

**HydroPanel® // Shower System  
with Biltmore 900 Pressure Balancing Valve****Product Specification****Description ■**

The Powers HydroPanel® // Series 450-4000 Shower System combines pressure balanced water control with the convenience of modular shrouding. HydroPanel® // stainless steel shrouding provides a concealed shower system where in-wall piping does not exist or may not be practical. The single unit shower mounts easily onto preassembled copper tubing with just three screws.

Behind the shroud, a Biltmore 900 valve uses a proven poppet/diaphragm cartridge to balance hot and cold water supply flows. This sensitive diaphragm responds immediately to supply pressure changes to maintain the user adjusted bathing temperature. If either supply pressure fails, the valve virtually shuts off.

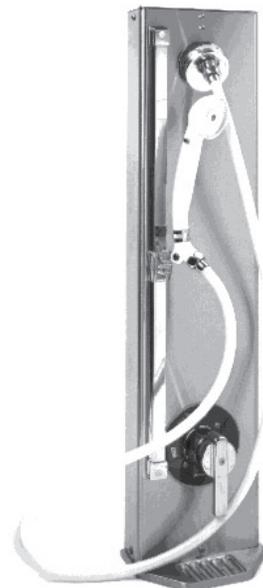
The HydroPanel® // units can be used for new or retrofit applications, such as single showers or for complete shower rooms. They are ideal in schools, factories, and remodeled buildings. Optional hand-held showers mounted on vertical glide rails provide easy shower access for users with limited mobility. Optional HydroPanel® // Modular Shrouding provides easy to install, interlocking stainless steel panels to conceal all exposed piping.

**Features ■**

- Installation requires minimal hardware: mount the brackets, connect supply piping and hang shrouding.
- All exposed surfaces are easy to clean stainless steel or chrome plated.
- The Celcon® balancing cartridge provides maximum protection against lime and dirt build up.
- Fixed (vandal resistant) and swivel showerheads are available.
- Single handle control and color coded dial offer quick and easy temperature selection.
- Optional hand-held showers with flexible hoses mount on 24" glide rails for use in special applications.
- Optional HydroPanel® // Modular Shrouding offers convenient configuration of horizontal and vertical panels to cover all exposed shower room piping. See ES-P-450SH for details on HydroPanel® // Modular Shrouding.
- Biltmore 900 valves are CSA certified, and meet the requirements of ANSI 112.18M and ASSE 1016 standards.
- All HydroPanel® // units with Biltmore 900 valves include a two year limited warranty.



HydroPanel® //  
Model 450-4002  
with Swivel Showerhead  
and Soap Dish



HydroPanel® //  
Model 450-4004  
with Hand Shower  
Assembly and Soap Dish

**Specifications ■**

**HydroPanel® //:** Brushed 18 Gauge 304 SS.  
Dimensions 31 1/8"H x 7 1/2"W x 6"D  
(791mm H x 191mm W x 154mm D).

**Piping:** 1/2"(15mm) copper tubing.

**Showerhead:** Fixed: Chrome plated brass, maximum flow 2.5 gpm @ 80psi (.16 l/s @ 552 kPa). Adjustable Swivel: Chrome plated brass, 30° angle of rotation, maximum flow 2.5 gpm @ 80psi (.16 l/s @ 552 kPa).

**Valve Assembly:** Biltmore 900 Pressure Balancing Valve. Four port (bottom outlet plugged), cast brass body with chrome plated zinc lever handle. 1/2" (15mm) sweat inlet/outlet connections. Standard integral checkstops. Standard handle rotation stop.

**Valve Operation:** 4.0 gpm @ 45psi differential (.25 l/s @ 310 kPa). Maximum pressure (static) 125psi (862 kPa). Maximum inlet temperature 180°F (82°C).

**Hand Shower:** Full spray with pushbutton water control. Minimum flow 2.0 gpm @ 20psi (.13 l/s @ 138 kPa). Maximum flow 2.5 gpm @ 80psi (.16 l/s @ 138 kPa). 1/2" (15mm) chrome finished supply connections. 24" (610mm) chrome finished brass glide bar, self-tensioned for easy height adjustment. Professional model: 60" (1499mm) reinforced vinyl hose. Deluxe Model: 60" (1499mm) metal spiral hose.

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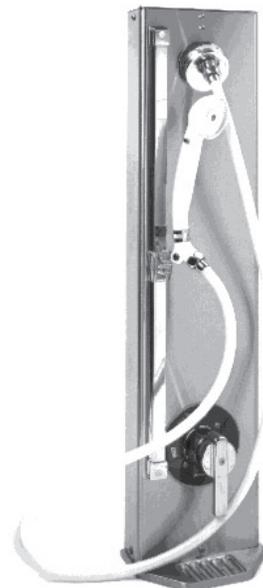
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- Optional HydroPanel® // Modular Shrouding offers convenient configuration of horizontal and vertical panels to cover all exposed shower room piping. See ES-P-450SH for details on HydroPanel® // Modular Shrouding.
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- All HydroPanel® // units with Biltmore 900 valves include a two year limited warranty.

HydroPanel® //  
Model 450-4002  
with Swivel Showerhead  
and Soap Dish



HydroPanel® //  
Model 450-4004  
with Hand Shower  
Assembly and Soap Dish



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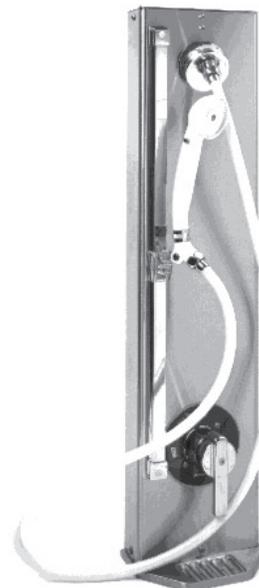
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- The Celcon® balancing cartridge provides maximum protection against lime and dirt build up.
- Fixed (vandal resistant) and swivel showerheads are available.
- Single handle control and color coded dial offer quick and easy temperature selection.
- Optional hand-held showers with flexible hoses mount on 24" glide rails for use in special applications.
- Optional HydroPanel® // Modular Shrouding offers convenient configuration of horizontal and vertical panels to cover all exposed shower room piping. See ES-P-450SH for details on HydroPanel® // Modular Shrouding.
- Biltmore 900 valves are CSA certified, and meet the requirements of ANSI 112.18M and ASSE 1016 standards.
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HydroPanel® //  
Model 450-4002  
with Swivel Showerhead  
and Soap Dish



HydroPanel® //  
Model 450-4004  
with Hand Shower  
Assembly and Soap Dish

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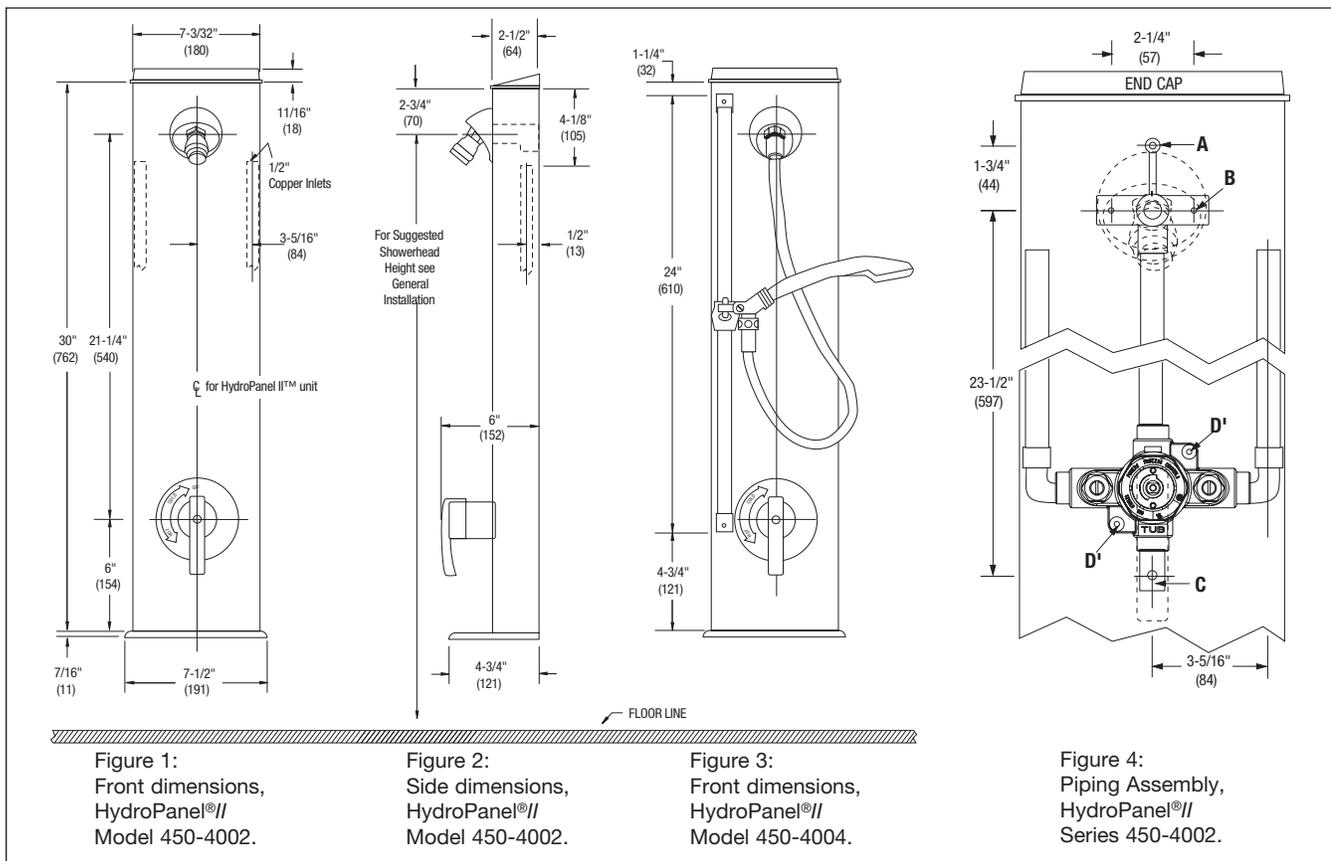
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### General Installation ■

The recommended minimum distance between the centerline of two HydroPanel®// units is 36 inches (914mm). Position units evenly between inlet supply piping.

Suggested showerhead heights (if not shown in architectural plans for shower room) are:

- Men** - 77" (1956mm)
- Youth** - 66" (1676mm)
- Women** - 70" (1778mm)
- Youth** - 60" (1524mm)



### Ordering Information ■

#### HydroPanel®// with Biltmore 900 Pressure Balancing Valve Order Code

- HydroPanel®// with Fixed Showerhead and Soap Dish ..... **450-4000**
- HydroPanel®// with Fixed Showerhead, less Soap Dish ..... **450-4001**
- HydroPanel®// with Swivel Showerhead and Soap Dish ..... **450-4002**
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- HydroPanel®// with Deluxe Hand Shower, Slide Bar, and Soap Dish ..... **450-4006**

ENGINEERING APPROVAL
Project: _____
Contractor: _____
Architect/Engineer: _____

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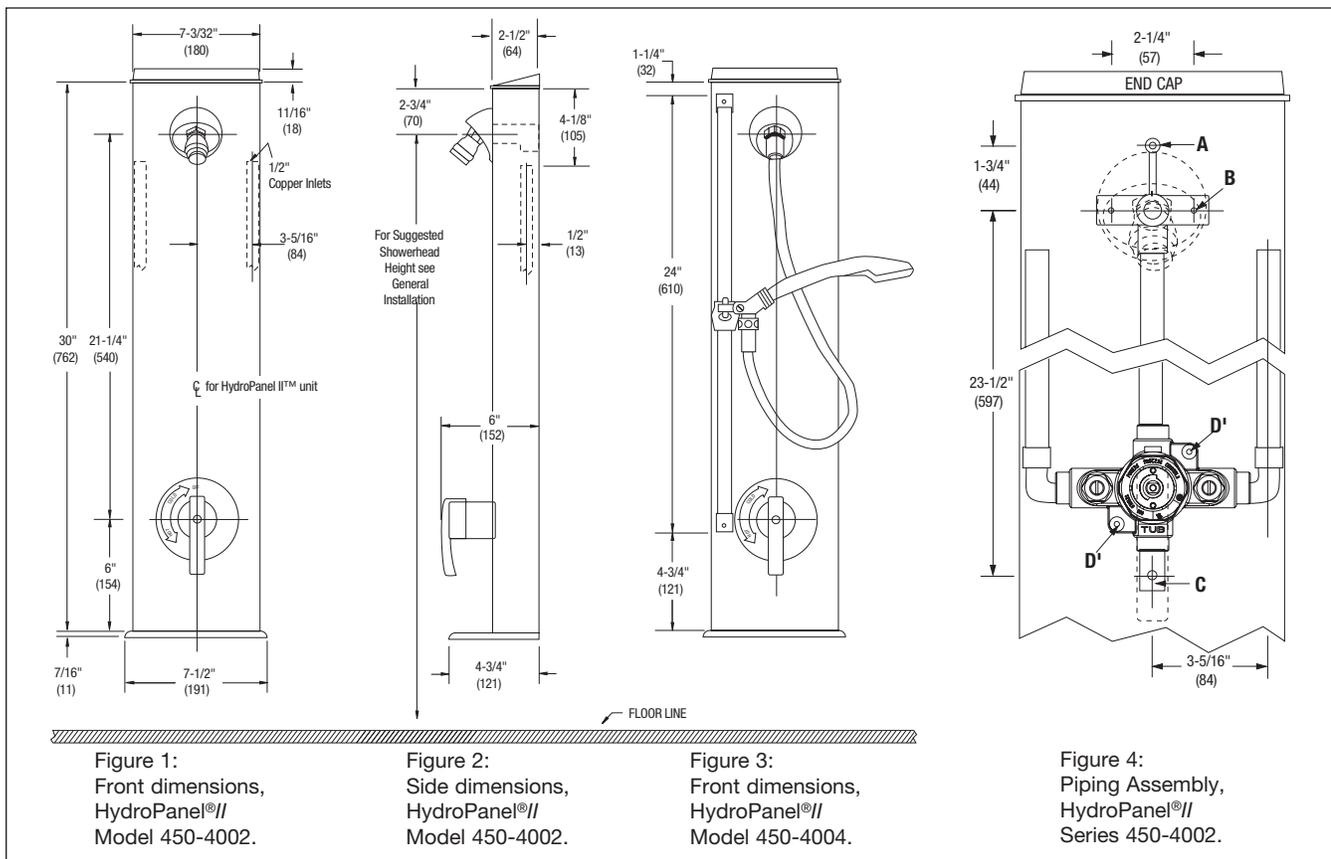
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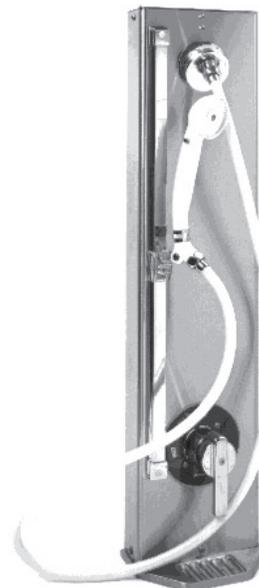
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Model 450-4002  
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HydroPanel®//  
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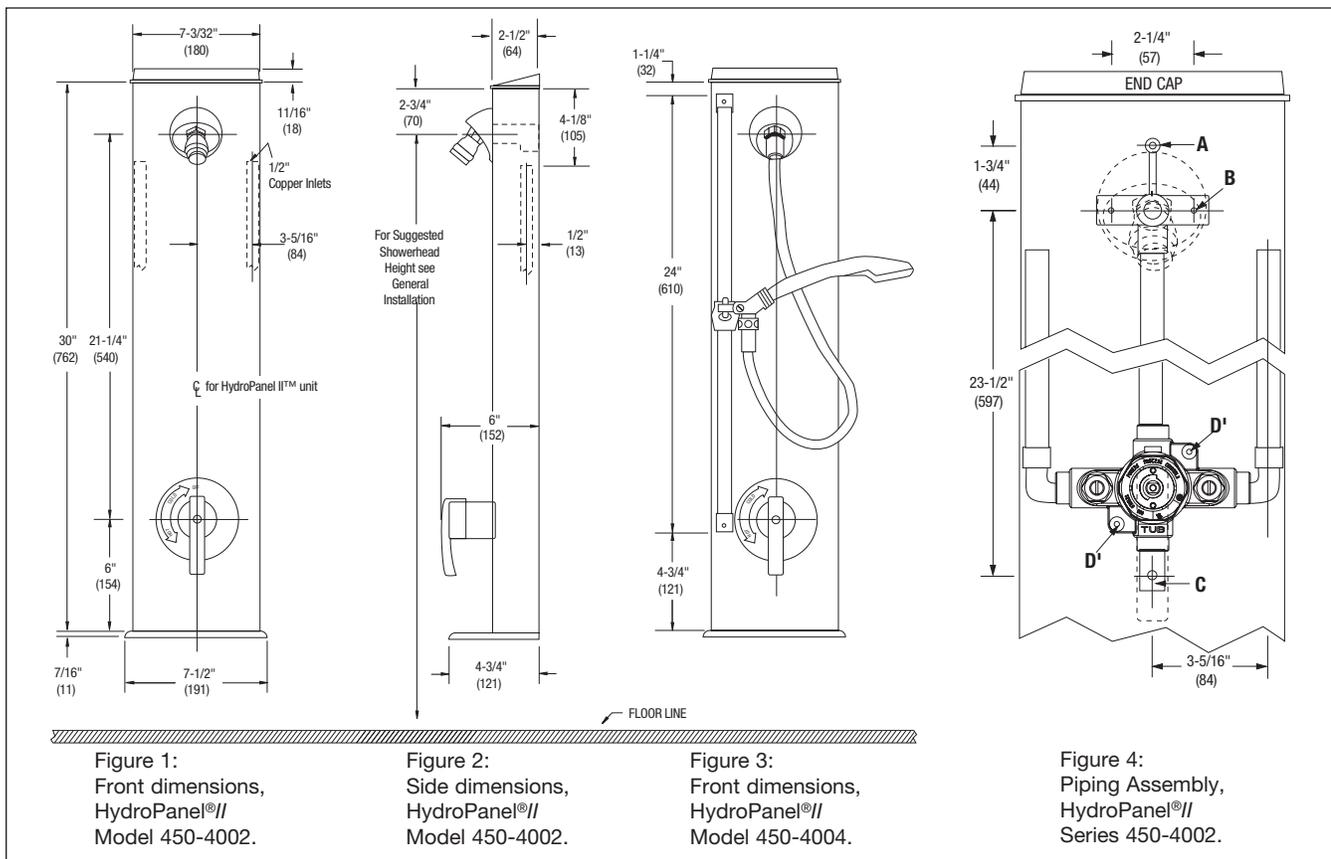


Figure 1:  
Front dimensions,  
HydroPanel®//  
Model 450-4002.

Figure 2:  
Side dimensions,  
HydroPanel®//  
Model 450-4002.

Figure 3:  
Front dimensions,  
HydroPanel®//  
Model 450-4004.

Figure 4:  
Piping Assembly,  
HydroPanel®//  
Series 450-4002.

**Ordering Information ■**

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- HydroPanel®// with Fixed Showerhead and Soap Dish ..... **450-4000**
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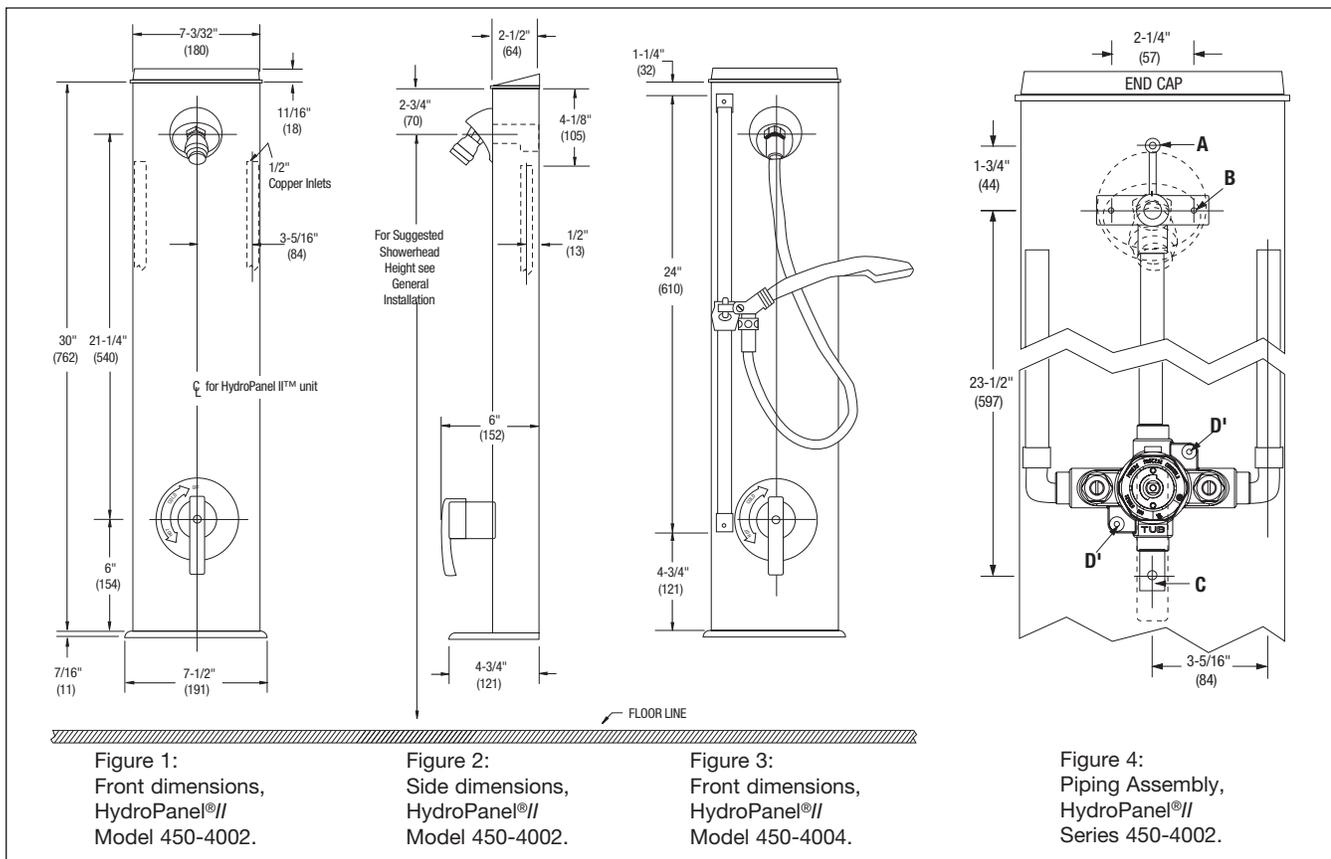
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