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**Flex-Seal® Corrugated Coupling - Submittal**
**MR70 Series - 3" to 8" sizes**

**Performance Couplings for Similar and Dissimilar Pipe Sizes**

**PROJECT _____________________________**
**ENGINEER __________________________**
**CONTRACTOR _________________________**

**MATERIALS**
- **Worm Drive Clamp**: 300 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.

**PROJECTS**
- **35°**
- **.030**
- **.12" THICK**

**Designed to join ribbed/corrugated profile pipe to smooth wall plastic drainage pipe**

**WORM DRIVE CLAMP DETAILS**
- **HOUSING**: .12" MAX
- **SADDLE**: .75
- **.36**
- **.19**
- **.81 MAX**
- **.026 ± .003**

**SHIELD DETAILS**

**SEALING GASKET DETAILS**

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

<table>
<thead>
<tr>
<th>TEST</th>
<th>GASKET PHYSICAL TESTS (ASTM C 425)</th>
<th>ASTM C 425</th>
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<tbody>
<tr>
<td>Tensile Strength</td>
<td>1000 PSI minimum</td>
<td>D412</td>
</tr>
<tr>
<td>Elongation</td>
<td>250% minimum</td>
<td>D412</td>
</tr>
<tr>
<td>Durometer (Shore A)</td>
<td>55 minimum 70 maximum</td>
<td>D2240</td>
</tr>
<tr>
<td>Accelerated Aging</td>
<td>85% of original tensile strength</td>
<td>D573</td>
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<tr>
<td></td>
<td>85% of original elongation</td>
<td></td>
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<tr>
<td></td>
<td>All determined after oven aging at 70°C for 7 days</td>
<td></td>
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<tr>
<td>Compression Set</td>
<td>20% maximum of original deflection</td>
<td>D395</td>
</tr>
<tr>
<td>Ozone Cracking</td>
<td>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.</td>
<td>D1149</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>5% maximum by weight after 7 days at 70°F</td>
<td>D471</td>
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**Used to Join** - MR70 Series Couplings are used to join ribbed/corrugated profile pipe to smooth wall plastic drainage pipe.

**Mission Rubber's Flex-Seal® Corrugated Coupling** is a shielded storm water, sewer and drainage system coupling. The MR70 Series 3" to 8" coupling consists of two (2) 300 series worm drive clamps and a heavy duty 301 series stainless steel shield, over a molded one-piece elastomeric sealing gasket.

**Leak-Proof Seal** - Wide gasket and thick shield provide a positive seal, ensuring a water-tight, leak-proof and root proof seal.

**Corrosion Resistant** - 300 series stainless steel components are highly effective in a variety of environments; such as marine applications, poorly aerated or moist soils, contaminated ground conditions (particularly industrial fill sites) and where the ground water contains chlorides, sulfates or bicarbonates.

**Superior Rigidity** - 0.12" 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 in cold weather applications than an elastomeric PVC gasket.

**Pre-Set Calibration** - All Flex-Seal® MR70 Series 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 .12" hex head screw.