

Technical Bulletin

Ply-Seal® FB, HALS

Ply-Seal® FB, HALS is a pre-formed, low-density, closed-cell, cross-linked, Ethylene Vinyl Acetate (EVA), polyethylene copolymer. Ply-Seal® FB, HALS also contains **Hindered Amine Light Stabilizers** for superior UV resistance. Designed as a flexible, waterproof, chemical-resistant, expansion joint seal, it is used in bridges, car parks, seismic applications, waste water treatment plants, precast members, and many other structures where a waterproof joint seal is required. Ply-Seal® FB, HALS is compatible with construction materials and resistant to abrasion, oxidation, oils, gasoline, salt, and other materials that may come in contact with the surface. The excellent physical performances combined with lower costs makes this an ideal seal for waterproofing expansion joints in most structures at an economical price. Meets NYSDOT 705.08 and conforms to ASTM D1056, Type 2, Class B, Grade 2 and 3.

Key Features

- Handles 30% tension, 60 % compression
- Weather & UV resistant – UV Inhibitor added
- Intersections and splices may be field-welded
- Quick and efficient field installations
- Solvent and chemical resistance
- Not affected by extreme cold

Uses

Waterproof Expansion-Contraction Joint Seal in: bridges, car parks, tunnels, waste water treatment plants, and interior/exterior commercial structures, above and below grade applications.

Enhanced Bond Line Design

Ply-Seal® FB seals are manufactured with grooves along the bond surface running the length of the joint. The grooves are approximately 1/8" wide by 1/8" deep and spaced between 1/4" and 1/2" apart. Splicing of the seal is performed using the heat-welding method.

Installation

Ply-Seal® FB is installed with **Ply-Bonder**, a 2-part epoxy, on both sides of the substrate and both sides of the **Ply-Seal® FB**. The seal is installed under compression (see design chart). Please refer to the Joint Seal Installation Instructions for proper installation procedures, including proper surface preparation.

Limited Warranty: Polyset Company Inc. makes no warranty, expressed or implied, including any warranty of merchantability of fitness for a particular purpose. The sole remedy of Purchaser for any claim concerning this product, including, but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the discretion of Polyset Company Inc. Any claims concerning this product shall be submitted in writing within one year of the delivery date of this product to Purchaser and any claims not presented within that period are waived by Purchaser. IN NO EVENT SHALL POLYSET COMPANY INC. BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDES LOSS OF PROFITS) OR PUNITIVE DAMAGES. Copyright © 2016 Polyset Company, Inc. All rights reserved. Revised 8/16.

Physical Data (with Skin/Hide Removed)

Property	Value	ASTM D3575
Density	2.6-3.1 pcf	Suffix W
Compressive Strength @ 25% & @ 50%	8-12 psi 15-20 psi	Suffix D
Elongation	250-350%	Suffix T (412)
Tensile Strength	80-100 psi	Suffix T (412)
Tear Strength	15 pli ± 3 pli	Suffix G (624)
Water Absorption	< 0.03 lb/ft ²	Suffix L
	3% vol/vol Max.	ASTM D545
Compression Set @ 50% for 22 Hrs	<12% Max. @24 hr	ASTM D1056 Suffix B
Extrusion (with 3 Sides Restrained)	< 0.25" @ 50% Compression	ASTM D545

Ply-Seal® FB, HALS Joint Material Design Chart

Model Number	Jt. Gap (in.) @ 60°F	Rec.* Seal Size (w x d)	Movement Range (in.)
#1.38	1	1 3/8 x 2	0.5 - 1.8
#1.63	1 1/4	1 5/8 x 2	0.6 - 2.1
#2.00	1 1/2	2 x 2	0.8 - 2.6
#2.38	1 3/4	2 3/8 x 2	0.9 - 3.1
#2.75	2	2 3/4 x 2	1.1 - 3.6
#3.00	2 1/4	3 x 2 1/2	1.2 - 3.9
#3.25	2 1/2	3 1/4 x 2 1/2	1.3 - 4.2
#3.50	2 3/4	3 1/2 x 2 1/2	1.4 - 4.5
#4.00	3	4 x 3	1.6 - 5.2
#4.50	3 1/2	4 1/2 x 3	1.8 - 5.8
#5.00	4	5 x 3 1/2	2.0 - 6.5

Packaging: Fabricated per project requirements

Storage: Maximum storage temperature: 95°F

Shelf Life: Unlimited when stored properly