



HYDRASHELL²⁵

25

HydraShell 25 is a synthetic underlayment constructed of high strength woven fabric that is polypropylene coated on both sides. A specially formulated anti-slip walking surface is 100% asphalt free.

- 2.5 TIMES LIGHTER PER SQUARE
- 25 TIMES STRONGER THAN #15 FELT
- 25 YEAR WARRANTY
- 180 DAY UV RESISTANCE

HYDRASHELLTM



SPECS & EASY INSTALL

- FOAM CLOSURES
- SEALANTS
- VENTILATION
- FLASHING
- DOORS
- FASTENERS
- UNDERLAYMENT



Lay out horizontally to the eave, printed side up, with 3" horizontal laps and 6" vertical laps



Fasten with 1" diameter plastic cap roofing nails or staples according to pre-printed nail pattern

PROPERTY	STANDARD	HYDRASHELL25™	#15 FELT*
Weight per square		2.0 lbs	11.2 lbs
Roll Length/Width		250'/48"	286'/42"
Fire Rating	ASTM E-108, NFPA 256	UL Class A	N/A
Nail Seal Ability	ASTM D-1970	PASS	N/A
Water Transmission	ASTM D-4869	PASS	PASS
Tear Strength	ASTM D-4533	36 lbs MD/36 lbs CD	2.2 lbs MD/0.9 lbs CD
Pliability	ASTM D-226	PASS	N/A
Water Ponding	ASTM D-779	PASS	N/A
Coefficient of Friction			
Static		Printed Side 1.202	N/A
Kinetic		Printed Side 1.053	N/A

*Typical value



HydraShell25™ represents yet another Marco Industries development in bringing you innovative, higher quality, and more economical products for the building industry.

Marco Weather-Tite® System Advantage

With Marco's Rapid Response™ get more of what you need faster and easier. Take advantage of free shipping with low minimum orders. Marco - we're big on customer service and small on hassle. Build it smart. Buy it smarter.



Get more at MarcoIndustries.com 1.800.800.8590



N/A No. Pending ICC-ESF. Pending

Universal Ventilation Material.

- **Won't absorb moisture, which can freeze and block all ventilation**
- **Easy one person installation**
- **40 year limited warranty**
- **ASTM E 84 tested/rated**

Proper ventilation is important to meet building codes, to reduce utility costs, and reduce long-term building damage. Flex-O-Vent provides plenty of cooling air flow.



Specially formulated polyester has been manufactured from recycled material and is recyclable.

EXTREMELY DURABLE POLYESTER

FLAME-RESISTANT/CLOG-RESISTANT/TEAR-RESISTANT

ECONOMICAL/LONG LASTING

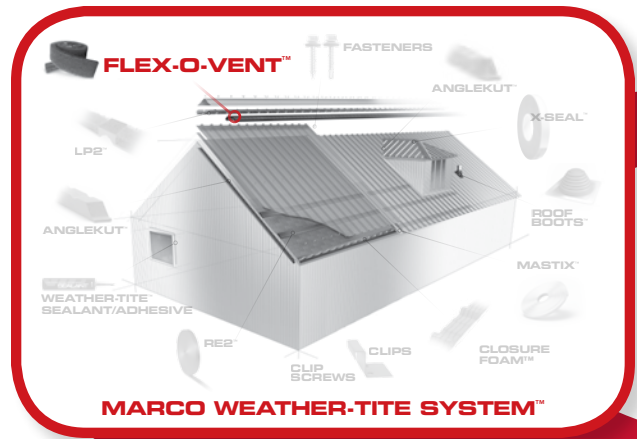


FLEX-O-VENT

One element of the Marco WEATHER-TITE™ SYSTEM

Flex-O-Vent

Flexibility, versatility, durability.
Universal Ventilation Material



Easy Installation



Flexible Design



Universal Fit

Specifications

Net Free Area	19 square inches per Linear Foot-ridge
1-1/2" x 3" x 10'	Rib heights 1 1/4" and lower
Air Permeability	760 Cubic Feet per minute
Cold Cracking	-55°C (-130°F)
Snow Infiltration	0
Tear Strength	3.5 ppi
Tensile Strength	16 psi – Elongation 175%
Compressive Strength	1.8 psi @ 75%
Abrasion	No Damage
100 mpg Wind-driven Rain ..	No Leakage Non-Profile Sensitive

Flex-O-Vent represents yet another Marco Industries technological development in bringing you innovative, higher quality, and more economical products for the building industry.

To order: 1.800.800.8590 | MarcoIndustries.com | info@MarcoIndustries.com



MPC0311

Marco Industries Corporate: 9410 E. 54th Street | Tulsa, OK 74145 | 1.800.800.8590
Marco Industries Canada: 1632 Broder Street | Regina, Sask S4N 7K1 | 1.866.244.7573

One element of the Marco WEATHER-TITE™ SYSTEM

Polyethylene Foam Spacer System

Use RE2™ instead of wood spacers to solve common re-roofing problems. RE2 acts as a spacer between the old shingles and the new metal roof, providing air flow and ventilation.

Revolutionary RE2 is manufactured with high density polyethylene foam. Lightweight, strong and won't decay or corrode the metal roof installed over it. RE2 will not warp, which causes the metal to crease.

RE2 is sold in two 150-foot, easy-to-handle rolls. Simply roll it across the old shingled roof, tack it down (with the 50 nails included), and install the metal roof on top.

The initial cost of RE2 is comparable to using wood spacers. It is easy to handle and install and also increases installation efficiency. Does not require heavy tools.

RE2 doesn't warp like wood, resulting in fewer customer callbacks.



- Eliminate tear-off
- Easy to install
- No more warped wood furring
- Cost comparable to wood, increases profitability
- Will not decay, corrode, or crease metal

Retro Fit

Remove the re-roofing danger, expense and hassle of wood furring with RE2™





FOAM CLOSURES

SEALANTS

VENTILATION

FLASHING

DOORS

FASTENERS

UNDERLAYMENT



Marco Weather-Tite® System Advantage

With Marco's Rapid Response™ get more of what you need faster and easier. Take advantage of free shipping with low minimum orders. Marco - we're big on customer service and small on hassle. Build it smart. Buy it smarter.

SPECS & EASY INSTALL

See our installation animations online at MarcoIndustries.com



You will need these products also:

TITEBOND
Metal roof sealant



X SEAL
Expandable foam tape



Unroll across existing shingle roof



Tack with staple gun or nails, install metal roof on top

PROPERTY	STANDARD	VALUE
Compressive Strength - Vertical direction (psi)	ASTM D3575-00	3.8
Compression Set (%)	ASTM D3575-00	< 30
Tensile Strength (psi)	ASTM D3575-00, suffix T (md / cmd)	58, 30
Elongation	ASTM D3575-00, suffix T (md / cmd)	86, 60
Tear Resistance (lb/in)	ASTM D3575-00, suffix G (md / cmd)	11, 17
Density Range (lb/ft ³)	ASTM D3575-00	1.5-1.9
Water Absorption (lb/ft ³)	ASTM D3575-00, suffix L	< 0.1
Thermal Stability	ASTM D3575-00, suffix S	< 5%
Contact Corrosivity (Alum. Plate)	Method 3005 FED STD. 101	None
Static Decay (anti-static grade)	EIA STD. 541 Appendix F	< 2 sec.
Surface Resistivity (anti-static grade)	EIA STD. 541, section 4.3	1.0 x 10 ⁹ - 1.0 x 10 ¹²
Thermal Conductivity k-value (BTU-IN / HR-FT ² -°F)	ASTM C518-91	0.35-0.42
Thermal Resistance R - Value (HR-FT ² -°F / BTU)	ASTM C518-91	1.30-1.60

RE2™ represents yet another Marco Industries development in bringing you innovative, higher quality, and more economical products for the building industry.

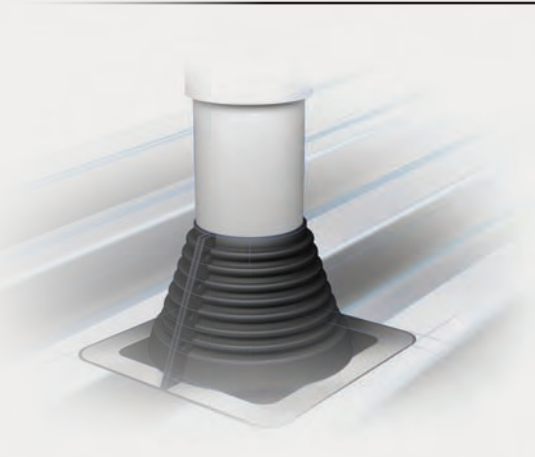
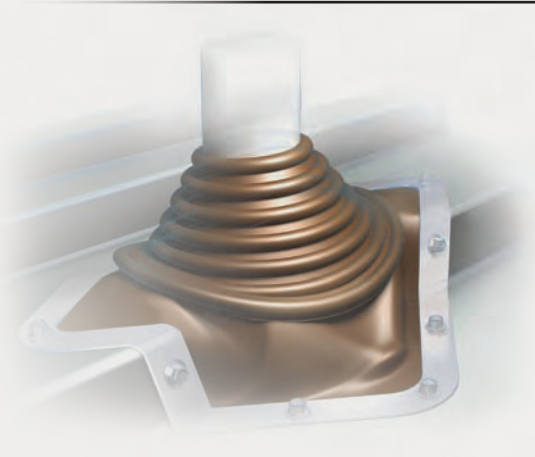
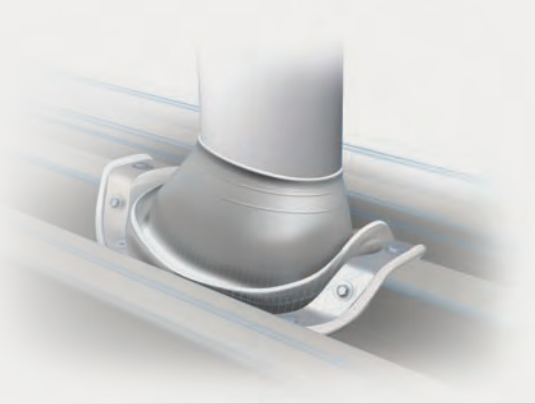
MarcoIndustries.com

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Step-by-step installation



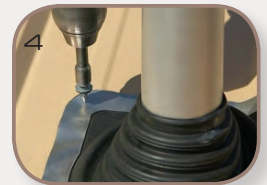
1 Choose the pipe opening and trim the sleeve



2 Apply sealant



3 Slide the boot over the pipe and form to the roof profile



4 Fasten to roof



5 Installation complete

For any shaped gap in the construction of metal buildings, doors and windows, concrete, wood, and more...

Fill gaps with **X-Seal.**



- Expands from 1/4" to 1-1/4"
- Follows, flexes, expands, compresses to fit
- UV stable
- Won't dry out or extrude like caulk or butyl tapes
- Highly resistant to bugs and vermin
- Economical
- Maintains seal in heat and cold

X-Seal comes compressed at just one-quarter inch, on an easy-to-handle roll. Cut the desired length of X-Seal, place X-Seal into the gap opening—even one with irregular hips and valleys—and remove the protective release paper. Now watch X-Seal slowly expand up to 1-1/4" to completely fill and seal the gap.

X-Seal won't dry out and become hard or brittle. And it's highly resistant to bugs and vermin.

It's UV stable and maintains a seal during thermal expansion and contraction of building panels. It has excellent compressibility and recovery (for minimal compression set). It's a very good thermal and sound insulator. And there's no shrinkage or blow-out from closed-cell breakage with X-Seal.

X-Seal holds the exterior out and the interior in, yet allows vapors to move through. A hermetic seal allows the absorption of moisture and when conditions permit, the slow release of moisture through evaporation.

With features like those, X-Seal's versatility makes it perfect for sealing gaps in so many construction projects, between similar and dissimilar materials:

- Joints and seams in metal construction
- Around doors and windows
- For control joints, expansion joints and isolation joints in concrete construction
- Civil and underground construction (highway and airport runways)
- Log and prefabricated homes
- Panel joints in precast panel construction

**SEAL**

One element of the Marco WEATHER-TITE™ SYSTEM

Expandable Foam Tape



SEAL

Expandable
foam tape.



Hips



Doors



Previous to Expansion



Expanded

Physical Characteristics

Description/Base/Color:	Precompressed, self-expanding pur-foam impregnated with a high quality modified acrylic, flame retardant emulsion. The base foam is black; other colors available.
Density:	10 lbs./cu. Ft. 150 kg/m ³
Flammability:	UL 94 HF1, Self-Extinguishing, DIN 4102, B1 compression at 50%, B2 compressed
Temperature Stability Range:	-40°F to 212°F
Manufacturer's Lab:	(-40°C to 120°C)
Weather Resistancy:	Excellent
Compression Set:	Maximum 2%
Tensile Strength:	21.8 psi
Thermal Conductivity:	12,106 BTU (hr.) (ft ²) (*F/ft)

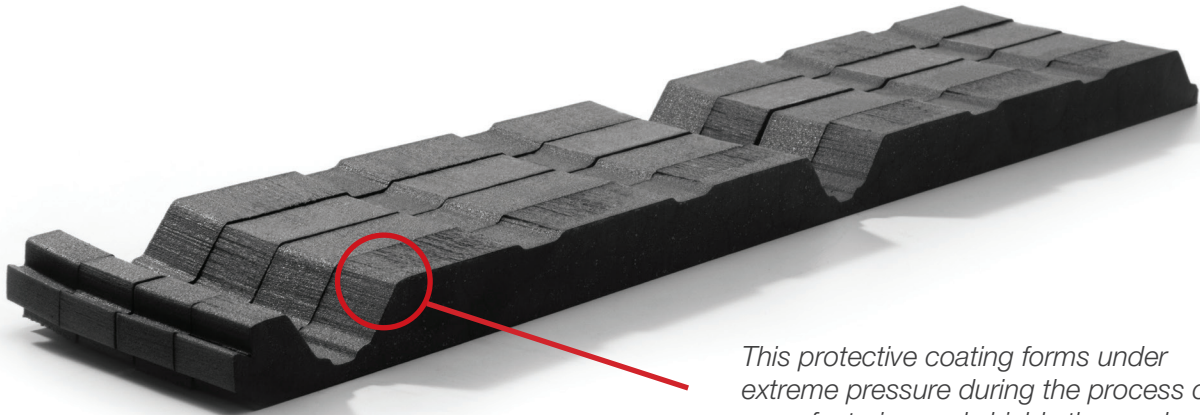
X-Seal™ represents yet another Marco Industries technological development in bringing you innovative, higher quality, and more economical products for the building industry.

1.800.800.8590 | MarcoIndustries.com | info@MarcoIndustries.com



CLOSURE-FOAM

CUSTOM FIT FOAM CLOSURE SYSTEM



This protective coating forms under extreme pressure during the process of manufacturing and shields the product from harmful UV rays.

Closure-Foam™ comes in more than 450 standard profiles and custom sizes. Designed to stay put, Marco's M63 industrial adhesive eliminates blow away problems with a 1/4" adhesive bead applied to either the flat or the ribbed side of Closure-Foam. It even adheres in subfreezing temperatures and on wet surfaces.

Closure-Foam is most commonly used without dovetails, but is also available with interlocking dovetails

(with or without adhesive) to eliminate gaps and ensure a snug end-to-end fit. They ship pre-scraped leaving you with less job site cleanup.

Closure-Foam is economically priced without sacrificing quality. Marco's crosslink polyethylene foam has a unique coating that gives it better UV resistance and durability than the industry standard. Independent testing confirms Marco's 1.5 density foam provides better UV stability than competitive products with a 2.0 density.

- Full 1/4" bead (once installed) of adhesive applied
- Profiles for every application
- Thickness variety
- Better UV resistance/longer lasting than competition
- No excess scrap for easier cleanup

CLOSURE-FOAM™

Superior Roof Ventilation Your Way. (Because One Size Does Not Fit All.)

For products tailored to fit your specific performance requirements and budget, choose Marco. Our full line of ventilation products offers you a choice, all made from superior material that outlasts and outperforms the competitors' polyurethane-material products.



FLEX-O-VENT

GOOD



Our original, most economical polyester-based ventilation product.

- Won't absorb moisture, which can freeze and block all ventilation
- 2 beads of M63 Marco proprietary adhesive for superior hold
- Easy, one-person installation
- 40 year limited warranty
- ASTM testing: D1929, D737
- Available in 10' and 20' rolls and multiple packaging options



FLEX-O-VENT

Specs

Net Free Area: Up to 25 sq. in. of NFA per lineal foot of ridge*

1-1/2" x 3" x 10': Rib heights up to 1-1/4"

1-1/2" x 2" x 10': Rib heights up to 1-1/4"

1" x 3" x 10': Rib heights up to 3/4"

1" x 2" x 10': Rib heights up to 3/4"

Air Permeability: >760 cubic feet per minute

Cold Cracking: -55° C (-130° F)

Tear Strength: 3.5 ppi

Tensile Strength: 16 psi – Elongation 175%

Compressive Strength: 1.8 psi at 75%



The Marco Weather-Tite™ System

Closure

Ventilation

Fasteners

Flashing

Sealants

Underlayment

Accessories



Our ventilation products feature an exclusive nonwoven polyester material that **delivers long-lasting resiliency and breathes, to help prevent moisture absorption** that can lead to costly rework, repairs, and high energy costs.



**40
YEAR
WARRANTY**



You may also need



Roof Boots™



Weather-Tite
Metal Roof Sealant