

TOPOG-E® GASKETS



The steam boiler market makes extreme demands on gaskets; Topog-E® molded rubber gaskets are specifically formulated to meet and exceed these demands and deliver industry standard performance.

Topog-E® Series 180 gaskets have been refined through a series of over 600 research formulation tests to ensure that they are able to meet the exacting performance standards of the steam boiler industry.

Specifically they:

1. Conform to the topography of the mating surfaces
2. Withstand a boiler's full, continuous and cycling operating pressures
3. Withstand continuous exposure to water treatment chemicals
4. Withstand continuous exposure to ion and oxygen attack in hot air
5. Prevent all leakage
6. Replace easily, without chiselling or buffing

MATERIALS

Special, proprietary rubber Composition, black, 80-85 Durometer.

SERVICE SUMMARY

Steam boilers: up to 180 psi (12 bar) and 380° F. (193° C) Water, condensate, etc. vessels: 200+ psi (14 bar) and less than 300°F. (150°C)

APPLICATIONS

When used on steam pressure vessels Topog-E® Series 180 gaskets are typically used at operating pressures of up to 180 PSI (12 bar) and saturated steam temperatures up to 380° F. (193° C) for an average service life of one year. When used in other applications (e.g. condensate, water, and air vessels) Topog-E® Series 180 gaskets are sometimes used at pressures above 200 PSI (14 bar) where temperatures are typically more moderate (e.g. below 250°F./121°C.). When operating under less severe conditions (e.g. water applications at ambient temperatures) Topog-E® Series 180 gaskets can provide very long service lives. Topog-E® Series 180 gaskets have been used successfully around the world for over forty years. In general, any type of industrial pressure vessel or tank that has inspection openings is a potential application where Topog-E® Series 180 gaskets can be used as a cost effective sealing device.

In addition to using them in steam pressure vessels, customers also use Topog-E® molded gaskets and sheet material with great success in many other applications, including:

- Water softeners
- Hot water heaters
- Steam humidifiers and cookers
- Water purifiers and demineralizers
- Refrigeration units
- Liquid treatment vessels
- Carbon absorption and filtering vessels
- Dryer cans in paper mills
- Water hydrants
- Mixing tanks
- Compressed air tanks
- Various types of dryers
- Air starters and receivers
- Deaerators
- Hatch covers
- Water towers and columns
- PVC reactor vessels

INSTALLATION ENVIRONMENT & SUITABILITY

Topog-E® Series 180 gaskets are specifically formulated to have excellent resistance to steam and hot and cold water.

They also have good resistance to:

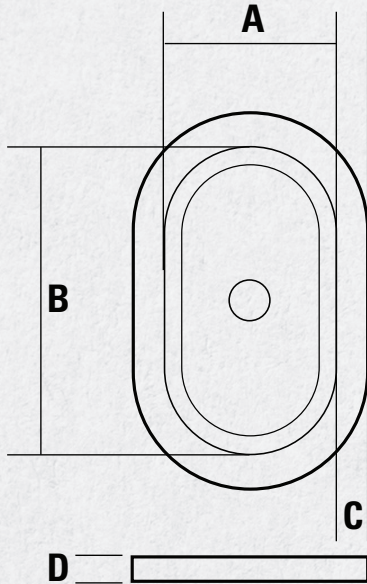
- Alcohols
- Ketones
- Phosphate esters
- Silicone oils and greases
- Dilute acids
- Bases
- Salts
- Glycols
- Ammonia
- Selected refrigerants
- Animal and vegetable fats

Water treatment chemicals, when used in accordance with supplier's guidelines, should not have a significant effect on the service life of properly installed Topog-E® Series 180 gaskets.

Topog-E® Series 180 gaskets are not recommended for use in applications where they see direct exposure to high concentrations of aromatic hydrocarbons, chlorinated solvents, or petroleum based oils, fuels, and lubricants.

TOPOG-E® GASKET SIZES

When ordering, be sure to state the two inside dimensions (A & B), flange width (C), thickness (D), and shape (E, OB, etc.).



SHAPE CODE



Elliptical – E



Pear – P



OB Round – OB



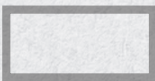
Square – S



Round – R



Special Square – SPS



Rectangle – Rect.



Elliptical Turtle – ET



Diamond – D

SIZE (IN)				SHAPE CODE	TYPE
A	B	C	D		
(unless stated otherwise)					
Elliptical - 'E'					
1-7/8	2-1/2	7/16	-	E	Handhole
1-3/4	3-3/4	3/8	-	E	Handhole
2	3	3/8	-	E	Handhole
2-1/4	3-1/4	1/2	-	E	Handhole
2-1/4	3-3/4	1/2	-	E	Handhole
2-1/2	3-1/4	3/8	-	E	Handhole
2-1/2	3-1/2	1/2	-	E	Handhole
2-3/4	3-1/2	3/8	3/16	E	Handhole
2-1/2	3-3/4	3/8	3/16	E	Bracket
2-3/4	3-1/2	1/2	-	E	Handhole
2-1/2	3-3/4	1/2	-	E	Bracket
2-3/4	3-3/4	5/8	-	E	Handhole
2-3/4	3-3/4	1/2	-	E	Handhole
2-7/8	3-7/8	1/2	-	E	Handhole
3	3-3/4	1/2	-	E	Handhole
2-3/4	4-1/2	5/8	-	E	Handhole
3	4-1/4	5/8	-	E	Bracket
3	4	5/16	-	E	Handhole
3	4	1/2	-	E	Handhole
2-3/4	4-1/4	1/2	-	E	Bracket
3	4	5/8	-	E	Handhole
3	4	3/4	-	E	Handhole
3	4	1-1/2	-	E	Handhole
3	4-1/2	1/2	-	E	Handhole
3	4-1/2	5/8	-	E	Handhole
3	5	9/16	-	E	Handhole
3-1/4	4-3/4	9/16	-	E	Bracket
3-1/4	4-1/4	1/2	-	E	Handhole
3-1/4	4-1/4	3/4	-	E	Handhole
3	4-1/2	3/4	-	E	Bracket
3-1/4	4-1/2	1/2	-	E	Handhole
3-1/4	5	9/16	-	E	Handhole
3-3/8	4-3/8	7/16	-	E	Handhole
3-3/8	4-3/8	9/16	-	E	Handhole
3-1/2	4-1/2	7/16	-	E	Handhole
3-1/2	4-1/2	1/2	-	E	Handhole
3-1/2	4-1/2	5/8	-	E	Handhole
3-1/2	4-1/2	3/4	-	E	Handhole
3-1/2	4-1/2	1-1/2	-	E	Handhole
3-1/2	5	1/2	-	E	Handhole
3-1/2	5	3/4	-	E	Handhole
3-3/4	4-3/4	9/16	-	E	Handhole
3-3/4	5-1/2	9/16	-	E	Handhole
4	5-1/4	9/16	-	E	Bracket
4	5	5/8	-	E	Handhole
3-3/4	5-1/4	5/8	-	E	Bracket

SIZE (IN)				SHAPE CODE	TYPE
A	B	C	D		
(unless stated otherwise)					
3-1/2	5-1/2	5/8	-	E	Bracket
4	4-3/8	1/2	-	E	Handhole
4	5-1/2	3/4	-	E	Handhole
4-1/2	5-1/2	5/8	-	E	Handhole
4	6	5/8	-	E	Handhole
4-1/2	6	3/4	-	E	Handhole
4-1/4	5-1/8	3/8	-	E	Handhole
4-1/2	6-1/2	9/16	-	E	Handhole
4-1/2	6-1/2	1-1/4	-	E	Handhole
4-3/4	6-5/8	3/4	-	E	Handhole
5	6	5/8	-	E	Handhole
5	7	3/4	-	E	Handhole
5-3/4	7-1/4	3/4	-	E	Handhole
6	8	3/4	-	E	Handhole
6	8	1	-	E	Handhole
6	9	1	-	E	Handhole
6	10	5/8	-	E	Handhole
6	10	1	-	E	Handhole
7	9	3/4	-	E	Handhole
7	10	1-1/2	-	E	Handhole
7-1/2	10-1/4	3/4	-	E	Handhole
7-1/2	11-1/2	1	-	E	Manway
7-7/8	11-3/4	1	-	E	Manway
8	10	1	-	E	Manway
8-5/8	12-1/2	1	-	E	Manway
8	11	1	-	E	Manway
9	12	1	-	E	Manway
9	14	1-1/4	-	E	Manway
9-1/2	14	1-1/8	-	E	Manway
9-3/4	14-1/2	2	-	E	Manway
9-3/4	14-3/4	1-1/4	-	E	Manway
9-1/2	15-1/2	1	-	E	Manway
9-15/16	15-15/16	3/4	-	E	Manway
10	14	1	-	E	Manway
10	14	1-1/2	-	E	Manway
10-1/2	14	1-1/4	-	E	Manway
10-1/2	14-1/2	1-1/4	-	E	Manway
10-1/2	14-1/2	1-3/8	-	E	Manway
10	15	1-3/8	-	E	Bracket
10-1/2	15	1-1/4	-	E	Manway
10-1/2	14-1/2	1-3/4	-	E	Manway
10-3/4	14-3/4	1-1/4	-	E	Manway
10	16	5/8	-	E	Manway
11	14	1-3/8	-	E	Manway
11	14	1-1/4	-	E	Manway
11	14-1/2	1	-	E	Manway

SIZE (IN)				SHAPE CODE	TYPE
A	B	C	D		
(unless stated otherwise)					
11	14-3/4	1-1/2	-	E	Manway
11-1/2	14-1/2	1-1/4	-	E	Manway
11	15	3/4	-	E	Manway
11	15	1	3/16	E	Manway
11	15	1	-	E	Manway
11	15	1-1/4	-	E	Manway
11	15	1-3/8	-	E	Manway
11	15	1-3/4	-	E	Manway
11-1/2	15-1/2	1-1/4	-	E	Manway
11-1/2	15-1/2	1-3/4	-	E	Manway
11-3/4	15-3/4	1-3/8	-	E	Manway
11-3/4	15-3/4	1-3/4	-	E	Manway
11	16	1-1/4	-	E	Manway
12	15	1	-	E	Manway
12	15	1-1/4	-	E	Manway
12	15-1/2	1	-	E	Manway
12	15-1/2	1-1/4	-	E	Manway
12	16	1	-	E	Manway
12	16	1-1/4	-	E	Manway
12	16	1-3/8	-	E	Manway
12-1/2	16-1/4	1-1/4	-	E	Manway
12-1/2	16-1/2	1	-	E	Manway
14	18	1-1/2	-	E	Manway
18	24	1-1/2	-	E	Manway
OBround - 'OB' flat sides					
1-3/4	3-3/4	1/2	-	OB	Handhole
2	3	1/2	-	OB	Handhole
2-1/4	3-1/4	1/2	-	OB	Handhole
2-1/4	3-1/4	3/8	-	OB	Handhole
2-1/2	3-1/2	1/2	-	OB	Handhole
2-1/4	3-3/4	9/16	-	OB	Handhole
2	4	9/16	-	OB	Bracket
2-1/2	3-3/4	1/2	3/16	OB	Handhole
2-3/4	3-1/2	1/2	-	OB	Handhole
2-3/4	3-3/4	1/2	-	OB	Handhole
2-7/8	3-7/8	7/16	-	OB	Handhole
2-7/8	4-3/8	9/16	-	OB	Handhole
2-3/4	4-1/2	1/2	-	OB	Handhole
3	4-1/4	1/2	-	OB	Bracket
2-3/4	4-3/4	1/2	-	OB	Handhole
3	4	1/2	-	OB	Handhole
3	4	9/16	-	OB	Handhole
3	4-1/2	9/16	-	OB	Handhole
3-1/4	4-1/4	9/16	-	OB	Handhole
3	5	9/16	-	OB	Handhole
3-1/4	4-1/2	1/2	-	OB	Handhole

* RAGCO supports the autonomy of its locations to select the best products to service their markets. Subtle variations of these specification may exist. Contact your RAGCO affiliate for confirmation.



TOPOG-E® GASKET SIZES

SIZE (IN)				SHAPE CODE	TYPE
A	B	C	D		
(unless stated otherwise)					
3-1/4	4-1/2	9/16	-	OB	Handhole
3-1/4	4-3/4	5/8	-	OB	Handhole
3-1/4	4-3/4	1/2	-	OB	Handhole
3-1/2	4-1/2	9/16	-	OB	Handhole
3	4-3/4	9/16	-	OB	Bracket
3-3/8	4-1/4	3/8	-	OB	Handhole
3-1/2	5	9/16	-	OB	Handhole
3-1/4	5-1/4	9/16	-	OB	Bracket
3-1/2	5-1/2	1/2	-	OB	Handhole
3-1/2	5-1/2	5/8	-	OB	Handhole
3-5/8	5-5/8	7/16	-	OB	Handhole
3-5/8	5-5/8	9/16	-	OB	Handhole
3-5/8	5-5/8	1	-	OB	Handhole
4	5	5/8	-	OB	Handhole
4-1/2	5-1/2	5/8	-	OB	Handhole
4	6	5/8	-	OB	Handhole
4-1/2	6	5/8	-	OB	Handhole
4-1/2	6-1/2	5/8	-	OB	Handhole
4-1/2	10-1/4	3/4	-	OB	Handhole
5	6-3/4	1	-	OB	Handhole
5	7	5/8	-	OB	Handhole
5	7-1/2	1	-	OB	Manway
10-1/2	14-1/2	1-5/16	-	OB	Manway
11	15	1-1/4	-	OB	Manway
12	16	1-1/2	-	OB	Manway
Round 'R'					
Inner 'D'	Outer 'D'	C	D		
1-3/8	2-5/16	-	5/16	R	Handhole
2-7/8	3-5/8	-	1/8	R	Handhole
2-15/16	3-15/16	-	-	R	Handhole
3	3-5/8	-	3/16	R	Handhole
3	3-3/4	-	-	R	Handhole
3	4	-	-	R	Handhole
3-1/4	4	-	-	R	Handhole
3-1/2	4-3/16	-	3/16	R	Handhole
3-1/2	4-1/2	-	-	R	Handhole
3-1/2	5	-	-	R	Handhole
3-1/2	5-1/2	-	-	R	Handhole
3-11/16	4-1/2	-	3/8	R	Handhole
4	4-3/4	-	-	R	Handhole
4	5	-	-	R	Handhole
4	5-1/4	-	3/16	R	Handhole
4-1/4	5-1/16	-	-	R	Handhole
4-1/2	5-1/2	-	3/16	R	Handhole
4-3/4	6-3/8	-	-	R	Handhole
5	6	-	-	R	Handhole

SIZE (IN)				SHAPE CODE	TYPE
Inner 'D'	Outer 'D'	C	D		
(unless stated otherwise)					
5-1/4	8	-	5/16	R	Handhole
5-7/16	7-9/16	-	5/16	R	Handhole
6	7-1/2	-	-	R	Handhole
10-3/4	13-3/8	-	1/8	R	Handhole
12-3/4	16-1/8	-	1/8	R	Handhole
Special Shapes					
1-1/2	3-3/4	-	-	R, 4 Holes	Flange
2	3-1/2	-	-	S, 4 Holes	Flange
7-3/8	7-3/8	5/8	-	S	Handhole
2	6	1-1/2	-	Rect.	Handhole
2-13/16	16-7/8	1-1/16	3/16	Rect.	Handhole
3-3/4	8-1/2	1/2	-	Rect.	Handhole
4-1/2	6	1/4	-	Rect.	Handhole
6-1/4	9-3/4	5/8	-	Rect.	Handhole
3	4	9/16	-	K	Handhole
3-3/8	3-3/4	1/4	1/8	D	
3-3/8	4-1/4	1/4	-	D	Handhole
3-1/2	4-1/2	1/4	-	D	Handhole
4	5	1/2	-	D	Handhole
4-1/4	5-1/4	13/32	-	D	Handhole
3-1/2	4-1/2	7/16	-	P	Handhole
3-3/8	4-3/8	1/2	-	P	Handhole
3-5/8	4-3/4	1/2	-	P	Handhole
4	5	1/2	-	P	Handhole
4	5	9/16	-	N.P.	Handhole
4	5	5/8	-	W.P.	Handhole
4-1/4	5-1/8	1/2	-	SPU.P	Handhole
5-1/4	5-1/4	3/8	-	SPS	Handhole
7-7/16	7-7/16	9/16	-	SPS	Handhole
10	16	1-3/4	-	ET	Manway
8-3/4	14	2-1/4	-	E, w 4 Bolt Holes	Manway
3-7/8	13-3/8	1-3/16	1/8	OB	Flange

DISCLAIMER All information in this data sheet is based on data believed to be reliable, however we make no guarantee or warranty of performance of Topog-E® Series 180 gaskets. Because there are many application-specific factors that can affect service life it is always advisable to first test Topog-E® Series 180 gaskets in a particular application to determine their ultimate suitability.



NOTES

- Standard thickness is 1/4" unless otherwise noted under column D.
- All prices are for Topog-E® Gasket Standard Material (refer to separate Material Specification sheet for more information).
- Prices are F.O.B. Tulsa, Oklahoma 74110.
- Bracketed gaskets are not stock molded sizes, however, the first stock size can often be used on plates designed for the bracketed size.
- A 25% restocking fee may be charged on all returns.
- Special sizes and shapes can be fabricated upon request.
- Topog-E® gaskets can be made from other materials – contact us to receive a Materials Specification Sheet for Alternative Elastomeric Materials.
- We also make chemical tank and water hydrant gaskets.

DISCLAIMER Topog-E® gaskets are made and sold for use in steam, water, air, and other selected applications only. Our recommendations for their use are based on tests believed to be reliable and on actual customer experience. Since their installation and use are beyond our control, we cannot guarantee the results, whether or not such use is in accordance with instructions. We disclaim any responsibility.