

PUBLIC UTILITIES DEPARTMENT
CITY OF SAN DIEGO

APPROVED MATERIALS LIST
FOR WASTEWATER



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May 2021

PUBLIC UTILITIES DEPARTMENT

CITY OF SAN DIEGO

APPROVED MATERIALS LIST

FOR MUNICIPAL SEWER

May 2021

SUBJECT	SPEC. REF	MANUFACTURER (Series/Model No.)	SELECTION	ADDITIONAL REQUIREMENTS
A. Sewer Pipes				
1. Vitrified Clay Extra Strength Pipe and Fittings	207-8 ASTM C 700	Pacific Clay Pipe	<input type="checkbox"/>	Plain End and Bell and Spigot Type Pipe
		Gladdin and McBean	<input type="checkbox"/>	
		Mission Clay	<input type="checkbox"/>	
2. PVC Sewer Pipe and Fittings— Gasket Joints 4 thru 15 inches diameter	207-17 ASTM D 3034 SDR-35	J-M	<input type="checkbox"/>	Green Bell
		CertainTeed	<input type="checkbox"/>	
		Vinyltech Corporation	<input type="checkbox"/>	Phoenix, Arizona Plant
		Northern Pipe Products	<input type="checkbox"/>	Fargo, North Dakota Plant
		Diamond Plastics Corporation	<input type="checkbox"/>	Casa Grande, Arizona (primary plant) GrandIsland, Nebraska (secondary plant)
		North American Pipe Corporation	<input type="checkbox"/>	Yucca, Arizona (primary plant) Wichita Falls, Texas (secondary plant)

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A. Sewer Pipes (cont.)				
3. PVC Sewer Pipe and Fittings— Gasket Joints 18 thru 36 inch diameter	207-17 ASTM F 679	J-M	<input type="checkbox"/>	*Up to 30-inch pipe
		CertainTeed	<input type="checkbox"/>	*Up to 30-inch pipe
		Vinyltech Corporation	<input type="checkbox"/>	Phoenix, Arizona Plant *18-inch pipe only
		Northern Pipe Products	<input type="checkbox"/>	Fargo, North Dakota Plant *up to 24-inch pipe
		Diamond Plastics Corporation	<input type="checkbox"/>	Casa Grande, Arizona (primary plant) GrandIsland, Nebraska (secondary plant)
4. Fusible PVC Sewer Pipe— 4 thru 36 inch diameter	*209-8 AWWA C900 (4"-12") AWWA C905 (14"-36")	Underground Solutions	<input type="checkbox"/>	Yucca, AZ Plant
5. Fiberglass Reinforced Polymer Mortar (FRPM) Sewer Pipe	207-20, ASTM D3262 (gravity sewer)	US Composite Pipe South - Flowtite (FRPM) Pipe	<input type="checkbox"/>	Zachary , Louisiana Plant *Resin: Only vinyl ester resin is approved. Use of any other resin is strictly prohibited.
6. Centrifugally Cast Fiberglass Reinforced Polymer Mortar (CCFRPM) Sewer Pipe	207-20, ASTM D3262 (gravity sewer)	Hobas Pipe USA	<input type="checkbox"/>	Houston, Texas Plant *Direct bury installations
7. Polymer Concrete Sewer Pipe (4 thru 36 inch diameter)	ASTM D6783	Meyer Polycrete Pipe	<input type="checkbox"/>	Zachary, Louisiana Plant *Resin: Only Dion Impact 9133-055 Epoxy Vinyl Ester Resin is approved. Use of any other resin is strictly prohibited. *Microtunneling and pipe jacking applications

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B. Sewer Laterals				
1. Vitrified Clay Pipe	207-8 ASTM C-700	Gladdin and McBean	<input type="checkbox"/>	Plain End and Bell and Spigot Type Pipe
		Mission Clay	<input type="checkbox"/>	
2. PVC Pipe	207-17 ASTM D 2751	J-M	<input type="checkbox"/>	
		CertainTeed	<input type="checkbox"/>	
		Vinyltech	<input type="checkbox"/>	
3. ABS (Acrylonitrile-butadiene-styrene) Solid Wall Pipe	207-15 ASTM D 2751	Colby	<input type="checkbox"/>	
		Standard Plastics	<input type="checkbox"/>	
C. Sewer Fittings				
1. Vitrified Clay Fittings	207-8 ASTM C-700	Gladdin and McBean	<input type="checkbox"/>	Plain End and Bell and Spigot Type Pipe
		Mission Clay	<input type="checkbox"/>	
2. PVC Fittings	207-17 ASTM D-3034 or ASTM F 679 depending upon size	Vassallo	<input type="checkbox"/>	Shelby Township, Michigan
		Multi-Fittings	<input type="checkbox"/>	
		G.P.K.	<input type="checkbox"/>	
		J-M	<input type="checkbox"/>	
		Plastic Trends Inc: Series G (SDR 35), Series H (SDR 26), Series C pressure sewer (DR-18 Class C-900 or C-905)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
3. ABS Fittings	207-15	U-Brand	<input type="checkbox"/>	

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D. Sewer Manhole Components				
1. Precast Manhole & Precast Base	ASTM C 478, 201-10	Mar-Con Products Oldcastle Precast, Inc Olson Precast Company	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	San Marcos, California San Diego, CA Plant Riverside, CA Plants Rialto, California
2. Manhole Covers and Frames		Pamrex & Pamtight (Pacific Pipeline Supply (or Pam Saint Gobain) National Casting (NC2531) South Bay Foundry Inc. (1310, 1325)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Saint Gobain Canalizaco, Ituana, Brazil Plant (All components shall be ductile iron.) Trident Export Corporation 58, N.S. Road Liluah, Howrah 711 204, India Plant Maquiladora-KM. 10.5 CRT. A San Luis Mexicali, BC Mexico

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E. Sewer Rehabilitation Products				
1. PE Solid Pipe	500-5.11	Chevron Plexco Chevron Phillips Driscopipe	<input type="checkbox"/> <input type="checkbox"/>	Reno, Nevada Plant Watsonville Plant
2. Cured-in-Place	500-5.5	Inliner-Fabric Tube: Polyester felt Resin: Dow Derakane 411 Vinyl Ester Insituform-Fabric Tube: Polyester felt Resin #1: Shell Epon 9215 epoxy Resin #2: Interplastics VE8319 Vinyl Ester National Liner Applied Felts Polyester felt AOC Vipel L704-Net-11 Isophthalic polyester resin or AOC Vipel L010-PPA Vinyl Ester resin EasyLiner CleanOutLiner System: Bullseye Liner CORVE 8190 Vinyl-Ester Resin	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Houston, Texas Plant Memphis, Tennessee Plant Martinsville, Virginia Perris, California Lateral rehabilitation only Gadmon Industries 57 Glengall Road, London, United Kingdom SE15 6NF 2015 Northeast Broadway Street, Minneapolis, Minnesota 55413-1775. Product shall be applied by an applicator approved and certified by Easy Liner LLC.
3. Profiled PVC	500-5.6	Danby	<input type="checkbox"/>	Toronto, Canada Plant
4. Deformed Solid Wall PE	500-5.7	Hydroconduit Uliner—Navacor Resin	<input type="checkbox"/> <input type="checkbox"/>	Roaring Springs, Texas Plant Houston, Texas Plant

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E. Sewer Rehabilitation Products (cont.)				
5. FRPM	500-5.8.1	Hobas Pipe	<input type="checkbox"/>	Birmingham, New York Plant Waco, Texas Plant
6. Folded Solid Wall PVC	500-5.10	America Plastic AMLiner Insituform Nupipe	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
7. Machine Spiral Wound PVC (November 2001)	500-5.13	RIB LOC	<input type="checkbox"/>	Gepps Gross, South Australia Plant
8. MultiPlexx Liner System, Type PVCP	502 Cured-In-Place Manhole Rehabilitation	Product: MultiPlexx Liner System by Terre Hill Composites MultiPlexx Liner System: Type/Model PVCP 20-28≥88 mils consisting of: PVC Liner: 20 mils PVC Polyester Fleece Backing:10 oz/yd ² Fiberglass Backing: 18 oz/yd ² Resin: EPON 9215 at 0.0005 gallons per square foot of manhole area Epoxy: Application to substrate surface of manhole to be rehabilitated.	<input type="checkbox"/>	Manufacturing Plant Site: Terre Hill Composites, Division of Terre Hill Concrete Products, Terre Hill, Pennsylvania Resin: Manufactured by Resolution Performance Products Installers: Tejon Constructors, Inc.

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E. Sewer Rehabilitation Products (cont.)				
9. Raven 405 Epoxy Lining System	502	Product: Raven 405 Epoxy Liner Systems by Raven Lining Systems, Inc. Raven 405 is a solvent-free 100% solids, extra high-build epoxy which can be applied over 200 mils in a single application. Light blue is the standard color when applied. Theoretical coverage averages 40 ft ² per gallon at 40-mil thickness.	<input type="checkbox"/>	Raven 405 Epoxy is manufactured by Raven Lining Systems, Inc. Plant is located at 1024 North Lansing Avenue, Tulsa, Oklahoma 74106 Product shall be applied by an applicator approved and certified by Raven Lining Systems.
10. Raven AquaFlex 505 Hybrid Polyurethane Coating with Raven 175 Primer	502	Product: Raven AquaFlex 505 Hybrid Polyurethane with Raven 175 Primer by Raven Lining Systems, Inc.	<input type="checkbox"/>	13105 E. 61st Street, Broken Arrow, OK 74012 Product shall be applied by an applicator approved and certified by Raven Lining Systems.
11. Zebron Epoxy 9000/Polyurethane 386 Lining System	502	Zebron Low Temperature Epoxy 9000 Primer, and Polyurethane 386. Epoxy 9000 is 100 percent solids moisture tolerant	<input type="checkbox"/>	The Low Temperature Epoxy 9000 is manufactured by a third party. However, Polyurethane 386 is Zebron's proprietary product. Zebron Epoxy 9000 and Polyurethane 386 are processed at: 1141 N Cosby Way Units H, I & J Anaheim, CA 92806 (800) 824-4214
12. Sherwin Williams Duraplate 6100 High Performance Epoxy Lining System/ Polycote 115 Elastomeric Urethane Lining System		Duraplate 6100 High Performance Epoxy Lining System Polycote 115 Elastomeric Urethane Lining System	<input type="checkbox"/> <input type="checkbox"/>	1655 Harbor Ave., Memphis, TN, 38106 3813 Helios Way, Pflyger, TX, 78660

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E. Sewer Rehabilitation Products (cont.)				
13. Utilithane Epoxy-Polyurethane	502	Prime Coatings Incorporated Utilithane 1600 Polyurethane and Utilithane 900 Low Temperature Epoxy are proprietary products of Prime Coatings Inc. This product is spray applied using airless spray equipment. Utilithane 1600 is dense polyurethane with no VOCs, and Utilithane 900 Epoxy is a two component product formulated as a "Fast-Set" or "Slow-Set".	<input type="checkbox"/>	Address of Prime Coatings Inc. is: P.O. Box 3056 Tustin, California PlantA 92781 Phone (714) 963-9583 Email: utilithane@sbcglobal.net Website: www.utilithane.com
14. Sancon 100 Polyurethane	502	<u>Sancon 100 Epoxy Primer and Sancon 100 Polyurethane spray applied liner</u> manufactured by PTM&W Industries at 10640 South Painter Ave, Santa Fe Springs, CA 90670 This product is spray applied using airless spray equipment	<input type="checkbox"/>	Sancon Engineering Inc. 5841 Engineer Dr Huntington Beach, California Plant 92649 (714) 891-2323 (800) 726-2664
15. Saueresin SewerGard No. 210X Epoxy Lining System	502	Saueresin SewerGard No. 210X Epoxy Lining System	<input type="checkbox"/>	Pittsburg, PA Plant
16. PVC Sheet Lining Systems	502	Ameron T-Lock and Arrow-Lock	<input type="checkbox"/>	Brea, CA Plant
17. Sprayroq Spraywall Polyurethane Liner System	502	Sprayroq Spraywall Polyurethane Liner System	<input type="checkbox"/>	Creative Polymer Solutions Grantswood Road, Suite100 Irondale, AL 35210
18. Tophat Lateral Connection Sealing System		Cosmic Tophat Lateral Connection Sealing System	<input type="checkbox"/>	Kasten, Austria Plant *Only ATLAC E-NOVA RE 3475 Vinyl Ester Resin with ECR fiberglass mat is approved.

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F. Miscellaneous				
1. Flexible Couplings		Smith-Blair 441 Rockwell APAC (331,323,335), (CDC-EC)	<input type="checkbox"/>	
2. Transition Gaskets	ASTM D 1869	Newby Rubber, Inc.	<input type="checkbox"/>	
3. High-Deflection Couplings 4 thru 12 inches diameter		CertainTeed	<input type="checkbox"/>	
4. Flexible Saddles (Wyes)		DFW Plastics, Inc.	<input type="checkbox"/>	
5. Transition Coupling with Shear Shield	ASTM C 1173	Mission Rubber Company, Flex-Seal ARC with 304SS shear band	<input type="checkbox"/>	Mission Rubber Company 1660 Leeson Lane Corona, CA 92878-2349 1-800-854-9991
6. Repair Couplings		Fenco Inc Series 5000 RC (Repair Coupling) with 316 stainless steel nut and bolt clamps (with 300 stainless steel shear ring) Series 1000 RC (Repair Coupling) with 301 stainless steel worm gear clamps (with 300 stainless steel shear ring)	<input type="checkbox"/>	Davison, Michigan Plant
		Joints Coupling Inc Banded Calder Repair Couplings	<input type="checkbox"/>	El Monte, CA Plant
7. Casing Spacers, End Seals, Pipe Penetration Seals	212-3	BWM Company (SS-8 for carrier pipe up to 24 inches, SS-12 for carrier pipe greater than 24 inches, ESW, ESPO, SSPS, CPS)	<input type="checkbox"/>	Forest City, NC Plant

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