

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	<a href="http://www.uspipe.com/Main/">http://www.uspipe.com/Main/</a>	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		<a href="http://www.acipco.com">http://www.acipco.com</a>		
	McWane	Tyton Joint		<a href="http://atlanticstates.com/">http://atlanticstates.com/</a>		
Ductile Iron Pipe 12-inch & Larger Diameter Protecto 401 Lined	US Pipe	Tyton Joint	250-350 psi see specification	<a href="http://www.uspipe.com/Main/">http://www.uspipe.com/Main/</a>	AWWA & DIPRA Standards	40-mils of Protecto 401 Interior Lining with Exterior Bituminous Coating (401 < 1yr old) McWane Pipe stamped: 'McWane by Atlantic States or Clow' only
	American (ACIPCO)	Fastite Joint		<a href="http://www.acipco.com">http://www.acipco.com</a>		
	McWane	Tyton Joint		<a href="http://atlanticstates.com/">http://atlanticstates.com/</a>		
Ductile Iron Fittings 8-inch to 10-inch Diameter (and 4-inch and 6-inch services) Cement Mortar Lined	Sigma	Mechanical Joint	350 psi	<a href="http://www.sigmaco.com/Products/Fittings.htm">http://www.sigmaco.com/Products/Fittings.htm</a>	AWWA C110/C111 and AWWA C153	Shall always meet or exceed pipe pressure rating
	Tyler Union			<a href="http://www.tylerunion.com/">http://www.tylerunion.com/</a>		
	SIP Industries			<a href="http://www.sipindustries.com/main/default.asp">http://www.sipindustries.com/main/default.asp</a>		
	Star			<a href="http://www.starpipeproducts.com/">http://www.starpipeproducts.com/</a>		
	American (ACIPCO)			<a href="http://www.acipco.com">http://www.acipco.com</a>		
Ductile Iron Fittings 12-inch & Larger Diameter Protecto 401 Lined	Sigma	Mechanical Joint	250-350 psi see specification	<a href="http://www.sigmaco.com/Products/Fittings.htm">http://www.sigmaco.com/Products/Fittings.htm</a>	AWWA & DIPRA Stds	Shall always receive interior Protecto 401 Lining to meet or exceed main line pipe standards. P401 lining must be less than 1 year old.
	Tyler Union			<a href="http://www.tylerunion.com/">http://www.tylerunion.com/</a>		
	SIP Industries			<a href="http://www.sipindustries.com/main/default.asp">http://www.sipindustries.com/main/default.asp</a>		
	Star			<a href="http://www.starpipeproducts.com/">http://www.starpipeproducts.com/</a>		
	American (ACIPCO)			<a href="http://www.acipco.com">http://www.acipco.com</a>		
PVC Pipe, SDR 35, 8-inch to 15-inch diameter Install depth of 4-ft to 14-ft	JM Eagle	ASTM D3034 Ring Tile Joint with Rieber Gasket	N/A	<a href="http://www.jmeagle.com/">http://www.jmeagle.com/</a>	ASTM and UNIBELL Stds.	ASTM D3034 Pipe with Cell Classification of 12454 or 12364.
	Diamond Plastics	ASTM D3034 Sewer Pipe with Rieber Gasket		<a href="http://www.dpcpipe.com/">http://www.dpcpipe.com/</a>		
	National Pipe & Plastics			<a href="http://www.nationalpipe.com/">http://www.nationalpipe.com/</a>		
	North American Pipe			<a href="http://www.northamericanpipe.com/">http://www.northamericanpipe.com/</a>		
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 Tile Joint with Rieber Gasket Joint	N/A	<a href="http://www.jmeagle.com/">http://www.jmeagle.com/</a>	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		<a href="http://www.dpcpipe.com/">http://www.dpcpipe.com/</a>		
	National Pipe & Plastics			<a href="http://www.nationalpipe.com/">http://www.nationalpipe.com/</a>		
	North American Pipe			<a href="http://www.northamericanpipe.com/">http://www.northamericanpipe.com/</a>		
Precast Concrete Manholes	Lindsay Precast	4-ft, 5-ft, & 6-ft diameter	H-20 Rating	<a href="http://www.stayright.com/">http://www.stayright.com/</a>	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			<a href="http://www.mackconcrete.com/">http://www.mackconcrete.com/</a>		
	Precast Solutions			<a href="http://www.precast-solutions.com/">http://www.precast-solutions.com/</a>		
	CP&P (Hanson, Carolina Precast)			<a href="http://www.carolinaprecast.com/">http://www.carolinaprecast.com/</a>		
	Tindall			<a href="http://www.tindallcorp.com/">http://www.tindallcorp.com/</a>		
	OldCastle (NC Products)			<a href="http://oldcastleprecast.com/plants/ncproductsraleigh/Pages/">http://oldcastleprecast.com/plants/ncproductsraleigh/Pages/</a>		
	Eastern Vault Co. Inc.			<a href="http://easternvault.net">http://easternvault.net</a>		
	Foltz			<a href="http://www.foltzconcretepipe.com">http://www.foltzconcretepipe.com</a>		
Polymer Concrete Manholes	Armorock	4-ft, 5-ft, & 6-ft diameter	H-20 Rating	<a href="https://armorock.com/manholes">https://armorock.com/manholes</a>	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	<a href="http://www.ejco.com">www.ejco.com</a>	CL35B ASTM-A48 Cover=120 lb min.	Type 1 - for installation in and near roadways
	US Foundry	669 Ring and LX Cover		<a href="http://www.usfoundry.com">www.usfoundry.com</a>		
Manhole Frame and Rotating Cover for Outfall Areas (watertight)	EJ	41384037R01	12,000 lb proof load	<a href="http://www.ejco.com">www.ejco.com</a>	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		<a href="http://www.usfoundry.com">www.usfoundry.com</a>		
Manhole Frame and Rotating Cover w/ 1 vent hole for Outfall Areas (vented)	EJ	41384038R01	12,000 lb proof load	<a href="http://www.ejco.com">www.ejco.com</a>	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		<a href="http://www.usfoundry.com">www.usfoundry.com</a>		

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	<a href="http://www.ejco.com">www.ejco.com</a>	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		<a href="http://www.usfoundry.com">www.usfoundry.com</a>		
Manhole Steps	M.A. Industries	PS1-PF or PS1-PF-DF	Horizontal Pull-out Load of 1000 lbs. when	<a href="http://www.maind.com">www.maind.com</a>	ASTM C478	Spaced 16" on center
	American Step Co.	ML-10-TDS-NCR		<a href="http://www.americanstep.com">www.americanstep.com</a>		
Riser Grade Rings	CreteX	Pro Rings	H-25 Loaded	<a href="https://www.cretexseals.com/product/pro-ring-concrete-grade-ring-alternative/">https://www.cretexseals.com/product/pro-ring-concrete-grade-ring-alternative/</a>	AASHTO M-306	
Exterior Joint Wrap for Manholes	ConSeal	CS-212	N/A	<a href="http://www.conseal.com">www.conseal.com</a>	ASTM C990, E1745, C877	
	Henry	RN103 - RAM-NEK		<a href="http://www.henry.com">www.henry.com</a>		
	Infi-Shield			<a href="http://www.infi-shield.com">www.infi-shield.com</a>		
Butyl Rubber Sealant	ConSeal	CS-102	N/A	<a href="http://www.conseal.com">www.conseal.com</a>	SS-S-210 ASTM C990	
Manhole Epoxy Coating (Interior)	RLS	Raven 405	120-mils	<a href="http://www.ravenlining.com">www.ravenlining.com</a>	Installed by:	<a href="http://www.dun-rightservices.com/">www.dun-rightservices.com/</a>
	Sherwin Williams	CorCote SC Epoxy		<a href="http://www.sherwin-williams.com">www.sherwin-williams.com</a>	Installed by:	<a href="http://www.cmtcoatings.com">www.cmtcoatings.com</a>
Exterior Manhole Coating for Wet Areas	Pro-Tech Coatings	EP-214	N/A	<a href="http://www.pro-techcoating.com">www.pro-techcoating.com</a>	Corps of Engineers C-200	40-mil minimum thickness required. Interior epoxy coatings may also be used.
	Carboline	Bitumastic 300M		<a href="http://www.carboline.com">www.carboline.com</a>		
	International	Devlar 5A		<a href="http://www.international-pc.com">www.international-pc.com</a>		
Mini Manhole Frame and Cover for Cleanout in Paved Areas	US Foundry	Ring: 8090167 Cover: 8090179	40,000 lb proof load	<a href="http://www.usfoundry.com">www.usfoundry.com</a>	CL35B ASTM-A48 Ring=39 lb min. Cover=14 lb min.	Domestically Made
	EJ	Model # 1566		<a href="http://www.ejco.com">www.ejco.com</a>		
Marking Tape	3M Marking Tape	7614-XR	N/A	<a href="http://solutions.3m.com/en_US/">http://solutions.3m.com/en_US/</a>	APWA	Green for Wastewater
4-inch and 6-inch Service Saddle for existing 8-inch thru 12-inch DIP	Romac	Model "CB"	N/A	<a href="http://www.romac.com">www.romac.com</a>	ASTM A536 ASTM D2000 MBA 710	Service Line shall be DIP. Strap and Hardware shall be 304 Stainless Steel
	Ford	FSS-1440-4 & FSS-1440-6		<a href="http://www.fordmeterbox.com">www.fordmeterbox.com</a>		
Ductile Iron Service Tee for PVC Main x 4" or 6" DIP Service line	Harco	280523-0804P 280523-0806P	350 psi	<a href="http://www.harcofittings.com">www.harcofittings.com</a>	ASTM A536, F477 AWWA C153	Protecto 401 Lined