



Installation Instructions

Installers who have not used ductile iron fittings before should be aware that these fittings are stronger than the pipe they are used in conjunction with in most cases. Therefore over-tightening the fitting can damage the pipe threads and create leaks. In general ductile iron fittings require about one-half turn less than the equivalent gray cast iron fitting.

(1) Pipe Threads: All pipe threads must be fabricated to ANSI B1.20.1 NPT (or BSPT threads to ISO 7 depending on countries installed).

Improper threads and or depth will affect sealing.

(2) Clean Threads: All threads must be clean and free of rust and debris prior to application joint sealant (tape or paste).

(3) Sealant Application: Apply a moderate amount of high quality sealant (Teflon based pipe paste or Teflon tape is recommended). The sealant should be applied evenly across the full length of the pipe threads.

If using Teflon tape, it should be applied with a minimum of three overlapping wraps along the full length of the threads. Wrap the tape from left to right starting at the beginning of the thread.

(4) Make-On Fitting: Firmly tighten the fitting by hand. With the pipe firmly secured, advance the fitting two to three complete revolutions using a pipe wrench.

If using an automatic make-on machine, please note that the torque parameters for ductile iron fittings will be different from that of gray cast and malleable iron threaded fittings. Use caution when setting these parameters prior to tightening the fittings on to male threads. In general ductile iron fittings require about one-half turn less than the equivalent gray cast iron fitting.

(5) Test and Inspection: Upon completion of installation, pressurize the system and inspect for leaks. If a leak is detected, advance the fitting to tighten and retest and inspect.

Over tightening fittings may result in joint failure.

Do not back-off fittings during or after tightening. If necessary to remedy a leak begin again at step 2 and repeat the steps.

Piping systems must always be depressurized and drained before attempting to disassemble, remove or adjust any piping component.

(6) Care & Maintenance: Ductile iron fittings in most applications do not require and special ongoing maintenance. Always follow generally accepted piping principles when caring for a piping system and ensure the entire system is maintained per all local codes and requirements including the most current version of NFPA Standard 25, entitled Inspection, Testing and Maintenance of a Water Based Fire Protection Systems.