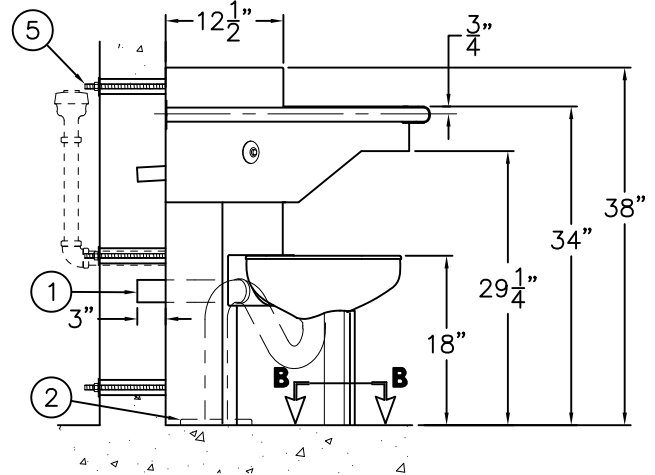
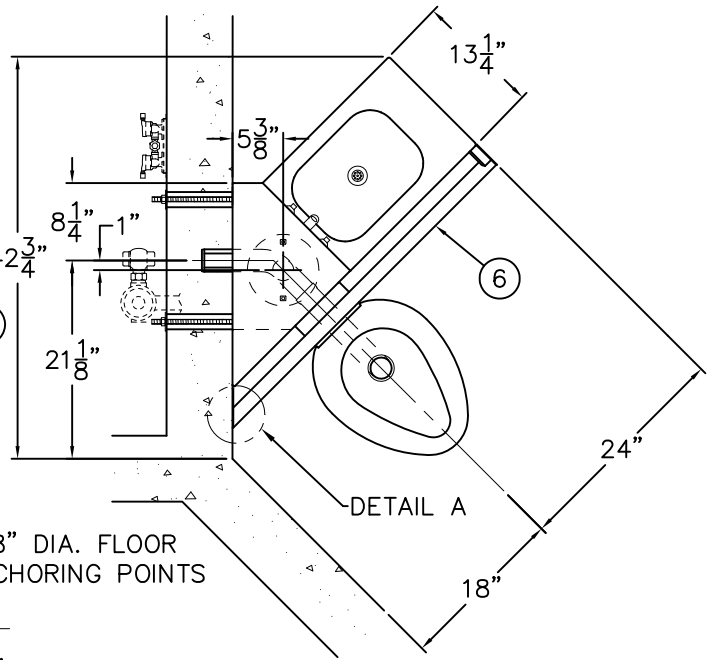
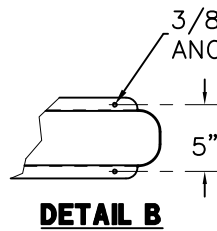
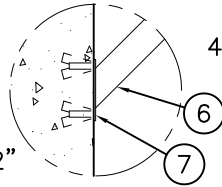
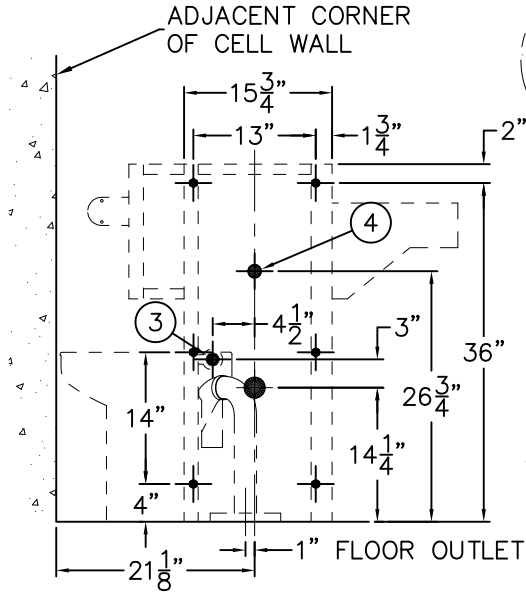




REFERENCE DRAWINGS		
ITEM	INSTALLATION	FIXTURE TRIM
AIR CONTROL (HOT & COLD)	9905-000-003	9957-055-001
AIR CONTROL (SINGLE TEMP)	9905-001-003	9957-056-001
WALL SLEEVE	9925-091-001	-----

**ROUGH-IN VIEW SHOWN FROM FIXTURE/CELL SIDE**

-AL ANGLED LEFT ROUGH-INS SHOWN  
-AR ANGLED RIGHT MODEL OPPOSITE



**IMPORTANT:** SOME OPTIONS MAY SLIGHTLY ALTER INSTALLATION PROCEDURES. READ ALL SUPPLEMENTAL DRAWINGS BEFORE INSTALLATION OF FIXTURE. ALL FASTENERS, PLATES, AND NUTS ARE ESSENTIAL IN PROPERLY ANCHORING THE FIXTURE. ACORN CANNOT ASSUME ANY RESPONSIBILITY FOR UNITS IMPROPERLY INSTALLED.

- A- ROUGH-IN PLUMBING FOR THE FOLLOWING CONNECTIONS:
  - TOILET WALL WASTE OUTLET: 2-3/8" O.D. PLAIN END (1). FOR SUFFIX OPTION (-W03), 3" O.D. PLAIN END IS PROVIDED.
  - TOILET FLOOR WASTE CONNECTION: 7-1/2" DIA. RECESSED GASKET FLANGE WITH 5/16" TAPPINGS AT 6" O/C (2).
  - FLUSHING INLET CONNECTION: 1-1/2" NPT FEMALE (3).
  - LAVY WASTE CONNECTION: 1-1/2" O.D. PLAIN END (4).
  - SEE INDIVIDUAL VALVE SHEET FOR LAVY VALVE ROUGH-IN.
- B- INSTALL HYDRAULIC FLUSH VALVE AND PUSHBUTTON (SHIPPED LOOSE) TO CABINET.
- C- BEFORE FASTENING FIXTURE TO WALL, FLOOR OUTLET TYPE FIXTURE MUST BE SET IN PLACE ON WASTE CONNECTION.
- D- SCREW IN 1/2"-13 UNC STUDS (5) INTO BACK OF FIXTURE. STUDS MUST HAVE MINIMUM 1/2" ENGAGEMENT. THREAD IN FLUSH VALVE SUPPLY NIPPLE (1" NPT) (3). MAKE UP LAVY WASTE CONNECTION, 1-1/2" O.D. PLAIN END (SUITABLE FOR COMPRESSION CONNECTION).

- E- LOCATE FIXTURE INTO PLACE, SLIDING STUDS AND PIPES THROUGH WALL OPENINGS.
- F- SECURE FIXTURE TO WALL USING WASHERS AND/OR PLATES AND NUTS. TORQUE (6) NUTS TO 60 FT-LBS.
- G- SECURE GRAB BAR (6) TO WALL USING WALL ANCHORS BY OTHERS AND ANCHORING HARDWARE PROVIDED. ANCHOR PLATE (7) PROVIDES HORIZONTAL ADJUSTMENT.

1. DO NOT CUT LENGTH OF TUBING PROVIDED.
2. DO NOT TAPE OR FIX TUBING IN A STATIONARY POSITION.

**NOTE: REFER TO A.D.A. ACCESSIBILITY GUIDELINES FOR COMPLETE INSTALLATION REQUIREMENTS.**

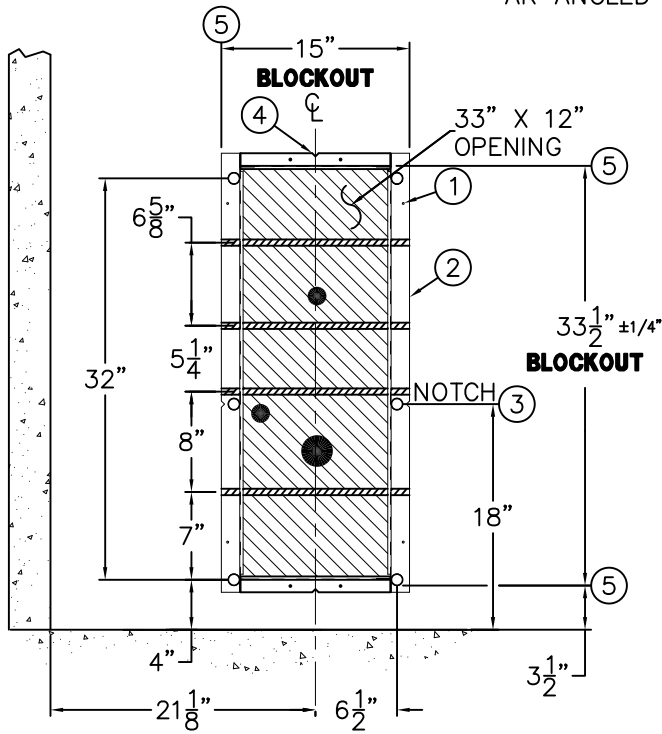
ACORN ENGINEERING COMPANY  
P.O. BOX 3527 Industry, CA 91744  
15125 Proctor Ave Industry, CA 91746  
(626) 336-4561 FAX (626) 961-2200

TITLE <b>ADA COMPLIANT LAV-TOILET COMBY ANCHORING INST ~ 1432</b>		
MANUFACTURE DATE <b>JANUARY 2012</b>	DATE ISSUED <b>02/29/12</b>	DRAWING NUMBER <b>9925-078-002</b>
<b>TO PRESENT</b>	DATE REVISED <b>12/03/13 E</b>	

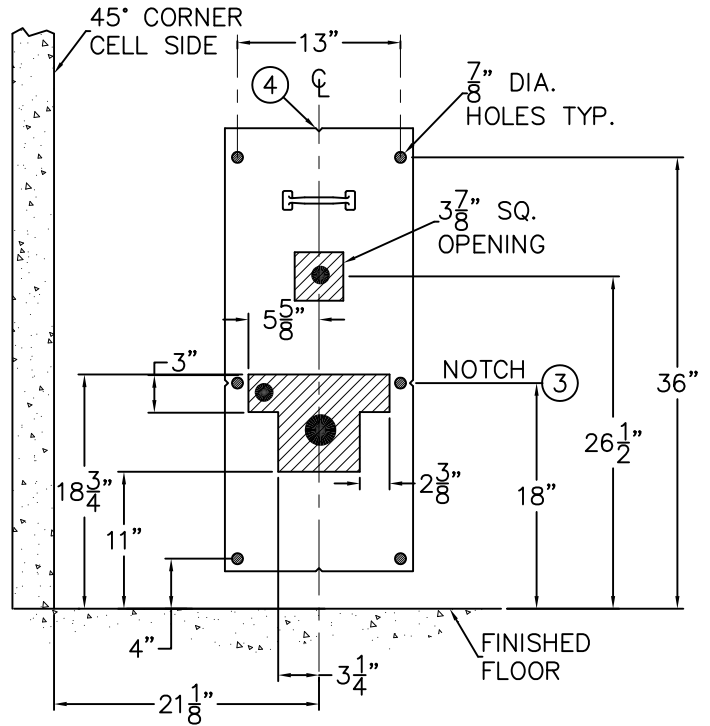


**VIEW FROM FIXTURE / CELL SIDE**

-AL ANGLED LEFT MODEL ROUGH-IN'S SHOWN  
 -AR ANGLED RIGHT IS OPPOSITE



**WALL SLEEVE (-SW)**



**METAL TEMPLATES (-MT)**

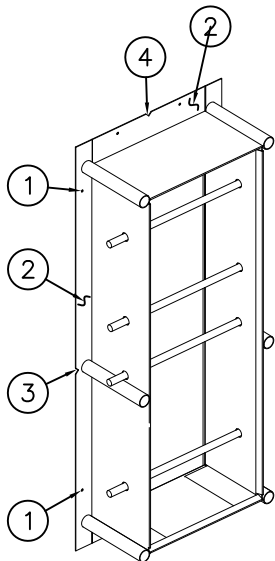


SHADED AREAS ARE REQUIRED WALL OPENINGS

**-SW WALL SLEEVE**

SLEEVES ARE INSTALLED IN FORMS USING NAIL HOLES (1) PROVIDED OR GROUTED INTO BLOCK WALLS BECOMING A PERMANENT PART OF THE WALL.

**WALL SLEEVE (-SW)**



NOTE: FOR POURED WALL CONSTRUCTION, TEMPORARY BRACING SHOULD BE INSTALLED WITHIN OPENING TO PREVENT DEFORMATION TO SLEEVE WHICH MAY OCCUR DURING POUR. DO NOT POUR CONCRETE DIRECTLY ON TOP OF WALL SLEEVE.

- A- INSTALL SLEEVE WITH FLANGE (2) ON CHASE SIDE OF WALL.
- B- SIDE NOTCHES (3) INDICATE INTEGRAL TOILET SEAT HEIGHT LOCATED 18" ABOVE FINISHED FLOOR ON CELL SIDE.
- C- VERTICAL OR TOP AND BOTTOM NOTCHES (4) INDICATE CENTERLINE OF SLEEVE AND FIXTURE TOILET WASTE OUTLET.
- D- USE BLOCKOUT DIMENSIONS (5) SHOWN WHEN SLEEVES ARE NOT AVAILABLE.

**-MT METAL TEMPLATES**

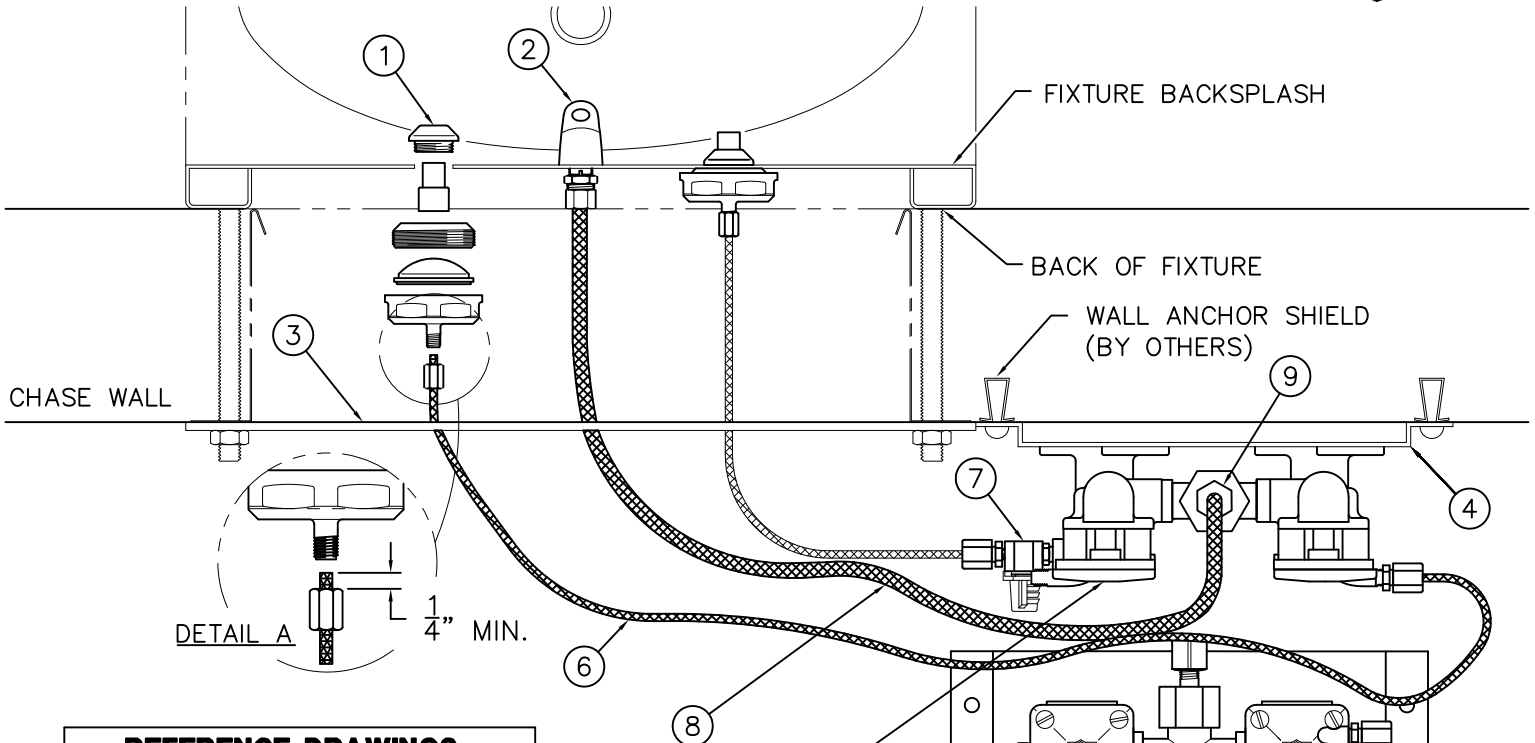
METAL TEMPLATES ARE USED TO LAYOUT REQUIRED WALL OPENINGS FOR SUBSEQUENT FLAME CUTTING OR CORE DRILLING.

- A- MEASURE FROM THE FINISHED FLOOR ON CELL SIDE AND STRIKE A HORIZONTAL CHALK LINE ON THE WALL AT DIMENSIONS SHOWN FOR SIDE NOTCHES (3) INDICATING TOILET SEAT HEIGHT 18" ABOVE FINISHED FLOOR ON CELL SIDE.
- B- STRIKE A VERTICAL CHALK LINE AT DIMENSIONS SHOWN FOR VERTICAL OR TOP AND BOTTOM NOTCHES (4) INDICATING CENTERLINE OF SLEEVE AND FIXTURE TOILET WASTE OUTLET.
- C- PLACE TEMPLATE AGAINST WALL ALIGNING VERTICAL AND HORIZONTAL NOTCHES AND MARK REQUIRED WALL OPENINGS.



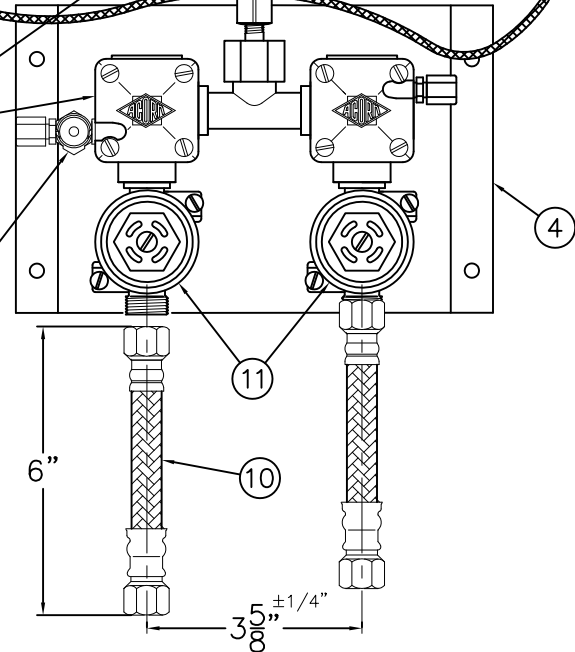
ACORN ENGINEERING COMPANY  
 P.O. BOX 3527 Industry, CA 91744  
 15125 Proctor Ave Industry, CA 91746  
 (626) 336-4561 FAX (626) 961-2200

TITLE <b>(-SW) WALL SLEEVE &amp; (-MT) METAL TEMPLATE 1432AL/AR COMBY</b>		
MANUFACTURE DATE <b>MAY 1999</b> <b>TO PRESENT</b>	DATE ISSUED <b>05/13/99</b>	DRAWING NUMBER <b>9925-091-001</b>
	DATE REVISED <b>02/29/12</b>	



REFERENCE DRAWINGS	
ASSEMBLIES	NUMBER
VALVE BODY	9955-005-003
CHECKSTOP	9956-040-003
FIXTURE TRIM	9957-050-001
-PBH/BPH TRIM	9957-060-001
AIR-CONTROL SERVOMOTORS	
METERING	9955-000-003
NON-METERING	9955-001-003

NOTE:  
THIS VALVE  
SHOWN w/ (-MH)  
METERING, HOT  
SIDE ONLY



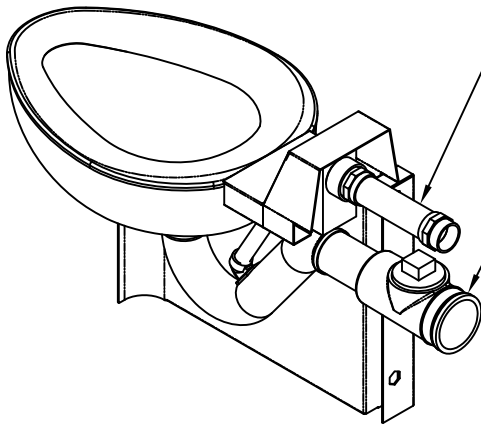
NOTE:  
MAXIMUM RECOMMENDED WORKING WATER PRESSURE IS 100 PSI; TEMPERATURE IS 130° F; OUTLET TEMPERATURE IS RECOMMENDED AT A MAXIMUM OF 105° F.  
WARNING:  
PRIOR TO MAKING INSTALLATION, SUPPLY LINES MUST BE FLUSHED OF ALL FOREIGN MATERIAL SUCH AS PIPE DOPE, CHIPS, SOLDER, ETC. VALVE MUST BE DRAINED PRIOR TO BEING SUBJECTED TO FREEZING TEMPERATURES. MAXIMUM RECOMMENDED OUTLET WATER TEMPERATURE IS 105° F.

**INSTALLATION INSTRUCTIONS:**

- A- PRIOR TO INSTALLATION OF THE FIXTURE, MOUNT PUSHBUTTONS ① AND BUBBLER ② TO THE BACKSPLASH.
- B- INSTALL THE PLUMBING FIXTURE TO THE WALL INCLUDING UPPER SUPPORT PLATE ③.
- C- MOUNT THE AIR-CONTROL VALVE ASSEMBLY ④. LOCATE AS REQUIRED. MAXIMUM ALLOWABLE DISTANCE BETWEEN PUSHBUTTON ① AND AIR-CONTROL SERVOMOTOR ⑤ IS 10 FEET. WALL ANCHORING HARDWARE ARE BY OTHERS.
- D- CONNECT 1/8" O.D. POLYETHYLENE AIR LINES ⑥ TO PUSHBUTTONS ① AND SERVOMOTOR ⑤. HAND TIGHTEN USING FERRULE NUTS PROVIDED. SEE DETAIL A. NOTE: WHEN METERING VALVES ARE SPECIFIED, AIR LINES CONNECT DIRECTLY TO VALVE TIMER ⑦.
- E- CONNECT 1/4" O.D. POLYETHYLENE WATER LINE ⑧ TO BUBBLER ② AND COMPRESSION NUT ⑨. HAND TIGHTEN USING FERRULE NUTS PROVIDED.

- F- AFTER THOROUGHLY FLUSHING THE SUPPLY LINES, MAKE-UP 1/2" NPS FEMALE SUPPLY CONNECTIONS. NOTE: SUPPLY INLET CONNECTION WILL ACCOMODATE 1/2" NPT MALE ADAPTER. THREAD FLEX CONNECTOR HOSE ⑩ TO CHECKSTOPS ⑪ AND TO SUPPLY STUB OUTS.
- G- SEE APPROPRIATE SERVOMOTOR REFERENCE DRAWING FOR DETAILS AND TIMING INSRUCTIONS.

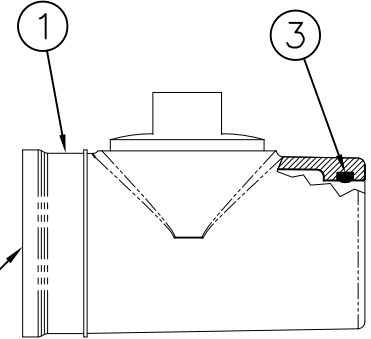
<p>ACORN ENGINEERING COMPANY P.O. BOX 3527 Industry, CA 91744 15125 Proctor Ave Industry, CA 91746 (626) 336-4561 FAX (626) 961-2200</p>	<p>TITLE <b>(04-SERIES) HOT &amp; COLD AIR-CONTROL VALVE ASSEMBLY - NEW STYLE</b></p>		
	<p>MANUFACTURE DATE <b>SEPT 1995 TO PRESENT</b></p>	<p>DATE ISSUED <b>11/1/95</b></p>	<p>DRAWING NUMBER <b>9905-000-003</b></p>
		<p>DATE REVISED <b>07/15/10</b></p>	



Optional -FVT Flush Valve Thru Wall Connection. Shown For Reference.

Optional -CO1 Waste Fitting. Shown For Reference.

REFERENCE DRAWING	
WASTE CONNECTION WITH CLEANOUT -CO1	9985-125-002

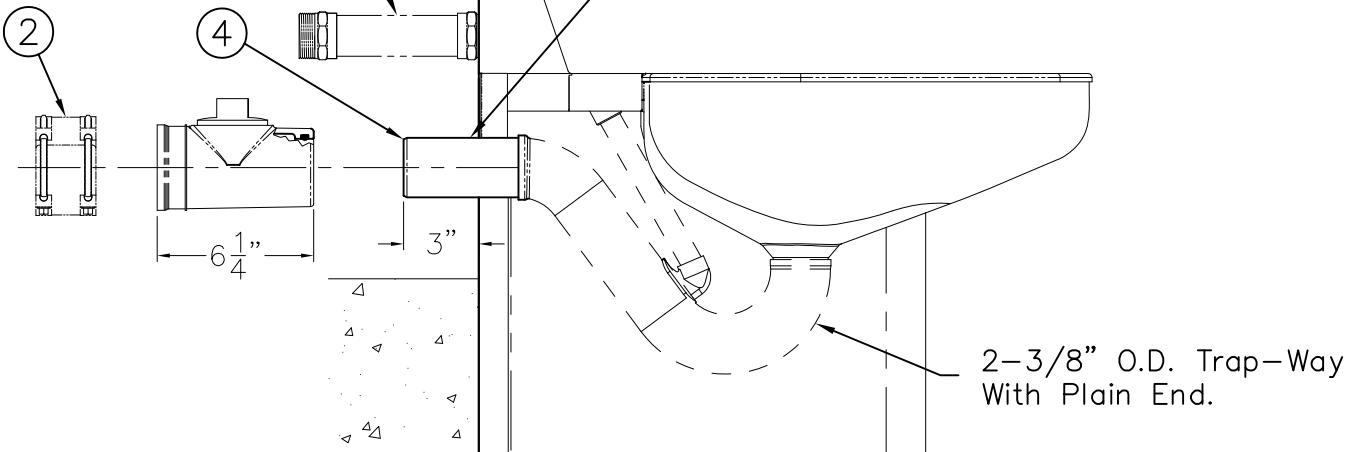


NOTE: Optional -CO1 Waste Fitting Available With 3" or 4" No-Hub

*Scaled: X 2*

Optional -FVT Flush Valve Thru Wall Connection Shown For Reference

Plain End Extends 3" Beyond Back Of Fixture. Optional Extended Waste Is Available -TWE



**MODEL #1685 SHOWN FOR REFERENCE**

**INSTALLATION INSTRUCTIONS**

A-INSERT O-RING ③ INTO GROOVE OF WASTE FITTING ①. LUBRICATE THE O-RING ③ WITH O-RING LUBRICANT.

B-INSTALL WASTE FITTING ① TO FIXTURE P-TRAP WASTE EXTENSION ④. ENGAGEMENT IS APPROXIMATELY 1-1/4". NOTE: TOILET WASTE

EXTENSION ④ IS 3" BEYOND BACK OF FIXTURE. LONGER WASTE EXTENSION IS AVAILABLE.

C-MAKE UP WASTE FITTING CONNECTION TO WASTE PIPING USING NO-HUB (BAND) CONNECTOR ② BY OTHERS.

**ACORN ENGINEERING COMPANY**  
P.O. BOX 3527 INDUSTRY, CA. 91744  
(626) 336-4561 FAX (626) 961-2200

TITLE **NO-HUB WASTE CONNECTION WITH CLEANOUT -CO1**

MANUFACTURE DATE

**JULY 1975**  
**PRESENT**

DATE ISSUED

**1/29/96**

DATE REVISED

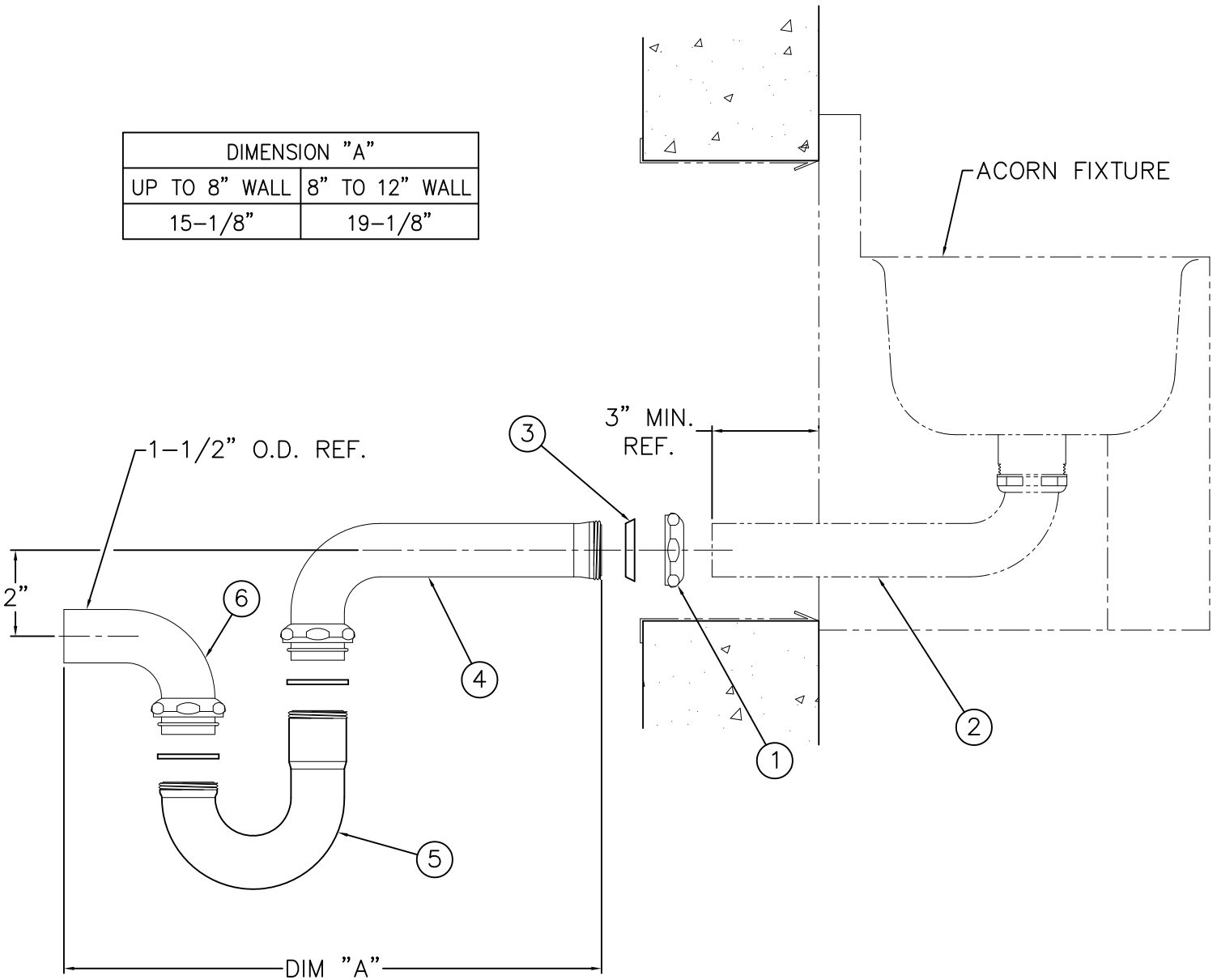
**11/08/13 D**

DRAWING NUMBER

**9925-054-001**



DIMENSION "A"	
UP TO 8" WALL	8" TO 12" WALL
15-1/8"	19-1/8"



**INSTALLATION INSTRUCTIONS:**

A- AFTER INSTALLING ACORN UNIT ON FINISHED WALL, SLIP COMPRESSION NUT ① OVER 1-1/2" O.D. PLAIN END WASTE ②. USING COMPRESSION GASKET ③, AND NUT ① MAKE-UP COMPRESSION CONNECTION WITH SLIP JOINT ELBOW ④.

B- REMOVABLE TUBULAR P-TRAP ⑤ CONNECTS TO SLIP JOINT ELBOW ④ AND PLAIN END ELBOW ⑥ WITH COMPRESSION CONNECTIONS AS SHOWN.

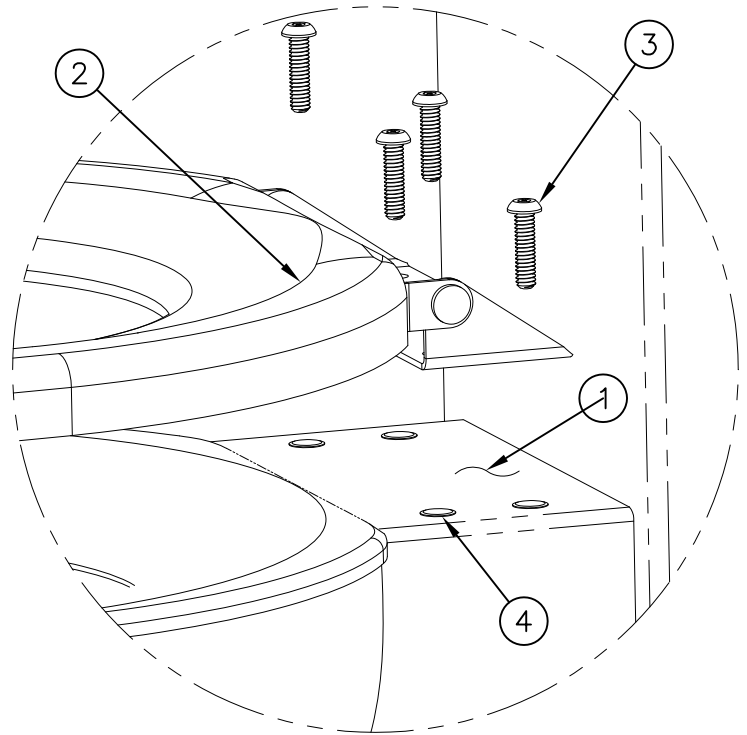
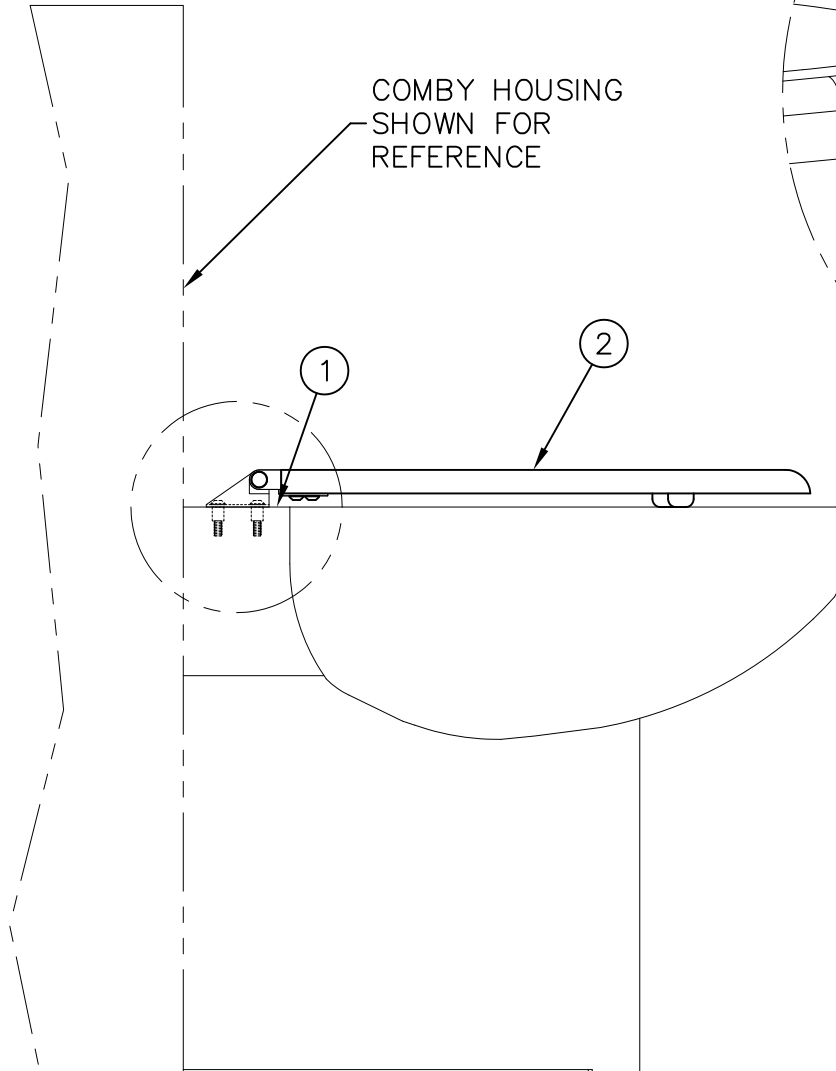
NOTE: TUBULAR P-TRAP IS REMOVABLE IN ORDER TO ALLOW FOR WASTE CLEANOUT.

<p>ACORN ENGINEERING COMPANY P.O. BOX 3527 Industry, CA 91744 15125 Proctor Ave Industry, CA 91746 (626) 336-4561 FAX (626) 961-2200</p>	<p>TITLE <b>LAVATORY THRU-WALL WASTE CONNECTION w/ P-TRAP &amp; CLEANOUT CAT. # -LW1</b></p>		
	<p>MANUFACTURE DATE <b>APRIL 30, 1998</b> <b>TO PRESENT</b></p>	<p>DATE ISSUED <b>3/19/98</b></p>	<p>DRAWING NUMBER <b>9925-065-002</b></p>
		<p>DATE REVISED <b>4/23/98</b></p>	



**REFERENCE DRAWINGS**

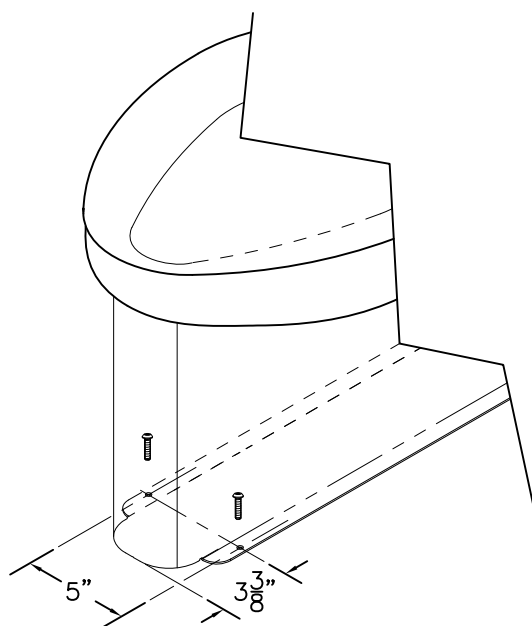
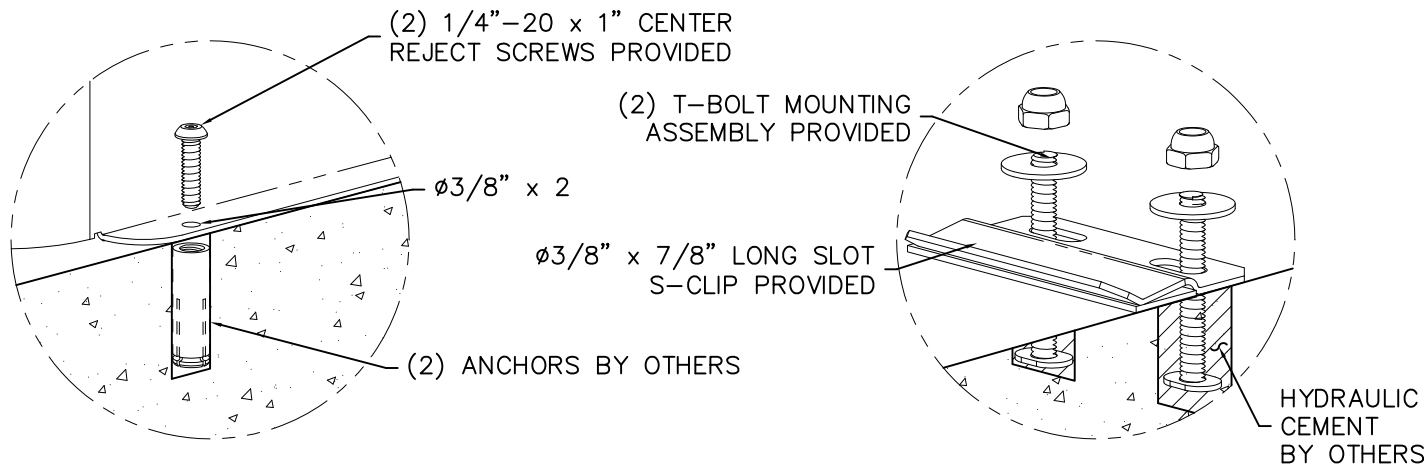
FASTENERS	9951-005-001
DRIVERS & BITS	9951-001-002



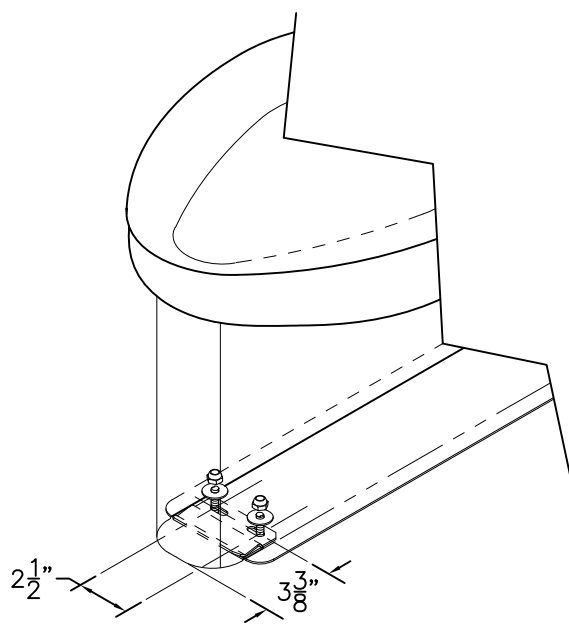
**INSTALLATION INSTRUCTIONS:**

- A- LOCATE HINGED SEAT MOUNTING HOLES ON FIXTURE TENSION MEMBER ①.
- B- POSITION HINGED SEAT ② ON TENSION MEMBER ① AND START SCREWS ③ INTO THREADED INSERTS ④. SEE MOUNTING DETAIL.
- C- TIGHTEN SCREWS ③

<p><b>ACORN ENGINEERING COMPANY</b> P.O. BOX 3527 INDUSTRY, CA. 91744 (626) 336-4561 FAX (626) 961-2200</p>	<p>TITLE <b>-HS HINGED SEAT OPTION INSTALLATION DETAIL - ADA COMBYS</b></p>		
	<p>MANUFACTURE DATE</p> <p><b>FEBRUARY 1999</b></p> <p><b>TO PRESENT</b></p>	<p>DATE ISSUED</p> <p><b>03/15/11</b></p> <hr/> <p>DATE REVISED</p> <p><b>08/13/12</b></p>	<p>DRAWING NUMBER</p> <p><b>9925-266-001</b></p>



**FLANGE MOUNTING**



**S-CLIP MOUNTING**

-SS-SPS SUICIDE RESISTANT SKIRT OPTION IS PROVIDED WITH ADDITIONAL MOUNTING POINTS NOT NORMALLY PROVIDED WITH OUR STANDARD FIXTURES AND COME IN TWO STYLES AS INDICATED BELOW.

**FIXTURES w/ FLANGE MOUNTING:**

- A-AFTER ROUGHING IN AS REQUIRED, PLACE FIXTURE IN POSITION AND USE AS TEMPLATE TO LOCATE AND MARK FLANGE POINTS ON FLOOR.
- B-REMOVE FIXTURE AND INSTALL FLOOR ANCHORS BY OTHERS FOR 3/8" DIAMETER FLANGE PUNCHING.
- C-ALIGN WALL AND FLOOR ANCHORING POINTS AND COMPLETE FIXTURE INSTALLATION AS INDICATED BY THE FIXTURE INSTALLATION SHEET PROVIDED.

**FIXTURES w/ S-CLIP:**

- A-AFTER ROUGHING IN AS REQUIRED, PLACE FIXTURE IN POSITION AND USE AS A TEMPLATE TO LOCATE AND MARK S-CLIP MOUNTING LOCATION ON FLOOR AS INDICATED.
- B-REMOVE FIXTURE, INSTALL T-BOLTS FOR S-CLIP 3/8" x 7/8" LONG MOUNTING SLOTS AND SECURE WITH HYDRAULIC CEMENT (BY OTHERS)
- C-INSTALL S-CLIP
- D-PLACE FIXTURE ON FLOOR POSITIONING THE "NOSE" OF THE SKIRT SEVERAL INCHES IN FRONT OF S-CLIP MOUNTING LOCATION, SLIDE FIXTURE INTO PLACE ENGAGING THE S-CLIP AND ALIGNING WALL MOUNTING LOCATIONS. COMPLETE FIXTURE INSTALLATION AS INDICATED BY THE FIXTURE INSTALLATION SHEET PROVIDED.



ACORN ENGINEERING COMPANY  
P.O. BOX 3527 Industry, CA 91744  
15125 Proctor Ave Industry, CA 91746  
(626) 336-4561 FAX (626) 961-2200

TITLE **-SPS MOUNTING DETAIL**

MANUFACTURE DATE  
**AUGUST 2012**  
**TO PRESENT**

DATE ISSUED  
**08/15/12**  
DATE REVISED  
**11/05/13 A**

DRAWING NUMBER  
**9925-007-001**