

Product Category	Approved Manufacturer	Model/Series	Pressure/Load Rating	Website	Reference/Standard	Requirements
Ductile Iron Pipe 8-inch & 10-inch Diameter (and 4-inch & 6-inch services) Cement Mortar Lined	US Pipe	Tyton Joint	350 psi	http://www.uspipe.com/Main/	AWWA C150 and AWWA C151	Cement Mortar Lined with Exterior Bituminous Coating McWane Pipe stamped: 'McWane by Atlantic States or Clow' only
	American (ACIPCO)	Fastite Joint		http://www.acipco.com		
	McWane	Tyton Joint		http://atlanticstates.com/		
Ductile Iron Pipe 12-inch & Larger Diameter Epoxy Lined	US Pipe	Tyton Joint	250-350 psi see specification	http://www.uspipe.com/Main/	AWWA & DIPRA Standards	40-mils of approved Interior Lining with Exterior Bituminous Coating (protecto 401 < 1yr old) McWane Pipe stamped: 'McWane by Atlantic States or Clow' only
	American (ACIPCO)	Fastite Joint		http://www.acipco.com		
	McWane	Tyton Joint		http://atlanticstates.com/		
Ductile Iron Fittings 8-inch to 10-inch Diameter (and 4-inch and 6-inch services) Cement Mortar Lined	Sigma	Mechanical Joint	350 psi	http://www.sigmaco.com/Products/Fittings.htm	AWWA C110/C111 and AWWA C153	Shall always meet or exceed pipe pressure rating
	Tyler Union			http://www.tylerunion.com/		
	SIP Industries			http://www.sipindustries.com/main/default.asp		
	Star			http://www.starpipeproducts.com/		
	American (ACIPCO)			http://www.acipco.com		
Ductile Iron Fittings 12-inch & Larger Diameter Epoxy Lined	Sigma	Mechanical Joint	250-350 psi see specification	http://www.sigmaco.com/Products/Fittings.htm	AWWA & DIPRA Stds	Shall always receive approved interior lining to meet or exceed main line pipe standards. P401 lining must be less than 1 year old.
	Tyler Union			http://www.tylerunion.com/		
	SIP Industries			http://www.sipindustries.com/main/default.asp		
	Star			http://www.starpipeproducts.com/		
	American (ACIPCO)			http://www.acipco.com		
DIP epoxy coating	Induron	Protecto 401	NA	www.protecto401.com	ASTM and DIPRA Stds.	40-mil thickness required. Pipe must be installed within 1 year of date of lining. High pressure cleaning shall not exceed 1800psi. Lined carrier pipe shall be pulled through casing.
PVC Pipe, SDR 35, 8-inch to 15-inch diameter Install depth of 4-ft to 14-ft	JM Eagle	ASTM D3034 Ring Tite Joint with Rieber Gasket	N/A	http://www.jmeagle.com/	ASTM and UNIBELL Stds.	ASTM D3034 Pipe with Cell Classification of 12454 or 12364.
	Diamond Plastics	ASTM D3034 Sewer Pipe with Rieber Gasket		http://www.dpcpipe.com/		
	National Pipe & Plastics			http://www.nationalpipe.com/		
	Sanderson Pipe			Sandersonpipe.com		
	North American Pipe			http://www.northamericanpipe.com/		
PVC Pipe, Heavy Wall SDR 26 (Minimum Pipe Stiffness of 115) 8-inch to 27-inch Diameter and Depth of Install 4-ft to 20-ft	JM Eagle	ASTM D3034 or F679 Ring Tite Joint with Rieber Gasket Joint	N/A	http://www.jmeagle.com/	ASTM and UNIBELL Stds.	ASTM D3034 or ASTM F679 Pipe with Cell Classification of 12454 or 12364.
	Diamond Plastics	ASTM D3034 or F679 Sewer Pipe with Rieber Gasket Joint		http://www.dpcpipe.com/		
	National Pipe & Plastics			http://www.nationalpipe.com/		
	Sanderson Pipe			Sandersonpipe.com		
	North American Pipe			http://www.northamericanpipe.com/		
Precast Concrete Manholes	Lindsay Precast	4-ft, 5-ft, & 6-ft diameter	H-20 Rating	http://www.stayright.com/	ASTM C478 and C923	All manhole bottoms greater than 5' diameter shall be a minimum of 8-inches thick. A minimum of 6inches for 4' diameter.
	Mack Industries			http://www.mackconcrete.com/		
	Precast Solutions			http://www.precast-solutions.com/		
	CP&P (Hanson, Carolina Precast)			http://www.carolinaprecast.com/		
	Tindall			http://www.tindallcorp.com/		
	OldCastle (NC Products)			oldcastleprecast.com/plants/ncproductsrakeigh/Pages/		
	Eastern Vault Co. Inc.			http://easternvault.net		
Foltz	http://www.foltzconcretepipe.com					
Polymer Concrete Manholes	Armorock	4-ft, 5-ft, & 6-ft diameter	H-20 Rating	https://armorock.com/manholes	ASTM C478, ASTM C990, ASTM C478, ASTM C857, ACI 350-06, ACI 440.1R-06, ASTM C923	May be used where epoxy lined manholes are required. Shall be domestically manufactured. Cary standards for ring and cover shall apply - cast iron covers required.
Manhole Frame and Cover for Paved Areas w/ 1 Vent Hole	EJ	Model # V1384	40,000 lb proof load per AASHTO M306	www.ejco.com	CL35B ASTM-A48 Cover=120 lb min.	Type 1 - for installation in and near roadways
	US Foundry	669 Ring and LX Cover		www.usfoundry.com		

Manhole Frame and Rotating Cover for Outfall Areas (watertight)	EJ	41384037R01	12,000 lb proof load	www.ejco.com	CL35B ASTM-A48 Ring=80 lb min. Cover=50 lb min	Type 2A - watertight for outfalls with elevated manholes (non-traffic bearing)
	US Foundry	8021464		www.usfoundry.com		
Manhole Frame and Rotating Cover w/ 1 vent hole for Outfall Areas (vented)	EJ	41384038R01	12,000 lb proof load	www.ejco.com	CL35B ASTM-A48 Ring=80 lb min. Cover=50 lb min	Type 2B - vented for outfalls with elevated manholes (non-traffic bearing)
	US Foundry	8021472		www.usfoundry.com		
Manhole Frame and Cover with 36-inch clear span opening for Large Diameter Manholes	EJ	Frame: 1581 Outer Cover: 1580EGS Inner Cover: 1040AGS	40,000 lb proof load per AASHTO M306	www.ejco.com	CL35B ASTM-A48 Minimum Weights: Ring=232lb Outer Cover=245lb Inner Cover=145lb	Type 3 - for large diameter outfall manholes
	US Foundry	Assembly: 8021054 Ring: 8020503 Outer Cover: 8015454 Inner Cover: 8015455		www.usfoundry.com		
Manhole Steps	M.A. Industries	PS1-PF or PS1-PF-DF	Horizontal Pull-out Load of 1000 lbs. when installed	www.maind.com	ASTM C478	Spaced 16" on center
	Meadow Burke Bowco	93810R		www.meadowburke.com		
	American Step Co.	ML-10-TDS-NCR		www.americanstep.com		
Riser Grade Rings	CreTex Ladtech	Pro Rings HDPE Adjusting Rings	HS-25 Loaded	https://www.cretexseals.com/product/pro-ring-concrete-grade-ring-alternative/ www.Ladtech.com	AASHTO M-306	Butyl Rubber Sealant Required
Exterior Joint Wrap for Manholes	ConSeal	CS-212	N/A	www.conseal.com	ASTM C990, E1745, C877	
	Henry	RN103 - RAM-NEK		www.henry.com		
	Infli-Shield			www.infi-shield.com		
Butyl Rubber Sealant	ConSeal	CS-102	N/A	www.conseal.com	SS-S-210 ASTM C990	
Manhole Epoxy Coating (Interior)	RLS	Raven 405	120-mils	www.ravenlining.com	Installed by: Installed by:	www.dun-rights.com/ www.cmtcoatings.com
	Sherwin Williams	Duraplate 5900		www.sherwin-williams.com		
Exterior Manhole Coating for Wet Areas	Pro-Tech Coatings	EP-214	N/A	www.pro-techcoating.com	Corps of Engineers C-200	40-mil minimum thickness required. Interior epoxy coatings may also be used.
	Carboline	Bitumastic 300M		www.carboline.com		
	International	Devtar 5A		www.international-pc.com		
Mini Manhole Frame and Cover for Cleanout in Paved Areas	US Foundry	Ring: 8090167 Cover: 8090179	40,000 lb proof load	www.usfoundry.com	CL35B ASTM-A48 Ring=39 lb min. Cover=14 lb min.	Domestically Made
	EJ	Model # 1566		www.ejco.com		
Marking Tape	3M Marking Tape	7904 EMS	N/A	http://solutions.3m.com/en_US/	APWA	Green for Wastewater
4-inch and 6-inch Service Saddle for existing 8-inch thru 12-inch DIP	Romac	Model "CB"	N/A	www.romac.com	ASTM A536 ASTM D2000	ASTM MBA 710
	Ford	FSS-1440-4 & FSS-1440-6		www.fordmeterbox.com		
Ductile Iron Service Tee for PVC Main x 4" or 6" DIP Service line	Harco	280523-0804P 280523-0806P	350 psi	www.harcofitting.com	ASTM A536,F477 AWWA C153	Lined with approved epoxy lining