Strength and Durability for LiFe®

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Ductile Iron Pipe Research Association

FEATURES

Ductile Iron Pipe Linings and Gaskets

Last Revised:
February 2017

Description	Maximum Service Temperature (°F)[1, 2]			Uses[3]
	Water & Sewer	Air[4,5]		
	Push-On & Mechanical Joint Gaskets	Push-On Joint Gaskets	Mechanical Joint Gaskets	
SBR (Styrene Butadiene)	150°	150°	125°	**Common:** Drinking Water, Sea Water, Sanitary Sewage, Reclaimed Water, Raw Water, Storm Water
EPDM (Ethylene Propylene Diene Monomer)	212°	200°	150°	**Common:** Alcohols, Dilute Acids, Dilute Alkalis, Ketones (MEK, Acetone), Vegetable Oil. **Other Acceptable Services:** Drinking Water, Sea Water, Sanitary Sewage, Reclaimed Water, Raw Water, Storm Water
Nitrile (NBR) (Acrylonitrile Butadiene)	150°	150°	125°	**Common:** Hydrocarbons, Fats, Oils, Greases, Chemicals, Oils & Fluids, Refined Petroleum. **Other Acceptable Services:** Drinking Water, Sanitary Sewage, Reclaimed Water, Raw Water, Storm Water
Neoprene® (CR) (Polychloroprene)	200°	180°	150°	**Common:** Greasy Waste. **Other Acceptable Services:** Sea Water, Sanitary Sewage, Reclaimed Water, Raw Water, Storm Water
Viton®; Fluorel® (FKM)[6] (Fluorocarbon)	212°	300°	300°	**Common:** Aromatic Hydrocarbons and Fuels, Acids, Vegetable Oils, Petroleum Products, Chlorinated Hydrocarbons, Most Chemicals and Solvents. **Other Acceptable Services:** Drinking Water, Reclaimed Water, Raw Water, Storm Water

[1] «Maximum service temperatures listed are intended as general guidelines for Ductile iron pipe gaskets. For service temperatures greater than those listed, consult pipe manufacturer for specific recommendations.

[2] Maximum service temperature is not usually a meaningful parameter for piping gaskets; however, low temperatures during pipeline installation may necessitate precautions. Consult pipe manufacturer for pertinent recommendations.

[3] Water, including sewage, with low levels of the listed contaminants.

[4] Lubricating oil in the air will adversely affect SBR and EPDM performance.

[5] SBR, Nitrile, or Neoprene are not recommended for air exposure in wastewater treatment systems.

[6] Consult pipe manufacturer for availability of FKM push-on gaskets.

Description	Maximum Service Temperature (°F)[7]	Uses	Thicknesses
Portland Cement Mortar[8] with Sealcoat without Sealcoat	150° 212°	**Common:** Drinking Water Sea Water Non-Septic Gravity Sewers Sanitary Sewer Force Mains Reclaimed Water	Standard or Double (ANSI/AWWA C104/ A21.4)
Fusion-Bonded Epoxy (Fittings Only)	120° - 150°[7]	**Common:** Drinking Water Non-Septic Gravity Sewers Sanitary Sewer Force Mains Reclaimed Water	(ANSI/AWWA C116/ A21.16)[10]
Petroleum Asphalt Coating	150°	**Common:** Air	1 mil (nominal)
Ceramic Quartz Filled Amine Cured Novalac Epoxy[9]	120° - 150°[7]	**Common:** Septic Sewers Acids Alkali Waste Pickling Brine Other Acceptable Services: Reclaimed Water	40 mil (nominal)

[7] Maximum service temperatures listed are intended as general guidelines which may vary depending on service conditions and lining formulation. Consult pipe manufacturer for specific recommendations.

[8] ASTM C150 Type V sulfate resisting cement is recommended for seawater applications and some reclaimed water applications. Consult pipe manufacturer for specific reclaimed water recommendations.

[9] Consult pipe manufacturer for specific service use and material details.

[10] Recommended lining thicknesses may vary depending on service conditions, epoxy formulation, diameter, and other variables. Consult fitting manufacturer for specific recommendations.

For more information contact DIPRA or any of its member companies.

Ductile Iron Pipe Research Association

An association of quality producers dedicated to the highest pipe standards through a program of continuing research and service to water and wastewater professionals.

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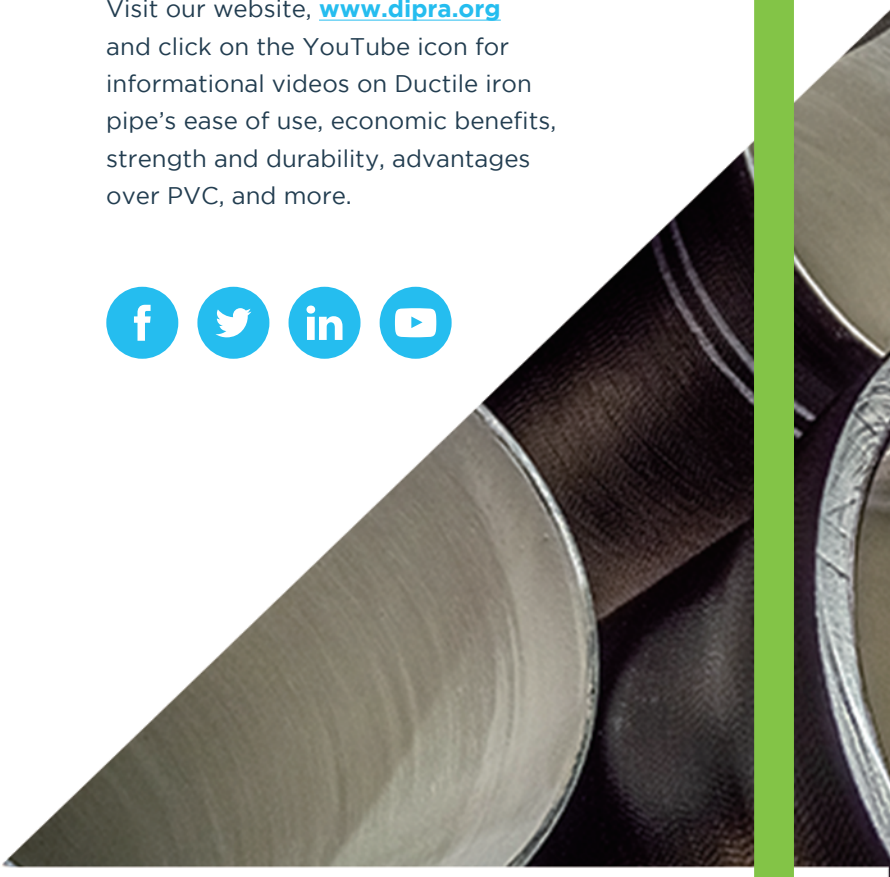

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