# **Therm-Flash / Flexible Flashing**

#### Description

Therm-Flash Flexible Flashing is a self adhering membrane featuring a durable Industrial aluminum film surface with a pure **butyl rubber** adhesive. The film surface provides excellent tear and puncture resistance. The adhesive surface is protected with a removable release film for ease of installation. The membrane provides a tight seal around windows, doors and other penetrations in exterior walls. The nominal 24-mil flashing (20 mils of butyl plus 4 mils of reinforcing foil film) prevents water from penetrating at a variety of openings. Therm-Flash Flexible Flashing is designed for use on walls and roofs and is recommended with the WaterWay Drainable Stucco Assembly, sealing terminations in conjunction with weather resistive barriers & Rainscreen applications.

## Applications

- Traditional Stucco
  - Behind FIFS
- Wood Base Siding

Manufactured Stone

- Under Metal Roofs
- Fiber Cement Siding

## **Features and Benefits**

- Prevents moisture intrusion in a water tight membrane
- Aggressive adhesive formulation Formulated to provide unsurpassed adhesion
- Fast and easy to install no expensive tools required (Only Roller & Razor Knife)
- Tough, Reinforced Aluminum film is very durable resists punctures
- May be installed in a wide temperature range / Stays Flexible
- Significant labor savings

Technical Data						
Typical Physical Properties	Test Method	USA (Metric)	Therm-Flash			
Thickness		mils	18 ±2			
Tensile	ASTM D 412	psi	75.0			
Elongation	ASTM D 412	%	60			
Permeance	ASTM E 283-83	cfm/ft <sup>2</sup>	0.01			
Puncture Resistance	ASTM E 154	lbs	125.0			
Performance Characteristics						
Low Temperature	ASTM D 1970	°F (°C)	-60 (-73)			
High Temperature		°F (°C)	220 (121)			
Crack Cycling (100 cycles)	ASTM C 836	°F (°C)	unaffected at -50			
Peel Strength	ASTM D 903	lb/in. Width	17			
Lap Adhesion	ASTM D 1876 Mod.	lb/in. Width	7.0			
Water Absorption	ASTM D 570	% by weight	0.1 (max)			
Hydrostatic Head	ASTM D 5385	ft	231 (min)			
Shelf Life		one year				

Technical Data - Foil						
Physical Properties	Test Method	USA (Metric)	Therm-Flash			
Aluminum foil thickness		inches (microns)	0.0003 (7.6)			
Adhesive			Flame resistant			
Reinforcement	bi-directional fiberglass	inches (100 mm)	1.8 MD (7 MD)			
		inches (100 mm)	1.8 XD (7 XD)			
Polyester film thickness		inches (microns)	0.00048 (12.2)			
Basis weight		lbs/1000 ft <sup>2</sup> (g/m <sup>2</sup> )	9.8 (47.9)			
Caliper / thickness	Micrometer	inches (microns)	0.005 (127)			
Tensile strength	ASTM C 1136	lbs/in (KN/m)	23 MD (4.0 MD)			
		lbs/in (KN/m)	24 MD (4.2 MD)			
low temperature resistance	ASTM D 1790	Remains Flexible				
		No Delamination				
high temperature resistance	4 hrs @ 275°F (116°C)	Remains Flexible, No Delamination				
Water immersion	24 hrs @ 73°F (23°C)	No Delamination				
Permeance (WVTR)	ASTM E 96	perm (ng/Ns)	0.02 (1.15)			
Fire Testing		Flame spread	Smoke developed			
Foil exposed	UL 723	5	0			
Polyester exposed	UL 723	5	10			

Standard Packaging Information								
Product	USA (Metric)	4" Flashing	6" Flashing	9" Flashing	12" Flashing			
Width	inches (cm)	4.0 (10.2)	6.0 (15.2)	9.0 (22.9)	12.0 (30.5)			
Length per roll	feet (meters)	100.0 (30.5)	100.0 (30.5)	100.0 (30.5)	100.0 (30.5)			
Rolls per case		12	8	8	4			
Area per roll	ft <sup>2</sup> (m <sup>2</sup> )	33.3 (3.1)	50.0 (4.6)	75.0 (7.0)	100.0 (9.3)			
Area total	ft <sup>2</sup> (m <sup>2</sup> )	400.0 (37.2)	400.0 (37.2)	300.0 (27.9)	400.0 (37.2)			
Roll diameter	inches (cm)	24.0 (61.0)	24.0 (61.0)	24.0 (61.0)	24.0 (61.0)			
Gross total weight	lbs (kg)	64.0 (29.0)	64.0 (29.0)	48.0 (21.8)	64.0 (29.0)			

#### Installation Procedure

- 1. Cut pieces to length.
- 2. Peel back clear release liner and discard.
- 3. Align strip and press into place. (All seams and splices must be overlapped a min. of 3" (76mm).
- 4. Roll Therm-Flash out with a hand roller taking special care to remove any voids and trapped air.
- 5. Make sure overlaps are in the direction of moisture drainage.

#### Limitations & Precautions:

- 1. Use Carlisle Glass Grip # 653 as a primer for fiberglass faced gypsum and some porous concrete surfaces.
- 2. Refrain from applications direct to OSB, plywood and gypsum on the face of exterior walls.
- 3. Conduct bond strength test to specified construction materials prior to use / confirm proper adhesion.
- 4. Maximum Therm-Flash exposure prior to cladding application is 90 days.
- 5. Surfaces must be clean, dry, and above 40 degrees,

## Storage & Handling

Therm-Flash is resistant to UV and water although, it should be stored at temperature between 50 degrees to 90 degrees, In a dry location, out of direct sun light.