weaving a better world™

INTERWRAP ROOFING PRODUCTS ARCHITECT eBINDER

PRODUCT CATEGORY 7

Roofers rely on it.™

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ABOUT INTERWRAP

InterWrap® is a vertically integrated, global manufacturer of innovative coated woven products and diverse multi-layer laminated reinforced plastic substrates. InterWrap serves a wide variety of markets such as synthetic roofing underlayments, protective packaging - lumber & metal wrap, geomembranes, converted fabrics, agricultural and construction products. Consistent product quality is achieved by using state-of-the-art plastic extrusion, weaving, coating, laminating, printing techniques and a strong commitment to partnership with our customers, employees and suppliers.

Manufacturing, R&D, Distribution and Warehousing

Manufacturing, Distribution and Warehousing

Distribution and Warehousing

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COMPANY HIGHLIGHTS

- InterWrap® - since 1984
- ISO 9001:2008, 14001:2004 & 18001:2007 certified
- Private corporation
- USD $250 m+ for fiscal 2015
- Over 1200 employees worldwide
- Integrated manufacturer of coated woven polyolefin products
- Entrepreneurial, speed to market culture
- Growth of 20% per annum since inception
- Doubled in size over the past 3 years
- R&D focused
- Committed to environmentally sustainable solutions
- Lean manufacturing
- Expanding globally: Manufacturing, Distribution and Markets

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MANUFACTURING CAPABILITIES

InterWrap's Headquarters are situated in Downtown Vancouver BC. Our two Canadian manufacturing facilities are located in Mission, British Columbia & Montreal, Québec. Our Canadian plants combined are equal to 300,000 square feet and are a key part of our North American manufacturing operations. Strategically positioned, these state-of-the-art facilities enable us to expedite goods to the West and East coasts of Canada and the U.S.A.

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Established in 2002, InterWrap India has two strategically situated manufacturing plants in South East Asia that are fully equipped to manufacture coated woven fabrics, building and construction materials, industrial fabrics, lumber and metal wraps. Combined, our Dapada and Sayli plants occupy 250,000 square feet. They are a vital part of our manufacturing effectiveness and ability to successfully compete in global markets.

Established in 2007, our China facility is located in the Jiazhou province within very close proximity to two major export ports. With 290,000 square feet of world class manufacturing equipment and easy access to major shipping ports, our China manufacturing plant is ideally positioned to provide rapid delivery to our growing global clientele.

Our Charleston, SC location covers 170,000 square feet and is equipped for manufacturing and warehousing. Strategically situated on the East Coast of the United States this large facility allows InterWrap to serve our US East Coast clients even more efficiently.

- ISO 9001:2008 Certified
- ISO 14001:2004 Certified
- ISO 18001:2007 Certified
- GAI Lab (Pending)
- 95,000 square meters of manufacturing space
- 220 weaving looms; flat and circular, up to 144"
- 16 tape extrusion lines
- 6 extrusion coating lines, up to 144"
- 8 printing presses; up to 144" and 4 colors
- 14 slitting, cutting & rewinding machines
- 33 converting lines; sewing and heat sealing
- Laminating; paper, foil, film, non-woven

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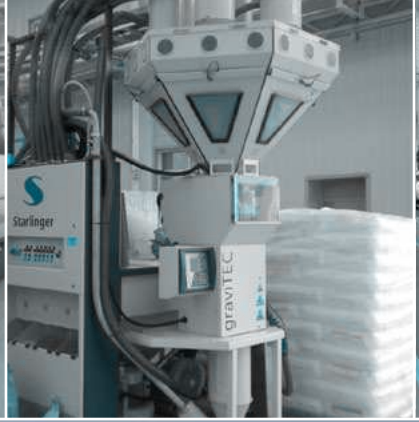

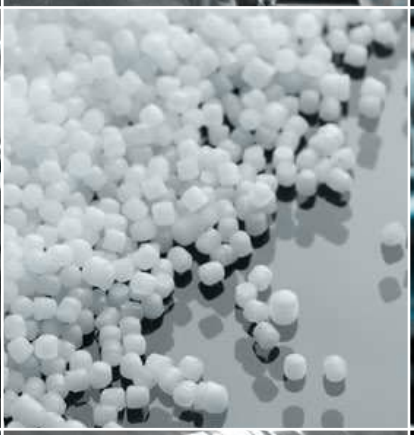

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QUALITY CONTROL

Commitment to Quality

InterWrap Group is committed to provide a dependable supply of products and services that consistently meet the customer's expectations and all applicable product-specific standards. All business units of InterWrap Group operate on a quality business management system that is certified to an international standard ISO-9001:2008.

Product Development and Commercialization

The development and innovation of products is carried out through a robust product development and commercialization process. Verification and validation runs are performed to confirm that the process produces consistent results and the product meets design specifications before proceeding to full scale commercialized production.

Our research and development center is located in our Mission, B.C., Canada facility. This R&D center is used for developing and/or adjusting present product selection, as a display center and application testing with actual on going tests per market served.

Quality Organization

InterWrap's Quality team consists of a Quality Manager, R&D Manager and Process Engineers, Quality Assurance/Quality Control Coordinators, Quality testing facilities and manufacturing personnel. The team is responsible for ensuring the system is functioning correctly, that raw material and finished goods inspections are being conducted according to established protocols, and that established identification and traceability standards are maintained.

Quality Manager:

Maintenance and improvement of the MQA program. Development and approval of all raw material and finished fabric inspection plans.

R&D Manager, Process Engineers:

Product development and commercialization, including verification and validation trials.

Approval of raw material specifications. Development and approval of all finished sheet product specifications.

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CSI PART 1 General

1.1 SECTION INCLUDES

A. Peel and stick weather barriers.

B. Synthetic roofing underlayment.

1.2 RELATED SECTIONS

A. Section 06100 - Rough Carpentry: Roof framing and sheathing.

B. Section 07310 - Shingles, Roof Tiles and Roof Coverings: Roof coverings applied over underlayment.

C. Section 07620 - Flashing and Sheet Metal: Gutters and downspouts.

D. Section 08630 - Unit Skylights: Skylights.

1.3 REFERENCES

A. ASTM International (ASTM):

1. ASTM D226 - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
2. ASTM D751 - Standard Test Methods for Coated Fabrics.
3. ASTM D903 - Standard Test Method for Peel or Stripping Strength of Adhesive Bonds.
4. ASTM D1777 - Standard Test Method for Thickness of Textile Materials.
5. ASTM D1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
6. ASTM D2261 - Standard Test Method for Tearing Strength of Fabrics by the Tongue (Single Rip) Procedure (Constant-Rate-of-Extension Tensile Testing Machine).
7. ASTM D2523 Standard Practice for Testing Load-Strain Properties of Roofing Membranes; 2000.
8. ASTM D4869 - Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing.
9. ASTM D5147 - Standard Test Methods for Sampling and Testing Modified Bituminous Sheet Material.
10. ASTM D5261 - Standard Test Method for Measuring Mass per Unit Area of Geotextiles.
11. ASTM E96 - Standard Test Methods for Water Vapor Transmission of Materials.
12. ASTM E108 - Standard Test Methods for Fire Tests of Roof Coverings.

B. National Roofing Contractors Association (NRCA): Steep Slope Roofing and Waterproofing Manual.

C. International Code Council (ICC): AC 48 - Acceptance Criteria For Roof Underlayment For Use In Severe Climate Areas.

D. UL 790 - Tests for Fire Resistance of Roof Covering Materials.

E. UL 997 - Wind Resistance of Prepared Roof Covering Materials.

1.4 SUBMITTALS

A. Submit under provisions of Section 01300.

B. Product Data: Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation methods.

C. Shop Drawings: Submit copies of manufacturer's standard details describing installation methods and flashing conditions applicable to the project.

D. Selection Samples: For each finish product specified, two samples representing manufacturer's full range of available colors, patterns, and materials.

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E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square representing actual product, color, and patterns.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: All primary products specified in this section will be provided by a single manufacturer with a minimum of ten (10) years experience.

B. Installer Qualifications: All products listed in this section are to be installed by a single installer with a minimum of five (5) years demonstrated experience in installing products of the same type and scope as specified.

C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.

1. Finish areas designated by Architect.
2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
3. Refinish mock-up area as required to produce acceptable work.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 WARRANTY

A. At project closeout, provide to the owner or owners representative an executed copy of the manufacturer's Limited Warranty against Manufacturing Defect.

1. Titanium PSU30 Warranty Duration: Limited Lifetime.
2. Titanium UDL25 Warranty Duration: Limited Lifetime.
3. Titanium UDL30 Warranty Duration: Limited Lifetime.
4. Titanium UDL50 Warranty Duration: Limited Lifetime.
5. RhinoRoof U10 Warranty Duration: 10 Years.
6. RhinoRoof U20 Warranty Duration: 20 Years.
7. RhinoRoof RSA Warranty Duration: 25 Years.

CSI PART 2 Products

2.1 MANUFACTURERS

A. Acceptable Manufacturer: InterWrap Inc., which is located at: 7163 Beatty Drive ; Mission, BC, Canada V2V 6C4; Toll Free Tel: 800-567-9727; Tel: 1-778-945-2888; Email: request info (dgagnier@interwrap.com);
Web: www.interwrap.com/Roofing/

B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 APPLICATION / SCOPE

A. Provide a temporary moisture resistant barrier over installed sloped roof decks equal to or greater than 2:12 pitch to "Dry-In" the structure and allow trades to work beneath. Finished roofing material must be installed over products specified in this section within:

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- (30) days for RhinoRoof U10
- (60) days for RhinoRoof U20
- (90) days for RhinoRoof RSA
- (180) days for Titanium UDL25, UDL30, UDL50 and PSU30

B. Provide a secondary air, water, vapor barrier beneath finished sloped roof surfaces to assist in preventing moisture infiltration.

2.3 ROOF UNDERLAYMENT

A. Water Barrier Membrane High Temperature/Low Temperature and Ice Damming Membrane - Titanium PSU30: Synthetic polymer surfaced self-adhered membrane roofing underlayment for sloped roofs equal to or greater than 2:12 pitch, subject to the effects of ice damming and wind driven rain.

1. Color: Gray.
2. Surface: Synthetic Polymer - Patented Sure-Foot® slip resistant Nodular.
3. Release Liner: Silicone Treated, Poly Split Release.
4. Weight per square: 24 lbs / (10.8 kg).
5. Minimum Thickness: ASTM D5147, 45 Mil (1.1 mm).
6. Tensile: ASTM D1970, MD 100 lbs/in/ (17.5 kN/m)
7. Thermal Stability: ASTM D1970, 240 degrees F (115 degrees C) Pass.
8. Low Temp Flexibility: ICC AC 48, Pass.
9. Tear Resistance: ASTM D1970, MD 140/ CD 100 lbf (622/445 N).
10. Adhesion to Plywood: ASTM D903, 4 lb/in (700 N/m).
11. Nail Sealability: ASTM D1970, Pass.
12. Temperature Service Range: 240° F to -40° F (115° to -40° C)
    - Installation temperature range: 40° F (5° C) and above
13. Roll Size: 36 inches by 72 feet (914mm x 21945mm), 2.16 Sq.(20 sm).

B. Synthetic Roofing Underlayment - Titanium UDL25 : Polyolefin based, asphalt free, high strength, reinforced roofing underlayment mechanically attached to sloped roof decks beneath shingles, shakes, metal, and composite roofing to prevent leaks caused by wind driven rain and primary roofing breach.

1. ICC Approved alternate to ASTM D 226 Type I (#15) or Type II (#30) felt. (ES ER-6043)
2. Fire Performance: Class A Fire ASTM E108, Pass.
3. Nail Sealability: ASTM D1970, Pass.
4. Permeability: ASTM E96, 0.06 perms.
5. Water Transmission: ASTM D4869, Pass.
6. Tear Strength: ASTM D4533, MD 31 lbs. (14 kg)
7. Tensile Strength: ASTM D751, MD 135 lbs. (61 kg)
8. Burst Strength: ASTM D751, 220 psi (1517 kPa).
9. Elongation: ASTM D751, MD 17% CD 20%.
10. Weight per Square: ASTM D5261, 2.4lbs (1.1 kgs).
11. Minimum Thickness: ASTM D1777, 15 mils (0.38 mm).
12. Temperature Service Range: 240° F to -40° F (115° to -40° C).
13. Roll Size: 48 inches by 250 feet (1219mm x 76200mm), 10 Sq. (92.9 sm).

C. Synthetic Roofing Underlayment - Titanium UDL30: Polyolefin based, asphalt free, high strength, reinforced roofing

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underlayment mechanically attached to sloped roof decks beneath shingles, shakes, slate, tile, metal, and composite roofing to prevent leaks caused by wind driven rain and primary roofing breach.

1. ICC Approved alternate to ASTM D 226 Type I (#15) or Type II (#30) felt. (ES ER-6043).
2. Fire Performance: Class A Fire ASTM E108, Pass.
3. Nail Sealability: ASTM D1970, Pass.
4. Permeability: ASTM E96, 0.06 perms.
5. Water Transmission: ASTM D4869, Pass.
6. Tear Strength: ASTM D2261, MD 44 lbs. (20 kg)
7. Tensile Strength: ASTM D751, MD 143 lbs. (65 kg)
8. Burst Strength: ASTM D751, 250 psi (1720 kPa).
9. Elongation: ASTM D751, MD 18% CD18%.
10. Weight per Square: ASTM D5261, 4.0 lbs. (1.82 kgs).
11. Minimum Thickness: ASTM D1777, 25 mils (0.63 mm).
12. Temperature Service Range: 240° F to -40° F (115° to -40° C).
13. Roll Size: 48 inches by 250 feet (1219mm x 76200mm), 10 Sq. (92.9 sm).

D. Synthetic Roofing Underlayment - Titanium UDL50: Polyolefin based, asphalt free, high strength, reinforced roofing underlayment mechanically attached to sloped roof decks beneath shingles, shakes, slate, tile, metal, and composite roofing to prevent leaks caused by wind driven rain and primary roofing breach.

1. ICC Approved alternate to ASTM D 226 Type I (#15) or Type II (#30) felt. (ES ER-6043).
2. Performance: Class A Fire ASTM E108, Pass.
3. Nail Sealability: ASTM D1970, Pass.
4. Permeability: ASTM E96, 0.05 perms.
5. Water Transmission: ASTM D4869, Pass.
6. Tear Strength: ASTM D226, MD 55 lbs. (25 kg)
7. Tensile Strength: ASTM D751, MD 178 lbs. (81 kg)
8. Burst Strength: ASTM D751, 300 psi (2065 kPa).
9. Elongation: ASTM D751, MD 20% CD 20%.
10. Weight per Square: ASTM D5261, 4.7 lbs. (2.13 kgs).
11. Minimum Thickness: ASTM D1777, 30 mils (0.75 mm).
12. Temperature Service Range: 240° F to -40° F (115° to -40° C).
13. Roll Size: 48 inches by 250 feet (1219mm x 76200mm), 10 Sq. (92.9 sm).

E. Synthetic Roofing Underlayment - RhinoRoof U10: Polyolefin based, asphalt free, high strength, reinforced roofing underlayment mechanically attached to sloped roof decks beneath shingle roofing to prevent leaks caused by wind driven rain and primary roofing breach.

1. ICC Approved alternate to ASTM D 226 Type I (#15) or Type II (#30) felt. (ES ER-6043).
2. Performance: Class A Fire ASTM E108, Pass.
3. Permeability: ASTM E96, 0.05 perms.
4. Water Transmission: ASTM D4869, Pass.
5. Tear Strength: ASTM D226, MD 26 lbs. (12 kg)
6. Tensile Strength: ASTM D751, MD 84 lbs. (38 kg)
7. Burst Strength: ASTM D751, 130 psi (897 kPa).
8. Elongation: ASTM D751, MD 20% CD 20%.

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9. Weight per Square: ASTM D5261, 1.9 lbs. (0.86 kgs).
10. Minimum Thickness: ASTM D1777, 6.5 mils (0.17 mm).
11. Temperature Service Range: 240° F to -40° F (115° to -40° C).
12. Roll Size: 42 inches by 286 feet (1,067mm x 87,170mm), 10 Sq. (92.9 sm).

F. Synthetic Roofing Underlayment - RhinoRoof U20: Polyolefin based, asphalt free, high strength, reinforced roofing underlayment mechanically attached to sloped roof decks beneath shingles, shakes, metal, and composite roofing to prevent leaks caused by wind driven rain and primary roofing breach.

1. ICC Approved alternate to ASTM D 226 Type I (#15) or Type II (#30) felt. (ES ER-6043).
2. Performance: Class A Fire ASTM E108, Pass.
3. Permeability: ASTM E96, 0.05 perms.
4. Water Transmission: ASTM D4869, Pass.
5. Tear Strength: ASTM D226, MD 33 lbs. (15 kg)
6. Tensile Strength: ASTM D751, MD 88 lbs. (40 kg)
7. Burst Strength: ASTM D751, 158 psi (1089 kPa).
8. Elongation: ASTM D751, MD 20% CD 20%.
9. Weight per Square: ASTM D5261, 2.25 lbs. (1.02 kgs).
10. Minimum Thickness: ASTM D1777, 7 mils (0.18 mm).
11. Temperature Service Range: 240° F to -40° F (115° to -40° C).
12. Roll Size: 42 inches by 286 feet (1,067mm x 87,170mm), 10 Sq. (92.9 sm).

G. Water Barrier Membrane High Temperature/Low Temperature and Ice Damming Membrane - RhinoRoof RSA: Synthetic polymer surfaced self-adhered membrane roofing underlayment for sloped roofs equal to or greater than 2:12 pitch, subject to the effects of ice damming and wind driven rain.

1. Color: Dark Gray.
2. Surface: Textured fiber-grip slip resistant.
3. Release Liner: Silicone Treated, Poly Split Release.
4. Weight per square: 22 lbs / (10 kg).
5. Nominal Thickness: ASTM DD1777, 40 Mil (1.0 mm).
6. Tensile: ASTM D1970, MD 45 lbs/in (7.9 kN/m)
7. Thermal Stability: ASTM D1970, 240 degrees F (115 degrees C) Pass.
8. Low Temp Flexibility: ASTM D1970, Pass.
9. Tear Resistance: ASTM D1970, MD 55/ CD 32 lbf (245/205 N).
10. Adhesion to Plywood: Min 5 lb/in (0.9 kN/m).
11. Nail Sealability: ASTM D1970, Pass.
12. Temperature Service Range: 240° F to -40° F (115° to 40° C)
    - Installation temperature range: 40° F (5° C) and above
13. Roll Size: 36 inches by 67 feet (914mm x 20,420mm), 2 Sq. (20 sm).

2.4 RELATED MATERIALS

A. Sealant: High quality, asbestos free plastic roofing cement meeting or exceeding the requirements of ASTM D 4586 Type I.

B. Titanium UDL50 Fasteners: 3/8 head roofing nail, plastic cap and nail, plastic cap and staple roofing fasteners with minimum 1 inch (25mm) diameter metal or plastic caps, Miami Dade approved Tin Tags.

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CSI PART 3 Execution

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Follow manufacturer's current installation guidelines, procedures found in the current version of the National Roofing Contractors Association's (NRCA) "Steep Slope Roofing and Waterproofing Manual", and requirements of all code bodies having jurisdiction. In the event of a conflict in installation requirements, the more stringent method of installation will prevail.

B. Roof Deck: Starting at the lowest point of the roof section, apply one layer of underlayment horizontally over all sections of roof deck not protected by eave or valley membrane and nail in place. Lap horizontal edges 2 4 inches (51 101 mm). Overlap ends at least 4 6 inches (102 152 mm); stagger end laps at least 36 inches (915 mm) apart.

C. Eaves: Place eave edge metal flashing tight with fascia boards; lap joints 2 inches (50 mm) and seal; nail at top of flange.

D. Valleys: Install a full width of weather barrier centered on valley; lap ends 6 inches (150 mm) and seal. Where open valley construction is specified, install metal flashing over weather barrier before roof deck underlayment is installed. Lap underlayment over valley protection at least 6 inches (150 mm).

E. Vent Pipes and Field Penetrations: Apply a 24 inch (610 mm) square target sheet of weather barrier around the penetration. Lap over underlayment beneath and at the sides of the penetration and beneath underlayment above the penetration. Apply sealant to the seam above the penetration.

F. Sidewalls, Headwalls and Chimneys: Apply weather barrier extending at least 8 inches (203 mm) up the wall and 12 inches (305 mm) on to the roof surface. Lap over roof deck protection.

G. Hips and Ridges: Apply weather barrier over the length of the hips and ridges. Where ridge ventilation is specified, remove weather barrier from areas where ventilation slots are required prior to installing ridge vent.

H. Rake Edges: Apply weather barrier and underlayment prior to installation of any rake edge flashing. Apply sealant to the edge prior to installation of metal flashing and nail metal edge flashing every 6 inches (152mm).

I. Skylights: Apply weather barrier up the sides of the frame and 12 inches (305 mm) on to the roof surface on all sides, Lap over underlayment beneath and at the sides of the skylight and beneath underlayment above the penetration. Apply sealant to the seam above the skylight. See skylight manufacturer for any additional installation details.

3.4 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

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TITANIUM® UDL 25

SYNTHETIC ROOFING UNDERLAYMENT

6 MONTHS UV

PATENTED SURE-FOOT® NODULAR WALKING SURFACE

ALL TEMP

BACK TO TOC

TITANIUM® UDL25

Synthetic Roofing Underlayment

UDL25 Features & Benefits

UDL25 is a premium synthetic roofing underlayment for use under: Metal, Shake & Shingle roofing.

Titanium® UDL25 is a highly engineered, mechanically attached, coated woven synthetic roofing underlayment for sloped roofs. Titanium UDL25 represents the future in felt replacement technology, and used in conjunction with Titanium PSU30 self adhered underlayment for ice damming and valley areas, a truly revolutionary system of safety, security and simplicity... Two products (UDL25 & PSU30) are ALL your sloped roof needs.

- Patented SURE-FOOT® slip resistant nodular walking surface and an advanced resin technology that provide superior steep slope walkability
- Lifetime Limited Warranty
- Up to 6 months UV exposure rating
- Meets and exceeds ASTM D226 Types I & II and D4869 Types II & IV
- ICC ES Approved - CAN/CSA A220.1
- Class A Fire ASTM E108
- Meets Class 4 Hail Rating
- Florida Building Code Approved
- Texas Department of Insurance
- 11 times lighter & 14 times stronger than #30 felt
- Contributes to LEED® points, 100% Recyclable
- All temperature performance -40°F to 240°F
- Synthetic construction inert to mold growth
- Cool gray surface, doesn't expand or contract
- Dual logo custom printing available

Titanium UDL25's advanced polymers combine to deliver a uniquely gray synthetic roofing underlayment that can be used under primary roofing materials to replace felt. Gray technology provides for a cooler roof and the best UV exposure properties (up to 6 months) in the marketplace. Unlike smooth surfaced underlayments, Titanium UDL25 has a unique ridged walking surface plus our Diamond-Plate slip resistant coating technology that allows for easier steep slope walk-ability, even when wet.

MIAMI-DADE COUNTY APPROVED

CAN/CSA A220.1
FLORIDA BUILDING CODE
CLASS A ASTM-E108
FIBREGLASS SHINGLES

CONTRIBUTES TO LEED POINTS

SCScertified
MINIMUM 20% RECYCLED CONTENT PRE-CONSUMER

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TITANIUM® UDL25

Synthetic Roofing Underlayment

UDL25 Technical Data

ROLL & PALLET SPECIFICATIONS	
LENGTH PER ROLL:	250' / 76.2 m
WIDTH PER ROLL:	48" / 122 cm
WEIGHT PER ROLL:	25 lbs / 11.5 kg
ROLL SIZE:	10 sq / 93 m²
ROLLS PER PALLET:	56
PALLET WEIGHT:	1,450 lbs / 658 kg

TEST & ASTM STANDARD	UDL25 TYPICAL VALUE	#30 FELT TYPICAL VALUE
Class A Fire E108	Pass	N/A
Nail Sealability Modified D1970	Pass	N/A
Permeability E96	.06 perms	1.75 perms
Water Transmission D4869	Pass	Pass
Tear Strength D4533	MD 31 lbs (14 kg) | CD 27 lbs (12.5 kg)	MD 4 lbs (1.8 kg) | CD 2 lbs (0.9 kg)
Tensile Strength D751	MD 135 lbs (61 kg) | CD 100 lbs (45.5 kg)	MD 70 lbs (32 kg) | CD 38 lbs (17 kg)
Burst Strength D751	220 psi (1517 kPa)	62 psi (430 kPa)
Elongation D751	MD 17% CD 20%	MD 2% CD 2%
Weight per Square D5261	2.4 lbs (1.1 kgs)	27.5 lbs (12.5 kgs)
Minimum Thickness D1777	15 mils (0.38 mm)	60 mils (1.5 mm)
Service Temperature Range	-40° F to 240° F (-40° C to 115° C)	

UDL25 Building Codes

- Meets and exceeds ASTM D226 Types I & II and D4869 Types II & IV
- Miami-Dade County Approved
- Florida Building Code Approved
- Texas Department of Insurance Listed
- Tile Roofing Institute Approved
- Meets Class 4 Hail Rating
- CLASS A ASTM E-108
- CAN/CSA A220.1
- ICC ESR

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UDL25 MSDS

I. Product Identification and Use:

Product Identification: Titanium UDL
Product Use/Description: Coated woven polyolefin for use as a roofing underlayment
Product Composition: 95% polyolefin, 5% polymer blend

II. Hazardous Ingredients:

This is not a hazardous product as defined by WHMIS

III. Physical Data:

a. Physical State: Solid
b. Odor and Appearance: Pigmented odorless Woven fabric
c. Odor threshold (ppm): N.Ap.
d. Vapor Pressure (mmHg): N.Ap.
e. Vapor Density (Air = 1): N.Ap.
f. Evaporation rate: N.Ap.
g. Boiling Point (oC): N.Ap.
h. Freezing Point (oC): N.Ap.
i. pH: N.Ap.
j. Specific Gravity: N.Ap.
k. Coef. Water/oil Dist. N.Ap.

IV. Fire and Explosion Data:

a. Flammability: Not flammable, but in case of a fire it will contribute.
b. Means of extinction: Water spray and dry chemicals.
c. Flash point (oC) and Method: N.Ap.
d. Upper flammable limit (% by volume): N.Ap.
e. Lower flammable limit (% by volume): N.Ap.
f. Hazardous combustion products: Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides
g. Explosion Data: Not sensitive to impact nor to static discharge.

V. Reactivity Data:

a. Chemical stability: Yes.
b. Incompatibility with other substances: None
c. Reactivity: Non-reactive
d. Hazardous decomposition products: No data.

VI. Toxicological properties:

a. Route of entry: N. Ap.
b. Effects of acute exposure to product: None known.
c. Effects of chronic exposure to product: None known.
d. Exposure Limits: Not available.
e. Irritancy of product: N.Ap.
f. Carcinogenicity: Not on IARC list.
g. Synergistic Products: None known

VII. Preventive Measures:

a. Gloves: N.Ap.
b. No respirator required under normal use.
c. Leak and spill procedure: N.Ap.
d. Waste disposal: See your local authorities for disposal instructions.
e. Handling and Storage: Rolls should be adequately restrained to prevent shifting during handling and storage.
f. Storage Requirements: N.Ap.
g. Special shipping information: None.

VIII. First aid measures:

*N.Ap.

IX. Other Information:
a. DOT Shipping Name: Not Available
b. DOT Hazard Class: Not Available

Prepared by: IW R&D group. (604) 820-5400
Revision Date: 5th June 2015

Disclaimer:
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*N.Ap. None Applicable

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UDL25 Installation Instructions

Titanium® UDL25 is an air, water and vapor barrier (.06 perms) and therefore should be installed above a properly ventilated space(s). It is recommended to follow all building codes applicable to your geographical region and structure type.

DECK PREP: All protrusions from the deck area must be removed and ensure the deck has no voids, damaged or unsupported areas. Deck surface should be free of debris, dry and moisture free.

USE: Titanium UDL25 must be covered by primary roofing within 180 days of application. UDL25 is designed for use under; asphalt and synthetic shingles, metal roofing, and cedar shakes.

APPLICATION: For slopes 2:12 and higher UDL25 is to be laid out horizontally (parallel) to the eave with the printed side up. Horizontal laps should be 4" and vertical laps should be 6"and anchored approximately 1" in from the edge. For low slope applications it is recommended to overlap 50% plus 1", for complete definition of low slope and guidelines consult authorities having jurisdiction. UDL25 product is not recommended for slopes less than 2:12. The use of a roofing hammer, hatchet hammer, pneumatic air or gas driven fastener tools is acceptable. The use of a straight edge cutting knife is recommended.

FASTENERS: For same day coverage with primary roofing UDL25 can be anchored with corrosive resistant 3/8" head x 1" leg roofing nails (ring shank preferred, smooth leg acceptable). The use of every other anchoring location printed on the product is also acceptable. **DO NOT USE STAPLES:** use of staples to penetrate UDL25 will void warranty.

ANCHORING: All anchoring nails must be flush, 90 degrees to the roof deck, and tight with the underlayment surface and the structural roof deck. Where seams and joints require sealant or adhesive use a low solvent plastic roofing cement meeting ASTM D-4586 Type 1, or Federal Spec SS-153 Type 1 such as Karnak, Henry, DAP, MB, Geocel or equivalent. Acceptable alternatives are butyl rubber, urethane, and EDPM based caulk or tape sealant.

EXTENDED EXPOSURE: If Titanium UDL25 product will be exposed longer than 1 day but less than 5 days then it is recommended to anchor using corrosive resistant 3/8" head x 1" leg roofing nails (Ring shank preferred). For exposure more than 5 days and up to 180 days UDL25 product must be anchored with 1" plastic or metal cap smooth or ring shank roofing nails. Miami-Dade approved tin tags or metal caps are also acceptable, and it is recommended for best performance to use with the rough edge facing up. For extended exposure it is always recommended to anchor on every printed position on the facer. Note: UDL25 is not designed for indefinite outdoor exposure. For extended exposure conditions where driving rain or strong winds are expected it is recommended to take additional precautions such as doubling the lap widths. Alternately or in addition to a compatible sealant could be used between the laps or a peel and stick tape could be applied to the overlaps.

CAUTION - READ GOOD SAFETY PRACTICES BELOW

Good safety practices should be followed on steep slope roofs, such as use of tie-offs, toe boards, ladders and/or safety ropes and personal body harnesses. Follow OSHA guidelines. Slip resistance may vary with surface conditions from debris that accumulates, weather, footwear and roof pitch. Failure to use proper safety gear can result in serious injury. Depending on roof pitch and surface conditions, blocking may be required to support materials on the roof and is good safety practice. Remember to seal the nail holes after removing blocking.

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TITANIUM® UDL25

Membrane Synthétique Pour Toiture

UDL25 Consignes d'installation

TitaniumMD UDL25 est une barrière contre l'air, l'eau et la vapeur (0,06 perm) et elle doit donc être installée au-dessus d'espaces bien ventilés. Il est recommandé de respecter tous les codes du bâtiment applicables à la région et au type de structure.

PRÉPARATION DU SURFACE : Les saillies de la surface du surface doivent être enlevées et le surface ne doit pas avoir d'interstices ni d'endroits endommagés ou non supportés. La surface du surface doit être exempte de débris, sèche et à l'abri de l'humidité.

UTILISATION : Le Titanium UDL25 doit être couvert par la couverture principale dans les 180 jours suivant sa pose. Le produit UDL25 est conçu pour être utilisé sous les bardeaux d'asphalte, les bardeaux synthétiques, les couvertures métalliques et les bardeaux de fente en cèdre.

APPLICATION : Pour les pentes fortes de 2:12 ou plus, le produit UDL25 doit être disposé horizontalement (parallèlement) par rapport à l'avant-toit, la face imprimée vers le haut. Les chevauchements horizontaux doivent être de 4 po et les chevauchements verticaux doivent être de 6 po et ancrés à environ 1 po du bord. Pour les pentes douces, il est recommandé de faire chevaucher de 50 % plus 1 po; pour voir une définition complète du terme « pente douce » et les lignes directrices à cet égard, veuillez consulter les autorités compétentes de votre région. Le produit UDL25 n'est pas recommandé sur les pentes de moins de 2:12. L'emploi de marteaux à toiture, d'un marteau hachette ou de cloueuses pneumatiques ou à gaz est acceptable. On conseille d'utiliser un couteau à lame droite.

FIXATIONS : Pour la pose du revêtement le même jour que la couverture principale, le produit UDL25 peut être fixé avec des clous de toiture de 1 po (tête de 3/8 po) résistants à la corrosion (clous à tige crantée privilégiés, mais des clous de toiture à tige lisse sont acceptables). L'usage de tout autre dispositif d'ancrage est acceptable sur le chantier. **NE PAS UTILISER D'AGRAFES :** L'utilisation d'agrafes pour installer le produit UDL25 annulera la garantie.

ANCRAGE : Tous les dispositifs d'ancrage doivent être affleurants, enfoncés à 90 degrés dans le surface, et ne pas présenter de jeu avec la sous-couche et avec la structure du surface. Lorsque les joints requièrent un produit d'étanchéité ou un adhésif, utilisez de la colle plastique pour feutre à faible teneur en solvant conforme à la norme ASTM D-4586 Type 1, ou à la spécification fédérale SS-153 de type 1 comme les adhésifs Karnak, Henry, DAP, MB, Geocel ou d'autres produits équivalents. Des solutions de rechange acceptables comprennent le butylcaoutchouc, l'uréthane et les calfeutrants ou rubans d'étanchéité à base d'EPDM.

EXPOSITION PROLONGÉE : Si le Titanium UDL25 doit être exposé à l'air libre pendant plus d'une journée, mais moins de 5, il est recommandé de l'ancrer avec des clous de toiture de 1 po (tête de 3/8 po) résistants à la corrosion (l'utilisation de clous à tige crantée est à privilégier). En cas d'exposition de plus de 5 jours, allant jusqu'à 180 jours, le produit UDL25 doit être ancré avec des clous de toiture à capuchon de plastique ou de métal de 1 po à tige lisse ou à tige crantée. Les rivets en étain ou capuchons en métal approuvés par Miami-Dade sont aussi acceptables, le bord rugueux face vers le haut pour des résultats optimaux. Dans le cas d'une exposition prolongée, il est toujours conseillé d'ancrer le produit sur chaque position imprimée de la surface. Remarque : Le produit UDL25 n'est pas conçu pour une exposition extérieure prolongée. Dans le cas d'une exposition prolongée ou de la pluie battante ou des vents violents pourraient survenir, il est conseillé de prendre des précautions additionnelles, comme doubler la largeur des chevauchements. Comme solution de rechange ou comme précaution additionnelle, vous pouvez utiliser un produit d'étanchéité compatible entre les chevauchements ou les recouvrir d'une bande adhésive pelée et collée.

MISE EN GARDE — VEUILLEZ LIRE LES CONSIGNES DE SÉCURITÉ CI-DESSOUS : Adoptez toujours de bonnes pratiques de sécurité sur les toits à pente raide; par exemple, servez-vous de cordes de fixation, de planches cale-pied, d'échelles ou de cordes de sécurité et de harnais de sécurité individuels. Veuillez suivre les lignes directrices de l'OSHA. La résistance au glissement peut varier selon l'état de la surface, les débris qui y sont accumulés, les conditions atmosphériques, les chaussures utilisées et la pente du toit. Le fait de ne pas utiliser un équipement de sécurité approprié pourrait entraîner des blessures graves. Selon la pente de toit et l'état de la surface, un calage pourrait être requis pour soutenir les matériaux sur le toit, ce qui est une bonne pratique de sécurité. Souvenez-vous de sceller les trous des fixations qui ont retenu les cales après les avoir enlevées.

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TITANIUM® UDL25

Membrana Sintética Para Techos

Instrucciones de instalación

Titanium® UDL25 es una barrera contra el aire, el agua y el vapor (.06 perms), por lo que debe instalarse sobre espacios con una ventilación adecuada. Se recomienda seguir todas las normas de construcción de su región geográfica para su tipo de estructura.

PREPARACIÓN DE LA ESTRUCTURA DEL TECHO:
Deben eliminarse las zonas salientes de la estructura del techo y esta no debe tener espacios vacíos ni áreas dañadas o sin apoyo. La superficie del techo debe estar seca y sin residuos ni humedad.

USO: El Titanium UDL25 debe cubrirse con el techado principal dentro de los 180 días posteriores a la aplicación. El UDL25 está diseñado para utilizarse bajo tejas sintéticas o de asfalto, techados de metal y tejados de cedro.

APLICACIÓN: El UDL25 debe instalarse de forma horizontal (paralela) al alero en techos con pendientes de 2:12 ó más, con el lado impreso hacia arriba. Los superposiciones horizontales deben ser de 4 pulg. (10.2 cm) y las verticales deben ser de 6 pulg. (15.2 cm) y deben estar ancladas a aproximadamente a 1 pulg. (2.5 cm) del borde. Con respecto a la aplicación en pendientes bajas, se recomienda sobreponer el 50% más 1 pulg. (2.5 cm); para conocer la definición de una pendiente baja y las directrices correspondientes, por favor consulte con las autoridades de su jurisdicción. El producto UDL25 no se recomienda en pendientes menores a 2:12. Pueden utilizarse martillos para techos, martillos tipo hacha y herramientas de fijación neumáticas de aire o gas. Se recomienda el uso de cortadores de borde recto.

FIJACIONES: Para cubrir el mismo día con techado primario, el UDL25 puede sujetarse con clavos para techo con cabeza de 3/8 de pulg. (9.5 mm) y 1 pulg. (2.5 cm) de largo que sean resistentes a la corrosión (es preferible usar clavos de cuerpo anillado, aunque los de vástago liso son aceptables). También es aceptable utilizar cualquier otro sitio para el anclaje que esté impreso en el producto. NO UTILIZAR GRAPAS: El uso de grapas para penetrar el UDL25 anulará la garantía.

ANCLAJE: Todos los clavos de anclaje deben estar al ras, a 90 grados con respecto a la plataforma del techo y ajustados a la superficie de recubrimiento y la estructura del techo. En los casos en que las uniones y juntas requieran de material sellador o adhesivo, se debe utilizar cemento plástico para techos con bajo contenido de solvente y que cumpla con las normas ASTM D-4586 Tipo 1 ó la Especificación Federal SS-153 Tipo 1, por ejemplo Karnak, Henry, DAP, MB, Geocel o equivalente. Otras alternativas aceptables son los selladores en forma de cinta o masilla con base de caucho butílico, uretano o EDPM.

EXPOSICIÓN PROLONGADA: Si el producto Titanium UDL25 va a estar expuesto más de 1 día pero menos de 5 días, se recomienda hacer el anclaje con clavos para techo con cabeza de 3/8 de pulg. (9.5 mm) y 1 pulg. (2.5 cm) de largo que sean resistentes a la corrosión (es preferible usar clavos de cuerpo anillado). Si el producto UDL25 se deja expuesto de 5 a 180 días, debe anclarse con clavos para techo anillados o lisos con tope de metal o de plástico de 1 pulg. (2.5 cm). También es aceptable utilizar placas de estaño o topes metal que estén aprobados en Miami Dade; se recomienda instalarlos con el borde rugoso hacia arriba para un mejor rendimiento. Para una exposición prolongada, se recomienda anclar todas las posiciones marcadas en el revestimiento. Nota: UDL25 no está diseñado para estar expuesto indefinidamente a la intemperie. En condiciones de exposición prolongada, donde se espera lluvia impulsada por el viento o ventarrones, se recomienda tomar precauciones adicionales como doblar el ancho de las superposiciones. De forma alternativa o adicional, podría utilizarse un sellador compatible entre las superposiciones, o bien, utilizar cinta adhesiva en las superposiciones.

ADVERTENCIA – LEA LAS SIGUIENTES BUENAS PRÁCTICAS DE SEGURIDAD

En techos muy inclinados, se deben seguir las buenas prácticas de seguridad, como el uso de amarres, topes para apoyar los pies, escaleras y/o cuerdas de seguridad y arneses personales para el cuerpo. Siga las directrices de la OSHA. La resistencia al deslizamiento puede variar según las condiciones de la superficie, los residuos que se acumulen, el clima, el tipo de calzado, y la inclinación del techo. La falta de uso de equipos de seguridad adecuados puede dar lugar a lesiones graves. Según la inclinación y las condiciones de la superficie del techo, es posible que deba utilizarse algún mecanismo de bloqueo para apoyar los materiales sobre el techo, lo que constituye también una buena medida de seguridad. Recuerde que se deben sellar los orificios de los clavos después de quitar el mecanismo de bloqueo.

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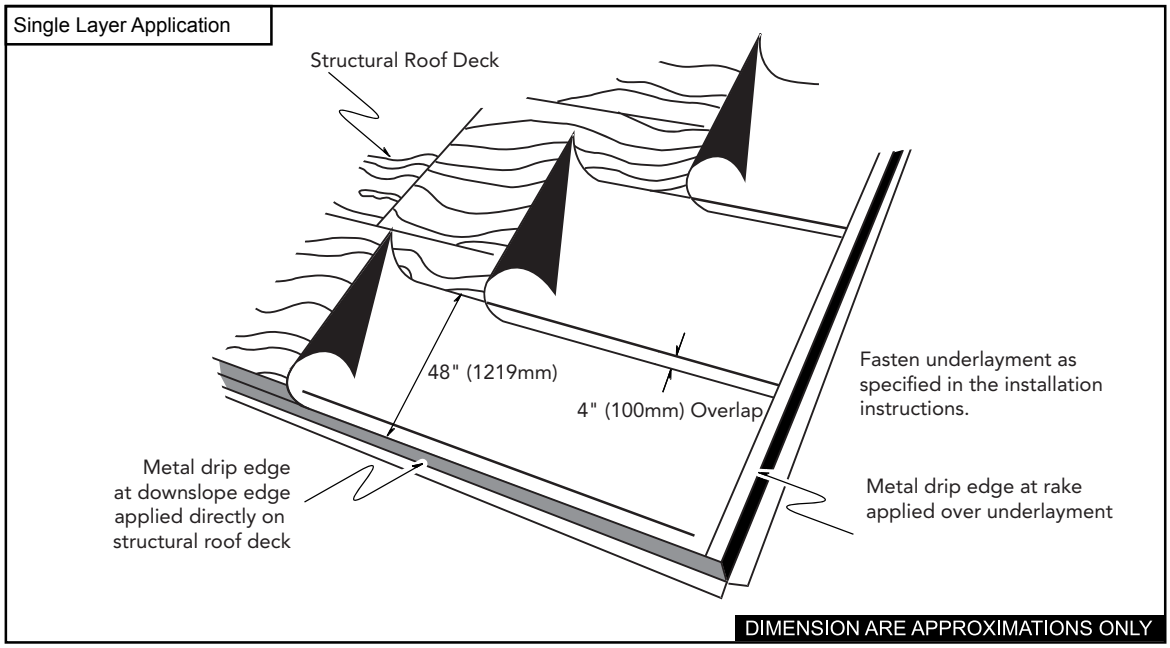
UDL25 Application Diagram

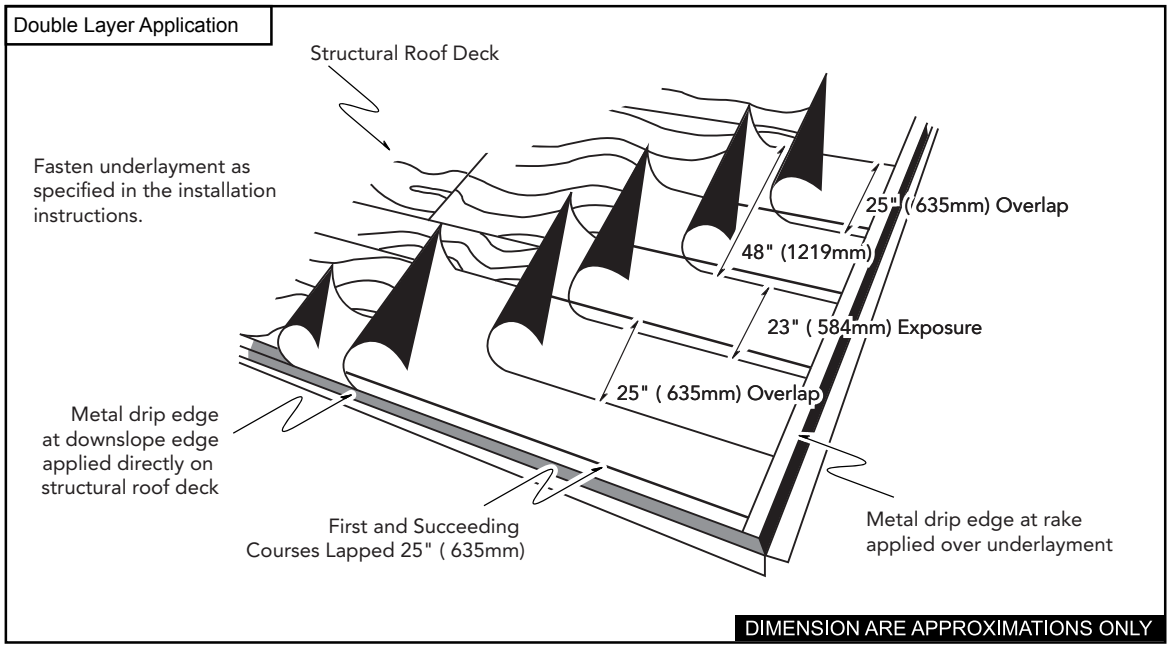
Single layer application of TITANIUM UDL's

For roof decks having slopes greater than 4:12, TITANIUM® UDL should be applied horizontally in shingle fashion with a 44 inch exposure and a 4 inch overlap.
Pay special attention to high wind and wind driven rain condition application instructions.



Double layer application of TITANIUM UDL's

For roof decks having slope of 2:12 to 4:12 a minimum of two layers of TITANIUM® UDL underlayment should be applied horizontally in shingle (water fall) fashion with a with a 23 inch exposure and a 25 inch overlap.



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TITANIUM® UDL 30

SYNTHETIC ROOFING UNDERLAYMENT

6 MHS UV

PATENTED SURE-FOOT® NODULAR WALKING SURFACE

ALL TEMP

TITANIUM®

LIFETIME*

LIMITED WARRANTY

BACK TO TOC

TITANIUM® UDL-30

Professional Grade Synthetic Roofing Underlayment

UDL30 Features & Benefits

UDL30 is a premium air, water and vapor barrier for use under: Metal, Tile, Slate, Shake & Shingle roofing.

Titanium UDL30 is a highly engineered, mechanically attached, coated woven synthetic roofing underlayment for sloped roofs. Titanium UDL30 represents the future in felt replacement technology, and used in conjunction with Titanium PSU30 self adhered underlayment, offers the sloped roofing industry a truly revolutionary system of safety, security and simplicity... Two products (UDL30 & PSU30) are ALL your roof needs.

- Patented SURE-FOOT® slip resistant nodular walking surface and an advanced resin technology that provide superior steep slope walkability
- Lifetime Limited Warranty
- Up to 6 months UV exposure rating
- Meets and exceeds ASTM D226 Types I & II and D4869 Types II & IV
- ICC ES Approved
- Class A Fire ASTM E108 - CAN/CSA A220.1
- Meets Class 4 Hail Rating
- Florida Building Code Approved
- Texas Department of Insurance
- 6 times lighter & 20 times stronger than #30 felt
- Contributes to LEED® points, 100% Recyclable
- All temperature performance -40°F to 240°F
- Synthetic construction inert to mold growth
- Cool gray surface, doesn't expand or contract
- Dual logo custom printing available

Titanium UDL30's advanced polymers combine to deliver a uniquely gray synthetic roofing underlayment that can be used under all types of primary roofing materials to replace felt. Gray technology provides for a cooler roof and one of the best UV exposure properties (up to 6 months) in the marketplace. Unlike smooth surfaced underlayments, Titanium UDL30 possesses a revolutionary patented slip resistant Sure-Foot® nodular walking surface technology that allows for easier steep slope walk-ability, even in wet conditions.

MIAMI-DADE COUNTY APPROVED

CAN/CSA A220.1
FLORIDA BUILDING CODE
CLASS A ASTM-E108
FIBREGLASS SHINGLES

CONTRIBUTES TO LEED® POINTS

SCScertified™
MINIMUM 20% RECYCLED CONTENT
PRE-CONSUMER

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TITANIUM® UDL-30

Professional Grade Synthetic Roofing Underlayment

UDL30 Technical Data

ROLL & PALLET SPECIFICATIONS	
LENGTH PER ROLL:	250′ / 76.2 m
WIDTH PER ROLL:	48″ / 122 cm
WEIGHT PER ROLL:	40 lbs / 18.2 kg
ROLL SIZE:	10 sq / 93 m²
ROLLS PER PALLET:	30
PALLET WEIGHT:	1250 lbs / 567 kg

TEST & ASTM STANDARD	UDL30 TYPICAL VALUE	#30 FELT TYPICAL VALUE
Class A Fire ASTM E108	Pass	N/A
Nail Sealability Modified D1970	Pass	N/A
Permeability ASTM E96	0.06 perms	1.75 perms
Water Transmission D4869	Pass	Pass
Tear Strength D4533	MD 44 lbs (20 kg) | CD 40 lbs (18 kg)	MD 4 lbs (1.8 kg) | CD 2 lbs (0.9 kg)
Tensile Strength D751	MD 143 lbs (65 kg) | CD 110 lbs (50)	MD 70 lbs (32 kg) | CD 38 lbs (17 kg)
Burst Strength D751	250 psi (1720 kPa)	62 psi (430 kPa)
Elongation D751	MD 18% CD 18%	MD 2% CD 2%
Weight per Square D5261	4.0 lbs (1.82 kg)	27.5 lbs (12.5 kgs)
Minimum Thickness D1777	25 mils (0.63 mm)	60 mils (1.5 mm)
Service Temperature Range	-40° F to 240° F (-40° C to 115° C)	

UDL30 Building Codes

- Meets and exceeds ASTM D226 Types I & II and D4869 Types II & IV
- Miami-Dade County Approved
- Florida Building Code Approved
- Texas Department of Insurance Listed
- Tile Roofing Institute Approved
- Meets Class 4 Hail Rating
- CLASS A ASTM E-108
- CAN/CSA A220.1
- ICC ESR

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UDL30 MSDS

I. Product Identification and Use:

Product Identification: Titanium UDL
Product Use/Description: Coated woven polyolefin for use as a roofing underlayment
Product Composition: 95% polyolefin, 5% polymer blend

II. Hazardous Ingredients:

This is not a hazardous product as defined by WHMIS

III. Physical Data:

a. Physical State: Solid
b. Odor and Appearance: Pigmented odorless Woven fabric
c. Odor threshold (ppm): N.Ap.
d. Vapor Pressure (mmHg): N.Ap.
e. Vapor Density (Air = 1): N.Ap.
f. Evaporation rate: N.Ap.
g. Boiling Point (oC): N.Ap.
h. Freezing Point (oC): N.Ap.
i. pH: N.Ap.
j. Specific Gravity: N.Ap.
k. Coef. Water/oil Dist. N.Ap.

IV. Fire and Explosion Data:

a. Flammability: Not flammable, but in case of a fire it will contribute.
b. Means of extinction: Water spray and dry chemicals.
c. Flash point (oC) and Method: N.Ap.
d. Upper flammable limit (% by volume): N.Ap.
e. Lower flammable limit (% by volume): N.Ap.
f. Hazardous combustion products: Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides
g. Explosion Data: Not sensitive to impact nor to static discharge.

V. Reactivity Data:

a. Chemical stability: Yes.
b. Incompatibility with other substances: None
c. Reactivity: Non-reactive
d. Hazardous decomposition products: No data.

VI. Toxicological properties:

a. Route of entry: N. Ap.
b. Effects of acute exposure to product: None known.
c. Effects of chronic exposure to product: None known.
d. Exposure Limits: Not available.
e. Irritancy of product: N.Ap.
f. Carcinogenicity: Not on IARC list.
g. Synergistic Products: None known

VII. Preventive Measures:

a. Gloves: N.Ap.
b. No respirator required under normal use.
c. Leak and spill procedure: N.Ap.
d. Waste disposal: See your local authorities for disposal instructions.
e. Handling and Storage: Rolls should be adequately restrained to prevent shifting during handling and storage.
f. Storage Requirements: N.Ap.
g. Special shipping information: None.

VIII. First aid measures:

*N.Ap.

IX. Other Information:
a. DOT Shipping Name: Not Available
b. DOT Hazard Class: Not Available

Prepared by: IW R&D group. (604) 820-5400
Revision Date: 25th June 2012

Disclaimer:
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DECK PREP: All protrusions from the deck area must be removed and ensure the deck has no voids, damaged or unsupported areas. Deck surface should be free of debris, dry and moisture free.

USE: Titanium UDL30 must be covered by primary roofing within 180 days of application. UDL30 is designed for use under; asphalt and synthetic shingles, metal roofing, and cedar shakes.

APPLICATION: For slopes 2:12 and higher UDL30 is to be laid out horizontally (parallel) to the eave with the printed side up. Horizontal laps should be 4" and vertical laps should be 6"and anchored approximately 1" in from the edge. For low slope applications it is recommended to overlap 50% plus 1", for complete definition of low slope and guidelines consult authorities having jurisdiction. UDL30 product is not recommended for slopes less than 2:12. The use of a roofing hammer, hatchet hammer, pneumatic air or gas driven fastener tools is acceptable. The use of a straight edge cutting knife is recommended.

FASTENERS: For same day coverage with primary roofing UDL30 can be anchored with corrosive resistant 3/8" head x 1" leg roofing nails (ring shank preferred, smooth leg acceptable). The use of every other anchoring location printed on the product is also acceptable. **DO NOT USE STAPLES:** use of staples to penetrate UDL30 will void warranty.

ANCHORING: All anchoring nails must be flush, 90 degrees to the roof deck, and tight with the underlayment surface and the structural roof deck. Where seams and joints require sealant or adhesive use a low solvent plastic roofing cement meeting ASTM D-4586 Type 1, or Federal Spec SS-153 Type 1 such as Karnak, Henry, DAP, MB, Geocel or equivalent. Acceptable alternatives are butyl rubber, urethane, and EDPM based caulk or tape sealant.

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Good safety practices should be followed on steep slope roofs, such as use of tie-offs, toe boards, ladders and/or safety ropes and personal body harnesses. Follow OSHA guidelines. Slip resistance may vary with surface conditions from debris that accumulates, weather, footwear and roof pitch. Failure to use proper safety gear can result in serious injury. Depending on roof pitch and surface conditions, blocking may be required to support materials on the roof and is good safety practice. Remember to seal the nail holes after removing blocking.

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UDL30 Consignes d'installation

TitaniumMD UDL30 est une barrière contre l'air, l'eau et la vapeur (0,06 perm) et elle doit donc être installée au-dessus d'espaces bien ventilés. Il est recommandé de respecter tous les codes du bâtiment applicables à la région et au type de structure.

PRÉPARATION DU SURFACE : Les saillies de la surface du surface doivent être enlevées et le surface ne doit pas avoir d'interstices ni d'endroits endommagés ou non supportés. La surface du surface doit être exempte de débris, sèche et à l'abri de l'humidité.

UTILISATION : Le Titanium UDL30 doit être couvert par la couverture principale dans les 180 jours suivant sa pose. Le produit UDL30 est conçu pour être utilisé sous les bardeaux d'asphalte, les bardeaux synthétiques, les couvertures métalliques et les bardeaux de fente en cèdre.

APPLICATION : Pour les pentes fortes de 2:12 ou plus, le produit UDL30 doit être disposé horizontalement (parallèlement) par rapport à l'avant-toit, la face imprimée vers le haut. Les chevauchements horizontaux doivent être de 4 po et les chevauchements verticaux doivent être de 6 po et ancrés à environ 1 po du bord. Pour les pentes douces, il est recommandé de faire chevaucher de 50 % plus 1 po; pour voir une définition complète du terme « pente douce » et les lignes directrices à cet égard, veuillez consulter les autorités compétentes de votre région. Le produit UDL30 n'est pas recommandé sur les pentes de moins de 2:12. L'emploi de marteaux à toiture, d'un marteau hachette ou de cloueuses pneumatiques ou à gaz est acceptable. On conseille d'utiliser un couteau à lame droite.

FIXATIONS : Pour la pose du revêtement le même jour que la couverture principale, le produit UDL30 peut être fixé avec des clous de toiture de 1 po (tête de 3/8 po) résistants à la corrosion (clous à tige crantée privilégiés, mais des clous de toiture à tige lisse sont acceptables). L'usage de tout autre dispositif d'ancrage est acceptable sur le chantier. **NE PAS UTILISER D'AGRAFES :** L'utilisation d'agrafes pour installer le produit UDL30 annulera la garantie.

ANCRAGE : Tous les dispositifs d'ancrage doivent être affleurants, enfoncés à 90 degrés dans le surface, et ne pas présenter de jeu avec la sous-couche et avec la structure du surface. Lorsque les joints requièrent un produit d'étanchéité ou un adhésif, utilisez de la colle plastique pour feutre à faible teneur en solvant conforme à la norme ASTM D-4586 Type 1, ou à la spécification fédérale SS-153 de type 1 comme les adhésifs Karnak, Henry, DAP, MB, Geocel ou d'autres produits équivalents. Des solutions de rechange acceptables comprennent le butylcaoutchouc, l'uréthane et les calfeutrants ou rubans d'étanchéité à base d'EPDM.

EXPOSITION PROLONGÉE : Si le Titanium UDL30 doit être exposé à l'air libre pendant plus d'une journée, mais moins de 5, il est recommandé de l'ancrer avec des clous de toiture de 1 po (tête de 3/8 po) résistants à la corrosion (l'utilisation de clous à tige crantée est à privilégier). En cas d'exposition de plus de 5 jours, allant jusqu'à 180 jours, le produit UDL30 doit être ancré avec des clous de toiture à capuchon de plastique ou de métal de 1 po à tige lisse ou à tige crantée. Les rivets en étain ou capuchons en métal approuvés par Miami-Dade sont aussi acceptables, le bord rugueux face vers le haut pour des résultats optimaux. Dans le cas d'une exposition prolongée, il est toujours conseillé d'ancrer le produit sur chaque position imprimée de la surface. Remarque : Le produit UDL30 n'est pas conçu pour une exposition extérieure prolongée. Dans le cas d'une exposition prolongée ou de la pluie battante ou des vents violents pourraient survenir, il est conseillé de prendre des précautions additionnelles, comme doubler la largeur des chevauchements. Comme solution de rechange ou comme précaution additionnelle, vous pouvez utiliser un produit d'étanchéité compatible entre les chevauchements ou les recouvrir d'une bande adhésive pelée et collée.

MISE EN GARDE — VEUILLEZ LIRE LES CONSIGNES DE SÉCURITÉ CI-DESSOUS : Adoptez toujours de bonnes pratiques de sécurité sur les toits à pente raide; par exemple, servez-vous de cordes de fixation, de planches cale-pied, d'échelles ou de cordes de sécurité et de harnais de sécurité individuels. Veuillez suivre les lignes directrices de l'OSHA. La résistance au glissement peut varier selon l'état de la surface, les débris qui y sont accumulés, les conditions atmosphériques, les chaussures utilisées et la pente du toit. Le fait de ne pas utiliser un équipement de sécurité approprié pourrait entraîner des blessures graves. Selon la pente de toit et l'état de la surface, un calage pourrait être requis pour soutenir les matériaux sur le toit, ce qui est une bonne pratique de sécurité. Souvenez-vous de sceller les trous des fixations qui ont retenu les cales après les avoir enlevées.

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TITANIUM® UDL-30

Membrana Sintética Para Techos

Instrucciones de instalación

Titanium® UDL30 es una barrera contra el aire, el agua y el vapor (.06 perms), por lo que debe instalarse sobre espacios con una ventilación adecuada. Se recomienda seguir todas las normas de construcción de su región geográfica para su tipo de estructura.

PREPARACIÓN DE LA ESTRUCTURA DEL TECHO: Deben eliminarse las zonas salientes de la estructura del techo y esta no debe tener espacios vacíos ni áreas dañadas o sin apoyo. La superficie del techo debe estar seca y sin residuos ni humedad.

USO: El Titanium UDL30 debe cubrirse con el techado principal dentro de los 180 días posteriores a la aplicación. El UDL30 está diseñado para utilizarse bajo tejas sintéticas o de asfalto, techados de metal y tejados de cedro.

APLICACIÓN: El UDL30 debe instalarse de forma horizontal (paralela) al alero en techos con pendientes de 2:12 ó más, con el lado impreso hacia arriba. Los superposiciones horizontales deben ser de 4 pulg. (10.2 cm) y las verticales deben ser de 6 pulg. (15.2 cm) y deben estar ancladas a aproximadamente a 1 pulg. (2.5 cm) del borde. Con respecto a la aplicación en pendientes bajas, se recomienda sobreponer el 50% más 1 pulg. (2.5 cm); para conocer la definición de una pendiente baja y las directrices correspondientes, por favor consulte con las autoridades de su jurisdicción. El producto UDL30 no se recomienda en pendientes menores a 2:12. Pueden utilizarse martillos para techos, martillos tipo hacha y herramientas de fijación neumáticas de aire o gas. Se recomienda el uso de cortadores de borde recto.

FIJACIONES: Para cubrir el mismo día con techado primario, el UDL30 puede sujetarse con clavos para techo con cabeza de 3/8 de pulg. (9.5 mm) y 1 pulg. (2.5 cm) de largo que sean resistentes a la corrosión (es preferible usar clavos de cuerpo anillado, aunque los de vástago liso son aceptables). También es aceptable utilizar cualquier otro sitio para el anclaje que esté impreso en el producto. **NO UTILIZAR GRAPAS:** El uso de grapas para penetrar el UDL30 anulará la garantía.

ANCLAJE: Todos los clavos de anclaje deben estar al ras, a 90 grados con respecto a la plataforma del techo y ajustados a la superficie de recubrimiento y la estructura del techo. En los casos en que las uniones y juntas requieran de material sellador o adhesivo, se debe utilizar cemento plástico para techos con bajo contenido de solvente y que cumpla con las normas ASTM D-4586 Tipo 1 ó la Especificación Federal SS-153 Tipo 1, por ejemplo Karnak, Henry, DAP, MB, Geocel o equivalente. Otras alternativas aceptables son los selladores en forma de cinta o masilla con base de caucho butílico, uretano o EDPM.

EXPOSICIÓN PROLONGADA: Si el producto Titanium UDL30 va a estar expuesto más de 1 día pero menos de 5 días, se recomienda hacer el anclaje con clavos para techo con cabeza de 3/8 de pulg. (9.5 mm) y 1 pulg. (2.5 cm) de largo que sean resistentes a la corrosión (es preferible usar clavos de cuerpo anillado). Si el producto UDL30 se deja expuesto de 5 a 180 días, debe anclarse con clavos para techo anillados o lisos con tope de metal o de plástico de 1 pulg. (2.5 cm). También es aceptable utilizar placas de estaño o topes metal que estén aprobados en Miami Dade; se recomienda instalarlos con el borde rugoso hacia arriba para un mejor rendimiento. Para una exposición prolongada, se recomienda anclar todas las posiciones marcadas en el revestimiento. Nota: UDL30 no está diseñado para estar expuesto indefinidamente a la intemperie. En condiciones de exposición prolongada, donde se espera lluvia impulsada por el viento o ventarrones, se recomienda tomar precauciones adicionales como doblar el ancho de las superposiciones. De forma alternativa o adicional, podría utilizarse un sellador compatible entre las superposiciones, o bien, utilizar cinta adhesiva en las superposiciones.

ADVERTENCIA – LEA LAS SIGUIENTES BUENAS PRÁCTICAS DE SEGURIDAD

En techos muy inclinados, se deben seguir las buenas prácticas de seguridad, como el uso de amarres, topes para apoyar los pies, escaleras y/o cuerdas de seguridad y arneses personales para el cuerpo. Siga las directrices de la OSHA. La resistencia al deslizamiento puede variar según las condiciones de la superficie, los residuos que se acumulen, el clima, el tipo de calzado, y la inclinación del techo. La falta de uso de equipos de seguridad adecuados puede dar lugar a lesiones graves. Según la inclinación y las condiciones de la superficie del techo, es posible que deba utilizarse algún mecanismo de bloqueo para apoyar los materiales sobre el techo, lo que constituye también una buena medida de seguridad. Recuerde que se deben sellar los orificios de los clavos después de quitar el mecanismo de bloqueo.

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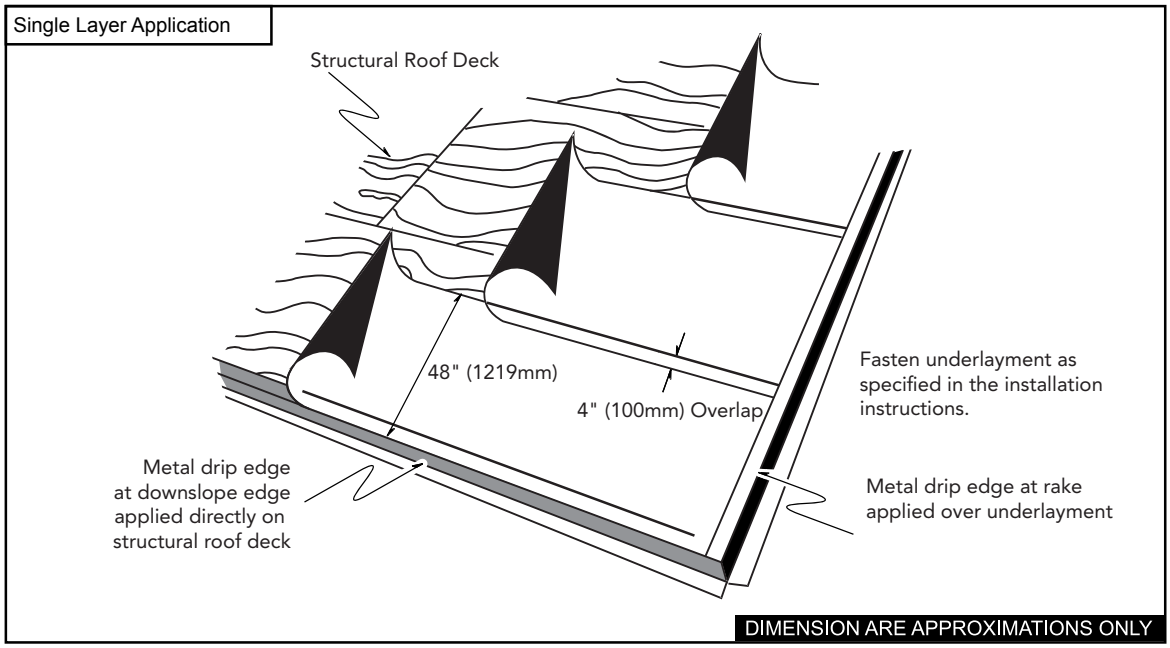
UDL30 Application Diagram

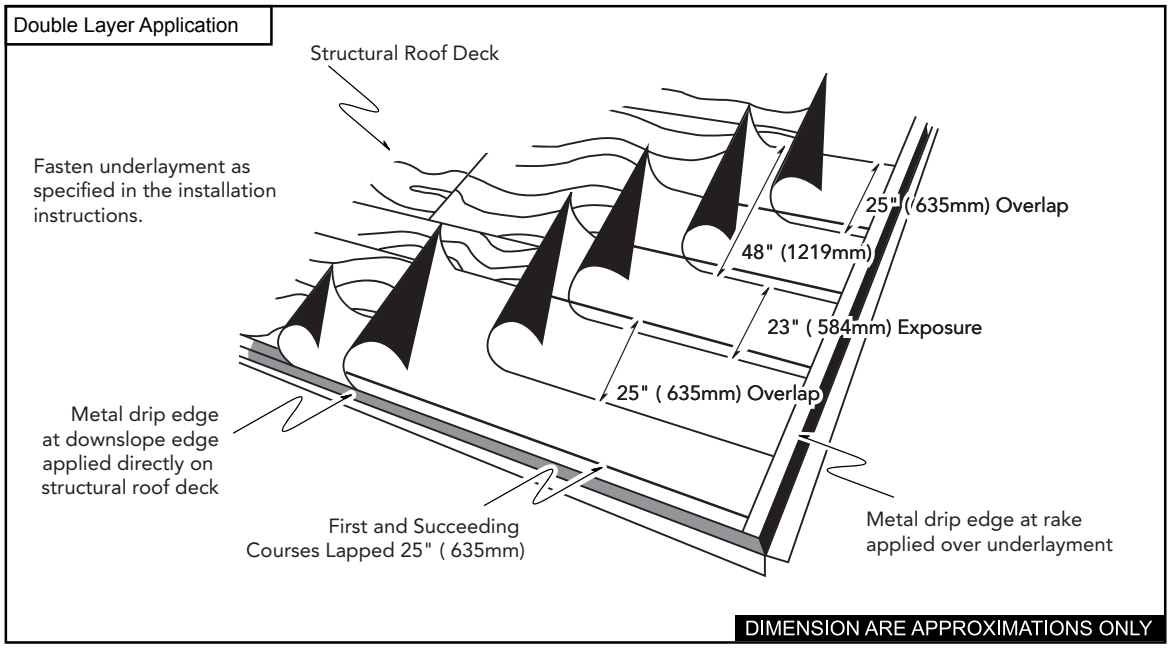
Single layer application of TITANIUM UDL's

For roof decks having slopes greater than 4:12, TITANIUM® UDL should be applied horizontally in shingle fashion with a 44 inch exposure and a 4 inch overlap.
Pay special attention to high wind and wind driven rain condition application instructions.



Double layer application of TITANIUM UDL's

For roof decks having slope of 2:12 to 4:12 a minimum of two layers of TITANIUM® UDL underlayment should be applied horizontally in shingle (water fall) fashion with a with a 23 inch exposure and a 25 inch overlap.



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TITANIUM® UDL 50

SYNTHETIC ROOFING UNDERLAYMENT

6 MNHS UV

PATENTED SURE-FOOT® NODULAR WALKING SURFACE

ALL TEMP

BACK TO TOC

TITANIUM® UDL50

Synthetic Roofing Underlayment

UDL50 Features & Benefits

UDL50 is a premium heavy duty air, water and vapor barrier for use under all: Metal, Tile, Slate, Shake & Shingle roofing.

Titanium UDL50 is a highly engineered, mechanically attached, coated woven synthetic roofing underlayment for sloped roofs. Titanium UDL50 is the first product for sloped roofs to address high end primary roofing products with long life warranties such as metal, clay & concrete tiles, slate and shingles. Titanium UDL50 used in conjunction with Titanium PSU30 self adhered underlayment, offers the sloped roofing industry a truly revolutionary system of safety, security and simplicity... two products (UDL50 & PSU30) are ALL your premium roofing systems need.

- Patented SURE-FOOT® slip resistant nodular walking surface and an advanced resin technology that provide superior steep slope walkability
- Lifetime Limited Warranty
- Tougher, thicker robust construction that can withstand harsh environmental conditions
- Up to 6 months UV exposure rating
- Meets and exceeds ASTM D226 Types I & II and D4869 Types II & IV
- ICC ES Approved
- Class A Fire ASTM E108
- CAN/CSA A220.1
- Meets Class 4 Hail Rating
- Florida Building Code Approved
- Texas Department of Insurance
- 5 times lighter & 25 times stronger than #30 felt
- Contributes to LEED® points, 100% Recyclable
- All temperature performance -40°F to 240°F
- Synthetic construction inert to mold growth
- Cool gray surface, doesn't expand or contract
- Dual logo custom printing available

UDL50 is 5 times lighter and 25 times stronger than 30 lb felt! Gone are the days of blow-offs and call backs. A 10 square roll weighs less than 50 lbs! This low weight combined with 48" width and 250 ft run length means big savings in time and labor (over 30% faster than felt!). UDL50 can be attached with 3/8 inch head electro galvanized roofing nails; tin tag caps & nails; screws with washers; plastic cap staples or plastic cap nails. Fewer laps, cuts and roll handling means you can do more jobs in less time. Inventory fewer rolls and gain an edge in productivity and profits.

MIAMI-DADE COUNTY APPROVED

CAN/CSA A220.1
FLORIDA BUILDING CODE
CLASS A ASTM-E108
FIBREGLASS SHINGLES

CONTRIBUTES TO LEED POINTS

SCScertified
MINIMUM 20% RECYCLED CONTENT PRE-CONSUMER

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TITANIUM® UDL50

Synthetic Roofing Underlayment

UDL50 Technical Data

ROLL & PALLET SPECIFICATIONS	
LENGTH PER ROLL:	250′ / 76.2 m
WIDTH PER ROLL:	48″ / 122 cm
WEIGHT PER ROLL:	48 lbs / 21.8 kg
ROLL SIZE:	10 sq / 93 m²
ROLLS PER PALLET:	25
PALLET WEIGHT:	1250 lbs / 567 kg

TEST & ASTM STANDARD	UDL50 TYPICAL VALUE	#30 FELT TYPICAL VALUE
Class A Fire E108	Pass	N/A
Nail Sealability Modified D1970	Pass	N/A
Permeability E96	0.05 perms	1.75 perms
Water Transmission D4869	Pass	Pass
Tear Strength D4533	MD 55 lbs (25 kg) CD 55 lbs (25 kg)	MD 4 lbs (1.8 kg) | CD 2 lbs (0.9 kg)
Tensile Strength D751	MD 178 lbs (81 kg) CD 176 lbs (80 kg)	MD 70 lbs (32 kg) | CD 38 lbs (17 kg)
Burst Strength D751	300 psi (2065 kPa)	62 psi (430 kPa)
Elongation D751	MD 20 % CD 20 %	MD 2% CD 2%
Weight per Square D5261	4.7 lbs (2.13 kg)	27.5 lbs (12.5 kgs)
Minimum Thickness D1777	30 mils (0.75 mm)	60 mils (1.5 mm)
Service Temperature Range	-40° F to 240° F (-40° C to 115° C)	

UDL50 Building Codes

- Meets and exceeds ASTM D226 Types I & II and D4869 Types II & IV
- Miami-Dade County Approved
- Florida Building Code Approved
- Texas Department of Insurance Listed
- Tile Roofing Institute Approved
- Meets Class 4 Hail Rating
- CLASS A ASTM E-108
- CAN/CSA A220.1
- ICC ESR

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UDL50 MSDS

I. Product Identification and Use:

Product Identification: Titanium UDL
Product Use/Description: Coated woven polyolefin for use as a roofing underlayment
Product Composition: 95% polyolefin, 5% polymer blend

II. Hazardous Ingredients:

This is not a hazardous product as defined by WHMIS

III. Physical Data:

a. Physical State: Solid
b. Odor and Appearance: Pigmented odorless Woven fabric
c. Odor threshold (ppm): N.Ap.
d. Vapor Pressure (mmHg): N.Ap.
e. Vapor Density (Air = 1): N.Ap.
f. Evaporation rate: N.Ap.
g. Boiling Point (oC): N.Ap.
h. Freezing Point (oC): N.Ap.
i. pH: N.Ap.
j. Specific Gravity: N.Ap.
k. Coef. Water/oil Dist. N.Ap.

IV. Fire and Explosion Data:

a. Flammability: Not flammable, but in case of a fire it will contribute.
b. Means of extinction: Water spray and dry chemicals.
c. Flash point (oC) and Method: N.Ap.
d. Upper flammable limit (% by volume): N.Ap.
e. Lower flammable limit (% by volume): N.Ap.
f. Hazardous combustion products: Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides
g. Explosion Data: Not sensitive to impact nor to static discharge.

V. Reactivity Data:

a. Chemical stability: Yes.
b. Incompatibility with other substances: None
c. Reactivity: Non-reactive
d. Hazardous decomposition products: No data.

VI. Toxicological properties:

a. Route of entry: N. Ap.
b. Effects of acute exposure to product: None known.
c. Effects of chronic exposure to product: None known.
d. Exposure Limits: Not available.
e. Irritancy of product: N.Ap.
f. Carcinogenicity: Not on IARC list.
g. Synergistic Products: None known

VII. Preventive Measures:

a. Gloves: N.Ap.
b. No respirator required under normal use.
c. Leak and spill procedure: N.Ap.
d. Waste disposal: See your local authorities for disposal instructions.
e. Handling and Storage: Rolls should be adequately restrained to prevent shifting during handling and storage.
f. Storage Requirements: N.Ap.
g. Special shipping information: None.

VIII. First aid measures:

*N.Ap.

IX. Other Information:
a. DOT Shipping Name: Not Available
b. DOT Hazard Class: Not Available

Prepared by: IW R&D group. (604) 820-5400
Revision Date: 25th June 2012

Disclaimer:
This information is furnished without warranty expressed or implied, except that it is accurate to the best knowledge of InterWrap Industries Inc. The data on this sheet relates only to the specific material designated herein. InterWrap assumes no legal responsibility for use or reliance upon this data.

*N.Ap. None Applicable

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UDL50 Installation Instructions

Titanium® UDL50 is an air, water and vapor barrier (.06 perms) and therefore should be installed above a properly ventilated space(s). It is recommended to follow all building codes applicable to your geographical region and structure type.

DECK PREP: All protrusions from the deck area must be removed and ensure the deck has no voids, damaged or unsupported areas. Deck surface should be free of debris, dry and moisture free.

USE: Titanium UDL50 must be covered by primary roofing within 180 days of application. UDL50 is designed for use under; Asphalt Shingles, Synthetic Shingles, Metal roofing, Tiles, Slate and Cedar Shakes.

APPLICATION: For slopes 2:12 and higher UDL50 is to be laid out horizontally (parallel) to the eave with the printed side up. Horizontal laps should be 4" and vertical laps should be 6"and anchored approximately 1" in from the edge. For low slope applications it is recommended to overlap 50% plus 1", for complete definition of low slope and guidelines consult authorities having jurisdiction. UDL50 product is not recommended for slopes less than 2:12. The use of a roofing hammer, hatchet hammer, pneumatic air or gas driven fastener tools is acceptable. The use of a straight edge cutting knife is recommended.

FASTENERS: For same day coverage with primary roofing UDL50 can be anchored with corrosive resistant 3/8" head x 1" leg roofing nails (ring shank preferred, smooth leg acceptable). The use of every other anchoring location printed on the product is also acceptable.

ANCHORING: All anchoring nails must be flush, 90 degrees to the roof deck, and tight with the underlayment surface and the structural roof deck. Where seams and joints require sealant or adhesive use a low solvent plastic roofing cement meeting ASTM D-4586 Type 1, or Federal Spec SS-153 Type 1 such as Karnak, Henry, DAP, MB, Geocel or equivalent. Acceptable alternatives are butyl rubber, urethane, and EDPM based caulk or tape sealant.

EXTENDED EXPOSURE: If Titanium UDL50 product will be exposed longer than 1 day but less than 5 days then it is recommended to anchor using corrosive resistant 3/8" head x 1" leg roofing nails (Ring shank preferred). For exposure more than 5 days and up to 180 days UDL50 product must be anchored with 1" plastic or metal cap smooth or ring shank roofing nails. Miami-Dade approved tin tags or metal caps are also acceptable, and it is recommended for best performance to use with the rough edge facing up. For extended exposure it is always recommended to anchor on every printed position on the facer. Note: UDL50 is not designed for indefinite outdoor exposure. For extended exposure conditions where driving rain or strong winds are expected it is recommended to take additional precautions such as doubling the lap widths. Alternately or in addition to a compatible sealant could be used between the laps or a peel and stick tape could be applied to the overlaps.

CAUTION - READ GOOD SAFETY PRACTICES BELOW

Good safety practices should be followed on steep slope roofs, such as use of tie-offs, toe boards, ladders and/or safety ropes and personal body harnesses. Follow OSHA guidelines. Slip resistance may vary with surface conditions from debris that accumulates, weather, footwear and roof pitch. Failure to use proper safety gear can result in serious injury. Depending on roof pitch and surface conditions, blocking may be required to support materials on the roof and is good safety practice. Remember to seal the nail holes after removing blocking.

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UDL50 Consignes d'installation

TitaniumMD UDL50 est une barrière contre l'air, l'eau et la vapeur (0,06 perm) et elle doit donc être installée au-dessus d'espaces bien ventilés. Il est recommandé de respecter tous les codes du bâtiment applicables à la région et au type de structure.

PRÉPARATION DU SURFACE : Les saillies de la surface du surface doivent être enlevées et le surface ne doit pas avoir d'interstices ni d'endroits endommagés ou non supportés. La surface du surface doit être exempte de débris, sèche et à l'abri de l'humidité.

UTILISATION : Le Titanium UDL50 doit être couvert par la couverture principale dans les 180 jours suivant sa pose. Le produit UDL50 est conçu pour être utilisé sous les bardeaux d'asphalte, les bardeaux synthétiques, les couvertures métalliques et les bardeaux de fente en cèdre.

APPLICATION : Pour les pentes fortes de 2:12 ou plus, le produit UDL50 doit être disposé horizontalement (parallèlement) par rapport à l'avant-toit, la face imprimée vers le haut. Les chevauchements horizontaux doivent être de 4 po et les chevauchements verticaux doivent être de 6 po et ancrés à environ 1 po du bord. Pour les pentes douces, il est recommandé de faire chevaucher de 50 % plus 1 po; pour voir une définition complète du terme « pente douce » et les lignes directrices à cet égard, veuillez consulter les autorités compétentes de votre région. Le produit UDL50 n'est pas recommandé sur les pentes de moins de 2:12. L'emploi de marteaux à toiture, d'un marteau hachette ou de cloueuses pneumatiques ou à gaz est acceptable. On conseille d'utiliser un couteau à lame droite.

FIXATIONS : Si le produit Titanium UDL50 doit être exposé à l'air libre pendant moins de 5 jours avant l'installation de la couverture principale, il est recommandé de l'ancrer avec des clous de toiture de 1 po (tête de 3/8 po) résistants à la corrosion (l'utilisation de clous à tige crantée est à privilégier). L'usage de tout autre dispositif d'ancrage est acceptable sur le chantier.

ANCRAGE : Tous les dispositifs d'ancrage doivent être affleurants, enfoncés à 90 degrés dans le surface, et ne pas présenter de jeu avec la sous-couche et avec la structure du surface. Lorsque les joints requièrent un produit d'étanchéité ou un adhésif, utilisez de la colle plastique pour feutre à faible teneur en solvant conforme à la norme ASTM D-4586 Type 1, ou à la spécification fédérale SS-153 de type 1 comme les adhésifs Karnak, Henry, DAP, MB, Geocel ou d'autres produits équivalents. Des solutions de rechange acceptables comprennent le butylcaoutchouc, l'uréthane et les calfeutrants ou rubans d'étanchéité à base d'EPDM.

EXPOSITION PROLONGÉE : Si le Titanium UDL50 doit être exposé à l'air libre pendant plus d'une journée, mais moins de 5, il est recommandé de l'ancrer avec des clous de toiture de 1 po (tête de 3/8 po) résistants à la corrosion (l'utilisation de clous à tige crantée est à privilégier). En cas d'exposition de plus de 5 jours, allant jusqu'à 180 jours, le produit UDL50 doit être ancré avec des clous de toiture à capuchon de plastique ou de métal de 1 po à tige lisse ou à tige crantée. Les rivets en étain ou capuchons en métal approuvés par Miami-Dade sont aussi acceptables, le bord rugueux face vers le haut pour des résultats optimaux. Dans le cas d'une exposition prolongée, il est toujours conseillé d'ancrer le produit sur chaque position imprimée de la surface. Remarque : Le produit UDL50 n'est pas conçu pour une exposition extérieure prolongée. Dans le cas d'une exposition prolongée ou de la pluie battante ou des vents violents pourraient survenir, il est conseillé de prendre des précautions additionnelles, comme doubler la largeur des chevauchements. Comme solution de rechange ou comme précaution additionnelle, vous pouvez utiliser un produit d'étanchéité compatible entre les chevauchements ou les recouvrir d'une bande adhésive pelée et collée.

MISE EN GARDE — VEUILLEZ LIRE LES CONSIGNES DE SÉCURITÉ CI-DESSOUS : Adoptez toujours de bonnes pratiques de sécurité sur les toits à pente raide; par exemple, servez-vous de cordes de fixation, de planches cale-pied, d'échelles ou de cordes de sécurité et de harnais de sécurité individuels. Veuillez suivre les lignes directrices de l'OSHA. La résistance au glissement peut varier selon l'état de la surface, les débris qui y sont accumulés, les conditions atmosphériques, les chaussures utilisées et la pente du toit. Le fait de ne pas utiliser un équipement de sécurité approprié pourrait entraîner des blessures graves. Selon la pente de toit et l'état de la surface, un calage pourrait être requis pour soutenir les matériaux sur le toit, ce qui est une bonne pratique de sécurité. Souvenez-vous de sceller les trous des fixations qui ont retenu les cales après les avoir enlevées.

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Instrucciones de instalación

Titanium® UDL50 es una barrera contra el aire, el agua y el vapor (.06 perms), por lo que debe instalarse sobre espacios con una ventilación adecuada. Se recomienda seguir todas las normas de construcción de su región geográfica para su tipo de estructura.

PREPARACIÓN DE LA ESTRUCTURA DEL TECHO: Deben eliminarse las zonas salientes de la estructura del techo y esta no debe tener espacios vacíos ni áreas dañadas o sin apoyo. La superficie del techo debe estar seca y sin residuos ni humedad.

USO: El Titanium UDL50 debe cubrirse con el techado principal dentro de los 180 días posteriores a la aplicación. El UDL50 está diseñado para utilizarse bajo tejas sintéticas o de asfalto, techados de metal y tejados de cedro.

APLICACIÓN: El UDL50 debe instalarse de forma horizontal (paralela) al alero en techos con pendientes de 2:12 ó más, con el lado impreso hacia arriba. Los superposiciones horizontales deben ser de 4 pulg. (10.2 cm) y las verticales deben ser de 6 pulg. (15.2 cm) y deben estar ancladas a aproximadamente a 1 pulg. (2.5 cm) del borde. Con respecto a la aplicación en pendientes bajas, se recomienda sobreponer el 50% más 1 pulg. (2.5 cm); para conocer la definición de una pendiente baja y las directrices correspondientes, por favor consulte con las autoridades de su jurisdicción. El producto UDL50 no se recomienda en pendientes menores a 2:12. Pueden utilizarse martillos para techos, martillos tipo hacha y herramientas de fijación neumáticas de aire o gas. Se recomienda el uso de cortadores de borde recto.

FIJACIONES: Si el producto Titanium UDL50 va a estar expuesto por 5 días o menos antes de la instalación del techado principal, UDL50 puede anclarse con clavos para techo con cabeza de 3/8 de pulg. (9.5 mm) y 1 pulg. (2.5 cm) de largo que sean resistentes a la corrosión o clavos de vástago liso (se prefieren los clavos de cuerpo anillado). También es aceptable utilizar cualquier otro sitio para el anclaje que esté impreso en el producto.

ANCLAJE: Todos los clavos de anclaje deben estar al ras, a 90 grados con respecto a la plataforma del techo y ajustados a la superficie de recubrimiento y la estructura del techo. En los casos en que las uniones y juntas requieran de material sellador o adhesivo, se debe utilizar cemento plástico para techos con bajo contenido de solvente y que cumpla con las normas ASTM D-4586 Tipo 1 ó la Especificación Federal SS-153 Tipo 1, por ejemplo Karnak, Henry, DAP, MB, Geocel o equivalente. Otras alternativas aceptables son los selladores en forma de cinta o masilla con base de caucho butílico, uretano o EDPM.

EXPOSICIÓN PROLONGADA: Si el producto UDL50 se deja expuesto de 5 a 180 días, se puede anclar con los siguientes sujetadores a fin de lograr un rendimiento óptimo en condiciones climáticas desfavorables; (1) clavos para techo anillados o lisos con tope de metal o de plástico de 1 pulg. (2.5 cm); (2) placas y clavos de estaño o topes de metal que estén aprobados en Miami Dade con el borde rugoso hacia arriba; (3) tornillos con arandelas; (4) clavos para techo con cabeza de 3/8 de pulg. (9.5 mm) y 1 pulg. (2.5 cm) de largo que sean resistentes a la corrosión (se prefieren los clavos de cuerpo anillado); o (5) grapas con tope de plástico con vástago de 7/16 de pulg. (11 mm) y una corona de ½ pulg (12.7 mm). Para una exposición extendida, se recomienda anclar todas las posiciones marcadas en el revestimiento. Nota: UDL50 no está diseñado para estar expuesto indefinidamente a la intemperie. En condiciones de exposición prolongada, donde se espera lluvia impulsada por el viento o ventarrones, se recomienda tomar precauciones adicionales como doblar el ancho de las superposiciones. De forma alternativa o adicional, podría utilizarse un sellador compatible entre las superposiciones, o bien, utilizar cinta adhesiva en las superposiciones.

ADVERTENCIA – LEA LAS SIGUIENTES BUENAS PRÁCTICAS DE SEGURIDAD

En techos muy inclinados, se deben seguir las buenas prácticas de seguridad, como el uso de amarres, topes para apoyar los pies, escaleras y/o cuerdas de seguridad y arneses personales para el cuerpo. Siga las directrices de la OSHA. La resistencia al deslizamiento puede variar según las condiciones de la superficie, los residuos que se acumulen, el clima, el tipo de calzado, y la inclinación del techo. La falta de uso de equipos de seguridad adecuados puede dar lugar a lesiones graves. Según la inclinación y las condiciones de la superficie del techo, es posible que deba utilizarse algún mecanismo de bloqueo para apoyar los materiales sobre el techo, lo que constituye también una buena medida de seguridad. Recuerde que se deben sellar los orificios de los clavos después de quitar el mecanismo de bloqueo.

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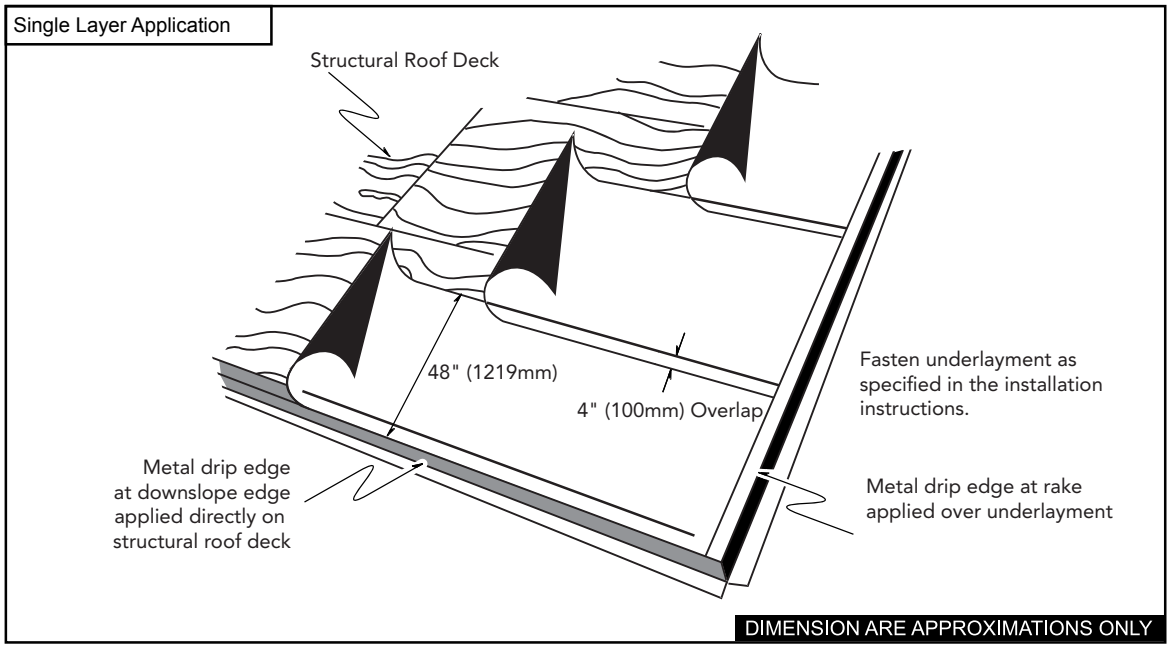
UDL50 Application Diagram

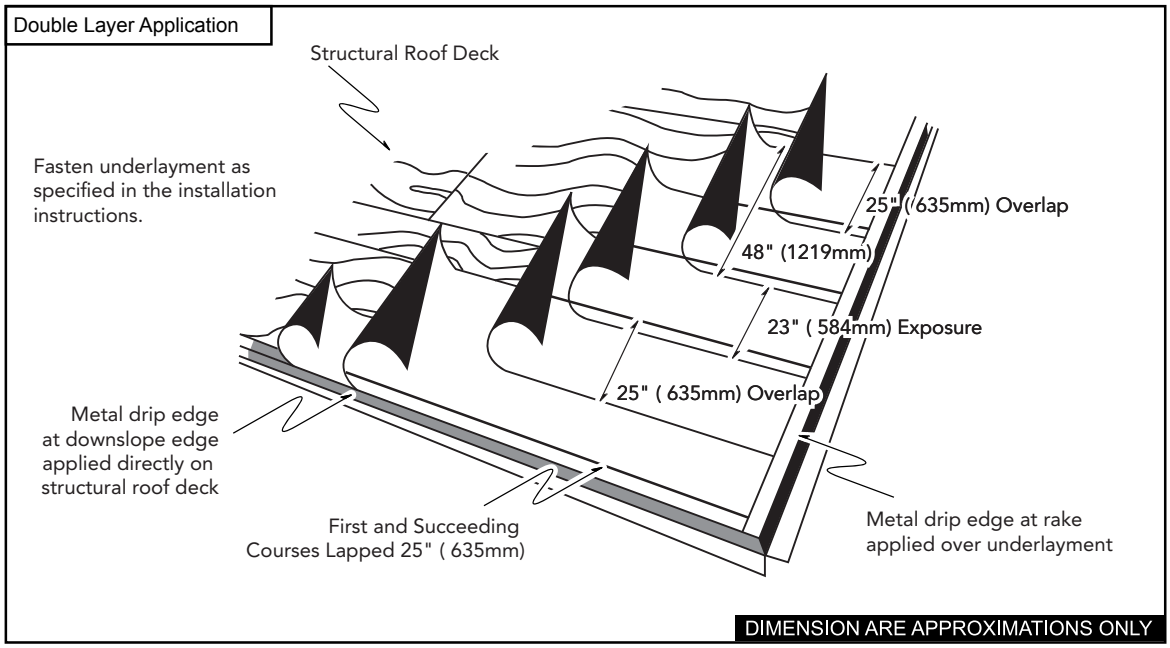
Single layer application of TITANIUM UDL's

For roof decks having slopes greater than 4:12, TITANIUM® UDL should be applied horizontally in shingle fashion with a 44 inch exposure and a 4 inch overlap.
Pay special attention to high wind and wind driven rain condition application instructions.



Double layer application of TITANIUM UDL's

For roof decks having slope of 2:12 to 4:12 a minimum of two layers of TITANIUM® UDL underlayment should be applied horizontally in shingle (water fall) fashion with a with a 23 inch exposure and a 25 inch overlap.



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TITANIUM® PSU 30

SYNTHETIC ROOFING UNDERLAYMENT

PATENTED SURE-FOOT® NODULAR WALKING SURFACE

HIGH TEMP°

6 MTHS UV

ICE DAM PROTECTION LOW TEMP INSTALL

SELF SEALING LAP SYSTEM

TITANIUM® LIFETIME* LIMITED WARRANTY

BACK TO TOC

TITANIUM® PSU30

Self-Adhered Synthetic Roofing Underlayment

PSU30 Features & Benefits

PSU30 is a high & low temp. professional grade self-adhesive synthetic roofing underlayment for protection from Wind-Driven Rain, Water, Snow and Ice Dams. Use under all: Metal, Tile, Slate, & Shingle roofing.

Titanium PSU30 is the only modified rubberized asphalt Peel & Stick with a tough, rugged surface and a self sealing lap system! Titanium PSU30 is an advanced, slip resistant synthetic polymer surfaced self-adhered roofing underlayment. It is designed for 2:12 or greater sloped roof applications subject to the effects of ice damming and wind driven rain. Titanium PSU30 rubberized asphalt delivers a unique combination of both high temperature (240°F / 115°C) flow resistance, and low temperature (40°F /5 ° C) deck adhesion "All Temp " performance. In addition Titanium PSU30 offers: a patented slip resistant Sure-Foot® nodular walking surface; a tough, durable, reflective gray synthetic polymer surface; a 6 month UV exposure rating; and an industry leading 30 year limited warranty!

- Watertight asphalt to asphalt lap system
- 30 Year limited warranty
- Titanium PSU30 is an approved Polyfoam underlayment for use with Polyset® foam systems
- The only modified rubberized asphalt Peel & Stick with a tough and rugged surface
- Class A Fire ASTM E108
- Meets and exceeds ASTM D226
- All temperature performance -40°F to 240°F (-40°C to 115°C) – Installation temperature 40°F (5°C) and above
- Patented Sure-Foot® slip resistant technology
- Synthetic construction is impervious to mold growth
- Cool gray surface, doesn't expand or contract
- Up to 6 Months UV exposure

Titanium PSU30 is the only modified rubberized asphalt Peel & Stick with a tough, rugged surface and a self sealing lap system! Titanium PSU30 is an advanced, slip resistant synthetic polymer surfaced self-adhered roofing underlayment. It is designed for 2:12 or greater sloped roof applications subject to the effects of ice damming and wind driven rain. Titanium PSU30 rubberized asphalt delivers a unique combination of both high temperature (240°F / 115°C) flow resistance, and low temperature (40°F /5 ° C) deck adhesion "All Temp " performance. In addition Titanium PSU30 offers: a patented slip resistant Sure-Foot® nodular walking surface; a tough, durable, reflective gray synthetic polymer surface; a 6 month UV exposure rating; and an industry leading 30 year limited warranty!

MIAMI-DADE COUNTY APPROVED

CAN/CSA A220.1
FLORIDA BUILDING CODE
CLASS A ASTM-E108
FIBREGLASS SHINGLES

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TITANIUM® PSU30

Self-Adhered Synthetic Roofing Underlayment

PSU30 Technical Data

ROLL & PALLET SPECIFICATIONS	
LENGTH PER ROLL:	72' / 22 m
WIDTH PER ROLL:	36" / 91.4 cm
WEIGHT PER ROLL:	48 lbs / 22 kg
ROLL SIZE:	2 sq / 20 m²
ROLLS PER PALLET:	25
PALLET WEIGHT:	1300 lbs / 590 kg

TEST & PROPERTIES	ASTM STANDARD	PSU30 TYPICAL VALUE
Color		Gray
Surface		Synthetic Polymer - Patented Sure-Foot®
Release Liner		Silicone Treated, Crinkled Poly Split Release
Weight per square		24 lbs / (10.8 kg)
Nail Sealability	ASTM D1970	Pass
Permeability	ASTM E96	0.0336
Nominal Thickness	ASTM D5147	45 Mil (1.1 mm)
Tensile	ASTM D1970	MD 100 lbs/in/ (17.5 kN/m) | CD 80 lbs/in (14 kN/m)
Tear Resistance	ASTM D1970	MD 140 lbs (622 N) | CD 80 lbs (445 N)
Weight per Square		27.5 lbs (12.5 kgs)
Thermal Stability	ASTM D1970	240° F (115° C) Pass
Low Temp Flexibility	ICC AC 48	Pass
Adhesion to Plywood	ASTM D903	4 lb/in (700 N/m)
Self Sealability	ASTM D1970	Pass
Service Temperature Range	-40° F to 240° F (-40° C	

PSU30 Building Codes

- Meets and exceeds ASTM D1970
- Miami-Dade County Approved
- Florida Building Code Approved
- Texas Department of Insurance Listed
- Tile Roofing Institute Approved
- Meets Class 4 Hail Rating
- CLASS A ASTM E-108
- CAN/CSA A220.1
- ICC ESR

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PSU30 MSDS

I. Product Identification and Use:

Product Identification: Titanium PSU
Product Use/Description: Coated woven polyolefin self adhesive membrane for use as a roofing underlayment
Product Composition: <25% Polyolefin Plastic
<75% Rubberized Asphalt

II. Hazardous Ingredients:

Hazardous Component: ACGIH TLV LD50 %Wt
Petroleum Asphalt : 5.0mg/m 5-15g/kg > 50%
CAS # 8052-42-4
Petroleum Oil: 0.2000 TWA >15% CAS # 64741-88-4

III. Physical Data:

a. Physical State: Solid.
b. Odor and Appearance: Pigmented Woven fabric Slight Petroleum Odor
c. Odor threshold (ppm): N.Ap.
d. Vapor Pressure (mmHg): N.Ap.
e. Vapor Density (Air = 1): N.Ap.
f. Evaporation rate: N.Ap.
g. Boiling Point (oC): N.Ap.
h. Freezing Point (oC): N.Ap.
i. pH: N.Ap.
j. Specific Gravity: 1.2
k. Coef. Water/oil Dist. N.Ap.

IV. Fire and Explosion Data:

a. Flammability: Will Support Combustion under direct flame
b. Fire Fighting Procedure: The use of self-contained breathing apparatus is recommended for firefighters.
c. Means of extinction: Water spray and dry chemicals
d. Flash point (oC) and Method: >410°F (T.O.C.).
e. Upper flammable limit (% by volume): N.Ap.
f. Lower flammable limit (% by volume): N.Ap.
g. Hazardous combustion products: Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides and Sulfur
h. Explosion Data: Not sensitive to impact nor to static discharge.

V. Reactivity Data:

a. Chemical stability: Yes.
b. Incompatibility with other substances: None
c. Reactivity: Non-reactive
d. Hazardous decomposition products: No data.

VI. Toxicological properties:

a. Route of entry: Skin , Ingestion
b. Skin: Avoid contact with skin. Excessive exposure may cause irritation to eyes, nose, throat and skin. Prolonged and repeated skin contact may cause skin irritation.
c. Ingestion: Slightly toxic
Emergency and First Aid Procedures
Inhalation: Not Applicable.
Skin: Wash thoroughly with soap and water. If redness or irritation develops, obtain medical assistance.
Eyes: Flush with water at least 15 minutes. Obtain medical assistance.
Ingestion: Drink liquids. Obtain medical assistance.
Medical Conditions Aggravated by Exposure: Disorders or Diseases of the Skin, Eyes, Respiratory Track or Allergies
Carcinogenicity: No
NTP: No IARC Monographs
OSHA Regulated Irritant: Yes
Sensitizer: Yes
Mutagenic: No
Teratogenic: No

VII. Preventive Measures:

a. Gloves: Recomended
b. No respirator required under normal use.
c. Leak and spill procedure: N.Ap.
d. Waste disposal: See your local authorities for disposal instructions.
e. Handling and Storage: Rolls should be adequately restrained to prevent shifting during handling and storage.
f. Storage Requirements: N.Ap.
g. Special shipping information: None.
IX. Other Information:
a. Shipping Name: Asphaltic Roofing Material
b. DOT Hazard Class: Not Required

Prepared by: IW R&D group. (604) 820-5400
Revision Date: 25th June 2012

Disclaimer:
This information is furnished without warranty expressed or implied, except that it is accurate to the best knowledge of InterWrap Inc. The data on this sheet relates only to the specific material designated herein. InterWrap assumes no legal responsibility for use or reliance upon this data.

*N.Ap. None Applicable

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PSU30 Installation Instructions

Titanium PSU30 is an air, water and vapor barrier and therefore must be installed above a properly ventilated space(s). Follow ALL building codes applicable to your geographical region and structure type as it is considered a vapor barrier.

STORAGE:

1. PSU30 should be stored at room temperature, upright in the original cardboard packaging in a dry properly ventilated area. Keep clear from open flames, sparks, harmful substances and shelter from the elements.
2. Only rolls destined for same-day use should be removed from its storage area.
3. For best results store in temperatures between 40°F (4.4°C) and 90°F (32°C) If room temperature storage is not available, it is recommended to heat material to a minimum temperature of 40°F (4.4°C) prior to application.

USE:

PSU30 must be covered by primary roofing within 180 days of application. PSU30 is designed for use under; Asphalt Shingles, Synthetic Shingles, Metal Roofing, Tiles, Slate, and Cedar Shakes.

DECK PREPARATION:

1. Protrusions from the deck area must be removed and decks shall have no voids, damaged or unsupported areas. Deck surface should be free of debris, dry and moisture free.
2. PSU30 may be applied directly to a plywood, OSB, concrete or masonry roof surface and should be fully covered as soon as possible or within 180 days. Priming is not required for attaching to wood surfaces when the temperature is above 40°F. Concrete and masonry decks should be primed with a solvent or a water based primer that meets ASTM D41 for asphalt based self-adhesive membranes.
3. For re-roofing projects replace any water damaged sheathing and sweep roof deck thoroughly removing dust, dirt and loose nails. Do not install over old roof covering.
4. Use of calcium or salt for ice and snow removal is not recommended.

APPLICATION:

1. For best results PSU30 should be installed on a dry deck when the air, membrane, and substrate temperature is over 40°F (4.4°C).
2. For cold weather applications below 40°F (4.4°C) a primer should be used and the laps blind nailed. Blind nail with 3/8" head roofing nails of 1" or longer in the 3" over lap area marked with a "+" symbol.
3. For steep slope applications (6:12 or greater) or when installing at temperatures greater than 100°F (38°C) it is recommended to blind nail the overlap area as instructed above for cold weather applications.
4. PSU30 is to be laid out horizontally (parallel) to the eave with the printed side up, using 3" horizontal laps and 6" vertical laps.
5. PSU30 may also be installed vertically. For vertical installation anchor with 3/8" head roofing nails along the upper most edge 3 inches down with 6 equally spaced nails across the 36" width. Ensure roofing nails are perpendicular to the roof deck so that the head lays flat and seals well to the top surface of the PSU30. Vertical overlaps to be 6" and 3" for horizontal laps if required.
6. Always work from the low point to the high point of the roof. Apply the membrane in valleys before the membrane is applied to the eaves.
7. Cut the membrane into manageable lengths. Peel back 1-2 feet of release liner, align the membrane, and continue to peel the release liner from the membrane. Hand press or walk on, then follow with a 40 lb or heavier pressure roller to smooth and secure the membrane, especially at the overlap layers. If a roller is not available or considered safe, walk on all laps, and as much of the field area as possible to push the adhesive into the pours of the roof deck and overlap.
8. For eave installation PSU30 should be applied over the metal drip edge at the eave. Do not fold PSU30 over the roof edge unless the edge is subsequently covered over by a drip edge or other flashing material. It is recommended that PSU30 extend from the eave up the roof to a point 24" inside the exterior wall. This should be above the maximum ice dam buildup line in most areas. Consult your local building code for specific requirements.
9. For valleys and ridge applications, peel the release liner; center the sheet over the valley or ridge, drape, and hand press in place. Note: It is very important PSU30 stay in contact with the roof deck into and out of the valley area. PSU30 should never be suspended or bridge a valley. It is recommended to follow up with a pressure roller or by walking on the surface. Give special attention to ALL perimeter edge areas.
10. Repair holes, fish mouths, tears, and any other penetration damage to the membrane with a round patch of membrane extending passed the damaged area by 6" in all directions. If fasteners are removed leaving holes in the membrane or other penetrations are accidentally produced, they must also be patched.
11. Do not install fasteners through membrane over any unsupported areas of the structural deck, such as over joints between adjacent structural panels.
12. For high elevation, high wind or wind driven rain it is recommended to cover the entire roof deck with PSU30.

PRECAUTIONS:

1. PSU30 is not designed for indefinite outdoor exposure. Final roofing should be installed within 180 days of installation.
2. Depending on roof pitch and surface conditions, blocking maybe required to support roofing materials placed on the roof. Remember to seal the fastener holes that secured the blocking after they have been removed.
3. Protect completed roof areas to avoid damage during roof installation and material transportation by installing protective boardwalks to enable passage of people, equipment and products
4. Be careful not to load too much material on the roof deck in one area. Disburse the weight over structural supports where possible.

CAUTION - READ GOOD SAFETY PRACTICES BELOW

As with any roofing product, always follow safe roofing codes & practices (OSHA) and always use and wear fall protection devices when working on roofs. Release liners are slippery and should be removed from work area immediately after application. Use caution when walking or standing on Titanium PSU30 as slip resistance may vary with surface conditions, weather, footwear and roof pitch. Failure to use proper safety gear and footwear can result in serious injury.

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PSU30 Consignes d'installation

Titanium PSU30 est une barrière contre l'air, l'eau et la vapeur et elle doit donc être installée au-dessus d'espaces bien ventilés. Respectez TOUS les codes du bâtiment applicables à la région et au type de structure, car elle est considérée comme un pare-vapeur.

ENTREPOSAGE :

1. Le produit PSU30 devrait être entreposé à température ambiante, à la verticale, dans son emballage en carton d'origine et dans un endroit sec et adéquatement aéré. Le garder à l'écart des flammes nues, des étincelles, des substances nuisibles et protégé des intempéries.
2. Seuls les rouleaux destinés à l'utilisation le jour même devraient être retirés de l'aire d'entreposage.
3. Pour des résultats optimaux, entreposer à une température entre 4,4 °C (40 °F) et 32 °C (90 °F). Si l'entreposage à température ambiante est impossible, il est conseillé de chauffer le matériau à une température d'au moins 4,4 °C (40 °F) avant l'installation.

UTILISATION :

Le produit PSU30 doit être couvert par la couverture principale dans les 180 jours suivant sa pose. Le produit PSU30 est conçu pour être utilisé sous les bardeaux d'asphalte, les bardeaux synthétiques, les couvertures métalliques, les tuiles, l'ardoise et les bardeaux de fente en cèdre.

PRÉPARATION DU SURFACE :

1. Les saillies de la surface du surface doivent être enlevées et le surface ne doit pas avoir d'interstices ni d'endroits endommagés ou non supportés. La surface du surface doit être exempte de débris, sèche et à l'abri de l'humidité.
2. Le produit PSU30 peut être installé directement sur un toit en contreplaqué, en panneau OSB, en béton ou en maçonnerie et devrait être entièrement recouvert le plus tôt possible ou dans les 180 jours. Il n'est pas nécessaire d'enduire un apprêt avant l'installation sur des surfaces en bois si la température est supérieure à 4,4 °C (40 °F). Les toitures en béton ou en maçonnerie doivent être enduites d'un apprêt à base de solvant ou d'eau répondant à la norme ASTM D41 pour les membranes autoadhésives à base d'asphalte.
3. Pour les projets de réfection de toiture, il est nécessaire de remplacer tout revêtement endommagé par l'eau et de balayer le surface pour complètement éliminer la poussière, la saleté et les clous. Ne pas installer le produit sur une vieille couverture.
4. L'utilisation de calcium ou de sel pour faire fondre la glace et la neige est déconseillée.

APPLICATION :

1. Pour des résultats optimaux, le produit PSU30 devrait être installé sur un surface sec lorsque la température ambiante, de la membrane et du substrat est supérieure à 4,4 °C (40 °F).
2. Pour l'installation par temps froid (température inférieure à 4,4 °C/40 °F), il est nécessaire d'utiliser un apprêt et d'utiliser un clouage invisible sur les chevauchements. Faire le clouage invisible avec des clous de toiture à tête de 3/8 po d'au moins 1 po de long dans la zone de chevauchement de 3 po marquée par des symboles « + ».
3. Pour les toitures à forte pente (6:12 ou plus) ou lorsque la température est supérieure à 38 °C (100 °F), il est recommandé d'utiliser un clouage invisible sur la zone de recouvrement, comme expliqué ci-dessus pour l'installation par temps froid.
4. Le produit PSU30 doit être posé à plat horizontalement (parallèle) à l'avant-toit avec le côté imprimé vers le haut en assurant des chevauchements horizontaux de 3 po et verticaux de 6 po.
5. Le produit PSU30 peut également être installé à la verticale. Pour l'installation à la verticale, ancrez le produit avec des clous de toiture à tête de 3/8 po le long du bord supérieur, à 3 po en bas du rebord avec 6 clous espacés également sur la largeur de 36 po. Assurez-vous que les clous de toiture sont enfoncés perpendiculairement au surface pour que leur tête soit posée à plat et qu'elle soit bien scellée contre la surface supérieure du produit PSU30. Les chevauchements verticaux doivent être de 6 po et les chevauchements horizontaux de 3 po, le cas échéant.
6. Travaillez toujours du bas vers le haut du toit. Installez la membrane dans les noues avant de l'installer sur l'avant-toit.
7. Coupez la membrane dans des longueurs faciles à manipuler. Enlevez de 1 à 2 pieds du film de protection, alignez la membrane et continuez à enlever le film de protection de la membrane. Pressez à la main ou en marchant dessus, puis roulez avec un rouleau de pression de 18 kg (40 lb) ou plus pour lisser et bien coller la membrane, particulièrement les couches en chevauchement. Si vous n'avez pas de rouleau de pression ou s'il n'est pas sécuritaire d'en utiliser, marchez sur tous les chevauchements et autant que possible sur la surface pour enfoncer l'adhésif dans les pores du surface et dans les chevauchements.
8. Pour l'installation sur l'avant-toit, le produit PSU30 doit être posé par-dessus le larmier situé à l'avant-toit. Ne pliez pas le PSU30 par-dessus le bord du toit à moins que le bord ne soit par la suite recouvert d'un larmier ou d'un autre type de solin. Le produit PSU30 doit s'étendre du bord de l'avant-toit jusqu'à une distance de 24 po à l'intérieur du mur extérieur. Cela devrait être plus haut que la ligne minimum de formation d'une digue de glace dans la plupart des régions. Consultez le guide du bâtiment local pour connaître les exigences particulières.
9. Pour les noues et les faîtes de toit, enlevez le film de protection, centrez la feuille sur la noue ou le faîte, drapez-la et pressez-la en place à la main. Remarque : Il est très important que le produit PSU30 demeure en contact avec le surface dans la noue et autour. Le produit PSU30 ne doit jamais être suspendu ou enjamber une noue. Nous conseillons de suivre cette installation avec un rouleau de pression ou en marchant sur la surface. Portez une attention particulière au rebord sur TOUT le périmètre.
10. Réparez les trous, les bâillements, les déchirures et tout autre dommage de pénétration de la membrane à l'aide d'une rustine circulaire constituée de membrane dépassant la zone endommagée de 6 pouces dans tous les sens. Si vous enlevez des fixations qui laissent des trous dans la membrane ou si vous pénétrez accidentellement la membrane, vous devez également rapiécer ces trous.
11. N'installez pas de fixations à travers la membrane dans des zones non supportées du surface structural, comme sur des joints entre des panneaux structurels adjacents.
12. Pour les installations hautes, exposées à des vents élevés ou à la pluie poussée par le vent, nous conseillons de recouvrir le surface en entier de PSU30.

PRECAUTIONS:

1. Le produit PSU30 n'est pas conçu pour une exposition extérieure prolongée. La couverture définitive doit être installée dans les 180 jours suivant l'installation du produit.
2. Selon la pente du toit et l'état de la surface, un calage peut être nécessaire pour soutenir les matériaux placés sur le toit. Souvenez-vous de sceller les trous des fixations qui ont retenu les cales après les avoir enlevées.
3. Protégez les zones de toit terminées pour éviter des dommages lors de l'installation ou du transport des matériaux en installant des passerelles protectrices pour le passage de personnes, de matériel ou de produits.
4. Prenez garde à ne pas trop charger de matériaux au même endroit sur le surface. Dans la mesure du possible, répartissez le poids sur les supports structurels.

MISE EN GARDE — VEUILLEZ LIRE LES CONSIGNES DE SÉCURITÉ CI-DESSOUS

Comme pour tout produit de couverture, respectez toujours les codes et pratiques (OSHA) de sécurité en matière de toiture, et utilisez toujours un équipement antichute lorsque vous travaillez sur un toit. Les films de protection sont glissants et doivent être éliminés de l'aire de travail immédiatement après l'installation. Faites preuve de prudence lorsque vous marchez ou que vous vous tenez debout sur les produits Titanium PSU30 parce que la résistance au glissement peut varier en fonction de l'état du toit, des conditions météorologiques, du type de chaussures ou de la pente du toit. Le fait de ne pas utiliser un équipement de sécurité approprié ou de ne pas porter de chaussures appropriées peut causer de graves blessures.

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PSU30 Instrucciones de instalación

ALMACENAMIENTO:

1. PSU30 debe almacenarse a temperatura ambiente, en posición vertical dentro del empaque de cartón original y en un lugar ventilado y seco. Debe mantenerse lejos de las llamas, chispas y sustancias nocivas y se debe resguardar de los factores climáticos
2. Los rollos se deben utilizar el mismo día en que se retiren de esta área de almacenamiento.
3. Para obtener los mejores resultados, almacénelos en temperaturas de entre 40 °F (4.4 °C) y 90 °F (32 °C). Si no hay un lugar donde se puedan almacenar a temperatura ambiente, se recomienda calentar el material a una temperatura mínima de 40 °F (4.4 °C) antes de instalarlo.

USO:

PSU30 debe cubrirse con el techado principal dentro de los 180 días posteriores a la aplicación. PSU30 está diseñado para utilizarse bajo tejas sintéticas o de asfalto, techados de metal, baldosas, tejas pizarra y tejados de cedro.

PREPARACIÓN DE LA SUPERFICIE:

1. Deben eliminarse las zonas salientes de la plataforma y ésta no debe tener espacios vacíos ni áreas dañadas o sin apoyo. La superficie del techo debe estar seca y sin residuos ni humedad.
2. PSU30 se puede aplicar directamente a una superficie de techo de mampostería, madera contrachapada, OSB, o concreto, y debe cubrirse totalmente lo más pronto posible y dentro de un periodo de 180 días. Si la temperatura supera los 40 °F (4.4 °C), no es necesario aplicar una capa base de primer para fijar la superficie de madera. En los techos de concreto y de mampostería sí se debe aplicar una capa base de solvente o un primer a base de agua que cumpla con la norma ASTM D41 para membranas autoadhesivas a base de asfalto.
3. En los proyectos de renovación de techos, reemplace los revestimientos dañados por el agua y barra la superficie del techo para retirar totalmente el polvo, la tierra y los clavos sueltos. No lo instale directamente sobre revestimientos anteriores del techo.
4. No se recomienda utilizar calcio ni sal para quitar hielo y nieve.

APLICACIÓN:

1. Para obtener los mejores resultados, PSU30 se debe instalar en una superficie seca, y el aire, la membrana y el sustrato deben estar a una temperatura de más de 40 °F (4.4 °C).
2. Para aplicar el material en climas fríos que no superan los 40 °F (4.4 °C), se debe aplicar un capa base de primer y se debe hacer un clavado invisible para fijar las superposiciones. Haga un clavado invisible con clavos para techo con cabeza de 3/8 de pulg. (9.5 mm) y 1 pulg. (2.5 cm) de largo o más en el área de superposición de 3 pulg. (7.6 cm) marcada con el símbolo "+".
3. Para aplicaciones con pendiente pronunciada (6:12 o más) o cuando se instala a temperaturas superiores a los 100 °F (38 °C), se recomienda hacer un clavado invisible para fijar el área de superposición, tal como se indicó anteriormente para las aplicaciones del material en climas fríos.
4. PSU30 se debe colocar en posición horizontal (paralela) al alero con la cara impresa hacia arriba, con superposiciones horizontales de 3 pulg. (7.6 cm) y superposiciones verticales de 6 pulg. (15.2 cm).
5. PSU30 también se puede instalar verticalmente. Para instalarlo verticalmente, fíjelo con clavos para techo con cabeza de 3/8 de pulg. (9.5 mm) a lo largo del borde superior con 3 pulg. (7.6 cm) hacia abajo con 6 clavos equidistantes en todo el ancho de 36 pulg. (91.4 cm). Verifique que los clavos para techo se claven perpendicularmente al techo y que la cabeza quede plana y pareja con el techo, y que se selle bien con la superficie superior de PSU30. Las superposiciones verticales deben ser de 6 pulg. (15.2 cm) y la superposiciones horizontales deben ser de 3 pulg. (7.6 cm), si es necesario.
6. Siempre comience a trabajar desde la parte más baja del techo y continúe hasta la parte más alta. Aplique la membrana en las áreas de los valles antes de aplicar la membrana en los aleros.
7. Corte la membrana en longitudes manejables. Desprenda 1 a 2 pies (30 a 60 cm) de la cubierta desprendible, alinee la membrana, y siga desprendiendo la cubierta desprendible de la membrana. Presione con las manos o camine sobre la membrana, y después pase un rodillo de 40 lbs (18.1 kg) o más de presión para alisar y fijar la membrana, sobre todo en las capas que se superponen. Si no hay un rodillo a la mano, o no es seguro usarlo, camine en las superposiciones y lo más posible en el área de aplicación para presionar el adhesivo y hacer que penetre en los poros del techo y las superposiciones.
8. En los aleros, PSU30 se debe aplicar sobre el borde de goteo de metal del alero. No doble el producto PSU30 para cubrir el borde del techo a menos que dicho borde esté cubierto por un borde de goteo u otro material protector. Se recomienda que PSU30 cubra desde el alero hasta el techo hasta un punto que esté 24 pulg. (61 cm) dentro de la pared exterior. Esto debería estar por arriba de la acumulación máxima de hielo en la mayoría de las áreas. Consulte el reglamento de construcción local para conocer las normas específicas pertinentes.
9. Para las aplicaciones en las áreas de crestas y valles, desprenda la cubierta desprendible, centre la hoja sobre el valle o cresta, cúbrala y presiónela para que se fije en su lugar. Nota: Es muy importante que PSU30 quede en contacto con la estructura del techo dentro y fuera de la zona del valle. PSU30 nunca debe quedar suspendido ni unir valles dejando un hueco abajo. Se recomienda que pase un rodillo de presión o que camine en esa parte de la superficie. Preste mucha atención a TODAS las áreas de los bordes del perímetro.
10. Repare los orificios, cavidades, desgarres, y cualquier otro daño u orificio de la membrana con un parche redondo de membrana que cubra la zona dañada más 6 pulg. (15.2 cm) a su alrededor. Si al retirar los sujetadores quedan orificios en la membrana, o si se producen otras vías de penetración por accidente, todo esto también debe ser parchado.
11. No instale sujetadores a través de la membrana sobre las áreas que no se apoyen en la estructura del techo, como por ejemplo, sobre las juntas que están entre los paneles estructurales adyacentes.
12. Para áreas de gran altitud, vientos fuertes o lluvia impulsada por el viento, se recomienda cubrir toda la superficie del techo con PSU30.

PRECAUCIONES:

1. PSU30 no está diseñado para estar expuesto indefinidamente a la intemperie. Todo el material para el techo debe instalarse en un periodo de 180 después de instalar el producto PSU30.
2. Dependiendo de la inclinación del techo y las condiciones de la superficie, es posible que se deba colocar material donde se puedan apoyar apoyar los materiales colocados en el techo. Recuerde sellar los orificios de los sujetadores que fijaban el mecanismo de bloqueo después de retirarlos.
3. Instale entablados de protección en las áreas terminadas del techo para protegerlo contra daños que puedan ocurrir con el paso de personas, equipo, productos y materiales durante la instalación del resto del techo.
4. Tenga cuidado de no cargar demasiado material en un área del techo. Coloque el peso sobre los soportes estructurales en la medida de lo posible.

ADVERTENCIA: LEA BIEN LAS SIGUIENTES PRÁCTICAS DE SEGURIDAD

Al igual que con cualquier producto para techos, siempre deben respetarse los códigos y las buenas prácticas de seguridad en techos (OSHA) y siempre deben utilizarse dispositivos de protección contra caídas al trabajar en altura. Las cubiertas desprendibles tiene una superficie resbaladiza y deben retirarse del área de trabajo inmediatamente después de la aplicación del material. Tenga cuidado al caminar o pararse sobre Titanium PSU30, puesto que la resistencia al deslizamiento puede variar según las condiciones de la superficie, el clima, el tipo de calzado y la inclinación del techo. El no usar calzado o equipo de seguridad adecuado puede ocasionar lesiones graves.

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Titanium Lifetime Limited Warranty

InterWrap® Corp. ("InterWrap" or the "Manufacturer") warrants to the purchaser of the Product (the "Building Owner") that Titanium® roofing underlayment (the "Product"), if installed in strict accordance with the Manufacturer's installation instructions, is free of manufacturing defects and will retain its ability to shed water and not deteriorate or decompose under the primary roofing material for the LIFETIME of the service application to which it has been applied, provided the terms, conditions and limitations set forth herein are met. This Warranty does not apply if (1) any part of the product is exposed to UV after roof cladding installation, and/or (2) the product has been installed and left uncovered without roof cladding for more than one hundred and eighty(180) days.

InterWrap agrees to provide either replacement product or refund the original purchase price paid for any portion of Titanium® product found to be defective.

InterWrap's obligations are subject to the following terms, conditions and limitations:

1. **Installation:** The job conditions, surface preparation, design and application must be in accordance with the Manufacturer's written installation instructions and recognized industry standards and practices.
2. **Notice:** The Building Owner shall provide InterWrap with written notice of any potential claims under this Warranty within thirty (30) days of discovery. Such notice shall be provided by e-mail, fax or mail to InterWrap's Technical Service Department, along with field samples illustrating production codes, application details and digital pictures. InterWrap reserves the right to reserve warranty claim judgment pending a full field sample evaluation. The InterWrap Technical Service department is located at 7163 Beatty Drive Mission, BC V2V 6C4; e-mail: mtupas@interwrap.com; toll-free, 1-888-713-7663.
3. **Remedy:** The remedy stated herein is the Building Owner's sole and exclusive remedy for defects in or failure of the materials supplied by the Manufacturer. The Manufacturer shall have no liability for any problems caused by leaks or defects caused by the failure of the roofing contractor to apply the Product in accordance with written instructions and specifications or recognized industry standards and practices. In no event shall the Manufacturer be held liable for damages and/or for special, incidental, indirect, punitive or consequential damages. The Manufacturer's liability on any claim of any kind for any loss or damage arising out of, in connection with or resulting from the manufacturer, sale or resale of the Product shall not exceed the original purchase price of the Product.
4. **Sole and Exclusive Warranty:** This Warranty is exclusive and replaces all other warranties, whether express or implied, including the implied warranties of merchantability and fitness for a particular purpose. No employee, agent, or representative of the Manufacturer has authority to make or give any other warranty or vary any of the terms or conditions of this Warranty. No statements made in any of the Manufacturer's brochures, pamphlets, flyers, advertisements or promotional materials of any kind constitute a warranty other than as set forth herein
5. **Exclusions:** Any damage or loss caused in whole or in part by the following conditions are excluded from this Warranty:
   a. Leaks caused by any penetrations (including penetrations by fasteners);
   b. Cost of removing or replacing primary roofing materials
   c. Leaks caused by natural forces, including but not limited to, lightning, gale-force winds, hail, hurricanes or similar natural causes; vandalism, animal abuse, fire, acts of war or civil disturbances;
   d. Leaks caused by alteration or repair of the roof or installation of structures, fixtures or utilities on or through the roof;
   e. Environmental fallout or overexposure to commercial industrial solvents, acids, caustic fluids, oils, waxes, gasses, absorbent clays, bleaches or plasticizers;
   f. Failure by the Building Owner or end user of the Product to use reasonable care in maintaining the roof;
   g. Leaks caused by excessive traffic or storage of materials on the roof;
   h. Infiltration or condensation of moisture in, through, around or above the walls of the building;
   i. Moisture that exists in the roofing system prior to the application of the Product;
   j. Structural failure or failure of material not supplied by the Manufacturer;
   k. Color changes or fading as the result of normal weathering or atmosphere conditions;
   l. Defective design, construction, installation or movement of the roof deck or roof accessories, including but not limited to vents, drains, curb units or other roof components;
   m. Damage caused by ponding water or the absence of positive drainage within the warranted roof area;
   n. Mold growth caused by inadequate ventilation or moisture that exists in the building or that enters the building prior to or after the installation of the Product;
   o. Cost of remediation or removal of hazardous materials, asbestos, mold, fungus, or any other contaminants;
   p. Loss of profits or damage to business reputation; and
   q. Damage caused by severe weather conditions prior to application of primary roofing.
6. **Non-Transferrable:** This Warranty is not transferred upon change of ownership of the building.
7. **Jurisdiction:** Any claim or dispute between the Building Owner and InterWrap arising out of this Warranty or relating to any material supplied or specifically required by InterWrap shall be resolved in the state or federal courts of Washington.
8. **Enforceability:** If any of the terms contained herein are unenforceable, such term shall be limited only to the extent necessary to make it enforceable, and all other terms shall remain in full force and effect.

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The Original

U20

RhinoRoof®

SYNTHETIC ROOFING UNDERLAYMENT

Break free from felt!™

20 YEAR LIMITED WARRANTY

20

RHINOROOF® U20

BACK TO TOC

RhinoRoof® U20

Synthetic Roofing Underlayment

U20 Features & Benefits

RhinoRoof U20 is an air, water and vapor barrier for use under: Asphalt Shingles, Synthetic Shingles, Residential Metal Roofing and Cedar Shakes

Say goodbye to traditional asphalt saturated felt paper - Break free from felt™ with RhinoRoof® U20 synthetic roofing underlayment! RhinoRoof U20 is a highly engineered, mechanically attached, coated woven synthetic roofing underlayment for sloped roofs. RhinoRoof's durable and high strength design along with its fiber grip walking surface provides a considerable improvement over asphalt saturated felt. The fiber grip textured walking surface can also be chalked just like felt.

- Meets ASTM D4869 & D226 Types I & II
- Fiber grip slip-resistant walking surface
- Enhanced UV - 60 days exposure
- 12 x stronger than #30 felt
- 8 squares more per roll compared to #30 felt
- 17% more coverage per lap (42" width as compared to 36" for felt)
- Ease of installation – wider, lighter, more coverage per lap
- Synthetic construction inert to mold growth
- Lays flat and does not absorb water and wrinkle
- No oil leaching - no hazardous material content
- Class A Fire - ASTM E108 (as part of a system)
- Contributes to LEED® points
- Texas Department of Insurance
- Advanced backside non-slip coating
- Low temperature flexibility
- Dual logo custom printing available

Gain an edge in productivity and profits; RhinoRoof's light weight, 42" width and 286 ft run length allows for fewer laps, cuts, and easier roll handling compared to felt. This means you can do more jobs in less time, use less labor, and inventory fewer rolls.

Gone are the days of blow-offs and call backs! RhinoRoof U20 is 12 times stronger than #30 felt and therefore offers superior wind resistance and durability through heavy roof traffic and adverse weather conditions. Stay on track, take on more jobs and sleep assured your U20 projects will remain intact and dried-in. RhinoRoof U20 will save you time and money with less material damage and fewer post-install repairs.

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RhinoRoof® U20

Synthetic Roofing Underlayment

U20 Technical Data

U20 ROLL & PALLET SPECIFICATIONS	
LENGTH PER ROLL:	286' / 87 m
WIDTH PER ROLL:	42" / 1.1 m
WEIGHT PER ROLL:	23.5 lbs / 10.6 kg
ROLL SIZE:	10 sq / 93 m²
ROLLS PER PALLET:	67
PALLET WEIGHT:	1,626 lbs / 738 kg

TEST & ASTM STANDARD	RHINOROOF U20 TYPICAL VALUE	#30 FELT TYPICAL VALUE
Permeability E96	.05 perms	1.75 perms
Water Transmission D4869	Pass	Pass
Tear Strength D4533	MD 33 lbs (15 kg) | CD 24 lbs (11 kg)	MD 4 lbs (1.8 kg) | CD 2 lbs (0.9 kg)
Tensile Strength D751	MD 88 lbs (40 kg) | CD 70 lbs (32 kg)	MD 70 lbs (32 kg) | CD 38 lbs (17 kg)
Burst Strength D751	158 psi (1089 kPa)	62 psi (430 kPa)
Elongation D751	MD 20% | CD 20%	MD 2% CD 2%
Weight per Square D5261	2.25 lbs (1.02 kg)	27.5 lbs (12.5 kg)
Nominal Thickness D1777	7 mils (0.18 mm)	60 mils (1.5 mm)
Service Temperature Range	-40 °F to 240 °F (-40 °C to 115 °C)	

U20 Building Codes

- Meets and exceeds ASTM D226 Types I & II and D4869 Types II & IV
- Miami-Dade County approved
- Florida Building Code approved
- Texas Department of Insurance listed
- Class A Fire - ASTM E108
- CAN/CSA A123.3
- CCRR-1015

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U20 MSDS

Product Identification: RhinoRoof U20
Product Use/Description: Coated woven polyolefin for use as a roofing underlayment
Product Composition : 97% polyolefin, 3% polymer blend

II. Hazardous Ingredients:

This is not a hazardous product as defined by WHMIS

III. Physical Data:
a. Physical State: Solid.
b. Odor and Appearance: Pigmented odorless Woven fabric
c. Odor threshold (ppm): N.Ap.
d. Vapor Pressure (mmHg): N.Ap.
e. Vapor Density (Air = 1): N.Ap.
f. Evaporation rate: N.Ap.
g. Boiling Point (oC): N.Ap.
h. Freezing Point (oC): N.Ap.
i. pH: N.Ap.
j. Specific Gravity: N.Ap.
k. Coef. Water/oil Dist. N.Ap.

IV. Fire and Explosion Data:

a. Flammability: Not flammable, but in case of a fire it will contribute.
b. Means of extinction: Water spray and dry chemicals.
c. Flash point (oC) and Method: N.Ap.
d. Upper flammable limit (% by volume): N.Ap.
e. Lower flammable limit (% by volume): N.Ap.
f. Hazardous combustion products: Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides
g. Explosion Data: Not sensitive to impact nor to static discharge.

V. Reactivity Data:

a. Chemical stability: Yes.
b. Incompatibility with other substances: None
c. Reactivity: Non-reactive
d. Hazardous decomposition products: No data.

VI. Toxicological properties:

a. Route of entry: N. Ap.
b. Effects of acute exposure to product: None known.
c. Effects of chronic exposure to product: None known.
d. Exposure Limits: Not available.
e. Irritancy of product: N.Ap.
f. Carcinogenicity: Not on IARC list.
g. Synergistic Products: None known

VII. Preventive Measures:

a. Gloves: N.Ap.
b. No respirator required under normal use.
c. Leak and spill procedure: N.Ap.
d. Waste disposal: See your local authorities for disposal instructions.
e. Handling and Storage: Rolls should be adequately restrained to prevent shifting during handling and storage.
f. Storage Requirements: N.Ap.
g. Special shipping information: None.

VIII. First aid measures:

*N.Ap.
IX. Other Information:
a. DOT Shipping Name: Not Available
b. DOT Hazard Class: Not Available
Prepared by: IW R&D group. (604) 820-5400
Revision Date: February 8, 2012

Disclaimer:
This information is furnished without warranty expressed or implied, except that it is accurate to the best knowledge of InterWrap Inc. The data on this sheet relates only to the specific material designated herein. InterWrap Industries Inc. assumes no legal responsibility for use or reliance upon this data.

*N.Ap. None Applicable

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U20 20 Year Limited Warranty

InterWrap Corp (the "Seller") warrants to the purchaser of these goods (the "Buyer"), the product RhinoRoof U20 synthetic roofing underlayment (hereinafter called "product") it manufactures, if installed strictly pursuant to Seller's application instructions. These instructions can be found on our website at www.interwrap.com/Rhinoroof. Warranty covers the products ability to shed water and not degrade, except as noted below, for a period of twenty (20) years from the sales invoice date or the product manufactured date printed on the product. (This is defined as the "Warranty Period"). The above warranty does not apply if: 1. any part of the product is exposed to UV after the asphalt shingle roofing material has been installed; and 2. the product has been installed and left uncovered without asphalt shingle roof material for more than 60 days. 3. the product is installed with non-specified fasteners such as staples. 4. product is used for an application outside of the recommended slope as defined in the product application instructions.

Buyer MUST give Seller written notice of any defects within 30 days from the date that the defect was discovered, along with field samples illustrating production codes, application details, and digital pictures. Seller reserves the right to reserve warranty claim judgment pending full field sample evaluation. Such notice shall be sent to Quality Control Manager, InterWrap, 1818 - 1177 West Hastings St. Vancouver BC, Canada V6E 2K3. Seller shall, at its sole option and as Buyer's sole remedy, repair or replace the product or refund the purchase price for that portion of the product that has been proven to be defective, within the written warranty conditions. Buyer shall pay all handling or transportation charges. Failure to timely give Seller notice of a defect, or unauthorized repairs or alterations, or misuse or misapplication of the product makes this warranty VOID. Instructions on how to make a warranty claim can be found on our website.

This warranty does not cover leaks or damage caused by any penetrations (including penetrations by fasteners), or by animals, vandalism, abusive conditions, inadequate or faulty structural design, structural defects, building alterations, natural forces such as tornados, hurricanes, earthquakes, other acts of nature, or any other cause beyond Seller's control. The warranties set forth herein are Seller's sole and exclusive warranties. Seller's liability on any claim of any kind for any loss or damage arising out of, in connection with, or resulting from the manufacture, sale, or resale of the product shall in no case exceed the purchase price paid for the product, prorated from the date of purchase to the date of discovery of the defect.

In no event shall Seller be liable for other damages or for special, incidental, punitive or consequential damages. Seller makes no other warranties of any kind, express or implied, including without limitation, any warranty of merchantability or fitness for a particular purpose. No part of this warranty may be changed or cancelled except by a written document signed by Seller and Buyer. No course of dealing or performance, usage of trade or failure to enforce any term shall be used to modify the warranty. Buyer can not assign or permit any other transfer of this warranty without Seller's consent. If any of the terms contained herein are unenforceable, such term shall be limited only to the extent necessary to make it enforceable, and all other terms shall remain in full force and effect. The warranty shall be covered by the laws of Washington, without regard to its conflicts of laws, provisions, and exclusive jurisdiction for any dispute arising from this warranty shall be in the state or federal courts of Washington.

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U20 Installation Instructions

RhinoRoof U20 is an air, water and vapor barrier and therefore must be installed above a properly ventilated space(s). Follow ALL building codes applicable to your geographical region and structure type as it is considered a vapor barrier.

DECK PREP: Protrusions from the deck area must be removed and decks shall have no voids, damaged or unsupported areas. Deck surface should be free of debris, dry and moisture free.

USE: RhinoRoof U20 must be covered by primary roofing within 60 days of application. U20 is designed for use under; asphalt or synthetic shingles, metal in residential applications, and cedar shakes that have been primed.

APPLICATION: For slopes from 2:12 and higher RhinoRoof U20 is to be laid out horizontally (parallel) to the eave with the printed side up. Horizontal laps should be 4" and Vertical laps should be 6"and anchored approximately 1" in from the edge. For low slope applications it is recommended to overlap 50% plus 1", for complete definition of low slope and guidelines consult authorities having jurisdiction. U20 product is not recommended for slopes less than 2:12. The use of roofing hammer, pneumatic air or gas driven fastener tools is acceptable. The use of straight edge cutting knives is recommended.

FASTENERS: For same day coverage with primary roofing RhinoRoof U20 can be anchored with corrosive resistant 3/8" head x 1" leg roofing nails (ring shank preferred, smooth leg acceptable). The use of every other anchoring location printed on the product is also acceptable. If U20 will be left exposed for up to 60 days the product must be anchored with 1" plastic or metal cap smooth or ring shank roofing nails and anchored in all locations printed on the facer. **DO NOT USE STAPLES:** the use of staples to penetrate RhinoRoof U20 will void warranty.

ANCHORING: All anchoring nails must be flush, 90 degrees to the roof deck, and tight with the underlayment surface and the structural roof deck. Where seams and joints require sealant or adhesive use a low solvent plastic roofing cement meeting ASTM D-4586 Type 1, or Federal Spec SS-153 Type 1 such as Karnak, Henry, DAP, MB, Geocel or equivalent. Acceptable alternatives are butyl rubber, urethane, and EDPM based caulk or tape sealant.

EXTENDED EXPOSURE: If RhinoRoof U20 product will be exposed longer than 24 hours and up to 60 days then product must be attached to the structural roof deck using a minimum 1" diameter plastic or metal cap roofing nails (ring shank preferred but smooth leg acceptable). Miami Dade approved tin tags/metal caps are also acceptable, and it is recommended for best performance to use with the rough edge facing up. For extended exposure it is always recommended to anchor on every printed position on the facer. RhinoRoof U20 is not designed for indefinite outdoor exposure.

For extended exposure conditions where driving rain or strong winds are expected it is recommended to take additional precautions such as doubling the lap widths. Alternately or in addition to a compatible sealant could be used between the laps or a peel and stick tape could be applied to the overlaps.

CAUTION - READ GOOD SAFETY PRACTICES BELOW

Good safety practices should be followed on steep slope roofs, such as use of tie-offs, toe boards, ladders and/or safety ropes and personal body harnesses. Follow OSHA guidelines. Slip resistance may vary with surface conditions from debris that accumulates, weather, footwear and roof pitch. Failure to use proper safety gear can result in serious injury. Depending on roof pitch and surface conditions, blocking may be required to support materials on the roof and is good safety practice. Remember to seal the nail holes after removing blocking.

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U20 Instrucciones de instalación

RhinoRoof® U15 es una barrera contra el aire, el agua y el vapor, por lo que debe instalarse sobre espacios con una ventilación adecuada. Siga TODAS las normas de construcción de su región geográfica para su tipo de estructura, puesto que se le considera una barrera contra el vapor.

PREPARACIÓN DE LA PLATAFORMA: Deben eliminarse las zonas salientes de la estructura del techo y esta no debe tener espacios vacíos ni áreas dañadas o sin apoyo. La superficie del techo debe estar seca y sin residuos ni humedad.

USO: RhinoRoof U15 debe cubrirse con el techado principal dentro de los 60 días posteriores a la aplicación. U15 está diseñado para utilizarse bajo tejas sintéticas o de asfalto, techados residenciales de metal y tejados de cedro.

APLICACIÓN: El RhinoRoof U15 debe instalarse de forma horizontal (paralela) al alero en techos con pendientes de 2:12 ó más, con el lado impreso hacia arriba. Los superposiciones horizontales deben ser de 4 pulg. (10.2 cm) y las verticales deben ser de 6 pulg. (15.2 cm) y deben estar ancladas a aproximadamente a 1 pulg. (2.5 cm) del borde. Con respecto a la aplicación en pendientes bajas, se recomienda sobreponer el 50% más 1 pulg. (2.5 cm); para conocer la definición de una pendiente baja y las directrices correspondientes, por favor consulte con las autoridades de su jurisdicción. El producto U15 no se recomienda en pendientes menores a 2:12. Pueden utilizarse martillos para techo, martillos tipo hacha y herramientas neumáticas de fijación de aire o gas. Se recomienda el uso de cortadores de borde recto.

FIJACIONES: Para cubrir el mismo día con techado primario, el U15 puede sujetarse con clavos para techo con cabeza de 3/8 de pulg. (9.5 mm) y 1 pulg. (2.5 cm) de largo que sean resistentes a la corrosión (es preferible usar clavos de cuerpo anillado, aunque los de vástago liso son aceptables). También es aceptable utilizar cualquier otro sitio para el anclaje que esté impreso en el producto. **NO UTILIZAR GRAPAS:** el uso de grapas para penetrar el U15 anulará la garantía.

ANCLAJE: Todos los clavos de anclaje deben estar al ras, a 90 grados con respecto a la plataforma del techo y ajustados a la superficie de recubrimiento y la estructura de la plataforma del techo. En los casos en que las uniones y juntas requieran de material sellador o adhesivo, se debe utilizar cemento plástico para techos con bajo contenido de solvente y que cumpla con las normas ASTM D-4586 Tipo 1 ó la Especificación Federal SS-153 Tipo 1, por ejemplo Karnak, Henry, DAP, MB, Geocel o equivalente. Otras alternativas aceptables son los selladores en forma de cinta o masilla con base de caucho butílico, uretano o EDPM.

EXPOSICIÓN PROLONGADA: Si el producto RhinoRoof U15 va a estar expuesto por más de 24 horas y por un máximo de 60 días, el producto debe fijarse en la estructura del techo utilizando clavos para techo con cabeza de metal o plástico de un mínimo de 1 pulg. (2.5 cm) de diámetro (se prefieren los clavos de cuerpo anillado, aunque los de vástago liso son aceptables). También es aceptable utilizar placas de estaño o topes metal que estén aprobados en Miami Dade; se recomienda instalarlos con el borde rugoso hacia arriba para un mejor rendimiento. Para una exposición extendida, se recomienda anclar todas las posiciones marcadas en el revestimiento. RhinoRoof U15 no está diseñado para estar expuesto indefinidamente a la intemperie. En condiciones de exposición prolongada, donde se espera lluvia impulsada por el viento o ventarrones, se recomienda tomar precauciones adicionales como doblar el ancho de las superposiciones. De forma alternativa o adicional, podría utilizarse un sellador compatible entre las superposiciones, o bien, utilizar cinta adhesiva en las superposiciones.

ADVERTENCIA – LEA LAS SIGUIENTES BUENAS PRÁCTICAS DE SEGURIDAD : En techos muy inclinados, se deben seguir las buenas prácticas de seguridad, como el uso de amarres, topes para apoyar los pies, escaleras y/o cuerdas de seguridad y arneses personales para el cuerpo. Siga las directrices de la OSHA. La resistencia al deslizamiento puede variar según las condiciones de la superficie, los residuos que se acumulen, el clima, el tipo de calzado, y la inclinación del techo. La falta de uso de equipos de seguridad adecuados puede dar lugar a lesiones graves. Según la inclinación y las condiciones de la superficie del techo, es posible que deba utilizarse algún mecanismo de bloqueo para apoyar los materiales sobre el techo, lo que constituye también una buena medida de seguridad. Recuerde que se deben sellar los orificios de los clavos después de quitar el mecanismo de bloqueo.

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U20 Consignes d'installation

RhinoRoof MD U15 est une barrière contre l'air, l'eau et la vapeur et elle doit donc être installée au-dessus d'espaces bien ventilés. Respectez TOUS les codes du bâtiment applicables à la région et au type de structure, car elle est considérée comme un pare-vapeur.

PRÉPARATION DE LA PLATEFORME : Les saillies de la surface de la plateforme doivent être enlevées et la plateforme ne doit pas avoir d'espaces ni d'endroits endommagés ou non supportés. La surface de la plateforme doit être exempte de débris, sèche et à l'abri de l'humidité.

UTILISATION : RhinoRoof U15 doit être couvert par la couverture principale dans les 60 jours suivant sa pose. U15 est conçu pour être utilisé sous les bardeaux d'asphalte, les bardeaux synthétiques, les couvertures métalliques et les bardeaux de cèdre.

APPLICATION : Pour les pentes fortes de 2 h 12 ou plus, RhinoRoof U15 doit être disposé horizontalement (parallèlement) par rapport à l'avant-toit, la face imprimée vers le haut. Les chevauchements horizontaux doivent être de 4 po et les chevauchements verticaux doivent être de 6 po et ancrés à environ 1 po du bord. Pour les pentes douces, il est recommandé de faire chevaucher de 50 % plus 1 po; pour voir une définition complète du terme « pente douce » et les lignes directrices à cet égard, consulter les autorités compétentes de votre région. Le produit U15 n'est pas recommandé sur les pentes de moins de 2:12. L'emploi de marteaux à toiture ou de cloueuses pneumatiques ou à gaz est acceptable. On conseille d'utiliser des couteaux à lame droite.

FIXATIONS : Pour le revêtement le même jour avec la couverture principale, RhinoRoof U15 peut être fixé avec des clous à toiture de 1 po (tête de 3/8 po) résistants à la corrosion (l'utilisation de clous à tige annelée est à privilégier, mais l'emploi de clous à toiture à tige lisse est acceptable). L'utilisation de tout autre dispositif d'ancrage imprimé sur le produit est aussi acceptable. **NE PAS UTILISER D'AGRAFES :** l'utilisation d'agrafes pour installer RhinoRoof U15 annulera la garantie.

ANCRAGE : Tous les dispositifs d'ancrage doivent être affleurants, enfoncés à 90 degrés dans les panneaux de toit, et ne pas présenter de jeu avec la sous-couverture et les panneaux de structure du toit. Lorsque les joints requièrent un produit d'étanchéité ou un adhésif, utilisez de la colle plastique pour toitures à faible teneur en solvant et conforme à ASTM D-4586 Type 1, spécification fédérale SS-153 Type 1 comme Karnak, Henry, DAP, MB, Geocel ou l'équivalent. Des solutions de rechange acceptables comprennent : caoutchouc de butyle, uréthane et calfeutrant ou scellant en ruban à base d'EDPM.

EXPOSITION PROLONGÉE : Si le produit RhinoRoof U15 est exposé plus longtemps que 24 heures et jusqu'à 60 jours, le produit doit alors être fixé aux panneaux de structure du toit à l'aide de clous à toiture à capuchon en plastique ou en métal d'un diamètre minimal d'un pouce (l'utilisation de clous à tige annelée est à privilégier, mais l'emploi de clous à toiture à tige lisse est acceptable). Les pastilles métalliques approuvées par Miami Dade sont aussi acceptables, le bord rugueux face vers le haut pour des résultats optimaux. Dans le cas d'une exposition prolongée, il est toujours conseillé d'ancrer sur chaque position imprimée de la surface. RhinoRoof U15 n'est pas conçu pour une exposition extérieure prolongée. Dans le cas d'une exposition prolongée ou de la pluie battante ou des vents violents pourraient survenir, il est conseillé de prendre des précautions additionnelles, comme doubler la largeur des chevauchements. Comme solution de rechange ou comme précaution additionnelle, vous pouvez utiliser un produit d'étanchéité compatible entre les chevauchements ou les recouvrir de ruban adhésif.

MISE EN GARDE — LIRE LES CONSIGNES DE SÉCURITÉ CI-DESSOUS On doit adopter de bonnes pratiques de sécurité sur les toits à pente raide, par exemple se servir de cordes de fixation, de planches cale-pied, d'échelles ou de cordes de sécurité et de harnais de sécurité individuels. Suivre les lignes directrices de l'OSHA La résistance au glissement peut varier selon l'état de la surface, les débris qui y sont accumulés, les conditions atmosphériques, les chaussures utilisées et la pente du toit. Le défaut d'utiliser un équipement de sécurité approprié pourrait entraîner des blessures graves. Selon la pente de toit et l'état de la surface, un calage pourrait être requis pour soutenir les matériaux sur le toit, ce qui est une bonne pratique de sécurité. N'oubliez pas de sceller les trous des clous avant d'enlever le calage.

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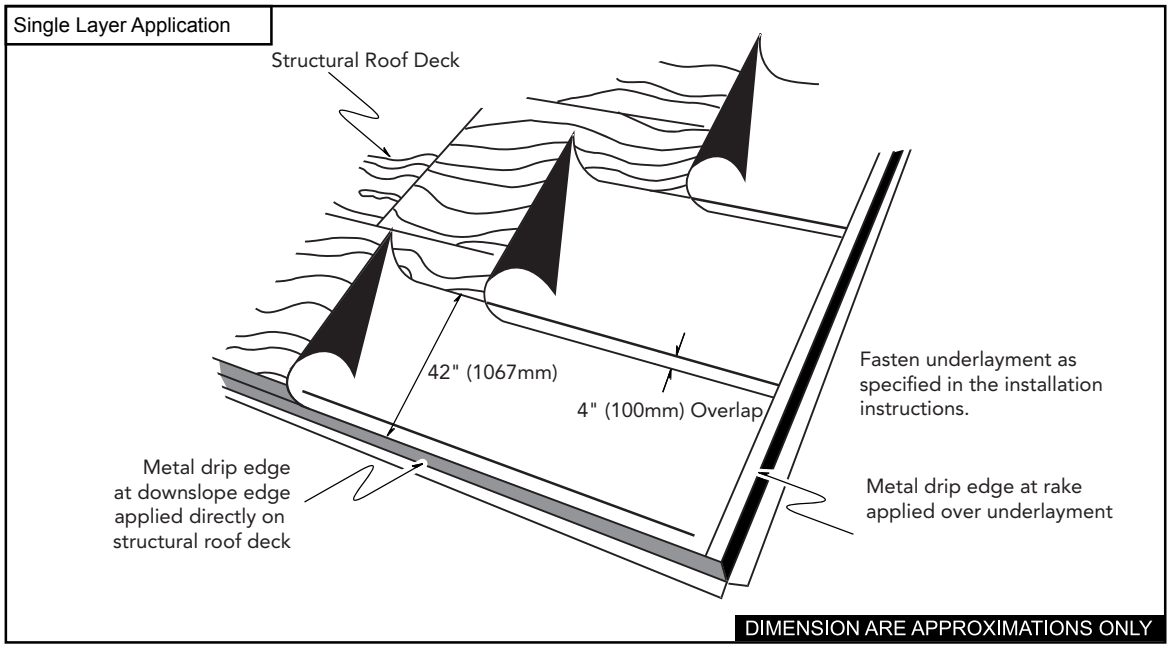
RhinoRoof U20 Application Diagram

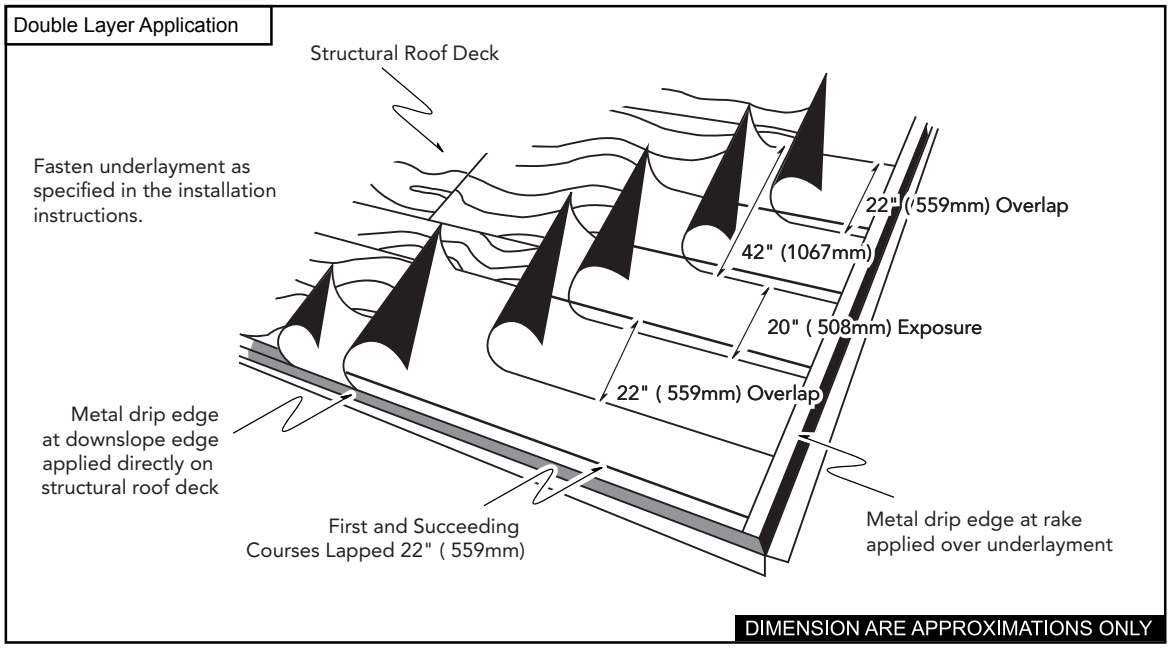
Single layer application of RhinoRoof®

For roof decks having slopes greater than 4:12, RhinoRoof should be applied horizontally in shingle fashion with a 38 inch exposure and a 4 inch overlap.
Pay special attention to high wind and wind driven rain condition application instructions.



Double layer application of RhinoRoof®

For roof decks having slope of 2:12 to 4:12 a minimum of two layers of RhinoRoof underlayment should be applied horizontally in shingle (water fall) fashion with a with a 20 inch exposure and a 22 inch overlap.



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U10

RhinoRoof®

SYNTHETIC ROOFING UNDERLAYMENT

Break free from felt!™

BACK TO TOC

RhinoRoof® U10

Synthetic Roofing Underlayment

U10 Features & Benefits

RhinoRoof U10 is an air, water and vapor barrier for use under: Shingles only.

Say goodbye to traditional asphalt saturated felt paper - Break free from felt™ with RhinoRoof® U10 synthetic roofing underlayment! RhinoRoof U10 is a highly engineered, mechanically attached, coated woven synthetic roofing underlayment for sloped roofs. RhinoRoof's durable and high strength design along with its fiber grip walking surface provides a considerable improvement over asphalt saturated felt. The fiber grip textured walking surface can also be chalked just like felt.

- Meets ASTM D4869 & D226 Types I & II
- Fiber grip slip-resistant walking surface
- Enhanced UV - 30 days exposure
- 12 x stronger than #30 felt
- 8 squares more per roll compared to #30 felt
- 17% more coverage per lap (42" width as compared to 36" for felt)
- Ease of installation – wider, lighter, more coverage per lap
- Synthetic construction inert to mold growth
- Lays flat and does not absorb water and wrinkle
- No oil leaching - no hazardous material content
- Texas Department of Insurance
- Advanced backside non-slip coating
- Low temperature flexibility

Gain an edge in productivity and profits; RhinoRoof's light weight, 42" width and 286 ft run length allows for fewer laps, cuts, and easier roll handling compared to felt. This means you can do more jobs in less time, use less labor, and inventory fewer rolls.

Gone are the days of blow-offs and call backs! RhinoRoof U10 is 12 times stronger than #30 felt and therefore offers superior wind resistance and durability through heavy roof traffic and adverse weather conditions. Stay on track, take on more jobs and sleep assured your U10 projects will remain intact and dried-in. RhinoRoof U10 will save you time and money with less material damage and fewer post-install repairs.

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RhinoRoof® U10

Synthetic Roofing Underlayment

U10 Technical Data

U10 ROLL & PALLET SPECIFICATIONS	
LENGTH PER ROLL:	286' / 87 m
WIDTH PER ROLL:	42" / 1.1 m
WEIGHT PER ROLL:	20 lbs / 9.1 kg
ROLL SIZE:	10 sq / 93 m²
ROLLS PER PALLET:	67
PALLET WEIGHT:	1,392 lbs / 632 kg

TEST & ASTM STANDARD	RHINOROOF U10 TYPICAL VALUE	#30 FELT TYPICAL VALUE
Permeability E96	.05 perms	1.75 perms
Water Transmission D4869	Pass	Pass
Tear Strength D4533	MD 26 lbs (12 kg) | CD 24 lbs (11 kg)	MD 4 lbs (1.8 kg) | CD 2 lbs (0.9 kg)
Tensile Strength D751	MD 84 lbs (38 kg) | CD 66 lbs (30 kg)	MD 70 lbs (32 kg) | CD 38 lbs (17 kg)
Burst Strength D751	130 psi (897 kPa)	62 psi (430 kPa)
Elongation D751	MD 20% | CD 20%	MD 2% CD 2%
Weight per Square D5261	1.9 lbs (0.86 kg)	27.5 lbs (12.5 kg)
Nominal Thickness D1777	6.5 mils (0.17 mm)	60 mils (1.5 mm)
Service Temperature Range	-40 °F to 240 °F (-40 °C to 115 °C)	

U10 Building Codes

- Meets and exceeds ASTM D226 Types I & II and D4869 Types II & IV
- Miami-Dade County approved
- Florida Building Code approved
- Texas Department of Insurance listed
- Class A Fire - ASTM E108
- CAN/CSA A123.3

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U10 MSDS

Product Identification: RhinoRoof U10
Product Use/Description: Coated woven polyolefin for use as a roofing underlayment
Product Composition : 97% polyolefin, 3% polymer blend

II. Hazardous Ingredients:

This is not a hazardous product as defined by WHMIS

III. Physical Data:
a. Physical State: Solid.
b. Odor and Appearance: Pigmented odorless Woven fabric
c. Odor threshold (ppm): N.Ap.
d. Vapor Pressure (mmHg): N.Ap.
e. Vapor Density (Air = 1): N.Ap.
f. Evaporation rate: N.Ap.
g. Boiling Point (oC): N.Ap.
h. Freezing Point (oC): N.Ap.
i. pH: N.Ap.
j. Specific Gravity: N.Ap.
k. Coef. Water/oil Dist. N.Ap.

IV. Fire and Explosion Data:

a. Flammability: Not flammable, but in case of a fire it will contribute.
b. Means of extinction: Water spray and dry chemicals.
c. Flash point (oC) and Method: N.Ap.
d. Upper flammable limit (% by volume): N.Ap.
e. Lower flammable limit (% by volume): N.Ap.
f. Hazardous combustion products: Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides
g. Explosion Data: Not sensitive to impact nor to static discharge.

V. Reactivity Data:

a. Chemical stability: Yes.
b. Incompatibility with other substances: None
c. Reactivity: Non-reactive
d. Hazardous decomposition products: No data.

VI. Toxicological properties:

a. Route of entry: N. Ap.
b. Effects of acute exposure to product: None known.
c. Effects of chronic exposure to product: None known.
d. Exposure Limits: Not available.
e. Irritancy of product: N.Ap.
f. Carcinogenicity: Not on IARC list.
g. Synergistic Products: None known

VII. Preventive Measures:

a. Gloves: N.Ap.
b. No respirator required under normal use.
c. Leak and spill procedure: N.Ap.
d. Waste disposal: See your local authorities for disposal instructions.
e. Handling and Storage: Rolls should be adequately restrained to prevent shifting during handling and storage.
f. Storage Requirements: N.Ap.
g. Special shipping information: None.

VIII. First aid measures:

*N.Ap.
IX. Other Information:
a. DOT Shipping Name: Not Available
b. DOT Hazard Class: Not Available
Prepared by: IW R&D group. (604) 820-5400
Revision Date: February 8, 2012

Disclaimer:
This information is furnished without warranty expressed or implied, except that it is accurate to the best knowledge of InterWrap Inc. The data on this sheet relates only to the specific material designated herein. InterWrap Industries Inc. assumes no legal responsibility for use or reliance upon this data.

*N.Ap. None Applicable

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U10 10 Year Limited Warranty

InterWrap Corp (the "Seller") warrants to the purchaser of these goods (the "Buyer"), the product RhinoRoof U10 synthetic roofing underlayment (hereinafter called "product") it manufactures, if installed strictly pursuant to Seller's application instructions. These instructions can be found on our website at www.interwrap.com/Rhinoroof. Warranty covers the products ability to shed water and not degrade, except as noted below, for a period of twenty (10) years from the sales invoice date or the product manufactured date printed on the product. (This is defined as the "Warranty Period"). The above warranty does not apply if: 1. any part of the product is exposed to UV after the asphalt shingle roofing material has been installed; and 2. the product has been installed and left uncovered without asphalt shingle roof material for more than 30 days. 3. the product is installed with non-specified fasteners such as staples. 4. product is used for an application outside of the recommended slope as defined in the product application instructions.

Buyer MUST give Seller written notice of any defects within 30 days from the date that the defect was discovered, along with field samples illustrating production codes, application details, and digital pictures. Seller reserves the right to reserve warranty claim judgment pending full field sample evaluation. Such notice shall be sent to Quality Control Manager, InterWrap, 1818 - 1177 West Hastings St. Vancouver BC, Canada V6E 2K3. Seller shall, at its sole option and as Buyer's sole remedy, repair or replace the product or refund the purchase price for that portion of the product that has been proven to be defective, within the written warranty conditions. Buyer shall pay all handling or transportation charges. Failure to timely give Seller notice of a defect, or unauthorized repairs or alterations, or misuse or misapplication of the product makes this warranty VOID. Instructions on how to make a warranty claim can be found on our website.

This warranty does not cover leaks or damage caused by any penetrations (including penetrations by fasteners), or by animals, vandalism, abusive conditions, inadequate or faulty structural design, structural defects, building alterations, natural forces such as tornados, hurricanes, earthquakes, other acts of nature, or any other cause beyond Seller's control. The warranties set forth herein are Seller's sole and exclusive warranties. Seller's liability on any claim of any kind for any loss or damage arising out of, in connection with, or resulting from the manufacture, sale, or resale of the product shall in no case exceed the purchase price paid for the product, prorated from the date of purchase to the date of discovery of the defect.

In no event shall Seller be liable for other damages or for special, incidental, punitive or consequential damages. Seller makes no other warranties of any kind, express or implied, including without limitation, any warranty of merchantability or fitness for a particular purpose. No part of this warranty may be changed or cancelled except by a written document signed by Seller and Buyer. No course of dealing or performance, usage of trade or failure to enforce any term shall be used to modify the warranty. Buyer can not assign or permit any other transfer of this warranty without Seller's consent. If any of the terms contained herein are unenforceable, such term shall be limited only to the extent necessary to make it enforceable, and all other terms shall remain in full force and effect. The warranty shall be covered by the laws of Washington, without regard to its conflicts of laws, provisions, and exclusive jurisdiction for any dispute arising from this warranty shall be in the state or federal courts of Washington.

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RhinoRoof® U10

Synthetic Roofing Underlayment

U10 Installation Instructions

RhinoRoof U10 is an air, water and vapor barrier and therefore must be installed above a properly ventilated space(s). Follow ALL building codes applicable to your geographical region and structure type as it is considered a vapor barrier.

DECK PREP: Protrusions from the deck area must be removed and decks shall have no voids, damaged or unsupported areas. Deck surface should be free of debris, dry and moisture free.

USE: RhinoRoof U10 must be covered by primary roofing within 30 days of application. U10 is designed for use under; shingles only.

APPLICATION: For slopes from 2:12 and higher RhinoRoof U10 is to be laid out horizontally (parallel) to the eave with the printed side up. Horizontal laps should be 4" and Vertical laps should be 6"and anchored approximately 1" in from the edge. For low slope applications it is recommended to overlap 50% plus 1", for complete definition of low slope and guidelines consult authorities having jurisdiction. U10 product is not recommended for slopes less than 2:12. The use of roofing hammer, pneumatic air or gas driven fastener tools is acceptable. The use of straight edge cutting knives is recommended.

FASTENERS: For same day coverage with primary roofing RhinoRoof U10 can be anchored with corrosive resistant 3/8" head x 1" leg roofing nails (ring shank preferred, smooth leg acceptable). The use of every other anchoring location printed on the product is also acceptable. If U10 will be left exposed for up to 30 days the product must be anchored with 1" plastic or metal cap smooth or ring shank roofing nails and anchored in all locations printed on the facer. **DO NOT USE STAPLES:** the use of staples to penetrate RhinoRoof U10 will void warranty.

ANCHORING: All anchoring nails must be flush, 90 degrees to the roof deck, and tight with the underlayment surface and the structural roof deck. Where seams and joints require sealant or adhesive use a low solvent plastic roofing cement meeting ASTM D-4586 Type 1, or Federal Spec SS-153 Type 1 such as Karnak, Henry, DAP, MB, Geocel or equivalent. Acceptable alternatives are butyl rubber, urethane, and EDPM based caulk or tape sealant.

EXTENDED EXPOSURE: If RhinoRoof U10 product will be exposed longer than 24 hours and up to 30 days then product must be attached to the structural roof deck using a minimum 1" diameter plastic or metal cap roofing nails (ring shank preferred but smooth leg acceptable). Miami Dade approved tin tags/metal caps are also acceptable, and it is recommended for best performance to use with the rough edge facing up. For extended exposure it is always recommended to anchor on every printed position on the facer. RhinoRoof U10 is not designed for indefinite outdoor exposure.

For extended exposure conditions where driving rain or strong winds are expected it is recommended to take additional precautions such as doubling the lap widths. Alternately or in addition to a compatible sealant could be used between the laps or a peel and stick tape could be applied to the overlaps.

CAUTION - READ GOOD SAFETY PRACTICES BELOW

Good safety practices should be followed on steep slope roofs, such as use of tie-offs, toe boards, ladders and/or safety ropes and personal body harnesses. Follow OSHA guidelines. Slip resistance may vary with surface conditions from debris that accumulates, weather, footwear and roof pitch. Failure to use proper safety gear can result in serious injury. Depending on roof pitch and surface conditions, blocking may be required to support materials on the roof and is good safety practice. Remember to seal the nail holes after removing blocking.

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U10 Instrucciones de instalación

RhinoRoof® U10 es una barrera contra el aire, el agua y el vapor, por lo que debe instalarse sobre espacios con una ventilación adecuada. Siga TODAS las normas de construcción de su región geográfica para su tipo de estructura, puesto que se le considera una barrera contra el vapor.

PREPARACIÓN DE LA PLATAFORMA: Deben eliminarse las zonas salientes de la estructura del techo y esta no debe tener espacios vacíos ni áreas dañadas o sin apoyo. La superficie del techo debe estar seca y sin residuos ni humedad.

USO: RhinoRoof U10 debe cubrirse con el techado principal dentro de los 30 días posteriores a la aplicación. U10 está diseñado para utilizarse bajo tejas de asfalto sólo.

APLICACIÓN: El RhinoRoof U10 debe instalarse de forma horizontal (paralela) al alero en techos con pendientes de 2:12 ó más, con el lado impreso hacia arriba. Los superposiciones horizontales deben ser de 4 pulg. (10.2 cm) y las verticales deben ser de 6 pulg. (15.2 cm) y deben estar ancladas a aproximadamente a 1 pulg. (2.5 cm) del borde. Con respecto a la aplicación en pendientes bajas, se recomienda sobreponer el 50% más 1 pulg. (2.5 cm); para conocer la definición de una pendiente baja y las directrices correspondientes, por favor consulte con las autoridades de su jurisdicción. El producto U10 no se recomienda en pendientes menores a 2:12. Pueden utilizarse martillos para techo, martillos tipo hacha y herramientas neumáticas de fijación de aire o gas. Se recomienda el uso de cortadores de borde recto.

FIJACIONES: Para cubrir el mismo día con techado primario, el U10 puede sujetarse con clavos para techo con cabeza de 3/8 de pulg. (9.5 mm) y 1 pulg. (2.5 cm) de largo que sean resistentes a la corrosión (es preferible usar clavos de cuerpo anillado, aunque los de vástago liso son aceptables). También es aceptable utilizar cualquier otro sitio para el anclaje que esté impreso en el producto. **NO UTILIZAR GRAPAS:** el uso de grapas para penetrar el U10 anulará la garantía.

ANCLAJE: Todos los clavos de anclaje deben estar al ras, a 90 grados con respecto a la plataforma del techo y ajustados a la superficie de recubrimiento y la estructura de la plataforma del techo. En los casos en que las uniones y juntas requieran de material sellador o adhesivo, se debe utilizar cemento plástico para techos con bajo contenido de solvente y que cumpla con las normas ASTM D-4586 Tipo 1 ó la Especificación Federal SS-153 Tipo 1, por ejemplo Karnak, Henry, DAP, MB, Geocel o equivalente. Otras alternativas aceptables son los selladores en forma de cinta o masilla con base de caucho butílico, uretano o EDPM.

EXPOSICIÓN PROLONGADA: Si el producto RhinoRoof U10 va a estar expuesto por más de 24 horas y por un máximo de 30 días, el producto debe fijarse en la estructura del techo utilizando clavos para techo con cabeza de metal o plástico de un mínimo de 1 pulg. (2.5 cm) de diámetro (se prefieren los clavos de cuerpo anillado, aunque los de vástago liso son aceptables). También es aceptable utilizar placas de estaño o topes metal que estén aprobados en Miami Dade; se recomienda instalarlos con el borde rugoso hacia arriba para un mejor rendimiento. Para una exposición extendida, se recomienda anclar todas las posiciones marcadas en el revestimiento. RhinoRoof U10 no está diseñado para estar expuesto indefinidamente a la intemperie. En condiciones de exposición prolongada, donde se espera lluvia impulsada por el viento o ventarrones, se recomienda tomar precauciones adicionales como doblar el ancho de las superposiciones. De forma alternativa o adicional, podría utilizarse un sellador compatible entre las superposiciones, o bien, utilizar cinta adhesiva en las superposiciones.

ADVERTENCIA – LEA LAS SIGUIENTES BUENAS PRÁCTICAS DE SEGURIDAD : En techos muy inclinados, se deben seguir las buenas prácticas de seguridad, como el uso de amarres, topes para apoyar los pies, escaleras y/o cuerdas de seguridad y arneses personales para el cuerpo. Siga las directrices de la OSHA. La resistencia al deslizamiento puede variar según las condiciones de la superficie, los residuos que se acumulen, el clima, el tipo de calzado, y la inclinación del techo. La falta de uso de equipos de seguridad adecuados puede dar lugar a lesiones graves. Según la inclinación y las condiciones de la superficie del techo, es posible que deba utilizarse algún mecanismo de bloqueo para apoyar los materiales sobre el techo, lo que constituye también una buena medida de seguridad. Recuerde que se deben sellar los orificios de los clavos después de quitar el mecanismo de bloqueo.

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U10 Consignes d'installation

RhinoRoof MD U10 est une barrière contre l'air, l'eau et la vapeur et elle doit donc être installée au-dessus d'espaces bien ventilés. Respectez TOUS les codes du bâtiment applicables à la région et au type de structure, car elle est considérée comme un pare-vapeur.

PRÉPARATION DE LA PLATEFORME : Les saillies de la surface de la plateforme doivent être enlevées et la plateforme ne doit pas avoir d'espaces ni d'endroits endommagés ou non supportés. La surface de la plateforme doit être exempte de débris, sèche et à l'abri de l'humidité.

UTILISATION : RhinoRoof U10 doit être couvert par la couverture principale dans les 30 jours suivant sa pose. U10 est conçu pour être utilisé sous les bardeaux d'asphalte seulement.

APPLICATION : Pour les pentes fortes de 2 h 12 ou plus, RhinoRoof U10 doit être disposé horizontalement (parallèlement) par rapport à l'avant-toit, la face imprimée vers le haut. Les chevauchements horizontaux doivent être de 4 po et les chevauchements verticaux doivent être de 6 po et ancrés à environ 1 po du bord. Pour les pentes douces, il est recommandé de faire chevaucher de 50 % plus 1 po; pour voir une définition complète du terme « pente douce » et les lignes directrices à cet égard, consulter les autorités compétentes de votre région. Le produit U10 n'est pas recommandé sur les pentes de moins de 2:12. L'emploi de marteaux à toiture ou de cloueuses pneumatiques ou à gaz est acceptable. On conseille d'utiliser des couteaux à lame droite.

FIXATIONS : Pour le revêtement le même jour avec la couverture principale, RhinoRoof U10 peut être fixé avec des clous à toiture de 1 po (tête de 3/8 po) résistants à la corrosion (l'utilisation de clous à tige annelée est à privilégier, mais l'emploi de clous à toiture à tige lisse est acceptable). L'utilisation de tout autre dispositif d'ancrage imprimé sur le produit est aussi acceptable. **NE PAS UTILISER D'AGRAFES :** l'utilisation d'agrafes pour installer RhinoRoof U10 annulera la garantie.

ANCRAGE : Tous les dispositifs d'ancrage doivent être affleurants, enfoncés à 90 degrés dans les panneaux de toit, et ne pas présenter de jeu avec la sous-couverture et les panneaux de structure du toit. Lorsque les joints requièrent un produit d'étanchéité ou un adhésif, utilisez de la colle plastique pour toitures à faible teneur en solvant et conforme à ASTM D-4586 Type 1, spécification fédérale SS-153 Type 1 comme Karnak, Henry, DAP, MB, Geocel ou l'équivalent. Des solutions de rechange acceptables comprennent : caoutchouc de butyle, uréthane et calfeutrant ou scellant en ruban à base d'EDPM.

EXPOSITION PROLONGÉE : Si le produit RhinoRoof U10 est exposé plus longtemps que 24 heures et jusqu'à 30 jours, le produit doit alors être fixé aux panneaux de structure du toit à l'aide de clous à toiture à capuchon en plastique ou en métal d'un diamètre minimal d'un pouce (l'utilisation de clous à tige annelée est à privilégier, mais l'emploi de clous à toiture à tige lisse est acceptable). Les pastilles métalliques approuvées par Miami Dade sont aussi acceptables, le bord rugueux face vers le haut pour des résultats optimaux. Dans le cas d'une exposition prolongée, il est toujours conseillé d'ancrer sur chaque position imprimée de la surface. RhinoRoof U10 n'est pas conçu pour une exposition extérieure prolongée. Dans le cas d'une exposition prolongée ou de la pluie battante ou des vents violents pourraient survenir, il est conseillé de prendre des précautions additionnelles, comme doubler la largeur des chevauchements. Comme solution de rechange ou comme précaution additionnelle, vous pouvez utiliser un produit d'étanchéité compatible entre les chevauchements ou les recouvrir de ruban adhésif.

MISE EN GARDE — LIRE LES CONSIGNES DE SÉCURITÉ CI-DESSOUS On doit adopter de bonnes pratiques de sécurité sur les toits à pente raide, par exemple se servir de cordes de fixation, de planches cale-pied, d'échelles ou de cordes de sécurité et de harnais de sécurité individuels. Suivre les lignes directrices de l'OSHA La résistance au glissement peut varier selon l'état de la surface, les débris qui y sont accumulés, les conditions atmosphériques, les chaussures utilisées et la pente du toit. Le défaut d'utiliser un équipement de sécurité approprié pourrait entraîner des blessures graves. Selon la pente de toit et l'état de la surface, un calage pourrait être requis pour soutenir les matériaux sur le toit, ce qui est une bonne pratique de sécurité. N'oubliez pas de sceller les trous des clous avant d'enlever le calage.

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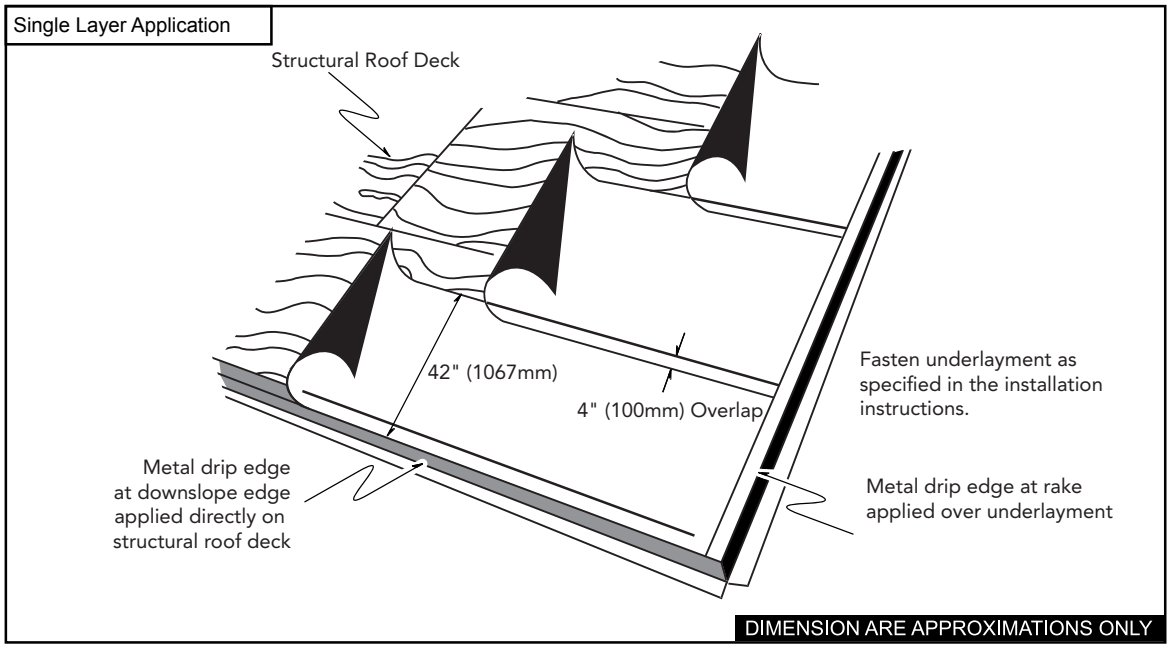
RhinoRoof U10 Application Diagram

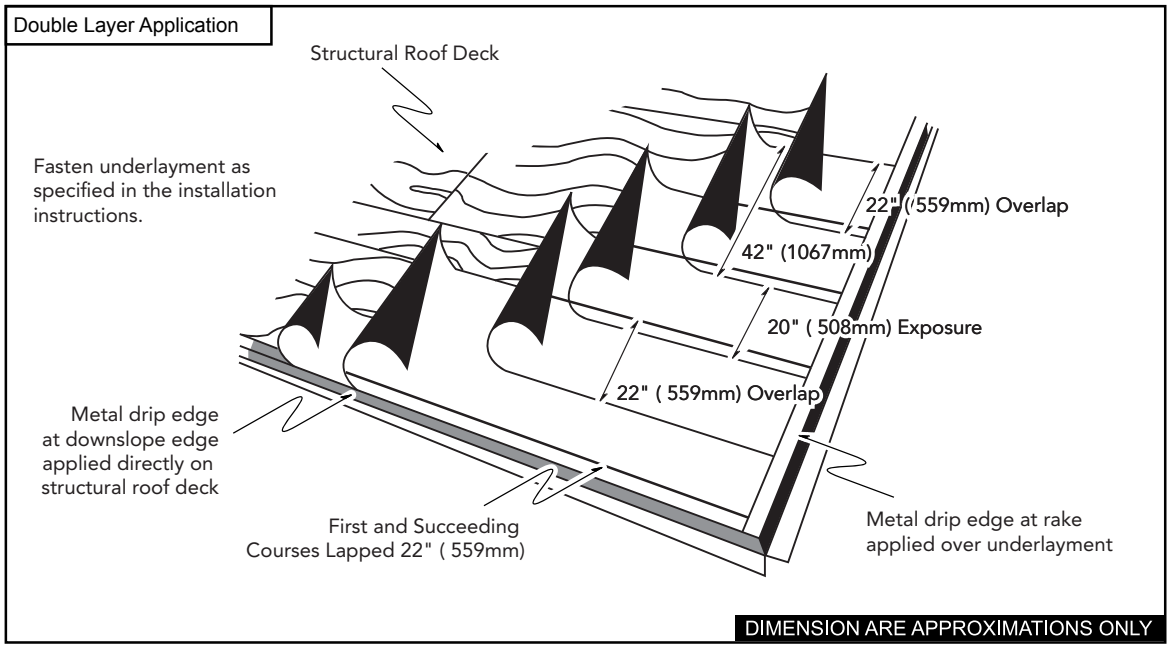
Single layer application of RhinoRoof®

For roof decks having slopes greater than 4:12, RhinoRoof should be applied horizontally in shingle fashion with a 38 inch exposure and a 4 inch overlap.
Pay special attention to high wind and wind driven rain condition application instructions.



Double layer application of RhinoRoof®

For roof decks having slope of 2:12 to 4:12 a minimum of two layers of RhinoRoof underlayment should be applied horizontally in shingle (water fall) fashion with a with a 20 inch exposure and a 22 inch overlap.



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RSA

RhinoRoof®

SYNTHETIC ROOFING UNDERLAYMENT

Self Adhered Underlayment
Water, Snow and Ice Dam Protection

25 YEAR LIMITED WARRANTY
25
RHINOROOF® RSA

HIGH TEMP°

ICE DAM PROTECTION
LOW TEMP INSTALL

BACK TO TOC

RhinoRoof® RSA

Self-Adhered Synthetic Roofing Underlayment

RhinoRoof RSA Features & Benefits

RhinoRoof® RSA is a self-adhered underlayment designed to protect roofing structures from water infiltration caused by wind driven rain, snow and ice dams.

RhinoRoof® RSA self-adhered underlayment is designed to protect roofing structures from water infiltration caused by wind driven rain, snow and ice dams. RSA is intended for use under many roofing materials including Metal, Tile, Slate and Shingles. It is easy to use, versatile, and created for use on the whole roof or on critical roof areas such as eaves, ridges, valleys, dormers and skylights.

- For use under Metal, Tile, Slate & Shingles
- Can be left exposed for up to 90 days
- 25 year limited warranty
- Fiber grip textured slip-resistant walking surface
- Flexible facer that conforms to roof imperfections
- Adhesive self seals around nails and roofing fasteners
- Granular free surface provides; stronger overlap bonds, reduced risk of corrosion and safer walking surface
- Ease of installation – Lightweight rolls are easy to transport
- Split release silicone liner
- Synthetic construction inert to mold growth

RSA combines a flexible synthetic facer with a uniquely formulated modified rubberized asphalt peel and stick backing. This combination allows the product to conform to imperfections in the roof deck or stretch around fastener protrusions instead of tearing or puncturing like some competing rigid fiberglass reinforced underlayments. RSA's unique formulation seals around roofing nails or metal roofing fasteners and provides superior adhesion to plywood decking without the need for primers or nails, ensuring long term protection from wind driven rain and ice. RhinoRoof RSA is designed for 2:12 or greater sloped roof applications and delivers a unique combination of both high temperature (240°F / 115°C) thermal stability, and low temperature installation (40°F / 4.4°C) deck adhesion.

RSA also features the RhinoRoof synthetic textured walking surface that offers superior steep slope walkability in wet or dry weather conditions. It also is warranted for up to 90 days UV exposure making it suitable for longer installation projects. RSA is engineered to lay flat and not buckle or wrinkle when exposed to temperature and moisture fluctuations on a roof. For faster and easier installation RSA features an easy to remove silicone treated poly split release liner.

RSA's surface is granular free. Loose granules can become a safety hazard, score the underside of metal roofing systems making them susceptible to premature corrosion, and track underneath footing causing damage to metal roofing systems. Granular surfaced membranes also provide inferior seam overlap strengths and integrity; a critical issue for ice damming and wind driven rain protection.

RSA comes in a 2 square roll which is lightweight and can be easily transported onto the roof deck. Its 40 mil thickness reduces the profile of the overlap lines unlike thicker competitive products that can detract from the architectural aesthetics of the primary roofing system.

Ensure you have the right product protecting your home. RhinoRoof is backed by InterWrap's industry leading 25 year limited warranty – Since tile and metal shingles are water-shedding not waterproofing, use RhinoRoof RSA to provide long lasting waterproofing protection.

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RhinoRoof® RSA

Self-Adhered Synthetic Roofing Underlayment

RhinoRoof RSA Technical Data

RSA ROLL & PALLET SPECIFICATIONS	
LENGTH PER ROLL:	67' / 20.4 m
WIDTH PER ROLL:	36" / .914 m
WEIGHT PER ROLL:	44 lbs / 20 kg
ROLL SIZE:	2 sq / 20 m^2
ROLLS PER PALLET:	25
PALLET WEIGHT:	1200 lbs / 545 kg

TEST & PROPERTIES	ASTM STANDARD	RSA TYPICAL VALUE
Color		Dark Gray
Surface		Textured fiber grip slip-resistant
Release Liner		Silicone treated split release
Nail Sealability	ASTM D1970	Pass
Weight per Square	ASTM D5261	22 lbs (10 kg)
Nominal Thickness	ASTM D1777	40 mils (1.0 mm)
Permeability	ASTM E96	Max. 0.10
Tensile	ASTM D1970	MD 45 lbs/in (7.9 kN/m)
	ASTM D1970	CD 32 lbs/in (5.6 kN/m)
Thermal Stability	ASTM D1970	240° F (115° C) Pass
Low Temp. Flexibility	ASTM D1970	Pass
Tear Resistance	ASTM D1970	MD 55 lbf (245 N) CD 46 lbf (205 N)
Adhesion to Plywood		Min. 5 lb/in (0.9kN/m)

RhinoRoof RSA Building Codes

- Meets and exceeds ASTM D1970
- CAN/CSA A220.1
- Class A Fire - ASTM E108
- CCRR-1017
- Texas Department of Insurance listed

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RhinoRoof RSA MSDS

I. Product Identification and Use:
Product Identification: RhinoRoof RSA
Product Use/Description: Coated woven polyolefin self-adhesive membrane for use as a roofing underlayment
Product Composition:
<20% Polyolefin Plastic
<75% Rubberized Asphalt
<15% Petroleum Oil

II. Hazardous Ingredients:

Hazardous Component: ACGIH TLV LD50 %Wt
Petroleum Asphalt : 5.0mg/m 5-15g/kg > 50%
CAS # 8052-42-4
Petroleum Oil: 0.2000 TWA >15% CAS # 64741-88-4

III. Physical Data:

a. Physical State: Solid.
b. Odor and Appearance: Pigmented Woven fabric Slight Petroleum Odor
c. Odor threshold (ppm): N.Ap.
d. Vapor Pressure (mmHg): N.Ap.
e. Vapor Density (Air = 1): N.Ap.
f. Evaporation rate: N.Ap.
g. Boiling Point (oC): N.Ap.
h. Freezing Point (oC): N.Ap.
i. pH: N.Ap.
j. Specific Gravity: 1.2
k. Coef. Water/oil Dist. N.Ap.

IV. Fire and Explosion Data:

a. Flammability: Will Support Combustion under direct flame
b. Fire Fighting Procedure: The use of self-contained breathing apparatus is recommended for firefighters.
c. Means of extinction: Water spray and dry chemicals
d. Flash point (oC) and Method: >410°F (T.O.C.).
e. Upper flammable limit (% by volume): N.Ap.
f. Lower flammable limit (% by volume): N.Ap.
g. Hazardous combustion products: Carbon Monoxide, Carbon Dioxide, Nitrogen Oxides and Sulfur
h. Explosion Data: Not sensitive to impact nor to static discharge.

V. Reactivity Data:

a. Chemical stability: Yes.
b. Incompatibility with other substances: None
c. Reactivity: Non-reactive
d. Hazardous decomposition products: No data.

VI. Toxicological properties:

a. Route of entry: Skin , Ingestion
b. Skin: Avoid contact with skin. Excessive exposure may cause irritation to eyes, nose, throat and skin. Prolonged and repeated skin contact may cause skin irritation.
c. Ingestion: Slightly toxic
Emergency and First Aid Procedures
Inhalation: Not Applicable.
Skin: Wash thoroughly with soap and water. If redness or irritation develops, obtain medical assistance.
Eyes: Flush with water at least 15 minutes. Obtain medical assistance.
Ingestion: Drink liquids. Obtain medical assistance.
Medical Conditions Aggravated by Exposure: Disorders or Diseases of the Skin, Eyes, Respiratory Track or Allergies
Carcinogenicity: No
NTP: No IARC Monographs
OSHA Regulated Irritant: Yes
Sensitizer: Yes
Mutagenic: No
Teratogenic: No

VII. Preventive Measures:

a. Gloves: Recomended
b. No respirator required under normal use.
c. Leak and spill procedure: N.Ap.
d. Waste disposal: See your local authorities for disposal instructions.
e. Handling and Storage: Rolls should be adequately restrained to prevent shifting during handling and storage.
f. Storage Requirements: N.Ap.
g. Special shipping information: None.
IX. Other Information:
a. Shipping Name: Asphaltic Roofing Material
b. DOT Hazard Class: Not Required

Prepared by: IW R&D group. (604) 820-5400
Revision Date: 17th December 2014

Disclaimer:
This information is furnished without warranty expressed or implied, except that it is accurate to the best knowledge of InterWrap Inc. The data on this sheet relates only to the specific material designated herein. InterWrap assumes no legal responsibility for use or reliance upon this data.

*N.Ap. None Applicable

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RhinoRoof RSA 25 Year Limited Warranty

InterWrap Corp (the "Seller") warrants to the purchaser of these goods (the "Buyer"), the product RhinoRoof RSA synthetic roofing underlayment (hereinafter called "product") it manufactures, if installed strictly pursuant to Seller's application instructions. These instructions can be found on our website at www.interwrap.com/Rhinoroof. Warranty covers the products ability to shed water and not degrade, except as noted below, for a period of twenty five (25) years from the sales invoice date or the product manufactured date printed on the product. (This is defined as the "Warranty Period"). The above warranty does not apply if: 1. any part of the product is exposed to UV after roof cladding installation; and 2: the product has been installed and left uncovered without roof cladding for more than 90 days.

Buyer MUST give Seller written notice of any defects within 30 days from the date that the defect was discovered, along with field samples illustrating production codes, application details, and digital pictures. Seller reserves the right to reserve warranty claim judgment pending full field sample evaluation. Such notice shall be sent to Quality Control Manager, InterWrap, 1818 - 1177 West Hastings St. Vancouver BC, Canada V6E 2K3 . Seller shall, at its sole option and as Buyer's sole remedy, repair or replace the product or refund the purchase price for that portion of the product that has been proven to be defective, within the written warranty conditions. Buyer shall pay all handling or transportation charges. Failure to timely give Seller notice of a defect, or unauthorized repairs or alterations, or misuse or misapplication of the product makes this warranty VOID. Instructions on how to make a warranty claim can be found on our website.

This warranty does not cover leaks or damage caused by any penetrations (including penetrations by fasteners), or by animals, vandalism, abusive conditions, inadequate or faulty structural design, structural defects, building alterations, natural forces such as tornados, hurricanes, earthquakes, other acts of nature, or any other cause beyond Seller's control. The warranties set forth herein are Seller's sole and exclusive warranties. Seller's liability on any claim of any kind for any loss or damage arising out of, in connection with, or resulting from the manufacture, sale, or resale of the product shall in no case exceed the purchase price paid for the product, prorated from the date of purchase to the date of discovery of the defect.

In no event shall Seller be liable for other damages or for special, incidental, punitive or consequential damages. Seller makes no other warranties of any kind, express or implied, including without limitation, any warranty of merchantability or fitness for a particular purpose. No part of this warranty may be changed or cancelled except by a written document signed by Seller and Buyer. No course of dealing or performance, usage of trade or failure to enforce any term shall be used to modify the warranty. Buyer can not assign or permit any other transfer of this warranty without Seller's consent. If any of the terms contained herein are unenforceable, such term shall be limited only to the extent necessary to make it enforceable, and all other terms shall remain in full force and effect. The warranty shall be covered by the laws of Washington, without regard to its conflicts of laws, provisions, and exclusive jurisdiction for any dispute arising from this warranty shall be in the state or federal courts of Washington.

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RSA Installation Instructions

STORAGE

1. RhinoRoof® RSA should be stored at room temperature, upright in the original cardboard packaging in a dry properly ventilated area. Keep clear from open flames, sparks, harmful substances and shelter from the elements.
2. Only rolls destined for same-day use should be removed from its storage area.
3. For best results store in temperatures between 40°F (4.4°C) and 90°F (32°C)
4. If room temperature storage is not available, it is recommended to heat material to a minimum temperature of 40°F (4.4°C) prior to application.
5. Be careful not to load too much material on the roof deck in one area. Disburse the weight over structural supports where possible.

SURFACE PREPARATION

1. RhinoRoof RSA may be applied to a plywood, OSB, concrete or masonry roof surface and should be fully covered as soon as possible or within 90 days. Priming is not required for attaching to wood surfaces when the temperature is above 40°F. Concrete and masonry decks should be primed with a solvent or a water based primer that meets ASTM D41 for asphalt based self-adhesive membranes.
2. The roof surface must be clean, dry, and protrusion free.
3. The roof deck should have no voids, damaged or unsupported areas.
4. For re-roofing projects replace any water damaged sheathing and sweep roof deck thoroughly removing dust, dirt, loose nails and old roofing material.
5. Use of calcium or salt for ice and snow removal is not recommended.

INSTALLATION

1. For best results RhinoRoof RSA should be installed on a dry deck when the air, membrane, and substrate temperature is over 40°F (4.4°C).
2. For cold weather applications below 40°F (4.4°C) a primer should be used and the laps blind nailed. Blind nail with 3/8" head roofing nails of 1" or longer in the 3" over lap area marked with a "+" symbol.
3. It is also recommended to blind nail on steep slopes 6:12 or greater or when installing at temperatures greater than 100°F (38°C).
4. RhinoRoof RSA is to be laid out horizontally (parallel) to the eave with the printed side up, using 3" horizontal laps and 6" vertical laps.
5. RSA may also be installed vertically. For vertical installation anchor with 3/8" head roofing nails along the upper most edge 3 inches down with 6 equally spaced nails across the 36" width. Ensure roofing nails are perpendicular to the roof deck so that the head lays flat and seals well to the top surface of the RSA. Vertical overlaps to be 6" and 3" for horizontal laps if required.
6. Always work from the low point to the high point of the roof. Apply the membrane in valleys before the membrane is applied to the eaves.
7. Cut the membrane into manageable lengths. Peel back 1-2 feet of release liner, align the membrane, and continue to peel the release liner from the membrane. Hand press or walk on, then follow with a 40 lb or heavier pressure roller to smooth and secure the membrane, especially at the overlap layers. If a roller is not available or considered safe, walk on all laps, and as much of the field area as possible to push the adhesive into the pours of the roof deck and overlap.
8. For eave installation RSA should be applied over the metal drip edge at the eave. Do not fold RhinoRoof RSA over the roof edge unless the edge is subsequently covered over by a drip edge or other flashing material. RSA should extend from the eave up the roof to a point 24" inside the exterior wall. This should be above the maximum ice dam buildup line in most areas. Consult your local building code for specific requirements.
9. For valleys and ridge applications, peel the release liner; center the sheet over the valley or ridge, drape, and hand press in place. Note: It is very important RSA stay in contact with the roof deck into and out of the valley area. RSA should never be suspended or bridge a valley. It is recommended to follow up with a pressure roller or by walking on the surface. Give special attention to ALL perimeter edge areas.
10. Do not install RSA directly over old roof covering.
11. Repair holes, fish mouths, tears, and any other penetration damage to the membrane with a round patch of membrane extending passed the damaged area by 6" in all directions. If fasteners are removed leaving holes in the membrane or other penetrations are accidentally produced, they must also be patched.
12. Do not install fasteners through membrane over any unsupported areas of the structural deck, such as over joints between adjacent structural panels.
13. Protect completed roof areas to avoid damage during roof installation and material transportation by installing protective boardwalks to enable passage of people, equipment and products.
14. For high elevation, high wind or wind driven rain it is recommended to cover the entire roof deck with RhinoRoof RSA.

PRECAUTIONS

1. RhinoRoof RSA is not designed for indefinite outdoor exposure. Final roofing should be installed within 90 days of installation. RSA is designed for use under metal, tile, slate, shake and shingle roofing.
2. RhinoRoof RSA is an air, water and vapor barrier (.03 perms). It must be installed above a properly ventilated space. Follow ALL building codes applicable to your geographic regions and structure type.
3. Depending on roof pitch and surface conditions, blocking maybe required to support roofing materials placed on the roof.
4. For extended exposure applications, the surface layer may be slightly discolored; this is normal, and will not affect the product's performance.
5. Although this product is suitable for almost all primary roofing types it is not recommended under roofs made with Copper and Zinc. It is also not recommended for some metal roofing at high altitudes or located in desert southwest USA . For these applications a high temperature rated underlayment such as Titanium® PSU30 should be used.

CAUTION - READ GOOD SAFETY PRACTICES BELOW

As with any roofing product, always follow safe roofing codes & practices (OSHA) and always use and wear fall protection devices when working on roofs. Release liners are slippery and should be removed from work area immediately after application. Use caution when walking or standing on RhinoRoof RSA as slip resistance may vary with surface conditions, weather, footwear and roof pitch. Failure to use proper safety gear and footwear can result in serious injury. Beyond the RhinoRoof RSA application instructions you should check with your local, county, state or national building code as applicable.

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RSA Consignes d'installation

ENTREPOSAGE

1. RhinoRoofMD RSA devrait être entreposée à température ambiante, à la verticale, dans son emballage en carton d'origine et dans un endroit sec et adéquatement aéré. Le garder à l'écart des flammes nues, des étincelles, des substances nuisibles et protégé des intempéries.
2. Seuls les rouleaux destinés à l'utilisation le jour même devraient être retirés de l'aire d'entreposage.
3. Pour des résultats optimaux, entreposer à une température entre 4,4 °C (40 °F) et 32 °C (90 °F).
4. Si l'entreposage à température ambiante est impossible, il est conseillé de chauffer le matériau à une température d'au moins 4,4 °C (40 °F) avant l'installation.
5. Prendre garde à ne pas trop charger de matériaux au même endroit sur le toit. Dans la mesure du possible, répartir le poids sur les supports structurels.

PRÉPARATION DE LA SURFACE

1. RhinoRoof RSA peut être installé sur un toit en contreplaqué, en panneau OSB, en béton ou en maçonnerie et devrait être entièrement recouvert le plus tôt possible ou dans les 90 jours. Il n'est pas nécessaire d'enduire un apprêt avant l'installation sur des surfaces en bois si la température est supérieure à 4,4 °C (40 °F). Les toitures en béton ou en maçonnerie doivent être enduites d'un apprêt à base de solvant ou d'eau répondant à la norme ASTM D41 pour les membranes autoadhésives à base d'asphalte.
2. La surface du toit doit être propre, sèche et exempte de saillies.
3. La surface du toit ne doit présenter aucun vide ni zone endommagée ou sans support.
4. Pour les projets de réfection de toiture, remplacer tout revêtement endommagé par l'eau et balayer la surface du toit pour complètement éliminer la poussière, la saleté, les clous et l'ancien matériau de toiture.
5. L'utilisation de calcium ou de sel pour faire fondre la glace et la neige est déconseillée.

INSTALLATION

1. Pour des résultats optimaux RhinoRoof RSA devrait être installé sur un toit sec lorsque la température ambiante, de la membrane et du substrat est supérieure à 4,4 °C (40 °F).
2. Pour l'installation par temps froid (température inférieure à 4,4 °C (40 °F), il faut utiliser un apprêt et faire le clouage invisible des chevauchements. Faire le clouage invisible avec des clous pour toiture à tête de 3/8 po d'au moins 1 po de longueur dans la zone de chevauchement de 3 po marquée par des symboles « + ».
3. Il est également conseillé de faire le clouage invisible sur les pentes raides de 6 h 12 ou plus, ou lors de l'installation à une température supérieure à 38 °C (100 °F).
4. RhinoRoof RSA doit être posé à plat horizontalement (parallèle) à l'avant-toit avec le côté imprimé vers le haut en assurant des chevauchements horizontaux de 3 po et verticaux de 6 po.
5. RSA peut également être installé à la verticale. Pour l'installation à la verticale, l'ancrer avec des clous pour toiture à tête de 3/8 po le long du bord supérieur à 3 po en bas du rebord avec 6 clous espacés également sur la largeur de 36 po. S'assurer que les clous pour toiture sont enfoncés perpendiculairement à la surface du toit afin que leur tête soit posée à plat et qu'elle soit bien scellée contre la surface supérieure du RSA. Les chevauchements verticaux doivent être de 6 po et les chevauchements horizontaux de 3 po, le cas échéant.
6. Toujours travailler du bas vers le haut du toit. Installer la membrane dans les noues avant de l'installer sur l'avant-toit.
7. Couper la membrane en longueurs de 10 à 15 pieds et les enrouler lâchement. Enlever de 1 à 2 pieds de l'endos, aligner la membrane et continuer à enlever l'endos de la membrane. Presser à la main ou en marchant dessus, puis rouler avec un rouleau de 18 kg (40 lb) ou plus pour lisser et bien coller la membrane, particulièrement les couches en chevauchement. Si un rouleau n'est pas disponible ou considéré sûr, marcher sur tous les chevauchements et sur la plus grande partie de la surface que possible afin de pousser l'adhésif dans les pores de la toiture et les chevauchements.
8. Pour l'installation sur l'avant toit, le RSA doit être posé par-dessus le larmier en bordure du toit. Ne pas plier le RhinoRoof RSA par dessus le bord du toit à moins que le bord ne soit par la suite recouvert d'un larmier ou d'un autre type de solin. Le RSA doit s'étendre du bord de l'avant-toit jusqu'à une distance de 24 po à l'intérieur du mur extérieur. Cela devrait être plus haut que la ligne minimum de formation de digue de glace dans la plupart des régions. Consulter le guide du bâtiment local pour connaître les exigences particulières.
9. Pour les noues et les faîtes de toit, enlever l'endos, centrer la feuille sur la noue ou le faîte, la draper et la presser en place à la main. Remarque : Il est très important que le RSA demeure en contact avec le revêtement du toit dans et autour de la noue. Le RSA ne doit jamais être suspendu ou enjamber une noue. Nous conseillons de suivre cette installation avec un rouleau de pression ou en marchant sur la surface. Porter une attention particulière au rebord sur TOUT le périmètre.
10. Ne pas installer le RSA directement sur l'ancienne couverture.
11. Réparer les trous, les bâillements et tout autre dommage de pénétration de la membrane à l'aide d'une rustine circulaire en membrane dépassant la zone endommagée de 6 pouces dans tous les sens. Si des fixations sont enlevées et laissent des trous dans la membrane ou si d'autres pénétrations sont accidentellement produites, la membrane doit également être rapiécée.
12. Ne pas installer de fixations à travers la membrane dans des zones non supportées du revêtement structurel, comme sur des joints entre des panneaux structurels adjacents.
13. Protéger les zones de toit terminées afin d'éviter des dommages lors de l'installation ou du transport des matériaux en installant des passerelles protectrices pour le passage de personnes, de matériel ou de produits.
14. Pour les installations hautes, exposées à des vents élevés ou à la pluie poussée par le vent, nous conseillons de recouvrir le toit en entier de RhinoRoof RSA.

PRÉCAUTIONS

1. RhinoRoof RSA n'est pas conçu pour l'exposition extérieure indéfinie. La couverture définitive doit être installée dans les 90 jours suivant l'installation de RhinoRoof RSA. RSA est destiné à être utilisé sous la tôle, les bardeaux, les tuiles, l'ardoise, les bardeaux de fente et les bardeaux d'asphalte.
2. RhinoRoof RSA est une barrière contre l'air, l'eau et la vapeur (0,03 perm). Il doit être installé au-dessus d'un espace adéquatement ventilé. Suivre TOUTES les recommandations du Code du bâtiment correspondant à votre région et au type de structure.
3. Dépendant de la pente du toit et de l'état de la surface, du calage peut être nécessaire pour soutenir les matériaux placés sur le toit.
4. Pour les installations à exposition prolongée, la couche de surface peut être légèrement décolorée; c'est normal et cela n'affectera pas le rendement du produit.
5. Bien que ce produit convienne à la majorité des principaux types de couvertures, il est déconseillé pour les toits en cuivre et en zinc. Il est également déconseillé pour certaines couvertures métalliques à haute altitude ou situé dans le désert du sud-ouest des États-Unis. Pour ces installations, il est préférable d'utiliser une sous-couche pour haute température telle que TitaniumMD PSU30.

ATTENTION – PRIÈRE DE LIRE CETTE PRATIQUE EXEMPLAIRE DE SÉCURITÉ

Comme avec tout produit de couverture, toujours observer des pratiques et des codes de sécurité (OSHA) pour les travaux de toiture et toujours porter des dispositifs antichute lors du travail sur un toit. Les endos protecteurs sont glissants et doivent être éliminés de l'aire de travail immédiatement après l'installation. Faire preuve de prudence en marchant ou en se tenant debout sur les produits RhinoRoof parce que la résistance au glissement peut varier en fonction de l'état du toit, des conditions météorologiques, du type de chaussures ou de la pente du toit. Ne pas porter d'équipement de protection ou de chaussures appropriées peut causer de graves blessures. Au-delà des instructions d'installation de RhinoRoof RSA, toujours consulter les codes du bâtiment locaux, provinciaux, d'État ou nationaux applicables.

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RSA Instrucciones de instalación

ALMACENAMIENTO

1. RhinoRoof® RSA debe almacenarse a temperatura ambiente, en posición vertical dentro del empaque de cartón original y en un lugar ventilado y seco. Debe mantenerse lejos de las llamas, chispas y sustancias nocivas y se debe resguardar de los factores climáticos.
2. Los rollos se deben utilizar el mismo día en que se retiren de esta área de almacenamiento.
3. Para obtener los mejores resultados, almacénelos en temperaturas de entre 40 °F (4.4 °C) y 90 °F (32 °C)
4. Si no hay un lugar donde se puedan almacenar a temperatura ambiente, se recomienda calentar el material a una temperatura mínima de 40 °F (4.4 °C) antes de instalarlo.
5. Tenga cuidado de no cargar demasiado material en un área del techo. Coloque el peso sobre los soportes estructurales en la medida de lo posible.

PREPARACIÓN DE LA SUPERFICIE

1. RhinoRoof RSA se puede aplicar a una superficie de techo de mampostería, madera contrachapada, OSB, o concreto, y debe cubrirse totalmente lo más pronto posible y dentro de un periodo de 90 días. Si la temperatura supera los 40 °F (4.4 °C), no es necesario aplicar una capa base de primer para fijar la superficie de madera. En los techos de concreto y de mampostería sí se debe aplicar una capa base de solvente o un primer a base de agua que cumpla con la norma ASTM D41 para membranas autoadhesivas a base de asfalto.
2. La superficie del techo debe estar limpia, seca y sin protrusiones.
3. El techo no debe tener huecos ni áreas dañadas o sin apoyo.
4. En los proyectos de renovación de techos, reemplace los revestimientos dañados por el agua y barra la superficie del techo para retirar totalmente el polvo, la tierra, clavos sueltos y materiales de trabajos anteriores.
5. No se recomienda utilizar calcio ni sal para quitar hielo y nieve.

INSTALACIÓN

1. Para obtener los mejores resultados, el RhinoRoof RSA se debe instalar en una superficie seca, y el aire, la membrana y el sustrato deben una temperatura de más de 40 °F (4.4 °C).
2. Para aplicar el material en climas fríos que no superan los 40 °F (4.4 °C), se debe aplicar un capa base de primer y se debe hacer un clavado invisible para fijar las superposiciones. Haga un clavado invisible con clavos para techo con cabeza de 3/8 de pulg. (9.5 mm) y 1 pulg. (2.5 cm) de largo o más en el área de superposición de 3 pulg. (7.6 cm) marcada con el símbolo "+".
3. También se recomienda hacer un clavado invisible en las pendientes pronunciadas de 6:12 o más, o cuando se instala a temperaturas superiores a los 100 °F (38 °C).
4. RhinoRoof RSA se debe colocar en posición horizontal (paralela) al alero con la cara impresa hacia arriba, con superposiciones horizontales de 3 pulg. (7.6 cm) y superposiciones verticales de 6 pulg. (15.2 cm).
5. El RSA también se puede instalar verticalmente. Para instalarlo verticalmente, fíjelo con clavos para techo con cabeza de 3/8 de pulg. (9.5 mm) a lo largo del borde superior con 3 pulg. (7.6 cm) hacia abajo con 6 clavos equidistantes en todo el ancho de 36 pulg. (91.4 cm). Verifique que los clavos para techo se claven perpendicularmente al techo y que la cabeza quede plana y pareja con el techo, y que se selle bien con la superficie superior del RSA. Las superposiciones verticales deben ser de 6 pulg. (15.2 cm) y la superposiciones horizontales deben ser de 3 pulg. (7.6 cm), si es necesario.
6. Siempre comience a trabajar desde la parte más baja del techo y continúe hasta la parte más alta. Aplique la membrana en las áreas de los valles antes de aplicar la membrana en los aleros.
7. Corte la membrana en longitudes manejables. Desprenda 1 a 2 pies (30 a 60 cm) de la cubierta desprendible, alinee la membrana, y siga desprendiendo la cubierta desprendible de la membrana. Presione con las manos o camine sobre la membrana, y después pase un rodillo de 40 lbs (18.1 kg) o más de presión para alisar y fijar la membrana, sobre todo en las capas que se superponen. Si no hay un rodillo a la mano, o no es seguro usarlo, camine en las superposiciones y lo más posible en el área de aplicación para presionar el adhesivo y hacer que penetre en los poros del techo y las superposiciones.
8. En los aleros, el RSA se debe aplicar sobre el borde de goteo de metal del alero. No doble el RhinoRoof RSA para cubrir el borde del techo a menos que dicho borde esté cubierto por un borde de goteo u otro material protector. El RSA debe cubrir desde el alero hasta el techo hasta un punto que esté 24 pulg. (61 cm) dentro de la pared exterior. Esto debería estar por arriba de la acumulación máxima de hielo en la mayoría de las áreas. Consulte el reglamento de construcción local para conocer las normas específicas pertinentes.
9. Para las aplicaciones en las áreas de crestas y valles, desprenda la cubierta desprendible, centre la hoja sobre el valle o cresta, cúbrala y presiónela para que se fije en su lugar. Nota: Es muy importante que el RSA quede en contacto con la estructura del techo dentro y fuera de la zona del valle. El RSA nunca debe quedar suspendido ni unir valles dejando un hueco abajo. Se recomienda que pase un rodillo de presión o que camine en esa parte de la superficie. Preste mucha atención a TODAS las áreas de los bordes del perímetro.
10. No instale el RSA directamente sobre revestimientos anteriores del techo.
11. Repare los orificios, cavidades, desgarres, y cualquier otro daño u orificio de la membrana con un parche redondo de membrana que cubra la zona dañada más 6 pulg. (15.2 cm) a su alrededor. Si al retirar los sujetadores quedan orificios en la membrana, o si se producen otras vías de penetración por accidente, todo esto también debe ser parchado.
12. No instale sujetadores a través de la membrana sobre las áreas que no se apoyen en la estructura del techo, como por ejemplo, sobre las juntas que están entre los paneles estructurales adyacentes.
13. Instale entablados de protección en las áreas terminadas del techo para protegerlo contra daños que puedan ocurrir con el paso de personas, equipo, productos y materiales durante la instalación del resto del techo.
14. Para áreas de gran altitud, vientos fuertes o lluvia impulsada por el viento, se recomienda cubrir toda la superficie del techo con RhinoRoof RSA.

PRECAUCIONES

1. RhinoRoof RSA no está diseñado para estar expuesto indefinidamente a la intemperie. Todo el material para el techo debe instalarse en un periodo de 90 después de instalar el RSA. El RSA está diseñado para utilizarse bajo techos de tejas, metal, tejas asfálticas, pizarra y tablones.
2. RhinoRoof RSA es una barrera contra el aire, agua y vapor (0.03 perms). Debe instalarse sobre un espacio que esté adecuadamente ventilado. Siga TODAS las normas de construcción de su región geográfica para su tipo de estructura.
3. Dependiendo de la inclinación del techo y las condiciones de la superficie, es posible que se deba colocar material donde se puedan apoyar apoyar los materiales colocados en el techo.
4. Para aplicaciones de exposición prolongada, la capa superficial puede presentar una ligera decoloración; esto es normal y no afectará el rendimiento del producto.
5. Aunque este producto es adecuado para casi todos los tipos de techos principales, no se recomienda que se use bajo techos hechos con cobre y zinc. Tampoco se recomienda para algunos techos de metal a gran altura o que estén en el desierto del suroeste de Estados Unidos. En estos casos, se debe utilizar un material de recubrimiento adecuado para altas temperaturas, como el Titanium® PSU30.

PRECAUCIÓN – LEA LAS BUENAS PRÁCTICAS DE SEGURIDAD QUE ESTÁN A CONTINUACIÓN

Al igual que con cualquier producto para trabajos de techado, siempre apéguese a las prácticas y normas de seguridad (OSHA) para techados, y siempre utilice dispositivos de protección contra caídas al trabajar sobre los techos. Las cubiertas desprendibles tiene una superficie resbaladiza y deben retirarse del área de trabajo inmediatamente después de la aplicación del material. Tenga cuidado al caminar o pararse sobre el RhinoRoof RSA, puesto que la resistencia al deslizamiento puede variar según las condiciones de la superficie, el clima, el tipo de calzado y la inclinación del techo. El no usar calzado o equipo de seguridad adecuado puede ocasionar lesiones graves. Más allá de las instrucciones para la aplicación del RhinoRoof RSA, debe consultar las normas de construcción locales, del condado, del estado y nacionales, según corresponda.

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Frequently Asked Questions

"Installation FAQ Section" | "Fastners FAQ Section" | "PSU Peel & Stick FAQ Section"

General FAQ Section

Q. What types of roofing materials can I use synthetic roofing underlayment with?

A. See our "Selection Guide"

Q. Do Titanium/RhinoRoof underlayments meet ASTM D226 standards?

A. Yes,all of our synthetic underlayments meet and exeed the testing requirements of ASTM D226 Types I & II and ASTM 4869 Types II & IV

Q. Can Titanium underlaymants contribute to a buildings LEED® points?

A. Yes, Titanium underlayments contribute to LEED points.

Q. Where can I find the building code listings for Titanium underlayments?

A. See www.interwrap.com/roofing/ for the latest building code information

Q. Can I print my company logo onto Titanium or RhinoRoof underlayments?

A. Dual Logo printing programs are available for: Titanium UDL25 , UDL30, UDL50 & RhinoRoof U20.

Q. Where can I buy Titanium Synthetic Roofing Underlayments?

A. Go to www.interwrap.com/roofing/find.php to locate your nearest roofing distributor. Alternatively, ask for it at your nearest roofing products distributor or lumber yard.

Q. Why should I use synthetic underlayments instead of traditional felt papers?

A.

- Felt papers can tear easily whereas Titanium and RhinoRoof are high strength coated woven construction (20-25 times stronger than #30 felt)
- Felt does not have a mechanical slip resistant feature like Titanium which has a patented Sure-Foot® nodular slip resistant walking surface
- Felt becomes brittle within days of UV exposure whereas Titanium can be left exposed for up to 6 months
- Felt leaches oil in the heat and cracks in the cold whereas Titanium and RhinoRoof remain flexible from -40°F to 240°F
- Felt papers are susceptible to mold growth whereas Titanium and RhinoRoof are completely inert to mold
- Felt paper is prone to "blow-offs" in windy conditions whereas Titanium and RhinoRoof's high strength coated woven construction holds fast even in extreme conditions thereby protecting your roof from leaks and water
- Felts are not covered by warranties whereas Titanium products are covered by a limited lifetime warranty.
- Felt only comes in heavy 36" wide rolls whereas Titanium and RhinoRoof rolls are up to 8 times lighter and up to 48" wide (This makes installation faster with fewer laps)
- Felt comes in 2 or 4 square rolls whereas Titanium and RhinoRoof is available in 10 gross square rolls

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- A 5,000 square foot job requires 25 rolls of #30 felt whereas with Titanium or RhinoRoof you would only requires 5.3 rolls.
- Felt paper is not recyclable whereas Titanium and RhinoRoof products are 100% recyclable (where facilities exist)

Q. What approvals / certifications / building code approvals do InterWrap underlayments comply with?

A. Exceeds all the underlayment standards.

Q. Are Titanium underlayments breathable?

A. Titanium underlayments are classified as an air, water and vapor barrier with a permeability rating based on ASTM E96 of approximately .06 perms.

Q. If the product is an 'air water & vapor barrier' - can you apply on a wet or damp roof? Will it trap/prevent moisture from drying out/escaping?

A. No. Installation instructions require that it be installed over a clean and dry deck. If installed over a wet deck, it could trap the moisture causing premature rot of the deck over time.

Q. What is Titanium product made of?

A. 100% polypropylene coated woven material, certified minimum of 20% reclaimed content – Titanium products contribute to LEED® points and are 100% recyclable, recycle symbol #5.

Q. Is Titanium or RhinoRoof product flammable?

A. Products qualifies for a Class A under metal, tile, slate, fibreglass mat based asphalt shingles per ASTM 108

Q. What is meant by Titanium and RhinoRoof being inert to mold?

A. Titanium and RhinoRoof are completely unaffected by mold and do not contribute to mold growth. Mold requires a food source to feed on (such as the paper in asphalt saturated felt underlayments) Titanium and RhinoRoof are 100% synthetic therefore mold cannot feed on it. Mold may appear on the surface (Due to environmental conditions) but the product is completely unaffected by it.

Q. Do Titanium and RhinoRoof products have an R Rating?

A. R-value is a measure of thermal resistance used in the building and construction industry. At this time none of InterWrap roofing underlayments have an R value.

Installation FAQ Section

Q. Can I use Titanium underlayments on a low slope or flat roof?

A. Titanium underlayments are for use primarily under steep slope roofing types. Steep sloped roofs are defined as having a pitch greater than 4:12. For low sloped (defined as 2:12 to 4:12) or flat roof types follow your regional building codes.

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Frequently Asked Questions

Q. How do I install synthetic underlayments?

A. Our installation instructions are available in English, French & Spanish. Visit our website for the latest installation instructions. (www.interwrap.com/roofing)

Q. What is a "Batten System"?

A. A Batten is normally a 1" x 2" x 48" wood strip (in a few areas 6' or 10'). Most tile roofing have a cleat at one end and the cleat rests against the batten so it does not slide down the roof. These applications are normally 6:12 or greater unless the regional building codes requires differently. When the battens are installed they are spaced approx. 2 inches apart, end to end to allow water through.

Q. Can Titanium or RhinoRoof be put on top of felt?

A. Prefer installation applied to a clean roofing deck with no protrusions or voids- but yes"…. follow the surface preparation in our installation instructions available on our website.

Q. Can I use Titanium under clay tiles as I'm concerned about the foam application.

A.We are approved to be used with Polyset foam application for PSU30, UDL30 & UDL50. These products are approved by Polyset foam & InterWrap with warranties in place.

Q. Can Titanium products be put on top of other ice damming products (not our PSU)?

A. YES, in many cases UDL is applied over PSU brands including ours to extend the UV exposure time or so the foot traffic effects the UDL not the PSU products.

Q. What is the minimum slope requirement for use of mechanically attached roofing underlayments?

A. InterWrap Titanium synthetics follow the same practice as for #30 felt. In short they can be used in a single layer for steep slope 4/12 or greater. For low slope applications 2/12 to 4/12 it would require and minimum overlap of 50% coverage plus 1 inch.

Q. Why is there a minimum slope requirement?

A.Slope effects the speed at which water runs down the roof or overlaps. If there is driving wind and rain water can get under the overlap and go beyond the 4 inch over lap and therefore water can get to the raw deck.

Q. Is "Valley Flashing" required?

A. Yes, valleys should be prepared according to NRCA roofing practices, local codes or the primary roofing material manufacturer's recommendation. The use of UDL does not change good valley preparation and application.

Q. Can Titanium UDL be used with foam insulation?

A. Blown foam insulation by its very nature can make a roof attic not well ventilated. Titanium installation instructions state to use "above a properly ventilated areas, as it is considered a vapor barrier". Titanium UDL underlayment can be used with a blown foam system if the attic area is part of a closed loop, meaning it is part of the HVAC system. Therefore the attic air temperature and moisture is being controlled by the HVAC mechanicals.

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Q. Can Titanium be used for wall application?

A. Titanium products should only be used if the wall envelope design calls for an air water and vapor barrier. IF a breathable product is specified then NO.

Fastners FAQ Section

Q. Can staples be used to fasten UDL products?

A. Plastic cap staples with a 7/16" leg or greater are OK with UDL50 only. Note: 3/8" head x 1" length ring shank nails preferred

Q. Why can't I use staples?

A. Use of staples results in poor hold down performance and the opportunity for staples to slice the membrane during traffic on the roof. The square edges of a staple act like a knife and with any movement, it could slice material and causing leakage. Plastic Cap Staples can be used with UDL50 only.

Q. How many plastic cap nails per UDL roll?

A. For overlap = 250' long x 12" / 6" spacing = 500 nails would be required In the field = 3,000" /24" spacing = 125 nails per row x 3 rows Total = 875 nails. With 10% overage we would recommend approximately 1,000

Note: This would be nails required for extended exposure. If covering the underlayment within 24 hours you can use every other anchoring point in the field and overlaps and therefore approximately 500 nails could be used.)

Q. Why is it recommended to use plastic cap nails?

A. The 1" diameter plastic cap helps increase hold down strength in high wind conditions. If wind gets under the UDL underlayment and lifts the product against a 3/8" nail head (pillowing between anchoring points) the nail head can slice through the product. Plastic cap nails provide some flex and a larger surface area to hold down product and are much less likely to pull through the UDL material.

Q. When using UDL30 under metal roof - do you have to use plastic cap nails?

A. The use of 3/8" head x 1" minimum length leg corrosion resistant roofing nails can be used without caps, if covered in 5 working days with the primary roofing material. (Ring shank nail leg is preferred)

PSU Peel & Stick FAQ Section

Q. Is Titanium PSU or RhinoRoof RSA compatible with Dow Styrofoam?

A. No. the modified SBS asphalt will effect the Dow foam. Dow states the same.

Q. Can you apply PSU, RSA and/or UDLs on top of foam (no deck in between)?

A. PSU and RSA can not be directly applied over Dow foam board. Yes UDL can be applied over foam board as long as the manufacturer of the foam board's directions are followed. Be careful not to tighten down the anchoring devises on the foam board too tight as this will create water pounding.

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Frequently Asked Questions

Q. Can I put PSU over UDL?

A. Yes, this is frequently used in southern climates under tile. Our PSU30 has been approved and is a requirement for Miami-Dade code installations. You cannot use this method for areas that require PSU ice damming protection. In this case the PSU must be applied directly to the deck surface.

Q. Is PSU self sealing around nails?

A. PSU30 passes the ASTM D1970 Nail Sealability test.

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US Key Contacts

Mark Hinterlong - Director of Sales
Cell: 847-347-4157
Fax: 847-792-0190
Email: mhinterlong@interwrap.com

Adam Fuchs - U.S. Regional Sales Manager
(CO, IA, ID, KS, MN, MO, MT, ND, NE, SD, UT, WI, WY)
Office: 608-207-9567
Cell: 608-312-9457
Fax: 608-207-9569
Email: afuchs@interwrap.com

Patrick Main - U.S. Regional Sales Manager
(IL, KY, IN, MI, OH)
Cell: 630-338-9347
Email: pmain@interwrap.com

Chris Arriaga - U.S. Regional Sales Manager
(TX, NM, OK, AK, LA)
Cell: 210-643-9210
Fax: 832-218-6816
Email: carriaga@interwrap.com

John Ricci - U.S. Regional Sales Manager
(CT, DE, MD, MA, ME, NH, NJ, NY, WV, PA, RI, VA & VT)
Cell: 781-844-8366
Fax: 781-344-6111
Email: jricci@interwrap.com

Scott Fisher - U.S. Regional Sales Manager
(AL, FL, GA, MS, NC, SC, TN, S.VA)
Cell: 702-418-5110
Office/Fax: 813-681-6473
Email: sfisher@interwrap.com

Steve Del'Nero - U.S. Regional Sales Manager
(AZ, CA, NV, WA & OR)
Cell: 916-521-9192
Office: 916-258-3374
Fax: 916-258-3375
Email: sdel'nero@interwrap.com

Canadian Key Contacts

Charisse Barry - Canadian Regional Sales Manager
Office: 1-604-625-1965
Cell: 1-604-308-7116
Fax: 1-604-625-1966
Email: cbarry@interwrap.com

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