

McWane Ductile Earthquake Resistant Ductile Iron Pipe (SFC) Product Information



For Seismic Events including Liquefaction, Subsidence and Permanent Ground Deformation zones, the McWane Ductile SEISMIC FLEX COUPLING™ (SFC) provides state of the art resilience by significantly increasing joint deflection & axial expansion/contraction ranges above industry averages. The SFC will be utilized with the TR-Flex® restraint joint to provide ERDIP resilience.

- The SFC will provide 10.66" of total Axial expansion/contraction range (+/- 5.33"). This range is Double what American offers and Triple what US Pipe offers.
- McWane Ductile Nominal Pipe Length is 18' providing 11.1% more joint deflection vs 20" pipe.

Pipe Diameter (inches)	Combined Deflection Range	Expansion/Compaction Range from Mid setting
4" - 12"	11.5 ⁰	± 5.33"
14", 16"	8 ⁰	± 5.33"
20"	6.5 ⁰	± 5.33"
24"	6 ⁰	± 5.33"
30"	5 ⁰	± 5.33"
36"	4.5 ⁰	± 5.33"

- The SFC will be shipped fully assembled (in the collapsed position). The coupling can be easily extended into the mid or fully extended position in the field to fit application requirements.
- The SFC & TR-Flex® Ductile iron pipe will be manufactured in the USA in accordance with ANSI/AWWA C-151/A21.51 and C153/A21.53 (latest revisions) meeting the requirements for AIS or Buy American projects.
- McWane's SFC and TR-Flex joint have been fully tested for performance capability by Cornell University's Seismic Lab located in the School of Civil and Environmental Engineering (Final Report available).
- The SFC components can be supplied with a variety of exterior coatings including standard seal coat, zinc with seal coat, Tnemec paint or Fusion Bonded Epoxy (FBE).
- ISO 16134 Performance Categories:

Expansion/Contraction	Slip Out Resistance	Joint Deflection
S1 (± 1 % of L or more)	B (1.5 d kN to 3 d kN)	M-2 (± 7,5° to < 15°)

- The TR-Flex® joint is a proven and reliable flexible restraint joint that is easily assembled in the field compared to other manufacturer's proprietary designs.
- Installation – V-Bio® Enhanced Polyethylene Encasement is recommended to reduce soil/pipe friction by as much as 30%.