

REGULAR DUTY (MI-HUB) VS. HEAVY DUTY (MI-XHUB NO HUB COUPLINGS)

MIFAB's Series of MI-HUB and MI-XHUB no hub couplings are designed and engineered to connect cast iron pipe and fittings together. MIFAB's flexible stainless steel shield provides adjustability to the installing contractor when working with cast iron pipe and fittings that are over or undersized to ensure a quality system and labor savings.

MIFAB's MI-HUB Series is a "regular duty" no hub coupling tested and certified to the ASTM # C1277-2009a, ASTM C564, CISPI 310-2010 and CSA B602-2010 Standards and listed with IAPMO. They are also tested by Intertek Testing Services to CAN / ULC S102.2-07 "smoke test".

Storm and Sanitary drainage systems are generally considered to be "low pressure" systems under normal conditions. This changes when a blockage in the line occurs and the resulting build up of water can greatly increase the pressure within the system.

High pressures can also occur in plumbing systems when lower level parking garages and multistory lobbies are built. Often, the design of these structures does not allow for relief in the sanitary systems for four floors or more. The condition known as "Hydraulic Jump" can lead to surges and pressure at any change of direction; especially at the base of the stack. Storm systems have even a greater risk of high line pressure occurrences since they are often not relieved for the total height of the structure.

Underground piping systems have different issues and risks not found above ground. Movement of the earth during back filling and settling of trench beddings is common. In addition, areas of seismic activity, unstable soil conditions caused by thermal effects (expansion and contraction), environments of high corrosion and high groundwater tables can lead to separation of joints without visibility to the installer.

Failure of the piping system due to high line pressures and faulty underground installations can lead to pipes leaking /breaking at their joints. The resulting water leaks can cause damage within the building, affecting equipment, furniture, machinery and the building structure. Plumbing Engineers should consider specifying MIFAB's "heavy duty" no hub couplings to minimize these risks.

MIFAB's MI-XHUB Series is a "heavy duty" no hub coupling tested and certified to the ASTM # C1540-2011, ASTM C564 and CSA B602-2010 Standards and listed with IAPMO. The MI-XHUB Series has also been tested by IAPMO to the FM1680-1989 Standard (except for markings).

The MI-XHUB Series provides a more rigid joint connection than the MI-HUB Series because it has a wider shield and a greater number of stainless steel clamps. These additional clamps, which need to be torqued to 80/100 inch pounds, make a more uniformly rigid joint with the load supported at the outer edges of the coupling and the centerline of the joint. The additional clamps also increase the surface bearing contact between the coupling and the pipe / fittings to reduce joint movement at high internal line pressures. In comparison, the industry's "regular duty" no hub couplings have two fewer clamps and are torqued only to 60 inch pounds.

MIFAB's MI-XHUB Series of heavy duty no hub couplings is the specifier's ideal choice for the most demanding conditions.

REQUIRED USE OF HANGERS AND SUPPORTS

To ensure optimum performance of a no hub cast iron pipe and fittings connected with MIFAB's no hub couplings, please consider the following:

1. UNDERGROUND INSTALLATIONS:

No hub cast iron pipe in trenches should be continuously supported on undisturbed earth, compacted fill or on masonry blocks at each joint connection. The line and grade of the pipe must be correct. Each vertical unsupported branch of pipe must be securely staked in order to maintain stability during backfilling and pouring of concrete. The pipe should be stabilized in the correct position by partial backfilling and cradling to ensure the proper alignment during backfilling. Ensure that large rocks and / or other large objects are not dropped into the trench on top of the piping system.

2. VERTICAL PIPE INSTALLATIONS:

No hub cast iron pipe and fittings installed vertically should be secured with floor clamps at each stack base and at each story height or at intervals close enough to maintain system alignment.

3. HORIZONTAL PIPE INSTALLATIONS:

No hub cast iron pipe and fittings installed horizontally should have pipe hangers installed per the local plumbing code to ensure proper alignment and grade to prevent shear. Horizontal piping should be supported at five foot intervals except that pipe exceeding five feet in length may be supported at ten foot intervals. Hangers should be installed at each horizontal branch connection. Hangers and supports should be installed within 18" of the no hub coupling. The bases of cast iron stacks should be supported on concrete, on brick laid in cement, by metal brackets attached to the building or by local plumbing code approved installations. Large diameter pipe (six inches and larger) should be braced at changes of direction to prevent horizontal movement.

Closet bends, traparms, traps and other branches should be securely supported by a clevis type hanger, strapping or cradled underneath by earth and secured above by a suitable material to provide a firm contact between the pipe and the building in order to prevent movement in any direction and to ensure the stability of the piping system.

Note: All pipe connections should be made and supported in accordance to local plumbing codes.

CALIFORNIA PROPOSITION 65 WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Design and dimensions are subject to modification. Prices do not include applicable taxes. Visit www.mifab.com for the most recent product information.

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All sales subject to MIFAB's® Terms and Warranties. Please refer to inside front cover.

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