

# **INSULATION PRODUCTS**

Selection Guide & Reference Chart

Mastics and Coatings

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## **Mastics and Coatings**

Typical Use Commercial (C) or Industrial (I)	Product Name	Vapor Sealing Insulation Facing and Jacketing (FSK, ASJ, FRK)	Lagging Adhesive/ Coating	Fiberglass and Mineral Wool	Rigid Insulation (Cellular Glass, PIR, Phenolic)	Polystyrene Coating <sup>1</sup>	Calcium Silicate
С	TITE-FIT <sup>™</sup> Coating <b>30-35</b> (White)	•		•	0		
С	SEALFAS <sup>®</sup> Coating <b>30-36</b> (White)		•	•	0	0	0
С	SEALFAS <sup>®</sup> Coating AF <b>30-36 AF</b> (White) (Fungus Resistant)		•	•	0	0	0
С	SEALFAS <sup>®</sup> Coating MA <b>30-36 MA</b> (White) (Marine Grade)		•	•	0	0	0
С	VAPOR-OUT <sup>™</sup> Coating <b>30-33</b> (White)	•		0	0	0	
С	VAPOR-FAS <sup>™</sup> WB Coating <b>30-65</b> (White)	•		•		0	
С	VAPOR-SAFE <sup>®</sup> Coating <b>30-80</b> (Brush), <b>30-90</b> (Trowel)	•		•	•	•	
С	VAPOR-SAFE <sup>®</sup> Coating AF <b>30-80</b> AF (White) (Fungus Resistant)	•		•	•	•	
С	WEATHERITE <sup>™</sup> Mastic (Brush) <b>46-50</b> (White), <b>46-51</b> (Gray)	0		•	•	•	•
I	SEALFAS G-P-M <sup>®</sup> Mastic <b>35-00</b> (Trowel), (White)			0	٠	0	•
I	SEALFAS G-P-M <sup>®</sup> Mastic <b>45-00</b> (Brush), (White)			0	•	0	•
I	C.I. <sup>™</sup> Mastic (Black) <b>60-25</b> (Trowel) <b>60-26</b> (Heavy Duty Airless Spray)			0	0		
I	MONOLAR <sup>®</sup> Mastic, Coatings <b>60-38</b> (White), <b>60-39</b> (Gray)			0	•		
I	MONOLAR <sup>®</sup> Mastic 60-90, 60-91 (Trowel); 60-95, 60-96 (Spray) (White/Gray)			•	•		
I	Fire Resistive C.I. <sup>™</sup> Mastic <b>65-05</b> (Black)			0	0		
I	H.I. <sup>™</sup> Mastic <b>90-07</b> (Black)			0	0		0
FOSTER <sup>®</sup> Va	por Barrier Membrane ar	nd Jacketing					
1	C.I. WRAP <sup>™</sup> <b>50</b> (Black)			•	٠	0	
С	C.I. WRAP™ <b>30</b> (Black)			•	•	0	

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This guide is provided as a quick reference. Please see product data sheet for specific test methods, installation methods and additional information. <sup>1</sup> Always choose white colored coating for exterior use on polystyrene insulation. Do not use solvent based products with polystyrene.

General Description	Type of Volatile	LEED 2009 IEQ CREDIT	Permeance Value as Measured in US Perms <sup>2</sup>	Flash Point
Flexible fire resistive vapor retarder coating for rigid insulation and fittings. Also used to vapor seal ASJ facing laps and punctures. Meets MIL-C-19565-C Type II and QPD listed.	Solvent		0.05	100°F (38°C)
A tough, washable, fire resistive coating for most indoor applications. Used as an adhesive and coating with lagging cloth and other fabrics. Meets MIL-A-3316C Class 1, Grade A requirements and is QPD listed. U.S. Coast Guard 164.012 certified.	Water	х	0.4 to 1.5	None
Offers the same properties of Foster <sup>®</sup> SEALFAS <sup>®</sup> 30-36 with added fungus protection. Passes ASTM D 5590 with '0' growth. U.S. Coast Guard 164.012 certified.	Water	х	0.4 to 1.5	None
Specially formulated lagging adhesive and coating for marine applications. Meets MIL-A-3316C Class 1, Grade A requirements and QPD Listed. U.S. Coast Guard 164.012, 164.112 certified and SOLAS/IMO approved.	Water	х	0.4 to 1.5	None
A white colored vapor retarder coating ideal for vapor sealing insulation facings including new white polyester facings. It provides excellent value for applications above 32°F to ambient operating conditions.	Water	х	0.1	None
An economical, fire resistive, vapor retarder coating for use over many types of thermal insulation on piping and equipment operating between 33°F and ambient temperatures.	Water	х	0.08	None
A water-based vapor retarder for indoor or outdoor use. Low odor, non-toxic and low VOC. Use on cold operating systems. Meets MIL-PRF-19565, Type II permeance requirements when tested by ASTM E 96, Procedure A.	Water	х	0.08	None
The same qualities of standard Foster <sup>®</sup> VAPOR-SAFE <sup>®</sup> 30-80 with added fungus protection. Passes ASTM D 5590 with '0' growth.	Water	х	0.08	None
Water-based, breather, weather barrier coating for indoor and outdoor use. Used over most types of insulation systems operating above ambient temperatures. Also used on cold or dual temperature systems where the insulation facing provides a vapor barrier.	Water	х	> 1.0	None
High performance, general purpose water-based, weather barrier mastic for indoor and outdoor use. Fire and chemical resistive. Excellent application properties for heavy duty applications.	Water	Х	> 1.0	None
Economical asphalt cutback vapor retarder mastic for insulation protection on cold systems. Tough and durable for exterior applications. Also suitable for underground applications.	Solvent		0.02	104°F (42°C)
High performance CSPE (Hypalon*) based vapor retarder mastic. Tough, flexible, elastomeric, chemical and fire resistive. The preferred product for most cold and dual-temp work including cryogenic insulation systems.	Solvent		0.025	103°F (40°C)
An elastomeric resin and CSPE (Hypalon*) containing vapor retarder. A tough, flexible, fire resistive finish which provides outstanding chemical and weather resistance. Used on cold and cryogenic insulation systems.	Solvent		0.03	Flash Point 110°F (43°C)
Asphaltic cutback vapor retarder mastic with added fire resistance. For use on exterior applications on cold insulation systems.	Solvent		0.03	104°C
Economical asphalt emulsion. A protective weather coat that is easy to apply and will not shrink or crack. Use on hot operating, exterior insulation systems.	Water	х	1	> 200°F ( 93°C )
A 50 mil flexible vapor retarder sheet membrane. It is used to provide a moisture and vapor retarder film over cold and cryogenic piping and equipment insulation. It is also suitable for underground piping.	n/a	n/a	<0.015	n/a
A 30 mil flexible vapor retarder sheet membrane. It is used to provide a moisture and vapor retarder film over cold and cryogenic piping and equipment insulation.	n/a	n/a	<0.02	n/a

<sup>2</sup> See PDS for methods and test conditions.

\* Chlorosulfonated Polyethylene Rubber (CSPE) is also known as Hypalon, a trademark of Dupont Performance Elastomers and is no longer produced by Dupont.



## **Adhesives**

Product Name	General Description	Type of Volatile	Flash Point
SEALFAS <sup>®</sup> Adhesive/Coating 30-36 30-36 AF (Fungus Resistant) 30-36 MA (Marine Grade)	Water-based lagging adhesive and coating for adhering canvas and fiberglass cloth over insulation. Meets MIL-A-3316C Class 1, Grade A requirements. See coatings page for 30-36 AF and 30-36 MA.	Water	None
Foster <sup>®</sup> S.M. Adhesive <b>81-10</b> (Brush, Spray)	Quick setting, rubber-based adhesive for bonding fibrous glass and acoustical duct liner. ASTM C 916 Type IV.	Solvent	-7°F (-22°C)
Fibrous Adhesive <b>81-27</b> (Brush, Trowel)	Sodium silcate-based adhesive for bonding calcium silicate insulation to itself and to substrates. MIL-I-24244, grade available.	Water	None
Fire Resistive Adhesive <b>81-33</b> (Trowel)	An excellent adhesive for bonding insulation to most structural surfaces. Also used for fitting fabrication and joint sealing with polyurethane and polyisocyanurate.	Solvent	110°F (43°C)
LAGFAS® Adhesive 81-42 W	Quick setting, water-based, thixotropic adhesive for sizing and adhering canvas, glass cloth and other fabrics to insulation. Washable and mildew resistant. Lower viscosity than 30-36.	Water	None
Hot Melt Adhesive 83-13HM ZP	Hot Melt pressure sensitive adhesive for bonding various facing materials including FSK, ASJ, polyester, Saran and other laminates to pipe covering, tank wrap and panel insulation materials. 100% solids, no VOC, allows for immediate handling of parts without waiting for drying or curing.	None	200°F (93°C)
STIC-SAFE <sup>®</sup> Adhesive <b>85-15</b> (Brush)	Fast-setting rubber adhesive for adhering low density fibrous insulation to sheet metal and to most other construction materials. ASTM C916 Type IV.	Solvent	-7°F (-22°C)
SPARK-FAS <sup>®</sup> Adhesive <b>85-20</b> (Brush)	Non-flammable, quick-setting adhesive for bonding fibrous insulation (up to 6 lb density) to sheet metal and aluminum. Also for lap sealing. ASTM C 916 Type I.	Solvent	None
QUICK-TACK <sup>™</sup> Adhesive <b>85-60</b> (Brush, Spray)	High tack, water-based adhesive for attaching low density fibrous insulation and duct liner to painted and unpainted metal. Also may be used for contact applications. ASTM C 916, Type II.	Water	None
SPARK-FAS <sup>®</sup> WB Adhesive <b>85-70</b> (Brush, Spray)	Water-based adhesive used to adhere fibrous glass or mineral wool insulations (up up 6 lbs density) to painted or unpainted metal surfaces. ASTM C 916, Type II, MIL-A-3316C, Class 2 and QPD listed.	Water	None
DRION <sup>®</sup> Contact Cement 85-75 (Brush)	A non-flammable contact cement with high initial strength. Used for lap sealing and bonding two impermeable surfaces.	Solvent	None
Cellular Glass & Urethane Adhesive/Sealant <b>81- 84</b> (Trowel) (Two Part Reactive Cure)	Used to bond cryogenic and low temperature insulations to themselves and to metal and masonry substrates. Chemically cures to form a strong yet flexible bond. May be used down to -260°F (-163°C) with PIR insulation.	None	Part A&B Blended over 200°F (93°C)
Cellular Glass & Urethane Adhesive/Sealant <b>81- 84 NH</b> (Trowel) (Two Part Reactive Cure)	Halide-free adhesive for bonding cryogenic and low temperature insulations to themselves and to stainless steel substrates. Chemically cures to form a strong yet flexible bond. May be used down to -260° F (-163° C) with PIR insulation.	None	Part A&B Blended over 200°F (93°C)
Cryogenic Adhesive 82-77 (Trowel) (Three Part Reactive Cure)	A chemically curing, 100% solids, three-component epoxy adhesive with a lower service temperature of minus 320° F (-196°C)	None	Wet Flammability <250°F (121°C)

Suggested Use <sup>1</sup>				Insulation Type						
Attachment	Lap Sealing	Lagging	Joint and Fitting Fabrication	Duct Liner	Fiberglass and Mineral Wool	PIR/ Polyurethane/ Phenolic	Cellular Glass	Polystyrene	Calcium Silicate	Rubber Foam
		•			•	0	0	0	0	0
•				•	•					
•			•						•	
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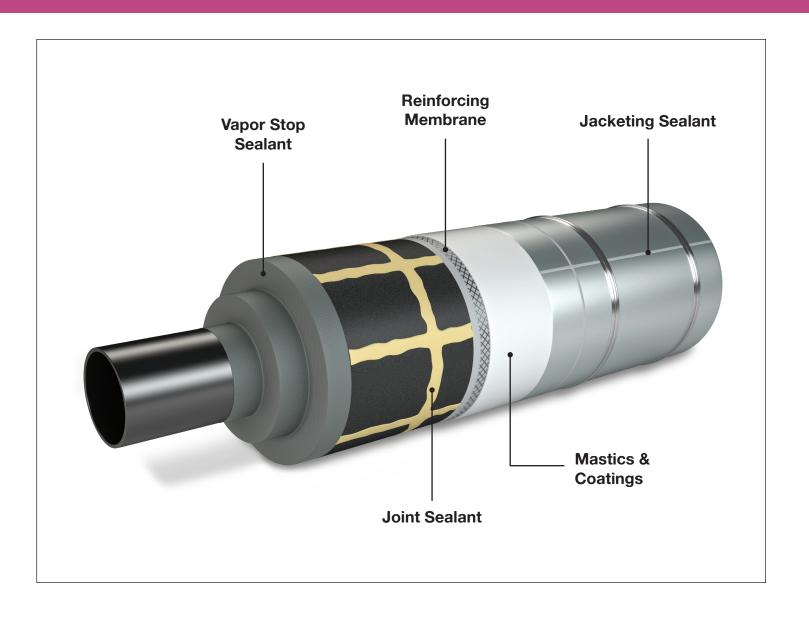


## Sealants

Product Name	General Description	Service Temperature Limits at Coated Surfaces	Type of Volatile	LEED 2009 IEQ Credit	Flash Point
Cryolar <sup>™</sup> 1K Vapor Stop Sealant <b>90-61</b>	A one component, elastomeric, ready to use vapor stop sealant for cold and cryogenic applications. Formulated for easy application by brush with no need to mix. Apply to PIR, cellular glass and metal substrates.	-320°F to 250°F (-196°C to 121°C)	Solvent		115°F (46°C)
Cryogenic Vapor Stop Sealant <b>90-66</b> (Two Part)	A two part sealant/coating designed for use in cryogenic applications. It is suitable for application to PIR foam, cellular glass and fibrous glass insulations in conjunction with aluminum and steel. Cures to a tough elastomeric film.	-320°F to 250°F (-196°C to 121°C)	Solvent		80°F (26.7°C)
FOAMSEAL <sup>™</sup> Sealant <b>30-45 N</b>	Vapor barrier joint sealant that remains flexible and will not shrink or crack. Also used for flashing metal jacketing and bedding of rigid insulations including cellular glass. PIR and polystyrene.	-100°F to 300°F (-73°C to 149°C)	Solvent (5%)	х	142°F (61°C)
ELASTOLAR <sup>™</sup> Sealant <b>95-44</b>	Elastomeric vapor barrier joint sealant and flashing compound. For insulation, masonry and metal jacketing. Aluminum pigmented. Apply with a trowel or caulking gun to all insulations except polystyrene foam.	See Data Sheet. -40°F to 250°F (-40°C to 121°C)	Solvent	x	105°F (41°C)
FLEXTRA <sup>™</sup> Sealant <b>95-50</b>	Non-hardening, high solids joint sealant. Remains soft in joint but skins on surface to reduce bleed through. Apply to joints of PIR, polyurethane and cellular glass insulations. Not for exposed joints, flashing or use with polystyrene. Apply with a trowel to all insulations except for polystyrene foam.	See Data Sheet. -200°F to 160°F (-129°C to 71°C)	Solvent	X	145°F (63°C)

Reinforcing Membranes				
Mast-a-Fab <sup>®</sup> <b>42-24</b>	A white leno weave synthetic fiber reinforcing membrane with 9" x 8" mesh size. Easy to handle yet superior to glass mesh because of its elastic properties.			
Chil-Glas <b>#10</b>	A 10' x 10' glass mesh. Used to reinforce mastic, coatings and sealants.			

This guide is provided as a quick reference. Please see product data sheet for specific test methods, installation methods and additional information.



#### **General Notes**

- 1. The recommendations in this selection guide are of general nature only. Refer to the product data sheets to be certain the selected Foster<sup>®</sup> product meets all the requirements of the application.
- 2. Do not apply exterior weather barrier coating on horizontal surfaces that might be subject to prolonged ponding of water.
- 3. If insulation cement is used, it must be completely dry before applying Foster® mastics or coatings. Prime as required.
- 4. Because of the variation in surface characteristics of facing materials, we recommend that the user conduct their own adhesion test when choosing a coating or mastic for foil, kraft and plastic-faced insulations.
- 5. The Foster® products listed in this guide are for professional use only.



H.B. Fuller Construction Products Inc. 1105 South Frontenac Street Aurora, IL 60504-6451 Phone: (800) 832-9002

#### fosterproducts.com