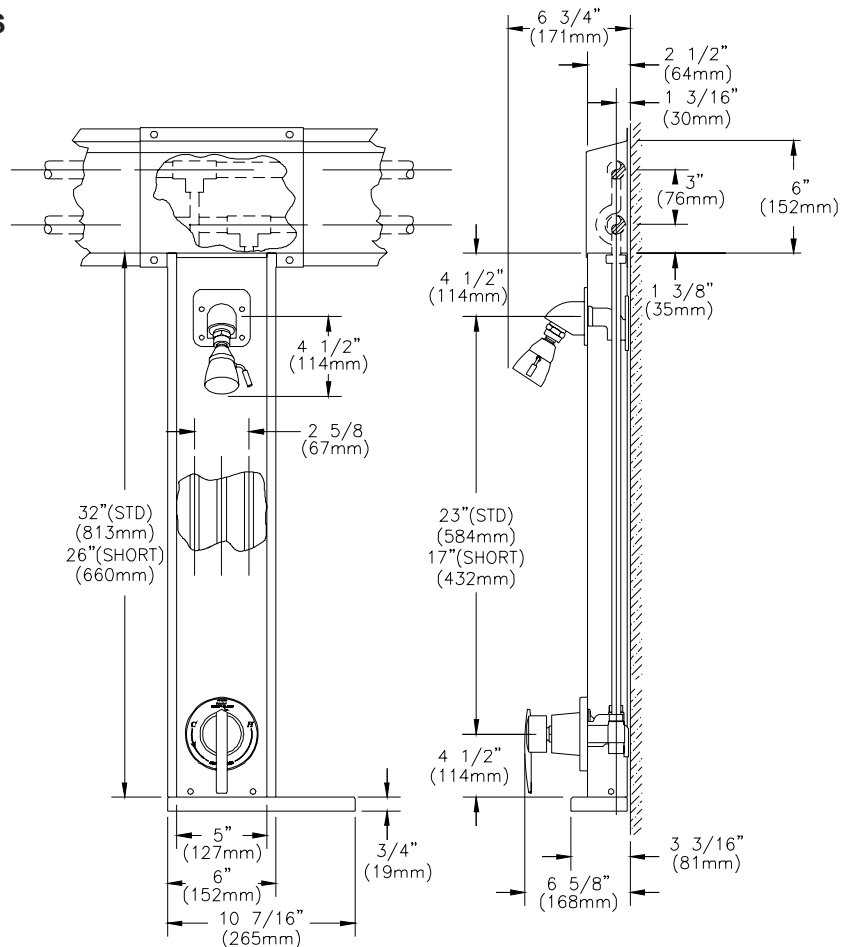


## □ Installation □ Maintenance Instructions

### AQUA-PANEL INSTALLATION INSTRUCTIONS

1. Remove all valve handles and escutcheons from all valves (Metering, Diverter, and/or Pressure Balancing) on Aqua-Panel unit.
2. Remove top two vandal proof screws from the institutional showerhead mount. Leave the bottom two screws attached to the panel. Remove vandal proof screw that fastens valve to panel. Screw is located just above valve body.
3. Lift off panel from valve / piping assembly.
4. Mount valve / piping assembly on wall using the three holes in the top wall bracket and the two holes by the valve body.
5. Remove pressure balancing valve control stem by first backing out adjustment screw until o-ring is fully exposed. Next, open valve counter clockwise to full hot position and unscrew bonnet cap. Control stem and bonnet cap will come out together. Leave packing nut in place. The preceding sequence must be followed to avoid distortion of control stem.
6. If unit has metering valve in place of pressure balancing valve remove handle nut assembly and poppet assembly.
7. Turn service stops, counter clockwise, to fully open position.
8. Solder connections at the hot and cold inlet pipes.
9. Turn water on and flush system of any debris.
10. Turn water off and reinstall pressure balancing valve control stem, or handle nut and poppet assemblies in metering valves.



11. Remove protective coating from panel and reinstall on valve / piping assembly. Gently press tailpiece with o-ring into wall bracket. Reattach the top two vandal proof screws into the wall bracket. Reattach lower vandal proof screw just above valve body.
12. Turn water on, and use adjustment screw to limit maximum water temperature on pressure balancing valve as described in box below. To adjust metering valve see supplemental instructions.
13. Reinstall all escutcheons and handles. Attach handwall unit if applicable.
14. If thru-ceiling extension pipe covers are being used, remove top end cap and use internal bracket (7500-17B) to attach panel to extension. Use external bracket (7500-17A) to fasten extension to wall near the ceiling.

#### Installation Notes for Options:

- CR-**Unit is attached to wall using brackets provided.
- FL-**Removal of panel from piping is not necessary, connect supplies using flexible hoses provided.
- TS-**Removal of tub Spout is required
- W2, W3-**Removal of panel from piping is not necessary. Remove top end cap to access top mounting slots.

The ZURN AQUA-PANEL Pressure Balancing Shower Valve is equipped with an adjustable limit stop screw. The limit stop device is to be used to limit the valve handle from being turned to undesired hot water discharge temperatures. To adjust the limit stop screw, remove handle and escutcheon, turn valve to maximum desired temperature and turn the limit stop screw until it seats.

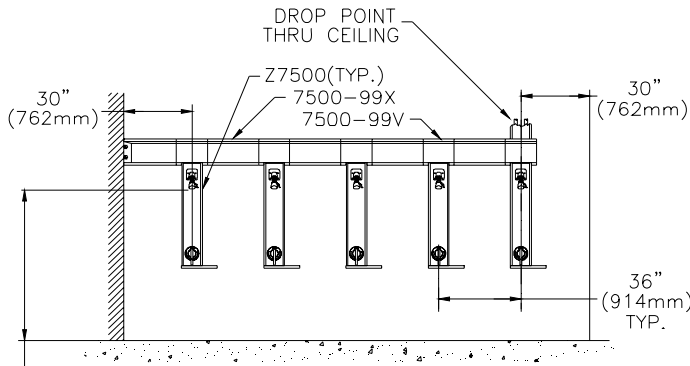
**IMPORTANT:** Failure to adjust the limit stop screw properly increases the chances for serious injury.

**WARNING:** This shower system may not protect the user from scalding when there is a failure of other temperature controlling devices elsewhere in the plumbing system.

**Proposition 65 Warning** This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

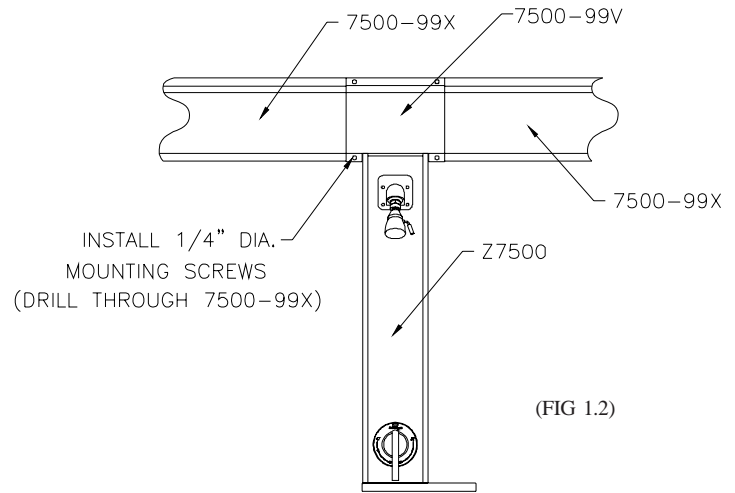
## TYPICAL SHOWER RUN

(FIG 1.1)



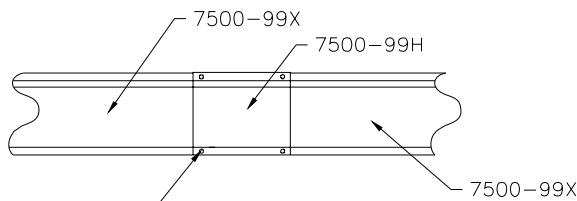
5'-6" (1676mm) WOMEN  
6'-0" (1829mm) MEN  
OR PER APPLICATION

## TYPICAL SHOWER RUN



(FIG 1.2)

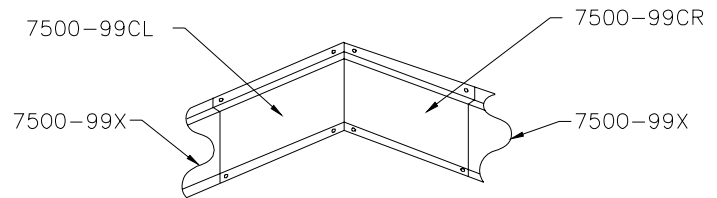
## HORIZONTAL RUN



(FIG 1.3)

INSTALL 1/4" DIA.  
MOUNTING SCREWS  
(DRILL THROUGH 7500-99X)

## 7500-99C TYPICAL CORNER DETAIL



(FIG 1.4)

## HORIZONTAL PIPE COVER INSTALLATION INSTRUCTIONS:

1. After the piping runs have been installed and completed, reinstall the Aqua-Panel units as shown on page 1.
2. Install the horizontal shower panel pieces (7500-99X) by starting at the end of the piping run.
3. Lay the 7500-99V vertical chase over the top of the 7500-99X horizontal panels (see FIG 1.2). Note that the goal here is to create a junction between the vertical panel and the horizontal panel. Each horizontal panel comes complete with pre-drilled holes to allow the 7500-99X to be mounted on the wall. Four additional holes will be required to be field drilled at each junction. Once the horizontal and vertical panels have been installed allowing for an equal sized gap on each side of the horizontal panel (7500-99X), the vertical chase (7500-99V) can be installed down on top of the 7500-99X. Use the 7500-99V as a drill template and drill four 1/4" holes thru the 7500-99X to complete the panel junction.
4. Snap a chalk line from the bottom edge of the Installed horizontal panel; making sure that this reference line is parallel to the horizontal pipe run.
5. Repeat steps 2 and 3 until all horizontal panels between shower stations are completed.
6. When a horizontal run is encountered where no valve exists, use the horizontal cover (7500-99H) to hide the gap between the horizontal panels. Center the horizontal cover (7500-99H) over top of the horizontal panels. Use the holes provided in the cover as a template and drill four 1/4" holes through the horizontal panels (7500-99X) at each intersection (see FIG. 1.3).
7. When a corner is encountered, place the corner chases (7500-99CL and 7500-99CR) over top of the horizontal panels and drill through holes provided with 1/4" drill bit (see FIG 1.4).



# MAINTENANCE & TROUBLE SHOOTING

PROBLEM	CAUSE	SOLUTION
Valve will not pass water.	Hot and cold water not turned on. Service Stops not open.	Be sure both supplies are turned on and service stops are open. Valve will not operate unless both HOT and COLD water pressure open to valve.
Valve leaks when shut-off.	Hot and cold water washers are worn, or foreign matter (solder, chips, etc.) are between washers and seat surfaces.	Replace Hot and Cold washers and inspect top surface on hot and cold seats for damage.
Water volume from valve is inconsistent during operation.	Pressure balancing piston housed in control spindle assembly is blocked from free movement by foreign matter.	With valve open half way, remove temperature handle and tap spindle with plastic hammer. If problem is not solved, remove spindle assembly completely and tap handle end against a solid object to free piston. Rinse out control spindle assembly. Soaking in household vinegar will help free foreign matter build-up.
Valve delivers an insufficient quantity of Hot or Cold water.		
Temperatures fluctuates without moving temperatures handle.		
Temperatures out of valve reduces gradually during use.	Supply system is running out of hot water.	Reduce maximum flow rate out of valve or shower head. This will allow longer period of use before reduction of hot water supply.

## OPERATION

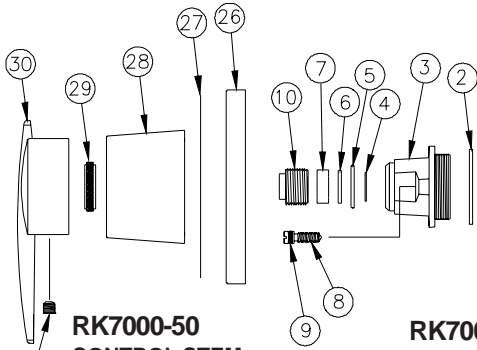
The principal handle of the TEMP-GARD pressure balancing valve is for temperature control only. To turn the valve on, the handle is turned counter-clockwise through the cold position, thru the warm position, and then to the hot position. The maximum turn of the valve is approximately one revolution. This large adjustment allows for a wide range of temperature settings to suit the requirements of the user.

## MAINTENANCE

- SHUT OFF WATER TO VALVE USING SERVICE STOPS ON VALVE
- REMOVE COVER TRIM AND PANEL COVER AS DESCRIBED IN INSTALLATION INSTRUCTIONS STEPS 1 AND 2
- Caution Important:** Before removing main cap follow this sequence to avoid distortion of stem. Back out adjustment screw Item (#9) until O-ring is fully exposed. Open valve to full hot and unscrew cap (#3). Control spindle will be removed with cap. Leave packing nut (#10) in place when removing cap to avoid distortion of control stem.
- STANDARD SERVICE: TO ELIMINATE DRIPPING OR NON-POSITIVE OFF
  - Normally requires only the replacement of parts supplied in control stem washer replacement kit (RK7500-200).

- Hold spindle with temperature handle (Z7000-LH) to remove the hot washer retaining screw and the cold washer retaining ring (Channel locks or equivalent can be used to remove cold washer retaining ring). **Note:** Be sure to inspect seats, seat o-ring and control stem for wear.
- EXTENDED SERVICE: WHEN WEAR ON SEATS, SEAT O-RING OR CONTROL STEM IS IDENTIFIED
    - Seat replacement
      - Requires seat replacement kit (RK7000-180) and a set of seat tools (RK7000-18TOOLS). **Note:** Make a positive engagement of tool into seats while removing and reassembling.
    - Control stem assembly service and replacement
      - The end of the control stem going into the valve is the most critical part of the valve. This end houses the stainless steel control piston.
      - If the piston is obstructed or blocked, try to free it by tapping the handle end against a firm object; such as a stiff rubber handle or sole of a shoe. If piston comes free, shake it and feel for resistance. The piston should move freely in control stem and should "click" when assembly is shaken.
      - If piston does not become unobstructed or any damage is noted, replace with the control stem assembly (RK7000-50). **CAUTION:** Do not tamper with the control spindle or attempt to remove the piston.
  - REASSEMBLE THE ZURN TEMP-GARD VALVE
    - Reversing above procedure - be sure that the spindle assembly is drawn close to the cap before screwing cap back into valve.

## PRESSURE BALANCING SHOWER VALVE

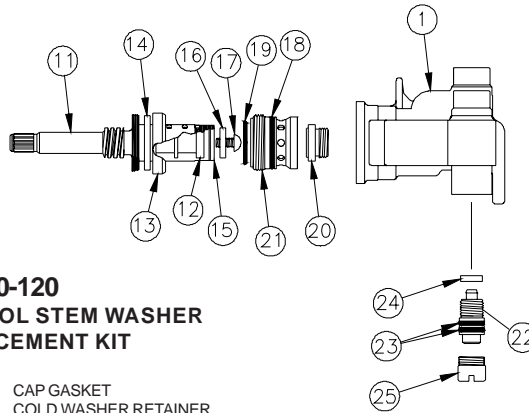


### RK7000-50 CONTROL STEM REPLACEMENT KIT

ITEM NO.	DESCRIPTION
2	CAP GASKET
11	CONTROL STEM
12	CONTROL PISTON
13	COLD WASHER RETAINER
14	COLD WASHER
15	CONTROL PISTON PLUNGER
16	HOT WASHER
17	WASHER RETAINING SCREW

### RK7000-120 CONTROL STEM WASHER REPLACEMENT KIT

ITEM NO.	DESCRIPTION
2	CAP GASKET
13	COLD WASHER RETAINER
14	COLD WASHER
16	HOT WASHER
17	WASHER RETAINING SCREW



### RK7500-50A SERVICE STOP REPLACEMENT KIT (2) PER

ITEM NO.	DESCRIPTION
22	VALVE STOP
23	STOP O-RING
24	STOP GASKET

### RK7000-100 PACKING REPLACEMENT KIT

ITEM NO.	DESCRIPTION
2	CAP GASKET
4	O-RING WASHER
5	O-RING
6	PACKING WASHER
7	GRAPHITE PACKING

### RK7000-180 SEAT REPLACEMENT KIT

ITEM NO.	DESCRIPTION
18	COLD SEAT O-RING
19	INT. COLD SEAT O-RING
20	HOT WATER SEAT
21	COLD WATER SEAT

### RK7000-110 ADJUSTMENT SCREW REPLACEMENT KIT

ITEM NO.	DESCRIPTION
8	ADJUSTMENT SCREW
9	O-RING

### RK7000-18TOOLS SEAT REPLACEMENT KIT

ITEM NO.	DESCRIPTION
	COLD SEAT TOOL
	HOT SEAT TOOL

### RK7500-200 BONNET NUT REPLACEMENT KIT

ITEM NO.	DESCRIPTION
2	CAP GASKET
3	BONNET
4	O-RING WASHER
5	O-RING
6	PACKING WASHER
7	GRAPHITE PACKING
8	ADJUSTMENT SCREW
9	ADJUSTMENT SCREW O-RING
10	PACKING NUT

### PARTS:

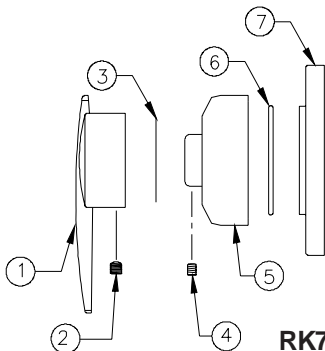
1	BODY
2	CAP GASKET
3	BONNET
4	O-RING WASHER
5	STEM O-RING
6	PACKING WASHER
7	GRAPHITE PACKING
8	ADJUSTMENT SCREW
9	ADJUSTMENT SCREW O-RING
10	PACKING NUT
11	CONTROL STEM
12	CONTROL PISTON
13	COLD WATER WASHER RETAINER
14	COLD WATER WASHER
15	CONTROL STEM PLUNGER
16	HOT WATER WASHER
17	WASHER RETAINING SCREW
18	COLD SEAT O-RING
19	INTERNAL COLD SEAT O-RING
20	HOT WATER SEAT
21	COLD WATER SEAT
22	SERVICE STOP STEM
23	SERVICE STOP O-RING
24	STOP GASKET
25	STOP RETAINER(7000-3D)
26	DIAL PLATE ESCUTCHEON(7500-81H)
27	DIAL PLATE TAG(T7500)
28	PRIMARY ESCUTCHEON(7500-81)
29	ESCUTCHEON NUT(7500-9)
30	LEVER HANDLE
31	LEVER HANDLE SET SCREW(7000-11G)

### Z7000-LH

#### LEVER HANDLE REPLACEMENT KIT

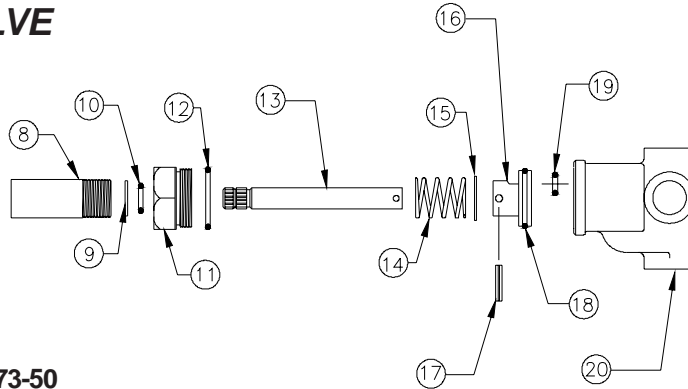
ITEM NO.	DESCRIPTION
30	LEVER HANDLE
31	LEVER HANDLE SET SCREW

## DIVERTER VALVE



### RK7073-50 STEM REPLACEMENT KIT

ITEM NO.	DESCRIPTION
13	VALVE STEM
16	PLUNGER
17	SPLIT PIN
18	O-RING
19	O-RING



### Z7000-LH

#### LEVER HANDLE REPLACEMENT KIT

ITEM NO.	DESCRIPTION
1	LEVER HANDLE
2	LEVER HANDLE SET SCREW

### PARTS:

1	LEVER HANDLE
2	LEVER HANDLE SET SCREW(7000-11G)
3	ESCUTCHEON TAG(T7073-2P)
4	ESCUTCHEON SET SCREW(7073-11)
5	DIVERTER VALVE ESCUTCHEON(7073-81)
6	O-RING(138N)
7	SECONDARY ESCUTCHEON(7500-81MH)
8	SLEEVE(7073-2)
9	WASHER(7073-14)
10	O-RING(111N)
11	MAIN CAP(7073-3)
12	O-RING(122N)
13	VALVE STEM
14	SPRING(7073-33)
15	FRICTION RING(7073-80)
16	PLUNGER
17	SPLIT PIN
18	O-RING
19	O-RING
20	DIVERTER VALVE BODY

Proper performance is dependent upon licensed, qualified personnel performing regular, periodic testing according to ZURN specifications and prevailing governmental & industry standards and codes and upon following these installation instructions. Failure to do so releases ZURN of any liability that it might otherwise have with respect to that device. Such failure could also result in an improperly functioning device.

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