

CCW WATER & ICE PROTECTION (WIP)

Self-Adhering Roofing Underlayments

C A R L I S L E C O A T I N G S & W A T E R P R O O F I N G



800.527.7092 | www.carlisle-ccw.com



CCW WATER & ICE PROTECTION (WIP) Self-A



Carlisle Coatings & Waterproofing, Inc. (CCW) provides a broad range of solutions to meet specific waterproofing needs. CCW offers technical services, research & development and manufacturing capabilities from its headquarters in Wylie, Texas and three additional manufacturing facilities in Terrell, TX, Elberton, GA, and Carlisle, PA. The CCW network is further supported by over 50 manufacturer's sales representatives directed by regional sales offices throughout the country. CCW offers a complete line of waterproofing and moisture protection products for the architectural, general construction, industrial and maintenance indus-

tries. Carlisle Coatings & Waterproofing, Inc., is part of the SynTec Division of Carlisle Companies, Inc., which is a publicly traded company on the NYSE.

CCW Water & Ice Protection (WIP) is a single ply roofing underlayment for critical roof areas such as eaves, ridges, valleys and skylights. Available in six specific systems, CCW WIP also provides complete protection over the entire roofing area by preventing water migration into occupied spaces. From traditional shingle style roofs to high temperature metal roofs, CCW has the right product for your application.

GENERAL INSTALLATION

General Information

Carlisle Coatings & Waterproofing offers six roofing underlayment products. The installation instructions are generic to all CCW WIP membranes unless otherwise stated.

Weather Conditions

CCW WIP roofing underlayments are applied when the roof deck is dry and the substrate temperature is 30°F (-1.1°C) to 70°F (21.1°C). At temperatures below 30°F, nailing or priming may be used to temporarily hold the membrane in place while adhesion develops. This product is designed to be

C A R L I S L E C O A T I N G S & W A T E R P R O O F I N G

800.527.7092 | www.carlisle-ccw.com

Adhering Waterproofing Membranes



covered with the primary roofing system and should not be exposed to sunlight for an extended period.

Substrate Preparation

New Construction: Prepare the roof deck by removing all loose objects, dirt, dust or debris.

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

Priming: Not required for attachment to wood surfaces. All concrete surfaces should be primed.

WIP 100: TECHNICAL DATA

Physical Properties:

Surface	Black Granular	
Thickness	min. 55 mils	
Performance Properties	Test Method	Typical Values
Tensile Strength	ASTM D 412	40 lbf/in. min.
Permeance	ASTM E 96	0.03 perms
Low Temperature Flexibility	ASTM D 1970	No Cracking or Delamination
Peel Adhesion	ASTM D 1970	4 lbs/in. width
Elongation	ASTM D 412	10% min.
Pliability	ASTM D-1970	_____
Water Absorption	ASTM D-1970	_____
Lap Adhesion	ASTM D-1970	_____

Packaging:

Roll Size	3' x 33' (0.91m x 10.2 m); 3' x 66' (0.91m x 20.4 m)	
Shipping Weight	35 lbs.	
Rolls per pallet	30	

UL Listed. ICBO Approved.

WIP 200: TECHNICAL DATA

Physical Properties:

Surface	Black Film	
Thickness	min. 40 mils	
Performance Properties	Test Method	Typical Values
Tensile Strength	ASTM D 412	25 lbf/in. min.
Permeance	ASTM E 96	0.03 perms
Low Temperature Flexibility	ASTM D 1970	No Cracking or Delamination
Peel Adhesion	ASTM D 1970	4 lbs/in. width
Elongation	ASTM D 412	100% min.
Pliability	ASTM D-1970	_____
Water Absorption	ASTM D-1970	_____
Lap Adhesion	ASTM D-1970	_____

Packaging:

Roll Size	3' x 33' (0.91m x 10.2 m); 3' x 66' (0.91m x 20.4 m)	
Shipping Weight	65 lbs.	
Rolls per pallet	20	

UL Listed. ICBO Approved.

WIP 300: TECHNICAL DATA

Physical Properties

Surface	Black Film	
Thickness	min. 40 mils	
Performance Properties	Test Method	Typical Values
Tensile Strength	ASTM D 412	550psi
Permeance	ASTM E 96	0.01 perms
Low Temperature Flexibility	ASTM D 1970	No Cracking or Delamination
Peel Adhesion	ASTM D 903	4 lbs/in. width
Elongation	ASTM D 412	275% min.
Pliability	ASTM D-1970	_____
Water Absorption	ASTM D-1970	_____
Lap Adhesion	ASTM D-1970	_____

Packaging:

Roll Size	3' x 66' (0.91m x 20.4 m)	
Rolls per pallet	25	

UL Listed. ICBO Approved.

Valley, Hips & Ridges

Cut CCW WIP roofing 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 towards the edges. For open valleys, cover CCW WIP roofing underlayment with metal valley liners.

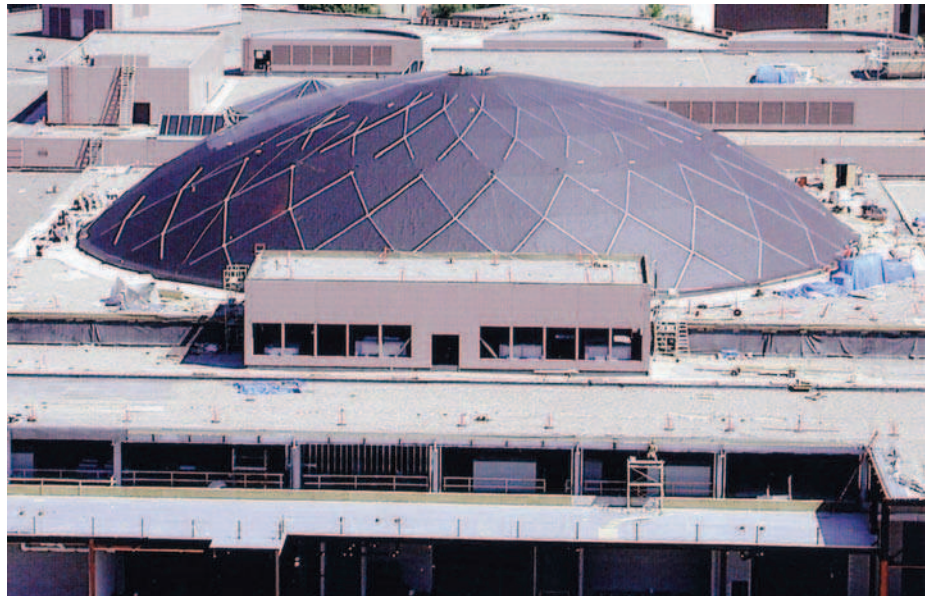
Eaves & Rakes

Cut CCW WIP roofing underlayment into 10-15 pieces. Remove 2-3 ft. of release film and align edge of the membrane, sticky side down, so it overhangs the drip edge by $\frac{3}{8}$ " (10mm). Continue to remove release film and press as you move across the roof. Use a



FEATURES AND BENEFITS

- **Moisture and Air Barrier:** Protects the Roof Structure from Water Seepage Caused by Ice Dams and Wind Driven Rains
- **Self Sealing:** Membranes Seal Around Roofing Nails, Screws, Staples and Clips Used to Install the Primary Roofing System
- **Self Adhering:** Membranes Bond Directly to the Roof Substrate for Fast and Easy Installation without the Need for Any Adhesives
- **Dual Barrier Protection:** Provides Maximum Waterproofing Protection. The Composite Membrane Consists of Rubberized Asphalt Laminated to an Impermeable, High Tensile Strength, Polyethylene Film
- **Skid Resistant:** Features a Unique Skid-Resistant Surface for Safe and Easy Installation
- **Permanent Protection and Low Life Cycle Cost:** Will not Crack, Dry Out or Rot Resulting in Long Term Waterproofing Performance
- **Aesthetically Pleasing:** A Concealed Waterproofing System that will not Distract from the Architectural Aesthetics of the Primary Roofing System
- **CCW WIP 300HT High Temperature Formulation:** Will Resist Temperatures up to 240°F (116°C) without Degradation of the Adhesive
- **CCW WIP 400 Series:** Available in High and Low Temperature Formulas



hand roller and/or hand pressure to press into place. Overlap end laps a minimum of 6". CCW WIP roofing underlayment should reach a point 2' inside the interior wall line. If additional courses are required, the top lap must be at least 3.5".

Drip Edges: At the rake edge, apply CCW WIP roofing underlayment first, and place drip edge on top of it. At the eave, apply the drip edge first and place CCW WIP roofing underlayment on top of the drip edge so that it overhangs drip edge $\frac{3}{8}$ " (10mm).

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

CCW WIP 100

CCW Water and Ice Protection (WIP) 100 used as shingle underlayments on critical roof areas such as eaves, ridges, valleys, dormers and skylights. CCW WIP membranes protect roofing structures and interior spaces from water penetration caused by wind driven rain and ice dams.

CCW WIP 100 is a flexible rubberized asphalt, fiberglass reinforced membrane with a granular surface providing maximum skid resistance during installation.

Standards, Tests, Certificates

- UL Listed
- ICBO Approved Report #ER-5260

Limitations

- CCW WIP 100 should be installed when air, roof deck and membrane temperatures are at or above 40°F (4.4°C)

- CCW WIP 100 should not be left exposed to sunlight for more than 14 days
- CCW WIP 100 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
- CCW WIP 100 should not be used under metal roofs

Packaging

3' x 33' (0.91m x 10.2 m) / 3' x 66' (0.91m x 20.4 m); Shipping Weight: 35 / 65 lbs., Rolls per pallet 30/20

Storage: CCW WIP 100 roofing underlayment rolls should be stored on end, under cover, and in areas where the temperature is between 40°F and 100°F (4.4°C and 38°C).

Do not double stack pallets.

CCW WIP 200

CCW Water and Ice Protection (WIP) 200 is used as shingle underlayments on critical roof areas like eaves, ridges, valleys, dormers and skylights. CCW WIP membranes protect roofing structures and interior spaces from water penetration caused by wind driven rain and ice dams.

CCW WIP 200 is a composite membrane consisting of fiberglass reinforced rubberized asphalt laminated to an impermeable polyethylene film layer, providing dual barrier moisture protection.

Standards, Tests, Certificates

- UL Listed
- ICBO Approved Report #ER-5260

Limitations

- CCW WIP 200 should be installed when air, roof deck and membrane temperatures are at or above 40°F (4.5°C)
- CCW WIP 200 should not be left exposed to sunlight for more than 30 days
- CCW WIP 200 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
- CCW WIP 200 should not be used under metal roofs

Packaging

3' x 33' (0.91m x 10.2 m) / 3' x 66' (0.91m x 20.4 m); Shipping Weight 35/65 lbs., Rolls per pallet 30/20

Storage: CCW WIP 200 roofing underlayment rolls should be stored on end, under cover, and in areas where the temperature is between 40° and 100°F (4.4° and 38°C).

Do not double stack pallets.

CCW WIP 300HT

CCW WIP 300HT Water and Ice Protection is a high tensile strength rubberized asphalt underlayment specifically designed to withstand temperatures up to 240°F (116°C).

CCW WIP 300HT is a composite membrane consisting of rubberized asphalt laminated to an impermeable polyethylene film layer, providing dual-barrier moisture protection.

CCW 300HT Metal Roof**Underlayment Roof Installation**

Under water shedding metal roof systems or low slope metal roofs with a minimum 1/2: slope, start at the low point and apply CCW WIP 300HT roofing underlayment over the full surface of the roof deck. Review the metal roofing manufacturer's instructions for limitations or precautions. Beginning at the eaves, apply product from the low point to the high point of the roof, running the roll horizontally. For standard installation details, follow the CCW WIP detail drawings. For non-standard installation instructions contact your local Carlisle Coatings & Waterproofing representative.

WIP 400: TECHNICAL DATA**Physical Properties:**

Surface	Black Film
Thickness	40 mils.

Performance Properties	Test Method	Typical Values
Tensile Strength	ASTM D 412	500 psi.
Permeance	ASTM E 96	0.05 perms max.
Low Temperature Flexibility	ASTM D 1970	_____
Peel Adhesion	ASTM D 1970	4 lb/in.
Elongation	ASTM D 412	300 %
Pliability	ASTM D-1970	Pass @ -25°F
Water Absorption	ASTM D-1970	0.12 % by wt.
Lap Adhesion	ASTM D-1970	10 lb/in.

Packaging:

Roll Size	3' x 75' (0.91m x 22.86 m)
Rolls per pallet	35

UL Listed. ICBO Approved.

WIP 401LT: TECHNICAL DATA**Physical Properties:**

Surface	Black Film
Thickness	40 mils.

Performance Properties	Test Method	Typical Values
Tensile Strength	ASTM D 412	500 psi.
Permeance	ASTM E 96	0.05 perms max
Low Temperature Flexibility	ASTM D 1970	_____
Peel Adhesion	ASTM D 1970	4 lb/in.
Elongation	ASTM D 412	300 %
Pliability	ASTM D-1970	Pass @ -35°F
Water Absorption	ASTM D-1970	0.12 % max.
Lap Adhesion	ASTM D-1970	10 lb/in.

Packaging:

Roll Size	3' x 75' (0.91m x 22.86 m)
Rolls per pallet	35

UL Listed. ICBO Approved.

WIP 403HR: TECHNICAL DATA**Physical Properties**

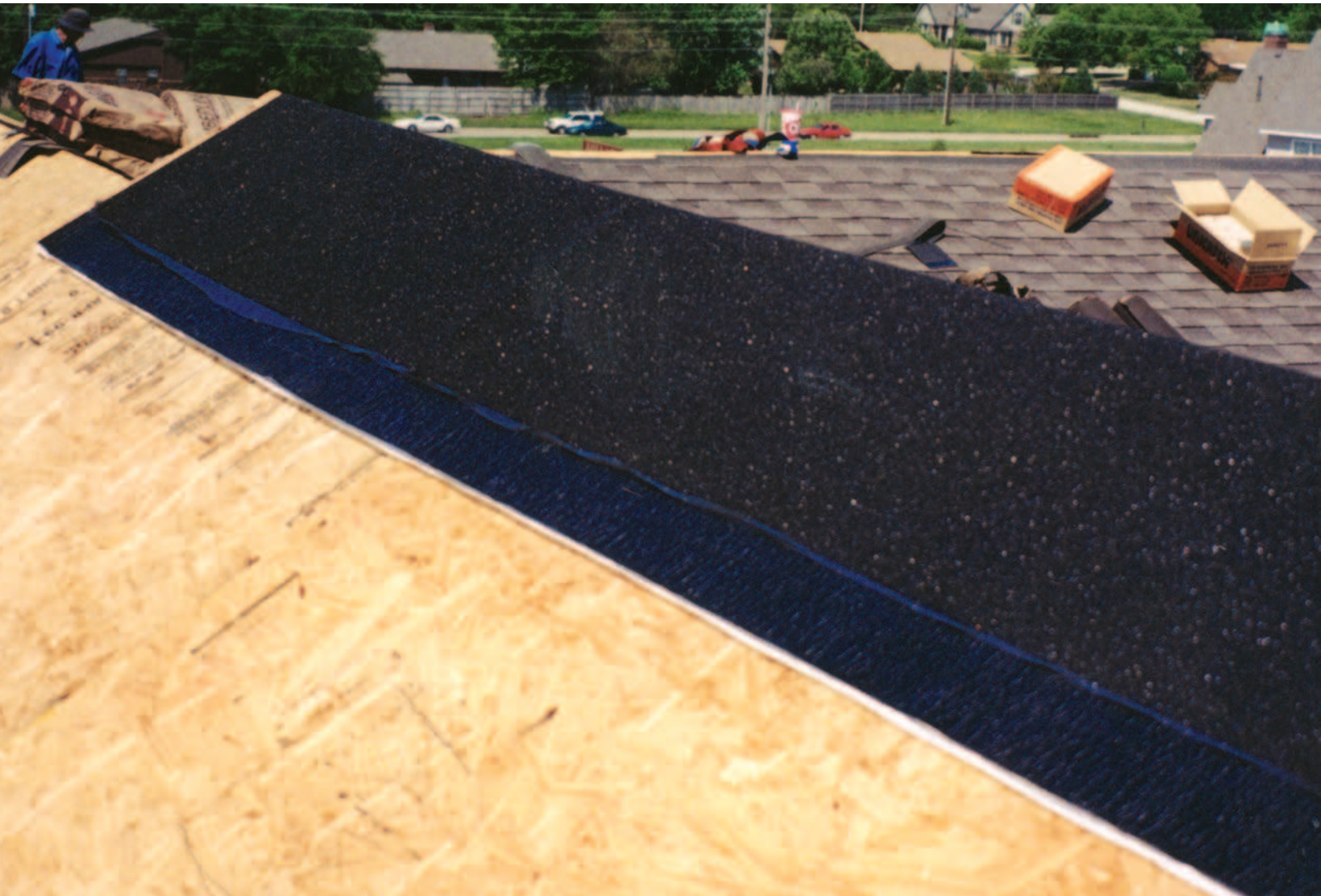
Surface	Blue Film
Thickness	40 mils

Performance Properties	Test Method	Typical Values
Tensile Strength	ASTM D 412	500 psi
Permeance	ASTM E 96	_____
Low Temperature Flexibility	ASTM D 1970	_____
Peel Adhesion	ASTM D 903	_____
Elongation	ASTM D 412	300%
Pliability	ASTM D-1970	Pass @ -25°F
Water Absorption	ASTM D-1970	0.12% by wt.
Lap Adhesion	ASTM D-1970	10 lb/in.

Packaging:

Roll Size	3' x 75' (0.91m x 22.86 m)
Shipping Weight	62 lbs.
Rolls per pallet	25

UL Listed. ICBO Approved.



Limitations

- CCW WIP 300HT should be installed when air, roof deck and membrane temperatures are at or above 40°F (4.4°C)
- CCW WIP 300HT should not be left exposed to sunlight for more than 60 days
- CCW WIP 300HT 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

Packaging

3' x 66' (0.91m x 20.4 m),
Rolls per pallet 25

Storage: CCW WIP 300HT roofing underlayment rolls should be stored on end, under cover, and in areas where the temperature is between 40°F and 100°F (4.4°C and 37.8°C).

Do not double stack pallets.

CCW WIP 400

CCW WIP 400 Roofing Underlayment is a 40 mil self-adhering sheet membrane. CCW WIP 400 is comprised of a strong, skid resistant polyethylene film laminated to a thick layer of highly adhesive rubberized asphalt. A siliconized release sheet is used to prevent the material from sticking in the roll, and is easily stripped away for installation.

Applicable Standards

CCW WIP 400 Roofing Underlayment meets or exceeds the requirements of:

- ICBO Report #ER-5260
- UL-790 Class A and C

- UL Classified Sheathing Material for Fire Rated Assemblies Design Numbers: P224, P225, P227, P230, P237, P259, P508, P510, P512, P514, P711, P717, P722, P734, P736, P803, P814, P818, P823, P824

- UL Classified
- ASTM D-1970

Limitations

- CCW WIP 400 should be installed when air, roof deck and membrane temperatures are at or above 40°F (4.5°C)
- CCW WIP 400 should not be left exposed to sunlight for more than 30 days
- CCW WIP 400 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
- CCW WIP 400 should not be used under metal roofs
- Do not apply when ambient temperature is below 40°F. Consult Carlisle Representative for extreme high or low temperature applications. Applications below 40°F may require nailing of the membrane or use of CCW WIP 401LT Roofing Underlayment.

Packaging

3' x 75' (0.91m x 22.86 m)

Rolls per pallet 35 Storage: CCW WIP 400 roofing underlayment rolls should be stored on end, under cover, and in areas where the temperature is between 40°F and 100°F (4.4°C and 38°C).

Do not double stack pallets.

CCW WIP 401LT

CCW WIP 401LT (Low Temperature) Roofing Underlayment is a 40 mil self-adhering sheet membrane, specifically designed for applications where the ambient temperature is between 30°F and 70°F (-1.1°C and 21.1°C).

CCW WIP 401LT is comprised of a strong, skid resistant polyethylene film laminated to a thick layer of highly adhesive rubberized asphalt. A siliconized release sheet is used to prevent the material from sticking in the roll, and is easily stripped away for installation.

Applicable Standards

CCW WIP 400 Roofing Underlayment meets or exceeds the requirements of:

- ICBO Report #ER-5260
- UL-790 Class A and C
- UL Classified Sheathing Material for Fire Rated Assemblies Design Numbers: P224, P225, P227, P230, P237, P259, P508, P510, P512, P514, P711, P717, P722, P734, P736, P803, P814, P818, P823, P824
- UL Classified
- ASTM D-1970

Limitations

- CCW WIP 401LT should be installed when air, roof deck and membrane temperatures are at or above 30°F (-1.1°C)
- CCW WIP 401LT should not be left exposed to sunlight for more than 30 days
- CCW 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
- Do not apply when ambient temperature is below 30°F or higher than 70°F

Packaging

3' x 75' (0.91m x 22.86 m);

Rolls per pallet 35

Storage: CCW WIP 401LT roofing underlayment rolls should be stored on end, under cover, and in areas where the temperature is between 30°F and 70°F (-1.1°C and 21.1°C).

Do not double stack pallets.

CCW WIP 403HR

CCW WIP 403HR (Heat Resistant) Roofing Underlayment is a 40 mil self-adhering sheet membrane used to protect roof substrates against water penetration caused by wind driven rain and water backup caused by ice dams. This membrane is designed for use in hot climate areas beneath metal roofing, slate, tile and asphalt shingles. The high performance adhesive resists softening and flow at the high in-service temperatures found in these areas.

CCW WIP 403HR is comprised of a strong, skid resistant polyethylene film laminated to a thick layer of adhesive. A siliconized release sheet is used to prevent the material from sticking in the roll, and is easily stripped away for installation. The membrane adheres to the deck, permanently bonds to itself at the laps and provides a seal around nails or other fasteners that penetrate the deck during installation of the primary roofing material.

Applicable Standards

CCW WIP 403HR Roofing Underlayment meets or exceeds the requirements of:

- ICBO Report #4941
- UL-790 Class A and C
- UL Classified Sheathing Material for Fire Rated Assemblies Design Numbers: P224, P225, P227, P230, P237, P259, P508, P510, P512, P514, P711, P717, P722, P734, P736, P803, P814, P818, P823, P824.
- ASTM D-1970

Limitations

- Roof deck surface must be clean, dry and free of debris
- Surface must be free of sharp protrusions which could cut through the membrane

- CCW WIP 403HR Roofing Underlayment must be covered with finished roofing material within 30 days. This membrane is not intended for permanent exposure. Consult manufacturer if exposure will exceed 30 days
- Consult a Carlisle Representative for extreme high or low temperature applications. Applications below 40°F may require priming and nailing of the membrane

Packaging

3' X 75' roll (0.91m X 20.4m); Shipping Weight 62 lbs., Rolls per pallet 35

Storage: CCW WIP 403HR roofing underlayment rolls should be stored on end, under cover, and in areas where the temperature is between 40°F and 100°F (4.4°C and 37.8°C).

Do not double stack pallets.

EZ-Roof™ Base

EZ-Roof Base is a high strength, reinforced, lightweight synthetic roofing underlayment which resists moisture and vapor transmission on new and re-roof construction. Reducing overall roof weight, EZ-Roof Base is designed for use on steep slope roofing applications and is also ideal for use on low slope roof applications under self adhered cap sheet. EZ-Roof Base surpasses the properties of 15 and 30 lb asphaltic felt and works with standard roof materials including shingles, tile, slate, metal and other roof composites.

Advantages

- Requires less nailing and labor compared to conventional roofing felts
- Synthetic reinforced polypropylene provides excellent water resistance and lays flat when exposed to rain; will not absorb water
- High tear strength and greater puncture resistance than conventional roofing felts
- UV stabilized properties provides extended exposure time
- Compatible with asphalt shingles and standard roofing materials

Limitations

- Should not be left exposed to sunlight for more than six (6) months
- Should not be folded over the roof edge unless protected by a gutter or other materials
- Not for use as an underlayment on low slope shingle roofs (under 2" per foot)
- May be slippery when water or frost is present

Packaging

5' X 200' individually wrapped roll (10 square roll); Shipping Weight 28 lbs.

COMPLETE WATERPROOFING ONE COMPANY

CCW provides a complete line of waterproofing solutions, and the expertise to help you select the ones that is best for your project.



CCW Deck Coatings



ECO-FAST Deck Coating System



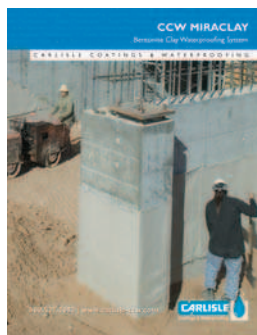
CCW-500R



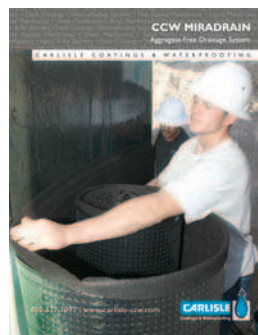
Barricoat-S



CCW MiraDRI 860/861



CCW MiraCLAY



CCW MiraDRAIN



Air & Vapor Barrier Systems



CLASSIFIED
C UL US (CCW WIP 100, 200, 400, 401LT, 403HR)

Prepared roofing accessory classified by UNDERWRITERS LABORATORY INC.® as to an external fire exposure only when applied in accordance with instructions included with the prepared roofing.



Visit Our Web Site at

www.carlisle-ccw.com

- Updates
- Data Sheets
- Contacts
- Guide Specifications
- Architectural Details
- Technical Bulletins

LIMITED WARRANTY

CARLISLE COATINGS & WATERPROOFING, INCORPORATED (CARLISLE) warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any CARLISLE materials prove to contain manufacturing defects that substantially effect their performance, CARLISLE will, at its option, replace the materials or refund its purchase price.

This limited warranty is the only warranty extended by CARLISLE with respect to its materials. There are no other warranties including the implied warranties of merchantability and fitness for a particular purpose.

CARLISLE specifically disclaims liability for any incidental, consequential or other damages including, but not limited to, loss of profits or damages to a structure or its contents arising under any theory of law whatsoever.

The dollar value of CARLISLE's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the CARLISLE material in question.

Carlisle Coatings & Waterproofing, Incorporated
900 Hensley Lane, Wylie TX 75098
800.527.7092 • www.carlisle-ccw.com

