

# Gasket Materials for UL 48 Standard – Electric Signage

UL 48 is the leading safety standard for electric signs, guiding sign manufacturers that want to meet UL 48 in the Sign Components Manual (SAM). Stockwell Elastomerics maintains inventory of gasket materials that meet UL 48 / SAM, including 3M adhesive backings that are UYMR2 recognized. Stockwell Elastomerics works closely with sign, digital display and kiosk manufacturers to develop and manufacture solutions that deliver optimal performance while meeting the UL standards.

### Materials:

Highlighted below are commonly specified engineered materials that meet the functional demands of indoor and outdoor electric signage. Many of the UL 48 gasket materials are also UL 94V-0 flame rated, often required for indoor applications. Stockwell Elastomerics offers a wide range of adhesive performace options including 3M adhesives recognized for sign accessories (UYMR2).

#### **Production:**

Stockwell Elastomerics offers these and other UL gasket materials in sheets or rolls, select grades are available in gasket tape rolls. These same performance materials are also available as custom cut parts with low volume waterjet cutting and high volume die cutting available.





Note: UL is developing a new standard (UL 48B) for indoor and outdoor digital signage and messaging equipment.

B-10480S -	Soft Silicone Sp	onge. Clos	sed Cell							
Product	Thickness Range	Firmness	Force Deflection*	Colors	Colors Uses					
R-10480-S	0.093 - 0.500" (1.59 - 12.7mm)	Soft	2 to 7 psi	Black & Orange	<ul> <li>Weather Sealing and Washdown (IP64, IP65)</li> <li>Indoor/Outdoor Gaskets (UV Resistant)</li> <li>Low Compression Set</li> <li>Meets SAM Bequirements</li> </ul>					
HT-800 - Medium Density Silicone Foam, Modified Closed Cell										
Product	Thickness Range	Firmness	Force Deflection*	Colors	Uses					
HT-800	0.032 - 0.500" (2.36 - 12.7mm)	Medium	6 to 14 psi	Gray & Black	Meets SAM Requirements					
HT-870 - Se	HT-870 - Soft Silicone Foam, Open Cell									
Product	Thickness Range	Firmness	Force Deflection*	Colors	Uses					
HT-870	0.062 - 0.500" (1.57 - 12.7mm)	Soft	2 to 7 psi	Black	<ul> <li>Weather Sealing at 50 - 70% Deflection</li> <li>Dust and Light Leak Gaskets at 25% deflection</li> <li>Indoor/Outdoor Gaskets (UV Resistant)</li> <li>Meets SAM Requirements</li> <li>UL 50, UL 50E, UL 94V-0, UL 508, UL 60947, UL 157</li> <li>Long Service Life</li> </ul>					
Poron <sup>®</sup> 470	Poron® 4701-30 Very Soft Urethane Foam, Open Cell									
Product	Thickness Range	Firmness	Force Deflection*	Density	Colors	Uses				
4701-30	0.032 - 0.500" (0.79 - 12.7mm)	Very Soft	1 to 5 psi 3 to 8 psi	15 lb/ft <sup>3</sup> 20 lb/ft <sup>3</sup>	Black	Indoor Gaskets     Excellent Dust Sealing Properties     Low Compression Set     UL 94HBF flame rating				
			5 to 12 psi	25 lb/ft <sup>3</sup>		Meets SAM Requirements     UL 50, UL 508				

\* Compression Force Deflection (psi) per ASTM D1056 @ 25% deflection

Bisco™ Silicone Foams and Poron® Urethane Foams are manufactured by Rogers High Performance Foams Stockwell Elastomerics is a Preferred Converter for Saint-Gobain, Rogers Corporation and 3M



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RELATED WEB PAGE: stockwell.com/UL48Gaskets stockwell.com/SiliconeMaterialsData

# STOCKWELL'S VALUE PROPOSITION:

**Design & Engineering:** Staff engineers comprehend design challenges and are available to help select materials and manufacturing processes that best fit your application needs.

# Material Solutions: Stockwell

Elastomerics has strategically partnered with industry leaders such as Rogers Corp., St. Gobain, 3M, Wacker Silicones and Momentive Silicones to ensure the <u>highest quality materials</u> are used. Stockwell Elastomerics has a comprehensive inventory of engineered materials designed and manufactured to meet requirements of the most demanding gasketing applications.

# Pre-Production through

**Manufacturing:** Combining in-house CNC die cutting, waterjet cutting, injection molding, compression molding and adhesive lamination with comprehensive inventory; Stockwell Elastomerics can fulfill fast-turn prototyping, pre-production and full production requirements.

# HOW TO SPECIFY

# Step 1: Select Base Gasket Material, Thickness & Width

Material	Firmness / Cell Structure	Thickness	Color*	Length & Width**
HT-870	Soft / Open	.062" - 0.50"	Black	Custom
HT-800	Medium / Closed	.032" - 0.50"	Black or Gray	Custom
R-10480-S	Soft / Closed	.093" - 0.25"	Orange or Black	Custom
4701-30	Very Soft	.032" - 0.50"	Black	Custom

\* Other colors may be available \*\* Rule of thumb, aspect ratio for width = 1.5x thickness

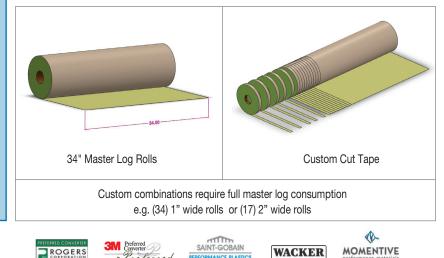
# **Step 2: SAM Listed Adhesives**

Adhesive	Construction and Use			
F-9473PC	VHB <sup>™</sup> adhesive is shear resistant with low initial tack, high ultimate strength.			
	Meets Sign Components Manual (SAM) Requirements.			
467MP	7MP Meets Sign Components Manual (SAM) Requirements			
468MP	Meets Sign Components Manual (SAM) Requirements			

# **Step 3: Contact Stockwell Elastomerics**

Call: 1-800-523-0123 or Email: service@stockwell.com

# Full Width Yield Required for Custom Combinations





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