

## Certificate of Compliance: Full Body Mechanical Joint Fittings AWWA C110

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SIP certifies that our 2" – 64" Ductile Iron and Gray Iron Full Body Mechanical Joint fittings and accessories are designed, manufactured, and distributed as per the Waterworks industry standards. All castings are tested and traceable by casting markings to the below standards. Please refer to our website www.sipindustries.com for up to date product data and technical advisories.

## Conformances

- ANSI/AWWA C110/A21.10 Ductile-Iron and Gray-Iron Fittings for Water Service
- ANSI/AWWA C115/A21.15 Flanged Ductile-Iron Pipe with Ductile Iron or Gray-Iron Threaded Flanges
- ANSI/AWWA C104/A21.4 Cement-Mortar Lining for Ductile-Iron Pipe & Fittings
- ANSI/AWWA C116/A21.16 Protective Fusion-Bonded Epoxy Coatings for the Interior and Exterior Surfaces of Ductile-Iron and Gray-Iron Fittings
- ANSI/AWWA C111/A21.11 Rubber-Gasket Joints for Ductile-Iron Pressure Pipe Fittings

Fittings : Ductile Iron per ASTM A536, Grade 65-45-12, ASTM 48

Gaskets : Gasket material composition: Standard - SBR (Buna-S)

Optional compositions: NBR (Buna-N), EPDM, CR, or FKM

Fasteners : M.J. T-Bolts & Nuts: High Strength-Low Alloy ASTM A242 Steel

Flanged Hex Bolts & Nuts: ASTM A307 Carbon-Steel Grade B

Optional Fluoropolymer coating available

Optional Type 304 or 316 Stainless Steel Bolts & Nuts available

Coatings : Fitting cement mortar lining: Cement lining material: ASTM C150, Type II 'Portland'

Cement. Fitting seal coat, interior and exterior are bituminous asphaltic paint

Optional Fusion Bonded Epoxy (FBE) coating.

Optional Zinc Underlay Coating: 99.9% Metallic Zinc applied per ISO 8179-1

## Listings and Approvals

- Fitting sizes 3" through 24": Listed by Underwriters Laboratory (UL) Hydrostatically tested at 3 times rated working pressure. Listings can be provided or found at UL website.
- Fitting sizes 3" through 24": Factory Mutual (FM) Approved Hydrostatically tested at 4 times rated working Pressure. Approvals can be provided or found at FM website.
- All Interior linings and coatings are NSF-61, and NSF 372 Certified.
- Foundry Certifications: ISO 9001

## Markings and Traceability

All castings have markings for identifications and traceability. Heat and foundry codes are also cast on each casting for traceability. If material certifications are required, please identify on purchase documents prior to shipping from manufacturer.

Sincerely,

Roger Johnson

**Director of Technical Services** 

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