

INSTALLATION INSTRUCTIONS:

- A- PRIOR TO INSTALLATION OF THE SHOWER PANEL (1), MOUNT PUSHBUTTON (2) & ESCUTCHEON (3) TO THE PANEL.
- B- HAND TIGHTEN (6) MOUNTING STUDS (4) INTO NUTS (5) ON BACK OF SHOWER PANEL (1). PLACE SHOWER PANEL AGAINST WALL OPENING. FROM CHASE SIDE, MOUNT BACK PLATES (6) ONTO STUDS; ATTACH WITH NUTS AND WASHERS (7). NOTE: DO NOT EXCEED 6.5 FT/LBS MAXIMUM TORQUE ON MOUNTING NUTS (7).
- C- MOUNT AIR-CONTROL VALVE ASSEMBLY (8) AS REQUIRED WITHIN 10 FEET OF THE PUSHBUTTON.
- D- INSTALL RISER TUBING (9). ATTACH TO SHOWER HEAD (10) AND VALVE COMPRESSION FITTING (11) USING FERRULE NUTS PROVIDED. TIGHTEN WATERTIGHT.

- E- CONNECT 1/8" O.D. AIR TUBING (12) FROM PUSHBUTTON (2) TO AIR-CONTROL SERVOMOTOR (13) USING FERRULE NUTS PROVIDED. HAND TIGHTEN. SEE DETAIL "A".
- F- AFTER THOROUGHLY FLUSHING THE SUPPLY LINES, MAKE-UP SUPPLY CONNECTIONS (1/2" NPS FEMALE). THREAD FLEX CONNECTOR HOSE (14) FROM VALVE INLET TO SUPPLY STUBOUTS. (NOTE: SUPPLY INLET CONNECTION WILL ACCOMMODATE 1/2" NPT MALE ADAPTER.)
- G- SEE APPROPRIATE SERVOMOTOR REFERENCE DRAWINGS FOR DETAILS AND TIMING INSTRUCTIONS.

NOTE:

MAXIMUM RECOMMENDED WORKING PRESSURE IS 100 PSI; TEMPERATURE IS 130°F; OUTLET TEMPERATURE IS RECOMMENDED AT A MAXIMUM OF 105°F.

WARNING:

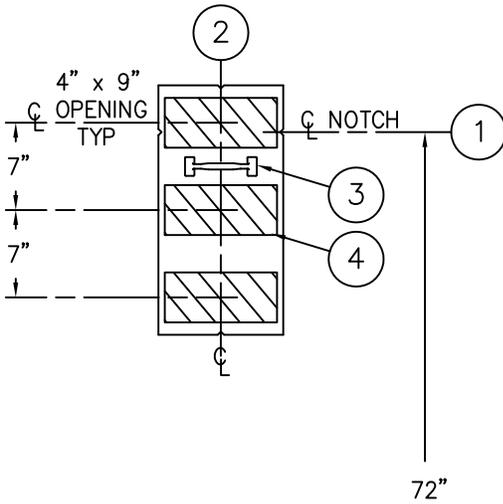
PRIOR TO MAKING INSTALLATION, SUPPLY LINES MUST BE FLUSHED OF ALL FOREIGN MATERIAL SUCH AS PIPE DOPE, CHIPS, ETC. VALVE MUST BE DRAINED PRIOR TO BEING SUBJECTED TO FREEZING TEMPERATURES. MAXIMUM RECOMMENDED OUTLET WATER TEMPERATURE IS 105°F.

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

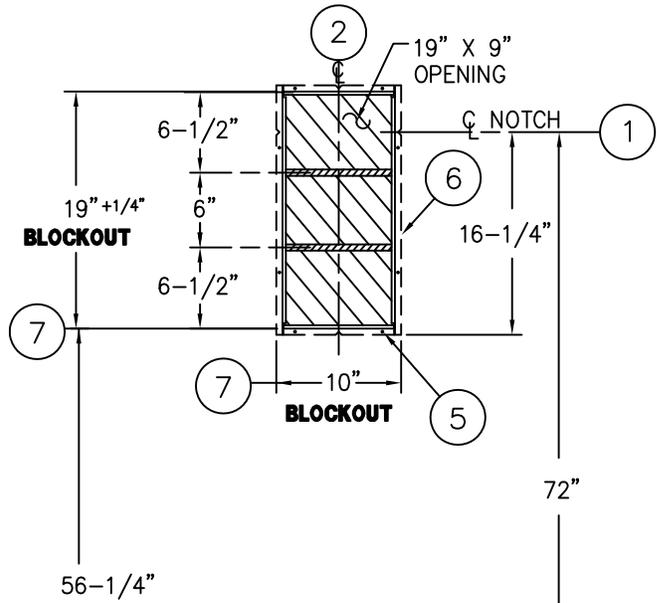
TITLE		
PENAL-PAK WALL SHOWERS w/ AIR-CONTROL VALVE - LR/1741-4 - NEW STYLE		
MANUFACTURE DATE	DATE ISSUED	DRAWING NUMBER
SEPT 1995	11/2/95	9925-103-002
TO PRESENT	DATE REVISED 06/29/17 A	



BOTH VIEWS ARE FROM CELL SIDE
 SHADED AREAS ARE REQUIRED WALL OPENINGS



METAL TEMPLATE (-MT)



WALL SLEEVE (-SW)

INSTALLATION INSTRUCTIONS

METAL TEMPLATES (-MT)

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

- A- STRIKE A HORIZONTAL CHALKLINE ① ON THE WALL 72" ABOVE FINISHED FLOOR. THIS WILL LOCATE CENTERLINE FOR HORIZONTAL NOTCHES ON TEMPLATE.
- B- STRIKE A VERTICAL CHALKLINE ② ON THE WALL TO INDICATE CENTERLINE OF FIXTURE. THIS WILL LOCATE FOR VERTICAL NOTCHES ON TEMPLATE.
- C- USING HANDLE ③ ON TEMPLATE ④, PLACE TEMPLATE AGAINST THE WALL, LOCATING NOTCHES AT CHALKLINES. MARK FOR WALL OPENINGS.

WALL SLEEVES (-SW)

SLEEVES ARE INSTALLED IN FORMS (USING NAIL HOLES ⑤ PROVIDED) OR GROUTED INTO BLOCK WALLS, BECOMING A PERMANENT PART OF THE WALL.

NOTE: FOR POURED WALL CONSTRUCTION, TEMPORARY BRACING SHOULD BE INSTALLED WITHIN SLEEVE 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 ⑥ ON CHASE SIDE OF WALL.
- B- TOP AND BOTTOM NOTCHES TO BE LOCATED AT VERTICAL CENTERLINE ② OF SLEEVE.
- C- SIDE NOTCHES ① TO BE LOCATED AT 72" ABOVE THE FINISHED CELL SIDE FLOOR (SHOWER HEAD DISCHARGE HEIGHT).
- D- WHEN SLEEVES ARE NOT AVAILABLE USE BLOCKOUT DIMENSIONS SHOWN ⑦.

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

TITLE

SLEEVES AND TEMPLATES (LR/1741-2 & LR/1741-4) H & C

MANUFACTURE DATE

**DEC 1981
 TO PRESENT**

DATE ISSUED

3-1-90

DATE REVISED

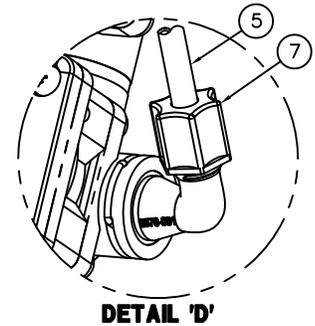
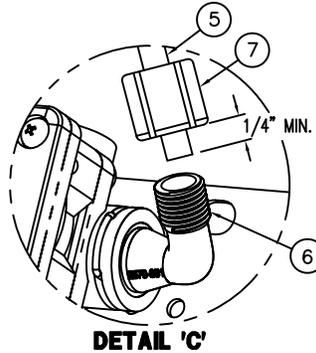
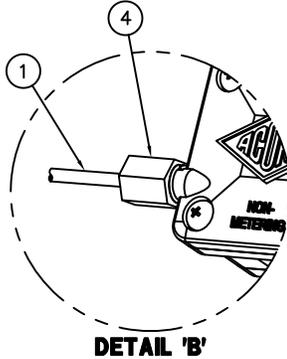
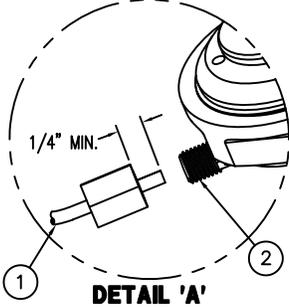
06/29/17 C

DRAWING NUMBER

9925-263-001

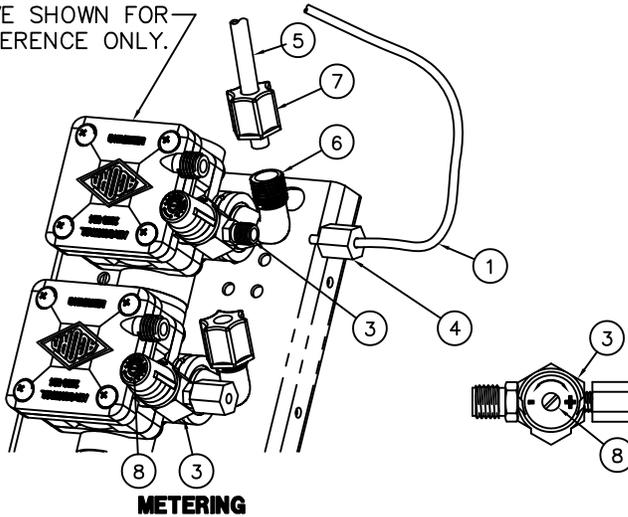


SIDE OUTLET SHOWN



NOTE: PENAL-WARE & ECO-RAIN SHOWER FIXTURES USE 1/4" O.D. RISER TUBING WHILE OTHER SHOWER-WARE FIXTURES USE 3/8" O.D. TUBING.

AIR-CONTROL O3M-MA2 VALVE SHOWN FOR REFERENCE ONLY.



METERING

TIMING IS ADJUSTABLE FROM 5 TO 60 SECONDS AND IS ACCOMPLISHED BY ROTATING TIMING SCREW (8). TURNING THE TIMING SCREW CLOCKWISE INCREASES METERING TIME WHILE TURNING THE SCREW COUNTERCLOCKWISE DECREASES METERING TIME.

REFERENCE DRAWINGS	
REPAIR PARTS	DRAWING
VALVE BODY	9955-006-003
CHECKSTOP	9956-040-003
PUSHBUTTON/ESCUTCHEON	9957-300-001
METERING SERVOMOTOR	9955-000-003

NOTE:
 1. ALL TUBING SHOULD BE CUT SQUARE AND BE FREE OF BURRS OR DEFORMITIES TO ENSURE A WATER TIGHT CONNECTION.
 2. EXTEND TUBING AT LEAST 1/4" BEYOND FERRULE NUT AND INSERT TUBING INTO CONNECTION OPENING BEFORE TIGHTENING.
 3. TUBING SHOULD BE FREE OF KINKS TO ENSURE PROPER OPERATION.
 4. 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- MOUNT FIXTURE IN ACCORDANCE TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.

B- ASSEMBLE PUSHBUTTONS AND OR SHOWER NOZZLES TO FIXTURE IF REQUIRED.

C- CONNECT 1/8" O.D. POLYETHYLENE AIR LINE (1) TO PUSHBUTTON (2) AND VALVE TIMER ASSEMBLY (3). SEE DETAILS 'A' & 'B'. HAND TIGHTEN FERRULE NUT (4) PROVIDED.

D- CONNECT SHOWER RISER (5) TO VALVE ASSEMBLY ELBOW (6). SEE DETAIL 'C' AND 'D'. HAND TIGHTEN FERRULE NUT (7) PROVIDED.

E- AFTER THOROUGHLY FLUSHING SUPPLY LINES, MAKE UP CONNECTIONS TO VALVE ASSEMBLY INLET(S) 1/2" NPT OR 1/2" NPS FLEX HOSE AS REQUIRED.

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

TITLE HAND OPERATED, AIR-CONTROL VALVE SHOWER CONNECTIONS		
MANUFACTURE DATE	DATE ISSUED	DRAWING NUMBER
OCTOBER 2010 TO PRESENT	10/28/10	9900-006-003
	DATE REVISED	