



## WIP 403HR Heat-Resistant Self-Adhering Roofing Underlayment



WIP 403HR is a high-performance self-adhering membrane comprised of a strong, skid-resistant polyethylene film laminated to a thick layer of butyl-modified adhesive and is specifically designed for applications in hot climate areas. Withstanding temperatures up to 250°F, WIP 403HR is ideal for use under metal including copper, zinc and COR-TEN® (consult technical department for installation instructions), and can also be used under synthetic tiles and asphalt shingles.

### Features and Benefits

- Protects the roof structure from water seepage caused by ice dams and wind-driven rains
- Resist temperatures up to 250°F without degradation of the adhesive
- Ideal for high elevation applications
- Seals around roofing nails, staples and screws
- Bonds directly to the roof substrate for fast and easy installation without the need for additional adhesives
- Split-release film provides easier, faster installation
- Resists cracking, drying and rotting, providing long-term waterproofing performance and low lifecycle cost
- Concealed waterproofing system will not detract from the architectural aesthetics of the primary roofing system
- Exposed rubberized asphalt bead along the membrane edge ensures watertightness of lap seams

### Standards

- 2009 International Building Code™
- ICC-ES ESR #2206
- UL Classified
- Meets ASTM D1970
- State of Florida Approved Product FSA #FL6785

### Storage

WIP 403HR roofing underlayment rolls should be stored flat, under cover and in areas where the temperature is between 40° and 100°F (4.4° and 38°C). Do not double-stack pallets.

### Warranty

Carlisle WIP products are backed by Carlisle's industry-leading warranty. Visit our website for warranty details.



## Installation

WIP 403HR roofing underlayment is applied when the roof deck is dry and the substrate temperature is 40°F (4.4°C) or higher. At temperatures below 40°F, nailing or priming should be used to temporarily hold the membrane in place while adhesion develops. WIP 403HR is designed to be covered with the primary roofing system and should not be exposed to sunlight for more than 60 days.

### Moisture

Substrate must be free of any moisture. If moisture is present, it may inhibit adhesion.

### New Construction

Prepare the roof deck by removing all loose objects, dirt, dust and debris.

### Re-roofing

Remove all old materials from the roof deck in the area to be covered with WIP 403HR underlayment. Replace water-damaged sheathing and sweep roof deck thoroughly.

### Priming

Priming is not required on clean, dry wood or metal surfaces but concrete masonry, exterior gypsum board and polyisocyanurate insulation should be primed using the appropriate primer or adhesive. Adhesives such as CCW-702 and CAV-GRIP™ are appropriate and required when temperatures are below 40°F.

### Valleys, Hips & Ridges

Cut WIP 403HR underlayment into manageable lengths. Align over the center of the valley, hip or ridge. Remove release film. Press the middle of the membrane first before working toward the edges. For open valleys, cover WIP 403HR underlayment with metal valley liners.

### Eaves & Rakes

Cut WIP 403HR underlayment into 10–15' pieces. Remove 2–3' of release film and align the edge of the membrane, sticky side down, so it overhangs the drip edge by 3/8" (10 mm). Continue to remove release film and press as you move across the roof. Use a hand roller and/or hand pressure to press into place. Overlap end laps a minimum of 6". WIP 403HR underlayment should reach a point 2' inside the interior wall line. Local codes may require additional courses. If additional courses are required, the top lap must be at least 3 1/2".

### Drip Edges

At the rake edge, apply WIP 403HR underlayment first and place drip edge on top. At the eave, apply drip edge first and place WIP 403HR underlayment on top of the drip edge so that it overhangs drip edge 3/8" (10 mm).

For standard installation details, follow the WIP detail drawings. For non-standard installation instructions, contact your local Carlisle Residential representative.

## Metal Roof Underlayment

Under water-shedding metal roof systems or low-slope metal roofs with a minimum 1/2" slope, start at the low point and apply WIP 403HR over the full surface of the roof deck. Review the metal roofing manufacturer's instructions for limitations and precautions. Beginning at the eaves, apply product from the low point to the high point of the roof, running the roll horizontally.

## Limitations

- Roof deck surface must be clean, dry and free of debris.
- Surface must be free of sharp protrusions that could cut through the membrane.
- WIP 403HR must be covered with finished roofing material within 60 days. This membrane is not intended for permanent exposure.
- Consult Carlisle Representative for extreme high- or low-temperature applications. Applications below 40°F may require priming and nailing of the membrane.
- Review the metal roofing manufacturer's instructions or the NRCA Manual for limitations, recommendations and precautions.
- WIP 403HR must to be used in contact with flexible PVC material.

## PRODUCT SPECIFICATIONS

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<b>PHYSICAL PROPERTIES</b>		
Surface	Blue Film	
Membrane	Rubberized Asphalt	
<b>PRODUCT CHARACTERISTIC</b>	<b>UNITS</b>	<b>RESULTS</b>
Roll Length	feet	75
Roll Weight	lbs	62
Roll Size	sq/ft	225
Roll Width	inches	36
<b>TYPICAL PERFORMANCE PROPERTIES</b>	<b>TEST METHOD</b>	<b>RESULTS</b>
Thickness	ASTM D1970	40 mils
Low Temperature Flexibility	ASTM D1970	-45°F
Adhesion to Plywood at 75°F	ASTM D1970	35 lbs/ft
Lap Seam Adhesion at 75°F	ASTM D1970	21 lbs/ft
Sealability Around Nail	ASTM D1970	Pass
Slip Resistance	ASTM D1970	Pass
Thermal Stability	ASTM D1970	Pass
Moisture Vapor Permeance	ASTM D1970	0.02 perms
Water Absorption	ASTM D1970	0.5%
Tensile Strength Machine Direction	ASTM D412	250 psi
Tensile Strength Transverse Direction	ASTM D412	1390 psi
Elongation at Break Machine Direction	ASTM D412	250%
Elongation at Break Transverse Direction	ASTM D412	170%
<b>PACKAGING INFORMATION</b>		
Boxes (rolls) per pallet		25