Mission Rubber Company LLC
1660 Leeson Lane
Corona, CA 92879
(800) 854-9991 • Fax (800) 637-4601
missionrubber.com

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

**Flex-Seal® ARC Coupling - Submittal**

**MR02 ARC Series**

Performance Couplings for Similar and Dissimilar Pipe Sizes and Materials

**PROJECT _____________________________**

**ENGINEER ___________________________**

**CONTRACTOR _________________________**

**MATERIALS**

- **Worm Drive Clamp** 300 series ASTM stainless steel
- **Nut & Bolt Clamp** 316 series ASTM stainless steel
- **Shield** 301 series ASTM stainless steel 0.012” thick
- **Gasket** This gasket is fabricated from a compound with high-quality elastomeric properties to meet physical testing.

**IGNED BY: ___________________________**

**SIGN DATE: _________________________**

**CONTRACTOR SIGNATURE: ___________________________**

**PROJECT SIGNATURE: ___________________________**

**COMPANY SIGNATURE: ___________________________**

**COMPANY NAME: ____________**

**ADDRESS: ____________**

**PHONE: ____________**

**FAX: ____________**

**EMAIL: ____________**

**NOTE: THIS COPY IS NOT FOR DISTRIBUTION.**

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**USE OF MR02 ARC SERIES COUPLINGS**

MR02 ARC Series couplings are used to join clay to cast iron or plastic.

**APPLICATIONS**

- Clay and plastic pipes in sanitary waste applications
- Clay and plastic pipes in water supply lines
- Clay and plastic pipes in gas lines

**FEATURES**

- **Clamp Design**
  - Worm-drive clamp
  - Heavy-duty 300 series stainless steel
  - Hex head screw
  - Nut & Bolt clamp
  - Surgical grade 316 stainless steel

- **Gasket Design**
  - Molded synthetic rubber
  - 0.012” thick
  - Resistant to ultraviolet rays, ozone, fungus growth, and natural weathering

- **Sealing Mechanism**
  - “O” Rings
  - Prevents slippage and creates a more positive seal

**TEST RESULTS**

- **Tensile Strength** 1000 PSI minimum
- **Elongation** 250% minimum
- **Durability** 55 minutes 70°F maximum
- **Accelerated Aging** 85% of original tensile strength
  - 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 PPM ozone concentrations at 40°C

**GASKET PHYSICAL TESTS (ASTM C 425)**

- **Compression Set** 85% of original elongation
- **Elongation** 85% maximum of original elongation
- **Tensile Strength** 55 minimum 70 maximum

**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 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’ thermostatic 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 in cold 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 .012” hex head screw.

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**Used to Join** - MR02 ARC Series couplings are used to join clay to cast iron or plastic.

**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. MR02 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.