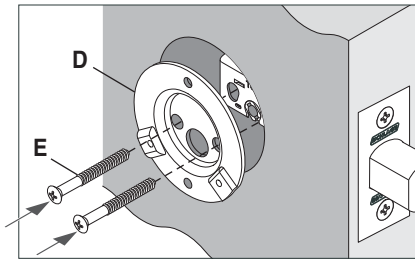


B560/B560F (UL)
Thumbturn/ Mariposa/Tourniquet



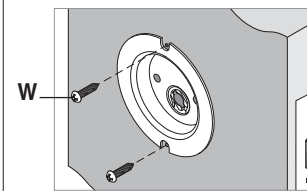
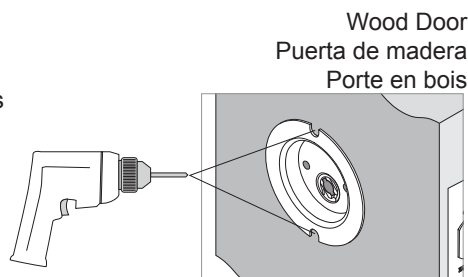
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8 UL Only/Solamente/Seulement:

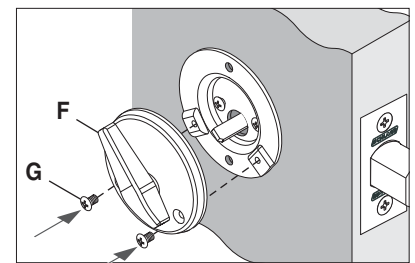
For 1½" (38 mm) Hole Only
Para un agujero de 38 mm solamente
Pour un trou de 38 mm seulement

½" (3 mm) Pilot Holes
Agujeros de guía de 3 mm
Trous pilote de 3 mm



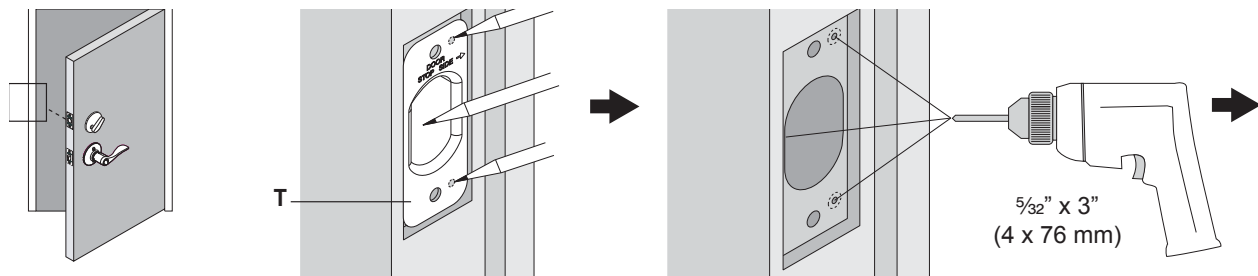
- Wood Door
Puerta de madera
Porte en bois
- OR - O - OU
- Metal Door
Puerta de metal
Porte en métal

9



10

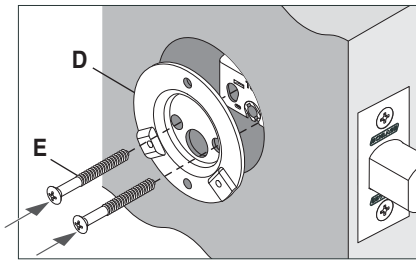
For Strike side of door
Para el lado de placa hembra de la puerta
Pour la côté de gâche de la porte



B561/B561F (UL)
Blank/ Cubierta Llana/Couverture Plaine



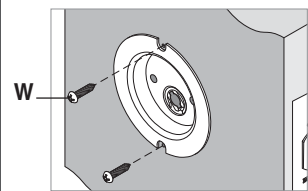
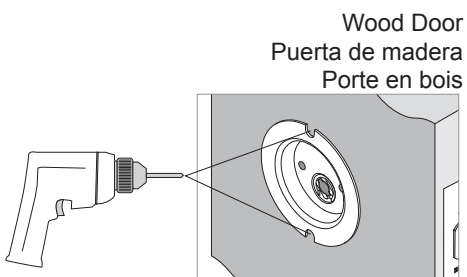
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8 UL Only/Solamente/Seulement:

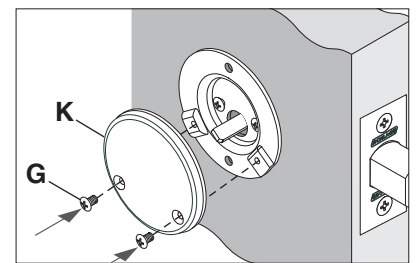
For 1½" (38 mm) Hole Only
Para un agujero de 38 mm solamente
Pour un trou de 38 mm seulement

½" (3 mm) Pilot Holes
Agujeros de guía de 3 mm
Trous pilote de 3 mm



- Wood Door
Puerta de madera
Porte en bois
- OR - O - OU
- Metal Door
Puerta de metal
Porte en métal

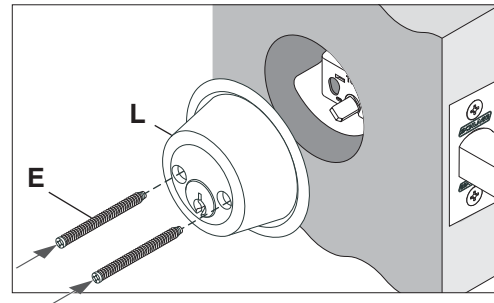
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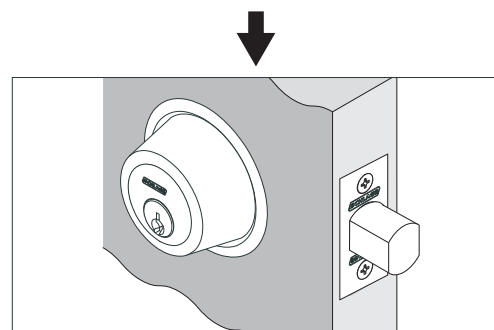
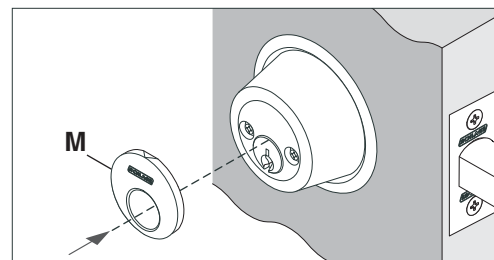
B562
Cylinder/Cilindro/Cylindre



7



8

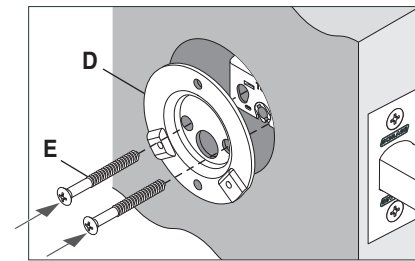


10

B563/B563F (UL)
Classroom/Salle de Classe/Salle de Classe



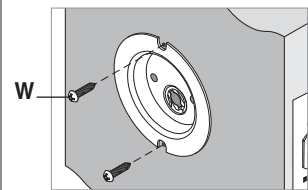
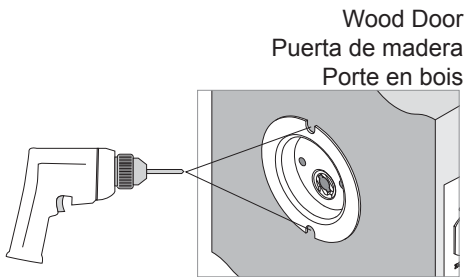
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8 UL Only/Solamente/Seulement:

For 1½" (38 mm) Hole Only
Para un agujero de 38 mm solamente
Pour un trou de 38 mm seulement

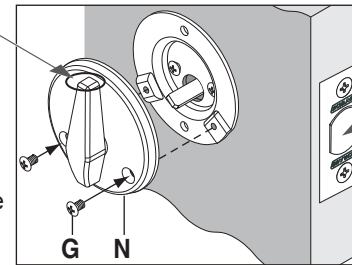
½" (3 mm) Pilot Holes
Agujeros de guía de 3 mm
Trous pilote de 3 mm



- Wood Door
Puerta de madera
Porte en bois
- OR - O - OU
- Metal Door
Puerta de metal
Porte en métal

9

Thumbturn Must Point Straight Up
Mariposa debe señalar directamente para arriba
Tourniquet doit être dirigé directement vers le haut



Latch Must Be Retracted
El pasador debe ser contraído
Le verrou doit être rétracté

- ① Thumbturn Must Only Retract Deadbolt, Not Extend It
- ① La mariposa se debe poder contraída el pasador solamente, no lo extendido
- ① Le tourniquet peut être rétracté le pêne seulement, non prolongé



1211 Series

Universal Dome Stop



1211 SHOWN



W1211 SHOWN

The patented Trimco **1211 Series** Universal Dome Stop is widely used due to its durability and versatility. With a low dome stop type lip and a high dome stop rubber height, the 1211 Series is the right choice for general uses like offices and hotels. The wrought version W1211 is manufactured by a cold-forging process and can hold up to the most demanding applications. The rubber face is sloped so that electrical cords from vacuum cleaners or polishers slide over the top instead of getting caught on the stop.

APPLICATIONS

- Offices
- Retail / Strip Malls
- Commercial & Industrial Buildings
- Hospitality

HEAVY DUTY STOPS & HOLDERS

PRODUCT FEATURES

- Highly durable and versatile
- Combines low lip and high dome for most applications
- Sloped face of W1211 easily bypassed by vacuum and floor polisher cords

SPECIFICATIONS

STANDARDS

BHMA L02141/L02161

WARRANTY

Lifetime Warranty

FASTNERS

Combo Pack supplied includes Wood Screw with Rawl Plug and Machine Screw & Anchor

NOTES

Patents #4,209,876 and #6,035,487
Carpet risers also available (for 1211 only): 1/2" (1211CL) and 3/4" (1211CH)

MATERIAL OPTIONS

BR – Brass
BZ – Bronze
SS – Stainless Steel

FINISHES

605	Polished Brass
606	Satin Brass
613	Oil Rubbed Bronze
625	Polished Chrome (1211 only)
626	Satin Chrome (1211 only)
629	Polished Stainless Steel (W1211 only)
630	Satin Stainless Steel (W1211 only)

1211 Series

Universal Dome Stop

HOW TO SPECIFY & ORDER

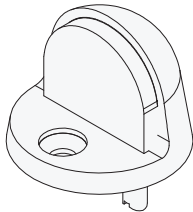
CHOOSE THE FOLLOWING

SERIES	FINISHES
<ul style="list-style-type: none"> • 1211 Cast Universal Door Stop • W1211 Wrought Universal Door Stop 	<ul style="list-style-type: none"> • 625 Polished Chrome (1211 only) • 626 Satin Chrome (1211 only) • 629 Polished Stainless Steel (W1211 only) • 630 Satin Stainless Steel (W1211 only) <p>See Finish List for all options.</p>

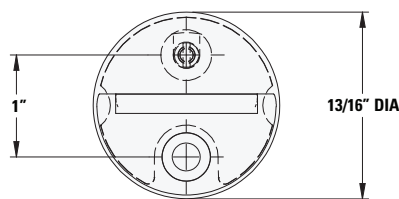
EXAMPLE

For a stainless steel wrought universal door stop, specify or order: **W1211.630**

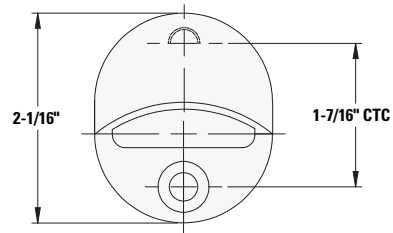
FRONT VIEW
1211



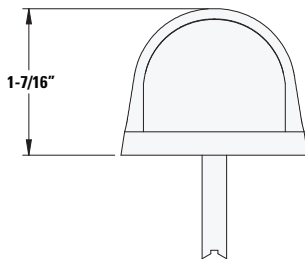
BOTTOM VIEW
1211



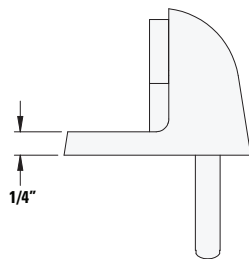
TOP VIEW
W1211



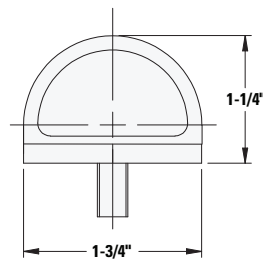
FRONT VIEW
1211



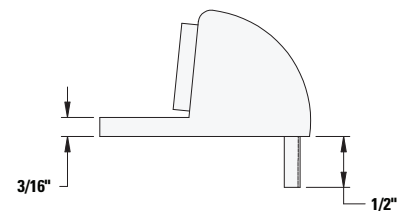
SIDE VIEW
1211



FRONT VIEW
W1211



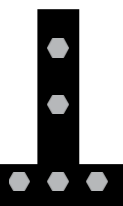
SIDE VIEW
W1211



* Dimensions are informational only. Templates are available at www.trimcobbw.com

2.02 FIXTURES

Data sheets to follow.



TOILET FIXTURE - 4110 & 4115

Item: _____



Unit may be pictured with some optional features.

1.6 gpf (6.0 Lpf) Fixtures - 3" waste connection

- 4110** Back supply connection 1 1/2" (38mm) FIPT.
- 4115** Top supply connection 1 1/2" (38mm) MIPT.

1.28 gpf (4.8 Lpf) Fixtures - 2-3/8" waste connection

- HET4110** Back supply connection 1 1/2" (38mm) FIPT.
- HET4115** Top supply connection 1 1/2" (38mm) MIPT.

STANDARD FEATURES

- **Chase mounted fixture, wall outlet waste.**
- **Toilet Bowl-**
 - Elongated.
 - High polished integral seat.
 - Self draining flushing rim.
 - Blowout flushing action.
 - Fully enclosed trap.
- **Hardware-**
 - Plated steel concealed anchor rods and fasteners.

► DESCRIPTION

This Toilet Fixture is designed for high abuse areas with an accessible pipe chase. The fixture is fabricated using heavy gauge type 304 stainless steel, seamlessly welded to form a vandal resistant unit. Internal piping is stainless steel. Exposed surfaces are polished to a satin finish, except for the integral seat which is polished to a bright finish.

► PERFORMANCE STANDARDS

Metcraft's standard toilet is a 1.6 gpf (6.0 lpf) fixture with a 3" (76mm) waste outlet. Metcraft offers a "High Efficiency Toilet" (HET) 1.28 gpf (4.8 lpf) with a 2 3/8" (60mm) waste outlet as an option. Metcraft bowls and assemblies are designed to withstand 5000 lb. (22kN) loading without permanent deflection and damage. This fixture meets or exceeds ASME A112.19.3 / CSA B45.4 standards for "Stainless Steel Plumbing Fixtures". The trap will pass a 2 1/8" (54mm) dia. ball. A minimum 1" (25mm) supply providing 35psi (241kPa) flushing pressure is required.

► INSTALLATION

An accessible pipe chase is required. Six anchor rods screw into sockets on back of the fixture. Anchor rods pass through the wall and are secured with washers and hex nuts on the chase side of the wall. No exposed fasteners are used. The installer must provide wall openings for anchor rods and piping per rough-in drawing provided by Metcraft..





NOTE: A security frame (wall sleeve) is recommended when installed on a new block (CMU) or poured concrete wall. A security frame is not appropriate for hollow wall construction.

Water Consumption:

With a low consumption flush valve - 1.6 gpf (6 liters)

With a HET consumption flush valve - 1.28 gpf (4.8 liters)

RECOMMENDED FLUSH VALVES

	SLOAN	ZURN	DELANY
Concealed low consumption	611-1.6	Z6611-1.6	F540-1.6
Concealed HET	611-1.28	Z6611-1.28	-
Exposed low consumption	111	Z6606-1.6	F439-1.6
Exposed HET	111-1.28	Z6606-1.28	-
 Concealed low consumption	9603-1.6	ZH6152-WS1-MBFW	1234-1.5
 Concealed HET	9603-1.28	ZH6152AV-1.28-MBFW	-
 Exposed low consumption	111	Z6000-1.6	439
 Exposed HET	111-1.28	Z6000-HET-1.28	-

Listed by



WALL THICKNESS AND TYPE (Must Specify)

Thickness: _____ Type: Concrete Block Steel

TOILET WASTE

- PE Plain end waste - 4" off fixture (Standard).
- PL Plain end waste - 3" into chase.
- GW Gasket waste outlet.

PRODUCT OPTIONS

- AFH Hydraulic Anti-Flood Valve. Not available on 4115 & HET4115.
- MS High Polished Seat (Standard).
- HS Hinged Seat
- HO Punched for hinged seat (By Others).
- PCC Powder Coat - Anti-microbial White.
- ADA ADA Mounting height - 18" Integral Seat Height.
* Dimensions raised 3" for ADA

OPTIONAL ACCESSORIES

- A120 Security Frame (Wall Sleeve/Can).
- A168 Metal Template for Wall Openings.
- TSC Toilet Shipping Cover

No-Hub Connectors for 1.6gpf Units

- A210-3 3" s/s to 3" CI No-hub Connector.
- A210-1 3" s/s to 4" CI No-hub Connector.

No-Hub Connectors for 1.28gpf Units

- A210-9 2-3/8" s/s to 3" CI No-hub Connector.
- A210-8 2-3/8" s/s to 4" CI No-hub Connector.
- A215-3 3" No-hub Test Tee.
- A215-4 4" No-hub Test Tee.
- A216-3 Pinned Cleanout Plug 3"
- A216-4 Pinned Cleanout Plug 4"
- A247 Flush valve thru wall connector.
- A611 Flush Valve access Panel. (Available on 4110).
- A615 Flush Valve Cover. (Available on 4115).

Wall Mounted Toilet Paper Holders

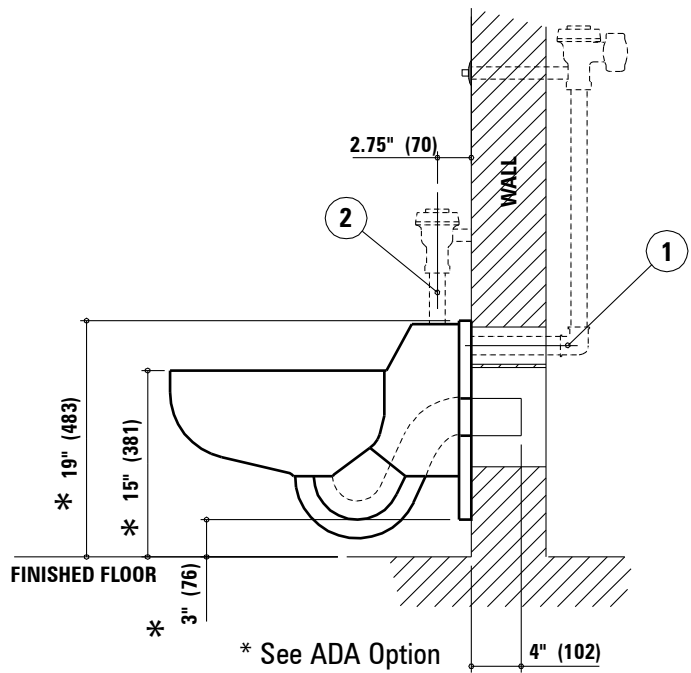
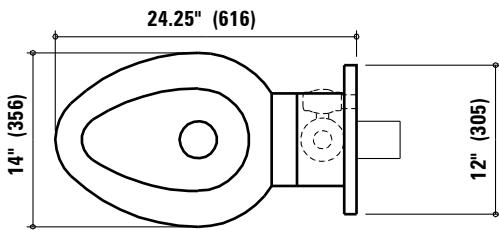
- A720 Chase Mounted Recessed Toilet Paper Holder.
- A721 Front Mounted Recessed Toilet Paper Holder.
- A722 Ligature Resistant Front Mounted Recessed Toilet Paper Holder.

TOILET FIXTURE - 4110 & 4115

Item: _____

NOTES:

1. Optional -FV Flush Valve
- Wall Supply Connection. (Concealed)
2. Optional -FV Flush Valve
- Top Supply Connection. (Exposed)



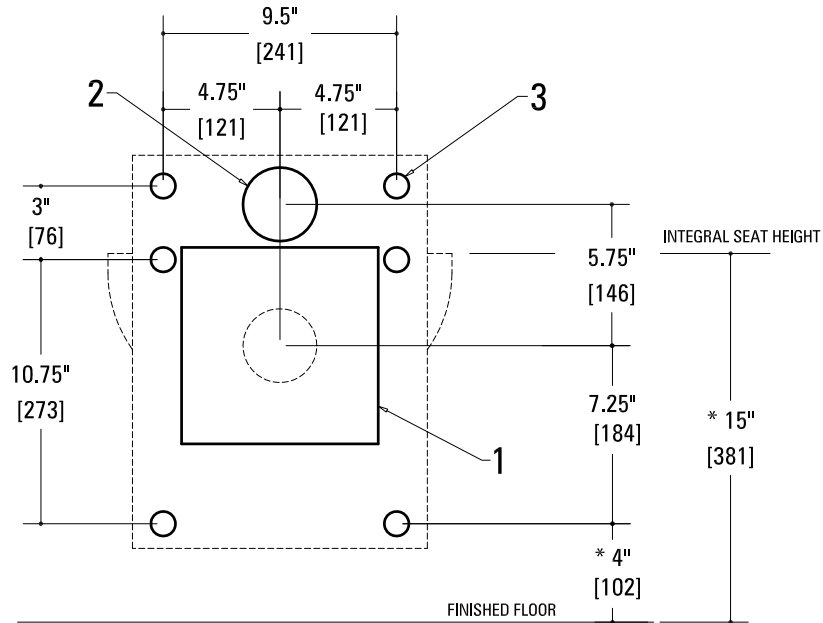
Due to continuous product improvement Metcraft reserves the right to make changes in design and specifications without prior notice. All dimensions should be verified with the factory for current information.

APPROVED FOR MANUFACTURING	Company: _____	Name: _____
	Signature: _____	Date: _____

ITEM:

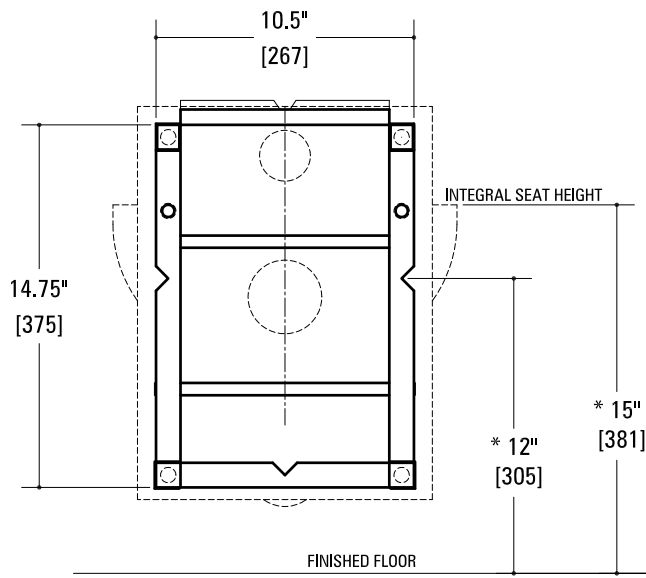
**TOILET FIXTURE - 4110 & 4115
HET4110 & HET4115**

1. 8" X 8" (203 X 203) Wall opening for toilet waste connection.
2. 3" (76) Wall opening for 1-1/2" (38) FIPT flush supply inlet.
(Not needed for top supply units 4115 & HET4115)
3. 1" (25) Dia. Wall openings for anchors. (6)



HOLES FOR CORE DRILLING OR STEEL PLATE WALLS

* Noted dimensions change with seat height.



**OPTIONAL SECURITY FRAME FOR Poured OR BLOCK WALLS
RECOMMENDED FOR NEW CONSTRUCTION**

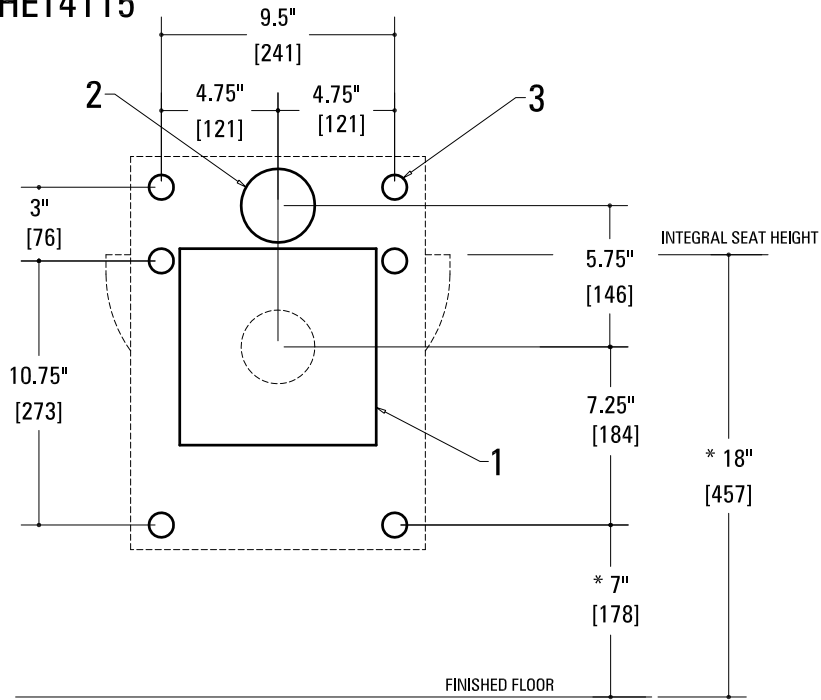
TEM:

TOILET FIXTURE - 4110 & 4115
 HET4110 & HET4115

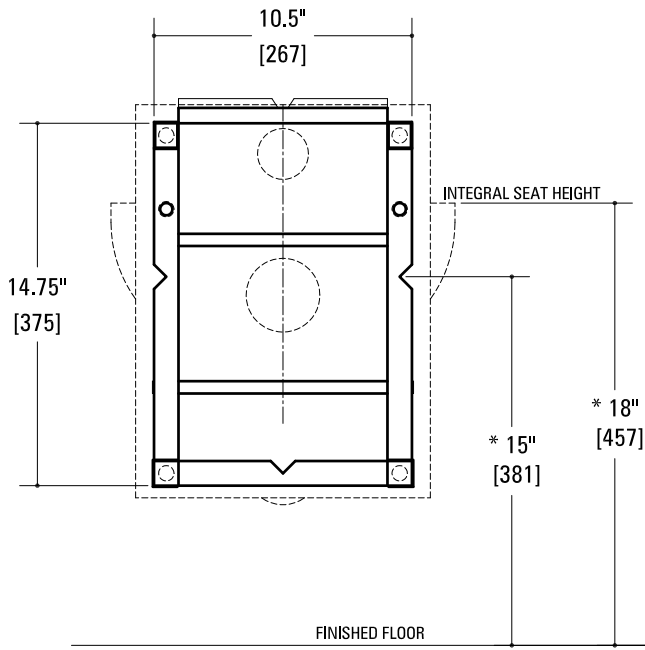
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2. 3" (76) Wall opening for 1-1/2" (38) FIPT flush supply inlet.
 (Not needed for top supply units 4115 & HET4115)
3. 1" (25) Dia. Wall openings for anchors. (6)



ADA
 COMPLIANT



HOLES FOR CORE DRILLING OR STEEL PLATE WALLS



* Noted dimensions
 change with seat height.

OPTIONAL SECURITY FRAME FOR POURED OR BLOCK WALLS
 RECOMMENDED FOR NEW CONSTRUCTION



Metcraft
Industries, Inc.

301 S.E. Thompson Drive
Lee's Summit, MO 64082

Phone: 816-554-0300
Fax: 816-554-0307

www.metcraftindustries.com
sales@metcraftindustries.com

Stainless Steel Plumbing Fixtures

Claims, Shortages, and Returns
Fixture Installation
Care and Cleaning
Valve Installation
Valve Trouble Shooting

STAINLESS STEEL PLUMBING FIXTURES

Metcraft stainless steel plumbing fixtures set industry standards for safe and reliable operation under the specialized conditions such as prisons, jails and public use environments. The following special features enhance safety and security.

- *Integrally welded heavy gauge stainless steel construction.
- *Smooth exposed edges
- *Special tamper resistant fasteners which resist unauthorized disassembly.
- *Toilet fixtures are reinforced to withstand load stress of 3000 lbs without permanent damage.
- *For maximum security, Metcraft recommends the use of optional security frame.



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sales@metcraftindustries.com

Claims, Shortages, and Returns

Claims and Shortages

The Buyer must file all claims for losses and damages in shipment; however, Metcraft will, if requested in writing, file such claims if Buyer has complied with all of the following within 5 working days after receipt of shipment:

1. Inspects shipment immediately upon receipt.
2. Have shipment inspected by delivering carrier for losses & damages.
3. Files inspection report with carrier and sends copy to factory.

All claims for shortages must be reported in writing to Metcraft within 14 days of shipment.

All claims for failure to receive shipment must be reported in writing to Metcraft within 30 days of invoice date.

Return of Goods

All items are manufactured per specification. The return of any goods is based on Metcraft's discretion. No goods shall be returned without written return materials authorization (R.M.A.) from factory. Requests for R.M.A.'s must be made within 60 days of shipment. To receive an R.M.A., the Buyer must supply the invoice number and date. Terms of the return are listed on Metcraft's R.M.A. when it is issued.

Warranties

Goods manufactured by Metcraft are warranted to be free from defects in workmanship and material for a period of one year from date of shipment. Metcraft must receive written notice from buyer of any defects promptly after discovery and within a one year period. Within a reasonable time after such notification, Metcraft will, at its sole option, repair or replace defective parts. This is the Buyer's exclusive remedy for breach of warranty. Metcraft will under no circumstances be responsible for consequential, incidental or special damages based upon breach of warranty, breach of contract, negligence, strict tort or any other legal theory. The statute of limitation within which any claims can be filed against Metcraft is one year

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, TITLE AND FITNESS FOR A PARTICULAR PURPOSE

The failure of Metcraft to insist upon the strict performance of the terms and conditions of sale shall not constitute or be construed as a waiver or relinquishment of Metcraft's rights thereafter to enforce any such term or condition or any other term or condition. Metcraft's order verification shall be construed under and governed by the Missouri Uniform Commercial Code and such laws of the state of Missouri as may be applicable.

NO AGENT OR REPRESENTATIVE OF METCRAFT IS AUTHORIZED TO MAKE ANY EXCEPTIONS TO THESE TERMS AND CONDITIONS OF SALE. IF LEGAL ACTION IS NECESSARY TO ENFORCE ANY OF THESE TERMS AND CONDITIONS OF SALE, THE CUSTOMER WILL BE RESPONSIBLE FOR ANY COURT COSTS AND REASONABLE ATTORNEY'S FEES.



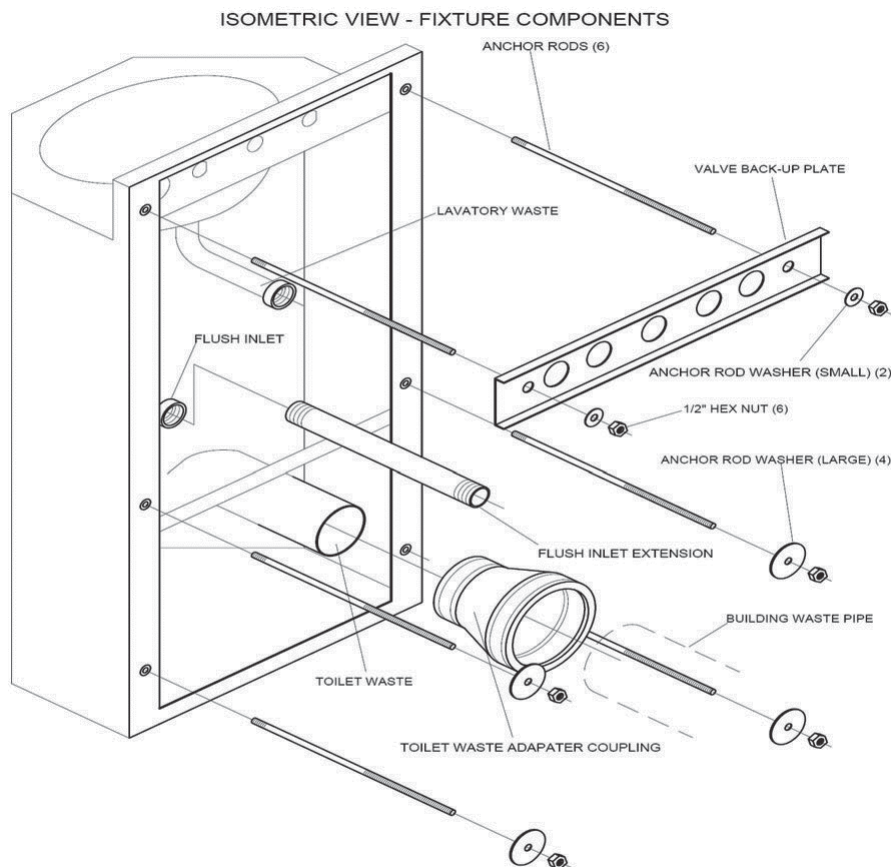
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Fixture Installation

At the time of installation, check to make sure frame is square and has not been damaged in shipment. If the frame is out of square mounting holes will not match fixture anchor locations.

Locate rough-in position on wall. If a Metcraft security frame is to be incorporated, cast the frame in place or block in place by conventional construction methods.

1. Rough-in all plumbing connections required by fixture.
2. Attach backsplash trim, all through wall plumbing connections and seal.
3. Attach anchor rods to fixture. Unit is now ready for final positioning.

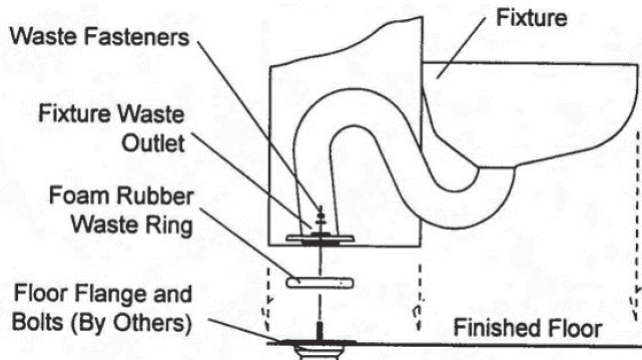


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Plumbing Connections

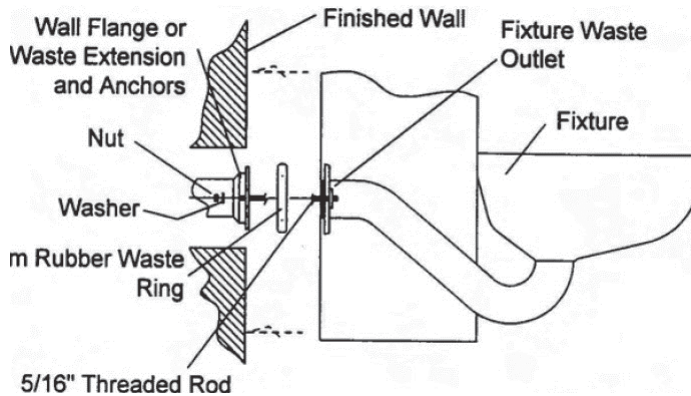
Plumbing connections on Metcraft security fixtures are made per conventional industry standards. The following details illustrate standard plumbing connections. Please refer to supplementary information covering valve applications. **Always follow local plumbing codes.**

Basic Floor Outlet Toilet Waste Connection



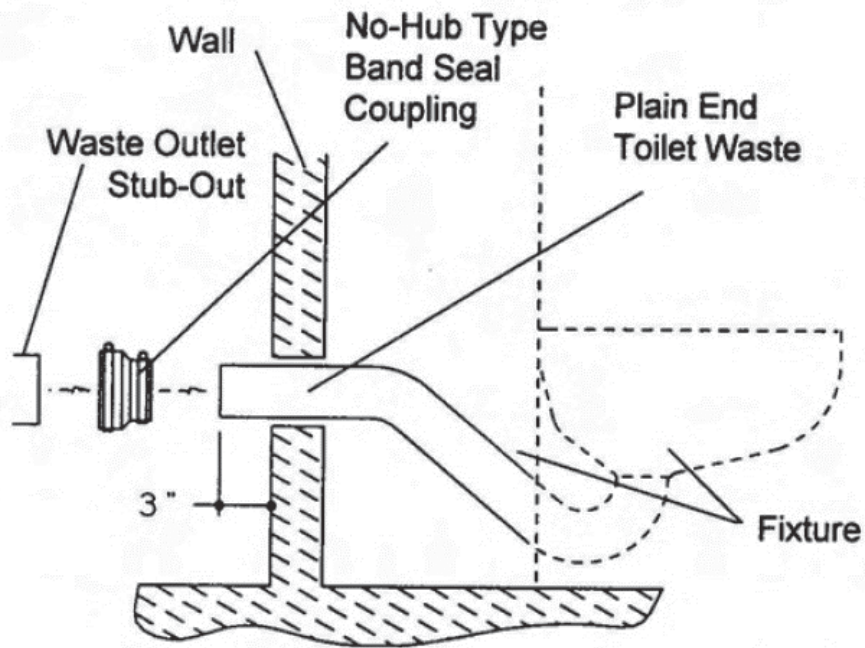
Note: All waste connections provided by others

Basic Wall Outlet Toilet Waste Connection

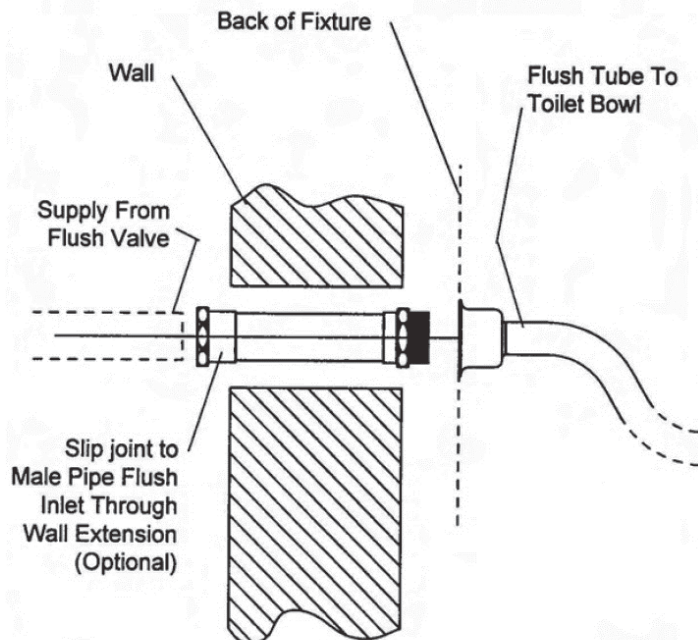


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www.metcraftindustries.com
sales@metcraftindustries.com

Extended Waste Tube & Adapter Coupling

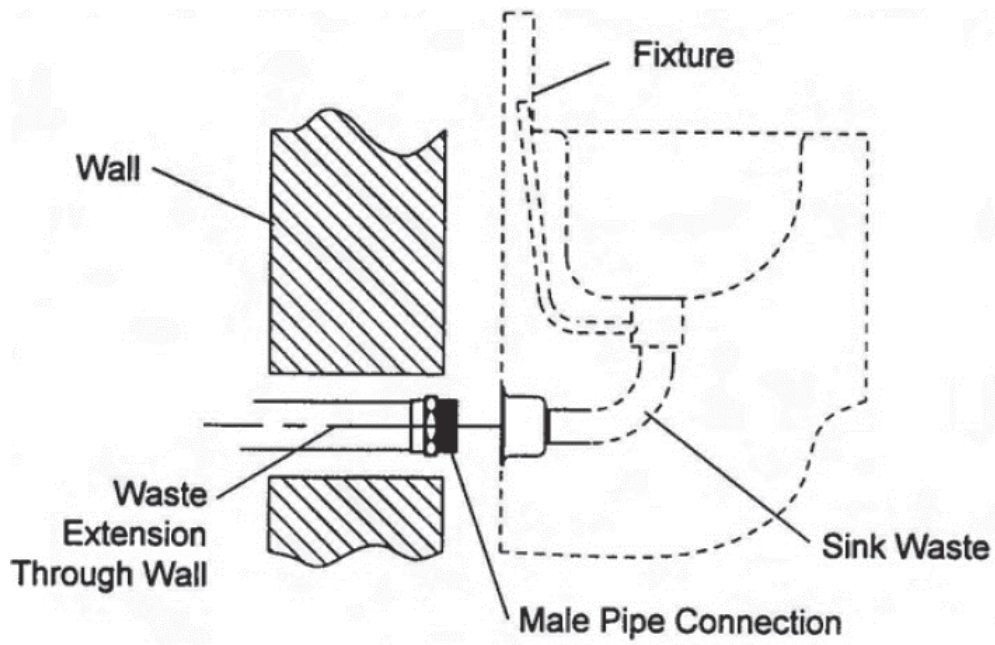


Basic Flush Inlet Plumbing Connection



301 SE Thompson Drive, Lee's Summit, MO 64082
Phone: 816.554.0300 Fax: 816.554.0307
www.metcraftindustries.com
sales@metcraftindustries.com

Basic Sink Waste Connection



301 SE Thompson Drive, Lee's Summit, MO 64082
Phone: 816.554.0300 Fax: 816.554.0307
www.metcraftindustries.com
sales@metcraftindustries.com

General Care and Cleaning

During Construction

The installing contractor must take care, during the construction phase, to care for the stainless steel plumbing fixtures. **Lack of care during the construction can cause the fixtures to rust.** The following is care that should be taken during the construction process.

- Routine cleaning, to remove residue from your stainless steel fixtures, should be performed every month.
 - Clean with ordinary soap and water.
 - Apply with a cloth or sponge
 - Rinse thoroughly and wipe dry
 - Apply a thin film of stainless steel cleaner and wipe dry.
 - For tougher stains, residues and deposits.
 - Use a Scotch-Brite™ scouring pad along with a stainless steel cleaner to remove tough stains, residues, and deposits. Never use common steel wool or wire brush as they will cause surface stains and rusting.
 - Rinse thoroughly and wipe dry
 - Apply a thin film of stainless steel cleaner and wipe dry.
- After installation, clean, dry & cover fixture to protect from soiling by work from other trades. **If contamination of the stainless steel surface occurs, then clean immediately as described above.**

Contamination of Stainless Steel Fixtures

Any of the following are considered a contaminant for stainless steel fixtures and will cause rusting and/or deterioration of these fixtures:

- **Construction Contaminations**
 - Weld Splatter, Metal Shavings, Cleaning Acids & Concrete Dust
- **Chemical Contaminations**
 - Chlorine, Muriatic Acid, Sulphuric Acid, Hydrochloric Acid, Iodine
- **Environmental Contaminations**
 - Sea Salt & Humidity is very caustic to stainless steel and requires more frequent care and cleaning to prevent these fixtures from rusting.
 - Standing Water & Organic Matter
 - Never let standing water or organic matter accumulate in the toilet for over a month.
- **Never allow bleach to stand in the toilet bowl. This is a typical practice we see to disinfect the toilet bowl during long periods where the toilet is inactive. This practice causes the bleach to attack the toilet bowl and destroy the fixture.**



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After Construction

- After construction, the cleaning staff should be trained on the proper care and cleaning of these stainless steel fixtures. Routine cleaning, to remove residue from your stainless steel fixtures should be performed every month.
 - Clean with ordinary soap and water.
 - Apply with a cloth or sponge
 - Rinse thoroughly and wipe dry
 - Apply a thin film of stainless steel cleaner and wipe dry.
 - For tougher stains, residues and deposits.
 - Use a Scotch-Brite™ scouring pad along with a stainless steel cleaner to remove tough stains, residues, and deposits.
 - Rinse thoroughly and wipe dry
 - Apply a thin film of stainless steel cleaner and wipe dry.
- **Never allow bleach to stand in the toilet bowl. This is a typical practice we see to disinfect the toilet bowl during long periods where the toilet is inactive. This practice causes the bleach to attack the toilet bowl and destroy the fixture.**



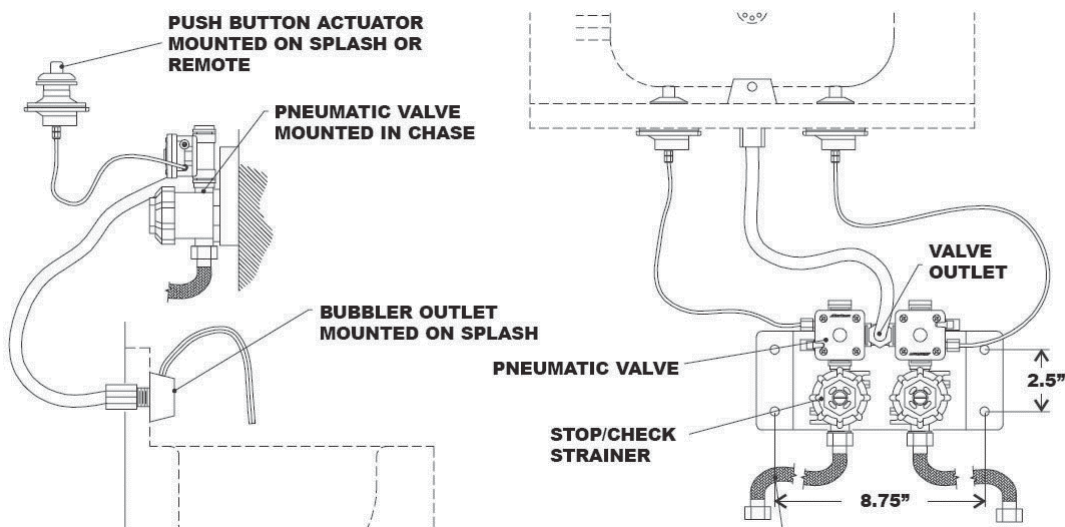
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A300 Series Pneumatic Valve Installation Instructions

For specific valve applications, Metcraft provides supplemental information which is provided with each shipment. Please refer to these sheets for answers to specific questions on individual valves. In general, Metcraft fixtures are designed to operate under these general guidelines.

1. All fixtures require water pressure of at least 35 PSI flowing. Recommended maximum pressure 75 PSI.
2. Flow controls of showers are preset to 2.5 gallons per minute or less. Flow controls of lavatories are preset to .5 gallons per minute.
3. Flush all standing water from lines prior to attachment of valve to water supply. Do not leave super chlorinated water in valves or severe damage will occur. Long periods of dormancy can adversely affect valves. The water should be removed from valves during such dormant periods.

For best results from Metcraft A300 Series Pneumatic Valves, reasonable water quality standards must be maintained. High levels of minerals and sediments in water supply will have detrimental effects on function of these valves.



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A300 Series Pneumatic Valve Installation Instructions

1. Flush all supply lines thoroughly.
2. Make sure polyethylene tubing is clear of any debris or water. DO NOT use tubing that has been kinked.
3. Assemble pushbuttons and bubbler spout to fixture backsplash before securing the fixture to the wall. Install the bubbler inlet fitting to the bubbler inlet.
4. Mount the valve and bracket assembly to the wall. Choose a location where future access for service and adjustment of the valve will be convenient, bearing in mind that the valve must be located within Seven feet of the pushbutton operators and bubbler outlet.
5. DO NOT use pipe thread compounds or sealants on Any threads connecting to the valves, valve operators and tubing nuts. Thread sealants are not intended for these connections and may contribute to valve damage or malfunctions and thereby void warranty.
6. A braided flexible connector is used to connect supply tubing to the strainer check/stop.
7. Connect 1/2" OD polyethylene tubing to the bubbler head and the valve outlet. Compression connections should only be tightened 1/4 TO 1/2 turn past hand tight. Over tightening with a wrench may cause damage. Make sure tubing is fully inserted into socket before tightening.
8. Connect 1/8" OD tubing to pushbutton diaphragm assemblies and to tube connection on the side of the valve operator closest to the timing adjustment. Make sure tubing is fully inserted in socket on valve operator end before tightening small plastic nut. Small nut should be finger tight but give the tubing a slight tug to see if connection is good. (A vacuum leak at this connection can cause a short cycle time.)
9. Open supply stop(s) and check the valve and connections for leaks.
10. Actuate pushbuttons several times to clear air from the valves and tubing. Hold hand in front of bubbler to contain squirting caused by air bubbles. Check water tubing at valve and bubbler for possible leaks again.
11. Adjust timed cycle of valves as needed. The timing cycle can be adjusted using the timing adjustment located next to the 1/8" air tube connection on the side the valve operator. Some valves have a small screwdriver slot on the end of the adjuster. Turning clockwise lengthens the cycle; Counterclockwise shortens the cycle. Adjustments should be made in small increment to achieve best result. As the cycle is lengthened, adjustment becomes increasingly sensitive. Timed cycles in excess of 1 minute require infinitely small adjustments.



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VALVE TROUBLE SHOOTING

Symptom: Valve Will Not Shut Off.

1. Remove 1/8" air tube beside timer. If the valve shuts off after a short time, turn the timer adjustment counter-clockwise several turns. Re-connect the tubing making sure the connection is sealed properly (tubing should not slip or come off if tugged gently). Re-adjust timer for desired cycle time. If the valve still refuses to shut off proceed to step 2.
2. Turn off water to valve. Remove the valve top by removing the (4) screws securing it. Note the position of the tube connector and timer so the valve top can be properly re-assembled in the same position. Remove valve operator exposing the water chamber of the valve. Check the rubber diaphragm assembly for possible debris. Check the diaphragm to be sure the rubber is properly seated into the plastic post. Check the hole through the plastic post to be sure it's free of debris. Turn the diaphragm assembly over and find the small circle near the edge of the rubber. There is a small hole in the middle of the circle that should be free of debris. Rinse the assembly with clean water to remove any debris. Also, rinse the orifice plate and the separator cup in the valve top, making sure the small spring in the separator cup (above the orifice plate) is not dropped or lost. If any part of the diaphragm is damaged, replace the entire diaphragm assembly using part #16426 (PVK-2 diaphragm kit). Clean any debris from the valve base and the valve seat before re-assembling. Re-assemble the valve and adjust the timing to desired cycle length.

Symptom: Valve Will Not Open.

1. Make sure the water supply is turned on.
2. Remove the 1/8" plastic tubing from the back of the pushbutton diaphragm and suck on the end. If water flows, the valve is operating properly but there is an air leak in the tubing connections, the tubing or the pushbutton diaphragm. Also, it is possible that the timer has been opened (turned counter-clockwise) so far the vacuum can not be held. Close the timer (turn clockwise) to see if the valve will operate. If yes, adjust timing for desired cycle.
3. Check the flow control orifice located in the valve outlet fitting to be sure it is not blocked by debris. If blocked, clear debris by blowing air through it from the tubing end of the fitting. Do not force any tools through the orifice as this may damage or distort it and cause improper operation.
4. Check the pushbutton actuator diaphragm for leakage by removing the diaphragm from the back of the pushbutton and from the air tubing. While holding your finger over the end of the tubing connection to seat it, push the rubber diaphragm toward



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the back using your finger in place of the pushbutton. If the tubing fitting is sealed properly with your finger, the rubber diaphragm should be held back away from the front of the diaphragm housing. If it returns to the front of the housing, it is not holding a vacuum and must be replaced. This test should be repeated several times before deciding the diaphragm must be replaced as it is difficult to hold your finger over the hole in the tube fitting to properly seal it

Symptom: Valve Will Only Run A Short Time And Does Not Respond To Timer Adjustment.

This is one of the most common complaints. In most cases, this is a result of an air leak in the air tubing connections either at the pushbutton end or the valve end of the tubing. If the tubing is connected using a white plastic nut, gently give the tubing a quick tug. If it comes out of the fitting, re-insert it, making certain it "bottoms out" in the fitting. Using gentle force, tighten the plastic nut one-quarter turn. Repeat as necessary until tubing is held tightly in place.

Some valve operators have a brass barb connection. No tubing nut is used on the operator.

It should be noted that the ends of the 1/8" tubing should be closely checked for splitting or cuts. Also, inspect the tubing to be sure there are no kinks or bends to prohibit air flow within the tubing. If the tubing is damaged or kinked, it must be replaced. The ends of the tubing should be cut square for best results.

Symptom: Bubbler Stream Overshoots The Lavatory Basin (Steady Stream).

1. Check the flow control fitting to be sure the flow restrictor is in place. The flow restrictor is normally located inside the fitting where the outlet supply tubing is connected to the valve. Penal spouts are designed for a rate of .5 gpm flow rate provided by this flow restrictor. Flow rate can not be adjusted adequately using the inlet stops on the valve.
2. Check the hole in the spout or bubbler for debris or blockage. The outlet hole of the bubbler must be clear of any obstruction or partial obstruction to form proper height arc. Clear any debris inside the bubbler head by disconnecting the supply tube from the fitting and blowing air back through the bubbler. Do not use tools or probes through the hole on the bubbler as they may damage the finish or distort the hole, causing an erratic stream. Re-assemble the valve and adjust timing to desired cycle length.



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Symptom: Bubbler Stream Does Not Form A High Enough Arc.

1. Check the flow control fitting for blockage. Clear any debris with air pressure or flushing with clean water. Do not use probes to clear blockage as this may cause damage to the flow restrictor.
2. Check plastic supply tubing for possible kinks that would restrict water flow.
3. Make sure inlet stops are open.
4. Turn off inlet stops and inspect strainer screens for blockage or mineral build-up. Use clean water to rinse away debris. If mineral build-up is severe on the screen, Use a commercial mineral solvent, (like calcsolve or limerase) to clean it. Thoroughly rinse the screen before re-installing it.

Important Valve Re-Assembly Note:

DO NOT tighten the four (4) screws that hold the valve top to the valve base any tighter than 18 inch pounds torque.



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Metcraft's Powder Coat Color Option



Metcraft's Powder Coat Color option has you covered when the durability of stainless steel is desired but the institutional appearance is not! Our electrostatically applied color coat is baked on to provide a highly durable and attractive appearance. While this powder coat is highly durable, it can be scratched or chipped if subjected to abuse. We do not recommend it for areas where vandalism or high abuse may be problematic. Non-Abrasive cleaning methods are required. **DO NOT use fiber pads (such as 3M Scotchbrite) or mild steel (wool) scouring pads on the powder coat finish. DO NOT use highly caustic cleaners on powder coated fixtures.** Highly caustic cleaners will degloss the paint causing a duller appearance and damage the powder coat.



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Thanks for purchasing this Metcraft Fixture!

For genuine Metcraft repair parts, call or email us for a copy of our Repair Catalog. Alternatively you can browse our Online Repair Catalog on our website:

www.metcraftindustries.com/parts.html

To keep updated with new products from us as well as helpful videos for Maintenance and Repair of Metcraft Products, follow us on Social Media!



Twitter: <https://twitter.com/MetcraftInc>



Facebook: <https://goo.gl/BtjK7q>



YouTube: <https://goo.gl/SJKyzH>



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PFTSCOF2000WH, PFTSCOFA2000WH



Commercial Toilet Seat

Product Features

- Heavy weight molded solid plastic
- Open front less cover
- External self-sustaining check hinge holds seat in any raised position up to 11° beyond vertical
- 304 Series stainless steel hardware
- Easy installation
- Large, molded in bumpers
- Slip resistant pads
- Elongated only
- Conforms to ANSI Z124.5
- Designed to be fitted for a toilet fixture compliant with ADA and CSA B651-12



External self-sustaining check hinge w/304 Series stainless steel hinge posts holds seat in any raised position up to 11° beyond vertical



PFTSCOF2000WH

Color Palette

White (WH)

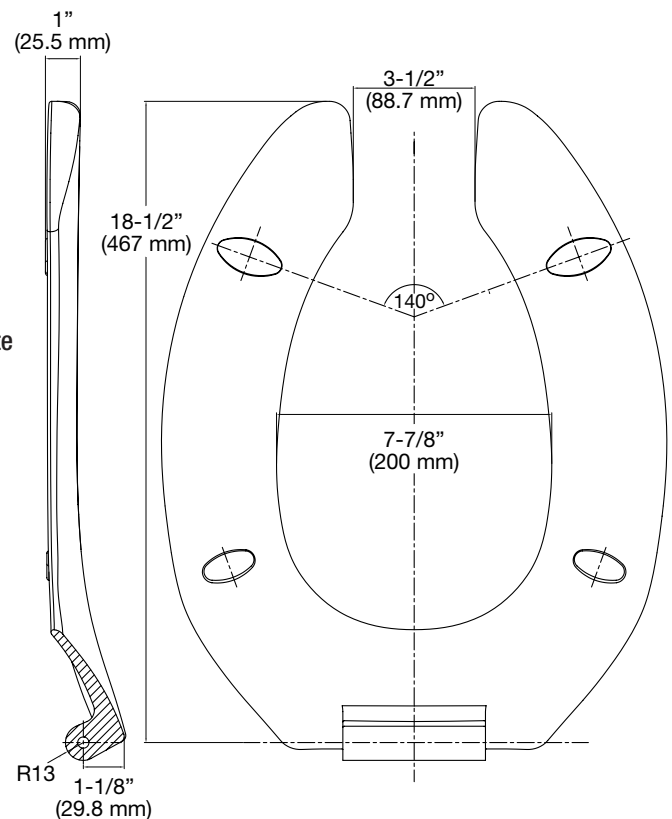
Model Numbers

- PFTSCOF2000BL Elongated commercial toilet seat, black
PFTSCOF2000WH Elongated commercial toilet seat, white
PFTSCOFA2000WH Anti-Microbial, Elongated commercial toilet seat, white

Warranty and Codes

PROFLO toilet seats carry a 1-year limited warranty. In an effort to continually improve our products, FEI will make design changes from time to time. We reserve the right to ship newly designed product to fill any order unless we agree in writing to do otherwise.

Product Specifications



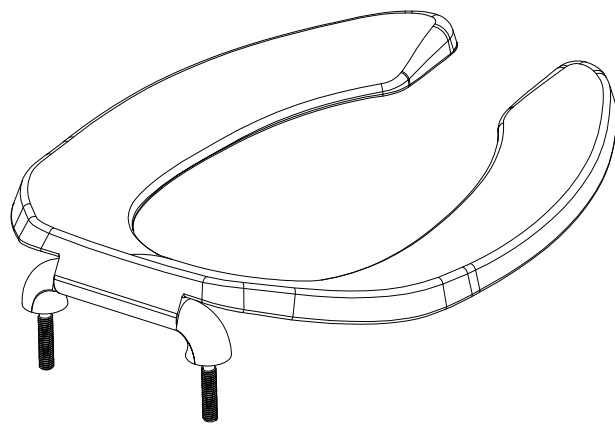


PFTSCOF2000WH
PFTSCOF2000BL

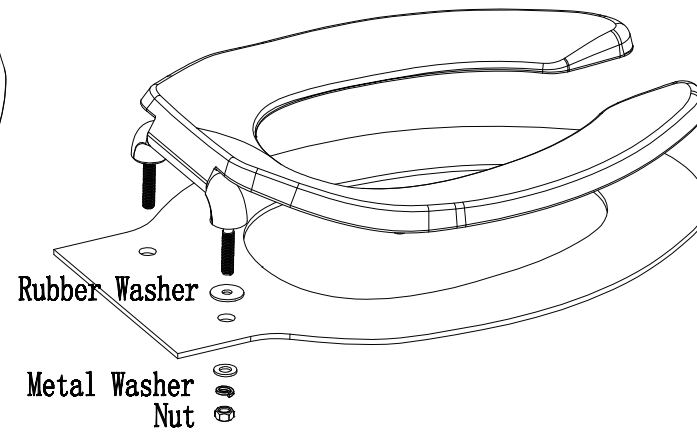
PFTSBB1000WH
PFTSCOFA2000WH
PFTSCOFH2000WH

Easy Installation / Instalación fácil / Installation facile

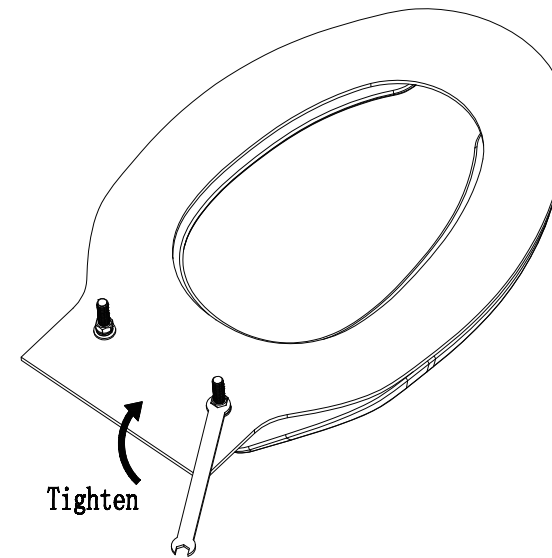
1. Installation Preparation



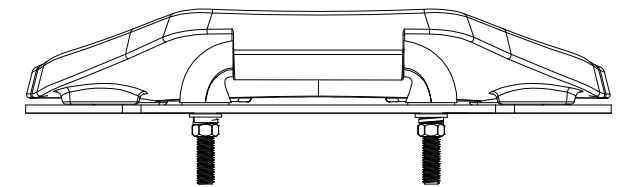
2. Combine Hardware as Shown



3. Tighten Nuts



4. Installation Complete



CODE NUMBER

3080053

DESCRIPTION

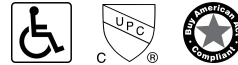
1.6 gpf, Polished Chrome Finish, Fixture Connection Top Spud, Single Flush, Regal® Exposed Manual Water Closet Flushometer.

DETAILS

- Flush Volume: 1.6 gpf (6.0 Lpf)
- Finish: Polished Chrome (CP)
- Valve: Diaphragm
- Valve Body Material: Semi-red Brass
- Fixture Type: Water Closet
- Fixture Connection: Top Spud
- Rough-In Dimension: 11 ½" (292mm)
- Spud Coupling: 1 ½" (38mm)
- Supply Pipe: 1" (25mm)

FEATURES

- ADA Compliant Metal Oscillating Non-Hold-Open Handle
- 1" I.P.S. Screwdriver Bak-Chek® Angle Stop
- Control Stop Plug
- Sweat Solder Adapter with Cover Tube
- Cast Wall Flange with Set Screw
- Vacuum Breaker Flush Connection
- Non-Hold-Open Handle and No External Volume Adjustment to Ensure Water Conservation

**COMPLIANCES & CERTIFICATIONS**

(ADA Compliant, cUPC Certified, BAA Compliant)

RECOMMENDED SPECIFICATION

Valve Body, Cover, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi- Red Brass. Valve shall be in compliance with the applicable sections of ASSE 1037 and ANSI/ASME 112.19.2.

VALVE OPERATING PRESSURE (FLOWING)

15-80 PSI (103-552 kPa). Specific fixtures may require greater minimum flowing pressure - consult manufacturer requirements.

DOWNLOADS

- [Regal XL Exposed Installation Instructions](#)
- [Control Stop Repair and Maintenance Guide](#)
- [Flush Connections Flanges Repair and Maintenance Guide](#)
- [Tail Piece Repair and Maintenance Guide](#)
- [Regal Flushometers Repair and Maintenance Guide](#)
- [Flushometer Pressure gauges](#)
- [Additional Downloads](#)

NOTES

All information contained within this document subject to change without notice.

Looking for other variations of the REGAL 111 product? [View the general spec sheet with all options.](#)

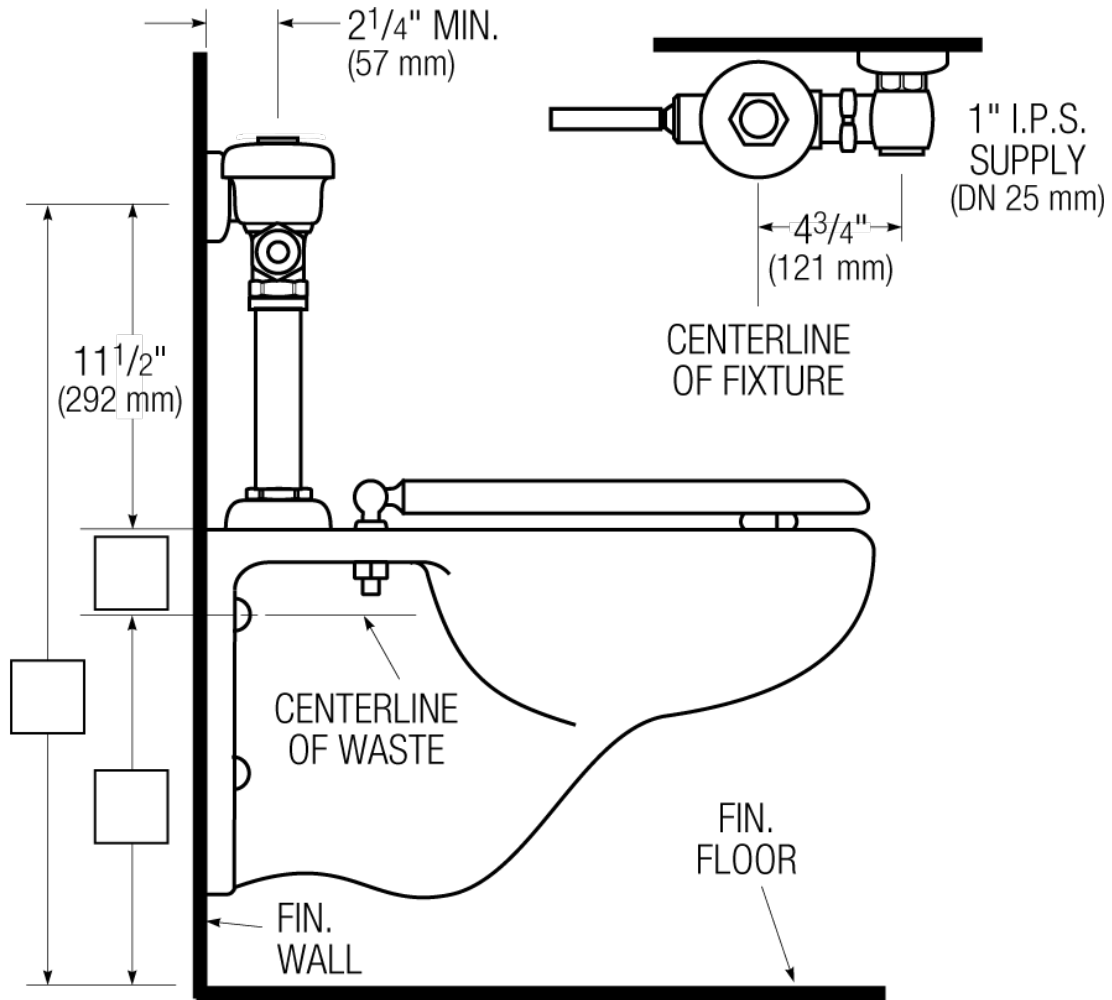
[Find a compatible urinal](#) for this flushometer.

[Find a compatible water closet](#) for this flushometer.

Sloan 10500 Seymour Ave, Franklin Park, IL 60131

Phone: 800.982.5839 • Fax: 800.447.8329 • sloan.com

ROUGH-IN



INSTALLATION INSTRUCTIONS FOR EXPOSED SLOAN WATER CLOSET AND URINAL FLUSHOMETERS



Closet Flushometer for 1½” Top Spud

- MODELS 110/111, 113, 114, 115 & 116

Service Sink Flushometer for 1½” Top Spud

- MODEL 117



Urinal Flushometer for ¼” Top Spud

- MODEL 180

Urinal Flushometer for ¾” Top Spud

- MODEL 186



Closet Flushometer for 1½” Back Spud

- MODELS 120, 121 & 122

LIMITED WARRANTY

Unless otherwise noted, Sloan Valve Company warrants this product, manufactured and sold for commercial or industrial uses, to be free from defects in material and workmanship for a period of three (3) years (one (1) year for special finishes, SF faucets, PWT electronics and 30 days for PWT software) from date of first purchase. During this period, Sloan Valve Company will, at its option, repair, replace, or refund the purchase price of any product which fails to conform with this warranty under normal use and service. This shall be the sole and exclusive remedy under this warranty. Products must be returned to Sloan Valve Company, at customer's cost. No claims will be allowed for labor, transportation or other costs. This warranty extends only to persons or organizations who purchase Sloan Valve Company's products directly from Sloan Valve Company for purpose of resale. This warranty does not cover the life of the batteries.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO EVENT IS SLOAN VALVE COMPANY RESPONSIBLE FOR ANY CONSEQUENTIAL DAMAGES OF ANY MEASURE WHATSOEVER.

PRIOR TO INSTALLATION

Before you install the Sloan Flushometer, be sure the items listed below are installed. Also, refer to the rough-in diagram below.

- Closet fixture
- Drain line
- Water supply line

IMPORTANT:

- **ALL PLUMBING SHOULD BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS.**
- **WATER SUPPLY LINES MUST BE SIZED TO PROVIDE AN ADEQUATE VOLUME OF WATER FOR EACH FIXTURE.**
- **FLUSH ALL WATER LINES PRIOR TO MAKING CONNECTIONS.**

The Sloan Flushometer is designed to operate with 15 to 80 psi (103 to 552 kPa) of water pressure. **THE MINIMUM PRESSURE REQUIRED TO THE VALVE IS DETERMINED BY THE TYPE OF FIXTURE SELECTED.** Consult fixture manufacturer for minimum pressure requirements. Most High Efficiency water closets require a minimum flowing pressure of 25 psi (172 kPa). Many building codes and the ASME A112.19.2 fixture standard list Maximum static water pressure as 80 PSI (552 kPa).

TOOLS REQUIRED FOR INSTALLATION

- Straight blade screwdriver
- Sloan A-50 Super-Wrench™, Sloan A-109 Plier Wrench or smooth jawed spud wrench

!!! IMPORTANT !!!

PROTECT THE FINISH OF SLOAN FLUSHOMETERS – DO NOT USE TOOTHED TOOLS TO INSTALL OR SERVICE THESE VALVES. USE A SLOAN A-50 SUPER-WRENCH™, SLOAN A-109 PLIER WRENCH OR SMOOTH JAWED SPUD WRENCH TO SECURE ALL COUPLINGS. ALSO SEE “CARE AND CLEANING” SECTION OF THIS MANUAL.

!!! IMPORTANT !!!

WITH THE EXCEPTION OF CONTROL STOP INLET, DO NOT USE PIPE SEALANT OR PLUMBING GREASE ON ANY VALVE COMPONENT OR COUPLING!

!!! IMPORTANT !!!

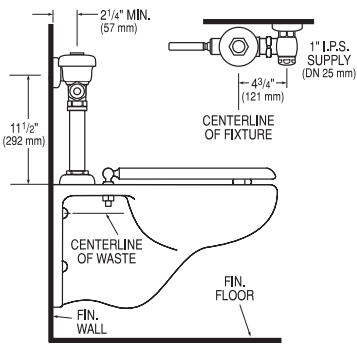
THIS PRODUCT CONTAINS MECHANICAL AND/OR ELECTRICAL COMPONENTS THAT ARE SUBJECT TO NORMAL WEAR. THESE COMPONENTS SHOULD BE CHECKED ON A REGULAR BASIS AND REPLACED AS NEEDED TO MAINTAIN THE VALVE'S PERFORMANCE.

If you have questions about how to install your Sloan flushometer, consult your local Sloan Representative or call Sloan Technical Support at:

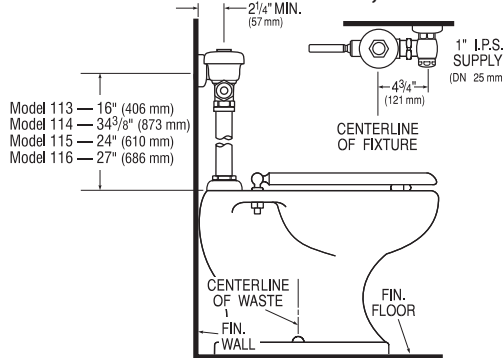
1-888-SLOAN-14 (1-888-756-2614)

ROUGH-IN

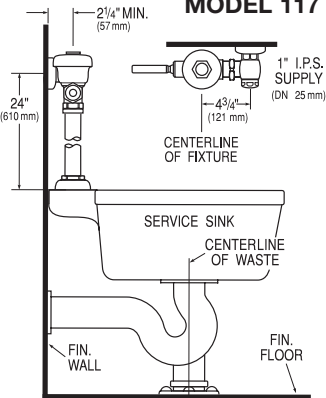
MODEL 110/111



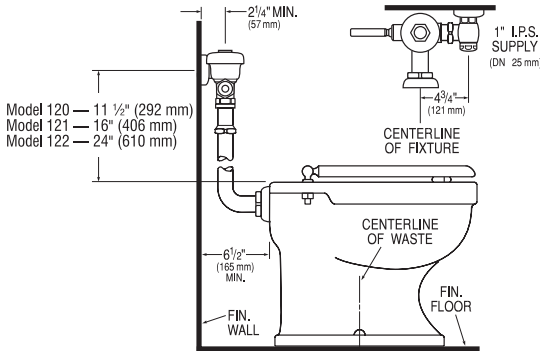
MODELS 113, 114, 115 & 116



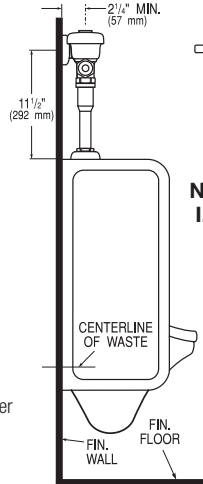
MODEL 117



MODELS 120, 121, & 122

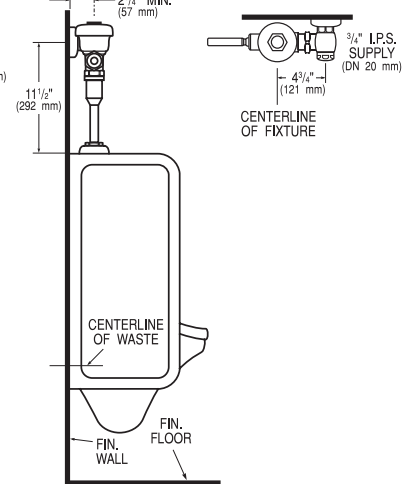


MODEL 180



NOTE: Requires 1" I.P.S. (DN 25 mm) Supply.

MODEL 186



IMPORTANT NOTES:

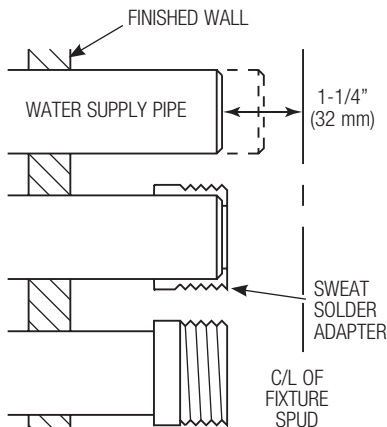
- When mounted on an ADA accessible bowl, the rough-in to the supply inlet should be no higher than 37 1/2" or the handle will exceed maximum height allowances under ADA guidelines.
- New ADAAG Guidelines allow for Split or Offset Grab Bars, check with local authorities or reference section 604.5.2 of ADAAG.

1 - INSTALL OPTIONAL SWEAT SOLDER ADAPTER (ONLY IF YOUR SUPPLY PIPE DOES NOT HAVE A MALE THREAD)

A Measure from finished wall to C/L of fixture spud. Cut pipe 1" (32 mm) shorter than this measurement. Chamfer O.D. and I.D. of water supply pipe.

B Slide threaded adapter fully onto pipe.

C Sweat solder the adapter to pipe.

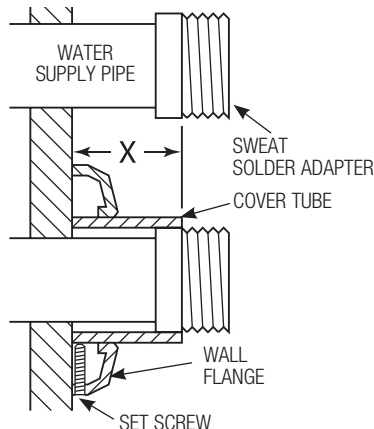


!!! IMPORTANT !!!
WITH THE EXCEPTION OF CONTROL STOP INLET, DO NOT USE PIPE SEALANT OR PLUMBING GREASE ON ANY VALVE COMPONENT OR COUPLING!

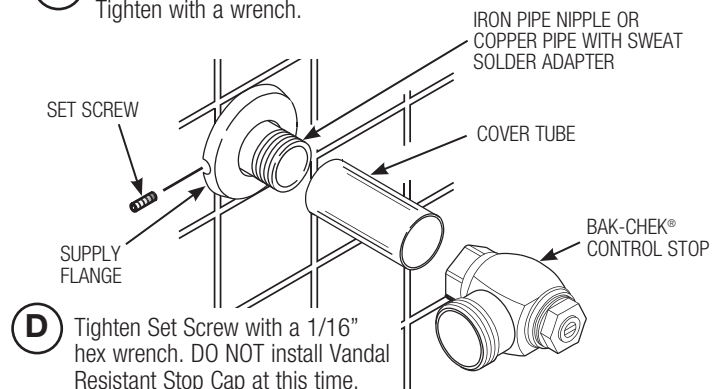
2 - INSTALL COVER TUBE, WALL FLANGE AND CONTROL STOP TO SUPPLY PIPE

A Measure from finished wall to first thread of adapter or threaded supply pipe (dimension "X"). Cut cover tube to this length.

B Slide cover tube over pipe. Slide wall flange over cover tube until against wall.



C Thread control stop onto pipe. Tighten with a wrench.

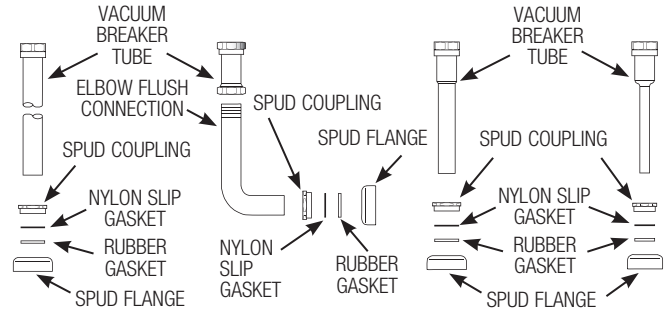


D Tighten Set Screw with a 1/16" hex wrench. DO NOT install Vandal Resistant Stop Cap at this time.

3 - INSTALL VACUUM BREAKER FLUSH CONNECTION

MODELS 110/111, 113, 114, 115, 116, 117 MODELS 120, 121, 122 MODEL 180 MODEL 186

- A** Slide spud coupling, nylon slip gasket, rubber gasket and spud flange over vacuum breaker tube.
- B** Insert tube into fixture spud.
- C** Hand tighten spud coupling onto fixture spud.



4 - INSTALL FLUSHOMETER

NOTE

For high efficiency urinal flushometers (0.5, 0.25 and 0.125 gpf), it is necessary to first insert the flow control component into the tailpiece assembly. See the H1015A flow control kit and separate instructions for details on how to install.

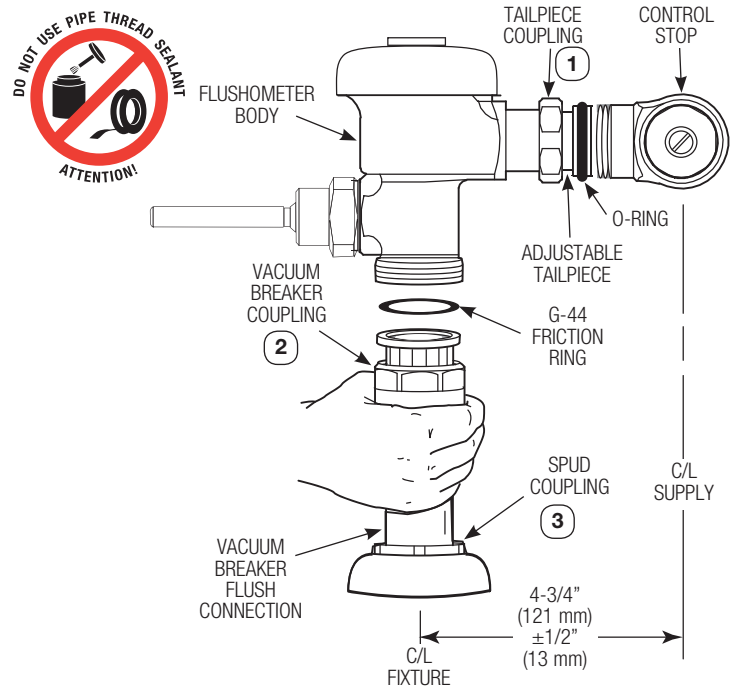
- A** Lubricate tailpiece o-ring with water. Insert adjustable tailpiece into control stop. Tighten tailpiece coupling by hand.
- B** Align flushometer directly above the vacuum breaker flush connection by sliding the flushometer Body IN or OUT as needed. Tighten vacuum breaker coupling by hand.

NOTE

Maximum adjustment of the Sloan Adjustable Tailpiece is 1/2" (13 mm) IN or OUT from the standard 4-3/4" (121 mm) (centerline of Flushometer to centerline of Control Stop).

If roughing-in measurement exceeds 5-1/4" (133 mm), consult factory for longer tailpiece.

- C** Align flushometer body and securely tighten first the tailpiece coupling (1), then the vacuum breaker coupling (2), and finally the spud coupling (3). Use a wrench to tighten these couplings in the order shown.



5 - FLUSH OUT SUPPLY LINE

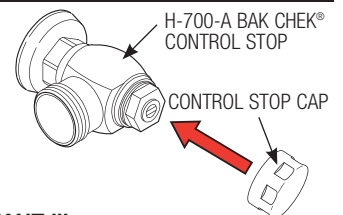
- A** Make sure control stop is CLOSED and remove flushometer outer cover.
- B** Remove inside cover and lift out inside parts assembly.

- C** Reinstall outside and inside cover wrench tight. Open control stop to flush supply line. Close control stop and remove outside and inside cover.
- D** Reinstall inside parts assembly, inside cover and outside cover wrench tight.

6 - ADJUST CONTROL STOP AND INSTALL VANDAL RESISTANT STOP CAP

- A** Open control stop COUNTERCLOCKWISE one FULL turn from closed position.
- B** Activate flushometer.

- C** Adjust control stop after each flush until the rate of flow delivered properly cleanses the fixture.
- D** Install vandal resistant control stop cap onto control stop.



!!! IMPORTANT !!!

Sloan's flushometers are engineered for quiet operation. Excessive water flow creates noise, while too little water flow may not satisfy the needs of the fixture. Proper adjustment is made when plumbing fixture is cleansed after each flush without splashing water out from the lip AND a quiet flushing cycle is achieved.

TROUBLESHOOTING

1. Valve does not function (no flush).

- A. Control stop or main valve is closed. Open control stop or main valve.
- B. Handle assembly is worn or damaged. Install handle repair kit or replace handle assembly.
- C. Relief valve is worn or damaged. Replace inside parts kit.

2. Volume of water is not sufficient to siphon fixture.

- A. Control stop is not open wide enough. Adjust control stop for desired delivery of water volume.
- B. Urinal flushometer parts inside a closet flushometer. Replace inside urinal Parts with proper closet flushometer parts.
- C. Low consumption flushometer installed on a higher consumption fixture. Replace inside parts kit with water saver kit.
- D. Water saver kit installed in old non-water saver bowl. Position refill head so that SIDE 1 is in the UP position.
- E. Water supply volume or pressure is inadequate. If no gauges are available to properly measure supply pressure or volume of water at the flushometer, then remove the relief valve from the inside parts kit, reassemble the flushometer and completely open the control stop.
 - If the fixture siphons, more water volume is required. If a 3.5 gpf inside parts kit is installed in the flushometer, then first flip the refill head (under the diaphragm) to obtain a 4.5 gpf volume. If this volume is still inadequate, remove the flow ring from the guide to obtain a 6.5 gpf kit. If additional flow is required, try a low pressure guide kit. **IMPORTANT – LAWS AND REGULATIONS PROHIBIT THE USE OF HIGHER FLUSHING VOLUMES THAN LISTED ON FIXTURE OR FLUSHOMETER.**
 - If the fixture does not siphon or if a low consumption fixture is installed, or if the above steps do not prove satisfactory, steps must be taken to increase the water supply pressure and/or volume. Contact the fixture manufacturer for minimum water supply requirements of the fixture.

3. Flushometer closes off immediately.

- A. Ruptured or damaged diaphragm. Replace inside parts kit.
- B. Enlarged by-pass orifice from corrosion or damage. Replace inside parts kit.

4. Length of flush is too short (short flush).

- A. Diaphragm assembly and guide assembly are not hand-tight. Screw the two assemblies hand-tight.
- B. Enlarged by-pass orifice from corrosion or damage. Replace inside parts kit.

- C. Urinal flushometer parts inside a closet flushometer. Replace inside urinal parts with proper closet flushometer parts.
- D. Low consumption flushometer installed on a higher consumption fixture. Replace inside parts kit with water saver kit.
- E. Handle assembly is damaged. Replace Handle

5. Length of flush is too long (long flush) or continuous.

- A. Relief valve is not seating properly or by-pass orifice is clogged because of foreign material, or by-pass orifice is closed by an invisible gelatinous film from "over-treated" water. Disassemble the working parts and wash thoroughly. **NOTE: Size of the orifice in the by-pass is of utmost importance for the proper metering of water into the upper chamber of the flushometer. Do not enlarge or damage this orifice.** Replace inside kit if cleaning does not correct problem.
- B. Supply line water pressure has dropped and is not sufficient to close the valve. Close control stop until pressure is restored.
- C. Closet flushometer parts inside a urinal flushometer. Replace inside closet parts with proper urinal flushometer parts.
- D. Inside cover is damaged. Replace inside cover.

6. Chattering noise is heard during flush.

- A. The segment diaphragm is installed upside-down. Replace the segment diaphragm to the proper position as instructed by markings on the diaphragm.
- A. Inside cover is damaged. Replace inside cover.

7. Handle Leaks.

- A. Handle gasket, seal or assembly is damaged. Replace as required.

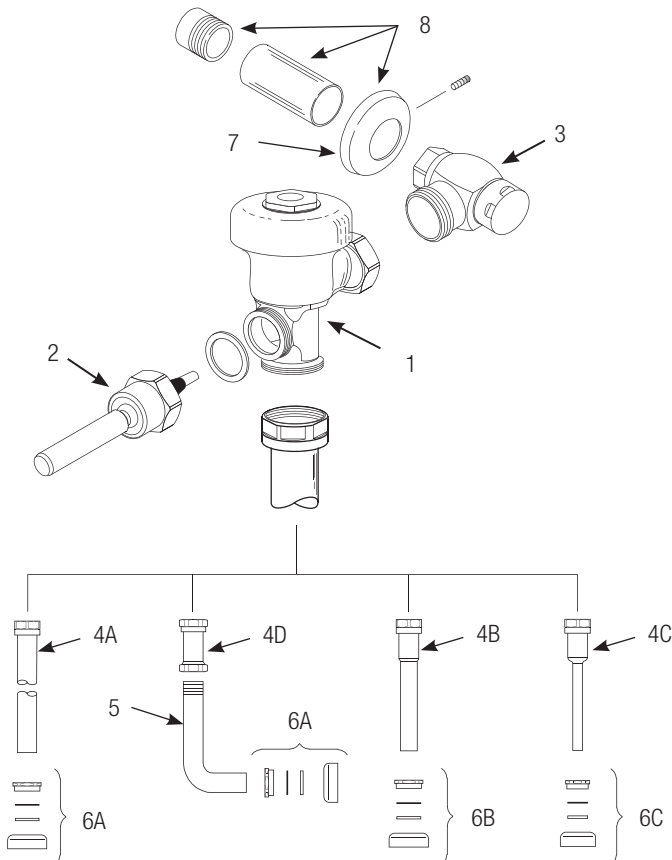
**If assistance is required, please contact
Sloan Technical Support at:
1-888-SLOAN-14 (1-888-756-2614)**

CARE AND CLEANING

DO NOT use abrasive or chemical cleaners (including chlorine bleach) to clean flushometers that may dull the luster and attack the chrome or special decorative finishes. Use ONLY mild soap and water, then wipe dry with clean cloth or towel.

While cleaning the bathroom tile, protect the flushometer from any splattering of cleaner. Acids and cleaning fluids will discolor or remove chrome plating.

PARTS LIST



Item No.	Part No.	Description
1	†	Valve Assembly
2	B-73-A	ADA Compliant Handle Assembly
3	H-710-A	Bak-Chek® Control Stop
4A	V-500-AA	1½" (38 mm) x 9" (229 mm) Vacuum Breaker Assembly ‡
4B	V-500-AA	1¼" (32 mm) x 9" (229 mm) Vacuum Breaker Assembly
4C	V-500-AA	¾" (19 mm) x 9" (229 mm) Vacuum Breaker Assembly
4D	V-500-A	Vacuum Breaker Assembly
5	F-109	1½" (38 mm) Elbow Flush Connection
6A	F-56-A	1½" (38 mm) Spud Coupling Assembly
6B	F-57-A	1¼" (32 mm) Spud Coupling Assembly
6C	F-58-A	¾" (19 mm) Spud Coupling Assembly
7	F-7	Supply Flange (Supplied when Valve is not Ordered with Sweat Solder Kit)
8	H-633-AA	1" (25 mm) Sweat Solder Kit with Cast Set Screw Flange
	H-636-AA	¾" (19 mm) Sweat Solder Kit with Cast Set Screw Flange
†		Part number varies with valve model variation; consult factory.
‡		Length varies with valve model variation; consult factory.

For optimum water conservation and flushometer performance, use only Genuine Sloan Parts.

NOTE: The information contained in this document is subject to change without notice.

SLOAN • 10500 SEYMOUR AVENUE • FRANKLIN PARK, IL 60131

Phone: 1-800-982-5839 • Fax: 1-800-447-8329 • www.sloanvalve.com

URINAL FIXTURE - 7130 & 7135

Item: _____



Unit may be pictured with some optional features.

- 7130** Back supply connection 3/4" (19mm) MIPT.
- 7135** Top supply connection 3/4" (19mm) MIPT.

STANDARD FEATURES

- Chase mounted fixture, Wall outlet waste, Washdown urinal
- High volume beehive style strainer.
- 1 1/2" (38mm) OD P-trap for slip-joint connection.
- Vandal resistant stainless steel trap enclosure.
- **Hardware-**
 - Plated steel concealed anchor rods and fasteners.

► DESCRIPTION

This Urinal Fixture is designed for areas with an accessible pipe chase. The fixtures are fabricated using heavy gauge type 304 stainless steel, welded to form a vandal resistant unit. Flushing provides a sanitary washdown of the interior. Exposed surfaces are polished to a satin finish. Fixtures come with a beehive type strainer, P-trap and vandal resistant stainless steel trap enclosure.

► PERFORMANCE STANDARDS

This fixture meets or exceeds ASME A112.19.3 / CSA B45.4 standards for "Stainless Steel Plumbing Fixtures".

Listed by



► INSTALLATION



An accessible pipe chase is required for installation. Four anchor rods screw into sockets on back of the fixture. Anchor rods pass through the wall and are secured with washers and hex nuts on the chase side. Installer must provide wall openings for anchor rods and piping per rough-in drawings provided by Metcraft.

NOTE: A security frame (wall sleeve) is recommended when installed on a new block (CMU) or poured concrete wall. A security frame is not appropriate for hollow wall construction.

Water Consumption:

With HEU consumption flush valve - .5 gpf (1.9 liters)

RECOMMENDED FLUSH VALVES

	SLOAN	ZURN	DELANY
Concealed	613	Z6613	F576
Exposed	186	Z6614	F575
 Concealed	995-MBFW	ZH6195-MBFW	1271
 Exposed	186	Z6003	451

WALL THICKNESS AND TYPE (Must Specify)

Thickness: _____ Type: Concrete Block Steel

OPTIONS/ACCESSORIES

- A120** Security Frame (Wall Sleeve/Can).
- A168** Metal Template for Wall Openings.
- PCC** Powder Coat - Anti-microbial White.
- A245** Flush valve thru wall connector $\frac{3}{4}$ " MIPT.
- A610** Flush Valve Access Panel. Not available on 7135.
- A615** Flush Valve Cover. Not available on 7130.
- ADA** ADA Mounting height - 17" Rim Height.

* Dimensions lowered 5" for ADA.

URINAL FIXTURE - 7130 & 7135

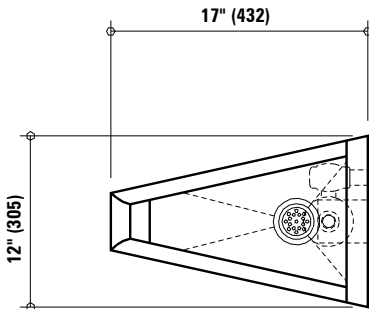
Item: _____

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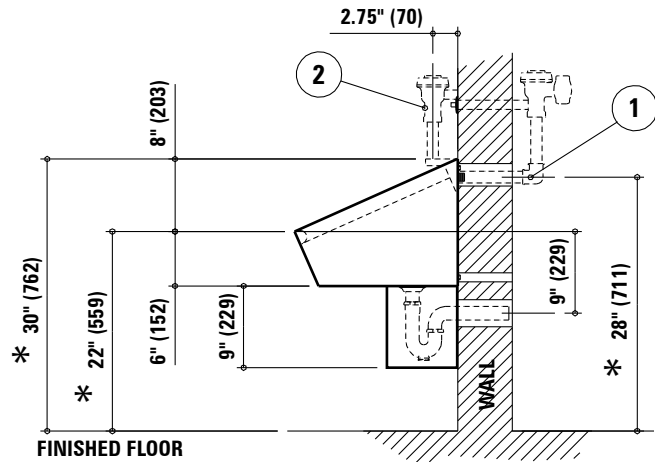
1 - Back Supply (7130)

2 - Top Supply (7135)

* See ADA Option



Due to continuous product improvement Metcraft reserves the right to make changes in design and specifications without prior notice. All dimensions should be verified with the factory for current information.

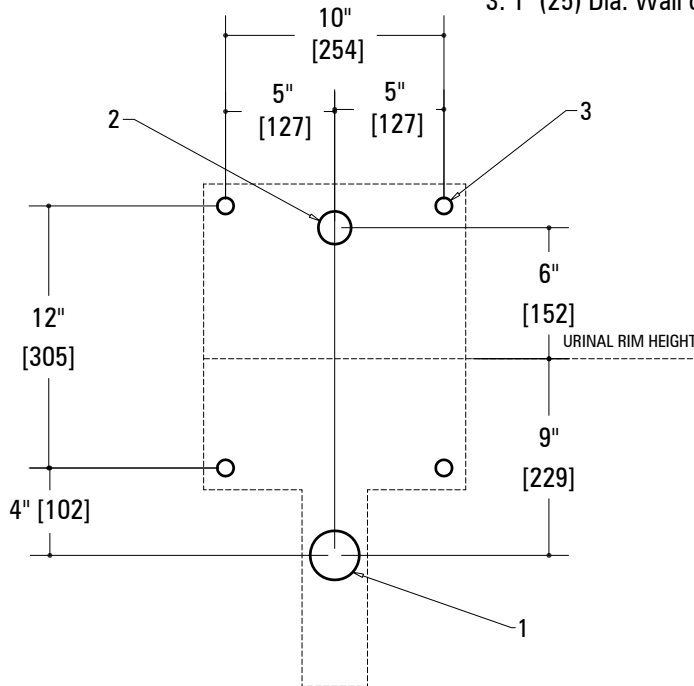


APPROVED FOR MANUFACTURING	Company: _____	Name: _____
	Signature: _____	Date: _____

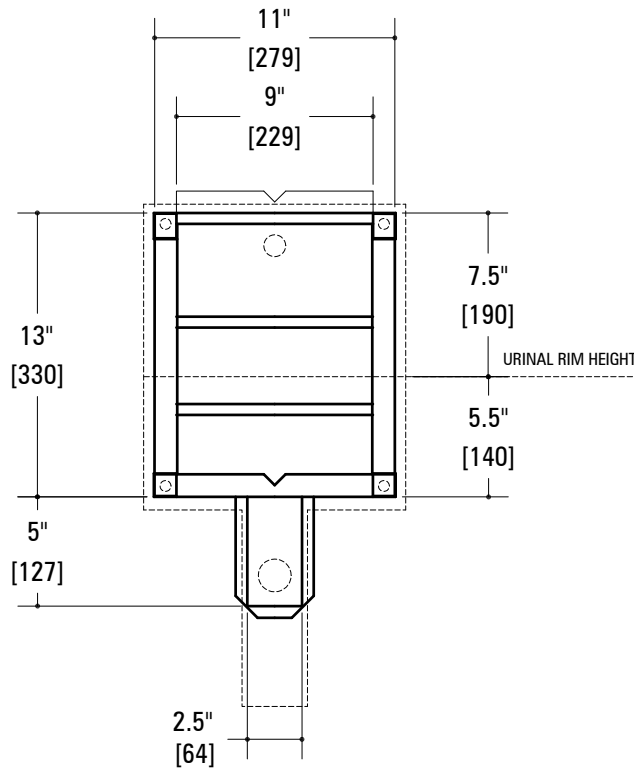
ITEM:

URINAL FIXTURE - 7130 & 7135

1. 3" (76) Dia. wall opening for waste outlet.
2. 2" (51) Dia. wall opening for 3/4" (19) MIPT flush supply inlet
(Not needed for top supply unit 7135)
3. 1" (25) Dia. Wall openings for anchors. (4)



HOLES FOR CORE DRILLING OR STEEL PLATE WALLS



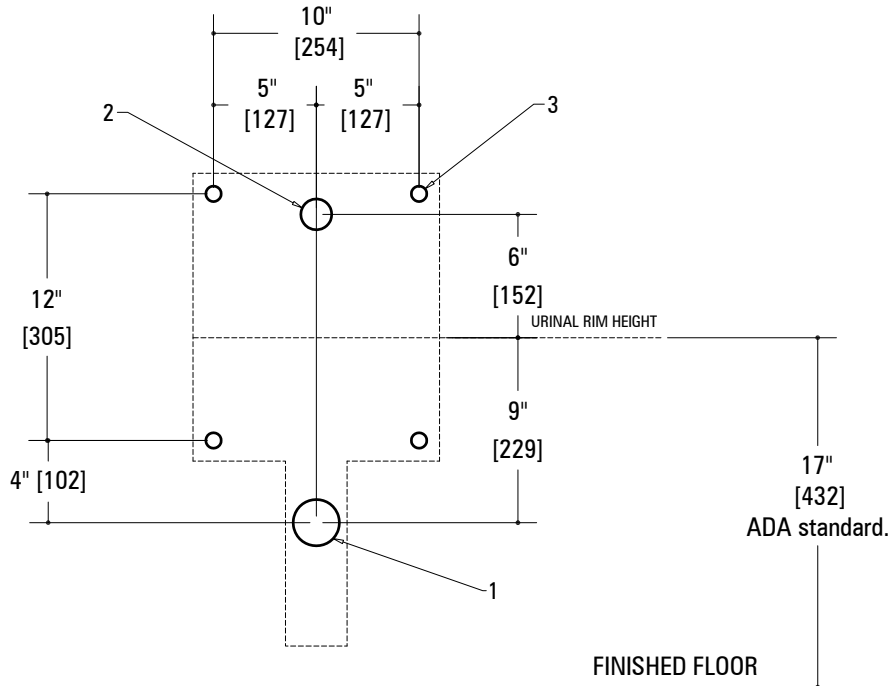
OPTIONAL SECURITY FRAME FOR POURED OR BLOCK WALLS
RECOMMENDED FOR NEW CONSTRUCTION

ITEM:
URINAL FIXTURE - 7130ADA & 7135ADA

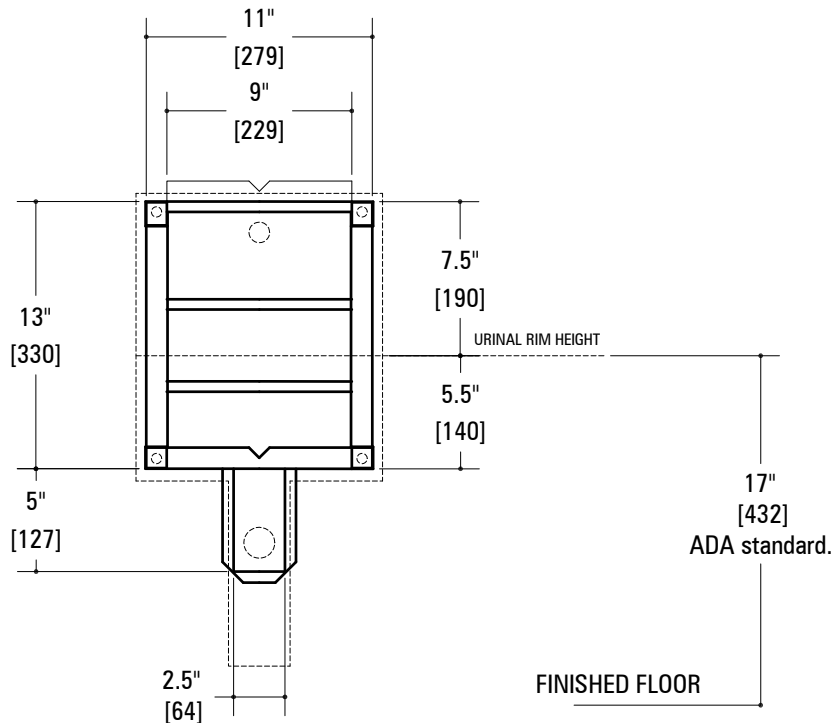
1. 3" (76) Dia. wall opening for waste outlet.
2. 2" (51) Dia. wall opening for 3/4" (19) MIPT flush supply inlet
(Not needed for top supply unit 7135ADA)
3. 1" (25) Dia. Wall openings for anchors. (4)



**ADA
COMPLIANT**



HOLES FOR CORE DRILLING OR STEEL PLATE WALLS



**OPTIONAL SECURITY FRAME FOR POURED OR BLOCK WALLS
RECOMMENDED FOR NEW CONSTRUCTION**

CODE NUMBER

3082675

DESCRIPTION

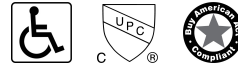
1.0 gpf, Polished Chrome Finish, Fixture Connection Top Spud, Single Flush, Regal® Exposed Manual Urinal Flushometer.

DETAILS

- Flush Volume: 1.0 gpf (3.8 Lpf)
- Finish: Polished Chrome (CP)
- Valve: Diaphragm
- Valve Body Material: Semi-red Brass
- Fixture Type: Urinal
- Fixture Connection: Top Spud
- Rough-In Dimension: 11 ½" (292mm)
- Spud Coupling: ¾" (19mm)
- Supply Pipe: ¾" (19mm)

FEATURES

- ADA Compliant Metal Oscillating Non-Hold-Open Handle
- Control Stop Plug
- Sweat Solder Adapter with Cover Tube
- Cast Wall Flange with Set Screw
- Vacuum Breaker Flush Connection
- Spud Coupling Wall and Spud Flange for ¾" Top Spud
- Non-Hold-Open Handle and No External Volume Adjustment to Ensure Water Conservation
- ¾" I.P.S. Wheel Handle Bak-Chek® Angle Stop

**COMPLIANCES & CERTIFICATIONS**

(ADA Compliant, cUPC Certified, BAA Compliant)

RECOMMENDED SPECIFICATION

Valve Body, Cover, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi- Red Brass. Valve shall be in compliance with the applicable sections of ASSE 1037 and ANSI/ASME 112.19.2.

VALVE OPERATING PRESSURE (FLOWING)

15-80 PSI (103-552 kPa). Specific fixtures may require greater minimum flowing pressure - consult manufacturer requirements.

DOWNLOADS

- [Regal XL Exposed Installation Instructions](#)
- [Control Stop Repair and Maintenance Guide](#)
- [Flush Connections Flanges Repair and Maintenance Guide](#)
- [Tail Piece Repair and Maintenance Guide](#)
- [Regal Flushometers Repair and Maintenance Guide](#)
- [Flushometer Pressure gauges](#)
- [Additional Downloads](#)

NOTES

All information contained within this document subject to change without notice.

Looking for other variations of the REGAL 186 product? [View the general spec sheet with all options.](#)

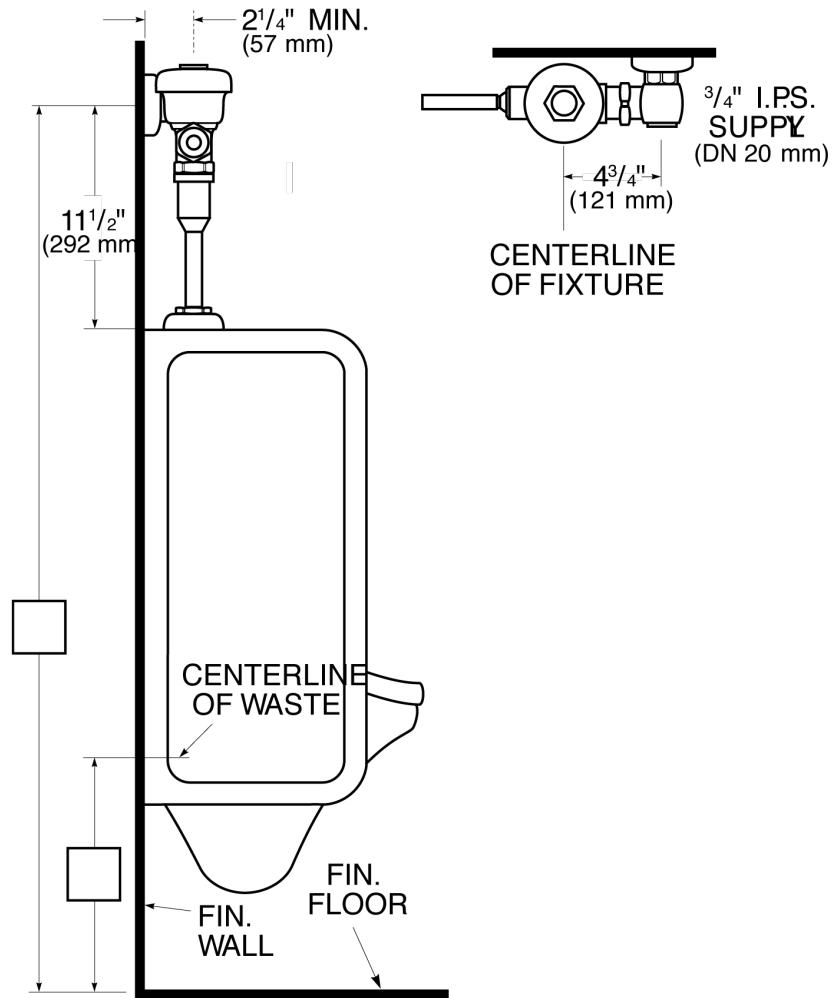
[Find a compatible urinal](#) for this flushometer.

[Find a compatible water closet](#) for this flushometer.

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Phone: 800.982.5839 • Fax: 800.447.8329 • sloan.com

ROUGH-IN



Sloan 10500 Seymour Ave, Franklin Park, IL 60131
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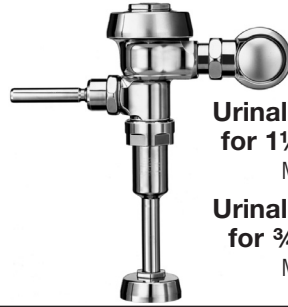
INSTALLATION INSTRUCTIONS FOR EXPOSED ROYAL® FLUSHOMETERS



**Closet Flushometer
for 1½" Top Spud**

MODELS 110/111,
113, 115 & 116

**Service Sink Flushometer
for 1½" Top Spud**
MODEL 117



**Urinal Flushometer
for 1¼" Top Spud**

MODEL 180

**Urinal Flushometer
for ¾" Top Spud**
MODEL 186



**Closet Flushometer
for 1½" Back Spud**

MODELS 120, 121 & 122

LIMITED WARRANTY

Unless otherwise noted, Sloan Valve Company warrants this product, manufactured and sold for commercial or industrial uses, to be free from defects in material and workmanship for a period of three (3) years (one (1) year for special finishes, SF faucets, PWT electronics and 30 days for PWT software) from date of first purchase. During this period, Sloan Valve Company will, at its option, repair, replace, or refund the purchase price of any product which fails to conform with this warranty under normal use and service. This shall be the sole and exclusive remedy under this warranty. Products must be returned to Sloan Valve Company, at customer's cost. No claims will be allowed for labor, transportation or other costs. This warranty extends only to persons or organizations who purchase Sloan Valve Company's products directly from Sloan Valve Company for purpose of resale. This warranty does not cover the life of the batteries.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO EVENT IS SLOAN VALVE COMPANY RESPONSIBLE FOR ANY CONSEQUENTIAL DAMAGES OF ANY MEASURE WHATSOEVER.

PRIOR TO INSTALLATION

Before you install the flushometer, be sure the items listed below are installed. Also, refer to the rough-in diagram below.

- Closet fixture • Drain line • Water supply line

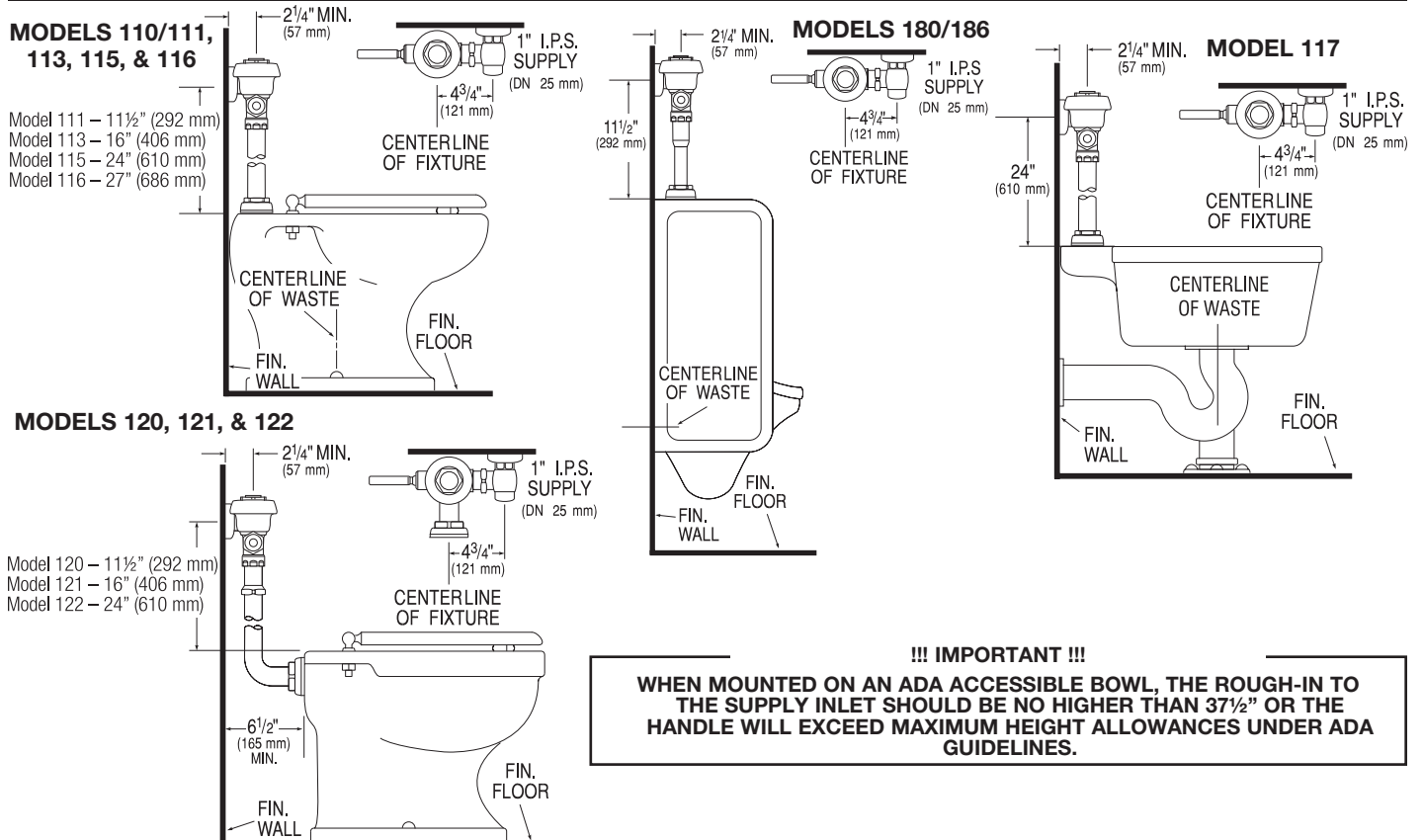
IMPORTANT:

- **ALL PLUMBING SHOULD BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS.**
- **WATER SUPPLY LINES MUST BE SIZED TO PROVIDE AN ADEQUATE VOLUME OF WATER FOR EACH FIXTURE.**
- **FLUSH ALL WATER LINES PRIOR TO MAKING CONNECTIONS.**

Sloan's flushometers are designed to operate with 15 to 80 psi (103 to 552kPa) of water pressure. **THE MINIMUM PRESSURE REQUIRED TO THE VALVE IS DETERMINED BY THE TYPE OF FIXTURE SELECTED.**

Consult fixture manufacturer for minimum pressure requirements. Most High Efficiency water closets require a minimum flowing pressure of 25 psi (172 kPa). Many building codes and the ASME A112.19.2 fixture standard list Maximum static water pressure as 80 PSI (552 kPa).

ROUGH-INS



TOOLS REQUIRED FOR INSTALLATION

- Straight blade screwdriver
- Sloan A-50 Super-Wrench™, Sloan A-109 Plier Wrench or smooth jawed spud wrench

!!! IMPORTANT !!!

PROTECT THE CHROME OR SPECIAL FINISH OF SLOAN FLUSHMETERS — DO NOT USE TOOTHED TOOLS TO INSTALL OR SERVICE THESE VALVES. USE A SLOAN A-50 SUPER-WRENCH™, SLOAN A-109 PLIER WRENCH OR SMOOTH JAWED SPUD WRENCH TO SECURE ALL COUPLINGS. SEE “CARE AND CLEANING” SECTION.

!!! IMPORTANT !!!

NEVER OPEN CONTROL STOP TO WHERE THE FLOW FROM THE VALVE EXCEEDS THE FLOW CAPABILITY OF THE FIXTURE. IN THE EVENT OF A VALVE FAILURE, THE FIXTURE MUST BE ABLE TO ACCOMMODATE A CONTINUOUS FLOW FROM THE VALVE.

!!! IMPORTANT !!!

WITH THE EXCEPTION OF CONTROL STOP INLET, DO NOT USE PIPE SEALANT OR PLUMBING GREASE ON ANY VALVE COMPONENT OR COUPLING!

!!! IMPORTANT !!!

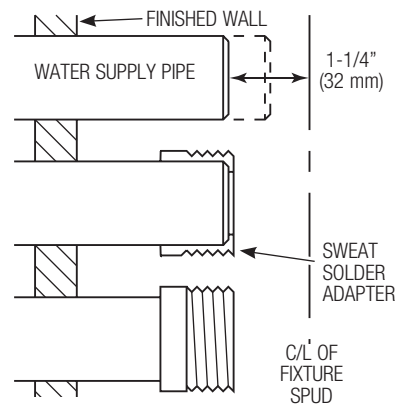
THIS PRODUCT CONTAINS MECHANICAL AND/OR ELECTRICAL COMPONENTS THAT ARE SUBJECT TO NORMAL WEAR. THESE COMPONENTS SHOULD BE CHECKED ON A REGULAR BASIS AND REPLACED AS NEEDED TO MAINTAIN THE VALVE'S PERFORMANCE.

Please take the time to read this manual to ensure proper product installation and longevity.

When further assistance is required, please contact your local Sloan Representative or Sloan Technical Support at:
1-888-SLOAN-14 (1-888-756-2614)

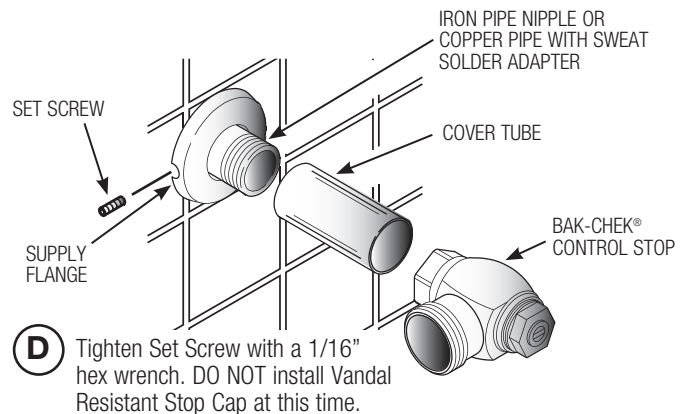
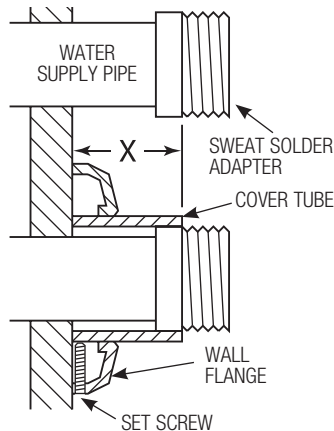
1 - INSTALL OPTIONAL SWEAT SOLDER ADAPTER (ONLY IF YOUR SUPPLY PIPE DOES NOT HAVE A MALE THREAD)

- Measure from finished wall to C/L of fixture spud. Cut pipe 1/4" (32 mm) shorter than this measurement. Chamfer O.D. and I.D. of water supply pipe.
- Slide threaded adapter fully onto pipe.
- Sweat solder the Adapter to pipe.



2 - INSTALL COVER TUBE, WALL FLANGE AND CONTROL STOP TO SUPPLY PIPE

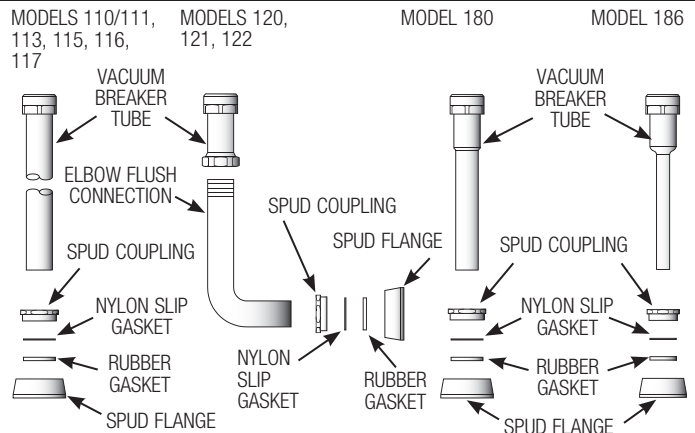
- Measure from finished wall to first thread of Adapter or threaded supply pipe (dimension "X"). Cut Cover Tube to this length.
- Slide Cover Tube over pipe. Slide Wall Flange over Cover Tube until against wall.
- Thread Control Stop onto pipe. Tighten with a wrench.



- Tighten Set Screw with a 1/16" hex wrench. DO NOT install Vandal Resistant Stop Cap at this time.

3 - INSTALL VACUUM BREAKER FLUSH CONNECTION

- Slide Spud Coupling, Nylon Slip Gasket, Rubber Gasket and Spud Flange over Vacuum Breaker Tube.
- Insert Tube into Fixture Spud.
- Hand tighten Spud Coupling onto Fixture Spud.



4 - INSTALL FLUSHOMETER AND TRIPLE SEAL HANDLE ASSEMBLY

NOTE

For high efficiency urinal flushometers (0.5, 0.25 and 0.125 gpf), it is necessary to first insert the flow control component into the tailpiece assembly. See the H1015A flow control kit and separate instructions for details on how to install.

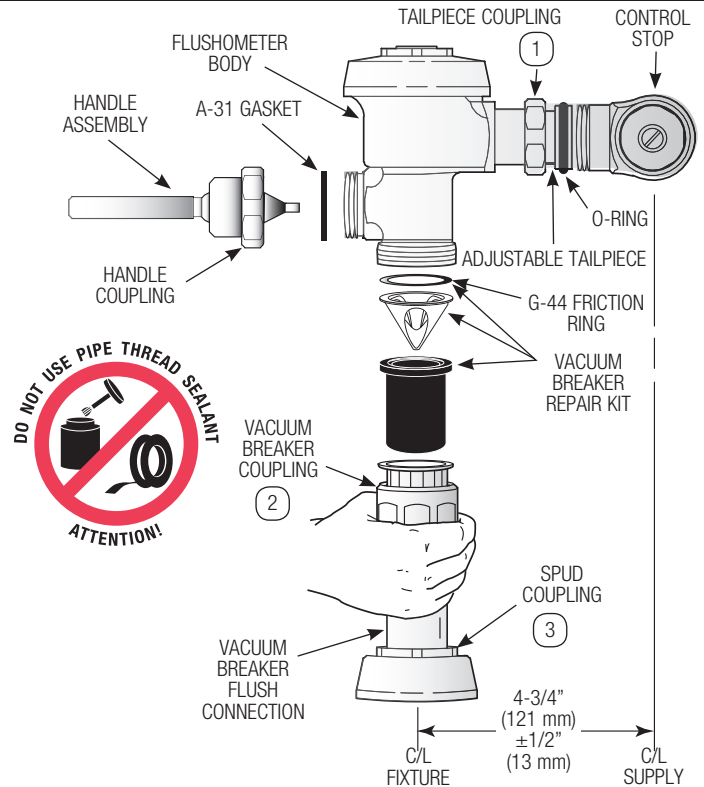
- A** Lubricate tailpiece O-ring with water. Insert Adjustable Tailpiece into Control Stop. Tighten Tailpiece Coupling by hand.
- B** Align Flushometer directly above the Vacuum Breaker Flush Connection by sliding the Flushometer Body IN or OUT as needed. Tighten Vacuum Breaker Coupling by hand.

NOTE

Maximum adjustment of the Sloan Adjustable Tailpiece is 1/2" (13 mm) IN or OUT from the standard 4-3/4" (121 mm) (centerline of Flushometer to centerline of Control Stop).

If roughing-in measurement exceeds 5-1/4" (133 mm), consult factory for longer tailpiece.

- C** Align Flushometer Body and securely tighten first the Tailpiece Coupling (1), then the Vacuum Breaker Coupling (2), and finally the Spud Coupling (3). Use a wrench to tighten these couplings in the order shown.
 - D** Install the red A-31 Handle Gasket on the Handle Assembly. Insert the Handle Assembly into the Handle opening in the Flushometer Body. Securely tighten the Handle coupling with a wrench.
- Sloan's triple-sealed Flushometer Handle is ADA-compliant.



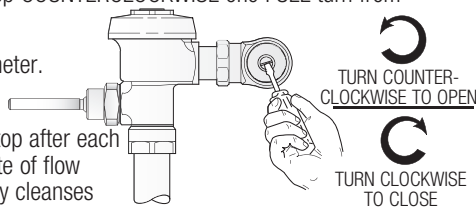
5 - FLUSH OUT SUPPLY LINE

- A** Make sure Control Stop is CLOSED and remove Flushometer Outer Cover.
- B** Remove Inside Cover and lift out Inside Parts Assembly.

- C** Reinstall Outside and Inside Cover wrench tight. Open Control Stop to flush supply line. Close Control Stop and remove Outside and Inside Cover.
- D** Reinstall Inside Parts Assembly, Inside Cover and Outside Cover wrench tight.

6 - ADJUST CONTROL STOP AND INSTALL VANDAL RESISTANT STOP CAP

- A** Open Control Stop COUNTERCLOCKWISE one FULL turn from closed position.
- B** Activate Flushometer.
- C** Adjust Control Stop after each flush until the rate of flow delivered properly cleanses the fixture.

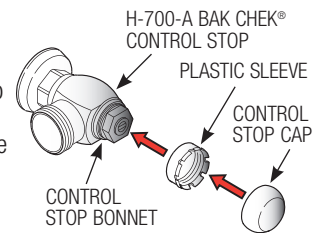


!!! IMPORTANT !!!

Sloan's flushometers are engineered for quiet operation. Excessive water flow creates noise, while too little water flow may not satisfy the needs of the fixture. Proper adjustment is made when plumbing fixture is cleansed after each flush without splashing water out from the lip AND a quiet flushing cycle is achieved.

Never open Control Stop to where the flow from the valve exceeds the flow capability of the fixture. In the event of a valve failure, the fixture must be able to accommodate a continuous flow from the valve.

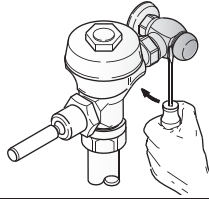
- D** Install Vandal Resistant Control Stop Cap onto Control Stop.
 - Thread the Plastic Sleeve onto the Stop Bonnet until it is snug (tighten only by hand; do not use pliers or a wrench).
 - Place the metal Control Stop Cap over the plastic Sleeve and use the palm of the hand to push or "pop" the Cap over the fingers of the Plastic Sleeve. The Cap should spin freely.



Important: DO NOT install Cap onto Sleeve unless the Sleeve has been threaded onto Control Stop Bonnet. If the Sleeve and Cap are assembled off of the Control Stop, the Sleeve WILL NOT come apart from the Cap.

VANDAL RESISTANT CONTROL STOP CAP REMOVAL

Use a large flat screwdriver as a lever to remove the Cap from the Control Stop. Insert the screwdriver blade between the bottom edge of the Cap and the flat surface of the Control Stop body as shown. Push the screwdriver handle straight back toward the wall to gently lift the Cap. If necessary, work the screwdriver around the diameter of the Cap until you can grasp the Cap and lift it completely off the Sleeve. The Sleeve should remain attached to the bonnet of the Control Stop.



TROUBLESHOOTING GUIDE

1. Flushometer does not function (no flush).

- Control stop or main valve is closed. Open control stop or main valve.
- Handle assembly is damaged. Replace handle or install handle repair kit.
- Relief Valve is damaged. Replace relief valve.

2. Volume of water is not sufficient to siphon fixture.

- Control stop is not open wide enough. Adjust control stop for desired delivery of water volume.
- Diaphragm assembly is damaged. Replace diaphragm assembly.
- Incorrect diaphragm assembly is installed in flushometer; for instance, urinal assembly inside a closet flushometer, or low consumption assembly inside a higher consumption fixture. Determine the flush volume required by the fixture and replace diaphragm. Use valve label and markings on fixture for reference.
- Water supply volume or pressure is inadequate. If no gauges are available to properly measure supply pressure or volume of water at the flushometer, then remove the relief valve from the diaphragm assembly, reassemble the flushometer and completely open the control stop.
 - If the fixture siphons, more water volume is required. Install a higher flushing volume diaphragm. **IMPORTANT – LAWS AND REGULATIONS PROHIBIT THE USE OF HIGHER FLUSHING VOLUMES THAN LISTED ON FIXTURE OR FLUSHOMETER.**
 - If the fixture DOES NOT siphon or if a low consumption flush is required, steps must be taken to increase the water supply pressure and/or volume. Contact the fixture manufacturer for minimum water supply requirements of the fixture.

3. Length of flush is too short (short flush).

- Diaphragm assembly is worn or damaged. Replace diaphragm assembly.
- Handle assembly is damaged. Replace handle or install handle repair kit.
- Incorrect diaphragm assembly is installed in flushometer; for instance, urinal assembly inside a closet flushometer, or low consumption assembly inside a higher consumption fixture. Determine the flush volume required by the fixture and replace diaphragm. Use valve label and markings on fixture for reference.

4. Length of flush is too long (long flush) or continuous.

- Metering bypass hole (upper filter ring) in diaphragm is clogged. Remove the diaphragm assembly. Remove the primary and secondary filter rings from the diaphragm, wash under running water, and reassemble. Replace as necessary.
- Diaphragm or relief valve is damaged. Replace diaphragm or relief valve.
- Incorrect diaphragm assembly is installed in flushometer; for instance, closet assembly inside a urinal flushometer, or water saver assembly inside a low consumption flushometer. Determine the flush volume required by the fixture and replace the diaphragm. Use valve label and markings on fixture for reference.
- Inside cover is damaged. Replace Inside cover.
- Supply line water pressure has dropped and is not sufficient to close the valve. Close control stop until pressure is restored.
- Relief valve is not seated properly. Disassemble diaphragm components (relief valve, filter rings, and diaphragm unit), wash under running water, and reassemble. Replace as necessary.

5. Chattering noise is heard during flush.

- Inside cover is damaged. Replace inside cover.
- Relief valve or diaphragm is damaged. Replace relief valve or diaphragm assembly.

6. Handle Leaks.

- Handle seal or assembly is damaged. Replace handle or install handle repair kit.

7. Water splashes from fixture.

- Control stop is open wider than necessary. Adjust control stop for desired delivery of water volume.
- Water saver/conventional diaphragm assembly is installed on low consumption fixture or closet diaphragm assembly is installed on urinal fixture. Determine the required flush volume (see label on valve or markings on fixture). Replace diaphragm assembly or relief valve for appropriate flush volume of fixture.

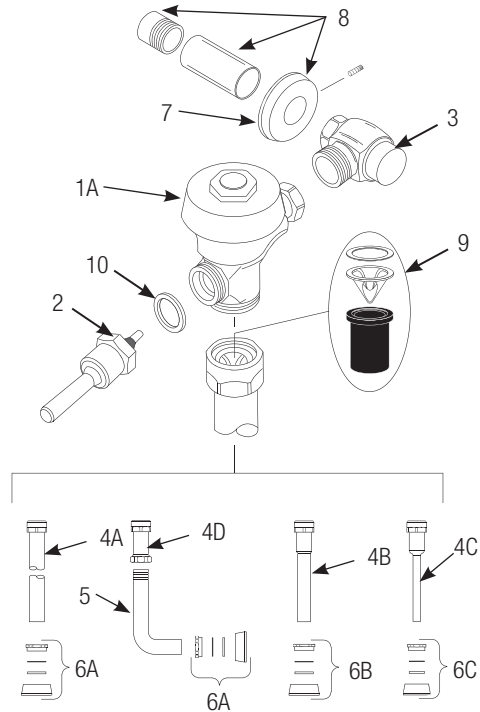
**When assistance is required, please contact your local Sloan Representative or Sloan Technical Support at:
1-888-SLOAN-14 (1-888-756-2614)**

CARE AND CLEANING

DO NOT use abrasive or chemical cleaners (including chlorine bleach) to clean Flushometers that may dull the luster and attack the chrome or special decorative finishes. Use ONLY mild soap and water, then wipe dry with clean cloth or towel.

While cleaning the bathroom tile, protect the Flushometer from any splattering of cleaner. Acids and cleaning fluids will discolor or remove chrome plating.

PARTS LIST



Item Part

No.	No.	Description
1	†	Valve Assembly
2	B-73-A	ADA Compliant Handle Assembly
3	H-700-A	Bak-Chek® Control Stop
4A	V-600-AA	1½" (38 mm) Vacuum Breaker Assembly ‡
4B	V-600-AA	1¼" (32 mm) Vacuum Breaker Assembly
4C	V-600-AA	¾" (19 mm) Vacuum Breaker Assembly
4D	V-600-A	Vacuum Breaker Assembly
5	F-109	1½" (38 mm) Elbow Flush Connection
6A	F-56-A	1½" (38 mm) Spud Coupling Assembly
6B	F-57-A	1¼" (32 mm) Spud Coupling Assembly
6C	F-58-A	¾" (19 mm) Spud Coupling Assembly
7	F-7	Supply Flange (Supplied when Valve is not Ordered with Sweat Solder Kit)
8	H-633-AA	1" (25 mm) Sweat Solder Kit with Cast Set Screw Flange
	H-636-AA	¾" (19 mm) Sweat Solder Kit with Cast Set Screw Flange
9	V-651-A	High Back Pressure Vacuum Breaker Repair Kit
10	A-31	Handle Gasket
†		Part number varies with valve model variation; consult factory.
‡		Length varies with valve model variation; consult factory.

NOTE: The information contained in this document is subject to change without notice.

SLOAN • 10500 SEYMOUR AVENUE • FRANKLIN PARK, IL 60131

Phone: 1-800-9-VALVE-9 or 1-847-671-4300 • Fax: 1-800-447-8329 or 1-847-671-4380 • sloan.com

LAVATORY FIXTURE - 5683-CF

Item: _____



5683-CF High Abuse Lavatory

STANDARD FEATURES

- **Wall mounted fixture, wall outlet waste.**
- **Lavatory basin-**
 - Rectangular lavatory basin.
 - 1 5/8" (41mm) dia. die formed drain opening.
- Integral ribbed soap tray.
- 4" (102mm) high back splash.
- Deck punched for faucets as required.

Unit may be pictured with some optional features.



WARNING: Cancer and Reproductive Harm
- www.P65Warnings.ca.gov.

► DESCRIPTION

This Lavatory is designed for public areas requiring a durable and vandal resistant fixture. The lavatory is fabricated using heavy gauge type 304 stainless steel seamlessly welded to form a one piece, vandal resistant unit. The lavatory is designed with an integral ribbed soap dish and a 4" (102mm) high backsplash. Exposed surfaces have a satin finish. Valves and other trim must be specified separately.

► PERFORMANCE STANDARDS

This fixture meets or exceeds ASME A112.19.3 / CSA B45.4 standards for "Stainless Steel Plumbing Fixtures".

Listed by



► INSTALLATION

The lavatory is designed for installation on a finished wall using a hanger bracket and bolt holes on back of the fixture. Wall anchors and anchor bolts are not furnished. Piping must be roughed out of wall for connection to lavatory waste and lavatory valve supplies.

Hole Punchings

- Single Hole** On Center.
- 4" Centerset** Two Holes.
- 4" Centerset** Three Holes. (Standard)
- 8" Centerset** Two Holes.

Hand Basins

- RB** Rectangular Basin. (Standard)

Drains

- ND** No Drain. (Die Formed Drain Opening 1-1/4")
- A261** Grid Drain with elbow.
- A270** Grid drain with Tailpiece.
- SJP** Slip Joint P-trap.

Options/Accessories

- OF** Overflow Vent.
- A775** Angle braces. (Standard)
- A780** Waste enclosures.
- PCC** Powder Coat - Anti-microbial White.
- A168** Metal Template.

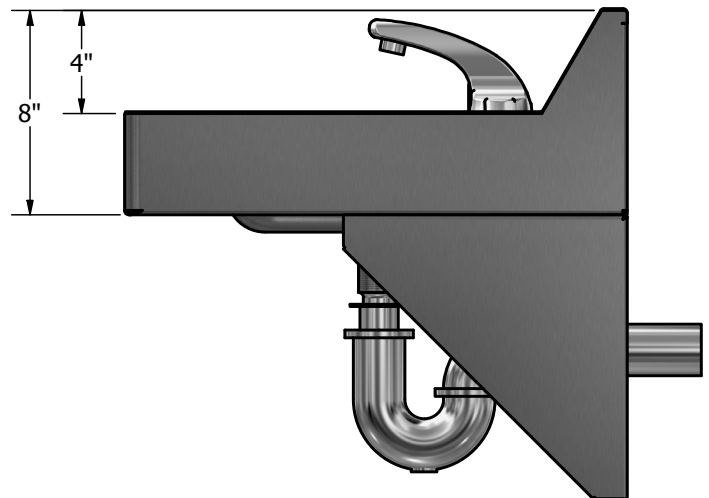
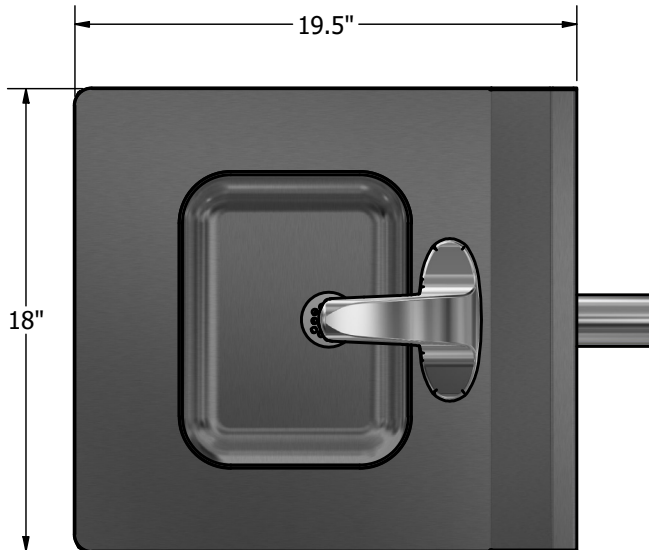
Deck Mounted Faucets

- A306** Faucet with Gooseneck.
- A307** Faucet blade style handles.

Note: To mount lavatory in accordance with "ADA" requirements the rim height must be mounted at 34" (864mm) above finished floor.

LAVATORY FIXTURE - 5683-CF

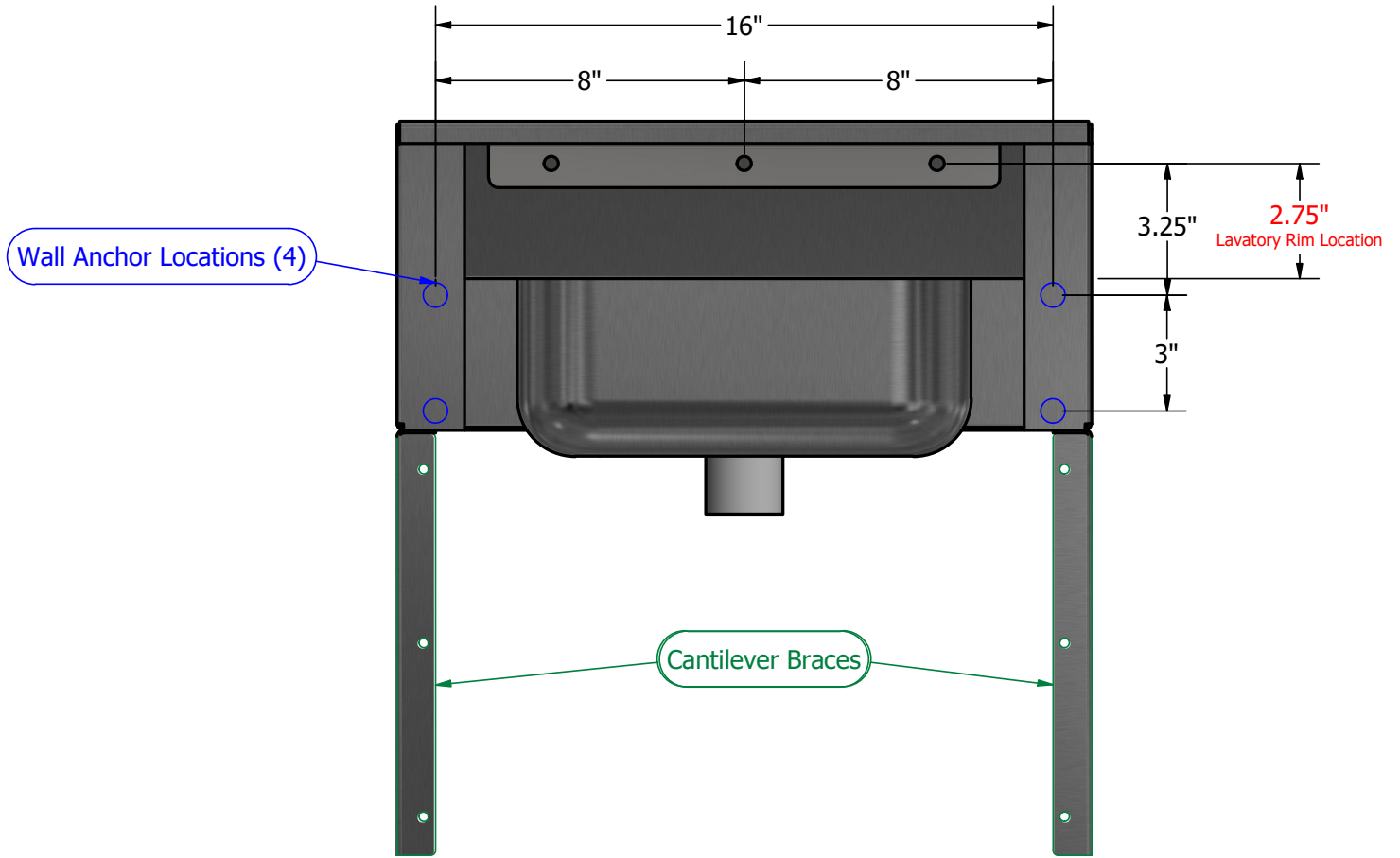
Item: _____



Due to continuous product improvement Metcraft reserves the right to make changes in design and specifications without prior notice. All dimensions should be verified with the factory for current information.

APPROVED FOR MANUFACTURING	Company: _____	Name: _____
	Signature: _____	Date: _____

Item: _____





PROFLO®
2 in. Open Diameter Faucet Hole Cover Chrome

Part #PFFHCP | Item #431561 | Manufacturer Part #FFHCK



Color/Finish:

Chrome



Product Details

Stem style

Specifications

ADA Compliant: No

Diameter: 2 in

Type: PFFHCP

Color Finish: Chrome

Faucet Part Type: Cover

Color Finish Category: Chromes

Trim Only: No

PF200 Series

Trap Covers



Product Features

- ADA & UFAS Compliant
- No tools required contractor friendly Tear-To-Fit feature makes trimming fast
- Universal design fits virtually all lavatory applications
- Smooth, flush SnapClip™ fasteners firmly secure piping covers in place and are nonabrasive and reusable
- Antimicrobial vinyl maintain sanitary conditions
- Lock Lid™ on valve stops tampering and allows service
- Cleanout nut cap allows service on trap without disassembly
- Internal ribs enhance K valve and soften impact cushioning
- Fire retardant

Model Numbers

PF200WH PF202WH PF205WH PFEXT200WH
 PF201WH PF203WH PF299WH

Material	Soft, resilient molded vinyl
Nominal Wall	1/8" constant with internal ribs
Durometer	70-80 – Shore A
UV Protection	Will not fade or discolor
Durability	Virtually indestructible
Trimming	E-Z Tear-To-Fit trim feature (no tools needed)
Fasteners	Internal E-Z Grip fasteners, reusable
Color	China white
Compatibility	Fits all 1-1/4" or 1-1/2" cast brass or tubular P-trap assemblies and 3/8" or 1/2" angle stop assemblies
Paintability	Apply latex paint
Burning Characteristics ASTM D-635	Self extinguished 0 sec (ATB) mm (AEB)
Bacterial/Fungus Resistance	ASTM G21 and G22 – Result: 0 growth
Maintenance	Wipe clean using common detergents

New E-Z Tear-To-Fit feature and E-Z Grip built-in fasteners make installation fast and easy!

1. Tear-To-Fit on internal, dimensioned tear lines for quick, clean, accurate trimming to fit virtually any piping configuration. Covers flex to install over pipes.
2. Press seams together at finger recesses to engage E-Z Grip internal fasteners for a secure, safe, tamper-resistant installation. To remove cover, firmly pull seam apart using a strong grip. To reinstall, press seams back together.

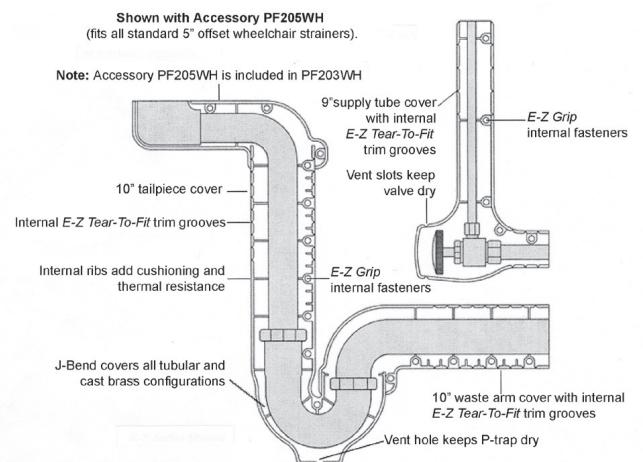
Warranty and Codes

This PROFLO product carries a 1-year limited warranty. This product meets ADA article 4.19.4; CABO/ANSI 4.20.4; UFAS 4.19.4; California Title 24; UPC/IAPMO ICC; Canada Barrier-Free Code. Made in USA.



Product Specifications

PF201WH



PF200WH	one P-trap cover
PF201WH	one P-trap cover, one angle valve and supply cover
PF202WH	one P-trap cover, two angle valves and supply covers
PF203WH	one P-trap cover, two angle valves and supply covers, one 5" offset tailpiece wheelchair strainer cover
PF299WH	one angle valve and supply cover
ACCESSORIES	
PF205WH	one 5" offset tailpiece wheelchair strainer assembly
EXTENSIONS	
PFEXT200WH	one 16" extension for drain waste or tailpiece



Manual and Metering Faucets

Product Type

Deck Mounted Single Hole Single Supply Metering Sink
Faucet

Features & Specifications

- Single Hole
- 2.2 GPM (8.3 L/min) Aerator
- 1 3/4" Vandal Proof MVP Metering Push Handle
- MVP Metering Adjustable Cycle Time Closure Cartridge
- 1/2" NPSM Supply Inlet with Coupling Nut for 3/8" or 1/2" Flexible Riser
- 3 3/8" Center to Center Integral Cast Brass Spout
- ECAST® design provides durable brass construction with total lead content equal to or less than 0.25% by weighted average
- CFNow! Item Ships in 5 Days

Performance Specification

- Rated Operating Pressure: 20-125 PSI
- Rated Operating Temperature: 40-140°F

Warranty

- Lifetime Limited Faucet Warranty
- 5-Year Limited Cartridge Warranty
- 1-Year Limited Finish Warranty

Codes & Standards

- ASME A112.18.1/CSA B125.1
- Certified to NSF/ANSI 61, Section 9 by CSA
- California Health and Safety Code 116875 (AB1953-2006)
- Vermont Bill S.152
- NSF/ANSI 372 Low Lead Content
- ADA ANSI/ICC A117.1

Job Name _____

Item Number _____

Section/Tag _____

Model Specified _____

Architect _____

Engineer _____

Contractor _____

Submitted as Shown Submitted with Variations

Date _____

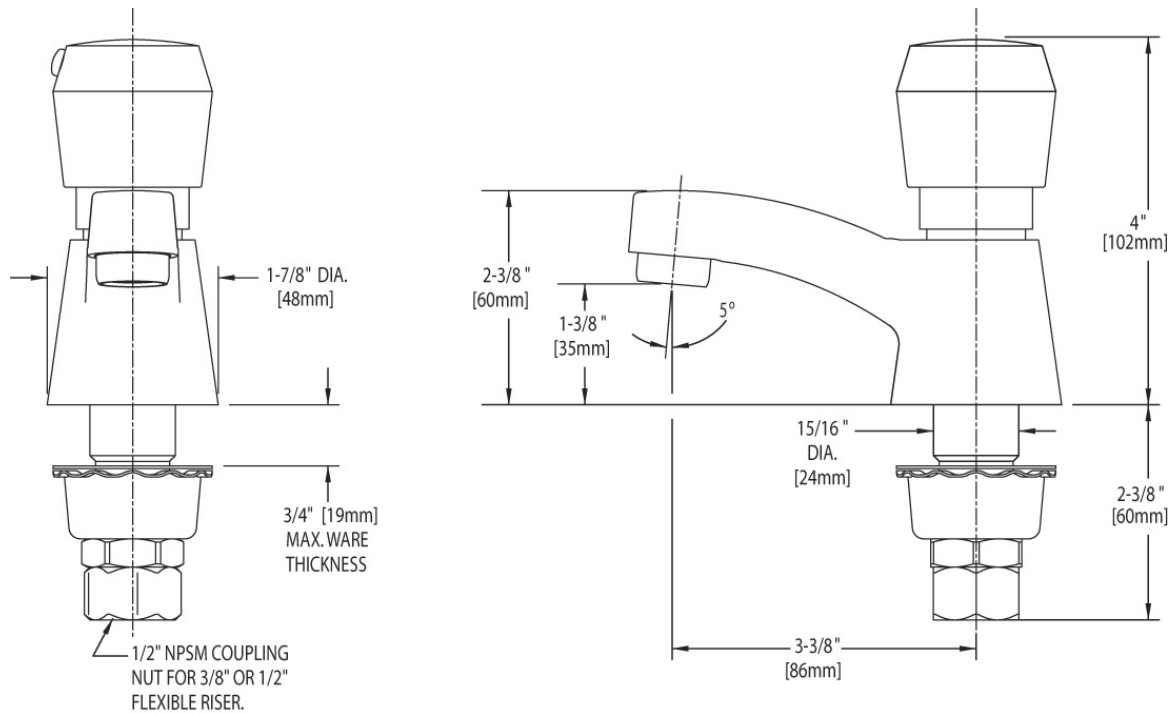


ECAST

ECAST products are intended for installation where state laws and local codes mandate lead content levels or in any location where lead content is a concern.

Architect/Engineer Specification

Chicago Faucets No. 333-665PSHABCP, Deck Mounted Single Hole Single Supply Metering Sink Faucet, Chrome Plated solid brass construction. 3 3/8" Center to Center Integral Cast Brass Spout. 2.2 GPM (8.3 L/min) Pressure Compensating Softflo Aerator. 1 3/4" Metal Vandal Proof MVP Metering Push handle(s) with Blue or Red Button. MVP™ self-closing, auto-timed metering cartridge, adjustable run time from 2 to 15 seconds, opens with push, 0.20 max gallon/cycle. 1/2" NPSM Supply Inlet with Coupling Nut for 3/8" or 1/2" Flexible Riser. ECAST® construction with less than 0.25% lead content by weighted average. Secondary Control Valve: 3 3/8" Center to Center Integral Cast Brass Spout. This product meets ADA ANSI/ICC A117.1 requirements and is tested and certified to industry standards: ASME A112.18.1/CSA B125.1, Certified to NSF/ANSI 61, Section 9 by CSA, California Health and Safety Code 116875 (AB1953-2006), Vermont Bill S.152, and NSF/ANSI 372 Low Lead Content.



Operation and Maintenance

Installation should be in accordance with local plumbing codes. Flush all pipes thoroughly before installation. After installation, remove spout outlet or flow control and flush faucet thoroughly to clear any debris. Care should be taken when cleaning the product. Do not use abrasive cleaners, chemicals or solvents as they can result in surface damage. Use mild soap and warm water for cleaning and protecting the life of Chicago Faucet products. For specific operation and maintenance refer to the installation instructions and repair parts documents that are located at www.chicagofaucets.com.

Chicago Faucets, member of the Geberit Group, is the leading brand of commercial faucets and fittings in the United States, offering a complete range of products for schools, laboratories, hospitals, office buildings, food service, airports and sport facilities. Call 1.800.TECTRUE or 1.847.803.5000 Option 1 for installation or other technical assistance.



Deck Mounted Faucets Installation Instructions

Recommended for base numbers 50, 50T, 51, 51T, 333, 335, 349, 350, 525, 526, 527, 700, 701, 730, 797, 802, 891, 894, 895, 929, 930, 931, 1100, 1102, 1891, 1895, and LWM Series Centerset and Single Basin Fittings, Pop-Up Drain Installation and Rigid/Swing Convertible Spout Installation.

Overview

Chicago Faucets deck mounted faucets feature cast brass bodies and precision cartridges for years of reliable operation. Metering models with adjustable cycle time offer true water savings.

Notice to the Installer

- Read this entire instruction sheet before installing to ensure proper installation.
- Installation must comply with local codes and ordinances.
- For fittings installed with pre-rinse or glass filler valves, check valves must be installed to prevent crossflow.

Pressurized plumbing fixtures shall be installed in accordance with manufacturer's recommendations. The supply piping to these devices shall be securely anchored to the building structure to prevent installed device from unnecessary movement when operated by the user. Care shall be exercised when installing the device to prevent marring the exposed surface.

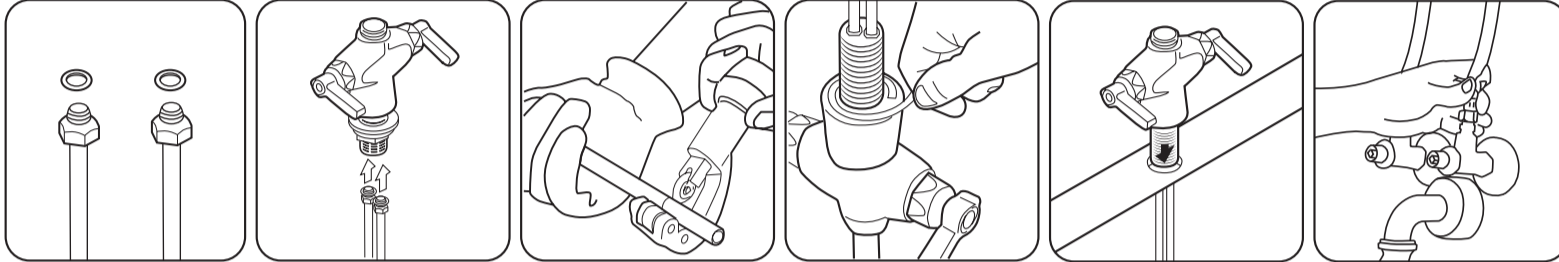
NOTE: The information in this manual is subject to change without notice.

Please leave this manual with the facility manager after completing the faucet installation. This document contains information necessary for routine maintenance and servicing.

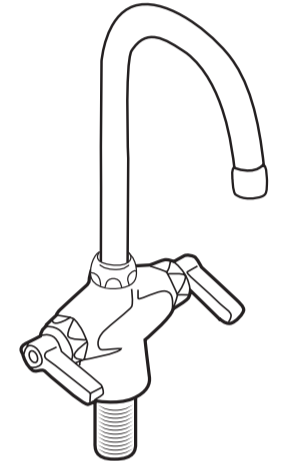
NOTE: Before installation, turn off water supplies to existing faucet and remove faucet if replacing. Clean faucet basin and clear away debris. Flush all supply lines before connecting to faucet. Failure to do so can result in debris clogging the inlets and/or cartridges.



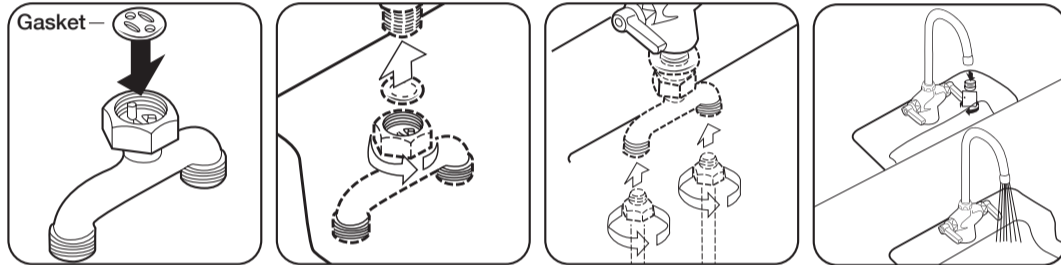
Single Hole Mixing Fittings — Base numbers 50, 50T, 51, 51T



1. Ensure O-Rings are installed on hoses or tubes.
2. Install hoses or tubes.
- Copper Tube Installation**
2b. Cut tubes to desired length.
3. Apply putty to underside of faucet body to assure a good seal and level fit.
4. Place shank through hole in sink and assemble mounting hardware.
5. Attach hoses or tubes to supply stops. Make sure gasket is installed.

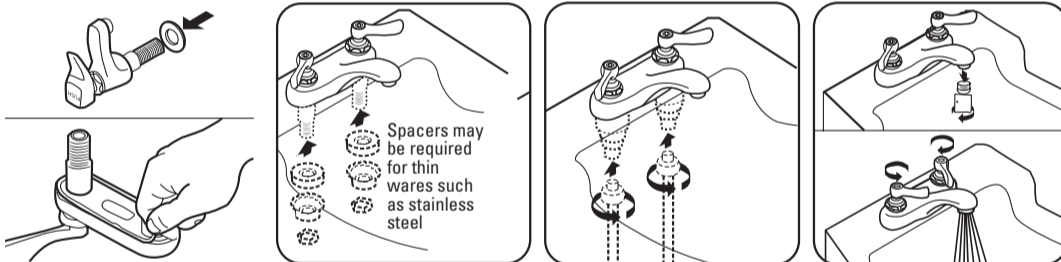


Mixing Tee Installation

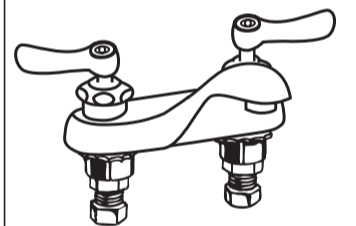


1. Install tee gasket over guide pins and secure coupling nut of tee to body shank.
2. Secure coupling nut of tee to body shank. Tighten securely.
3. Attach supply lines with coupling nuts. Tighten securely.
4. Remove outlet and flush lines for about one minute. Replace outlet.

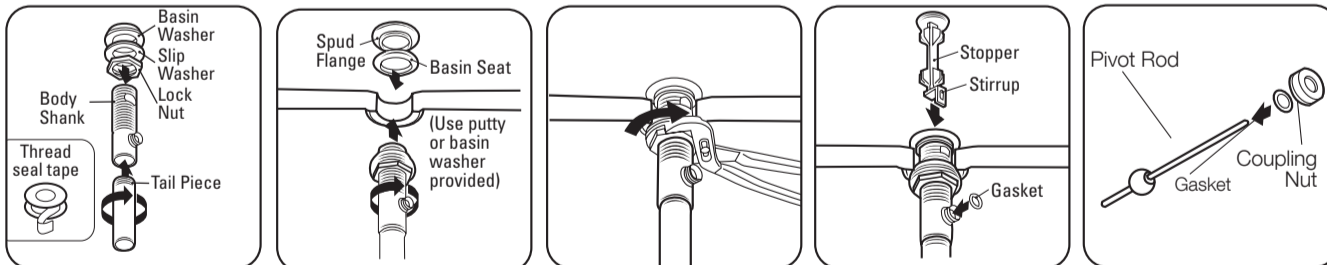
Centerset and Single Basin Fittings — Base numbers 333, 335, 349, 350, 525, 526, 527, 700, 701, 730, 797, 802, 891, 894, 895, 1100, 1102, 1891, 1895



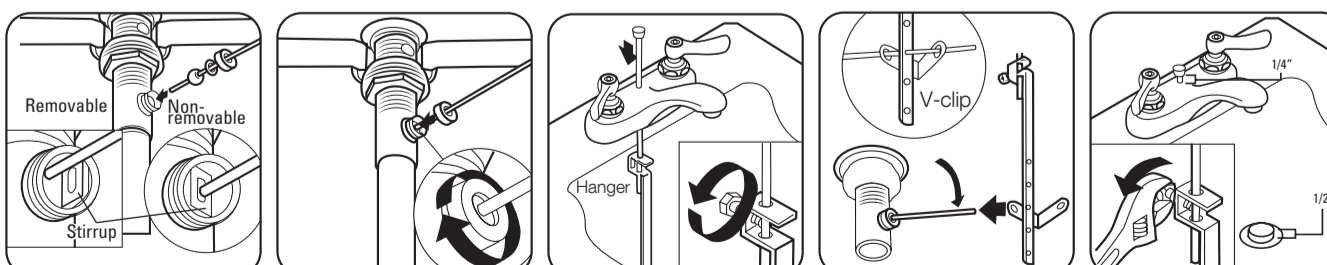
1. Apply putty or rubber washer to underside of faucet body to assure a good seal and level fit.
2. Place shank(s) through holes in sink and assemble mounting hardware. Use spacers if necessary.
3. Attach supply lines with coupling nuts and tighten securely. Attach spout if provided separately.
4. Remove outlet and flush lines for about one minute. Replace outlet.



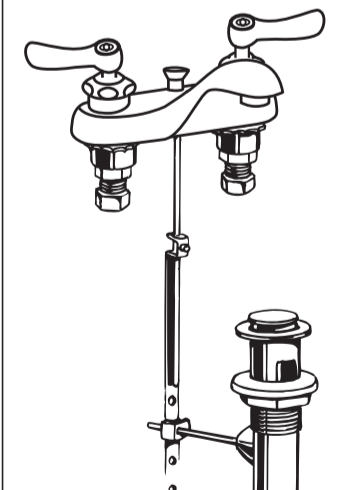
Pop-Up Drain Installation



1. Assemble tail piece to body shank with thread seal tape. Assemble lock nut, slip washer, and basin washer to body shank.
2. Fully assemble the basin seat and spud flange to body shank assembly. (Use putty or basin washer provided)
3. Position body shank toward the lift rod. Tighten lock nut until properly sealed.
4. Place stopper into body shank cavity orienting the stirrup for removable or non-removable stopper as desired. (see #6)
5. Insert pivot ball rod assembly through pivot rod gasket and coupling nut.



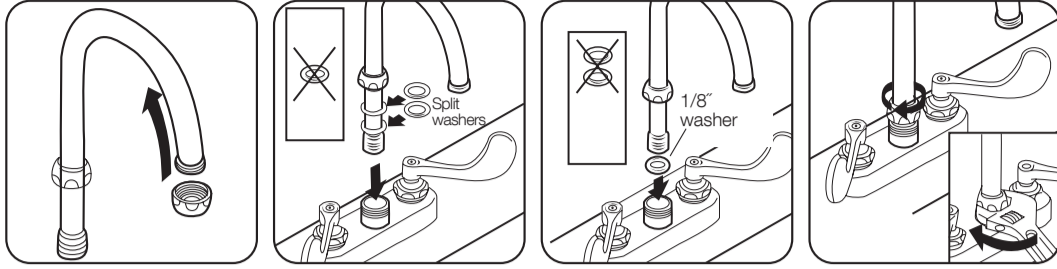
6. Attach pivot rod assembly to body shank.
7. Tighten pivot rod assembly nut as required to seal and provide smooth operation.
8. Insert pop up rod through holes in hanger and hand tighten.
9. Push pivot ball rod to lowest position, squeeze v-clip and slide pivot ball rod through v-clip and appropriate hole in hanger.
10. Test the assembly for proper function and make adjustments as necessary. Once set, tighten securely.



Deck Mounted Faucets Installation Instructions

(continued)

Rigid/Swing Convertible Spout Installation



1. Remove outlet and assemble spout nut over outlet end, until it rests on shoulder of spout joint.
2. **For Swing Spouts**
2a. Assemble two plastic split washers to spout joint and discard 1/8" thick plastic washer.
For Rigid Spouts Only
2b. Place 1/8" thick plastic washer into spout base bore and discard plastic split washers.
3. Insert spout assembly firmly into spout base and tighten spout nut.

Chicago Faucets deck mounted faucets come with cartridges already installed. Instructions for adjusting the timing on metering cartridges are shown below. For complete instructions on servicing and replacing Chicago Faucets cartridges, see our Cartridge Maintenance/Repair Guide, available online at chicagofaucets.com/pdf/CF1081.pdf. You may also order a copy of the Guide by calling 800-832-8783.

Supplemental Bubbler Installation Instructions for 748-665CP, 748-665FHCP, 748-244CP and 748-244FHCP

Installation with Anti-Rotational Pins (Figure A)

1. Choose Two holes in bubbler base that corresponds with the deck/sink drilling and tap each anti-rotational pin with a hammer until seated. There should be approximately 1/8" length of pin exposed when fully seated.
2. Drill 3/16" diameter holes on 1-9/32" centers and 1/4" deep in the deck/sink for anti-rotational pins if mounting holes are not provided.
3. Attach Bubbler to deck using the anti-rotational washer provided.

Flow Adjustments (Figure B)

1. The projection of water flow can be adjusted by using the 1/8" hex wrench provided. Insert hex wrench and rotate control clockwise or counterclockwise until the desired flow is achieved.

Note: Bubblers have been designed to utilize the 722-013K inlet flow control. To insure proper performance, it is imperative that the 722-013K be installed with each bubbler.

Timing Adjustment on an MVP Metering Cartridge

1. With cartridge and handle installed in body and water supply turned on, purge cartridge of air by pushing handle completely down 4-8 times repeatedly, then check timing cycle.
2. To change cycle time, remove index button, then handle using a 3/32" hex wrench. (Figure C)
3. Using your fingers, change height of adjustment nut by 1/4 turn only. Turn adjustment nut clockwise to increase cycle time or counter-clockwise to decrease cycle time. (Figure D)
4. If filter and lower valve cartridge have been removed from fitting, replace them by inserting filter first.
5. If gasket has been removed from the actuator assembly, replace it by inserting into bottom of actuator assembly.
6. Assemble actuator assembly to body and tighten to 12-15 ft-lbs torque.
7. Replace handle and verify desired cycle time. NOTE: TIMING MUST BE CHECKED WITH HANDLE IN PLACE.
8. If additional adjustment is necessary, repeat steps 3 through 7 until desired cycle time is achieved.
Note: Some new installations might produce a slight closing noise. This is normally the result of air trapped in the cartridge. The noise will dissipate over time.
9. Attach handle and tighten set screw with a 3/32" hex wrench. If index button is included, snap into handle.

Timing Adjustment on Push-Button (NAIAD) & Tip-Tap Self-Closing Cartridges

1. Turn off water supply.
2. Remove cartridge from valve body with 1-1/4" flat hex wrench. Use care to prevent damage to cap hex nut.
3. Locate timing hex nut on bottom of dashpot. Turn hex nut clockwise to increase cycle time or counter-clockwise to decrease cycle time (Figure E). NOTE: Turn in 90 degree increments for each adjustment cycle. Fill the dashpot with water, slide it over the bottom of the cartridge, and place both back into the faucet body.
4. Place cartridge into faucet body and fully tighten cap nut with wrench to 15-25 ft-lbs torque. Turn on water and verify cycle time by depressing cartridge fully.
NOTE: Insure that cap gasket is in place within cap before assembly into valve body.

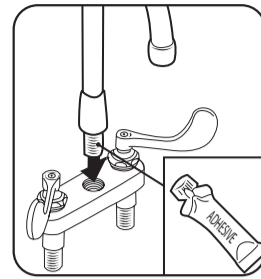
NOTE: Cartridges with 'SLO' designation include an external timing adjustment via a set screw in the top of the handle. Using a 7/64" hex wrench, turn the set screw clockwise to decrease cycle time or counter-clockwise to increase cycle time. (Figure F)

Timing Adjustment on a Push-Tilt Self-Closing Cartridge

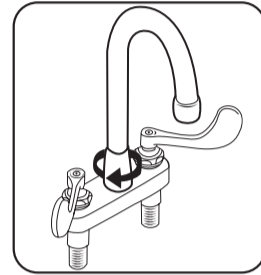
For Push-Tilt cartridges, the timing adjustment procedure is identical to Push-Button Self-Closing Cartridges, except for an external timing adjustment feature that is integral to Push-Tilt handles. This adjustment can be used for minor cycle time changes without the need to remove the cartridge from the body.

For external adjustment, lift handle slightly to expose 1/16" hex socket set screw (Figure F). Turn adjustment set screw clockwise to increase cycle time or counter-clockwise to decrease cycle time. If greater timing adjustment is required, follow the instructions for adjusting the timing on a Push-Button Self-Closing Cartridge.

RGD1 and RGD2 Only Spout Installation



1. Apply Loctite 680, Permabond HH-040 anaerobic sealant, or equivalent NSF 61 approved sealant to threads of spout and tighten spout into base. Back off as necessary for centered position.



2. Hand tighten sleeve until flush with body.

FIGURE A

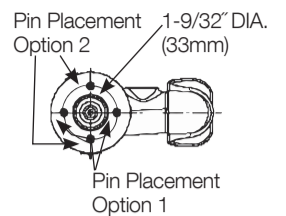


FIGURE B

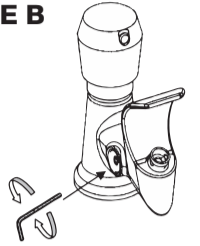


FIGURE C

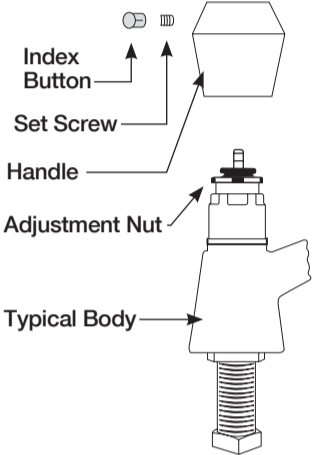


FIGURE D

How To Adjust (Top View)

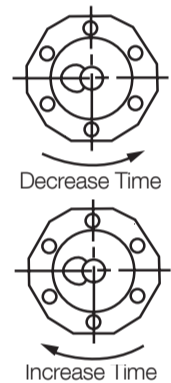


FIGURE E

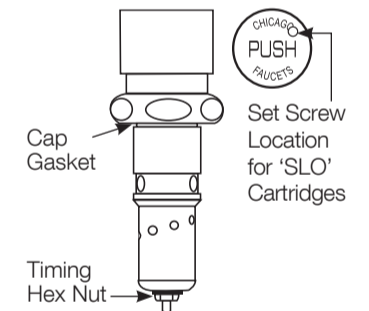
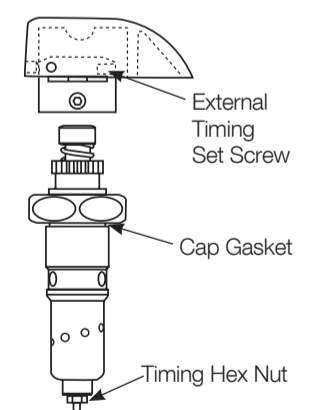


FIGURE F



Care and Maintenance

All Chicago Faucets fittings are designed and engineered to meet or exceed industry performance standards. Care should be taken when cleaning this product. Do not use abrasive cleaners, chemicals or solvents as they can result in surface damage. Use mild soap with warm water for cleaning and protecting the surface of Chicago Faucets fittings.

For additional technical assistance, call 800/TEC-TRUE (800-832-8783) or visit our website at chicagofaucets.com.

CHICAGO FAUCETS LIMITED WARRANTY

TO WHOM DOES THIS WARRANTY APPLY? — The Company extends the following limited warranty to the original user only.

WHAT DOES THIS WARRANTY COVER AND HOW LONG DOES IT LAST?

This warranty covers the following Commercial Products:

LIFETIME FAUCET WARRANTY — The "Faucet," defined as any metal cast, forged, stamped or formed portion of the Product, not including electronic or moving parts or other products separately covered by this Limited Warranty or water restricting components or other components, is warranted against material manufacturing defects for the life of the Product.

FIVE YEAR FAUCET WARRANTY — Certain Products and portions of the Product are warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase. Products warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase are referred to by the product numbers 42X, 43X, 15XX and E-Tronic® - 4X, 5X, 6X, 7X, 8X and 9X. All zinc die cast portions of Product are warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase.

THREE YEAR ELECTRONICS WARRANTY — Electronic components, including the solenoid, are warranted for three (3) years from the date of installation.

FIVE YEAR CARTRIDGE WARRANTY — The "Cartridge", defined as the metal portion of any Product typically referred to by the product numbers containing 1-099, 1-100, 377X, 217X and 274X, excluding any rubber or plastic components, is warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase. All Cartridges included in the Company's Single Control or Shower Products also are warranted against material manufacturing defects for a period of five (5) years from the date of Product purchase.

ONE YEAR FINISH WARRANTY - COMMERCIAL — For Products used in commercial applications, the finish of the Product is warranted against material manufacturing defects for a period of one (1) year from the date of Product purchase.

OTHER WARRANTIES — All other Products not covered above are warranted against material manufacturing defects for a period of one (1) year from the date of Product purchase.

Other restrictions and limitations apply. For complete warranty details, call Chicago Faucets Customer Service at 847-803-5000 or visit chicagofaucets.com.

The Chicago Faucet Company
2100 South Clearwater Drive
Des Plaines, IL 60018
Phone: 847/803-5000
Fax: 847/849-1845
Technical: 800/832-8783
www.chicagofaucets.com

For Commercial Applications

Job Name _____ Item Designation _____

Job Location _____ Contractor _____

Engineer _____ Representative _____

Wall Thickness: _____ Inlet: P__ C__ (P1__ EP__ **MADE TO ORDER, NO RETURN**) Finish: CH__ BR__ PB__

Woodford Model 67

Backflow Protected Automatic Draining Freezeless Wall Hydrant

The Model 67 is an automatic draining, freezeless wall hydrant with hose connection Backflow Protection. The hydrant drains as handle is shut off, *even if hose is attached*. The Model 67 is intended for irrigation purposes and is designed to blend in with modern architecture for installation on restaurants, schools, office buildings, churches, apartments, motels, stores, shopping centers and industrial buildings.


Sizes: 4" - 24" (in 2" increments)
CC (Close Coupled) for non-freezing climates

Features:

- Drain port under nozzle diverts water away from building
- Red Brass head & valve body
- 3/8" solid brass operating rod
- Copper casing tubes
- Hardened stainless steel operating stem
- One piece valve plunger
- 4 inlet options
- Loose tee key operation
- No Lead Solder - All joints
- Supplied with adjustable wall clamp

Specifications:

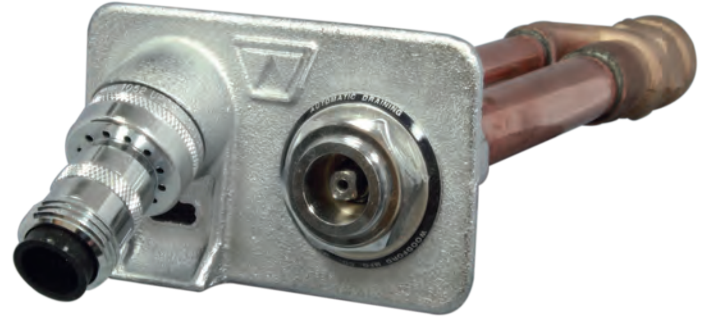
PATENTED HIGH FLOW DOUBLE CHECK BACKFLOW PREVENTER

- NIDEL® Model 50HA with 3/4 inch male hose thread
- ASSE Standard 1052 approved 
- Field Testable
- Two Independent Check Valves
- Drains automatically when hose is removed
- No spray back

- **Maximum Working Pressure:** 125 p.s.i.
- **Maximum Temperature:** 120° F

Specify as follows:

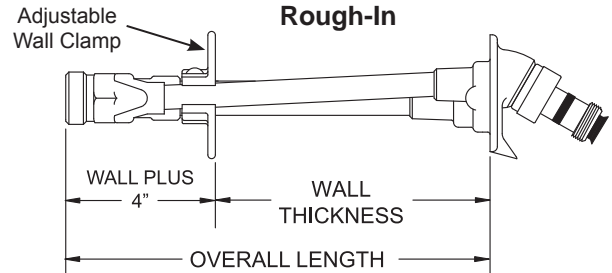
Wall hydrant shall be Woodford Model 67, automatic draining with ASSE 1052 approved NIDEL® Model 50HA high flow double check backflow preventer. 3/4" inlet and outlet (specify type of inlet). Hardened stainless steel operating stem and one-piece valve plunger to control both flow and drain functions. Exterior finish to be Chrome Plated (options: Polished Brass or Rough Brass). Loose tee key to be furnished with each hydrant. Intended for irrigation purposes. Wall thickness to be _____ inches.



Exterior Finish:

Standard - Chrome (CH)

Optional - Brass (BR) Polished Brass (PB)
Fits one standard modular brick course.



Overall Length = Wall Thickness + Inlet
Close Coupled Overall Length = 5"

Inlet Options

- P - 3/4" Female Pipe Thread**
- P1 - 1" Male Pipe Thread
- C - 3/4" Copper Water Tube
- EP - Union Elbow with 3/4" Male Pipe Thread



WOODFORD MANUFACTURING COMPANY

2121 WAYNOKA ROAD
COLORADO SPRINGS, CO 80915
Phone (800) 621-6032 Fax (800) 765-4115
Website: www.woodfordmfg.com
Email: sales@woodfordmfg.com

For Commercial Applications

Job Name _____

Item Designation _____

Job Location _____

Contractor _____

Engineer _____

Representative _____

Inlet: P-1/2__ P-3/4 __ CP __ C __

Finish: CH __ BR __ PC__

For Non Freezing Areas

Woodford

Model 24

Anti-Siphon Protected Wall Faucet

The Model 24 is an Anti-Siphon Vacuum Breaker protected wall faucet designed for use in mild climate areas. The Model 24 is designed to blend in with modern architecture for installation on homes, service stations, churches, motels, drive-in restaurants, etc.

Features:

- EPDM Packing
- Adjustable brass packing nut
- Standard "O" size valve seat washer
- Polycarbonate wheel handle and loose tee key
Optional: Metal wheel handle
- 4 inlet options

Specifications:

- **HOSE CONNECTION VACUUM BREAKER:**
 - NIDEL® Model 34HF with 3/4" hose connection
 - ASSE Standard 1011 approved
 - IAPMO® listed
 - Canadian Standards Association listed
 - Single check valve
- **Maximum Working Pressure:** 125 p.s.i.
- **Maximum Temperature:** 120° F

Specify as follows:

Wall faucet shall be a Woodford Model 24 for non-freezing areas with anti-siphon vacuum breaker. ASSE Standard 1011 approved. 3/4" hose connection (specify type of inlet). Exterior finish to be Chrome Plated (options: Rough Brass or Polished Chrome). Loose tee key to be furnished with each faucet. Inlet Type _____

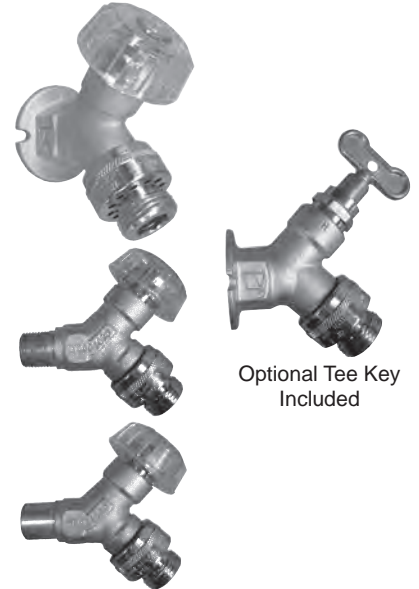
Model & Inlet

24P-1/2
1/2" FPT

24P-3/4
3/4" FPT

24CP
Combination
1/2" Copper Tube
1/2" MPT

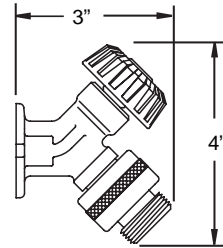
24C
Combination
1/2" Copper Tube
3/4" Copper Tube



Exterior Finish:

Standard - Chrome (CH)
Optional - **Rough Brass (BR)** or Polished Chrome (PC)

Rough-In Dimensions - Typical

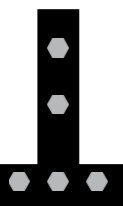


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2.03 ELECTRICAL

Data sheets to follow.



Catalog Number
Notes
Type

FEATURES & SPECIFICATIONS

INTENDED USE

Provides years of maintenance-free illumination for outdoor use in residential & commercial applications. Ideal for applications such as lighting walkways and stairways for safety and security.

CONSTRUCTION

Cast-aluminum housing with corrosion-resistant paint in either dark bronze or white finish.

ADA compliant.

OPTICS

4000K CCT LEDs.

Polycarbonate lens protects the LED from moisture, dirt and other contaminants.

LUMEN MAINTENANCE: The LED will deliver 70% of its initial lumens at 50,000 hour average LED life. See Lighting Facts label on page 2 for performance details.

ELECTRICAL

MVOLT driver operates on any line voltage from 120-277V

Operating temperature -30°C to 40°C.

1KV surge protection standard.

INSTALLATION

Surface mounts to universal junction box (provided by others).

LISTINGS

UL Listed to U.S. and Canadian safety standards for wet locations.

Tested in accordance with IESNA LM-79 and LM-80 standards.

WARRANTY — 5-year limited warranty. Complete warranty terms located at

www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Note: Specifications subject to change without notice.

Outdoor General Purpose

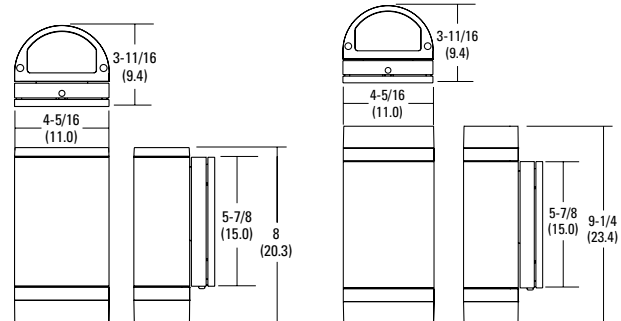
OLLWD & OLLWU

LED WALL CYLINDER LIGHT



Specifications

All dimensions are inches (centimeters)



Exterior Light Fixtures

ORDERING INFORMATION

For shortest lead times, configure products using **bolded options**.

Example: OLLWD LED P1 40K MVOLT DDB

Series	Performance Package	Color temperature (CCT)	Voltage	Finish
OLLWD LED Downlight OLLWU LED Up & downlight	P1	40K 4000K	MVOLT 120V-277V 120 120V ¹	DDB Dark bronze WH White

Notes

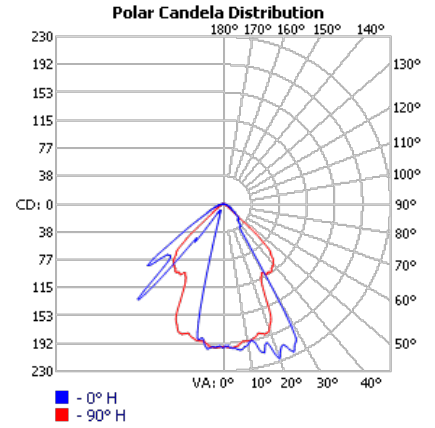
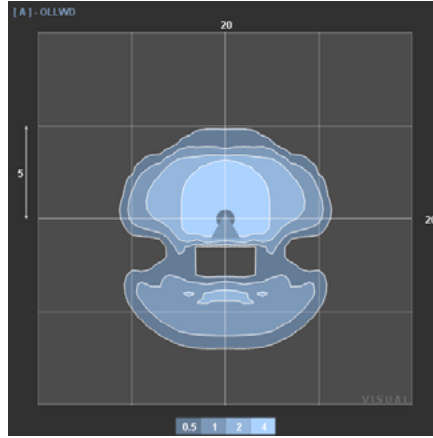
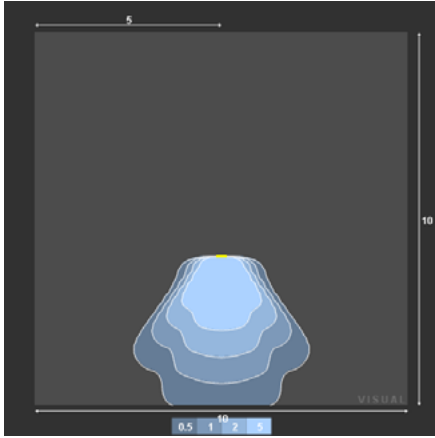
1 Only available with OLLWU and in DDB.

OLLWD & OLLWU LED Wall Cylinder Light

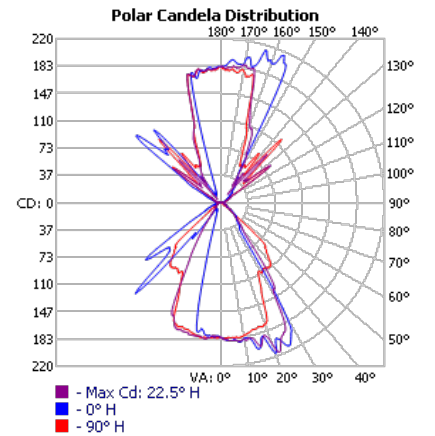
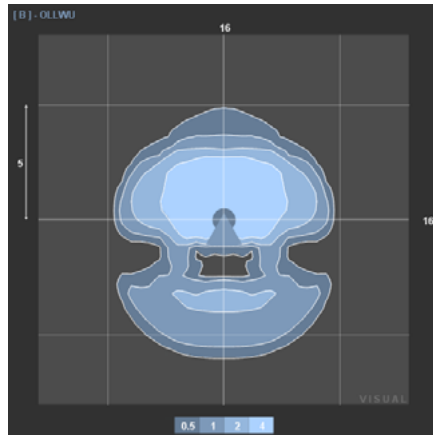
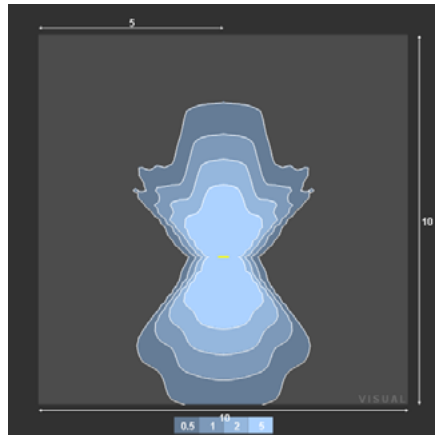
PHOTOMETRICS

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's Outdoor LED homepage
 Tested in accordance with IESNA LM-79 and LM-80 standards.

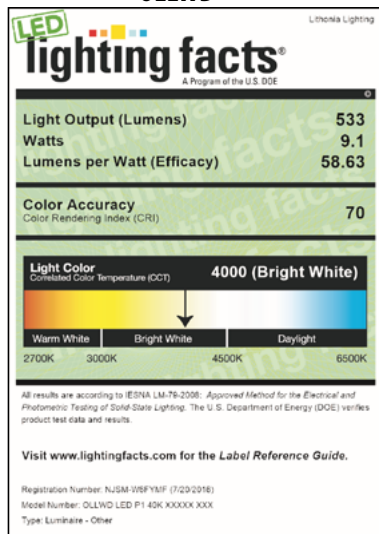
OLLWD



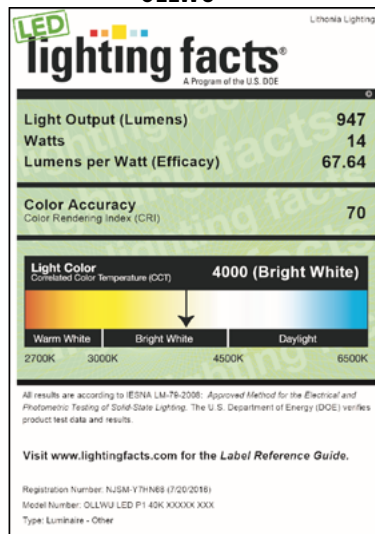
OLLWU



OLLWD



OLLWU



IMPORTANT SAFETY INSTRUCTIONS

- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards read all warnings and instructions included with and on the fixture box and all fixture labels.
- Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- Commercial installation, service and maintenance of luminaires should be performed by a qualified licensed electrician.
- For Residential installation: If you are unsure about the installation or maintenance of the luminaires, consult a qualified licensed electrician and check your local electrical code.
- DO NOT INSTALL DAMAGED PRODUCT!**
- Recycle: For information on how to recycle LED electronic products, please visit www.epa.gov.
- Fixture can NOT be used with a dimmer switch, motion or occupancy sensors and other electronic switching devices unless otherwise designated.
- This fixture should not be used in areas with limited ventilation or high ambient temperatures.
- This fixture is intended to be connected to a properly installed and grounded UL listed junction box.
- These instructions do not purport to cover all details or variations in equipment nor to provide every possible contingency to meet in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's or owner's purpose, this matter should be referred to Acuity Brands

WARNING: RISK OF ELECTRICAL SHOCK

- Turn off electrical power at fuse or circuit breaker box before wiring fixture to the power supply.
- Turn off the power when you perform any maintenance.
- Verify that supply voltage is correct by comparing it with the luminaire label information.
- Make all electrical and grounded connections in accordance with the National Electrical Code and any applicable local code requirements.
- All wiring connections should be capped with UL approved wire connectors.

CAUTION: RISK OF INJURY

- Wear gloves and safety glasses at all times when removing luminaire from carton, installing, servicing or performing maintenance.
- Avoid direct eye exposure to the light source while it is on.
- Account for small parts and destroy packing material, as these may be hazardous to children.

WARNING: RISK OF BURN

- Allow fixture to cool before handling. Do not touch enclosure or light source.
- Do not exceed maximum wattage marked on luminaire label.
- Follow all lamp manufacturer's warnings, recommendations and restrictions for: driver type, burning position, mounting locations/methods, replacement, and recycling.
- Use only lamps that comply with ANSI standards.

CAUTION: RISK OF FIRE

- Keep combustible and other materials that can burn away from luminaire and lamp/lens.
- Minimum 75° C supply conductors.

INFORMACIÓN IMPORTANTE DE SEGURIDAD

- Para reducir el riesgo de muerte, lesiones personales o daño a la propiedad que pueda surgir de incendios, choques eléctricos, cortes, abrasiones, caída de partes y otros peligros lea todas las advertencias e instrucciones incluidas en la caja o su interior, además de las etiquetas del montaje.
- Antes de instalar o revisar el equipo, o realizar mantenimiento de rutina, siga estas precauciones generales.
- La instalación, la revisión y el mantenimiento comerciales de las luminarias debe ser realizada por un electricista calificado autorizado.
- En el caso de instalaciones residenciales: Si no está seguro sobre la instalación o el mantenimiento de las luminarias, consulte a un electricista calificado autorizado y verifique el código eléctrico local.
- NO INSTALE EL PRODUCTO SI ESTÁ DAÑADO**
- Reciclado: Para obtener información sobre cómo reciclar productos electrónicos LED, visite www.epa.gov.
- El montaje NO se puede utilizar con un reductor de intensidad de luz, sensor de movimiento u ocupación, u otro dispositivo de conmutación eléctrico salvo que se especifique lo contrario.
- Este montaje no se debe utilizar en áreas con poca ventilación o alta temperatura ambiente.
- Este montaje ha sido diseñado para conectarse a una caja de unión aprobada por UL debidamente instalada y puesta a tierra.
 - Estas instrucciones no pretenden cubrir todos los detalles o las variaciones de los equipos ni abarcar todas las posibles eventualidades relacionadas con la instalación, el funcionamiento o el mantenimiento. Si necesita más información o surgen problemas específicos que no están debidamente cubiertos en la información del producto, remítase a Acuity Brands Lighting, Inc.

ADVERTENCIA: RIESGO DE CHOQUE ELÉCTRICO

- Desconecte la energía eléctrica en el fusible o disyuntor antes de conectar el montaje a la fuente de energía.
- Desconecte la energía eléctrica cuando realice operaciones de mantenimiento.
- Verifique que el voltaje de alimentación sea correcto; compárelo con la información de la etiqueta de la luminaria.
- Realice todas las conexiones eléctricas y a tierra en cumplimiento del Código Eléctrico Nacional y de los requisitos del código local vigente.
- Todas las conexiones de cableado deben cubrirse con conectores para cable reconocidos y aprobados por UL.

PRECAUCIÓN: RIESGO DE LESIONES

- Use gafas y guantes de protección en todo momento al retirar la luminaria de la caja, al instalarla, repararla o realizar operaciones de mantenimiento.
- Una vez encendida la fuente de luz, evite la exposición directa con los ojos.
- Tenga cuidado con las piezas pequeñas y destruya el material de embalaje, ya que pueden ser peligrosos si están al alcance de niños.

ADVERTENCIA: RIESGO DE QUEUMADURAS

- Antes de manipular el montaje, déjelo enfriar. No toque la carcasa ni la fuente de iluminación.
- No supere el voltaje máximo señalado en la etiqueta de la luminaria.
- Respete todas las advertencias, recomendaciones y restricciones que proporciona el fabricante para: tipo de conductor, posición de funcionamiento, puntos o métodos de montaje, reemplazo y reciclado.
- Use sólo lámparas que cumplan los estándares ANSI.

PRECAUCIÓN: RIESGO DE INCENDIO

- Mantenga lejos de la luminaria y de las lámparas/lentes, los materiales combustibles y de otro tipo que se puedan incendiar.
- Conductores de alimentación de un mínimo de 75° C.

IMPORTANTES MESURES DE SÉCURITÉ

- Afin de réduire le risque de blessures personnelles ou de mort, ou d'endommager le matériel en raison d'un incendie, d'un choc électrique, de la chute de pièces, de coupures/abrasions ou de tout autre danger, lisez tous les avertissements et instructions compris dans et sur la boîte de la fixation et toutes ses étiquettes.
- Avant d'installer, d'entretenir ou de réaliser une maintenance de routine sur cet équipement, tenez compte de ces précautions générales.
- L'installation commerciale, l'entretien et les réparations des lampes ne devraient être effectuées que par un électricien diplômé et qualifié.
- Pour les installations résidentielles : Si vous avez des doutes quant à l'installation ou l'entretien des lampes, consultez un électricien diplômé et qualifié et vérifiez votre code de l'électricité local.
- N'INSTALLEZ PAS UN PRODUIT ENDOMMAGÉ !**
- Recyclage : pour des informations sur la manière de recycler les produits électroniques à DEL, veuillez vous rendre sur www.epa.gov.
- Cette fixation ne peut PAS être utilisée avec un dispositif de gradation, des capteurs de mouvement ou d'occupation et d'autres dispositifs de commutation électroniques sauf indication contraire.
- Cette fixation ne devrait pas être utilisée dans des endroits où la ventilation est limitée ou qui présentent des températures ambiantes élevées.
- Cette fixation est conçue pour être connectée à une boîte de jonction certifiée UL, correctement installée et mise à la masse.
- Ces instructions ne sont pas censées couvrir tous les détails ou variations de l'équipement ni fournir toutes les éventualités possibles en ce qui concerne l'installation, l'utilisation ou l'entretien. Si des informations supplémentaires devaient s'avérer nécessaires, ou si des problèmes particuliers se présentent et ne sont pas suffisamment repris par l'acheteur ou du propriétaire, il conviendrait de contacter Acuity Brands Lighting, Inc à ce sujet.

AVERTISSEMENT: RISQUE DE CHOC ÉLECTRIQUE

- Coupez l'alimentation électrique au niveau du fusible ou du disjoncteur avant de câbler la fixation sur l'alimentation.
- Coupez l'alimentation lorsque vous effectuez tout travail d'entretien.
- Vérifiez que la tension d'alimentation est correcte en la comparant avec les informations sur l'étiquette de la lampe.
- Réalisez tous les raccordements électriques et de masse conformément aux exigences du Code national de l'électricité et de tout code local applicable.
- Tous les raccordements câblés doivent être faits avec des connecteurs de câbles certifiés UL.

ATTENTION: RISQUE DE BLESSURE

- Portez des gants et des lunettes de protection en permanence lorsque vous retirez la lampe du carton et que vous procédez à l'installation, à l'entretien ou à des réparations.
- Évitez le contact direct des yeux avec la source de lumière lorsqu'elle est allumée.
- Faites attention aux petites pièces et détruisez le matériel d'emballage car ils pourraient être dangereux pour les enfants.

AVERTISSEMENT: RISQUE DE BRÛLURE

- Laissez refroidir la fixation avant de la manipuler. Ne touchez pas l'enceinte ou la source de lumière.
- Ne dépassez pas la puissance maximum indiquée sur l'étiquette de la lampe.
- Respectez tous les avertissements, recommandations et restrictions du fabricant de lampe pour le circuit d'attaque, la position de fonctionnement, les méthodes/endroits de montage, le remplacement et le recyclage.
- Utilisez uniquement les lampes qui sont conformes aux normes ANSI.

ATTENTION: RISQUE D'INCENDIE

- Conservez les matériaux combustibles et tout autre élément pouvant prendre feu à l'écart de la lampe/lentille.
- Conducteurs d'alimentation de 75° C minimum.

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: RISK OF PRODUCT DAMAGE

- Never connect components under load.
- Do not mount or support these fixtures in a manner that can cut the outer jacket or damage wire insulation.
- Unless individual product specifications deem otherwise: Never connect an LED product directly to a dimmer packs, occupancy sensors, timing devices, or other related control devices. LED fixtures must be powered directly off a switch circuit.
- Unless individual product specifications deem otherwise: Do not restrict fixture ventilation. Allow for some volume of airspace around fixture. Avoid covering LED fixtures with insulation, foam, or other material that will prevent convection or conduction cooling.
- Unless individual product specifications deem otherwise: Do not exceed fixtures maximum ambient temperature.
- Only use fixture in its intended location.
- LED products are Polarity Sensitive. Ensure proper Polarity before installation.
- Electrostatic Discharge (ESD): ESD can damage LED fixtures. Personal grounding equipment must be worn during all installation or servicing of the unit.
- Do not touch individual electrical components as this can cause ESD, shorten lamp life, or alter performance.
- Some components inside the fixture may not be serviceable. In the unlikely event your unit may require service, stop using the unit immediately and contact an ABL representative for assistance.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when used in a commercial environment. This equipment generates, uses and can radiate radio frequency energy. If not installed and used in accordance with the instruction manual, this equipment may cause harmful interference to radio communications. Operation is subject to the following two conditions:
1) This device may not cause harmful interference, and
2) This device must accept any interference received, including interference that may cause undesired operation.

INFORMACIÓN IMPORTANTE DE SEGURIDAD

PRECAUCIÓN: RIESGO DE DAÑO PARA EL PRODUCTO

- Jamás conecte componentes bajo carga.
- No monte estos montajes de manera que puedan cortar el revestimiento exterior o dañar el aislamiento de los cables.
- A menos que las especificaciones del producto individual consideren lo contrario: jamás conecte un producto LED directamente a un paquete de reducción de intensidad de la luz, sensores de ocupación, dispositivos de temporización ni demás dispositivos de control relacionados. Los montajes LED se deben apagar directamente de un circuito de interruptores.
- A menos que las especificaciones del producto individual consideren lo contrario: no limite la ventilación del montaje. Deje un poco de espacio alrededor del montaje. Evite cubrir los montajes LED con aislación, goma u otro material que evitará la convección o el enfriamiento de la conducción.
- A menos que las especificaciones del producto individual consideren lo contrario: no supere la temperatura ambiente máxima para el montaje.
- Use el montaje sólo en la ubicación para la que está diseñado.
- Los productos LED son sensibles a la polaridad. Asegure la correcta polaridad antes de la instalación.
- Descarga electrostática (DES): la DES puede dañar los montajes LED. Durante la instalación o reparación de la unidad se debe usar siempre equipo personal conectado a tierra.
- No toque componentes eléctricos individuales ya que esto puede causar DES, reducir la vida útil de la lámpara o alterar el funcionamiento.
- Es posible que algunos componentes dentro del montaje no se puedan reparar. En el caso improbable de que su unidad requiera reparación, deje de usar la unidad inmediatamente y comuníquese con un representante de ABL para obtener ayuda.

Este equipo se ha probado y se ha encontrado para conformarse con los límites para un dispositivo de la clase B digital, conforme a la parte 15 de las reglas de la FCC. Estos límites se diseñan para proporcionar la protección razonable contra interferencia dañosa cuando están utilizados en un ambiente comercial. Este equipo genera, las aplicaciones y puede irradiar energía de la radiofrecuencia. Si no instalado y utilizado de acuerdo con el manual de la instrucción, este equipo puede causar interferencia dañosa a las comunicaciones por radio. La operación está conforme a las dos condiciones siguientes:
1) Este dispositivo puede no causar interferencia dañosa, y
2) Este dispositivo debe aceptar cualquier interferencia recibida, incluyendo interferencia que operación indeseada de la causa de mayo.

IMPORTANTES MESURES DE SÉCURITÉ

ATTENTION : RISQUE D'ENDOMMAGEMENT DU PRODUIT

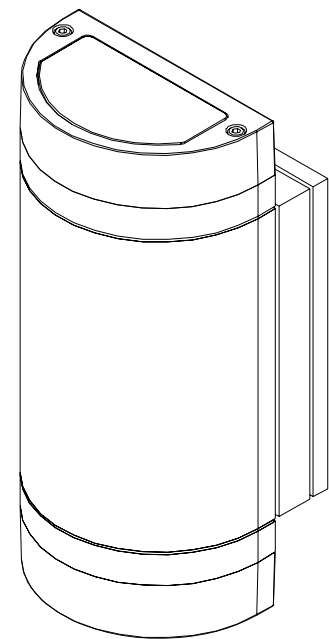
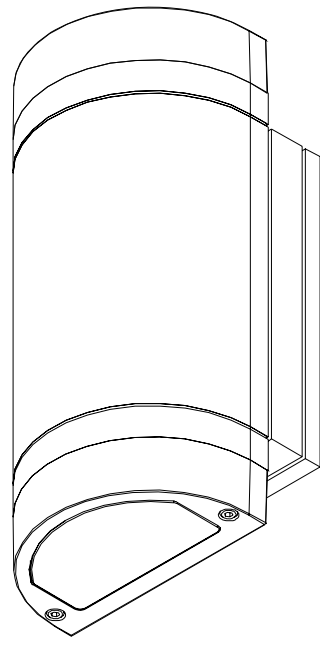
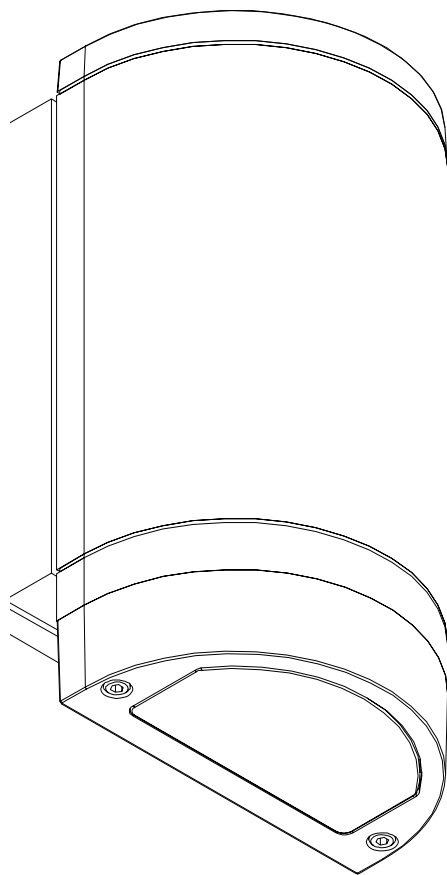
- Ne connectez jamais des composants sous charge.
- Ne montez ni soutenez pas ces fixations d'une manière qui pourrait sectionner la gaine extérieure ou endommager l'isolation de câble.
- Sauf si contraire aux spécifications du produit individuel : ne connectez jamais un produit à DEL directement à des packs de gradation de la lumière, des capteurs d'occupation, des dispositifs de minuterie ou d'autres dispositifs de commande liés. Les fixations DEL doivent être alimentées directement hors d'un circuit à interrupteur.
- Sauf si contraire aux spécifications du produit individuel : ne connectez jamais un produit à DEL directement à des packs de gradation de la lumière, des capteurs d'occupation, des dispositifs de minuterie ou d'autres dispositifs de commande liés. Les fixations DEL doivent être alimentées directement hors d'un circuit à interrupteur.
- Sauf si contraire aux spécifications du produit individuel : ne pas limiter la ventilation de la fixation. Laissez un espace libre suffisant autour de la fixation. Évitez de couvrir les fixations DEL avec de l'isolation, de la mousse ou d'autres matériaux qui empêcheront le refroidissement de convection ou de conduction.
- Sauf si contraire aux spécifications du produit individuel : ne pas dépasser la température ambiante maximum à laquelle les fixations sont exposées.
- N'utilisez la fixation que dans l'emplacement prévu à cet effet.
- Les produits à DEL sont sensibles à la polarité. Assurez-vous que la polarité est correcte avant l'installation.
- Décharge électrostatique (DES) : les DES peuvent endommager les fixations DEL. Un équipement de mise à la masse personnel doit être porté lors de toute installation ou entretien de l'unité.
- Ne touchez pas les composants électriques individuels car cela peut causer une DES, réduire la durée de vie de la lampe ou altérer ses performances.
- Certains composants à l'intérieur de la fixation peuvent ne pas être réparables. Dans le cas peut probable où votre unité aurait besoin d'être réparée, arrêtez immédiatement d'utiliser l'unité et contactez un représentant ABL pour obtenir de l'aide.

Cet équipement a été examiné et avéré pour être conforme aux limites pour un dispositif de la classe B digital, conformément à la partie 15 des règles de FCC. Ces limites sont conçues pour assurer la protection raisonnable contre l'interférence nocive une fois utilisées dans un environnement commercial. Cet équipement se produit, des utilisations et peut rayonner l'énergie de radiofréquence. Sinon installé et utilisé selon le manuel d'instruction, cet équipement peut causer l'interférence nocive aux communications par radio. L'opération est sujette aux deux conditions suivantes :
1) Ce dispositif peut ne pas causer l'interférence nocive, et
2) Ce dispositif doit accepter n'importe quelle interférence reçue, y compris l'interférence qu'opération peu désirée de cause de mai.



LED Wall Cylinder Light

Luz LED de cilindro de pared Éclairage mural cylindrique DEL



Model Number / Número de Modelo / Numéro des modèles

OLLWD & OLLWU



Protect yourself. Before installing, read these instructions carefully and save them for future reference.

Date Installed: _____

Failure to follow any of these instructions could void product warranties. For a complete list of product Terms and Conditions, visit [www.acuitybrands.com/CustomerResources/Terms and conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx) Acuity Brands Lighting, Inc. assumes no responsibilities for claims arising out of improper or careless installation or handling of its products.

Protégase. Antes de instalar, lea estas instrucciones cuidadosamente y guárdelas para futura referencia.
Fecha Instalada: _____

El incumplimiento de alguna de estas instrucciones puede anular la garantía del producto. Para obtener la lista completa de los términos y las condiciones respecto al producto, visite www.acuitybrands.com. Acuity Brands Lighting, Inc. no se hace responsable por los reclamos que puedan surgir de la instalación o manipulación inadecuada o negligente de sus productos.

Pour votre propre protection. Avant de procéder à l'installation, veuillez lire attentivement ces directives et les conserver pour référence ultérieure.
Date de l'installation : _____

Tout manquement au respect de ces instructions pourrait rendre nulles les garanties. Pour une liste complète des conditions générales du produit, veuillez vous rendre sur www.acuitybrands.com. Acuity Brands Lighting, Inc. n'assume aucune responsabilité pour les réclamations découlant d'une installation ou d'une manipulation incorrectes ou négligentes de ses produits.

INSTALLATION INSTRUCTIONS

INSTALLATION FIGURES/FIGURES D'INSTALLATION FIGURAS DE LA INSTALACIÓN

Description	Quantity
1) LED Light Fixture.....	1
2) Mounting Plate.....	1
3) 5/8" #6 Screw.....	1
4) 1-1/4" #8 Screws *.....	2
5) Wire Nuts*.....	3

*Contained in parts packs
Mounting Hardware Included
Silicone Sealant required

- Remove fixture components and parts pack. Check that all parts are included.

Note: NOT suitable for use with dimmers, motion sensors or other remote devices.

- Turn OFF Power at circuit breaker box.

CAUTION: Do not rely on wall switch alone to turn off power.

Note: This fixture is intended for wall mount

Assistance may be required to support fixture during installation.

- Fixture Installation: see Fig.A & B

Loosen Screw [3] on bottom of back and remove Mounting Plate [2] from LED Light Fixture. Thread house supply wires through center of mounting Plate and attach Mounting Plate to standard recessed outdoor wet location junction box using two 1-1/4" Screws [4] (see Fig. B). Use Wire Nuts [5] to make wiring connections as outlined in step 4 below. Push wire connections into jbox and align LED Light Fixture [1] over Mounting bracket. Tighten Screw [3] to secure LED Light Fixture to Mounting plate.

- CAUTION: WIRING AND FIXTURE OPERATION** Note: Make sure power is turned off!

Use Wire Nut to connect the house supply ground wire (copper) & the fixture ground (copper) wire.

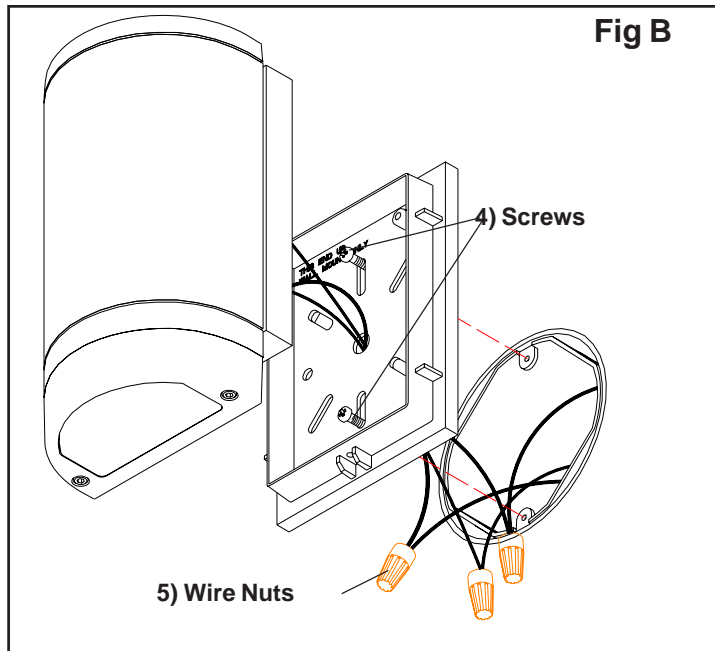
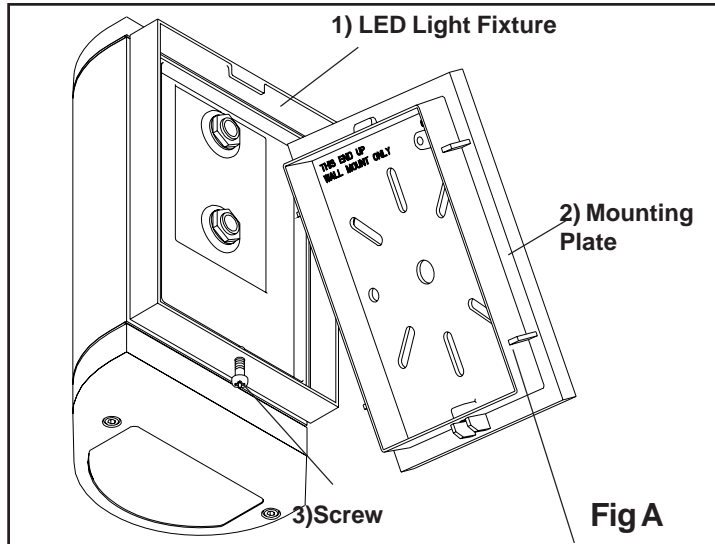
Note: If house wiring does not include a ground wire, consult your local electrical code for approved grounding methods.

Use Wire Nuts to connect the black fixture wire to the black power supply wire and the white fixture wire to the white (neutral) house supply wire.

For proper connection, place wire nut over wires and twist clockwise until tight.

- Turn on electricity at fuse or circuit breaker box and verify success of installation.

- Apply silicone caulking (not included) around the perimeter of the back of the fixture where it contacts the mounting surface for moisture seal.



GUÍA DE PASO-A-PASO

LISTA DE EMBALAJE

Descripción	Cantidad
1) Montaje de luz LED.....	1
2) Placa de Montaje.....	1
3) Tornillo.....	1
4) Tornillos N.º 8 de 1-1/4".....	2
5) Tuercas para conexión de cables*.....	3

*Contenido en el paquete de piezas

Herraje de Montaje Incluido
Requiere Sellador de Silicona

- Quite los componentes del luminario y el paquete de piezas. Verifique que todas las piezas estén incluidas.

Nota: Este montaje NO se puede usar con reductores de lumbrado, sensores de movimiento u otros dispositivos remotos.

- ¡Apague la electricidad en la caja de rtacircuitos!

ATENCIÓN: No se confíe de cortar la corriente en el interruptor mural solamente.

Nota: Este montaje está diseñado para colocarse en paredes

Puede que necesite ayuda a sostener el luminario durante la instalación.

- Instalación del montaje: ver Fig. A & B

Afloje el tornillo [3] ubicado en la parte inferior trasera y quite la placa de montaje [2] del montaje de la luz LED [1].

Pase los cables de alimentación a través del centro de la placa de montaje y conéctelos a la caja de unión empotrada estándar para lugares húmedos del exterior utilizando dos tornillos de 1-1/4" [4] (ver Fig. B).

Utilice tuercas para conexión de cables [5] para hacer las conexiones de cableado como se explica en el paso 4. Inserte las conexiones de cables en la caja de unión y alinee el montaje de luz LED sobre la placa posterior. Ajuste el tornillo [3] para asegurar el montaje de la luz LED a la placa posterior.

4. PRECAUCIÓN: OPERACIÓN DEL LUMINARIO Y ALAMBRADO

Cerciórese que la fuente de alimentación eléctrica este apagada.

Para poner a tierra el luminario, utilice una Tuerca de Alambres para conectar el alambre de tierra de suministro de la casa y el alambre (cobre) de tierra del luminario (cobre). **Nota:** Si el alambrado de la casa no incluye un alambre de Conexión a Tierra, consulte su código eléctrico local para métodos aprobados para conectar a tierra. Use capuchones de alambres para conectar los dos alambres negro del luminario al alambre negro del suministro de electricidad de la casa y los dos alambres blanco del luminario al blanco (neutral) del suministro de electricidad de la casa.

Para una conexión apropiada, coloque el capuchón de alambre sobre los alambres y gire en el sentido de las agujas del reloj hasta que este apretado.

- Encienda la electricidad en la caja de fusibles o caja de cortacircuitos y verifique el éxito de la instalación.
- Aplique calafatea de silicona (no incluida) alrededor del perímetro de la Placa Trasera para Un sello contra la humedad.

GUIDE DÉTAILLÉ

LISTE DES PIÈCES

Description	Quantité
1) Appareil d'éclairage DEL.....	1
2) Plaque de montage.....	1
3) Vis.....	1
4) Vis n° 8 de 1-1/4 po*.....	2
5) Capuchons de connexion*.....	3

*Compris dans l'emballage de pièces

Quincaillerie de montage comprises
Joint d'étanchéité à la silicone requis

- Retirer les composants de l'appareil et l'emballage des pièces. S'assurer que toutes les pièces sont incluses.

Remarque: Cette fixation n'est pas compatible avec les gradateurs ou les dispositifs de gradation de la lumière.

- Couper l'électricité au fusible ou au disjoncteur!

ATTENTION: Ne coupez pas le courant uniquement au niveau de l'interrupteur mural.

Note: Cette lampe est prévue pour une fixation murale.

De l'aide peut être nécessaire pour supporter le luminaire lors de l'installation.

- Installation de la lampe: voir Fig. A & B

Desserrer la vis [3] placée en bas à l'arrière, puis retirer la plaque de fixation [2] de l'appareil d'éclairage DEL [1].

Faire passer les câbles d'alimentation de la maison à travers la plaque de fixation par le centre, puis les fixer sur le boîtier de connexion en emplacement humide extérieur standard au moyen de deux vis de 1-1/4 po [4] (voir figure B).

Utiliser des capuchons de connexion [5] pour effectuer des connexions de câblage comme indiqué à l'étape 4.

Introduire les connexions de câblage dans le boîtier de connexion, puis aligner l'appareil d'éclairage DEL sur la plaque arrière. Serrer la vis [3] pour fixer solidement l'appareil d'éclairage DEL sur la plaque arrière.

4. Pour MISE EN GARDE: CÂBLAGE ET MODE D'EMPLOI DE L'APPAREIL

Vous assurer de couper le courant avant de procéder au câblage.

Pour la mise à terre de l'appareil, connecter le fil de terre de l'alimentation (cuivre) au fil de terre (cuivre) de l'appareil, à l'aide d'un capuchon de connexion. **Note:** Si le câblage d'alimentation ne comprend pas un fil de mise à la terre, consulter votre code d'électricité local et vérifier les méthodes conformes pour la mise à la terre.

Employer des capuchons de connexion pour connecter les deux fils noirs de l'appareil au fil d'alimentation noir et les deux fils blancs au fil blanc (neutre) d'alimentation.

Pour vous assurer d'un bon raccordement, mettre le capuchon sur les fils et tourner dans le sens de rotation horaire jusqu'à ce que la connexion soit solide.

- Rétablir le courant au fusible ou au disjoncteur et vérifier si l'installation est réussie.
- Applique du bouche-fentes à la silicone (non inclus) sur le périmètre de l'appareil là où il entre en contact avec la surface de montage.

Trouble Shooting Guide

Trouble Shooting Guide

If this fixture fails to operate properly, use the guide below to diagnose and correct the problem.

If light does not come on:

- Verify that power is turned on at switch and breaker
- Verify that fixture is wired properly
- Verify that line voltage is correct.

If further assistance is required, contact:
Technical Support at: (800) 279-8041

This LED light provides low maintenance service with no bulbs to change. Clean surfaces with mild soap and water. Do not use abrasive materials such as scouring pads or powders, steel wool or abrasive paper.

WARNING: There are no user serviceable parts inside fixture.

Guía de Localización de Averías

Guía de Localización de Averías

Si este luminario falla de operar apropiadamente, use la siguiente guía para diagnosticar y corregir el problema.

- Verifique que el luminario este alambrado apropiadamente
- Verifique que el luminario este conectado tierra correctamente
- El voltaje de la línea en el luminario este correcto

Si requiere ayuda adicional, contacte:
Technical Support al: (800) 279-8041

Esta lámpara LED con detector de movimiento necesita muy poco mantenimiento y no es necesario cambiar los focos. Limpie las superficies con un limpiador suave no abrasivo.

ADVERTENCIA: La cabeza de la lámpara no contiene piezas que el usuario puede reparar.

Guide de dépannage

Guide de dépannage:

Si l'appareil ne fonctionne pas adéquatement, veuillez vous servir du guide ci-dessous afin d'identifier et corriger le problème.

- Vérifier si le câblage de l'appareil est bien fait.
- Vérifier si la mise à la terre de l'appareil est adéquate.
- Vérifier la tension de secteur de l'appareil.

Pour toute autre assistance, veuillez contacter nos services de support technique:
Technical Support : (800) 279-8041

Cette lampe à détecteur de mouvement DEL nécessite peu d'entretien et il n'y a aucune ampoule à changer. Nettoyez les surfaces avec un produit doux non abrasif.

AVERTISSEMENT: Il n'y a aucune pièce réparable à l'intérieur de chaque projecteur.

Catalog Number
Notes
Type

FEATURES & SPECIFICATIONS

INTENDED USE — The 6" Wafer™ LED Downlight with Switchable White provides high-quality light output and efficiency featuring a switch for easy color temperature adjustment - while eliminating the need for recessed housings. The innovative, slim design allows for easy retrofit, remodel or new construction installation from below the ceiling. The Wafer LED downlight is wet location listed – making it ideal for use in a breadth of outdoor residential, hospitality, commercial and multifamily applications.

CONSTRUCTION — Aluminum die cast outer frame. Durable, powder coat paint to prevent rust. FT4 plenum rated cable connector to connect from module to remote driver box. IC rated driver with convenience and value of two remote selectable color temperature options, each with a setting choice to choose either 2700K, 3000K, and 3500K or 3000K, 4000K, and 5000K using the switch. The isolated driver integrated inside steel remote box with four 7/8" knockouts with slots for pryout. Suitable for pulling wires with the 12 cubic-inch wiring compartment to accommodate up to (6) 14 gauge insulated conductors; making the Wafer LED Downlights much easier to wire in 2in/2out (plus ground) daisy-chain applications and contractor friendly.

PATENT PENDING.

INSTALLATION — Ideal for shallow ceiling plenum; no housing required. Steel spring clip for easy installation. 6" cut out template is provided to ensure a correct sized hole is cut into ceiling for proper installation of the trim. Size of hole should not exceed 6 1/4 inches for this product. Suitable for installation in t-grid and drop ceiling applications. 2" plenum space required for installation of the remote driver box.

OPTICS — Edge-lit LED technology uses light guided plate to distribute light. Polycarbonate lens provides even illumination throughout the space.

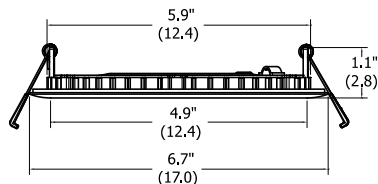
ELECTRICAL — Connect directly to 120V power supply via provided UL recognized driver. High efficient driver with power factor > 0.9. Ambient operating temperature: -40°F (-40°C) to +104°F (+40°C). Dimming down to 10% with most standard incandescent dimmers (see list of approved dimmers). Replaces 75W incandescent for 1150L lumens and 100W incandescent for lumens.

LISTINGS — CSA certified to US and Canadian safety standards. ENERGY STAR® certified product. Wet location. Air Tight certified in accordance with ASTM E283-2004. NOM Certified. Can be used to comply with California Title 24 Part 6 High Efficacy LED light Source Requirements.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Specifications	
Aperture:	4.9 (12.4)
Ceiling opening:	6 (15.2)
Overlap trim:	6.7 (17)
Height:	1.1 (2.8)



All dimensions are inches (centimeters) unless otherwise indicated.



Wafer LED Recessed Downlight

WF6

6" LED Switchable White Color Temperature

IC/Non-IC
New Construction/Remodel

ORDERING INFORMATION For shortest lead times, configure product using **standard options (shown in bold)**.

Example: WF4 LED 30K40K50K 90CRI MW

WF6 Series	Lamp	CCT/W/Lumens ¹	CRI	Finish
WF6 6" wafer-thin LED downlight	LL Low Lumen	27K30K35K 2700K/10W/830L 3000K/10W/900L 3500K/10W/860L 30K40K50K 3000K/10W/850L 4000K/10W/920L 5000K/10W/880L	90CRI 90CRI	MW Matte White MB Matte Black BN Brush Nickel ORB Oil-Rubbed Bronze
	LED LED	27K30K35K 2700K/14W/1040L 3000K/14W/1150L 3500K/14W/1110L 30K40K50K 3000K/14W/1090L 4000K/14W/1190L 5000K/14W/1120L		

Interior Restroom Light Fixtures

Accessories: Order as separate catalog number.	
WF8643 Pan U	Universal new construction pan
WFJB U	Remodel joist bar



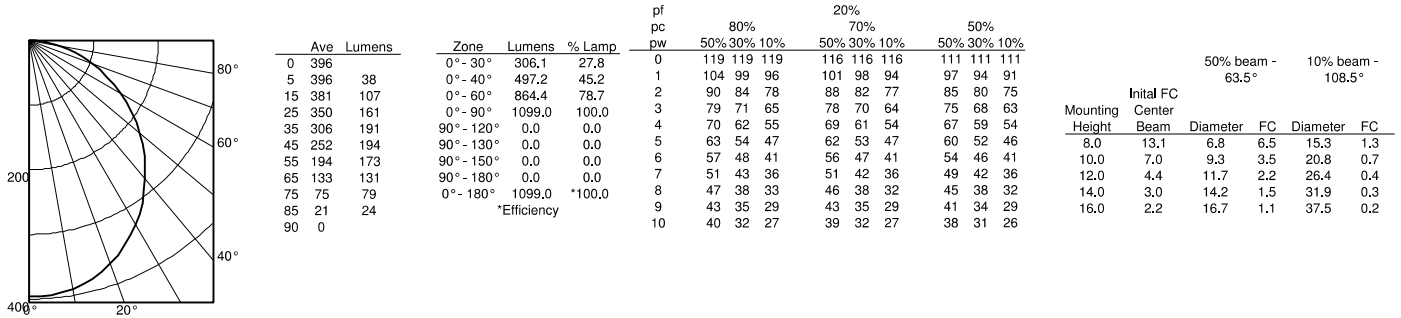
Notes
1 Total system delivered lumens.

WF6 Switchable White 6" LED Wafer Module

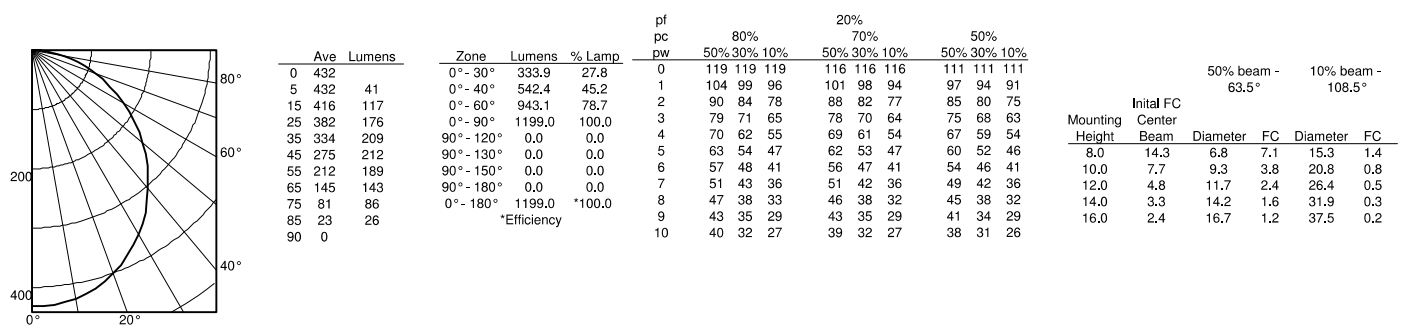
PHOTOMETRICS

Distribution Curve Distribution Data Output Data Coefficient of Utilization Illuminance Data at 30" Above Floor for a Single Luminaire

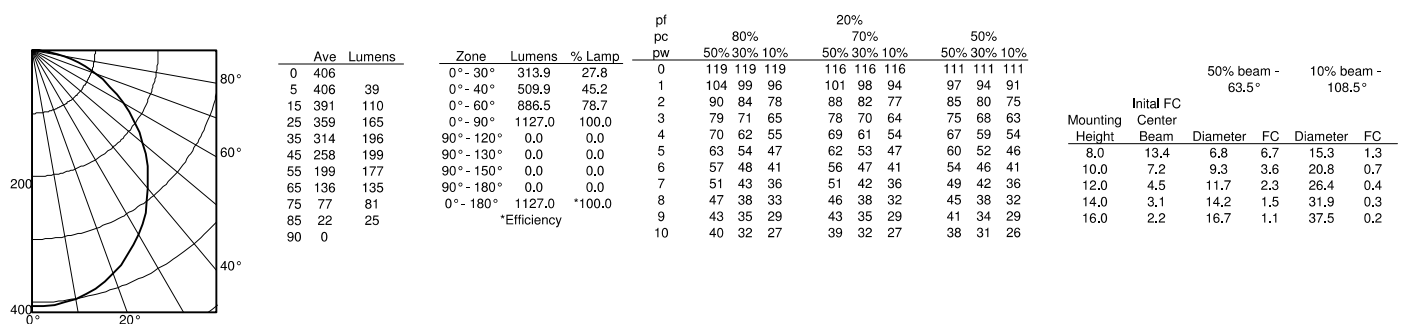
WF6 LED 30K40K50K, 3000K LEDs, input watts: 14, delivered lumens: 1099, LM/W=79, test no. ISF 36826P10



WF6 LED 30K40K50K, 4000K LEDs, input watts: 13, delivered lumens: 1199, LM/W=92, test no. ISF 36826P11



WF6 LED 30K40K50K, 5000K LEDs, input watts: 14, delivered lumens: 1127, LM/W=81, test no. ISF 36826P12



WF6 Switchable White 6" LED Wafer Module

ENERGY DATA

WF6 LED 27K30K35K			
Color Temperature	2700K	3000K	3500K
Lumens	1070	1150	1110
CRI	90	90	90
Rated wattage	14.1	13.4	13.9
Lu/Watts	75.9	85.8	79.9
Min. starting temp	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)
EMI/RFI	FCC Title 47 CFR, Part 15, Class B	FCC Title 47 CFR, Part 15, Class B	FCC Title 47 CFR, Part 15, Class B
Sound rating	Class A Standards	Class A Standards	Class A Standards
Input voltage	120V	120V	120V
Min. power factor	0.98	0.98	0.98
Input frequency	50/60 Hz	50/60 Hz	50/60 Hz
Input power	120V	120V	120V
Input current	0.12A	0.12A	0.12A

WF6 LL 27K30K35K			
Color Temperature	2700K	3000K	3500K
Lumens	830	900	860
CRI	90	90	90
Rated wattage	10	9.7	9.9
Lu/Watts	83.0	92.8	86.9
Min. starting temp	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)
EMI/RFI	FCC Title 47 CFR, Part 15, Class B	FCC Title 47 CFR, Part 15, Class B	FCC Title 47 CFR, Part 15, Class B
Sound rating	Class A Standards	Class A Standards	Class A Standards
Input voltage	120V	120V	120V
Min. power factor	0.98	0.98	0.98
Input frequency	50/60 Hz	50/60 Hz	50/60 Hz
Input power	120V	120V	120V
Input current	0.08A	0.08A	0.08A

WF6 LED 30K40K50K			
Color Temperature	3000K	4000K	5000K
Lumens	1090	1190	1120
CRI	90	90	90
Rated wattage	13.8	13.4	13.9
Lu/Watts	79.0	88.8	80.6
Min. starting temp	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)
EMI/RFI	FCC Title 47 CFR, Part 15, Class B	FCC Title 47 CFR, Part 15, Class B	FCC Title 47 CFR, Part 15, Class B
Sound rating	Class A Standards	Class A Standards	Class A Standards
Input voltage	120V	120V	120V
Min. power factor	0.98	0.98	0.98
Input frequency	50/60 Hz	50/60 Hz	50/60 Hz
Input power	120V	120V	120V
Input current	0.12A	0.12A	0.12A

WF6 LL 30K40K50K			
Color Temperature	3000K	4000K	5000K
Lumens	850	920	880
CRI	90	90	90
Rated wattage	9.9	9.8	10
Lu/Watts	85.9	93.9	88.0
Min. starting temp	-40°C (-40°F)	-40°C (-40°F)	-40°C (-40°F)
EMI/RFI	FCC Title 47 CFR, Part 15, Class B	FCC Title 47 CFR, Part 15, Class B	FCC Title 47 CFR, Part 15, Class B
Sound rating	Class A Standards	Class A Standards	Class A Standards
Input voltage	120V	120V	120V
Min. power factor	0.98	0.98	0.98
Input frequency	50/60 Hz	50/60 Hz	50/60 Hz
Input power	120V	120V	120V
Input current	0.08A	0.08A	0.08A

WF6 Switchable White 6" LED Wafer Module

LIGHTING PERFORMANCE DATA



LOW LUMEN

LIGHTING PERFORMANCE DATA DONNÉES SUR LE RENDEMENT DE L'ÉCLAIRAGE	
Light Appearance (CCT) Aspect de la lumière (CCT)	
2700K soft white blanc doux	
830 lumens 83 lumens per watt	
3000K warm white blanc chaud	
900 lumens 90 lumens per watt	
3500K neutral white blanc neutre	
860 lumens 86 lumens per watt	
Watts	10
Color Accuracy (CRI)	90
Précision des couleurs (CRI)	

LIGHTING PERFORMANCE DATA DONNÉES SUR LE RENDEMENT DE L'ÉCLAIRAGE	
Light Appearance (CCT) Aspect de la lumière (CCT)	
3000K warm white blanc chaud	
850 lumens 85 lumens per watt	
4000K cool white blanc froid	
920 lumens 92 lumens per watt	
5000K daylight blanc neutre	
880 lumens 88 lumens per watt	
Watts	10
Color Accuracy (CRI)	90
Précision des couleurs (CRI)	

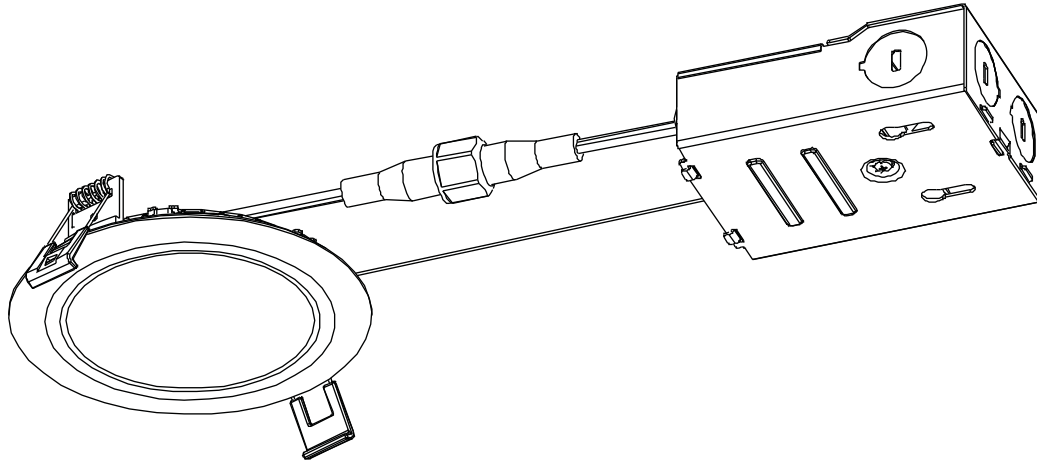
HIGH LUMEN



LIGHTING PERFORMANCE DATA DONNÉES SUR LE RENDEMENT DE L'ÉCLAIRAGE	
Light Appearance (CCT) Aspect de la lumière (CCT)	
3000K warm white blanc chaud	
1600 lumens 160 lumens per watt	
4000K cool white blanc froid	
1720 lumens 172 lumens per watt	
5000K daylight blanc neutre	
1760 lumens 176 lumens per watt	
Watts	10
Color Accuracy (CRI)	90
Précision des couleurs (CRI)	

LIGHTING PERFORMANCE DATA DONNÉES SUR LE RENDEMENT DE L'ÉCLAIRAGE	
Light Appearance (CCT) Aspect de la lumière (CCT)	
3000K warm white blanc chaud	
1600 lumens 160 lumens per watt	
4000K cool white blanc froid	
1720 lumens 172 lumens per watt	
5000K daylight blanc neutre	
1760 lumens 176 lumens per watt	
Watts	10
Color Accuracy (CRI)	90
Précision des couleurs (CRI)	

LED Ultra-Thin Wafer Retrofit Module



Model Number / Número de Modelo / Numéro des modèle

**WF3 LED 30K MW, WF4 LED 30K MW, WF6 LED 30K MW
WF3 LED 40K MW, WF4 LED 40K MW, WF6 LED 40K MW**

This Fixture is Ceiling Mounted

Round 3", 4", and 6" fixtures with integral LEDs. Isolated external driver factory installed inside remote driver box. LED retrofit module comes as complete unit consisting of 2 parts: The LED module and remote driver box. One remote driver box for each fixture is required. Pot light housing NOT required even for insulated ceilings and can be direct fit in ceiling hole. LED fixture and remote driver box are TYPE IC rated.

3" replaces halogen 50W Lamp
4" replaces halogen 65W Lamp
6" replaces halogen 75W Lamp

Montajes circulares de 3 in, 4 in y 6 in con luces de led integrales. Controlador externo aislado, instalado desde fábrica dentro de la caja de unión. La luz de led empotrada viene en una unidad completa que consta de 2 partes: Módulo de LED y la caja de controlador remoto. Se requiere un cuadro de controlador remoto para cada aparato. NO requiere caja para luz empotrada, incluso para techos con aislamiento, y se puede colocar directamente en el agujero del techo. El montaje de led y el controlador están clasificados como TIPO IC.

3" reemplaza a halógena 50W lámpara
4" reemplaza a halógena 65W lámpara
6" reemplaza a halógena 75W lámpara

Luminaire ronds à DEL intégrées de 7,62, 10,16 et 15,24 cm (3, 4 et 6 po) Pilote externe installé en usine à l'intérieur de la boîte de jonction. Le plafonnier intensif DEL est livré sous forme d'unité complète composée de 2 parties : Le module LED et boîte de pilote à distance. Chaque luminaire doit comporter un pilote. Pour les lampes cylindriques, un boîtier n'est PAS nécessaire, même pour les plafonds isolés. Elles peuvent être montées directement dans le trou du plafond. Le luminaire à DEL et le pilote sont classés comme de TYPE IC.

3" remplace les halogènes 65W lampe
4" remplace les halogènes 65W lampe
6" remplace les halogènes 75W lampe



Protect yourself. Before installing, read these instructions carefully and save them for future reference.

Date Installed: _____

Protéjase. Antes de instalar, lea estas instrucciones cuidadosamente y guárdelas para futura referencia.

Fecha Instalada: _____

Pour votre propre protection. Avant de procéder à l'installation, veuillez lire attentivement ces directives et les conserver pour référence ultérieure.

Date de l'installation : _____

LED IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL SAFETY INSTRUCTIONS! SAVE THESE INSTRUCTIONS AND DELIVER TO OWNER AFTER INSTALLATION

- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards please read all warnings and instructions included with and on the fixture box and all fixture labels.
- Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- Installation and service of luminaires should be performed by a **qualified licensed electrician**.
- Maintenance of the luminaires should be performed by person(s) familiar with the luminaires' construction and operation and any hazards involved. Regular fixture maintenance programs are recommended.
- It will occasionally be necessary to clean the outside of the refractor/lens. Frequency of cleaning will depend on ambient dirt level and minimum light output which is acceptable to user. Refractor/lens should be washed in a solution of warm water and any mild, non-abrasive household detergent, rinsed with clean water and wiped dry. Should optical assembly become dirty on the inside, wipe refractor/lens and clean in above manner, replacing damaged gaskets as necessary.
- **DO NOT INSTALL DAMAGED PRODUCT!** This luminaire has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.
- Recycle: For information on how to recycle LED electronic products, please visit www.epa.gov.
- These instructions do not purport to cover all details or variations in equipment nor to provide every possible contingency to meet in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's or owner's purposes, this matter should be referred to Acuity Brands Lighting, Inc.

WARNING RISK OF ELECTRIC SHOCK

- Disconnect or turn off power before installation or servicing.
- Verify that supply voltage is correct by comparing it with the luminaire label information.
- Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements.
- All wiring connections should be capped with UL approved recognized wire connectors.

CAUTION RISK OF INJURY

- Wear gloves and safety glasses at all times when removing luminaire from carton, installing, servicing or performing maintenance.
- Avoid direct eye exposure to the light source while it is on.

WARNING RISK OF BURN

- Allow lamp/fixture to cool before handling. Do not touch enclosure or light source.
- Do not exceed maximum wattage marked on luminaire label.
- Follow all manufacturer's warnings, recommendations and restrictions for: driver type, burning position, mounting locations/methods, replacement and recycling.

CAUTION RISK OF FIRE

- Keep combustible and other materials that can burn, away from lamp/lens.
- Do not operate in close proximity to persons, combustible materials or substances affected by heat or drying.

CAUTION: RISK OF PRODUCT DAMAGE

- Never connect components under load.
- Do not mount or support these fixtures in a manner that can cut the outer jacket or damage wire insulation.
- Never connect an LED product to an unapproved dimmer pack. Contact ABL directly for any dimmers not specifically recommended for the product.
- Unless individual product specifications deem otherwise: Allow for some volume of airspace around fixture. Avoid covering LED fixtures with insulation, foam, or other material that will prevent convection or conduction cooling.
- Unless individual product specifications deem otherwise: Maximum ambient temperature is 90°C. Do not operate fixture at temperatures higher than this.
- Unless individual product specifications deem otherwise: Never mount in places where fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.
- LED products are Polarity Sensitive. Ensure proper Polarity before installation.
- Electrostatic Discharge (ESD): ESD can damage LED fixtures. Personal grounding equipment must be worn during all installation or servicing of the unit.
- Do not touch individual electrical components as this can cause ESD, shorten lamp life, or alter performance.
- There are no user serviceable parts inside the unit. Do not rewire, reconfigure, or modify the unit or attempt any repairs yourself. Additionally, field replacement of the LED assembly or lamps is not allowed by UL standards at this time. In the unlikely event your unit may require service, stop using the unit immediately and contact an ABL representative.

All luminaires that contain electronic devices that generate frequencies above 9kHz from any component within the luminaire comply with one of the following Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This device complies with Part 18 of the FCC Rules but may cause interference with cordless and cell phones, radios, televisions, and other electronic devices. To correct the problem move the device away from the luminaire or plug into a different outlet. This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communications equipment operating between 0.45-30MHz.

Failure to follow any of these instructions could void product warranties.

OUR BRANDS

Indoor/Outdoor: Lithonia Lighting, Carandini, Holophane, RELOC

Indoor Lighting: Gotham, Mark Architectural Lighting, Peerless, Renaissance Lighting, Winona Lighting

Outdoor Lighting: American Electric Lighting, Antique Street Lamps, Hydrel, Tersen

Controls: DARK TO LIGHT, Lighting Control & Design, ROAM, Sensor Switch, Synergy

Acuity Brands Lighting, Inc. assumes no responsibility for claims arising out of improper or careless installation or handling of its products.

ABL LED General Warnings, Form No. 503.203
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INSTRUCCIONES DE SEGURIDAD IMPORTANTES SOBRE EL LED

LEA Y RESPETE TODAS LAS INSTRUCCIONES DE INSTALACIÓN GUARDE LAS INSTRUCCIONES Y DEVUÉLVASLAS AL PROPIETARIO DESPUÉS DE REALIZAR LA INSTALACIÓN

- Para reducir el riesgo de muerte, lesiones personales o daño a la propiedad que pueda surgir de incendios, choques eléctricos, cortes, abrasiones, caída de partes y otros peligros lea todas las advertencias e instrucciones incluidas en la caja o su interior, además de las etiquetas del producto.
- Antes de instalar, revisar el estado de mantenimiento de rutina del equipo, siga estas precauciones generales.
- La instalación y el mantenimiento de las luminarias lo debe realizar un **electricista calificado autorizado**.
- El mantenimiento de las luminarias lo debe realizar una persona familiarizada con la fabricación y el funcionamiento de este producto así como con los peligros relacionados con este. Se recomienda realizar el mantenimiento regular de los montajes.
- Cada tanto será necesario limpiar la parte externa del refractor y de la lente. La frecuencia de la limpieza dependerá del nivel de polvo del ambiente y de la potencia de la luz mínima aceptable para el usuario. El refractor/lente se debe lavar con una solución de agua tibia y detergente de uso doméstico suave no abrasivo, enjuagar con agua limpia y secar. Si el montaje óptico se ensucia por dentro, limpie el refractor o la lente como se indicó anteriormente; de ser necesario, reemplace las juntas dañadas.
- **NO INSTALE EL PRODUCTO SI ESTÁ DAÑADO** Esta luminaire se embaló adecuadamente de modo tal que las piezas no sufrían daños durante su transporte. Inspeccione las partes para confirmar. Reemplace toda pieza que se dañe o rompa durante su montaje o posterior a este.
- Reciclado: Para obtener información sobre cómo reciclar productos electrónicos LED, visite www.epa.gov.
- Estas instrucciones no pretenden cubrir todos los detalles o las variaciones de los equipos ni abarcar todas las posibles eventualidades relacionadas con la instalación, el funcionamiento o el mantenimiento. Si necesita más información o surgen problemas específicos que no están debidamente cubiertos en la información del producto, remítase a Acuity Brands Lighting, Inc.

ADVERTENCIA: RIESGO DE CHOQUE ELÉCTRICO

- Desconecte o interrumpa la energía eléctrica antes de realizar la instalación o la reparación.
- Verifique que el voltaje de alimentación sea correcto; compárelo con la información de la etiqueta de la luminaire.
- Realice todas las conexiones eléctricas y a tierra en cumplimiento con el Código Eléctrico Nacional y de los requisitos del código local vigente.
- Todas las conexiones de cableado deben cubrirse con conectores para cable reconocidos y aprobados por UL.

PRECAUCIÓN: RIESGO DE LESIONES

- Use gafas y guantes de protección en todo momento al retirar la luminaire de la caja, al instalarla, repararla o realizar operaciones de mantenimiento.
- Una vez encendida la fuente de luz, evite la exposición directa con los ojos.

ADVERTENCIA: RIESGO DE QUEMADURAS

- Antes de manipular la lámpara o el montaje, déjelo enfriar. No toque la carcasa ni la fuente de iluminación.
- No supere el voltaje máximo señalado en la etiqueta de la luminaire.
- Respete todas las advertencias, recomendaciones y restricciones que proporciona el fabricante para: tipo de conductor, posición de funcionamiento, puntos o métodos de montaje, reemplazo y reciclado.

PRECAUCIÓN: RIESGO DE INCENDIO

- Mantenga lejos de la luminaire y de las lámparas o los lentes, los materiales combustibles y de otro tipo que se puedan incendiar.
- No las encienda cerca de personas, materiales combustibles o sustancias calientes o secas.

PRECAUCIÓN: RIESGO DE DAÑO PARA EL PRODUCTO

- Jamás conecte componentes bajo carga.
- No monte estos montajes de manera que puedan cortar el revestimiento exterior o dañar el aislamiento de los cables.
- Jamás conecte un producto LED directamente a un paquete de reducción de intensidad de la luz. Los montajes LED se deben agregar directamente de un circuito de interruptores.
- A menos que las especificaciones del producto individual consideren lo contrario: Deje un poco de espacio alrededor del montaje. Evite cubrir los montajes LED con aislamiento, goma u otro material que evite la convección o el enfriamiento de la conducción.
- A menos que las especificaciones del producto individual consideren lo contrario: La temperatura ambiente máxima debe ser de 90 °C. No haga funcionar el montaje a temperaturas más elevadas que esta.
- A menos que las especificaciones del producto individual consideren lo contrario: Jamás instale los montajes en lugares donde quedan expuestos a la lluvia, a un alto nivel de humedad, a cambios de temperatura extrema o a ventilación limitada.
- Los productos LED son sensibles a la polaridad. Asegure la correcta polaridad antes de la instalación.
- Descarga electrostática (DES): la DES puede dañar los montajes LED. Durante la instalación o reparación de la unidad se debe usar siempre equipo personal conectado a tierra.
- No toque componentes eléctricos individuales ya que esto puede causar DES, reducir la vida útil de la lámpara o alterar el funcionamiento.
- La unidad no contiene piezas que el usuario pueda reparar. No modifique los cables de la unidad, no la vuelva a conectar, ni la modifique si no quiere repararla usted mismo. Además, en este momento los estándares de UL no permiten el reemplazo en campo del montaje LED o sus lámparas. En el caso impropio de que su unidad requiera reparación, deje de usar la unidad inmediatamente y comuníquese con un representante de ABL.

Todas las luminarias que contienen dispositivos eléctricos que generan frecuencias superiores a 9kHz desde cualquier componente de la luminaire cumplen una de las reglas de la Parte 15 de las reglas de la FCC. El funcionamiento depende de las siguientes dos condiciones:

- (1) Este dispositivo no puede ocasionar interferencias perjudiciales
- (2) Este dispositivo debe aceptar cualquier interferencia recibida, incluso, las interferencias que pueden ocasionar un mal funcionamiento.

Este dispositivo cumple con la Parte 18 de las reglas de la FCC pero puede ocasionar interferencia con teléfonos inalámbricos y celulares, radios, televisores y otros dispositivos electrónicos. Para corregir el problema, aleje el dispositivo de la luminaire o enchúfelo en otra toma de corriente. Este producto puede ocasionar interferencia en equipos de radio y no se debe instalar cerca de equipos de comunicación de seguridad marítima u otros equipos de comunicación o navegación crítica que funcionen en el rango 0.45-30MHz.
El cumplimiento de alguna de estas instrucciones puede anular la garantía del producto.

NUESTRAS MARCAS

Interior/Exterior: Lithonia Lighting, Carandini, Holophane, RELOC

Sistemas de iluminación para interior: Gotham, Mark Architectural Lighting, Peerless, Renaissance Lighting, Winona Lighting

Sistemas de iluminación para exterior: American Electric Lighting, Antique Street Lamps, Hydrel, Tersen

Controls: DARK TO LIGHT, Lighting Control & Design, ROAM, Sensor Switch, Synergy

Acuity Brands Lighting, Inc. no se hace responsable por los reclamos que puedan surgir de la instalación o manipulación inadecuada o negligente de sus productos.
Advertencias generales de ABL LED, Form. n.º 503.203
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IMPORTANTES CONSIGNES DE SÉCURITÉ SUR L'ÉCLAIRAGE DEL

LIRE ATTENTIVEMENT ET OBSERVER TOUTES LES CONSIGNES DE SÉCURITÉ CONSERVER CES DIRECTIVES ET LES REMETTRE AU PROPRIÉTAIRE APRÈS L'INSTALLATION

- Pour réduire les risques de décès, blessures ou dommages matériels résultant d'un incendie, d'un choc électrique, de chutes de pièces, coupures, éraflures et autres dangers, veuillez lire tous les avertissements et toutes les directives fournis avec l'appareil, sur la boîte et les étiquettes.
- Avant l'installation, l'entretien ou la maintenance de cet équipement, veuillez prendre les précautions générales suivantes.
- L'installation et le service technique des luminaires doivent être effectués par un **électricien licencié qualifié**.
- L'entretien des luminaires doit être effectué par des personnes au courant de la construction et du fonctionnement des luminaires et des risques impliqués. Un programme d'entretien régulier est recommandé.
- À l'occasion, il sera nécessaire de nettoyer l'extérieur du réfracteur ou de la lentille. La fréquence de nettoyage dépendra du niveau de saleté ambiante et du flux lumineux minimal acceptable pour l'utilisateur. Le réfracteur et la lentille doivent être nettoyés à l'aide d'une solution d'eau tempérée et de tout détergent domestique doux, non abrasif, puis rincés à l'eau propre et essuyés. En cas de saleté à l'intérieur du bloc optique, essuyez le réfracteur ou la lentille, puis nettoyez comme indiqué ci-dessus et remplacez toute garniture d'étanchéité endommagée au besoin.
- **NE PAS INSTALLER UN PRODUIT ENDOMMAGÉ !** Ce luminaire a été emballé de manière à ce que les pièces ne subissent pas de dommages lors du transport. Veuillez inspecter et confirmer le bon état. Toute pièce endommagée ou brisée lors de l'assemblage ou après devrait être remplacée.
- Recyclage : pour accéder à l'information sur le recyclage des produits électroniques DEL, veuillez visiter www.epa.gov.
- Ces directives n'entendent pas couvrir tous les détails, tous les modèles d'équipement, ni prévoir toute éventualité liée à l'installation, au fonctionnement ou à l'entretien de cet équipement. Pour toute autre information ou en cas d'un problème non résolu par le présent document, l'acheteur ou le propriétaire est prié de contacter Acuity Brands Lighting, Inc.

AVERTISSEMENT RISQUE DE CHOQUE ÉLECTRIQUE

- Couper ou éteindre l'alimentation électrique avant l'installation ou l'entretien.
- Vérifier que la tension d'alimentation est adéquate en la comparant à l'information sur l'étiquette du luminaire.
- Effectuer toutes les connexions et la mise à la terre conformément au National Electrical Code (NEC) et aux exigences de tout autre code local applicable.
- Toutes les connexions doivent être protégées d'un capuchon de connexion homologué UL.

MISE EN GARDE RISQUE DE BLESSURE

- Porter des gants et des verres de sécurité en tout temps pour retirer le luminaire de la boîte, l'installation, l'entretien ou les travaux de maintenance.
- Éviter d'exposer directement les yeux à la source lumineuse lorsqu'allumée.

AVERTISSEMENT RISQUE DE BRÛLURE

- Permettre le refroidissement de la lampe et du luminaire avant la manipulation. Ne pas toucher au boîtier ou à la source lumineuse.
- Ne pas dépasser la puissance maximale indiquée sur l'étiquette du luminaire.
- Observer tous les avertissements, toutes les recommandations et toutes les restrictions du fabricant sur : le type de pilote, la position d'utilisation, l'emplacement et les méthodes de montage, le remplacement et le recyclage.

MISE EN GARDE RISQUE D'INCENDIE

- Éloigner toutes les matières combustibles ou inflammables de la lampe et de la lentille.
- Ne pas employer à proximité des personnes, des matières combustibles ou des substances sensibles à la chaleur ou la sécheresse.

MISE EN GARDE : RISQUE DE CAUSER DES DOMMAGES AU PRODUIT

- Ne jamais connecter des composants en charge.
- Ne pas monter ou supporter ces appareils d'une manière pouvant causer l'abrasion de la gaine externe ou endommager l'isolant des fils.
- Ne jamais connecter un produit DEL à un dispositif de gradation non approuvé. Veuillez contacter ABL directement pour vérifier la compatibilité d'un gradateur non recommandé précisément pour le produit.
- Sauf en cas de spécifications contraignantes individuelles des produits : Permettre un espace libre suffisamment autour du luminaire. Éviter de couvrir les appareils DEL d'un matériau isolant, alvéolaire ou tout autre matériau empêchant le refroidissement de l'unité par convection ou conduction.
- Sauf en cas de spécifications contraignantes individuelles des produits : La température ambiante maximale est 90 °C. Ne pas employer le luminaire à une température plus élevée.
- Sauf en cas de spécifications contraignantes individuelles des produits : Ne pas monter le luminaire où il sera exposé à la pluie, humidité élevée, les changements de température extrêmes ou une aération limitée.
- Les produits DEL sont sensibles à la polarité. S'assurer d'une polarité adéquate avant l'installation.
- Décharge électrostatique (DES) : Une DES peut endommager les appareils DEL. Un équipement de mise à la terre de protection individuelle doit être porté lors de l'installation ou l'entretien de l'unité.
- Ne pas toucher aux composantes électriques individuelles, car cela peut causer une DES, réduire la durée de vie de la lampe ou compromettre la performance de l'unité.
- Aucune pièce ne doit être réparée par l'utilisateur. Ne pas recâbler, recoudre, modifier ou réparer l'unité. De plus, le remplacement sur place du groupe DEL ou des lampes n'est pas permis par UL pour le moment. Dans le cas peu probable où l'unité exige un service technique, cessez de l'utiliser et contactez le représentant ABL.

Tous les luminaires comportant des dispositifs électroniques émetteurs de fréquences supérieures à 9 kHz de toute composante du luminaire se conforment à l'une des règles de la FCC, Section 15. Le fonctionnement est soumis aux deux conditions suivantes :

- (1) Ce dispositif ne peut causer de perturbations nuisibles.
- (2) Ce dispositif peut accepter toute perturbation reçue, notamment les perturbations pouvant causer un fonctionnement indésirable.

Ce dispositif est conforme à la Section 18 des règles de la FCC, mais peut causer de l'interférence avec les téléphones sans fil ou cellulaires, radios, téléviseurs et autres dispositifs électroniques. Pour corriger un problème, éloigner le dispositif du luminaire ou le brancher dans une autre prise de courant. Ce produit peut causer de l'interférence à l'équipement radio, ne pas l'installer à proximité de l'équipement de communications de la sécurité maritime ou tout autre équipement critique de navigation ou de communications fonctionnant entre 0,45 et 30 MHz.

Ne pas observer ces instructions pourrait annuler les garanties du produit.

NOS MARQUES

Intérieur/Exterior: Lithonia Lighting, Carandini, Holophane, RELOC

Eclairage intérieur: Gotham, Mark Architectural Lighting, Peerless, Renaissance Lighting, Winona Lighting

Eclairage extérieur: American Electric Lighting, Antique Street Lamps, Hydrel, Tersen

Commandes d'éclairage: DARK TO LIGHT, Lighting Control & Design, ROAM, Sensor Switch, Synergy

Acuity Brands Lighting, Inc. décline toute responsabilité pour les réclamations résultant d'une installation ou manipulation inadéquate ou négligente de ses produits.

Avvertissements généraux de ABL sur les produits DEL, pub. no 503.203
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STEP-BY-STEP GUIDE

Note: Before beginning the installation, make sure all power is off, shutting power off in breaker box to areas where downlights are to be installed is recommended.

Required Tools (not included): Safety glasses and gloves.

1. Double check and measure the ceiling hole. Make sure it is the correct size for outside rim of the luminaire to cover the hole while still allowing the back of luminaire to sink in to the ceiling and springs to hold firmly.

- Remove existing retrofit can if present or move it out of the way since it will not be needed for installation.
- If new hole is to be cut, use provided hole template. Place template over the desired location. Trace the outer ring with a pen or pencil (not included). Cut the opening with a saw (not included). (Figure 1)

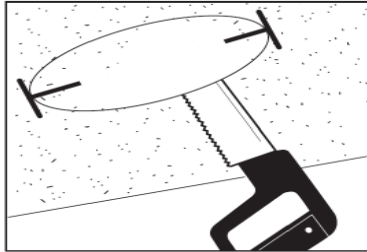


Figure 1 / Figura 1 / Schéma 1

2. Open the cover of the remote driver box. Push and remove one of the knockouts on the side plate.

- Locate power supply leads from remote driver box and connect to power source using wago connectors (provided).
- Connect black wire to live wire, white wire to neutral wire, and green wire with ground (as shown) and secure using wago connector. Close the cover of the box. (Figure 2)

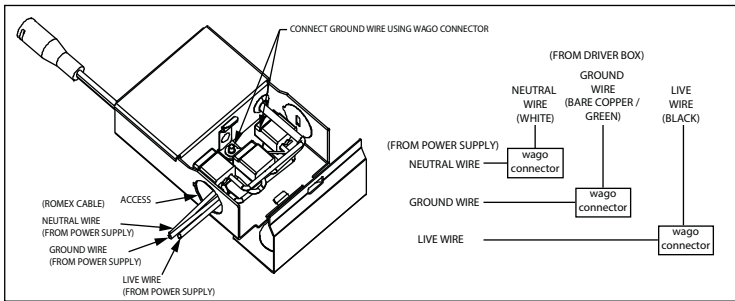


Figure 2 / Figura 2 / Schéma 2

3. Connect the remote driver box to the light fixture and tighten the nut connector by hand. Arrow on the male and female parts of the connector between the driver and fixture cable should match. (Figure 3)

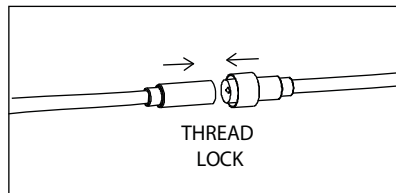


Figure 3 / Figura 3 / Schéma 3

4. Place remote driver box thru the cut-out hole. If remote driver box need to be attached, use provided keyhole fittings on the back of the box to hang it using round head screw (not included). (Figure 4)

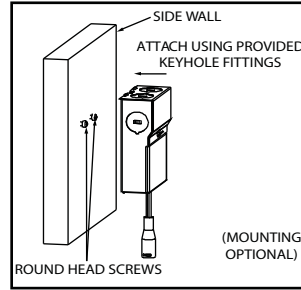
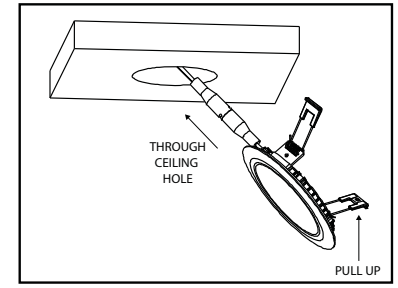


Figure 4 / Figura 4 / Schéma 4



5. Pull the spring clip on the fixture up and through the ceiling hole and place module in the hole making sure the spring clips are holding securely. (Figure 5)

6. Turn the power back on. If the module doesn't illuminate within 5 seconds, turn power off, carefully remove the module and double check all wiring and replace. (Figure 6)

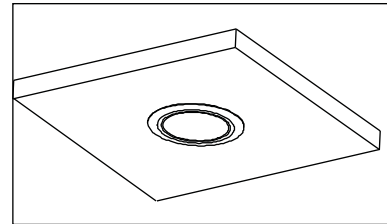


Figure 6 / Figura 6 / Schéma 6

WARNING:

- DO NOT PLACE YOUR HAND UNDERNEATH SPRING CLIP DURING REMOVAL PROCESS. SNAPPING OF THE CLIPS CAN CAUSE INJURIES TO THE HAND. (Figure 7)

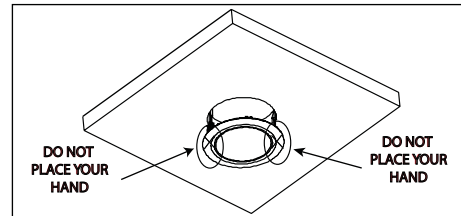


Figure 7 / Figura 7 / Schéma 7

- DO NOT USE ANY OTHER DRIVER EXCEPT LITHONIA LIGHTING DRIVER THAT IS INCLUDED WITH THE FIXTURE.
- DO NOT CONNECT MULTIPLE MODULES TO ONE DRIVER.
- DO NOT OPEN THE MODULE AND SIDE PLATE OF THE REMOTE DRIVER BOX - NO SERVICEABLE PARTS INSIDE.

Trouble Shooting Guide

If this fixture fails to operate properly, use the guide below to diagnose and correct the problem.

- Verify that fixture is wired properly.
- Verify that fixture is grounded correctly.
- Verify that the line voltage at the fixture is correct.

If further assistance is required, contact:

Technical Support at: (800) 748-5070

This LED module does not require service or new bulbs to change.



Catalog Number
Notes
Type

Contractor Select™
CVST

Vapor Tight LED Strip Light



These fully-gasketed, wet-location, and code-compliant vapor tights are DLC® listed and IP65 and IP66 rated. They can be surface mounted on the ceiling or wall and are designed for continuous row mounting. The CVST vapor tights are ideal for outdoor venues, canopies and locker rooms.

FEATURES:

- The fully gasketed, polycarbonate housing with polymeric captive latches provides a water-tight seal and stands up to dust and dirt with its IP65 and IP66 ratings
- Provides the performance you need with the UV-stabilized, high-impact, frosted polycarbonate lens for uniform light output and high impact-resistance
- Quick and simple to install with the snap-lock tool-less access
- 4-foot and 8-foot SKUs available Switchable technology move to before switchable



Catalog Number	UPC	Description	Lumens	Wattage	Voltage	Color Temperature	Color Rendering Index
CVST L48 5000LM MVOLT 40K 80CRI*	00194995069408	4' MVOLT Vapor Tight LED Strip Light	4,298	35.3	MVOLT (120-277)	4000K	80CRI
CVST L48 AL03 MVOLT SWW3 80CRII	00194995069507	4' MVOLT Switchable LED Vapor Tight Strip Light	3,190 - 5,274	27.7 - 43.9	MVOLT (120-277)	35K/40K/50K	80CRI
CVST L96 10000LM MVOLT 40K 80CRI	00194995280858	8' MVOLT Switchable LED Vapor Tight Strip Light	8,596	72	MVOLT (120-277)	4000K	80CRI
CVST L96 AL04 MVOLT SWW3 80CRI	00194995069446	8' MVOLT Switchable LED Vapor Tight Strip Light	6,380 - 10,549	55.3 - 87.9	MVOLT (120-277)	35K/40K/50K	80CRI

More configurations are available. [Click here](#) or visit www.acuitybrands.com and search for CSS LED.

Accessories: Order as separate catalog number.	
CVST STSL LATCH	Stainless steel latch kit (Set of 10)
CVSTJSB	Junction box mount
CVSTANGBKT	45 Angle mount bracket
CVST DPMP	Dual pendant mounting bracket

Mechanical & Storage Rooms Light Fixtures



Specifications

INTENDED USE:

Available in several color temperatures, lumen packages and lengths. Ideal for use in commercial, retail, office, warehouse and display applications. **Certain airborne contaminants can diminish integrity of acrylic.** [Click here for Acrylic Environmental Compatibility table for suitable uses.](#)

Certain airborne contaminants may adversely affect the functioning of LEDs and other electronic components, depending on various factors such as concentrations of the contaminants, ventilation, and temperature at the end-user location. [Click here for a list of substances that may not be suitable for interaction with LEDs and other electronic components.](#)

CONSTRUCTION:

- Light Gray Polycarbonate housing
- Frosted Polycarbonate lens
- Poured in place polyurethane gasket
- Polycarbonate Latches (optional stainless steel)
- Standard 1/2" wet location fitting ghimpact.

ELECTRICAL:

- High Efficiency LEDs meet DLC Standard
- MVOLT (120-277V) & 347V
- 0-10V Dimming standard

INSTALLATION:

- CSA Certified to UL & C-UL Standards for wet location
- IP65, IP66 rated per IEC60529
- FCC Title 47, Part 15 Subpart B compliant
- 2.5kV/0.75kA Surge Rated per ANSI C82-77-5-2015
- CSA Ambient Listings on Page 3
- Lumen Maintenance Listed on Page 3

LISTINGS:

- Surface (wall, ceiling) using standard brackets
- Surface (angle) using optional ANG bracket
- Suspended (chain, cable) using standard brackets
- Pendant mount with dual pendant mount bracket
- Junction Box Mount

WARRANTY:

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

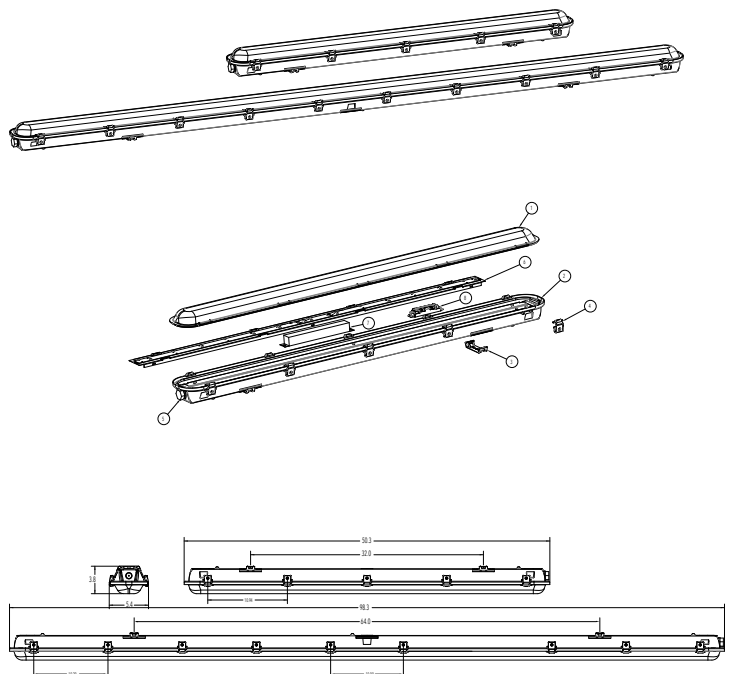
Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Dimensions

All dimensions are inches (centimeters) unless otherwise indicated.

4FT ASSEMBLY



READ AND FOLLOW ALL SAFETY INSTRUCTIONS!
SAVE THESE INSTRUCTIONS AND DELIVER TO OWNER AFTER INSTALLATION

- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards please read all warnings and instructions included with and on the fixture box and all fixture labels.
- Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- Installation and service of luminaires should be performed by a **qualified licensed electrician**.
- Maintenance of the luminaires should be performed by person(s) familiar with the luminaires' construction and operation and any hazards involved. Regular fixture maintenance programs are recommended.
- It will occasionally be necessary to clean the outside of the refractor/lens. Frequency of cleaning will depend on ambient dirt level and minimum light output which is acceptable to user. Refractor/lens should be washed in a solution of warm water and any mild, non-abrasive household detergent, rinsed with clean water and wiped dry. Should optical assembly become dirty on the inside, wipe refractor/lens and clean in above manner, replacing damaged gaskets as necessary.
- **DO NOT INSTALL DAMAGED PRODUCT!** This luminaire has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.
- Recycle: For information on how to recycle LED electronic products, please visit www.epa.gov.
- These instructions do not purport to cover all details or variations in equipment nor to provide every possible contingency to meet in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's or owner's purposes, this matter should be referred to Acuity Brands Lighting, Inc.



WARNING
RISK OF ELECTRIC SHOCK

- ✓ Disconnect or turn off power before installation or servicing.
- ✓ Verify that supply voltage is correct by comparing it with the luminaire label information.
- ✓ Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements.
- ✓ All wiring connections should be capped with UL approved recognized wire connectors.



WARNING
RISK OF BURN

- ✓ Allow lamp/fixture to cool before handling. Do not touch enclosure or light source.
- ✓ Do not exceed maximum wattage marked on luminaire label.
- ✓ Follow all manufacturer's warnings, recommendations and restrictions for: driver type, burning position, mounting locations/methods, replacement and recycling.



CAUTION
RISK OF INJURY

- ✓ Wear gloves and safety glasses at all times when removing luminaire from carton, installing, servicing or performing maintenance.
- ✓ Avoid direct eye exposure to the light source while it is on.



CAUTION
RISK OF FIRE

- ✓ Keep combustible and other materials that can burn, away from lamp/lens.
- ✓ Do not operate in close proximity to persons, combustible materials or substances affected by heat or drying.

- ✓ Never connect components under load.
- ✓ Do not mount or support these fixtures in a manner that can cut the outer jacket or damage wire insulation.
- ✓ Controls for dimming, auto-sensing, or remote control of a luminaire that are not factory-wired to the luminaire must be checked for compatibility with the luminaire prior to installation. LED fixtures must be powered directly off a switched circuit.
- ✓ Unless individual product specifications deem otherwise: Do not restrict fixture ventilation. Allow for some volume of airspace around fixture. Avoid covering LED fixtures with insulation, foam, or other material that will prevent convection or conduction cooling.
- ✓ Unless individual product specifications deem otherwise: Do not exceed fixtures maximum ambient temperature.
- ✓ Only use fixture in its intended location.
- ✓ LED products are Polarity Sensitive. Ensure proper Polarity before installation.
- ✓ Electrostatic Discharge (ESD): ESD can damage LED fixtures. Personal grounding equipment must be worn during all installation or servicing of the unit.
- ✓ Do not touch individual electrical components as this can cause ESD, shorten lamp life, or alter performance.
- ✓ Some components inside the fixture may not be serviceable. In the unlikely event your unit may require service, stop using the unit immediately and contact an ABL representative for assistance.
- ✓ Always read the fixtures complete installation instructions prior to installation for any additional fixture specific warnings.
- ✓ Always ensure that the electrical distribution system is up to NEC (and any applicable local code) requirements.
- ✓ Verify that power distribution system has proper grounding. Lack of proper earth ground can lead to fixture failure and may void warranty.

All luminaires that contain electronic devices that generate frequencies above 9kHz from any component within the luminaire comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received, including interference that may cause undesired operation

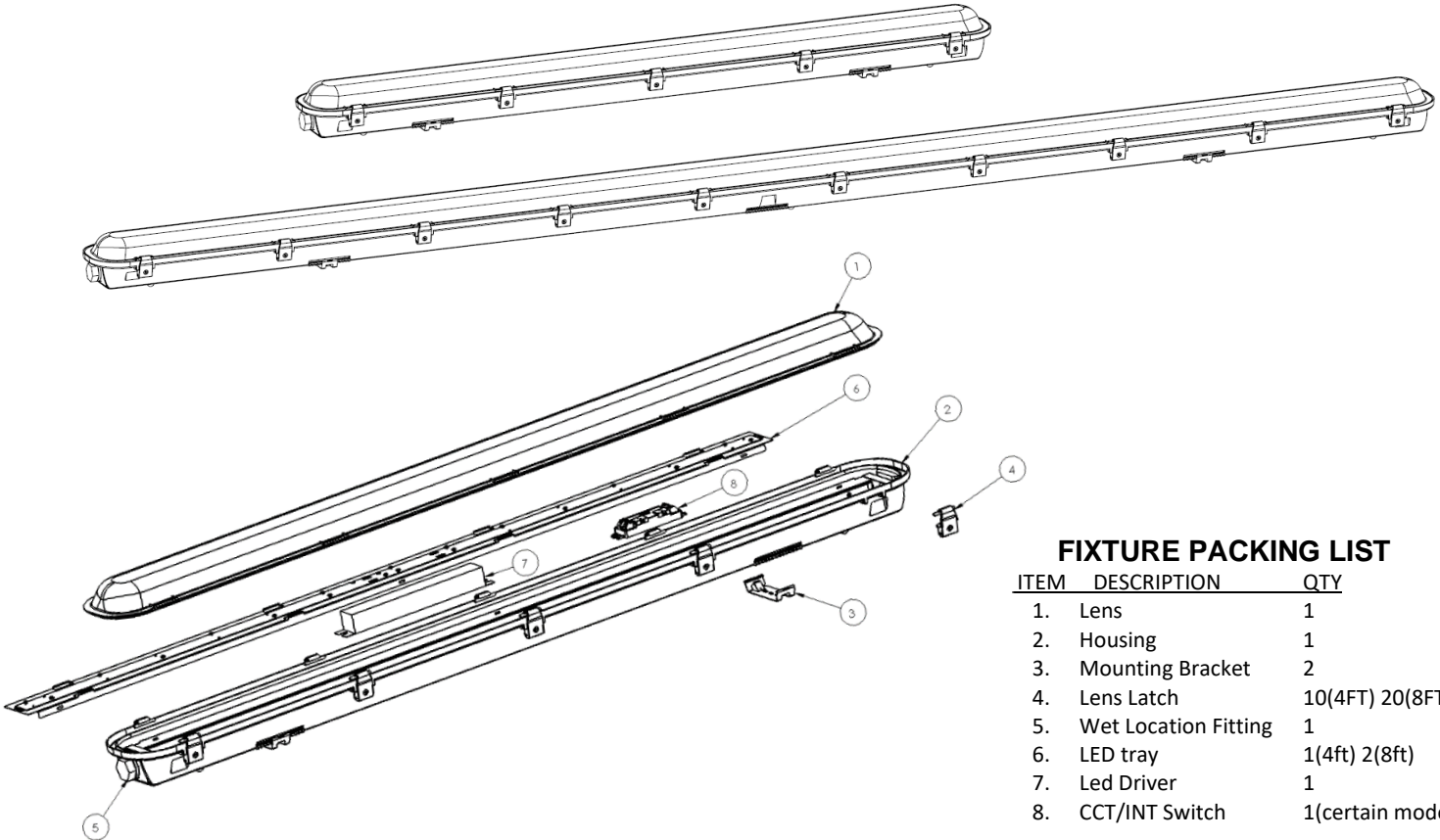
Failure to follow any of these instructions could void product warranties. For a complete listing of product Terms and Conditions, please visit www.acuitybrands.com.

Our Brands	Indoor/Outdoor Lithonia Lighting Carandini Holophane RELOC Light Concepts	Indoor Lighting Gotham Mark Architectural Lighting Peerless Renaissance Lighting Winona Lighting	Outdoor Lighting American Electric Lighting Antique Street Lamps Hydrel Tersen	Controls DARK TO LIGHT LC&D ROAM Sensor Switch Synergy	Daylighting SunOptics
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Acuity Brands Lighting, Inc. assumes no responsibility for claims arising out of improper or careless installation or handling of its products.
 ABL LED General Warnings, Form No. 503.203

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Installation Instructions - CSVT
Contractor Single Strip Vapor-Tite
LED Luminaire



FIXTURE PACKING LIST

ITEM	DESCRIPTION	QTY
1.	Lens	1
2.	Housing	1
3.	Mounting Bracket	2
4.	Lens Latch	10(4FT) 20(8FT)
5.	Wet Location Fitting	1
6.	LED tray	1(4ft) 2(8ft)
7.	Led Driver	1
8.	CCT/INT Switch	1(certain models)

When handling the fixture during unpacking and installation take precautions of the plastic Lens and plastic end caps. Dropping the fixture or excess force on the lens or housing can cause damage. Removing the lens from the housing during installation exposes the LED's and puts them at risk for damage. Damage to the LEDs caused during installation will not be covered under the warranty.

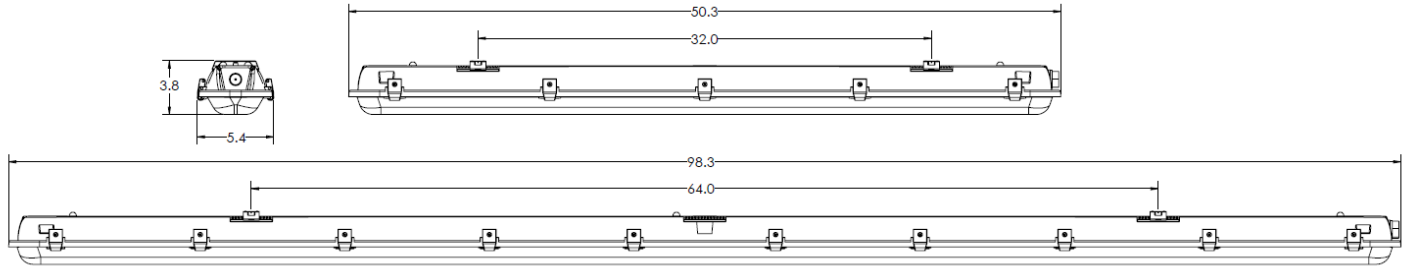
Protect yourself. Before installing, read these instructions carefully and save them for future reference.

Date Installed: _____

TOOLS REQUIRED FOR INSTALLATION

- Safety glasses •Drill
- Ruler/Tape measure •3/32" Drill Bit
- Flat blade screwdriver •1/2" Drill Bit
- Phillips screwdriver •7/8" Drill Bit
- Adjustable wrench •Pliers

DIMENSIONS



CSVT INSTALLATION INSTRUCTIONS

INSTALLATION OF THIS FIXTURE IN ANY OTHER MANNER THAN WHAT IS INDICATED WITHIN THE SUPPLIED INSTRUCTIONS WILL VOID ALL WARRANTIES.

These instructions are for NORMAL On/Off operations.

Ensure proper voltage will be supplied to the fixture. Check the fixture label on the carton for fixture voltage. Fixture must be grounded before use. Remove fixture from packaging and check for damage. If present remove plastic film from lens prior to installation.

GENERAL INSTALLATION

This luminaire is suitable for wet locations when labeled accordingly. This luminaire may be surface mounted or suspended by cable or chain (provided by others). For all mounting methods make sure the facility mounting points and mounting hardware (provided by others) is rated for 4X the fixture load.

DRIVER AND WIRING ACCESS

Once the fixture is mounted:

1. Remove the lens by supporting the lens with one hand and releasing the latches with the other hand. Number of latches vary by fixture length; L48 has 10 and L96 has 20.
2. To open the LED tray, squeeze in on the channel below the led tray in the three places shown in figure 1 and the tray snaps will disengage releasing the LED tray. Slowly lower the LED tray until supported by the safety tethers.
3. Make the electrical connection to the fixture in accordance with your local electrical code. Make all necessary wiring connections, observing proper voltage and polarity.
4. When closing the LED tray ensure that the LED tray is not pinching/catching wires or lens latches. Once closed verify the LED tray is fully engaged.
5. Replace the lens by reversing the procedure outlined in Step 1.

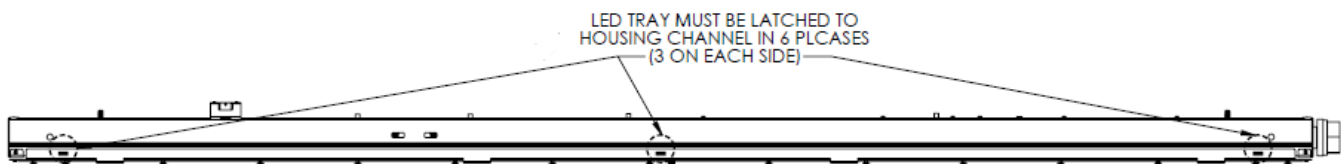


FIGURE 1

STEP-BY-STEP GUIDE

1. Remove fixture components and parts pack(s). Check that all parts are included.
Note: Turn off power at circuit breaker box!
2. **Position the Fixture Housing against** the mounting surface and with a pencil, mark the screw hole locations on mounting brackets.
3. **Using a drill with a 1/16" drill bit**, make two small pilot holes at the marked screw hole locations. If drill bit does not encounter a stud or wood surface, use toggle bolts or suitable fastener depending on structural conditions. If drill bit does encounter wood surface, use #10 wood screw. (FIGURE 2)
4. **Install the Mounting Brackets.** Attach supplied surface mounting brackets to ceiling making sure ceiling and screws can support 4x the full fixture weight. (FIGURE 2)
5. **Install the fixture.** Hang the fixture into the mounting brackets by clipping into one side of each bracket and rotating upward to clip into the other side of each bracket.

WIRING AND FIXTURE OPERATION CAUTION:

Connect fixture to supply wires rated for at least 90°C (194°F).

6. Remove lens by removing all lens latches.
7. **Remove Wireway Cover Assembly by lifting upward** on exposed edges of part. Start in the middle and work outward. Disconnect Wireway Cover Assembly from Housing Assembly.
8. **Disconnect Wireway Cover Assembly from Fixture Housing** by pinching Orange or Red connector on Wiring Harness.
9. **Insert house power supply cable** through wet location fitting
10. **Ensure all electrical connections are made** within Fixture Housing. For Emergency Fixtures, refer to Emergency Battery Installation Instructions for test switch connections.
11. **Cut supply cable to desired length.** Strip black and white wire leads with wire strippers to expose 3/8"-7/16" of bare metal.
12. **Using Wirenuts, connect supply** (house) wires to fixture wires - white to white, black to black, and green to green or bare copper ground wire.

13. **Bundle wires in tight grouping to be out of the way** and reinstall Wireway Cover Assembly (step 3)

14. Reattach lens by latching all latches ensuring that lens has seated properly into the gasket channel.

Trouble Shooting Guide

If this fixture fails to operate properly, use the guide below to diagnose and correct the problem.

- Verify that fixture is wired properly.
- Verify that fixture is grounded correctly.
- The line voltage at the fixture is correct.

If further assistance is required, contact:

Technical Support at: (800) 705-7378

If servicing fixture:

- For driver replacement see steps 2 and 11.
- For LED replacement see step 2 and note that entire Wireway Cover Assembly will be replaced.

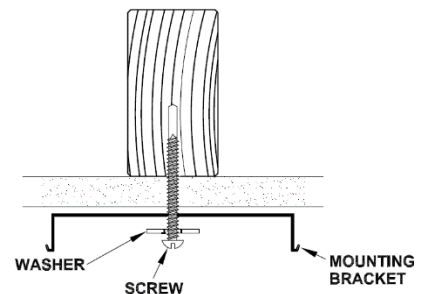
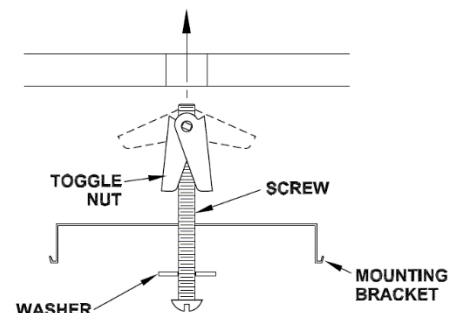


FIGURE 2



Switchable Settings (Certain Models)

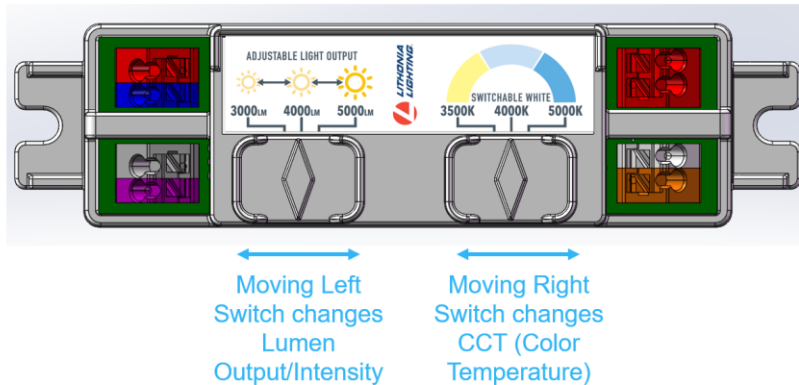


WARNING: RISK OF ELECTRIC SHOCK

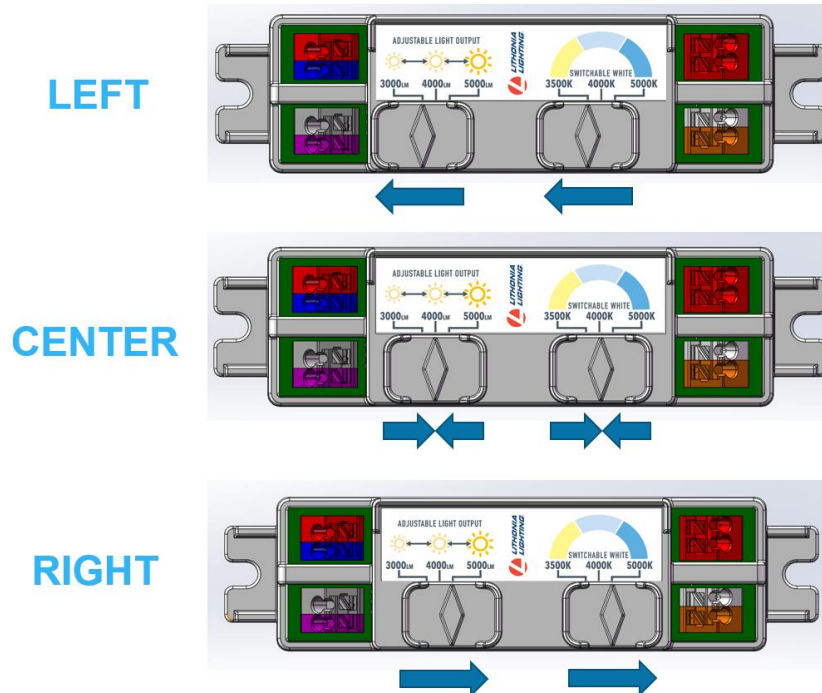
- ✓ Disconnect power before adjusting color temperature or intensity switches.

Switchable Option (ALO SWW)

Fixtures ship with both switches in the center positions, L48 = 4000LM & 4000K, L96 = 8000LM & 4000K.



Switch Positions





WARNING: RISK OF ELECTRIC SHOCK

- ✓ Disconnect power before adjusting color temperature or intensity switches.

Switch Settings (CERTAIN MODELS)

Example: If 4000LM and 4000K is desired then both switches would be moved to the Center positions.

For all possible settings and combinations see the table below.

4ft Lumens	8ft Lumens	Left Switch	Right Switch	CCT
3000LM	6000LM	Left	Left	3500K
4000LM	8000LM	Center	Left	3500K
5000LM	10000LM	Right	Left	3500K
3000LM	6000LM	Left	Center	4000K
4000LM	8000LM	Center	Center	4000K
5000LM	10000LM	Right	Center	4000K
3000LM	6000LM	Left	Right	5000K
4000LM	8000LM	Center	Right	5000K
5000LM	10000LM	Right	Right	5000K

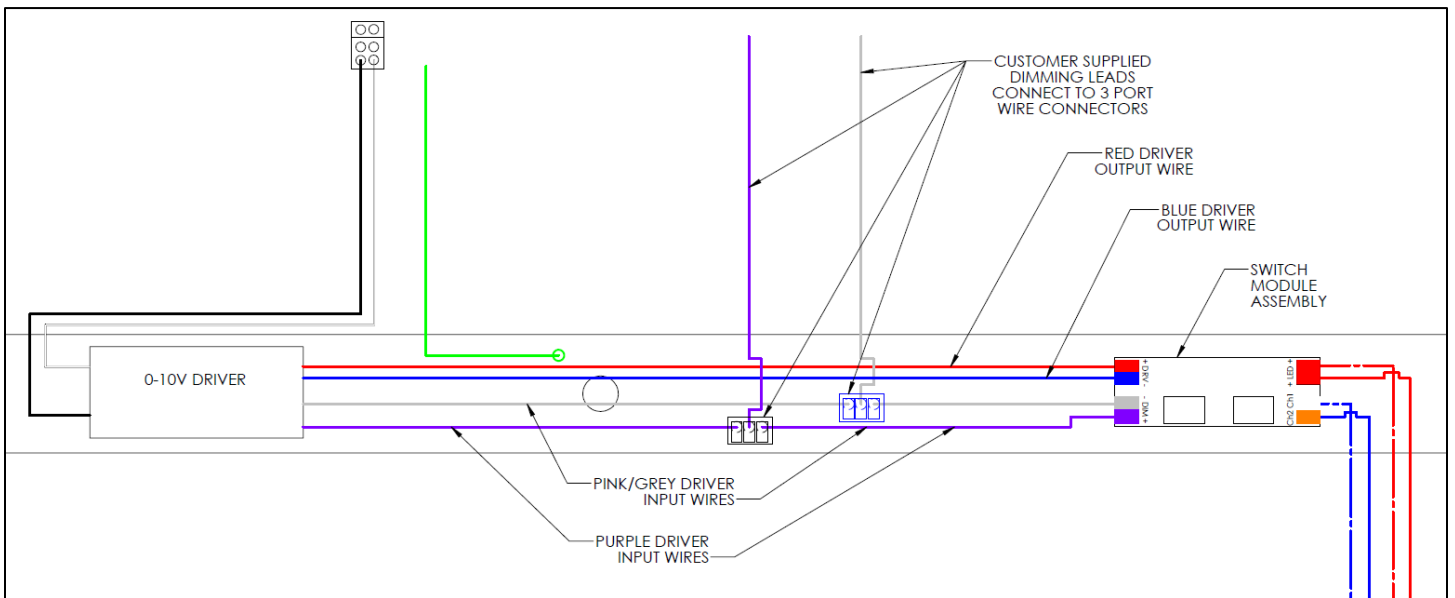
DIMMING

All fixtures: Dimmable

Switchable fixtures:

Maximum light level for switchable luminaires is controlled by the lumen setting on the switch. These products are capable of being dimmed down to 10% when used with 0-10V dimming controls. The fixture with the lowest switch setting on a circuit sets the maximum output for all other switchable fixtures on that same dimming circuit.

Switching luminaires are optimized for use with “sinking” dimming controls (most common in residential and commercial applications). If utilizing switchable luminaires in combination with “sourcing” dimming controls (most common in theatre applications), please ensure that no more than 5 dimming devices totaling more than 10mA source current (typical device is under 2mA) are used on a single dimming circuit.



Warranty terms are located at the link below:

<http://www.acuitybrands.com/resources/terms-and-conditions>

For Technical Support:

Email techsupport-industrial@acuitybrands.com or

Phone 1-800-705-SERV (7378)

OVERVIEW

The CM family of ceiling mount occupancy sensors provide a range sensor solutions for applications with finished ceilings (e.g. ceiling tiles, sheetrock, plaster). CM family sensors utilize 100% digital Passive Infrared (PIR) detection and are available with several lens options, providing flexibility for multiple mounting height and coverage pattern requirements. Dual technology (PDT) occupancy detection can also be added as an option for applications where occupants are stationary for long periods of time. With optional flash programming via the Sensor Switch Mobile App, the user can easily change time delay, on mode and photocontrol settings.

FEATURES

- Configurable using the Sensor Switch Mobile App
- 360° coverage pattern
- Push- button programmable, adjustable time delays, and multiple operating modes
- 100 hr lamp burn-in timer
- No field calibration or sensitivity adjustments required
- Convenient test mode
- Green LED indicator

Warranty

Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice



*CM
CM PDT
Ceiling Mount
Occupancy Sensor*



ORDERING INFORMATION

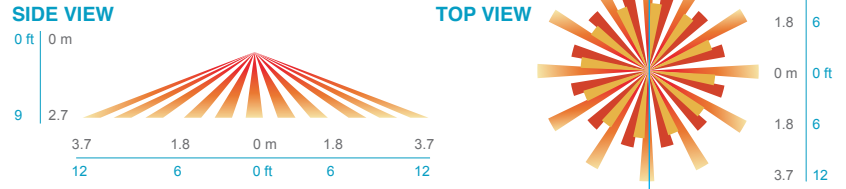
CM Family		Example: CM PDT 11 R LT									
Series	Detection Technology	Coverage Type		Relay		Dimming		Visible Light Programming		Temp/Humidity	
CM Ceiling Mount Sensor	[blank] PIR PDT ¹ Dual Technology (PIR/Microphonics)	6 High Bay 360°	9 Small Motion 360°	10 Large Motion 360°	11 Hallway	[blank] None R Low Voltage Relay	[blank] None D Occupancy Controlled Dimming P Photocell ADC ² Photocell w/ Dimming	[blank] None VLP ³ 6-8' Range Flash Programming via the Sensor Switch Mobile App	[blank] Standard LT Low Temp/ High humidity		

- Notes
1. PDT option not available on CM 6 models
 2. ADC option not available on CM 6 models
 3. Must specify P or ADC if VLP is ordered and must be within 5ft of sensor to program

COVERAGE PATTERNS

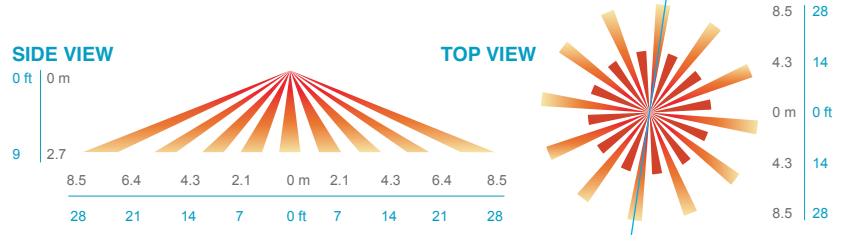
Small Motion 360° (Model # CM 9/ CM PDT 9')

- Best choice for small motion (e.g. hand movements) detection
- 360° conical shaped pattern
- Provides 12 ft (3.66 m) radial coverage (~500 ft²) when mounted to standard 9 ft (2.74 m) ceiling
- 8 to 15 ft (2.44 to 4.57 m) mounting heights provide 10 to 20 ft (3.05 to 6.10 m) radial coverage
- Lens assembly is marked with a gray ring around lens to differentiate versus the #10 lens
- Tested to NEMA WD 7-2011



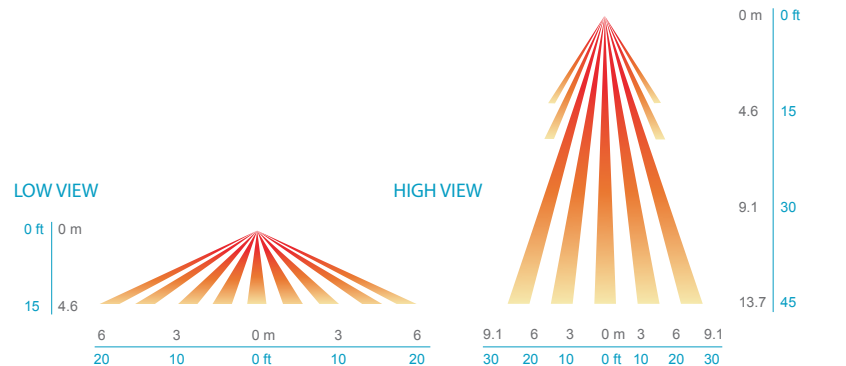
Large Motion 360° (Model # CM 10/ CM PDT 10')

- Best choice for large motion detection (e.g. walking)
- 360° conical shaped pattern
- Provides ~24 ft (7.32 m) radial coverage (~2000 ft²) when mounted at 9 ft (2.74 m)
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage
- Detection range improves when walking across beams compared to into beams
- Tested to NEMA WD 7-2011



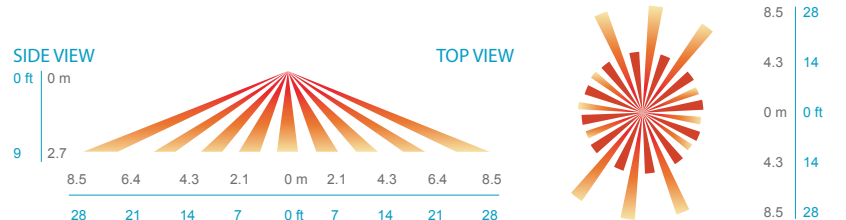
High Mount 360° (Model # CM 6)

- Best choice for 15 to 45 ft (4.57 to 13.72 m) mounting heights
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Excellent detection of large motion (e.g. walking) up to 35 ft (10.76 m)
- Excellent detection of extra large motion (e.g. forklifts) up to a 45 ft (13.72 m)
- Tested to NEMA WD 7-2011



High Mount Hallway (Model # CM 11/ CM PDT 11')

- Best choice for large motion detection
- Provides 28 ft (8.53 m) of coverage when mounted to standard 9 ft (2.74 m) ceiling
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) hallway coverage
- Tested to NEMA WD 7-2011



1. Sensors with Microphonics™ provides overlapping detection of human activity over the complete PIR coverage area. Advanced filtering is also utilized to prevent non-occupant noises from keeping the lights on.

WIRING (DO NOT WIRE HOT)

STANDARD WIRING

RED - Power Input (12-24 VAC/VDC)

BLACK - Common

WHITE - Occupancy State (high VDC for occupied)

PHOTOCELL / DIMMING OPTIONS (D, P, ADC)

BLUE - Direct output to power pack for providing photocell control and/or secondary dim time out. Output is high VDC with occupancy & low light. Output also held high during secondary dim time out. For multi-level control, use two power packs and connect White wire to primary load and Blue to daylight load.

VIOLET w/ WHITE STRIPE - Connect to 0-10 VDC control wire (typically Violet) from 0-10 VDC dimmable ballast

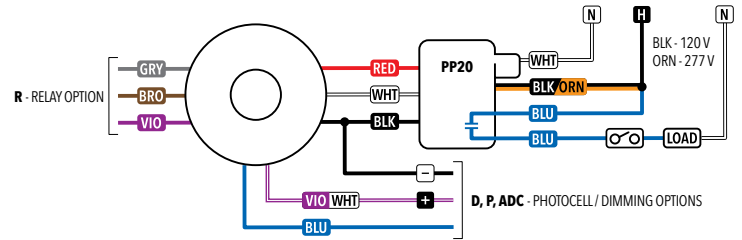
GRAY from Ballast - Connect to sensor Black wire

RELAY OPTION (R)

GRAY / BROWN - Connected during occupied state

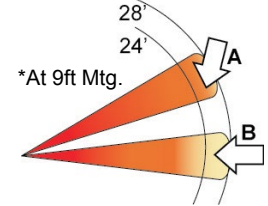
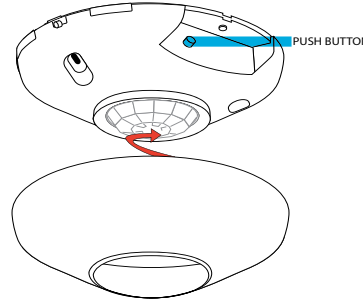
VIOLET / BROWN - Connected during unoccupied state

Note: Relay is energized during unoccupied state



INSTALLATION

- Mount sensor directly to a ceiling tile or a metallic grid (two self-tapping screws provided).
- Sensor's mounting holes also align with 3.5" octagon or single gang handy box (screws not provided).
- Sensor will detect motions crossing segments more effectively than motions parallel to beams.
- For optimal detection, position sensor such that segments are crossed upon entrance and unable to view outside the space.
- PDT models: For maximum Microphonics sensitivity avoid locating sensor near HVAC air diffusers



*At 9ft Mtg.

A: When walking across beam, detection will occur at approximately 28 feet. (8.53 m)

B: When walking into beam, detection will occur at approximately 24 feet. (7.32 m)

SPECIFICATIONS

Electrical

Input Ratings	Class 2 Input 24V max, 4mA Class 2 Input 24V max, 16mA (-R Option)
Relay Type	Electrically held
Low Voltage Output Ratings	0-10VDC, Sinks <20mA
Standards/ Ratings	Energy Management Equipment, UL916 (E167435)

Mechanical

Dimensions	4.55"W x 1.55"D (116mm x 40mm)
Mounting	Single-Gang or Octagonal Box, Surface Mount
Color	White
Finish	Matte
Connection Type	Low Voltage Leads

Environmental

Warrantied Operating Temperature	Standard: 14°F to 185°F (-10°C to 85°C) PDT option: 14°F to 140°F (-10°C to 60°C) LT option: -4°F to 185°F (-20°C to 85°C) PDT LT options: -4°F to 140°F (-20°C to 60°C)
Relative Humidity	Up to 90%, Non-Condensing
Environment	Indoor
Standards/ Ratings	RoHS

PROGRAMMING INSTRUCTIONS

Please read all 7 steps before programming

1. Enter programming mode by pressing & holding programming button until LED flashes rapidly. Release button.
2. Enter a specific programming function by pressing button the number of times as the desired function number from the tables to the right (e.g., press twice for function 2, time delay).
3. LED will flash back the selected function's current setting (e.g., 5 flashes for 10 minute time delay). To change setting, proceed to step 4 before flash back sequence repeats 10 times. To exit the current function or to change to a different function, wait for sequence to repeat 10 times then return to step 1.
4. Press button the number of times indicated in the particular function's detailed table for the NEW desired setting (e.g., press 3 times for 5 min). As confirmation of setting change, LED flashes back the NEW setting 10 times before exiting.
5. Exit programming mode by pressing and holding button again until LED flashes rapidly. Release button.
6. Re-enter function number as final confirmation that its setting changed.
7. LED will flash twice indicating acceptance of NEW settings. If two flashes are not seen, repeat 7 step process.

SHORTCUT PROGRAMMING METHOD

For all functions except 1 (Pole Selection) and 9 (Restore Factory Defaults), a shorter programming method that requires following only steps 2, 3, and 4 can be used.

Note: The LED flash back sequence used for programming readout and confirmation repeats only 3 times when the shortcut method is used.

DETAILED FUNCTION TABLES

1 = Pole Selection⁶

1	1st Pole*	2	2nd Pole**
3	Both Poles 1 & 2 (also copies Pole 1 to Pole 2)**		
4	Disable Button Mode		
5	Enable Button Mode		

2 = Occupancy Time Delay

1	30 sec	4	7.5 min	7	15.0 min
2	2.5 min	5	10.0 min*	8	17.5 min
3	5.0 min	6	12.5 min	9	20.0 min

4 = Test Mode / 100 hr Burn-In / Auto Set-Point

1	Normal*	4	Run Auto Set-Point ^{1,2}
2	Run 100 hr Burn-In	5	Blink back Set-Point ³
3	Run 100 hr then Auto-Setpoint ^{1,2}	6	Test Mode ^{1,4}

5 = Ten's Digit of Set-Point²

1	10 fc	4	40 fc	7	200 fc	10	0 fc*
2	20 fc	5	50 fc	8	Disable		
3	30 fc	6	100 fc	9	Not applicable		

6 = One's Digit of Set-Point²

1	1 fc	4	4 fc	7	7 fc	10	0 fc
2	2 fc	5	5 fc*	8	8 fc		
3	3 fc	6	6 fc	9	9 fc		

7 = Sunlight Discount Factor^{1,2}

1	x/1	4	x/4*	7	x/7	10	x/10
2	x/2	5	x/5	8	x/8		
3	x/3	6	x/6	9	x/9		

8 = Incremental Set-Point Adjustment²

1	Decrease 1 fc	2	Increase 1 fc
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9 = Restore Factory Defaults

1	Keep Current*	2	Restore Factory Defaults
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10 = Minimum On Time¹

1	0 min***	3	30 min	5	60 min
2	15 min*	4	45 min		

12 = Dual Technology (Microphonics™)⁵

1	Normal*	2	Off	3	Medium	4	Low
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* Indicates default setting

** Indicates additional settings for 2-pole sensors

*** Special Default for LWS(H) sensors

NOTES

¹ Programming function will effect both poles regardless of which Pole is currently selected

² Programming function only present on products with Photocell option (model numbers with suffix P)

³ The LED will blink back the ten's digit, then pause, then blink back the one's digit. For a "0" the LED will blink very rapidly. The sequence is repeated 3 times.

⁴ Test Mode will disable Minimum On Time, set Occupancy Time Delays to 30 sec, and shorten all photocell transitions rates. Mode will expire after 10 min or if function 4 is set back to Normal.

⁵ Programming function only available with products with Dual Technology (model numbers containing PDT)

⁶ Settings 1-3 related to Pole Selection not available with HM(R) products

FUNCTION DEFINITIONS

1 POLE SELECTION

POLE 1 / POLE 2 / BOTH POLES

The particular relay that subsequent programming will effect

BUTTON MODE

When enabled, allows user to switch the relay by pressing the push-button for test purposes (e.g., in order to test wiring). The particular relay(s) to be switched is determined by the previous pole selection.

2 OCCUPANCY TIME DELAY

The length of time an occupancy sensor will keep the lights on after it last detects occupancy (assuming minimum on time has been met)

4 TEST MODE / 100 HOUR BURN-IN / AUTO SET-POINT

TEST MODE

Disables Minimum On Time, sets Occupancy Time Delay to 30 sec, and shortens all photocell transition rates. Mode will expire after 10 min or if function 4 is set back to Normal.

100 HOUR BURN-IN

Overrides relay on (typically for lamp seasoning) for 100 hrs of powered operation. LED blinks rapidly during burn-in period.

AUTO SET-POINT

Photocell calibration procedure for detecting optimum lighting control level. When engaged, LED will blink rapidly then lights will cycle up to three times as sensor measures amount of light it is controlling.

5 TEN'S DIGIT OF SET-POINT

The ten's digit of the target light level that is to be maintained by the device (in foot-candles)

6 ONE'S DIGIT OF SET-POINT

The one's digit of the target light level that is to be maintained by the device (in foot-candles)

7 SUNLIGHT DISCOUNT FACTOR

Value used to improve the tracking accuracy of a photocell during periods of high daylight. Decreasing the value will lower the controlled level of the lights

8 INCREMENTAL SET-POINT ADJUSTMENT

Alters the target light level that is to be maintained by the device (in foot-candles)

9 RESTORE FACTORY DEFAULTS

Returns the sensor to its default settings

10 MINIMUM ON TIME

The length of time required for lamps to be on in order to prevent all short cycling that shortens lamp life. If occupancy time delay expires prior to Minimum On time being satisfied, the lamps will remain on until time has been met.

12 DUAL TECHNOLOGY (MICROPHONICS™)

A second method of occupancy detection that allows the sensor to hear occupants

NOTE:

For information on additional advanced settings, including resetting unit to factory defaults, contact:

Technical Support: 1.800.535.2465

LWS(H) / WVR / HM(R) SERIES OCCUPANCY SENSOR PROGRAMMING INSTRUCTIONS

AcuityControls.

Sensor Switch™

1.800.535.2465

OVERVIEW

Power packs are the heart of the low voltage sensor system. A PP20 Series power pack transforms Class I high voltage (120/277 VAC) to Class 2 15 VDC for powering remote sensors. The PP20 and the SP20 Series secondary pack are also capable of switching lighting loads on and off using their internal relays. Class 2 wire leads connect to 18 to 22 AWG low voltage cable running to the sensors, making installation easy and clean. Power packs also have an elongated chase nipple that allows it to be mounted either directly through a ½ inch knockout into a junction box, or inside an adjacent box for meeting specific local code requirements in ceiling plenums.

The PP20 is versatile. It utilizes a patented relay contact protection and can power up to 14 sensors. Dual-circuit control can be handled by two PP20's or a PP20 power pack and a SP20 secondary pack.

For emergency powered loads, please visit our shunt power pack solution:

Line Voltage:

<https://www.acuitybrands.com/products/detail/460876/sensorswitch/pp16-shunt/bypass-relay>

Low Voltage:

<https://www.acuitybrands.com/products/detail/1171701/sensorswitch/pp5lv-shunt/pp5lv-shunt-bypass-relay>

FEATURES

- Powers Low Voltage Sensors (PP20 only)
- Self-Contained Relay(s) Switch Line Voltage Loads
- Relay Contact Protection
- Plenum Rated

Warranty

Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.



*PP20
SP20
Power Pack*



ORDERING INFORMATION

PP20		Example: PP20 LT		
Series	# of Poles	Voltage	Temperature/Humidity	
PP20 Power/ Relay Pack	[blank] 1	[blank] 120/277 VAC	[blank]	Standard
SP20 Secondary Relay Pack			LT	Low Temp/High Humidity

SPECIFICATIONS

Electrical Specifications

Input Ratings PP20:120/277VAC, 50/60 Hz; SP20 15 VDC

Output Ratings 120/277VAC, 20A - General Use
240VAC, 1 HP - Motor
120VAC, 5A, 600 W - Tungsten
240VAC, 1 HP - Motor
120VAC, 5A, 600 W - Tungsten; SP20: 120/277VAC, 20A - General Use
240VAC, 1 HP - Motor
120VAC, 5A, 600 W - Tungsten

Relay Type Latching/ SP20: Latching

Low Voltage Output Ratings PP20: 15VDC, 20A per pole (150mA total); SP20

Standards/ Ratings Energy Management Equipment, UL916 (E167435); UL916 (E167435); SP20: Energy Management Equipment, UL916 (E167435)

Mechanical

Dimensions 3.00"H x 2.25"W x 1.88"D (76mm x 57mm x 48mm) - not including chase nipple; SP20: 3.00"H x 2.25"W x 1.88"D (76mm x 57mm x 48mm) - not including chase nipple

Mounting 1/2" Knockout (7/8" hole) SP20: 1/2" Knockout (7/8" hole)

Color Black/ SP20: Black

Connection Type Line-Voltage Leads; SP20: Line-Voltage Leads

Environmental

Warrantied Operating Temperature 14°F to 122°F (-10°C to 50°C)
14°F to 113°F (-10°C to 45°C) if enclosed within a junction box
14°F to 113°F (-10°C to 45°C) if enclosed within a junction box / SP20: 14°F to 122°F (-10°C to 50°C)
14°F to 113°F (-10°C to 45°C) if enclosed within a junction box

Relative Humidity Up to 90%, Non-Condensing; SP20: Up to 90%, Non-Condensing

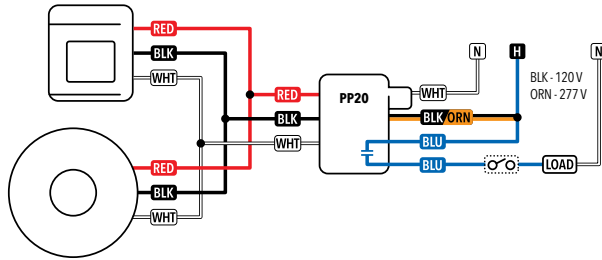
Standards/ Ratings PP20: RoHS, Plenum UL2043; SP20: RoHS, Plenum UL2043

Standards/ Ratings System Component to aid in compliance with Title 24/SP20: System Component to aid in compliance with Title 24

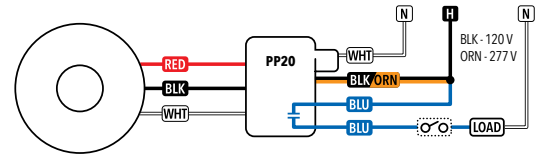
WIRING (DO NOT WIRE HOT)

Note: The Power Pack must be connected to a single phase Hot and Neutral System. For 120 VAC, connect the Black wire to Hot, White wire to Neutral, and Cap off the Orange/Red wire. For 240-277 VAC, connect the Orange to Hot, White to Neutral, and Cap off the Black Wire. **Never connect both the Black and Orange wires!** Low Voltage wire can be 18 to 22 AWG; shielding is not necessary.

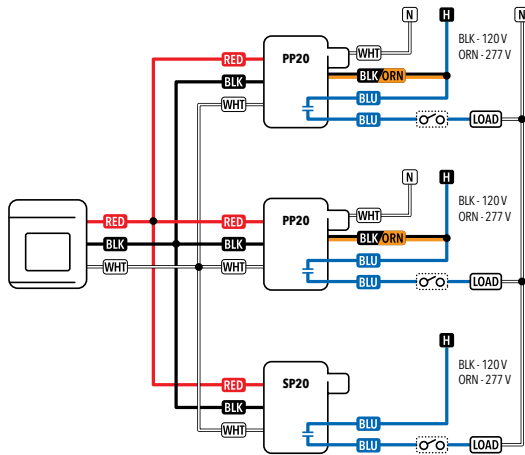
Multiple Sensors Controlling One Circuit



One Sensor Controlling One Circuit



Wiring Multiple Power Packs Together



POWERING CAPACITY

A power pack's transformers can supply up to 150 mA of power. Each relay requires 40 mA during the on state. Low voltage remote sensors typically require 3 mA when detecting occupants, and 0.15 mA when in standby. Therefore, each transformer can handle up to 3 relays (including the relay(s) inside the power pack). For example, one PP20 can power its relay (40 mA) and 110 mA of external devices. Because of the ultra low current design of the sensors, up to 14 sensors can be connected to a single power pack! If multiple power packs are used together, an additional 110 mA is available. Do not exceed more than 5 connected power packs.

Note:

Only three relays may be controlled with one Power Pack. If more than three circuits are required, multiple power packs must be used. The R option adds an isolated low voltage relay to a sensor. Only one sensor with this option is typically needed in a room.

	Sensors	Sensors w/ R option
1 PP20	14	8
1 PP20 w/SP20	7	6
2 PP20	28	16



A full line of thermal type photo controls and relay type photo controls provide "dusk-to-dawn" lighting control. The thermal type controls feature a cadmium sulfide photocell and sonic welded polycarbonate case and lens to seal out moisture. The design utilizes a dual temperature compensating bimetal and a metal film resistor for reliable long life operation over ambient temperature extremes. The thermal type photo controls provide a delay action which eliminates loads switching OFF due to car headlights, lightning, etc.

Applications

- Parking Lot Lighting
- Area Lighting
- Car Lot Lighting
- Security Lighting
- Billboard Lighting
- Municipal Lighting
- Roadway Lighting
- Street Lighting



Model
K4321C
UL773A
E42722

C22.2-55
LR38068

K4000 Series
UL773A
E42722

5 Year
Warranty

Fixed Position Mounting, Thermal Type — K4000C Series

Designed to fit into a standard outlet box, a post lamp or wall packs. Model K4321 includes a weatherproof wall plate with neoprene gasket. The UL listing for this model applies to the entire plate assembly when properly mounted to an approved outdoor junction box. All other models are equipped with a 3/8"-18 threaded side mounting, locking nut and washer gasket. All models with 9" leads.

Size – Plate - 4-1/2" (11.4 cm) High, 2-3/4" (7.0 cm) Wide;
Mechanism - 1-5/16" (3.3 cm) W, 1-13/16" (4.6 cm) L, 13/16" (2.1 cm) D.

Model #	Watts Tungsten	VA Ballast	Amps Tungsten	Amps Ballast	Volts
K4021C	1800	1000	15	8.3	120
K4023C	3100-4150	1700-2300	15	8.3	208-277
K4022	3600	2000	15	8.3	240
K4033	4150	2300	15	8.3	277
K4027***	5205	2880	15	8.3	347
K4035*	7200	4000	15	8.3	480
K4321C**	1800	1000	15	8.3	120

Note: Wall plate with gasket available for other models; order No. K4001.
* Not UL listed or CSA certified.
** Wall plate included.
*** Certified by CSA to US and Canadian Standards.

Specifications

Unless noted otherwise, the specifications listed below apply to K4000, K4100, K4200, K4300 & K4500 Series.
Size – See individual models. Most hard wired models supplied with 6" leads. K4000 fixed position models have 9" leads.
Switch Rating – See chart for each series. Note that the ballast wattage rating is based upon a 50% power factor.
Activation – 1 - 5 FC "ON"; 3 - 15 FC "OFF" (without shield on models with shield.)
Color – Gray
Shipping Weight – See individual models.

K4021C



K4321C



Light Shield for K4000
Part Number 6LV1352



UL773A
E42722

C22.2-55
LR38068

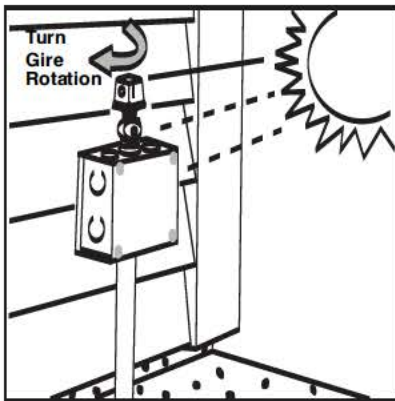
K4000 Series
UL773A
E42722

5 Year
Warranty



Instructions for installing K4000 and LC4500 series photo controls Instrucciones para la instalación de los fotocontroles de las series K4000 y LC4500 Instructions d'installation des interrupteurs photo-électriques des séries K4000 et LC4500

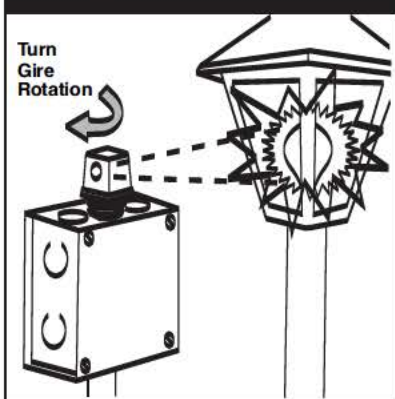
Common problems - read first! / Problemas comunes - ¡Lea primero! Problèmes courants - à lire avant tout !



1. Do not face the photocell into the midday sun. If installed on the south side of a building, face east or west or point the photo control down toward the ground. The best direction to face the photo control is north.

No oriente la fotocelda donde pueda recibir luz artificial. La luz procedente de ventanas, anuncios, alumbrado público, etc., hará que el fotocontrol no encienda la luz que está controlando. El fotocontrol tendrá que ser colocado de manera que no perciba la luz que está controlando (o luz reflejada), la anterior condición haría que la luz que está controlando, se encienda y se apague por ciclos.

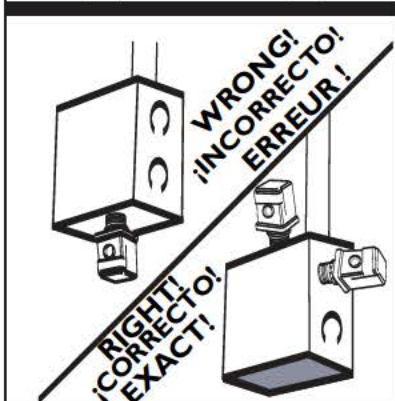
Ne placez pas la cellule photoélectrique face au soleil du midi. Si l'appareil est installé sur le côté sud d'un bâtiment, placez-le de façon à faire face vers l'est ou l'ouest ou pointez le contrôle photoélectrique vers le sol. La meilleure direction vers laquelle pointer le contrôle photoélectrique est le nord.



2. Do not face the photocell where it can see artificial light. Light from windows, signs, street lights, etc., will cause the photo control not to switch on. The photo control should not be positioned so that it sees the light it is controlling (or reflected light). These conditions will cause the light to cycle on and off.

No oriente la fotocelda donde pueda recibir luz artificial. La luz procedente de ventanas, anuncios, alumbrado público, etc., hará que el fotocontrol no encienda la luz que está controlando. El fotocontrol tendrá que ser colocado de manera que no perciba la luz que está controlando (o luz reflejada), la anterior condición haría que la luz que está controlando, se encienda y se apague por ciclos.

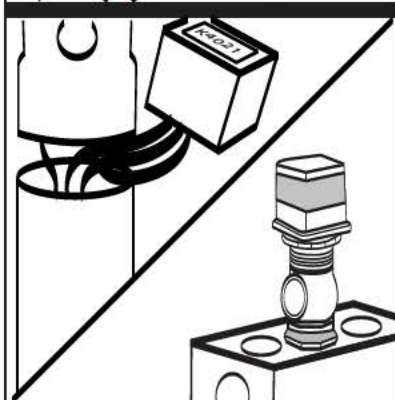
Ne placez pas la cellule photoélectrique l'endroit où elle peut détecter de la lumière artificielle. La lumière en provenance de fenêtres, d'enseignes, de lampadaires, etc. provoquera la non-activation du contrôle photoélectrique. La cellule du contrôle photoélectrique ne devrait pas être placée de façon à ce qu'elle puisse détecter le luminaire qu'elle contrôle (ou la lumière réfléchi). Ces conditions provoqueront l'activation cyclique de la lumière.



3. Do not install the photo control with wires up unless there is **NO POSSIBILITY** of water entering the photo control around the wires. The photo control must be installed in an approved weatherproof box. Do not attempt to caulk around the wires. Installing Photo Control below the box is **WRONG!** Photo control installed on top of the Box is **RIGHT!** Photo Control installed by the side of the weatherproof box is: **ACCEPTABLE!**

No instale el fotocontrol con los alambres hacia arriba a menos que no exista **NINGUNA POSIBILIDAD** de que entre agua alrededor de los cables. Tendrá que instalarlo en una caja resistente a la intemperie. No intente sellar alrededor de los cables. Fotocontrol en la parte superior de la caja es **¡CORRECTO!** Fotocontrol en la parte inferior de la caja es: **¡INCORRECTO!** Fotocontrol en la parte lateral de la caja es: **¡ACEPTABLE!**

N'installez pas le contrôle photoélectrique avec les fils vers le haut à condition qu'il n'y ait **AUCUNE POSSIBILITÉ** d'infiltration d'eau autour des fils. Le contrôle photoélectrique devrait être installé dans un boîtier étanche approuvé. Ne tentez pas de calfeutrer autour des fils. Le contrôle photoélectrique est installé sous le boîtier : **NON!** Le contrôle photoélectrique sur le haut du boîtier **OU!** Le contrôle photoélectrique est installé sur le côté du boîtier étanche : **ACCEPTABLE!**



4. When you are testing the photo control, be sure to turn on the power (load will come on) and wait up to 5 minutes for photocell to switch load off. For further testing cover the photo control completely with black tape or another dark material to simulate night conditions. If you can't cover the control with tape, try covering the photo control with the shipping carton to simulate night conditions.

Cuando esté probando el fotocontrol, asegúrese de activar la corriente (la luz que está controlando encenderá y espere unos 5 minutos hasta el fotocontrol apague la luz que está controlando. Para seguir probándolo cubra por completo la fotocelda del fotocontrol con cinta negra u otro material oscuro para simular condiciones nocturnas. Si no puede cubrirlo con cinta, intente cubrirlo con el cartón del empaque (donde se le envió) para simular condiciones nocturnas.

Lorsque vous faites l'essai du contrôle photoélectrique, assurez-vous de mettre l'alimentation en circuit (la charge s'activera) et d'attendre jusqu'à 5 minutes pour que le contrôle photoélectrique se mette en arrêt. Pour faire des essais supplémentaires, couvrez complètement le contrôle photoélectrique avec du ruban noir ou un autre matériel foncé afin de simuler les conditions nocturnes. S'il n'est pas possible de couvrir la cellule photoélectrique avec la boîte d'expédition afin de simuler les conditions nocturnes.

Installation Instructions: /Instrucciones de instalación: /Instructions d'installation :

1. Turn power off.
Apague el interruptor de la corriente.
Coupez l'alimentation.
2. Line voltage must be the same as indicated on the control label. **Check it!**
El voltaje de línea deberá coincidir con el que indica la etiqueta del Fotocontrol. ¡Verifíquelo!
La tension du secteur doit être la même que celle indiquée sur l'étiquette du contrôle photoélectrique. **Vérifiez-la !**
3. Select a location or mount the photo control so that artificial light doesn't cause the unit to turn off. Do not install the photo control so that it directly faces the midday sun. See Common Problems 1, 2 and 3.
Seleccione un lugar apropiado o monte el Fotocontrol de manera que la luz artificial no provoque que éste se apague. No instale el Fotocontrol de forma que quede orientada hacia el Sol del mediodía (hacia arriba). Lea los problemas comunes 1, 2 y 3 mencionados anteriormente.
Sélectionnez un emplacement ou fixez le contrôle photoélectrique de façon que la lumière artificielle ne cause pas la désactivation du contrôle photoélectrique. N'installez pas la cellule du contrôle photoélectrique de façon à ce qu'elle fasse face au soleil du midi. Voir les Problèmes courants 1, 2 et 3 ci-dessus.
4. The photo control can be mounted in any approved outdoor junction box or fixture (see illustrations).
Se puede montar el Fotocontrol en el exterior en cualquier caja o accesorio para conexiones apropiado para uso a Intermperie. (Vea las ilustraciones).
Le contrôle photoélectrique peut être fixé dans n'importe quelle boîte de jonction ou fixture approuvée pour l'extérieur (voir les illustrations).
5. Wire the photo control according to the illustrations.
Conecte el Fotocontrol según la ilustración aquí mostrada.
Connectez le contrôle photoélectrique selon les illustrations.
6. Switch power on. The controlled load should turn on regardless of whether you are installing the unit during the day or at night.
Conecte la corriente. Se encenderá la carga ó luz a controlar independientemente de que se instale el Fotocontrol de DÍA ó de NOCHE.
Activez l'alimentation. La charge contrôlée devrait s'activer peut importe si vous effectuez l'installation de l'appareil le jour ou le soir.
7. If it is daylight the control should switch off within a few minutes. **See important note.**
Si es de DÍA, el Fotocontrol apagará la carga ó luz a controlar en pocos minutos. **Lea la nota importante.**
S'il fait jour, le contrôle devrait s'éteindre après quelques minutes. **Voir la note importante.**

Limited 5-year warranty for all K models, except model K4141, which has a one year limited warranty.

Limited 3-year warranty for LC models.

5 años de garantía limitada para todos los modelos K con la excepción del modelo K4141 cuya garantía es de solo un año. 3 años de garantía limitada para los modelos LC.

Garantie limitée de cinq ans pour tous les Modèles lequle comporte une K à l'exception du Modèle K4141, et une garantie limitée d'un an. Trois ans pour les Modèles LC.

Specifications:

Operating Temperature Range: -40° to 150°F (-40° to 67°C).

Voltage: See product packaging and product label. Note that multi-voltage models self-adjust for the voltage. Models rated for 120-277 volts will not work on 120-volts once used on 208-277 volts.

Frequency: All controls operate on 50 or 60 hertz.

Especificaciones:

Rango de temperatura operativa: -40° a 150°F (-40° a 67°C).

Voltaje: Ver el empaque y la etiqueta del producto. Nótese que los modelos de voltaje múltiple se ajustan automáticamente al voltaje apropiado. Los modelos con régimen nominal de 120-277 voltios no funcionan con 120-voltios después que se utilizan con 208-277 voltios.

Frecuencia: Todos los controles funcionan a 50 o 60 hertz.

Caractéristiques :

Plage de température d'utilisation : -40° à 150 °F (-40° à 67 °C).

Tension : Voir l'emballage et l'étiquette du produit. Notez que les modèles multi-tension se règlent automatiquement pour la

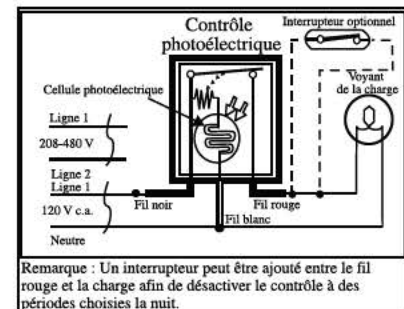
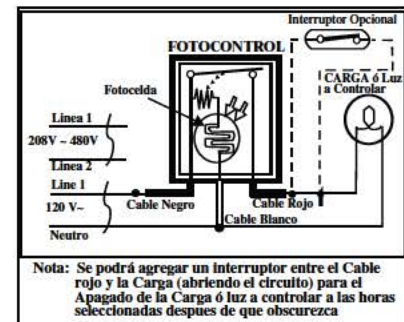
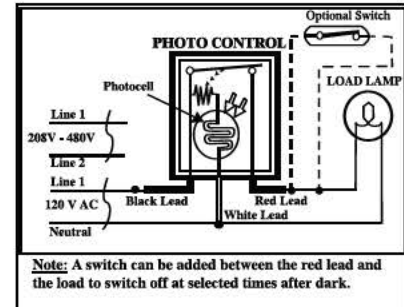
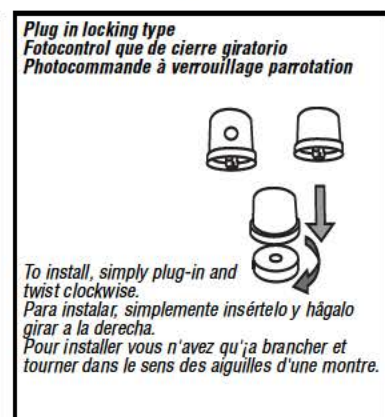
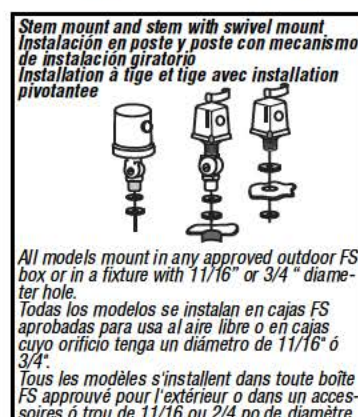
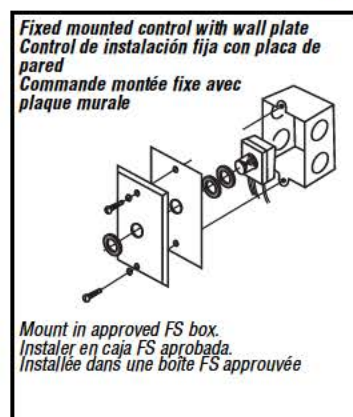
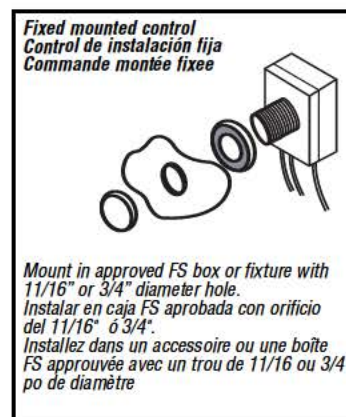
tension. Les modèles dont la capacité nominale est de 120 à 277 volts ne fonctionneront pas sur 120 volts après avoir été utilisés sur 208 à 277 volts.

Fréquence : Toutes les commandes fonctionnent sous 50 ou 60 hertz.

Mounting diagrams (be sure to use all gaskets provided as shown below!!!)

Diagramas de instalación (¡asegúrese de utilizar todas las juntas proporcionadas de la manera indicada!)

Schémas d'installation (assurez-vous d'utiliser tous les joints statiques fournis tel qu'ilustré ci-dessous !)



Troubleshooting Chart / Diagrama de solución de problemas / Tableau de dépannage

Problem / Problema / Problème	Cause / Causa / Cause	Solution / Solución / Solution
<p>Fuse blows when power is connected.</p> <p>EL fusible se funde cuando se conecta la corriente.</p> <p>Le fusible saute lorsque l'alimentation est branchée.</p>	<p>Load exceeds fuse rating. Photo control is incorrectly wired. Short in wiring. La corriente de la carga (lámpara o luz a controlar) excede la capacidad del fusible. El fotocontrol está conectado incorrectamente. Corto circuito en el cableado. La charge dépasse la capacité du fusible. Le contrôle photoélectrique est mal installé. Il y a un court-circuit dans le câblage.</p>	<p>Reduce load to within fuse rating. Check wiring.</p> <p>Reduzca la corriente de la carga a la capacidad del fusible. Como?...Bajando el vatiage de la carga.</p> <p>Réduire la charge à l'intérieur de la plage de capacité du fusible Vérifiez le câblage.</p>
<p>Load lamp blinks during the day, but is on at night. La luz de la Carga (Luz de la lámpara) parpadea durante el día pero está encendida durante la noche. Le voyant de la charge clignote pendant le jour, mais est allumé la nuit.</p>	<p>Photo control is incorrectly wired. El fotocontrol está conectado incorrectamente. Le contrôle photoélectrique est mal installé.</p>	<p>Rewire as shown in wiring diagram. Vuelva a instalar el cableado como se muestra en la ilustración de la instalación. Refaites la canalisation électrique selon le schéma de connexions.</p>
<p>Load lamp blinks at night, but is off during the day. La luz indicadora de la carga parpadea durante la noche pero está apagada durante el día. Le voyant de la charge clignote la nuit, mais est désactivé le jour.</p>	<p>Too much light is striking photo cell. Light from load is shining or being reflected on photocell's window of photo control. High pressure sodium lamp is at end of life. La fotocelda recibe demasiada luz. La luz de la carga está brillando o siendo reflejada en la fotocelda del fotocontrol. La Lámpara de sodio de alta presión está al término de su vida útil. Il y a trop de lumière qui frappe la cellule photoélectrique. La lumière en provenance de la charge brille ou est réfléchi sur l'ouverture de la cellule de contrôle photoélectrique. La durée de vie de l'ampoule à vapeur de sodium à haute pression est échoué.</p>	<p>Reorient or relocate photo control. Relocate or reorient light source. See high pressure sodium note below. Reorient or reubique el fotocontrol. Reubique o reoriente la fuente de luz. Vea abajo la nota del sodio de alta presión. Réorientez ou d'placez le contrôle photoélectrique. Déplacez ou réorientez la source de lumière. Référez-vous à l'entrée concernant la vapeur de sodium à haute pression ci-dessous.</p>
<p>Load stays on. La luz de la Carga (Luz de la lámpara) permanece encendida. La charge demeure active.</p>	<p>Line voltage is exceptionally low. Photo control is not rated at voltage being used. Contacts are welded due to excessive load. Not enough light strikes photo cell. El voltaje de línea está demasiado bajo. El fotocontrol no es adecuado para el voltaje para el que esta siendo utilizado. Los contactos internos del fotocontrol se han soldado debido a una carga excesiva. La fotocelda del fotocontrol no recibe suficiente luz. La tension d'alimentation est exceptionnellement basse. La tension utilisée dépasse la capacité nominale du contrôle photoélectrique. Les contacts sont fusionnés suite à une charge excessive. Trop peu de lumière atteint la cellule photoélectrique.</p>	<p>Have power company check voltage. Replace control with unit of correct voltage. Replace control and connect only rated load. Reorient or relocate photo control. Comuníquese con su compañía eléctrica para que revise el voltaje. Remplace el fotocontrol por uno del voltaje correcto. Reemplace el fotocontrol y conecte la carga con la capacidad adecuada. Reorient or reubique el fotocontrol. Faites vérifier la tension au contrôle par la compagnie d'électricité. Remplacez le contrôle photoélectrique par un appareil de la bonne capacité nominale. Remplacez le contrôle photoélectrique et utilisez uniquement une charge conforme. Réorientez ou déplacez le contrôle photoélectrique.</p>
<p>Load stays off. La luz de la Carga (Luz de la lámpara) permanece apagada. La charge reste désactivée.</p>	<p>Lamp and/or ballast is burned out. Line voltage is exceptionally high. Photo control is not rated at voltage being used. Too much light strikes the photo cell of photo control at night. La lámpara y/o resistencia de la carga se han fundido. El voltaje de línea está demasiado alto. El fotocontrol no es adecuado para el voltaje para el que esta siendo utilizado. La fotocelda del fotocontrol recibe demasiada luz durante la noche. L'ampoule ou le ballast est brûlé. La tension d'alimentation est exceptionnellement haute. La tension utilisée dépasse la capacité nominale du contrôle photoélectrique. Trop de lumière atteint la cellule du contrôle photoélectrique la nuit.</p>	<p>Replace lamp and/or ballast Have power company check voltage at photo control. Replace control with unit of correct voltage. Reorient or relocate photo control. Remplace la lámpara y/o resistencia de la carga. Comuníquese con su compañía eléctrica para que revise el voltaje del fotocontrol. Reemplace el fotocontrol por otro del voltaje correcto. Reorient or reubique el fotocontrol. Remplacez l'ampoule ou le ballast. Faites vérifier la tension au contrôle par la compagnie d'électricité. Remplacez le contrôle par un appareil de la bonne capacité nominale. Réorientez ou déplacez le contrôle photoélectrique.</p>
<p>Photo control operates normally for a short time, then remains on. El fotocontrol funciona normalmente durante un periodo breve y luego permanece encendido. La photocommande fonctionne normalement pour une courte durée, puis reste en marche.</p>	<p>Photo control's contacts are welded due to excessive load. Los contactos internos del fotocontrol se han soldado debido a una carga excesiva. Les contacts sont fusionnés suite à une charge excessive.</p>	<p>Replace photo control and connect only rated load or smaller. Reemplace el fotocontrol y conecte solamente la carga con la capacidad adecuada o más baja. Reemplacez le contrôle photoélectrique et utilisez uniquement une charge conforme ou inférieure à la charge nominale.</p>
<p>Photo control fails to switch off and photo-cell shows evidence of burning or arcing across serpentine pattern. El fotocontrol no se apaga y la fotocelda muestra indicios de estar fundida o quemada en la superficie en forma de serpiente. Le contrôle photoélectrique ne s'éteint pas et la cellule photoélectrique présente des indications de brûlure ou de formation d'arc de la serpentine tracé.</p>	<p>Photo control damaged by lightning or other high-energy transient. El fotocontrol se dañó a causa de un rayo un fenómeno transitorio de alta energía. Le contrôle photoélectrique a été endommagé par la foudre ou une autre surtension transitoire.</p>	<p>Replace photo control. Consider installing "LA" Model Control, lightning arrester or surge protection device in circuit. Reemplace el fotocontrol. Considere instalar un fotocontrol modelo "LA", pararrayos o protector contra sobrecargas en el circuito. Remplacez le contrôle photoélectrique. Considérez l'installation d'un Modèle <<LA>>, d'un parafoudre ou d'un dispositif de protection contre les surtensions.</p>
<p>High pressure sodium or mercury vapor end-of-life failure. Falla debido al término de vida útil del sodio de alta presión o el vapor de mercurio. Sodium à haute pression ou vapeur de mercure échec de la durée de vie.</p>	<p>With these lamps the end-of-life failure mode is one of cycling (the initial cycling period may be as long as one-hour but will shorten to as little as one minute). El modo indicador del término de vida útil de la lámpara se presenta como ciclos. (El periodo del ciclo inicial puede durar hasta una hora, pero se acortará hasta un minuto). Le mode de fin de durée de ces lampes en est un de cyclage (la période de cyclage initiale peut être d'une heure, mais se réduira à aussi peu qu'une minute).</p>	<p>Replace lamp and/or ballast. Reemplace la lámpara y/o resistencia de la carga. Remplacez l'ampoule ou le ballast.</p>

IMPORTANT NOTE:**"SUNLIGHT OPERATION ONLY"****MOUNT WITH LEADS DOWN**

The load being controlled by your photo control will be on even if installation is done during daylight hours. Allow a few minutes for the photo control to operate and turn the load off. To test the photo control in daylight, cover the photocell window completely and wait for the load to switch on (**up to five minutes** may be needed). If this does not work, switch breaker off and wait ten minutes. Switch breaker on. The load should be on.

NOTA IMPORTANTE:**"OPERACION CON LUZ SOLAR UNICAMENTE"****INSTALE CON LOS CABLES HACIA ABAJO**

La carga que está siendo controlada por el fotocontrol estará encendida aún si la instalación se realiza durante el día. Permita algunos minutos para que el fotocontrol funcione y apague la carga. Para probar el fotocontrol durante el día, cubra la fotocelda completamente y espere a que la carga se encienda. (Se pueden requerir hasta cinco minutos). Si este no funciona, Apague el interruptor y espere diez minutos. Encienda el interruptor. La carga deberá encenderse.

REMARQUE IMPORTANTE :**<<OPÉRATION PENDANT LE JOUR>>****MONTER AVEC LES FILS VERS LE SOL**

La charge contrôlée par votre contrôle photoélectrique sera active même si l'installation s'effectue pendant le jour. Allouez quelques minutes au contrôle photoélectrique pour fonctionner et désactiver la charge. Pour faire l'essai du contrôle pendant le jour, recouvrez complètement l'ouverture photoélectrique et attendez que la charge s'active (**une attente de cinq minutes** peut être nécessaire). Si cela ne fonctionne pas, désactivez le disjoncteur et attendez dix minutes. Activez le disjoncteur. La charge devrait être activée.

IMPORTANT NOTE:

The load being controlled by your photo control will be on even if installation is done during daylight hours. Allow a few minutes for the photo control to operate and turn the load off. To test the control in daylight, cover the photo eye completely and wait for the load to switch on (up to five minutes may be needed). If this does not work, switch breaker off and wait ten minutes. Switch breaker on. The load should be on.

NOTA IMPORTANTE:

La carga que debe controlar el fotocontrol encenderá aun cuando la instalación se esté realizando de noche. Espere unos minutos hasta que el fotocontrol se active y apague la carga. Para probar el control durante el día, cubra el ojo fotoeléctrico completamente y espere hasta que la carga encienda (quizás deba esperar hasta cinco minutos). Si esto no funciona, apague el interruptor automático y espere diez minutos. Vuelva a encender el interruptor automático. La carga debe encender.

NOTE IMPORTANTE :

La charge contrôlée par votre photocommande sera en marche même si l'installation se fait durant le jour. Prévoyez quelques minutes pour que la photocommande fonctionne et arrête la charge. Pour tester la commande le jour, couvrez entièrement le détecteur et attendez que la charge se mette en marche (jusqu'à cinq

LIMITED WARRANTY

If within the warranty period specified, this product fails due to a defect in material or workmanship, Intermatic Incorporated will repair or replace it, at its sole option, free of charge. This warranty is extended to the original household purchaser only and is not transferable. This warranty does not apply to: (a) damage to units caused by accident, dropping or abuse in handling, acts of God or any negligent use; (b) units which have been subject to unauthorized repair, opened, taken apart or otherwise modified; (c) units not used in accordance with instructions; (d) damages exceeding the cost of the product; (e) sealed lamps and/or lamp bulbs, LED's and batteries; (f) the finish on any portion of the product, such as surface and/or weathering, as this is considered normal wear and tear; (g) transit damage, initial installation costs, removal costs, or reinstallation costs.

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BRP12B100R

Type BR Loadcenter

Optimized Knockouts

- Knockout locations for additional access
- Easier to remove

Smooth Case Edges

- Provides a more professional look and feel

Top or Bottom Feed

- Straight-in wiring saves labor and material
- One panel for either top or bottom applications

Plug-On Neutral

- Eliminates the pigtail connection providing time and labor savings
- Provides a professional installation

2/0 Lug

- Easily removable and can be installed in any location on the neutral bar

Type BR AFCI Breakers

- Compact design for easier wiring improved wireway access
- Optional LED indicates one of six trip codes for circuit diagnostics
- Provides a clean gutter space

Inboard Neutral

- Increases gutter space to allow for the professional installation of conductors

Standard Tin-Plated Aluminum Bus

- Excellent conductivity and corrosion resistance
- Copper bus options available for select catalog numbers

Drywall Offset on Both Sides of the Enclosure

- Allow for faster installation using predetermined self-leveling tabs



“Tangential” Center Knockout

- Easier installation for conduit applications

Commercial Grade Main Breaker

- 25 kAIC series rated main breaker for superior protection

Common Drive Types

- Minimizes number of tools required for installation as the neutral bar and breaker screws will share a common drive type

Grounding Screw

- Provides a quick and easy means of bonding the neutral and ground

Twin Neutral Bars

- Minimum 150% neutral capacity

Backed Out Neutral Screws

- Allows for quick connection of neutral and ground conductors

Cover Features not Shown:

- Cover Keyhole Hanging Feature
- Ease of cover installation

Rigid Center Cover Spine

- Provides strength when twistouts are removed

Improved Cover Twist-Outs

- Easier to remove twistouts

Embossed Cover Circuit Numbers

- Durable circuit numbering with added marking for twin breakers

Single Keyhole Mounting

- One keyhole at the top and bottom provides easier mounting and leveling

Warranty

10-year warranty on all Type BR loadcenters and circuit breakers.

1.2

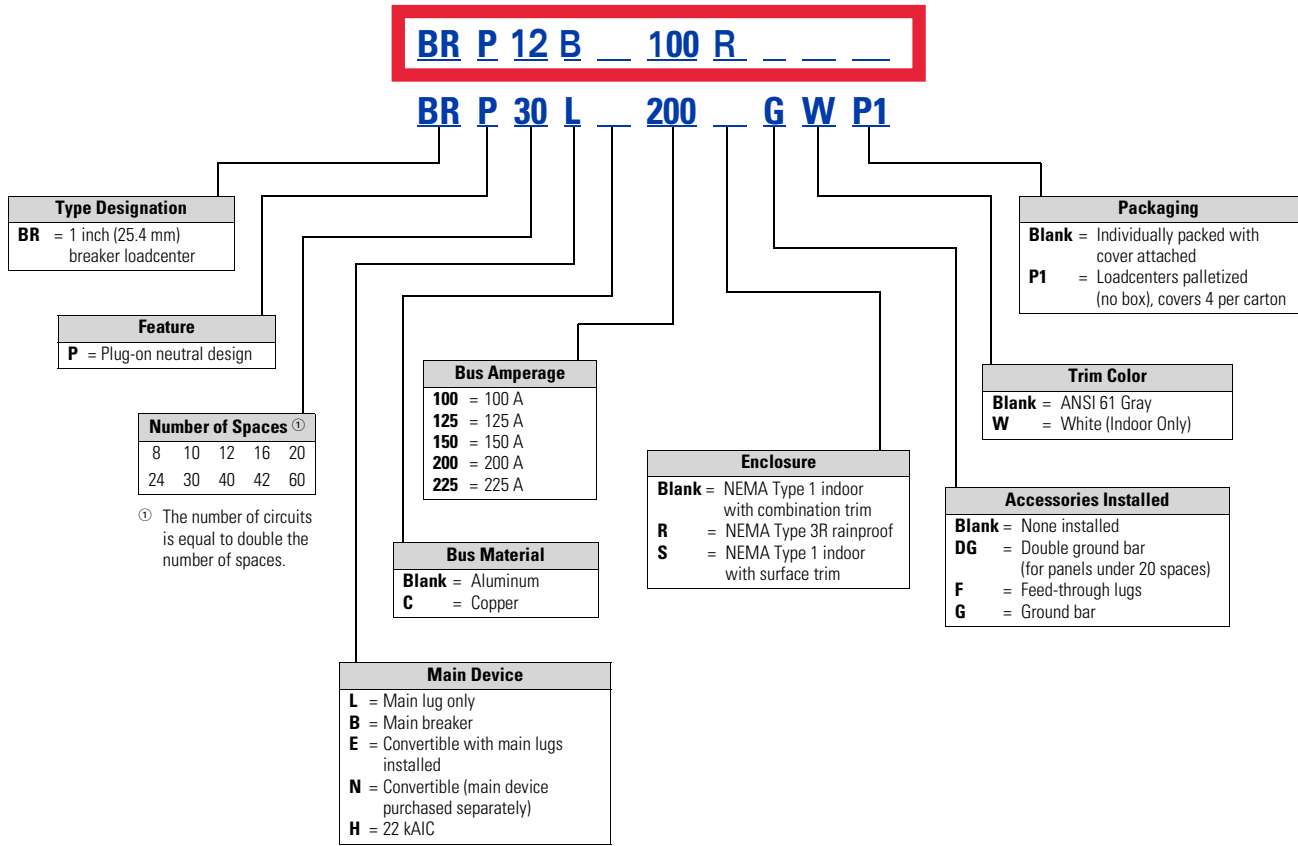
Loadcenters and Circuit Breakers

Type BR Loadcenters and Circuit Breakers

Catalog Number Selection

Single-Phase Plug-on Neutral Loadcenters

1



Note

① No character space used.

1

Product Selection

Single-Phase—Plug-on Neutral—Main Circuit Breaker Loadcenters—10/25 kAIC

Single-Phase Three-Wire—120/240 Vac—Insulated/Bondable Split Neutral

BRP10B100



Main Breaker Type	Main Amp Rating	Maximum Number 1-Inch (25.4 mm) Spaces	Maximum Number 1-Inch (25.4 mm) Poles	Enclosure Type	Box Size	Wire Size Range Cu/Al 60 °C or 75 °C for Main Breaker	Loadcenter Catalog Number with Combination 1 or NEMA Type 3R Cover ^{①②}			
BR	100	10	20	Indoor	X0	#4–1/0 2	BRP10B100			
		10	20	Outdoor	X1R		BRP10B100RF ^{③④}			
		12	24	Indoor	X1		BRP12B100			
		12	24	Outdoor	X1R		BRP12B100R ^④			
		16	32	Indoor	X2		BRP16B100			
		16	32	Outdoor	X2R		BRP16B100R ^④			
		20	40	Outdoor	X11R		BRP20B100R ^④			
		20	40	Indoor	X3		BRP20B100			
		30	60	Indoor	X5		BRP30B100			
		BRH ^⑤	125	16	32		Indoor	X2	#4–2/0	BRP16B125
20	40			Indoor	X3	BRP20B125				
20	40			Outdoor	X11R	BRP20B125R ^④				
30	60			Indoor	X5	BRP30B125				
BRH ^⑤	100	12	24	Indoor	X1	#4–1/0	BRP12H100			
		20	40	Indoor	X3		BRP20H100			
CSR ^⑥	150	8	16	Outdoor	X11R	#2–300 kcmil	BRP08B150RF ^{③④}			
		16	32	Indoor	X4		BRP12B150			
		20	40	Indoor	X4		BRP20B150			
		24	48	Indoor	X6		BRP24B150			
		20	40	Outdoor	X5R		BRP20B150R ^④			
		30	60	Indoor	X6		BRP30B150			
		CSR ^⑥	200	8	16		Outdoor	X11R	#2–300 kcmil	BRP08B200RF ^{③④}
				16	32		Indoor	X4		BRP16B200
				20	40		Outdoor	X5R		BRP20B200R ^④
				20	40		Indoor	X5		BRP20B200
24	48			Indoor	X6	BRP24B200				
30	60			Indoor	X6	BRP30B200				
30	60			Indoor	X6	BRP30B200G				
30	60			Outdoor	X6R	BRP30B200R ^④				
40	80			Indoor	X8	BRP40B200				
40	80			Outdoor	X8R	BRP40B200R ^④				
CSR ^⑥	200	60	120	Indoor	X10	#2–300 kcmil	BRP60B200			
		60	120	Outdoor	X10R		BRP60B200R ^④			

Notes

- ① Combination style covers may be used in surface or flush applications.
- ② All main circuit breaker loadcenters are listed for use as service entrance equipment and are shipped with neutral bonding screw preattached. The maximum rating of the panel is the main circuit breaker rating when used as service entrance equipment. Ground bar kits priced separately. See **Page V1-T1-71**.
- ③ Includes through-feed lugs for both phase and neutral conductors.
- ④ Rainproof panels are furnished with hub closure plates. For rainproof hubs, refer to **Page V1-T1-71**.
- ⑤ 22 kAIC series combination rating is obtained when Types BD, BR, BQ, BQC and ETN01 10 kAIC branch breakers are used in series with Type BRH main breaker.
- ⑥ 25 kAIC series combination rating is obtained when Types BD, BR, BQ, BQC and ETN01 10 kAIC branch circuit breakers are used in series with Type CSR main breaker.

Grounds

In service entrance applications where the neutral is bonded, unused neutral holes may be used for terminating ground conductors. In sub-feed panels, the neutral must be isolated (non-bonded), and ground wires must be terminated on a separate ground bar.

The insulated/bondable single/split neutral panels have sufficient terminations for both ground and neutral conductors. The insulated/bondable single split neutral panels are supplied with a separate factory-installed ground bar if the catalog number contains a "G." If not, a separate ground bar should be installed. Insulated/Bondable Single Neutral panels are supplied without a ground bar (unless otherwise noted), and ground bar kits if needed must be purchased separately.

Neutral and Ground Terminals

The standard terminals on grounds and neutrals are rated to accept (3) #14–#10 Cu/Al or (1) #14–4, provided the cables terminated are of the same material. For larger cables, add-on neutral lugs may be ordered from the accessories on **Page V1-T1-71**.

Note: NEC allows only one current-carrying conductor per hole on neutrals unless otherwise noted.

Bottom Fed Loadcenters

For single-phase 225 A and below loadcenters that are bottom fed, a standard panel can be rotated 180 degrees to allow straight-in wiring of power cables to the main terminals. Because the main circuit breaker handle operates horizontally, the orientation of the main circuit breaker handle is consistent with the requirements of NEC 2008 Article 240.81.

Gutter Splicing

Loadcenters are not UL listed as wiring troughs. Therefore, gutter splicing of riser cables to tap off to the main device is not permitted. Refer to NEC 2008 Article 312.8.

Fire Rating

Due to the numerous openings in both loadcenter boxes and trims, they should not be mounted in firewalls. There is no approved method for sealing the enclosures for this application.

Date Code

The date of manufacture of each loadcenter is printed on the outside of the carton as well as inside the loadcenter. On the carton, the date code is printed on the end carton label. In the loadcenter, the date code is located on the small white label located on the right side wall (with the main device on top).

The date code is in the following format: F # # # &. The "F" is the numeric code for the Lincoln, IL plant, and the three numbers are the year and week of manufacturing, e.g., 023. The "!" sign at the end signifies the decade of the 2010. Therefore, the date code F023& would indicate that the product was manufactured in the 23rd week of 2010. The 1980s are represented by the "+" sign and the 1990s are represented by a "=" at the end of the code.

Standards and Certifications**UL Listings**

All Eaton Type BR loadcenters are listed under UL File E52977 except the 2–8 circuit loadcenters, up through and including 125 A, which are listed under UL File E8741.

**Circuit Breaker Case Interrupting Capacity**

- 10 kAIC
- 22 kAIC
- 25 kAIC

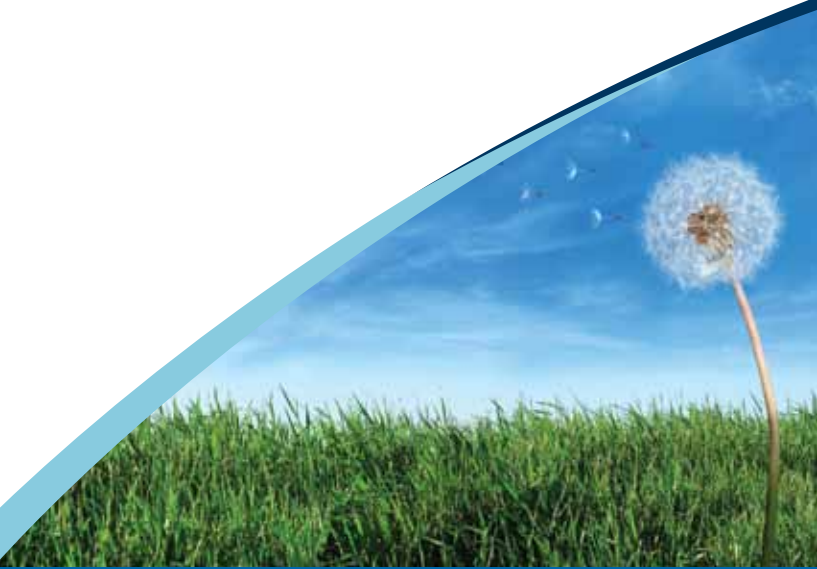
Warranty Information

- 10-year limited loadcenter warranty
- 10-year limited branch breaker warranty



Inline Fans Options

Featuring TD-MIXVENT/TD-SILENT



The World's Leading Producer of Air Movement Products

Soler & Palau
Ventilation Group

TD_0812
August 2012

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Overview TD-MIXVENT & TD-SILENT Series

Compact Size-TD Fans require minimum space

The S&P TD-MIXVENT & TD-SILENT series of in-line duct fans have been specially designed to maximize the airflow performance with minimal noise levels within the smallest and most compact of housing sizes. This makes the TD-MIXVENT & TD-SILENT series the ultimate solution for small to medium sized ventilation installations which require a high airflow to pressure ratio and occupy only the minimum space possible. Example: false ceiling voids, cabinets and many other limited space environments.

Easy to Install...fit and forget!

All the models in the TD-MIXVENT & TD-SILENT range have been designed with the professional contractor/engineer in mind. All models include a “removable body” feature that enables the motor-impeller assembly to be completely removed or replaced without the need to interfere with the attached ducting.



Multitude of features-high specification

All models within the TD-MIXVENT & TD-SILENT range incorporate a powerful mixed flow impeller and internal air vanes located at the discharge end of the fan housing. This impeller and guide vane combination provides a smooth laminar air flow which in turn minimizes turbulence and noise, and generates an **excellent air flow to pressure performance ratio**.

Description

All of the TD-fans include the combination of a powerful motor, factory installed, to a mixed flow impeller. This motor and impeller combination enables the TD-fans to deliver high airflow performances with minimum noise generation against high static pressures typically found in ducted ventilation systems. The unique design of the support brackets, allows the motor and impeller assembly to be fitted or removed without dismantling the adjacent ducting and therefore, facilitating any installation or maintenance. The internal aerodynamic design of the TD-MIXVENT & TD-SILENT fans enable the units to generate large air volumes and pressures with the minimum of in-duct or radiated noise. As an additional standard advantage, TD-MIXVENT fans are fitted with a direct connection two-speed motor. The TD-fans offer the ideal in-line duct fan solution for a wide range of HVAC ventilation applications.



Mixed Flow Fans vs. Axial & Centrifugal Fans

Axial Fans

- Low noise levels
- High air volumes
- Very little static pressure capability*

Noise Level

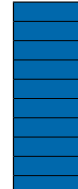
High



Low

Air Volume

High



Low

Static Pressure

High

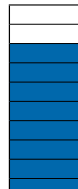


Low

Centrifugal Fans

- Higher noise levels
- Lower air volumes
- Very high static pressure capability*

High



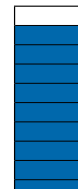
Low

High



Low

High

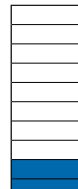


Low

Mixed Flow Fans**

- Low noise levels
- High air volumes
- Significant static pressure capability*

High



Low

High

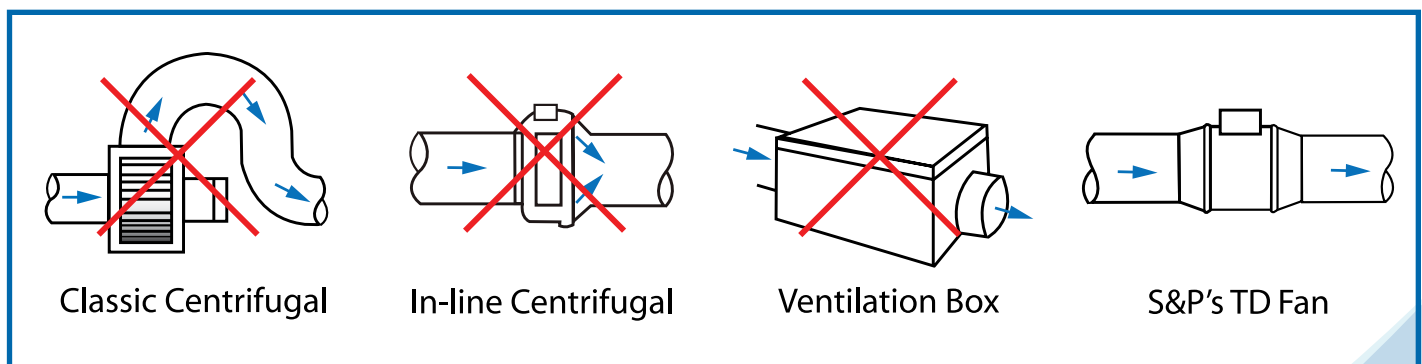


Low

High



Low



*Static pressure is the ability of the fan to overcome resistance such as long or complicated duct runs.

Mixed flow fans (TD series) offer the best of both axial and centrifugal fans and are suitable for most air movement applications. S&P's **TD-MIXVENT & TD-SILENT Series has all the benefits of a mixed flow fan, plus it requires minimal space and it is easy to install.

General Details of the TD-MIXVENT Range

S&P
Exclusive
Product



Low profile mixed flow fans, manufactured in plastic material (up to model 200) or in **galvanized steel** sheet protected with Epoxy paint (model 250 and 315), with external terminal box, removable motor-impeller assembly and adjustable single-phase motor, Class B, IP44.



Construction characteristics

	100	100x	125	150	200	250	315
Polypropylene housing	•	•	•	•	•		
Steel housing with epoxy coating						•	•
ABS fan blades	•	•	•	•	•		
Aluminum fan blades						•	•
Thermal link via fuse	•						
Thermal link with automatic reset		•	•	•	•	•	•
Permanently lubricated ball bearings	•	•	•	•	•	•	•
Speed controllable 2-speed motor	•	•	•	•	•	•	•

The extensive range of the TD-MIXVENT series makes it an effective solution for a wide range of residential and light commercial ventilation installations.

TD-MIXVENT Installation & Maintenance

Low Profile



The low profile of the fans in the TD-MIXVENT range makes them the ideal product for installations with low height limits, such as the case of suspended ceilings.

Easy to Install

1



Secure the support.

2



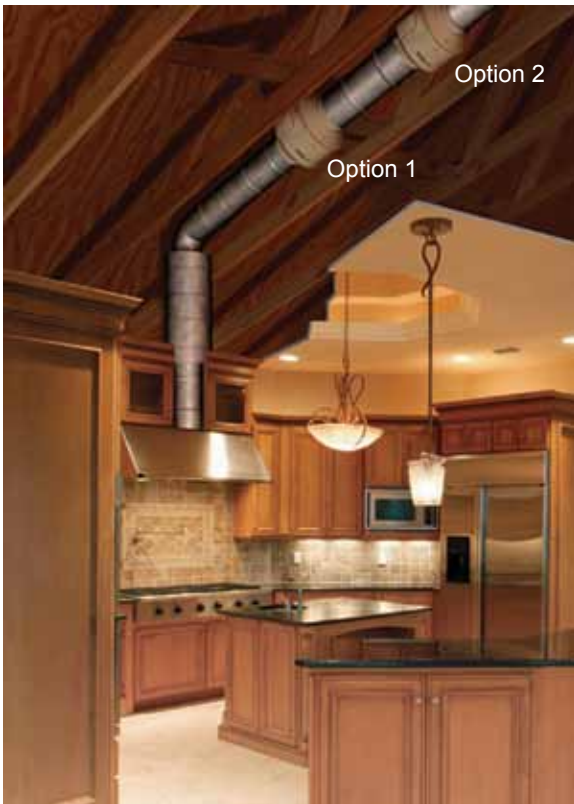
Make the connections.

3



Connect the ducts.

Flexibility in Location



The fans can be connected at any point along the ventilation duct: along the duct or at the end.

Easy Maintenance



Removable body, for repair or cleaning, without the need to touch the ducts.



TD-MIXVENT Technical Specifications



Warranty

Five (5) year limited warranty.

Range

The TD-MIXVENT series consists of seven (7) nominal sized in-line fans. All models are specifically designed for direct connection in-line with industry standard diameter round ducting.

Construction

The TD-MIXVENT models 100, 100x, 125, 150, and 200 are manufactured in tough reinforced plastic, models 250 and 315 have a metal casing and are finished in a tough epoxy-polyester paint coating. The TD fan duct connection flanges are manufactured from reinforced plastic, except for models 200, 250 and 315 which are constructed from epoxy-polyester coated metal.

Impellers

The impeller blades for models 100, 100x, 125, 150 and 200 are molded in tough ABS plastic. Models 250 and 315 are metal.

Motors

Models 100, 100x and 125 :

Single-phase, 120V 60Hz, shaded pole induction asynchronous motor in die cast aluminum. All motors include direct two speed connection and are also suitable for voltage speed control.

- Class II electrical insulation (model 100) & Class I (models 100x and 125)
- IP 44 Protection
- Class B Motor Insulation
- Safety auto reset Thermal Overload Protection (fuse type)
- Self-lubricating sleeve bearings.
- Suitable for working airstreams up to 104° F (40°C).

Models 150, 200, 250 and 315:

• Single-phase induction asynchronous motor, with permanent capacitor and external rotor constructed of die cast aluminum. Models 150, 200 and 315 include direct two speed connection and are also suitable for voltage speed control.

- Class I electrical insulation
- IP 44 Protection
- Thermal Overload Protection
- Class B Motor Insulation
- Sealed For Life, ball bearings
- Suitable for working airstreams up to 140° F (60°C).

Performance characteristics

All models include a direct two speed motor connection.

Model	Nom. RPM	Volts	Max. Watts	Speed	CFM v Static Pressure (SP) Ins. WG							Max. SP	Max operating temp. (°F)	Wgt. (lbs)	Duct Dia. Ins.
					0"	0.125"	0.25"	0.375"	0.5"	0.75"	1.0"				
TD-100	2431	120	23	LS	97	81	51	-	-	-	-	.4	104	2	4"
	2516	120	26	HS	101	85	57	-	-	-	-	.4	104	2	4"
TD-100x	1556	120	20	LS	100	77	48	-	-	-	-	.375	104	4.4	4"
	2096	120	33	HS	135	113	90	53	-	-	-	.55	104	4.4	4"
TD-125	1633	120	24	LS	149	110	73	-	-	-	-	.35	104	4.4	5"
	2146	120	38	HS	197	168	133	86	22	-	-	.55	104	4.4	5"
TD-150	1709	120	54	LS	218	193	163	128	105	24	-	.8	140	4.4	6"
	2289	120	65	HS	293	273	250	227	206	131	35	1.15	140	4.4	6"
TD-200	2322	120	139	LS	476	422	373	317	260	40	-	1.38	140	8.8	8"
	2781	120	184	HS	538	495	458	418	367	190	10	1.625	140	8.8	8"
TD-250	2400	115	162	LS	541	475	418	355	295	218	170	2.03	140	19.8	10"
	3200	115	241	HS	754	715	680	640	606	520	405	2.53	140	19.8	10"
TD-315	2000	115	208	LS	751	670	545	420	285	190	130	1.62	140	30.9	12.4"
	2500	115	335	HS	1050	990	932	850	770	600	420	2.95	140	30.9	12.4"

Performance certified is for installation Type D: Ducted Inlet, Ducted Outlet. Performance ratings do not include the effects of appurtenances.

LS= Low Speed
HS = High Speed



S&P USA certifies that the TD range shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



The TD-MIXVENT Models 100, 100x and 150 are California Title 24 compliant and meet ASHRAE 62.2 when installed with a CVC and other TD models are compliant when installed with a 3 way switch and remotely mounted speed control.



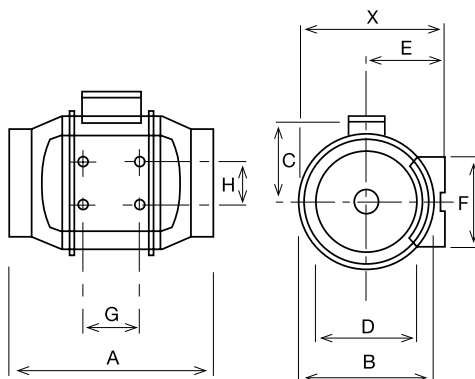
TD 250 & 315 are UL listed for outdoor use.



Sound characteristics

Fan sound levels are measured in sones. At this time there are no sone level test standards available through HVI due to the fact that remote mounted fan noise levels are in proportion to the following: type of duct, length of duct, fan distance from the intake source and other miscellaneous factors. However, it is generally accepted that remote mounted venting is usually quieter than standard (in room) venting.

Dimensions (inches/mm)



Model	X	A	B	C	D	E	F	G	H
TD-100	5 15/16 151	9 1/8 232	5 7/16 138	3 3/4 96	3 7/8 98	3 1/4 82	3 3/4 95	1 7/8 48	2 1/16 52
TD-100x	7 3/8 188	11 15/16 303	6 15/16 176	4 1/2 115	3 13/16 97	3 15/16 100	3 9/16 90	3 1/8 80	2 3/8 60
TD-125	7 3/8 188	10 3/16 258	6 15/16 176	4 1/2 115	4 13/16 123	3 15/16 100	3 9/16 90	3 1/8 80	2 3/8 60
TD-150	8 3/8 212	11 5/8 295	7 7/8 200	5 127	5 13/16 147	4 7/16 112	5 1/8 130	3 1/8 80	2 3/8 60
TD-200	9 3/16 233	11 7/8 302	8 9/16 217	5 9/16 141	7 13/16 198	4 7/8 124	5 1/2 140	3 15/16 100	3 11/16 94
TD-250	11 7/16 291	15 3/16 386	10 11/16 272	7 9/16 192	9 3/4 248	6 1/8 155	6 5/8 168	5 11/16 145	5 1/2 140
TD-315	14 356	17 11/16 450	13 1/4 336	8 13/16 224	12 5/16 312	7 3/8 188	8 1/4 210	7 3/16 182	7 178

ThinAir® HAND DRYER



MODELS: TA - ABS SB -VOLTAGE (See Chart)



TA-SB
Brushed Stainless Steel



TA-ABS
White Polymer
(ABS)



TA-SB
Brushed Stainless
Steel

PERFORMANCE



DRY TIME: 14 SECONDS*

ENERGY PER USE: 3.7 Wh*

Wattage: 950 Watts (Heat On) - 300 Watts (Heat Off)

Certifications:



RoHS



CONSTRUCTION

- A. All covers will be fastened to a base plate by one chrome plated tamper-proof bolt. The cover shall be composed of:
 - ABS** – White polymer with SanaFor™ antimicrobial additive.
 - SB** – Brushed Stainless Steel.
- B. Base plate shall be equipped with (3) 7/8" (22 mm) diameter knockouts, one of which is located on the right side and suitable for use with surface conduit.
- C. All internal parts shall be coated according to Underwriters' Laboratories, Inc. requirements.
- D. Entire mechanism shall be internally grounded, per UL requirements.
- E. Accessories (optional)
 - Microban® Antimicrobial Wall Guards:**
89W (White), 89B (Black), 89S (Brushed Stainless Steel)

MECHANISM

- A. Motor shall be a thermally protected, series commutated, through-flow discharge vacuum motor/blower (~½ hp / high-30,000 rpm, low-20,000 rpm) which provides air velocity of up to 16,000 LFM (linear feet per minute) at the air outlet. Includes a washable metal mesh filter for more reliable performance.
- B. Heating element (550 W) is constructed of Nichrome wire and mounted inside the blower housing behind air baffle, thereby being vandal resistant. It shall be protected by an automatic resetting thermostat, which shall open whenever air flow is cut off and shall close when flow of air is resumed. It shall produce an air temperature of up to 141°F (61°C) at a 72°F (22°C) ambient room temperature at the outlet and 101°F (38°C) at the hands (4 inches [102 mm] below air outlet).
- C. Control assembly is activated by an infrared optical sensor located next to the air outlet. The dryer shall operate as long as hands are under the air outlet. Control includes a speed and sound control mechanism, adjustable heat control with High, Medium, Low and Off settings and a filter sensor which is activated should the filter become clogged. There is a 35-second lockout feature if hands are not removed. Sensor equipped with externally visible Red LED light that can flash error codes to assist in troubleshooting.

LIMITED WARRANTY

The dryer shall be guaranteed to be free from defects for a period of five (5) years. Warranty shall include labor performed at factory as well as the repair or exchange of defective parts, at manufacturer's option.

QUANTITY RECOMMENDATIONS

One dryer for every two washbasins is sufficient for most applications. If restroom traffic is unusually heavy, we suggest one dryer per washbasin in small installations and two dryers for every three washbasins in larger installations. When a 54" washfountain is used, we suggest four to five dryers.

ADA COMPLIANCE

ADA guidelines state that fixtures mounted above 27" must not protrude more than 4" from the wall.

4"



Maximum: 48"
Recommended: 37"

37"



UL Environment published the first global Product Category Rules (PCR) for Hand Dryers and Excel Dryer is proud to have been selected to chair the project. The PCR created evaluation methods through industry consensus that compare products' environmental impact and performance. Third party testing results then enable specifiers and buyers to make a true apples-to-apples comparison of products and more informed decisions.

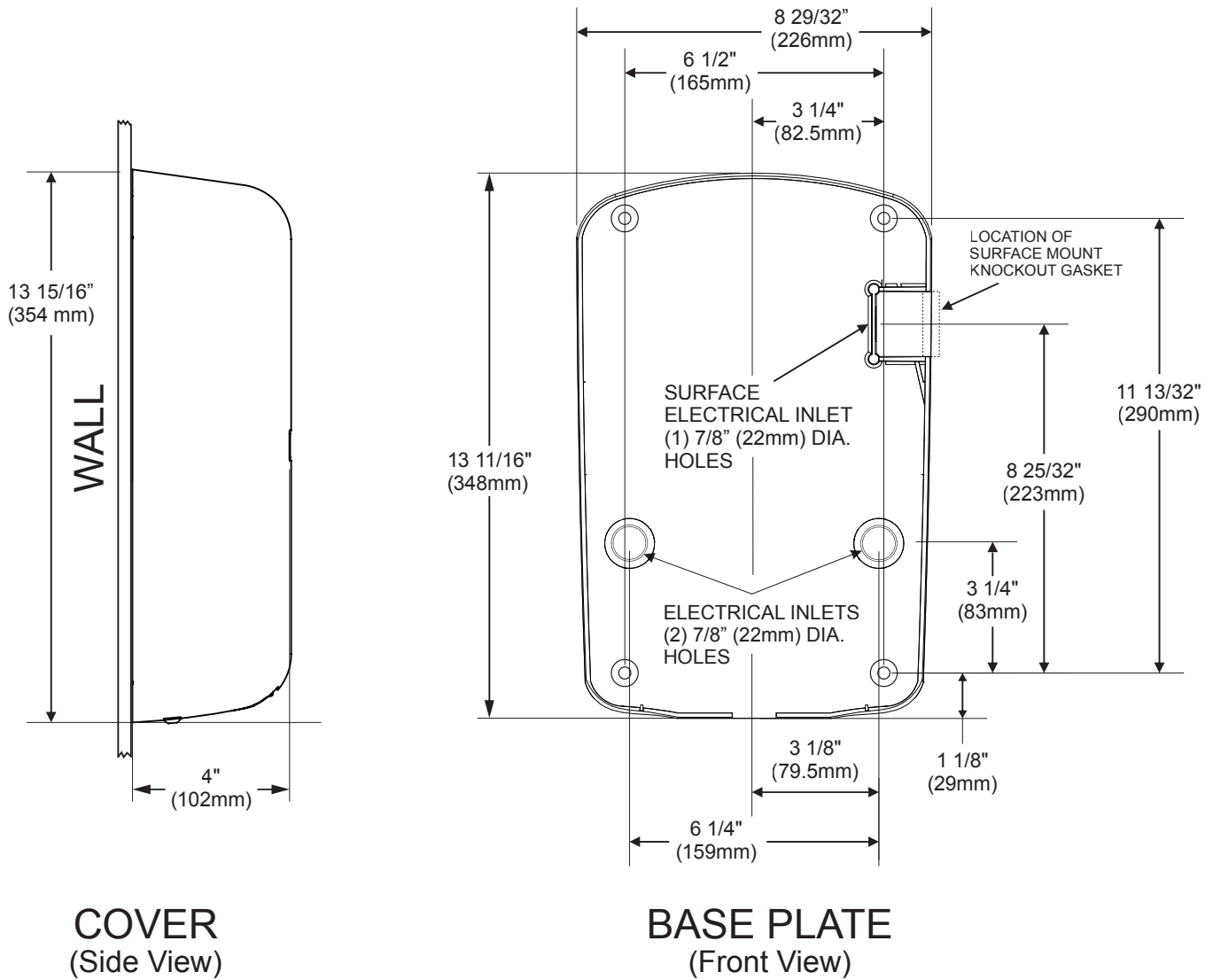
FOR ARCHITECT/ENGINEER APPROVAL

Job Name	Date
Model Specified	Quantity
Voltage Specified	
Customer/Wholesaler	
Contractor	
Architect	

ThinAir® HAND DRYER



MODELS: TA - ABS SB -VOLTAGE (See Chart)



COVER
(Side View)

BASE PLATE
(Front View)

OVERALL DIMENSIONS

Width: 9 5/32" (233 mm) Height: 13 15/16" (354 mm) Depth: 4" (102 mm)

WEIGHT

TA-ABS: 8 lbs. (3.6 kgs.) TA-SB: 10 lbs. (4.5 kgs.)

ELECTRICAL

Units are Single Phase; 950 Watts or as low as 300 Watts (without heat) and available as specified in:

VOLTS	AMPS	WATTS	NO HEAT AMPS	NO HEAT WATTS	HERTZ	
110-120V	7-7.7A	770-915W	3-3.2A	310-370W	50/60 Hz	
208-277V	3.6-4A	735-950W	1.5-1.9A	300-375W	50/60 Hz	
230V	3.9A	890W	1.7A	375W	50 Hz	

ACTIVATION

Automatic Sensor Activated

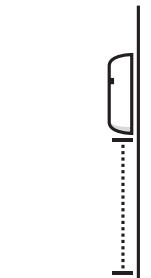
MOUNTING

Surface-Mounted

SUGGESTED MOUNTING HEIGHTS

from floor to bottom of dryer:

Men	45" (114 cm)
Women	43" (109 cm)
Teenagers	41" (104 cm)
Small Children	35" (89 cm)
Accessible	37" (94 cm)



*Dry time and energy use testing performed by SGS International on standard Thin Air Hand Dryers to 0.25g or less of residual moisture, pursuant to the UL Environment Global Product Category Rules (PCR) for Hand Dryers.

EASYHEAT™ AHB AUTOMATIC ELECTRIC WATER PIPE HEATING CABLE

EasyHeat™, the leader in residential pipe freeze protection, presents this innovative pre-assembled and ready-to-install cable that will prevent your home's metal and plastic supply pipes from freezing.

THE AHB ADVANTAGE

- Using AHB cable can prevent the costly and dangerous damage caused by frozen pipes by keeping water flowing at ambient temperatures down to -40°F (-40°C)
- No special wiring is required; the AHB plugs into a standard GFCI protected 120 VAC outlet or GFCI protected cord.
- A wide variety of lengths is available that will protect pipes that range from 3 feet to 80 feet (1 meter to 24 meters).
- The AHB's built-in thermostat saves energy by automatically powering the cable only when necessary.
- Constructed of durable and tough components for a long product life.
- A glowing indicator light in the AHB's plug clearly shows that the system has power.

INDICATOR LIGHT

Indicator light in the AHB plug assures the system has power.



BUILT-IN THERMOSTAT

Energy efficient built-in thermostat automatically energizes the cable only when it's needed.



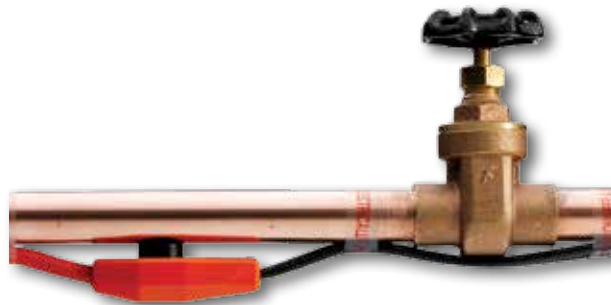
WHAT CABLE LENGTH DO YOU NEED?

Measure the outer diameter of the pipe and the length of the pipe run (including valves) to be heated. Use the Cable Selection Guide below to find the right model for your application.

Length of Pipe		Wattage	Cable Length	Model No.
ft	m			
3-4	(0.9-1.2)	21	3'	AHB013
3-7	(0.9-2.1)	42	6'	AHB016
6-10	(1.8-3)	63	9'	AHB019
9-13	(2.7-4)	84	12'	AHB112
12-16	(3.7-4.9)	105	15'	AHB115
15-19	(4.6-5.8)	126	18'	AHB118
21-25	(6.4-7.6)	168	24'	AHB124
27-31	(8.2-9.4)	210	30'	AHB130
37-41	(11.3-12.5)	280	40'	AHB140
57-61	(17.4-18.6)	420	60'	AHB160
77-81	(23.5-24.7)	560	80'	AHB180

⚠ WARNING

- Cable must be long enough to run along the bottom of horizontal pipes and "weather" side of vertical pipes (including valves) without crossing or spiraling.
- Never use a cable longer than the pipe it is intended to protect.
- For pipe diameters larger than 1-1/2" (38 mm), please contact EasyHeat™ technical support Monday through Friday from 7:00 a.m. to 4:30 p.m. CST at 800.537.4732.



This electric heating cable is intended to protect 3/8" to 1-1/2" metal and plastic water-filled supply pipes from freezing at temperatures down to -40°F (-40°C).

SIMPLE TO INSTALL

EasyHeat™ AHB pipe heating cables require no special wiring or assembly. Be sure to follow the full instructions included with the product.

1 Measure the length of the pipe to be heated, then choose the correct AHB cable from the Cable Selection Guide.



Place the thermostat on the coldest end of the pipe, ensuring the thermostat is making direct contact with the pipe.



Secure the cable to the pipe with application or high-quality electrical tape at 6" intervals. (EasyHeat™ HCA application tape recommended.)



Wrap the entire pipe and AHB cable, including thermostat, with fiberglass or other equivalent non-flammable foam insulation made for pipe application. Waterproof vapor seal and caution labels (EasyHeat™ CS caution labels recommended) may now be applied to complete the installation.

⚠ WARNING

- Do not install on pipe shorter than 3' (0.9 m) long. Please contact EasyHeat™ technical support at 800.537.4732 for guidance.
- AHB must be used with a GFCI protected receptacle or portable GFCI protected cord.

2 For better heat distribution on plastic pipes, we recommend wrapping the pipes in aluminum foil prior to installing the AHB cable.



Apply the rest of the AHB cable to the pipe in a straight line, making sure not to spiral or overlap on the pipe.



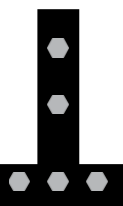
Two AHB heating cables may be used on opposite sides of the pipe if a standard cable length is not available.



Plug the cable into a 120 Vac GFCI protected receptacle or portable GFCI protected cord. The indicator light in the AHB's plug will glow to confirm that the cable has power.

2.04 ACCESSORIES

Data sheets to follow.

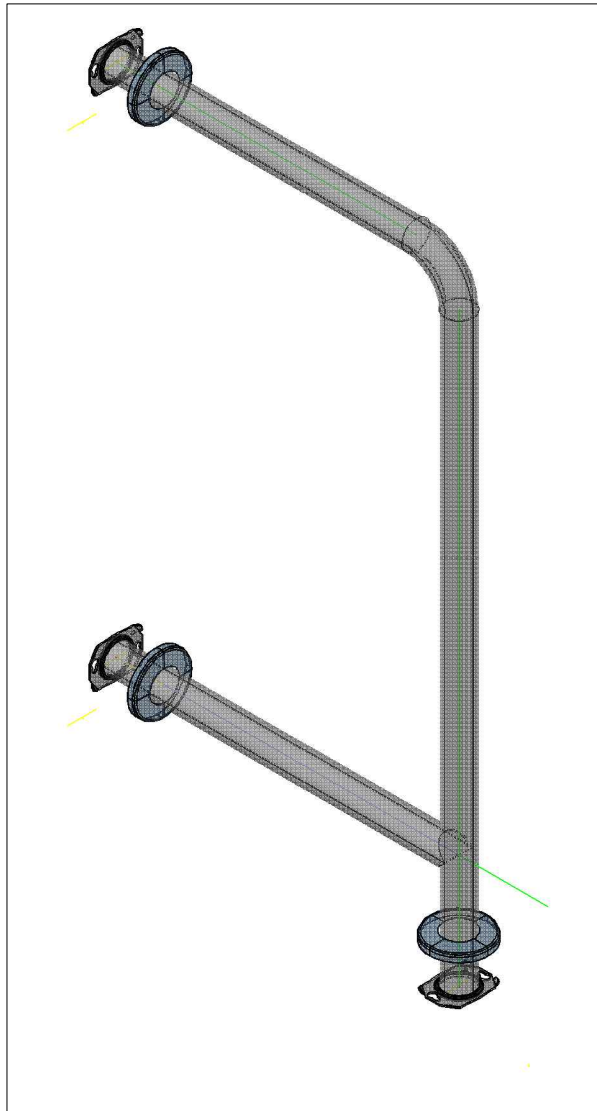


PART # D-7867-SS



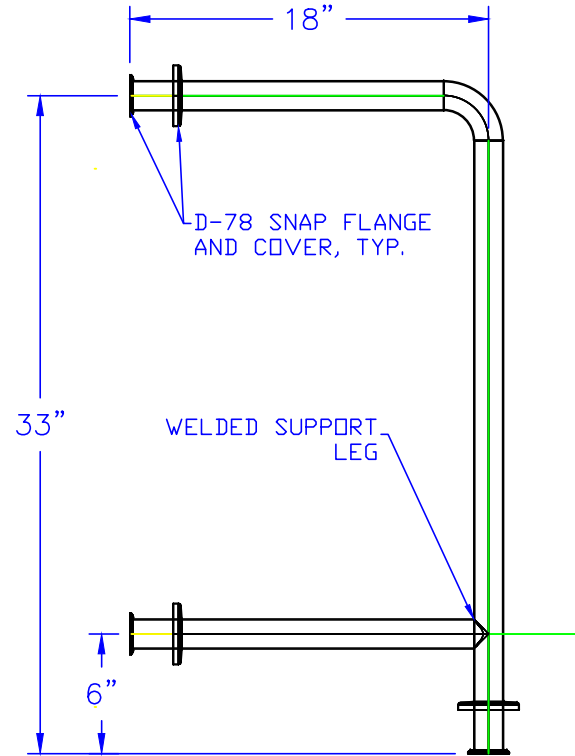
1209 West Lehigh Street
 Bethlehem, PA 18018
 Phone: 610.867.1401
 Fax: 610.866.1433
 www.breykrause.com

REVISIONS			
ZONE	REV	DESCRIPTION	DATE APPROVED
	1	WAS ZD8461 PART # (TWIN CITY)	1-16-12



1 1/2" X .049W STAINLESS STEEL TUBE.
 D-78 SNAP FLANGE AND COVER.
 WELDED SUPPORT LEG AS SHOWN.
 SATIN #4 FINISH.
 DIM. AS SHOWN.

Drinking
Fountain
Guard Rails



Dr	DATE M.	3-31-11	
D T Fr XX: -0.062 XXX -0.015			SIZE A
PROPRIETARY AND CONFIDENTIAL T Br A Br d.			

Product Materials

FLANGES: 3" dia. 12-gauge stainless steel.

ESCUTCHEONS: 14-gauge stainless steel. One-piece drawn construction with exposed surfaces in architectural satin finish. Snap over flanges to conceal mounting screws.

TUBING: 1½" O.D. 18-gauge stainless steel, seamless construction with exposed surfaces in architectural satin finish. Bent ends of tubing pass thru the flanges and are welded for maximum strength. Intermediate supports are contour cut and joined by welding to form an integral part of the grab bar. All exposed welds ground and polished to blend. Mandrel bending process maintains uniform bar diameter. Return provides 1½" standard safety clearance between wall and bar.

Strength

When properly mounted, all Bradley heavy-duty grab bar systems meet or exceed the requirements of ANSI Standard A117.1, the ADA and ABA Accessibility Guidelines for Buildings and Facilities (ADAAG), and the Uniform Federal Accessibility Standard (UFAS). All 812 grab bars are rated to support up to 250 pounds. Wall must be reinforced in the area of the grab bar in order to support the load it is intended to support.

Guide Specification

Grab bar shall be fabricated of stain finish stainless steel with concealed mounting flanges in sizes and configurations as indicated. Partition mounting kits are available.

Installation

For instructions on installation, warnings, and maintenance, please visit www.bradleycorp.com.

General-purpose mounting screws are provided; however, installers are advised to use the appropriate fasteners based on the specific substrate to ensure secure mounting.

Product Compliance

Complies with

- ADA
- ADAAG
- ICC ANSI A117.1
- UFAS

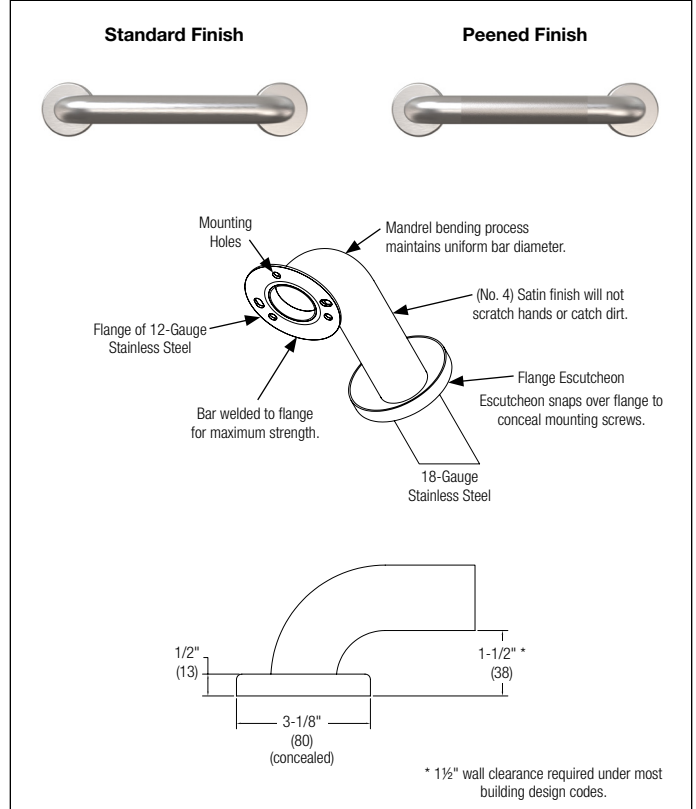


- Consult local and national accessibility codes for proper installation guidelines.
- Conformity and compliance to local and national codes is the responsibility of the installer.

Optional Features

Features	Suffix
<input type="radio"/> Peened Finish	-2

Orders composed of products indicated as **Bradex**® will be available to ship in three days after receipt of order at the factory. There is no pricing penalty for this service from Bradley.



Bradex® Models

Configuration Number	Shipping Data		Finish Options	
	Cu. Ft.	Wt. Lb.	Satin	Peened
001-12"	0.13	2	X	X
001-18"	0.14	2	X	X
001-24"	0.14	3	X	X
001-30"	0.15	3	X	X
001-36"	0.15	3	X	X
001-42"	0.15	4	X	X
001-48"	0.25	4	X	X
001-54"	0.54	6	X	X
054 (30" X 30")	2.50	5	X	
056 (18" X 33")	1.30	5	X	
057 (30" x 30")	2.10	5	X	
058 (18" x 30")	1.40	5	X	
058 (24" x 36")	2.10	6	X	
058 (42" x 54") *	8.40	10	X	

NOTE: These units must ship via common carrier. * 058 (42" x 54") Models **not listed** in the chart require an additional lead time of 3–4 weeks.



Romtec Stainless Steel Toilet Paper Dispenser

Description:

The following is an example of the Romtec toilet paper dispenser included in the design of this building.

Features:

- Stainless steel
 - 1/4" thick stainless steel
 - 11" long
- Holds two rolls
- Narrow bar provides easy rotation
- Padlock is supplied by others



Note: Image is example only. Dimensions, appearance, and features may vary as needed for specific project(s).

*** Minimum one year limited warranty included for all Romtec Custom Fabrication items.**

For more info about Romtec and other available products, see:

www.Romtec.com



Model 250-15 — Surface-Mounted
Bradex®

- C-Fold/Multi-Fold Towels
- Tumbler Lock

Product Materials

UNIT: 22 gauge stainless steel with exposed surfaces in architectural satin finish. Smooth corners, free of burrs and sharp edges. Tumbler lock keyed like other Bradley units. Cabinet hinged at bottom to allow easy filling. Refill indicator slot on face of cabinet. Rolled edge on dispenser opening.

Capacity

525 multi-fold or 400 C-fold paper towels.

Operation

Unit holds multi-fold or C-fold towels without use of special adapter.

Installation

Verify all rough-in dimensions prior to installation. Secure to wall with mounting screws (not included) at holes provided. Mounting kit (#899-027) available through Bradley. Visit bradleycorp.com for more information. Provide in-wall backing at mounting screw locations.

Guide Specification

Surface-mounted towel dispenser shall be fabricated of type heavy duty, 22 gauge stainless steel with exposed surfaces in satin finish. Refill indicator on face of cabinet. Tumbler lock to secure hinged front panel. Towel dispenser capacity 525 multi-fold or 400 C-fold towels.

Overall dimensions: 11"W x 15⁵/₁₆"H x 4"D.

 **ADA Compliant**

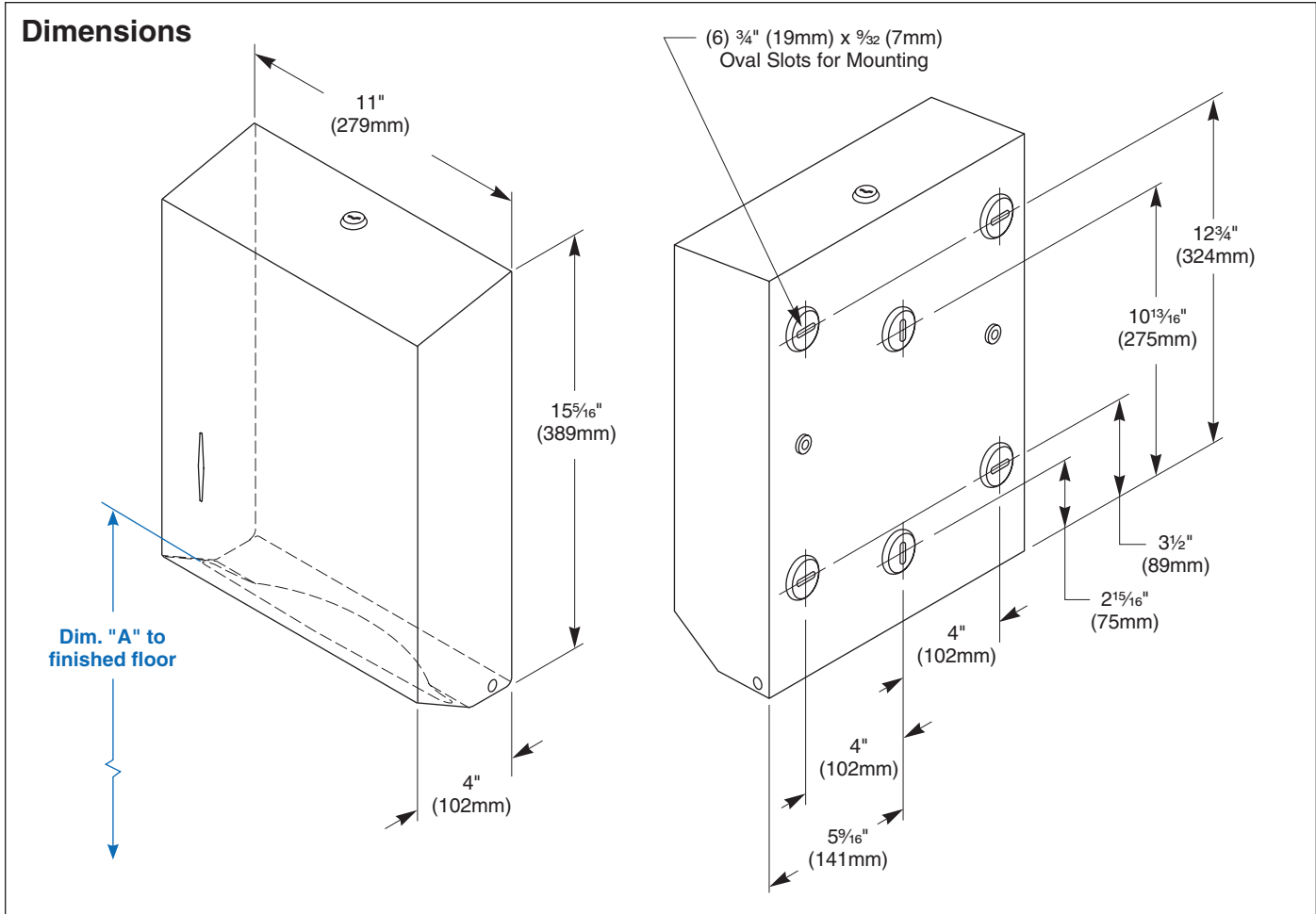
- Consult local and national accessibility codes for proper installation guidelines.
- Conformity and compliance to local and national codes is the responsibility of the installer.



Optional Features

Feature	Suffix
<input type="checkbox"/> Polished Stainless Steel	-78

Orders composed of products indicated as **Bradex®** will be available to ship in three days after receipt of order at the factory. There is no pricing penalty for this service from Bradley.



Dim. "A" Key Surface:	For Dim. "A"	Top of Rough Wall Opening	Bottom of Rough Wall Opening
Paper towel top of opening to finished floor	48" (1219mm)	62 1/2" (1588mm)	47 3/16" (1199mm)
	45" (1143mm)	59 1/2" (1511mm)	44 3/16" (1122mm)
	42" (1067mm)	56 1/2" (1435mm)	41 3/16" (1046mm)
	40" (1016mm)	54 1/2" (1384mm)	39 3/16" (995mm)
Rough wall opening:			
Surface Mount:	No rough opening, see overall dimensions		

Orders composed of products indicated as **Bradex**® will be available to ship in three days after receipt of order at the factory. There is no pricing penalty for this service from Bradley.



Dispenser Key Features

- Offers flexibility as this unit dispenses liquid soap or gel hand sanitizer
- Compatible mounting with Bradley's 6A20-110000 Hand Sanitizer/Soap Dispenser Stand
- Vandal-resistant filler hole cover and sight gauge
- Concealed mounting plate
- Corrosion-resistant sanitizer valve
- Touch-free operation
- Tank capacity of 27 oz (800 mL)

Product Material

BODY: Heavy gauge stainless steel with exposed surfaces in architectural satin finish. Front has matching curvature to other Bradley Diplomat washroom accessories.

WALL PLATE: ABS plastic

RESERVOIR: Reusable, cap-sealed plastic tank; holds 27 oz (800 mL) of liquid soap or gel sanitizer

BATTERY BOX: Plastic, holds 4 "AA" Alkaline batteries (not included)

Operation

Place hands under spout and hold to dispense liquid soap or gel sanitizer (2–3" sensing range). Sight gauge indicated refill time. Refill by unlocking lock with key (supplied), swinging open dispenser body. Remove cap to refill the internal tank.

Installation

Verify all rough-in dimensions prior to installation. Secure separate mounting bracket with mounting screws (included) at holes provided. Unlock the cover. Open and remove tank. Secure unit to wall using the mounting screws. Install batteries (not included). Fill tank with bulk liquid soap or gel sanitizer. Close and lock the cover.

Specification

Surface-mounted automatic liquid soap or gel sanitizer dispenser, with face formed contemporary contours, radii, and finish matching related accessories in manufacturer's designer series. Capacity 27 oz (800 ml). Equipped with hinged cover and completely concealed mounting plate. Vandal-resistant filler hole cover and sight gauge. Corrosion-resistant sanitizer valve.

Overall Dimensions: 4⁵/₈" W x 10⁹/₁₆" H x 4³/₁₆" D

MasterFormat Title: Commercial Toilet Accessories

MasterFormat Number: 10 28 13.13

OmniClass Title: Soap Holders, Dispensers

OmniClass Code: 23.40.20.21.34




Model

6A03-110000 Liquid Soap / Gel Sanitizer Dispenser

Finishes

 Brushed Stainless

Product Compliance

 ADA / ICC ANSI A117.1, Citation 309.3

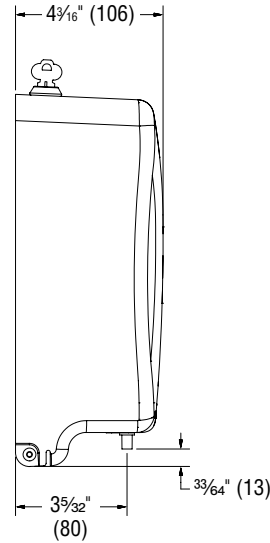
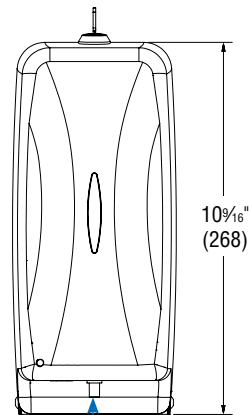
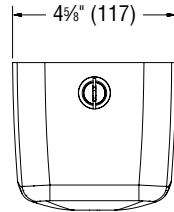
Compatible Bradley Products

- [6A20-110000 Hand Sanitizer/Soap Dispenser Stand](#)



Dimensions

(mm)



Dim. "A" to finished floor



Dim. "A" Key Surface:	For Dim. "A"	Locate Top of Unit	Locate Bottom of Unit
Bottom of dispensing tube to finished floor	48" (1219)	58" (1473)	47 1/16" (1205)
	45" (1143)	55" (1397)	44 1/16" (1129)
	42" (1067)	52" (1321)	41 1/16" (1053)
	40" (1016)	50" (1270)	39 1/16" (1002)



Located in Unisex Restroom Only

963, 9631, 9632
Baby Changing Station

- ✓ Surface-Mounted
- ✓ ADA compliant – opens with less than 5 lbs. of force, projects less than 4" from the wall when closed
- ✓ Model 963 – Gray and White Speckled **Bradex**®
- ✓ Model 9631 – Light Grey **Bradex**®
- ✓ Model 9632 – Cream **Bradex**®

Product Materials

Bacterial resistant high density polyethylene with steel to steel support hinges. Pneumatic gas shock mechanism opens and closes unit smoothly. Liner dispenser and purse.diaper bag hooks molded in. ADA compliant nylon buckle is adjustable with one hand.

STRENGTH NOTE: Unit complies with ASTM F2285 Standard that requires commercial diaper changing stations be able to support a static load of up to 250 lbs.

Installation

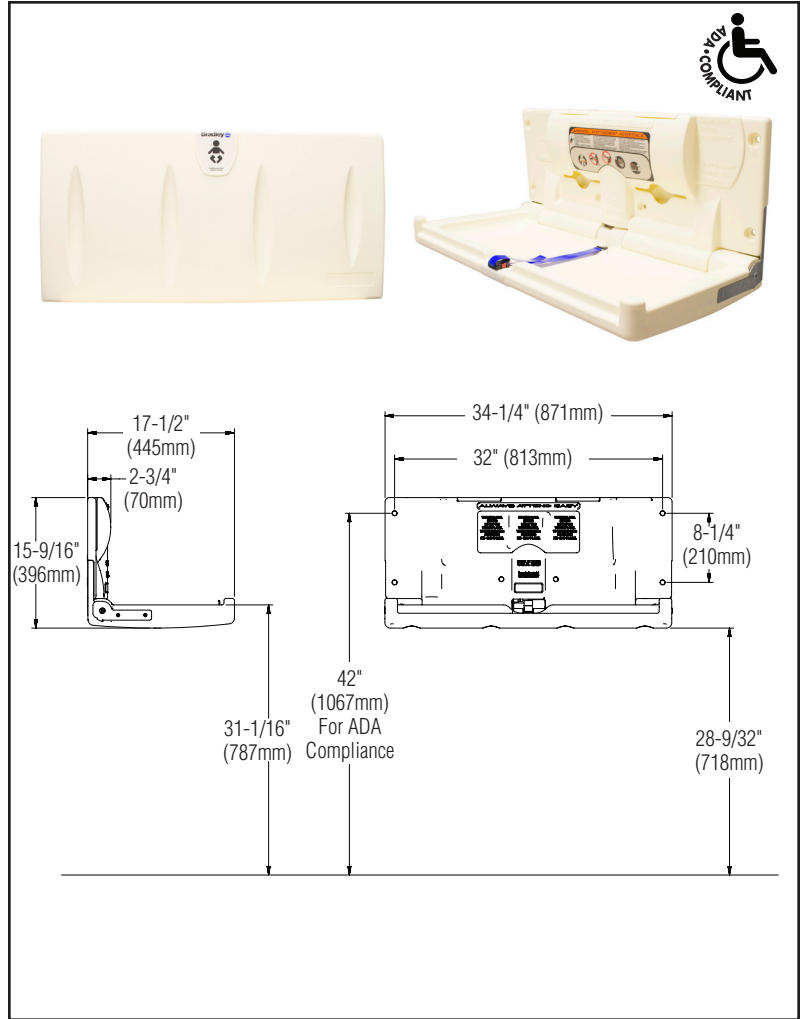
Verify all rough-in dimensions prior to installation. Secure to wall through mounting holes. Mounting hardware for typical conditions is included.

WARNING: Be sure to use reinforced backing behind wall where mounting screws or anchoring devices are installed to ensure adequate support for the baby changing station. All anchoring devices must be appropriate for specific wall construction. Severe personal injury and/or property damage may result from improper mounting.

Guide Specification

Surface-mounted baby changing station shall be gray and white speckled (963), solid light grey (9631) or cream colored (9632) molded bacterial-resistant, high density polyethylene. Steel to steel support hinges with pneumatic gas shock mechanism. Unit shall have integrated liner dispenser and bag hooks. Unit shall have an anti-microbial safety belt. Warning labels are printed in English, Spanish, French and Braille. Unit shall be operable with less than 5 lbs. of force and complies with ASTM F2285 Standard.

Overall dimensions: 34-1/4"W x 15-3/8"H x 4"D.



ADA Compliant

- ✓ Consult local and national accessibility codes for proper installation guidelines.
- ✓ Conformity and compliance to local and national codes is the responsibility of the installer.

Service Parts Available

Part Number	Description
P15-491	Replacement Strap

Orders composed of products indicated as **Bradex**® will be available to ship in three days after receipt of order at the factory. There is no pricing penalty for this service from Bradley.



A Silver-Leaf Design LLC Company

KROY

Sign Systems

ADA SIGNS-INJECTION MOLDED

Kroy Sign Systems manufactures architectural and ADA (Americans with Disabilities Act) signs for safety and identification applications.

Injection Molded ADA signs feature UV resistant, high impact polystyrene panels that are 8.0" inches square and 1/8" inch thick. Raised white pictograms, text and Grade II Braille insure that ADA and ISA (International Symbol of Accessibility) requirements are achieved. A variety of sign messages are available including restroom signs in English & Spanish translations.

Kroy Injection molded ADA Signs are stocked in four (4) popular colors, Blue, Black, Brown and Dark Gray. Kroy signs comply with federal regulations for the visually impaired. Sign panels are ready to install and suitable for facility interior and exterior applications.

Clear Injection Molded ADA Signs allow Kroy to quickly achieve unlimited colors and specific color combinations that customers require. Signs are back-painted and finished with polyurethane paint to match any PMS (Pantone Matching System) or paint manufacturer color.

Kroy Injection Molded ADA signs are highly visible, durable and affordable. Distributors and customers are assured of experienced manufacturing, quality sign products, timely delivery, written warranties and customer support.

Optional injection molded frames are also available in Black, Brown, Beige, White, Gray and Dark Gray to enhance the sign appearance and provide additional sign panel mounting options.

For more information on this or other Kroy Sign products, call 1-800-950-5769, send us an email or visit us on the web.

signs@kroysignsystems.com • www.kroysignsystems.com

Quality



Service



Innovation



Esthetics



ADA SIGNS-INJECTION MOLDED

Specification Data

1 Materials

(1a) .125" thick injection molded High Impact Polystyrene (HIPS) solid color panel - or - .125" thick injection molded Acrylonitrile Butadiene Styrene (ABS) clear panel.

(1b) Optional injection molded frame.

2 Graphics

1/32" raised pictogram, text and Grade II Braille. Surface hotstamped white (solid color panel) or screen printed (clear panel) to match customer specified color.

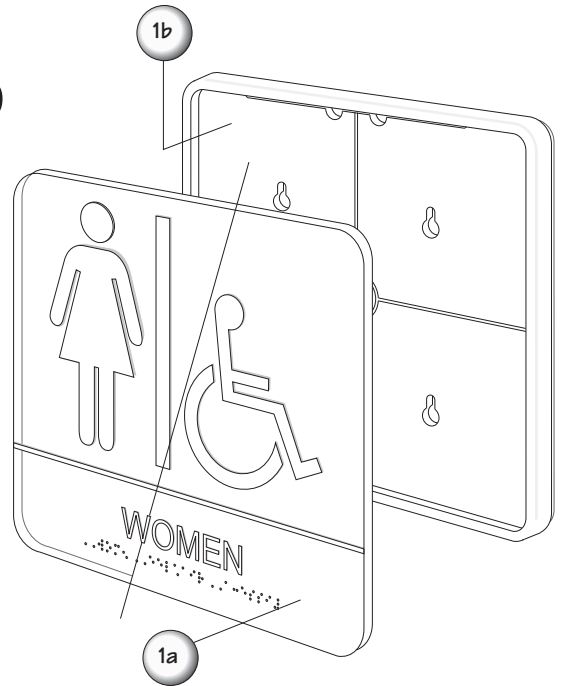
3 Colors

Solid color panel - Black, Brown, ADA Blue, Dark Grey.

Clear panel - Subsurface painted to match customer specified color.

Frame - Black, Grey, Beige, Brown, ADA Blue, Dark Grey, White or surface painted to match customer specified color.

4 Message



ALSO AVAILABLE:

High Impact Polystyrene, California Title 24 Restroom signs.



RESTROOM / MEN



RESTROOM / WOMEN



RESTROOM

- 1 - Restroom/Women
- 2 - Restroom/Men
- 3 - Restroom/Women ISA*
- 4 - Restroom/Men ISA*
- 5 - ISA*
- 6 - Restroom
- 7 - Restroom/ISA*
- 8 - No Smoking
- 9 - Restroom/Girls ISA*
- 10 - Restroom/Boys ISA*
- 11 - Stairs
- 12 - In Case of Fire . . .
- 13 - Men/Hombres
- 14 - Women/Mujeres
- 15 - Restroom/Bano
- 16 - Unisex
- 17 Unisex/ISA*
- 18 - Exit (2.5" x 6.5")
- 19 - Enter (2.5" x 6.5")

* International Symbol of Accessibility

Summary: 2010 ADA Standards for Accessible Design

Letters and numerals shall be raised 1/32" upper case sans serif type and shall be accompanied with Grade II Braille. Raised characters shall be at least 5/8" high, but no higher than 2". Pictograms shall be accompanied by the equivalent verbal descriptions placed directly below the pictograms. The border dimensions for the pictogram shall only be 6" in height. The characters and background of sign shall be eggshell, matte or other non-glare finish. Characters and symbols shall contrast with their background - either light characters on a dark background or dark characters on a light background.

SIGN INSTALLATION GUIDE

FOR NEW CONSTRUCTION & RENOVATIONS, AS PER 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

GENERAL INSTRUCTIONS

1. Verify the wall, door, or ceiling surface is smooth and free of any dirt or dust. Complete any wall treatments, such as wallpapering or painting, prior to sign installation.
2. Use the following information to determine the mounting height for your specific sign type.
3. Then install using one of the three mounting methods shown on the next page of this guide: adhesive tape, screw mounting, or silicone adhesive.

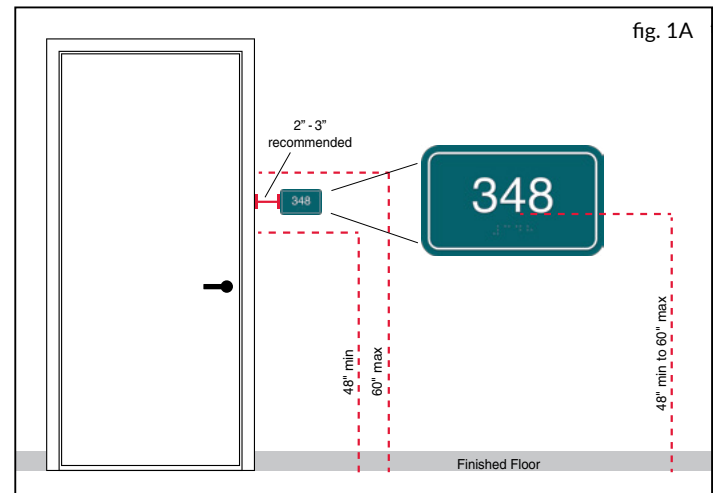
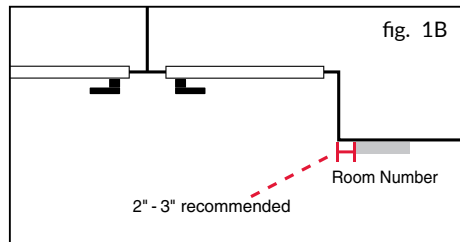
DESIGN TIP

We recommend installing all of our signs at 54" from the center of the sign to the floor for both ADA compliancy and visual consistency.

TACTILE WALL INSTALLATION

- ☑ For tactile signs, the ADA requires that the baseline of the lowest raised character be a minimum of 48" above the finished floor, and the baseline of the highest raised character be a maximum of 60" above the finished floor. (see fig. 1A) We recommend installing our signs at 54" from the center of the sign to the floor.

- ☑ For wall signs located near a door, the ADA requires signs to be mounted on the latch side of the door. Where there is no wall space at the latch side of a single door, signs must be installed on the nearest adjacent wall. (see fig. 1B)



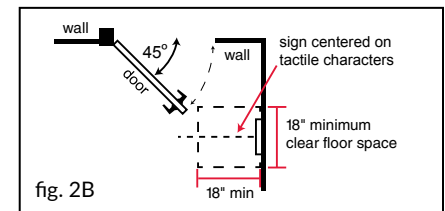
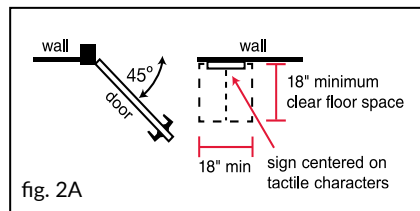
Tactile Wall Installation

FLOOR CLEARANCE

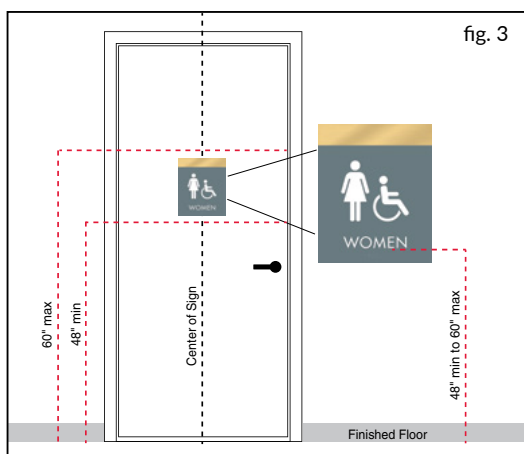
When a door swings into a hallway, signs with raised characters must be centered on the letters in a clear floor space of 18" minimum by 18" minimum. This floor space must be outside of the swing of the door. (see fig. 2A)

If there is no room on the latch side of the door, the sign must be installed on the nearest adjacent wall with the 18" minimum clear floor space. (see fig. 2B)

Floor Clearance for Doors that Swing into Hallways



TACTILE DOOR INSTALLATION



Tactile Door Installation

You may install your tactile signs directly on the door only when these 3 requirements are met:

- The sign will be hung on the push side of the door.
- The door has an automatic closer that is ADA compliant.
- The door does not have a hold-open device.

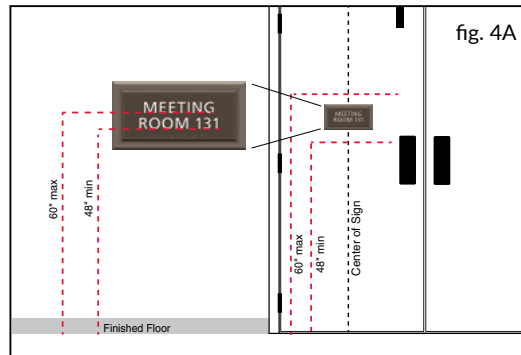
- ☑ The ADA requires that the baseline of the lowest raised character be a minimum of 48" above the finished floor, and the baseline of the highest raised character be a maximum of 60" above the finished floor. (see fig. 3) We recommend installing our signs at 54" from the center of the sign to the floor.

QUESTIONS

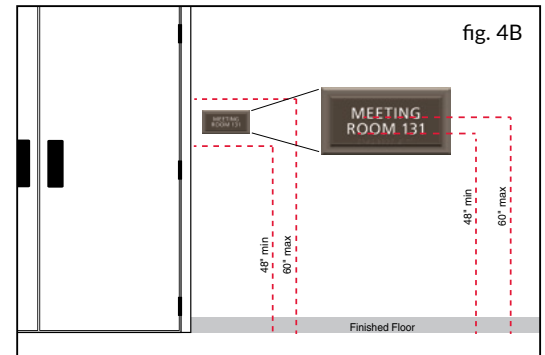
If you have questions or a special installation circumstance, please contact us. If you have questions about the ADA or to understand your responsibilities, please visit www.ada.gov.

DOUBLE-DOOR INSTALLATION

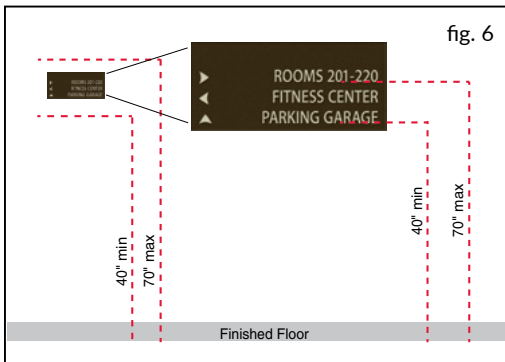
- ☑ Install the tactile sign centered on the inactive (locked) leaf of a double-door. (see fig. 4A)
- ☑ If the double-door contains two active leaves (neither door is locked in place), the sign should be mounted on the wall to the right of the double-doors. (see fig. 4B)



Installation for Double-Doors with a Locked Leaf



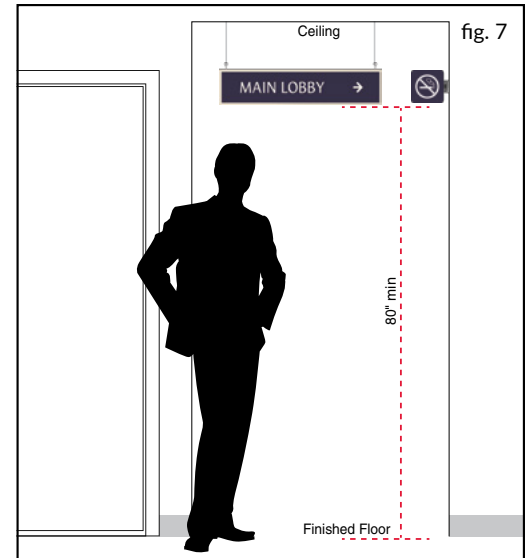
Alternate Wall Installation for Double-Doors



Visual Character Signs

VISUAL CHARACTER SIGNS

- ☑ There is no set standard for the location of visual signs and they can be installed anywhere in the facility.
- ☑ The ADA requires visual signs with text 2" and under in height to be installed with the baseline of the lowest visual character a minimum of 40" above the finished floor, and the bottom of the highest visual character a maximum of 70" above the finished floor. (see fig. 6) We recommend installing our signs at 54" from the center of the sign to the floor.



Perpendicular & Ceiling Installation

PERPENDICULAR & CEILING

- ☑ The ADA requires signs that project from the wall (perpendicular signs) or ceiling (overhead signs) to have a clearance of 80" from the finished floor to the bottom of the sign.
- ☑ Signs should not interfere with or block the function of any doors, emergency equipment, or sprinklers. (see fig. 7)
- ☑ Using a level to ensure the sign is straight, mount the sign to the wall or ceiling with the supplied bracket and hardware. Depending on the wall or ceiling type, you may need to insert anchors prior to fastening hardware.

MOUNTING METHODS

Choose the mounting method best suited for your specific sign material and mounting surface.

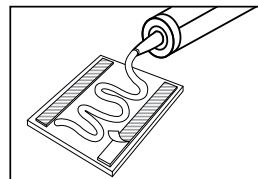
Adhesive Tape

Remove the adhesive tape backing. Using a level to ensure the sign is straight, press the sign firmly to the wall.

Screw Mounting

Using a level to ensure the sign is straight, mark the wall through the screw holes. Drill holes and then insert anchors into the wall. Holding sign in place, fasten screws into wall anchors.

For signs with frames and screw holes, first remove the sign face. Next, position the frame on the wall, and follow the above instructions. Then replace the sign face.



When installing signs requiring silicone adhesive, be sure to read and follow the manufacturer's instructions.

For heavy signs, exterior signs, or when applying to textured wall surfaces, it is recommended to use a silicone construction adhesive* in addition to the adhesive tape on the back of the sign. Apply silicone adhesive as illustrated and remove the adhesive tape backing. Using a level to ensure the sign is straight, press the sign firmly to the wall.

*Silicone sealant is different from silicone adhesive. Please be sure to use a silicone adhesive to guarantee proper adhesion.