

## MASTER SEAL™ Washers

Provide An Air, Vapor Or Liquid-Tight Seal

AZTEC MasterSeal washers are a practical and simple, yet sturdy and reliable. They are engineered to prevent delamination of metal and sealant.

### Features and Benefits

- Vulcanized for optimal strength.
- Aluminum, stainless steel or galvanized steel backing standard; Monel backing also available.
- EPDM sealer standard; neoprene and silicone also available.
- Deflectable, tapered lip on inside diameter assures inner seal around fastener.
- Sealant evenly compresses to create a uniform seal.
- Resists shearing and tearing during application.
- Retains positive seal regardless of position on flat surfaces and many curved surfaces.
- Allows visual confirmation of proper seating.

## SIZES

Sealant: EPDM

### 20 Gage Galvanized Steel Backing

Outside Diameter	Screw Size
1/2" (9mm)	#10, #12, 1/4", #14
9/16"	#12
5/8" (15mm)	#10, #12, 1/4", #14, #17, 5/16"
.729"	1/4", #14, 5/16", 3/8
1"	5/16", 1/2"
1-1/8"	1/4", #14
1-13/16"	5/16"
1-1/2"	1/4", #14, 5/16"

### 20 Gage 304 Stainless Steel Backing

Outside Diameter	Screw Size
1/2" (9mm)	#10, #12, 1/4", #14
9/16"	#12
5/8" (15mm)	#10, #12, 1/4", #14, #17, 5/16"
.729"	1/4", #14, 5/16", 3/8
7/8"	3/8"
1"	5/16", 1/2"

### .040 Aluminum 5052 Backing

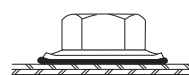
Outside Diameter	Screw Size
9/16"	#12, 1/4", #14
5/8" (15mm)	#10, #12, 1/4", #14
.729"	5/16", 3/8
1"	5/16"
1-3/16"	5/16"
1-1/2"	5/16"

## Installation

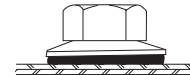
Extrusion of sealant at outer edge of properly seated washer provides easy conformation of proper fastener seal.



Correct  
Slight circle of sealant extrusion.



Too Tight  
Metal backing begins to turn up.



Too Loose  
Sealant is not compressed and can not form seal.

## Typical properties of Bonded EPDM Sealing Washer Material

Property	Value	Test Method
Base Material	Cross-Linked EPDM (Ethylene propylene di ene terpolymer)	N/A
Color	Black	N/A
Test Level	3	Grade
Test Temperature	B 100 degrees C	Type
Volume Swell	A No Requirement	Class
Durometer Hardness	70 +/- 5ASTM	D2240
Tensile Strength	10 MPa (1450 PSI) Minimum	ASTM D412
Ultimate Elongation	250% Minimum	ASTM 412 A/C
Heat Resistance	Heat aging 70 hrs @ 100 degrees C	ASTM D573
	Change / Hardness Maximum + 10 Points	
	Change / Tensile Maximum - 25%	
	Change / Ultimate Elongation Maximum - 25%	
Compression Set	Maximum 25%	ASTM D395B
Ozone Resistance	No observed effect (70 hrs. @ 50 ppm)	ASTM D1171
	100% Quality Retention Facing	
Low Temperature Brittleness	Non-brittle 3 minutes@ -55 degrees C	ASTM D2137
UV Resistance	Excellent	
Resistance To Aging	Excellent	
Non-standing	Pass	

## SADDLE WASHERS

We can provide saddle washers for a variety of panel types. Contact TFC for sizes.



Styles for flat and curved ribs

All information is non-binding and without guarantee. Before using the products, all specifications and calculations must be checked by a suitably qualified person and local regulations must be observed. This document is subject to revision. We reserve the right to make technical changes. (0321-1)