

WIP 401LT Low-Temperature Self-Adhering Roofing Underlayment

WIP 401LT

WATER & ICE PROTECTION NON-SKID FILM SURFACE

WIP 401LT is a self-adhering membrane composed of a strong, skid-resistant polyethylene film laminated to a thick layer of highly adhesive rubberized asphalt. It is specifically designed for low-temperature applications where the ambient temperature is between 30°F and 70°F (-1.1°C and 21°C) and provides superior protection from water penetration caused by wind-driven rain and ice dams.

Features and Benefits

- Protects the roof structure from water seepage caused by ice dams and wind-driven rains
- Seals around roofing nails, staples and screws
- 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, 2012, and 2015 International Building Code™
- ICC-ES ESR #2206
- UL Classified
- Meets ASTM D1970

Storage

WIP 401LT 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. Carlisle WIP Products will display optimal performance when stored under recommended conditions and used within one year of date of manufacture. Product installed after one year of date of manufacture is not covered under defect warranty. Visit our website for warranty details.



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Installation

WIP 401LT underlayment is applied when the roof deck is dry and the substrate temperature is 25°F (-3.89°C) or higher. At temperatures below 25°F, nailing or priming should be used to temporarily hold the membrane in place while adhesion develops. WIP 401LT is designed to be covered with the primary roofing system and should not be exposed to sunlight for more than 60 days.

Substrate must be free of any moisture. If moisture is present, it may inhibit adhesion. Prepare the roof deck by removing all loose objects, dirt, dust and debris. For re-roofing applications, remove all old materials from the roof deck in the area to be covered with WIP 401LT underlayment. Replace water-damaged sheathing and sweep roof deck thoroughly.

Priming

Priming is not required on clean, dry wood, metal or most polyisocyanurate surfaces (polyiso paper facer does require priming). Masonry and exterior gypsum boards (such as DensDeck®) should be primed using an appropriate primer or adhesive. Some rigid insulation boards with porous or dusty surfaces may require priming to promote initial adhesion. Priming is required on all substrates when air or substrate temperatures are below 40°F (4.4°C). Adhesives such as CCW-702, CCW-702WB, CAV-GRIP™ and CCW-AWP are approved for use with WIP products. Refer to your local building codes to determine acceptable product for use in your region.

Selection of roof deck or insulation substrate and/or use of a primer or adhesive are the responsibility of the architect, specifier or roofing contractor to determine based on the roof assembly and environmental conditions.

Valleys, Hips & Ridges

Cut WIP 401LT 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 401LT underlayment with metal valley liners.

Eaves & Rakes

Cut WIP 401LT 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 401LT 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 3/2".

Drip Edges

At the rake edge, apply WIP 401LT underlayment first and place drip edge on top. At the eave, apply drip edge first and place WIP 401LT underlayment on top of the drip edge so that it overhangs drip edge by 3/8" (10 mm).

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

Limitations

- WIP 401LT should be installed when air, roof deck and membrane temperatures are at or above 25°F (-3.89°C).
- WIP 401LT should not be left exposed to sunlight for more than 60 days.
- WIP 401LT membrane should not be folded over the roof edge unless protected by a gutter or other flashing materials.
- The primary roof system must be ventilated to prevent excessive moisture build-up in the interior structure.
- Use caution during the installation of the membrane as it may become slippery when wet or covered with frost.
- WIP 401LT should not be used under metal roofs.
- Do not apply when ambient temperature is below 25°F. Consult a Carlisle Representative for extreme high- or low-temperature applications. Applications below 25°F may require nailing of the membrane.
- WIP 401LT must be used in contact with PVC material.

PRODUCT SPECIFICATIONS

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PHYSICAL PROPERTIES		
Surface	Black Engineered Polyolefin Composite Film with Factory-applied Anti-skid Coating	
Membrane	Rubberized Asphalt	
PRODUCT CHARACTERISTIC	UNITS	RESULTS
Roll Length	feet	75
Roll Weight	lbs	62
Roll Size	sq ft	225
Roll Width	inches	36
TYPICAL PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Thickness	ASTM D1970	40 mils
Low Temperature Flexibility	ASTM D1970	-25°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	1200 psi
Tensile Strength Transverse Direction	ASTM D412	1390 psi
Elongation at Break Machine Direction	ASTM D412	490%
Elongation at Break Transverse Direction	ASTM D412	170%
PACKAGING INFORMATION		
Boxes (rolls) per pallet		25

