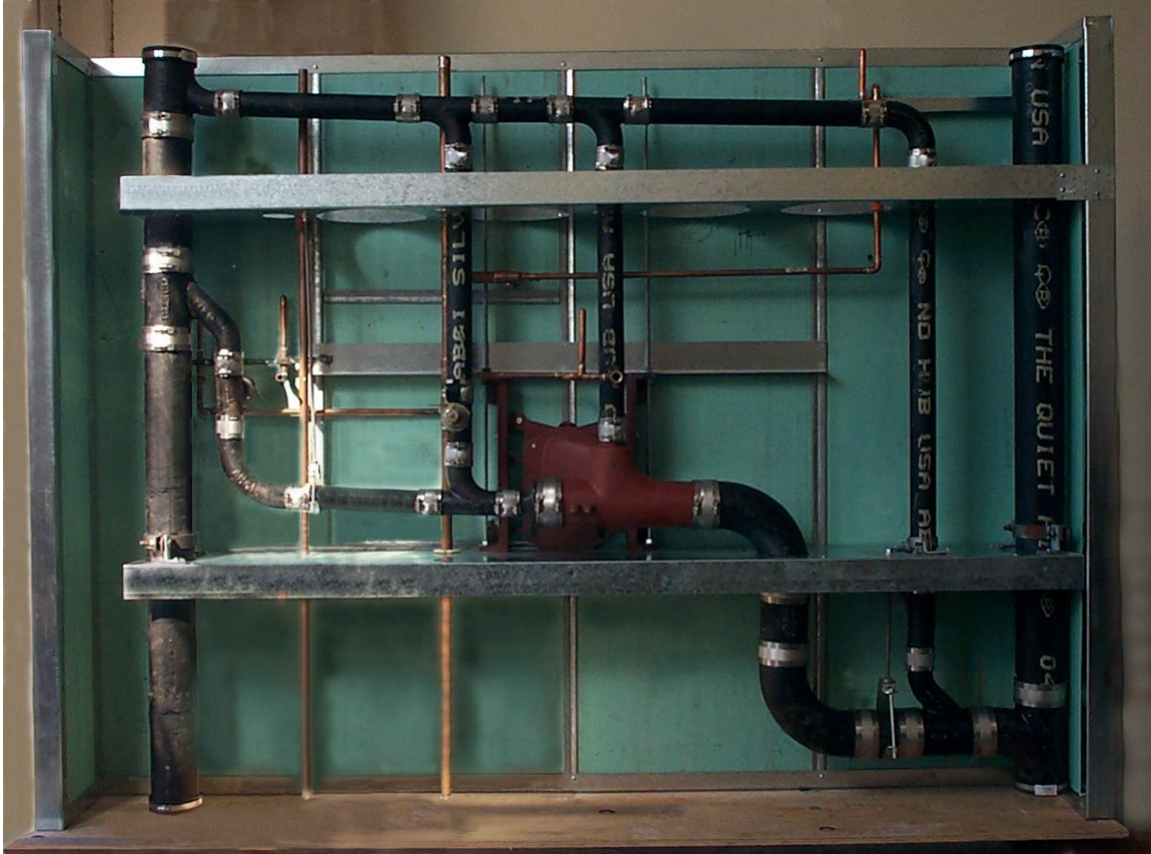


WET WALL[®]

Mechanical Modules

REDUCE CONSTRUCTION TIME WITH A PRE-FABRICATED
BATHROOM AND KITCHEN MODULE FROM WET WALL[®]



Speed

Wet Wall is designed for multi-family construction. Wet Wall modules are delivered to the jobsite, hoisted into location, connected together, and within days, the mechanical systems are ready for testing and inspection!

Simplicity

With all the mechanical components contained in a simple, clean shaft, there are no joists to cut, no beam penetrations with stiffener plates, no soffits, no interference between trades, and no variations from bathroom to bathroom. The Wet Wall modules ship completely tested and pressurized. The modules extend approximately 48" above the floor and descend approximately 20" below the ceiling of the room below. The floor-to-floor height does not alter the Wet Wall module, because the connecting pipes and ducts are field measured and installed.

What's Included

Unlike the plumbing trees often used in multi-unit construction, Wet Wall modules are not just plumbing fittings assembled offsite and attached to Uni-Strut frames. The basic Wet Wall comes complete with the following:

"Wet Wall" and associated drawings © 2006 Malpas and Birmingham Inc.

W E T W A L L ©

Mechanical Modules

1. A pre-fabricated galvanized steel chassis with lifting ring,
2. Tub and mixer rough-in,
3. Wall-hung or floor mount toilet rough-in,
4. Wall-hung lavatory rough-in,
5. Kitchen sink rough-in,
6. Exhaust fan and duct,
7. Shaft wall framing and drywall shaftliner,
8. Fire and sound caulking,
9. Sixteen gauge backing for accessible or adaptable grab bars
10. Backing for other bath accessories as required.

In short, multiple trades and services are organized in one compact, efficient area. The modules are designed to stack. There are waste and vent risers, the hot water and circulation risers, the cold water riser, the bath fan chase riser, and room for additional services as may be required; for example gas, electric, low voltage, and rain water leaders.

Flexibility

Wet Walls are available with single side Bathrooms, back-to-back Bathrooms, Kitchens to Bathrooms, in ADA (Handicapped) or non-ADA orientation, in rights and lefts. In short, almost any plan which addresses vertical organization can be accommodated.

Fire Rating

The basic Wet Wall is non-combustible. It is suitable for Type I construction. It comes complete with the inner shaft wall layer. If there is a danger of weather exposure, this inner layer can be specified as DensGlass® Ultra Shaftliner™. Unlike Type "X" drywall, DensGlass Ultra has glass mat facings which resist the growth of mold. The outer layer is installed on site as part of the drywall installation with one layer of 5/8" drywall for a one-hour shaft, or two layers for a two hour shaft. All shaftwall penetrations are fire-caulked at the factory.

Sound Transfer

Cast iron waste and vent piping and copper water piping is standard. Careful attention to detail ensures that all piping is isolated from the steel chassis with isolation pads. If electrical boxes are required, they are wrapped with sound absorption pads. The mass of the shaftwall system further deadens any sound transmission from within the shaft and from unit to unit through the shaft. Low Sone bath fans are used with 26 gauge ducting to minimize the noise of air movement.

Green Building

The waste and vent piping is made from a high percentage of recycled cast iron. The chassis is made from galvanized steel with a high recycled content. The water piping is made from re-cyclable copper. In most cases, the factories producing the various parts are local, reducing the transportation component of the net embodied energy.

Installation

Precise, stacked openings (by others) are blocked-out in the floors, and openings are left in the roof. Wet Wall modules come with lifting rings for crane handling, skids for forklift or pallet jack handling, and flanges to mount to the floors. In a typical installation, the flanges are first unbolted. The Wet Wall module is then swung up and lowered down through the roof to the correct floor. The module is jockeyed into position with a crane, or with a pallet jack and come-

W E T W A L L ©

Mechanical Modules

along, and the unit is lowered near to position. The flanges are bolted back on, and the unit is lowered to its final resting place and carefully aligned.

Steel Frame/Pan Deck/Concrete Building

If the Wet Wall module is to be installed before the pan deck, the horizontal legs of the flanges are either welded or fastened with self-drillers to the building frame. Brake-formed closure angles are installed, and the Wet Wall modules are poured in with the floors. After the floor is poured, the piping system risers are connected with appropriate test wyes and isolation valves, the fan chase riser is connected, the power is connected, and the modules are inspected.

If the Wet Wall is to sit on top of the pan deck, the horizontal legs of the flanges are fastened with self-drillers to the pan deck. Closure angles are installed at the correct height, and the Wet Wall modules are poured in with the floors.

Post-Tensioned Concrete Building Installation

The Wet Wall flanges sit on top of the plywood floor forms. The chassis is arranged such that the post-tensioning tendons pass through the Wet Wall. The piping is sleeved to cast into the concrete. In this case, the Wet Wall ships with chassis and piping only, no shaftwall framing or drywall shaftliner.

Wood Framed Building Installation

The horizontal legs of the flanges are lagged down through the plywood to the framing. Again, these horizontal legs are hidden in a layer of gypsum underlayment or tile backer. Depending on local codes, and with careful draft-stopping, the rated shaftwall may not be required in wood frame construction. In this case, Wet Walls are delivered with the mechanical services mounted in the chassis only, no shaftwall framing or drywall shaftliner.

Specific Design and Shop Drawings

Each project is slightly different, so the key to making Wet Wall work in a project is for us to get involved EARLY. Often the design only requires minor adjustment to take advantage of the benefits of modular mechanical systems. We review the plans and fixture specifications in detail to make sure economies of scale can be realized. When agreement is reached, we produce detailed shop drawings. The shop drawings are in fact the fabrication drawings and become the controlling drawings on site.

Contact Us

Wet Wall © Mechanical Modules are proprietary products manufactured by:

Malpas and Birmingham Inc.
962 Chula Vista Ave.
Burlingame CA 94010
(415) 760-0194
b.malpas@comcast.net

LET'S GET TOGETHER AND SEE HOW
MANY WEEKS WET WALL © CAN
SAVE ON YOUR NEXT PROJECT.

W E T W A L L ©

Mechanical Modules