### MISSION CLAY PRODUCTS LLC

A COMPLETE LINE OF CLAY PIPE PRODUCTS

# BAND-SEAL® VITRIFIED CLAY PIPE & FITTINGS



## BAND-SEAL®

#### VITRIFIED CLAY PIPE & FITTINGS



#### MISSION CLAY PRODUCTS LLC



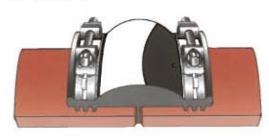
Band-Seal® Reducing Couplings and Bushings provide a fast and simple method for connecting clay, asbestos cement, cast iron, concrete, steel pipe and plastic pipe.

## BAND-SEAL®

#### VITRIFIED CLAY PIPE & COUPLINGS

The sturdy and dependable Band-Seal® line of mechanical compression couplings and bushings have been in use for over fifty years. They continue to be the choice to join clay pipe and to join clay pipe to other types of pipe.





#### TYPE I BAND-SEAL® BUILDING AND HOUSE SEWER PIPE

- Available in 4" and 6" diameters in standard 6' lengths;
   also available in 4', 4-1/2', and 5' lengths
- Highly adaptable to cut and fit requirements
- Heavy duty synthetic rubber couplings are factory-applied to pipe and fittings with a pneumatic wrench
- Field joints are quickly made by tightening the stainless steel clamp with take-up bolt
- 316 Series stainless steel clamp



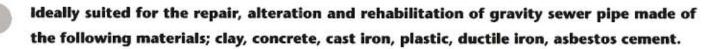


#### TYPE 2 BAND-SEAL® MAINLINE SEWER PIPE

- Available in 6", 8", 10" and 12" diameters
- Ideal for permanent installations
- Dependable, mechanical compression sealing joint
- Factory-applied, flexible rubber couplings with heavy-duty, shear rings provide superior shear strength
- 316 Series stainless steel take-up clamps
- Meets or exceeds ASTM Specification C 425

#### SPECIAL BAND-SEAL® SEWER COUPLINGS

- 4" x 6" and 6" x 8" Increaser/Reducer Couplings
- Type O Couplings to fit other brands of clay pipe
- Couplings to fit other types of materials





## SMALL DIAMETER BAND-SEAL® ADJUSTABLE REPAIR COUPLINGS (ARC) FOR MAINLINE SEWERS (TYPE Z)

- Available in 4"–12" diameters
- Engineered and designed for the insertion of replacement sections of pipe or new fittings into an existing sewer line
- Split 300 Series stainless steel shear ring with take-up clamps are designed to fit variable outer pipe diameters
- Holds pipe or fitting in alignment and provides superior shear strength
- Rubber collar with 316 Series stainless steel clamps provides a water tight seal
- Also used for flexibility and strength at the first joint out of a manhole
- Meets or exceeds ASTM Specification C 425
- Meets or exceeds Standard Specifications for Public Works Construction (Greenbook), Type Z



## LARGE DIAMETER ADJUSTABLE REPAIR COUPLINGS (ARC) FOR MAINLINE SEWERS

- Available in 15"-42" diameters
- Couplings are 10" wide and come with four multiple take-up stainless steel clamps to provide superior seal on pipe ends
- Flanged bushings accommodate differences in pipe ODs of up to 6"
- Flanged bushings allow for easy positioning into the coupling during installation
- Couplings and flanges are manufactured of EPDM rubber making them resilient to and unaffected by normal soil conditions and sewer gases
- 300 Series stainless steel outside shear rings (ARC)
- T-bolt clamps have a 316 Series stainless steel strap and a torque rating of 150 in./lb. to provide even greater sealing performance

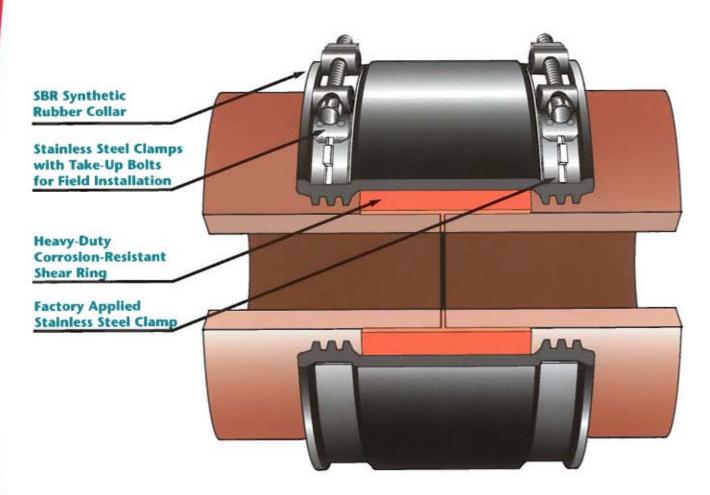
**IMPORTANT:** When ordering large diameter couplings, specify the outside diameter of the two pipes to be joined.

## BAND-SEAL®

#### VITRIFIED CLAY PIPE & COUPLINGS

### Mission Clay Products Band-Seal® Mainline Vitrified Clay Pipe and Couplings meet or exceed the following standards:

- ASTM C 700 and ASTM C 425 which supersede Federal specifications SS-P-361e and SS-P-359b
- SSPWC, Standard Specifications for Public Works Construction, also known as "Greenbook"
- International Association of Plumbing and Mechanical Officials



Band-Seal® Coupling Detail

SPECIFICATIONS					
Vitrified Clay Sewer Pipe	ASTM C 700	SSPWC* Sec. 207-8			
Method for Testing Clay Sewer Pipe	ASTM C 301	SSPWC* Sec. 207-8.5			
Installation of Vitrified Clay Sewer Pipe	ASTM C 12				
Joint, Type D	ASTM C 425	SSPWC* Sec. 208-2.2			
Stainless Steel	ASTM A 167				
Clamp	300 Series, Type 316				
Bolt	300 Series				
Nut	300 Series				

<sup>\*</sup>Standard Specifications for Public Works Construction

#### **MISSION CLAY PRODUCTS LLC**

#### All Mission Band-Seal® Vitrified Clay Pipe is extra strength and plain end

- . Type 1 does not include shear ring and is available in 4" and 6" diameter
- Type 2 includes shear ring and is available in 6", 8", 10", and 12" diameter
- Highly resistant to attack from sewer gases, acids, alkalis and most other corrosive products that commonly plague most domestic and industrial sanitary sewer systems
- Quick and easy assembly in the trench; cut and fit with less waste
- Chemically inert and unaffected by decomposition and abrasion common to other pipe materials
- Will not deform under constant load conditions



Nominal I.D. (inches)	Nominal Lay- ing Length (feet)	Approximate Weight (lbs.per lineal loot)	Minimum ASTM 3-Edge Bearing (lbs. per lineal foot)	Minimum SSPWC* 3-Edge Bearing (lbs. per lineal loot)	Nominal Wall Thickness (inches)	Nominal 0.0 Barrel (inches)
4	4-6	10	2000	2000	11/16	5.45
6	4 1/2-6	20	2000	2000	7/8	7.75
8	4 1/2-6	30	2200	2200	1 1/16	9.90
10	4 1/2-6	45	2400	2400	1 1/8	12.40
12	4 1/2-6	60	2600	2600	1-15/16	14.60

Dimensions subject to normal variations as defined by ASTM C 700.

#### **HOW TO SPECIFY BAND-SEAL®**

All pipe shall be extra strength, plain end vitrified clay, with Band-Seal mechanical compression couplings, meeting the requirements of ASTM Specification C 700, as manufactured by Mission Clay Products, Inc. Field Joints are made by tightening the stainless steel nut and bolt take-up after pipe has been properly assembled. Joints conform to the material and performance standards of ASTM C 425 "Standard Specification for Compression Joints for Vitrified Clay Pipe and Fittings". Installation shall be as per ASTM C 12 "Installing Vitrified Clay Pipe Sewers".

#### **Coupling and Bushing Specifications**

Product Number	COUPLINGS	Minimum Maximum Pipe O.D. Pipe O.D	
0403 428	3' Type 1 Mission Standard Coupling	4.25	4.50
0404 624	4' Type O Mission Standard Coupling	5.31	5.50
0406 652	6' Type 1 Mission Standard Coupling	7.55	7.75
0406 678	6' Type 2 Plastic Shear Ring Coupling	7.58	7.78
0406 751	6' Adjustable Repair Coupling	7.50	8.00
0406 793	6' Adjustable Repair Coupling - Oversize	7.50	8.13
0408 732	8° Type 2 Plastic Shear Ring Coupling	9.80	10.00
0488 781	8' Adjustable Repair Coupling	9.75	10.13
1488 327	8' Adjustable Repair Coupling - Oversize	10.00	10.50
8410 738	10° Type 2 Plastic Shear Ring Coupling	12.25	12.50
0410 688	10° Adjustable Repair Coupling	12.25	12.60
8410 720	10° Adjustable Repair Coupling - Oversize	12.50	13.13
0412 726	12" Type 2 Plastic Shear Ring Coupling	14.50	14.74
0412 635	12° Adjustable Repair Coupling	14.25	14.52
8412 684	12° Adjustable Repair Coupling - Oversize	14.13	15.00
0406 736	6" x 4" Increaser/Reducer Coupling	7.55 5.28	7.75 5.45
0488 864	8" x 6" Increaser/Reducer Coupling	9.25 7.25	10.13 8.00

Product Komber	BUSHINGS	Minimum Maximum		
	Journal	Pipe O.D.	Pipe 0.D	
0502 419	4" x 2" Plain End Bushing	2.26	2.44	
0502 427	4" x 2" Bead End Bushing	2.58	2.68	
0503 433	3" x 3" Plain End Bushing (use w/coupling 0403 428)	3.34	3.53	
0503 417	4" x 3" Plain End Bushing	3.26	3.44	
0503 425	4" x 3" Bead End Bushing	3.32	3.50	
0504 415	4" x 4" Plain End Bushing	4.29	4.47	
0504 423	4" x 4" Bead End Bushing	4.35	4.53	
0504 431	4" x 4" Asbestos Cement or Bituminous Fiber Bushing	4.69	4.89	
0504 506	4" x 4" Thinwall Plastic Bushing	4.10	4.25	
0506 410	6° Plain End Bushing	6.13	6.50	
0506 428	6" Bead End Bushing	6.50	6.75	
0506 436	6° Asbestos Cement or Bituminous Fiber Bushing	6.81	7.06	
0508 416	8" Plain End Bushing	8.25	8.53	
0508 424	8" Asbestos Cement Bushing	8.63	9.06	
0510 412	10° Plain End Bushing	10.25	10.50	
0510 420	10' Asbestos Cement Bushing	10.88	11.13	
0512 418	12' Plain End Bushing	11.88	12.50	
0512 426	12" Asbestos Cement Bushing	13.00	13.25	



#### MISSION CLAY PRODUCTS LLC

www.missionclay.com

#### REGIONAL SALES OFFICES

Southern

Post Office Box 549 Corona, CA 92878 tel: (951) 277-4600 fax: (951) 277-1127

#### Northern

880 81st Avenue Oakland, CA 94621 tel: (510) 568-0800 fax: (510) 568-2699



#### WILL CALL YARDS

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#### Oakland, CA

880 81st Avenue 94621 tel: (510) 568-0800 fax: (510) 568-2699

#### Santa Fe Springs, CA

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