
INSTALLATION INSTRUCTIONS – DUCTILE IRON THREADED FITTINGS

Scope:

This instruction sheet is applicable to all ductile iron threaded fittings and includes various steps involved in the installation.

General Description:

Ductile iron is normally stronger than cast iron and has excellent properties of fracture toughness (Ability to resist fracturing), high fatigue strength, vibration dampening, shock & impact loading.

Although they are much lighter than the cast iron the tensile strength (65,000 psi) is much higher than that of cast iron (30,000psi) which makes it less susceptible to cracking.

Threads conform to ANSI/ASME B1.20.1 NPT which is the same as cast iron threaded fittings.

Installation Instruction:

- *Clean the threads of the fitting and pipe of any rust or debris before applying the pipe sealant or tape.*
- *Apply the recommended Teflon tape or high quality sealant as required on the male thread to cover the entire length of the thread.*
- *Hand tighten the fitting onto the pipe with hand till it is “SNUG”.*
- *By holding the pipe firmly secured use a wrench to tighten the fitting further 2-3 turns.*

PLEASE NOTE THAT THE TORQUE PARAMETERS WILL BE DIFFERENT FROM THAT OF CAST OR MALLEABLE IRON FITTINGS AND WILL BE GENERALLY 1 ½ TURNS LESSER WHEN USING A MAKE-ON MACHINE.

- *Upon completion of installation, pressurize the system and inspect for leaks. If a leak is detected, advance the fitting to tighten and retest.*

PLEASE NOTE THAT OVER TIGHTENING THE FITTINGS WILL RESULT IN DAMAGE OF THE THREADS RESULTING IN THE JOINT FAILURE.

Maintenance:

Ductile Iron Fittings do not require any special maintenance and should be maintained as per the local codes and requirements including the current version of NFPA 25 – Standard for the inspection, testing and maintenance of water-based fire protection systems.