Mission Rubber Company LLC

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> When there is a need to withstand shear forces, deflection & improved alignment

MEETS: ASTM C 425 ASTM C 1173 ASTM A240/<u>A240</u>M **CSA B602 UPC 4224**



Flex-Seal® ARC Coupling - Submittal MR06 ARC Series

Performance Couplings for Similar and Dissimilar Pipe Sizes and Materials

PROJECT **ENGINEER**

CONTRACTOR _

MATERIALS

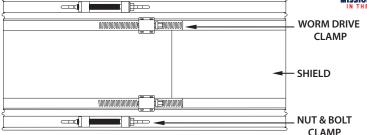
Nut & Bolt Clamp Shield Gasket

300 series ASTM stainless steel 316 series ASTM stainless steel 301 series ASTM stainless steel 0.012" thick

This gasket is fabricated from a compound with high-quality elastomeric properties

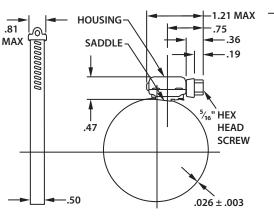
SEALING GASKET DETAILS

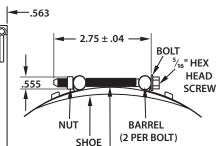
to meet physical testing.



W .012" THICK SHIELD DETAILS

WORM DRIVE CLAMP DETAILS

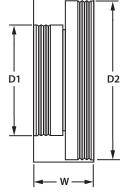


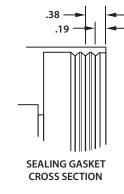


1/4-20 UNC-2A

THREAD R.H.

NUT & BOLT CLAMP DETAILS





MISSION REFERENCE MR06 SERIES	SHIELD DIMENSIONS		SEALING GASKET DIMENSIONS		
	L	W	D1	D2	W
MR06 44 ARC	21.50	2.12	4.50	6.00	4.00
MR06 64 ARC	29.25	3.81	4.50	8.12	6.00
MR06 66 ARC	29.25	3.81	6.62	8.12	6.00
MR06 86 ARC	36.50	3.81	6.62	10.50	6.00
MR06 88 ARC	36.50	3.81	8.40	10.50	6.00
MR06 1010 ARC	45.13	3.38	10.85	12.80	6.00
MR06 1212 ARC	54.63	3.38	12.90	15.10	6.00
MR06 1515 ARC	67.50	5.75	15.40	19.90	10.00
MR06 1818 ARC	76.00	5.75	18.80	22.60	10.00
MR06 2121 ARC	88.50	5.75	22.10	26.60	10.00
MR06 2424 ARC	101.13	5.75	25.10	30.60	10.00
MR06 2727 ARC	112.13	5.75	28.10	34.10	10.00

Used to Join - MR06 ARC Series couplings are used to join concrete to cast iron or

Mission's Flex-Seal® ARC Adjustable Repair Coupling is a shielded sewer repair coupling designed to provide superior performance and excellent resistance to heavy earth loads, shear forces, deflection and improved alignment. Coupling consists of two (2) 300 series stainless steel worm drive clamps, two (2) or four (4) surgical grade 316 stainless steel Nut & Bolt clamps and a heavy duty 301 series stainless steel shield, over a molded one-piece elastomeric sealing gasket. MR06 ARC Series couplings are available in sizes 4" to 27".

Leak-Proof Seal - Increased band tension of surgical grade 316 stainless steel Nut & Bolt clamps ensure a water-tight, leak-proof and root-proof seal that is resistant to both infiltration and exfiltration. Axially slotted clamps enable bands to tighten independently to accommodate variances in the outside diameters of the pipe to be joined. Sealing "O" Rings are installed under each sealing clamp to prevent pipe slippage and create a more positive seal.

TEST	GASKET PHYSICAL TESTS (ASTM C 425)	
Tensile Strength	1000 PSI minimum	D412
Elongation	250% minimum	D412
Durometer (Shore A)	55 minimum 70 maximum	
Accelerated Aging	85% of original tensile strength 85% of original elongation All determined after oven aging at 70°C for 7 days	
Compression Set	20% maximum of original deflection	
Ozone Cracking	No visible cracking at 2X magnification of the gasket after 24 hours exposure in 0.5 PPHM ozone concentrations at 40°C. Testing and inspection to be on gasket which is loop-mounted to give approximately 20% elongation of outer surface.	
Water Absorption	5% maximum by weight after 7 days at 70°F	D471

Corrosion Resistant - Surgical grade 316 stainless steel Nut & Bolt clamps and 300 series stainless steel components provide outstanding protection in severe environments; such as marine applications, poorly aerated or moist soils, contaminated ground conditions (particularly industrial fill sites) and where the ground water contains chloride, sulfates or bicarbonates.

Superior Rigidity - .012" thick 301 series stainless steel shield provides for superior load bearing control between the coupling and pipe surface. The coupling's rugged construction provides excellent sealing properties, and the stainless steel shield provides excellent resistance to shear forces and helps with alignment, while maintaining flexibility.

Withstands Tension and Compression - Synthetic rubbers permit a substantial degree of distortion without change in basic physical resistance, unlike other manufacturers' thermoplastic coupling materials. Molded synthetic rubber gasket is strong, durable and resilient to ultraviolet rays, ozone, fungus growth, natural erosive properties of soil and normal sewer gases. More pliable and easier to install weather applications than an elastomeric PVC gasket. Pre-Set Calibration - All ARC couplings are designed to be installed with a pre-set torque wrench calibrated to 60 in/lbs. maximum to accommodate the 300 series stainless steel 5/16" hex head screw.