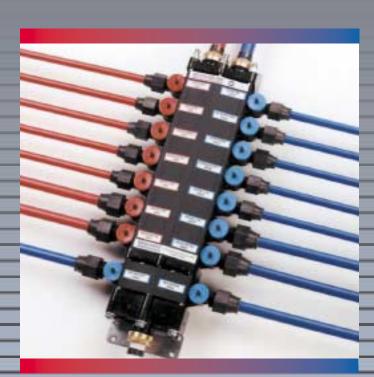


# MANABLOC

MODULAR MANIFOLD PLUMBING SYSTEM



The Vanguard MANABLOC® Home-Run plumbing system provides high-tech convenience you'll enjoy for years!



Your Source For Plumbing Products.

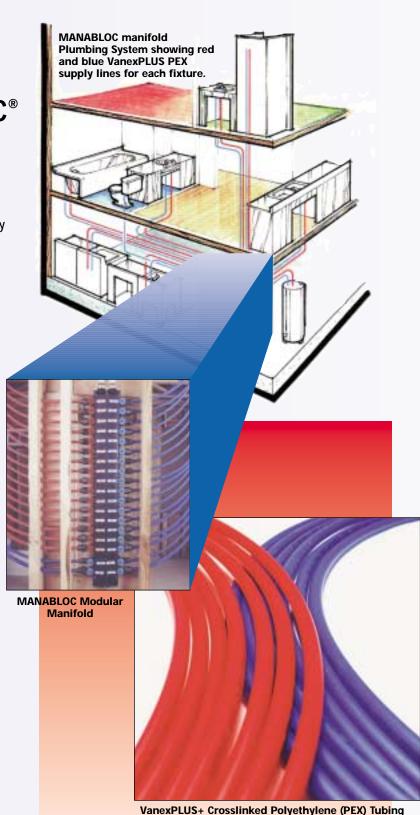
### Vanguard MANABLOC® Manifold Plumbing System concept.

A MANABLOC Home-Run plumbing system is such a simple concept with such extra-ordinary performance: each fixture is fed by its own flexible water distribution line which runs from a central manifold. By providing each fixture with its own distribution line, the system simply out-performs conventional plumbing designs. Appropriately-sized lines can be installed so hot water is delivered more rapidly. Compared to a conventional system of a main distribution line with branches to each fixture, the manifold system performs more efficiently.

## Contractors prefer the MANABLOC system.

Contractors appreciate the installation efficiency of the MANABLOC system. Vanex®PLUS+ PEX color-coded flexible tubing can be run through studwalls and around obstacles without tees or elbows, cutting installation time to a minimum.

Installation times will vary depending on the structure design, but in most instances the MANABLOC system can be installed in a fraction of the time it takes for a conventional plumbing system. With its low noise transmission and high resistance to freeze damage and corrosion, Vanex Series PEX tubing is an ideal material for use in the MANABLOC plumbing system.



### MODULAR MANIFOLD PLUMBING SYSTEM



### The MANABLOC Home-Run system offers homeowners distinct advantages over conventional plumbing systems.

#### **Equalized Water Pressure**

The large diameter (1 1/4") built-in reservoir in the MANABLOC distribution manifold allows you to use several fixtures at the same time without dramatic pressure changes. This means you can run the washer, use the sink and have the shower running simultaneously without noticing any change in water pressure or temperature.

#### **Dedicated Distribution Lines**

Since each side of each fixture is fed by its own dedicated line, the line can be sized at 3/8"\* for fixtures up to a 2.5 GPM demand. Dedicated lines dramatically reduce the possibility of dramatic temperature changes in the shower caused when one or more fixtures (toilet or a sink) are turned on in a conventional plumbing system. The dedicated lines have individual shut-off valves at the Manabloc making maintenance easy and more convenient for the home owner. Water does not have to be cut off from any other fixtures when one is being worked on.

#### **Fast Hot Water Delivery**

When appropriately-sized Vanex tubing is used in a MANABLOC system, the speed of water delivery to the fixture is increased. In addition, since hot water is the only thing flowing through the line dedicated to the "Hot" fixtures, less cool water is purged through the line to get to the hot water supply, saving time, energy and water.

#### **Fewer Fittings**

The MANABLOC system uses Vanex Series PEX tubing which is flexible and can be installed with only a fitting at the MANABLOC and a transition fitting at the fixture. This reduces the number of connections to barely one third of what is in a conventional flexible plumbing system and even further reduces the amount of fittings required in a rigid pipe plumbing system. Fewer fittings reduces the chance for leaks and there are few, if any, connections "hidden" behind walls or ceilings.

\*Use the MANABLOC Tube Size Guide to verify that 3/8 line size is appropriate to the water requirements of the fixture.

# MANABLOC® Modular Manifold Plumbing System

MANIFOLD vs. SERIES Plumbing System 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% Wait Time **SERIES** Energy Loss Water **MANIFOLD** Wasted

An independent study conducted by the Davis Energy Group of Davis, California, has confirmed that a properly-designed manifold plumbing system can help conserve energy, water and save time.

Comparing conventional series piping systems with the parallel piping (manifold) systems, the Davis Group concluded: "Projected reductions in energy use, water use and hot water waiting time suggest significant value in parallel residential hot water distribution systems. These system advantages should become increasingly valuable with growing worldwide emphasis on energy and water conservation."

#### **Design Economy**

Utilizing the MANABLOC Tube Size Guide (or other methods of calculating), the size of the distribution lines can be matched to the fixture demand, service pressure, and required length of each line. This allows only the required size line to be used to supply each fixture and eliminates oversizing associated with conventional methods to accommodate the demand of additional fixtures being fed by the same supply line

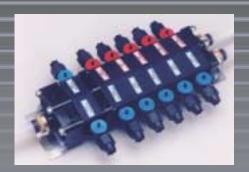
#### **Fast Installation**

The MANABLOC system's flexible Vanex PEX tubing is the key to its installation. The distribution lines can run directly from the MANABLOC manifold, through studwalls, around obstacles and to the fixtures in a single length. Fittings in distribution lines are allowed, but should be used only when necessary. See the MANABLOC Installation Guide for details. Vanguard maintains a complete line of fittings to accommodate the design requirements of any MANABLOC system.

Each MANABLOC manifold comes complete with fittings needed to connect distribution lines to the manifold. Water supply connections are available in a wide range of types and sizes.

### MANABLOC

- Fast hot water delivery.
- Balanced flow so you can turn on several fixtures without robbing water from the shower.
- Most connections are easily accessible, not concealed behind a wall.
- Individual valves for each fixture.
- Extremely quiet water flow.
- Independent distribution lines from the MANABLOC manifold to each fixture for more constant water pressure.
- Only one-third the fittings of conventional plumbing.
- Simple, neat installation that's easy to service if needed.



"High performance water delivery to every outlet."



Vanguard Piping Systems, Inc. 901 N. Vanguard Street McPherson, KS 67460

Continental U.S. **800-775-5039** 

Outside U.S. 316-241-6369

FAX

800-775-4068

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