

BUILDING & CONSTRUCTION MATERIALS



ARCHITECT eBINDER DIVISION 7

Thermal & Moisture Protection

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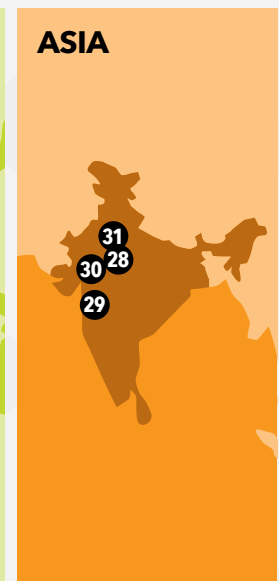
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CORPORATE PROFILE

Intertape Polymer Group Inc. is a recognized leader in the development, manufacture and sale of a variety of paper and film based pressure-sensitive and water-activated tapes, polyethylene and specialized polyolefin films, protective packaging, engineered coated products and packaging machinery for industrial and retail use. Headquartered in Montreal, Quebec and Sarasota, Florida, IPG employs approximately 3,500 employees with operations in 31 locations, including 21 manufacturing facilities in North America, four in Asia and one in Europe.



NORTH AMERICA

- | | | |
|------------------------|----------------------|-----------------------|
| 1. Ansonia, CT ■ | 10. Chicago, IL ● | 18. Montreal, QC ★ |
| 2. Atlanta, GA ● | 11. Corona, CA ● | 19. Salisbury, NC ● |
| 3. Bardstown, KY (2) ● | 12. Cornwall, ON ● | 20. Sarasota, FL ☆ |
| 5. Blythewood, SC ● | 13. Danville, VA ●▲ | 21. Schaumburg, IL ■ |
| 6. Brighton, CO ● | 14. Delta, BC ● | 22. Springfield, OH ● |
| 7. Carbondale, IL ● | 15. Marysville, MI ● | 23. Toronto, ON ● |
| 8. Carlstadt, NJ ● | 16. Menasha, WI ● | 24. Tremonton, UT ● |
| 9. Carrollton, TX ● | 17. Midland, NC ● | 25. Truro, NS ● |

EUROPE

- | |
|--------------------------|
| 26. Flensburg, Germany ▲ |
| 27. Porto, Portugal ● |

ASIA

- | |
|-----------------------|
| 28. Chopanki, India ● |
| 29. Daman, India ● |
| 30. Dahej, India ● |
| 31. Karoli, India ● |

● Manufacturing	■ Machine Assembly	▲ Distribution
★ Corporate Headquarters	☆ Executive Headquarters	





BUILDING & CONSTRUCTION SOLUTIONS

Intertape Polymer Group® offers a complete line of products specifically engineered to meet the most rigorous building and construction requirements. From high performance building wraps, roof underlayments and flashings to basic duct and painters tapes, IPG® has solutions for all your commercial and residential applications.

HISTORY OF PERFORMANCE

For over 20 years, IPG® has been providing products and moisture control solutions that improve the way buildings are designed, constructed, and operated. Our time-tested products have contributed to energy efficiency, occupant comfort, and durability in both commercial and residential settings.

PASSION FOR INNOVATION

Innovative solutions are a clear emphasis at IPG®. Our dedicated R & D teams maintain a continuous focus on bringing new products and technologies that fulfill both today's requirements and code listings and those of the future. Regardless of the design and construction challenge at hand—sustainability, ease of installation, building performance, energy efficiency—our passion for innovation results in high quality, cost effective solutions developed for better “building science.”

GLOBAL OPERATIONS

Intertape Polymer Group® is a global manufacturer of woven coated polyolefin fabrics. With manufacturing facilities in the United States, Canada and India, we can get your products to market fast. Our supply chain has the flexibility to produce products completely within one manufacturing facility, or assemble components drawn from IPG manufacturing facilities across the globe.

SOLVING DESIGN & CONSTRUCTION CHALLENGES

DISTRIBUTION PARTNERS

CONTRACTORS & BUILDERS

ARCHITECTS & SPECIFIERS

OWNERS





IPG STEWARDSHIP

At IPG, our corporate commitment has and continues to be focused on stewardship of our environment, providing a safe working environment for IPG employees, and manufacturing quality products in a responsible manner. IPG continuously seeks ways to minimize waste and environmental impacts throughout the manufacturing process. Stewardship is a commitment shared by the leaders and employees of IPG to continually look for opportunities to improve. Since 2013, IPG has significantly reduced its carbon footprint and VOC emissions.

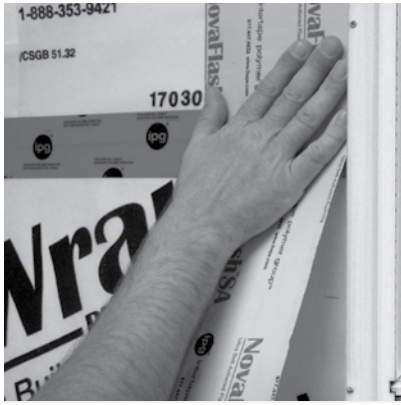
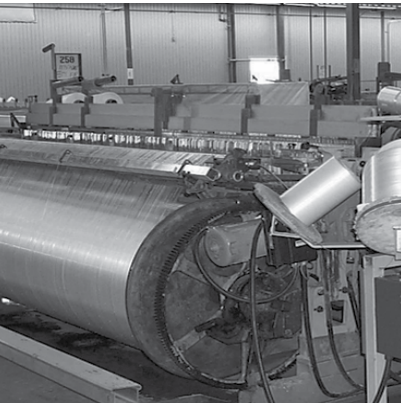
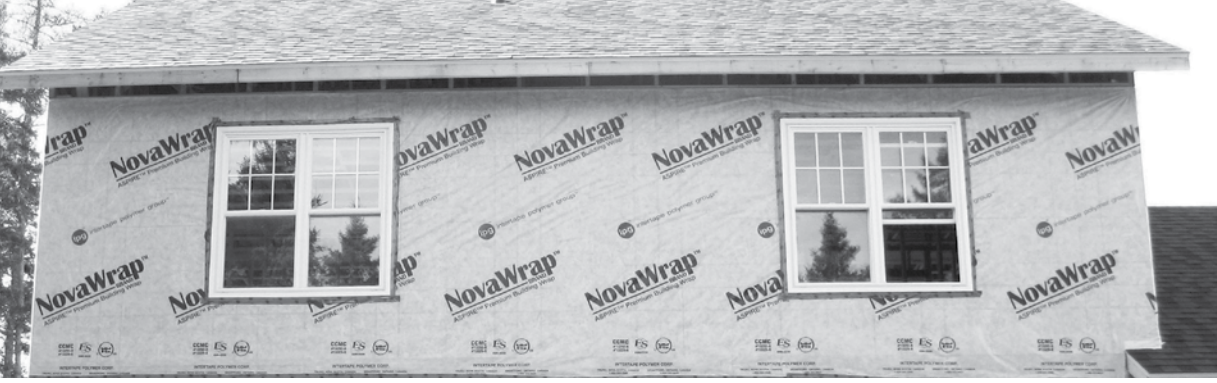
ENERGY STAR PARTNER

Intertape Polymer Group, an ENERGY STAR partner since 2009, was recognized for these key 2018 accomplishments:

- Achieving a one percent reduction in energy intensity to save over \$500,000 in avoided energy costs and nearly \$5.6 million since 2009.
- Engaging employees through ENERGY STAR Treasure Hunts at three locations, raising the total number of employees who have participated to 183 and the energy saving opportunities to \$1.8 million.
- Developing a “playbook” of best practices in energy management to enhance and sustain energy efficiency throughout operations.
- Working with local community leaders, businesses, and students to raise awareness about energy efficiency and support Certified Energy Manager training.
- Implementing a digital communications strategy to promote ENERGY STAR and energy accomplishments that resulted in 254,482 impressions and page views.

The 2019 Partner of the Year – Sustained Excellence Awards are given to a variety of organizations to recognize their contributions to reducing harmful carbon pollution through superior energy efficiency efforts. These awards recognize ongoing leadership across the ENERGY STAR program, including energy-efficient products, services, new homes, and buildings in the commercial, industrial, and public sectors. For more information about ENERGY STAR, visit energystar.gov.





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 1-800-565-2000 | www.itape.com

SECTION 073010 - ROOFING UNDERLAYMENT

SPEC NOTE: Following are suggested specification paragraphs to be used when specifying a premium roof underlayment under Section 073010. Insert the required paragraphs into the Section under the noted Articles, and make any required selections, such as roll size. Where selection is indicated with an [OR] statement, select the appropriate paragraph and delete the inappropriate statement. Delete all SPEC NOTES and [OR] statements prior to final printing.

This guide is for applications using an enhanced roof underlayment under all types of roofing materials as identified by ICC-ES AC188, Section 3.0.

DISCLAIMER: The manufacturer has reviewed the product information contained in this short form specification and is responsible for its accuracy. The information is organized and presented to assist the specification writer working on a construction project to select the appropriate products and to save time in writing the project specification Section and is not intended to replace the manufacturers installation instructions.

PART 1 - GENERAL

1.1 Introduction

- A. Synthetic roofing underlayment (NovaSeal® Ultra).

1.2 References

- A. ASTM International (ASTM)
 1. ASTM D146 – Standard Test Methods for Sampling and Testing Bitumen-Saturated Felts and Woven Fabrics for Roofing and Waterproofing.
 2. ASTM D226 – Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
 3. ASTM D1777 – Standard Test Method for Thickness of Textile Materials.
 4. ASTM D1970 – Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
 5. ASTM D1709 – Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method.
 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 D3786 – Standard Test Method for Bursting Strength of Textile Fabrics – Diaphragm Bursting Strength Tester Method.
 8. ASTM D4533 – Standard Test Method for Trapezoidal Tearing Strength of Geotextiles.
 9. ASTM D4869 – Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing (Liquid Water Transmission).
 10. ASTM D5034 – Standard Test Method for Breaking Strength of Geotextiles and Elongation of Textile Fabrics.
 11. ASTM D5035 – Standard Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)
 12. ASTM E108 – Standard Test Methods for Fire Tests of Roof Coverings.
 13. ASTM E96 – Standard Test Methods for Water Vapor Transmission of Materials.
 14. ASTM G154 – Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials.
- B. International Code Council (ICC): AC48 – Acceptance Criteria for Roof Underlayment For Use in Severe Climate Areas.



- C. CAN/CSA A220.1 (Section 4.4 Underlayment Materials)
- D. CAN/CSA A123.3 – Asphalt Saturated Organic Roofing Felt (Unrollability, Breaking Strength, Pliability, Felton Heating, Liquid Water Transmission)
- E. UL790 – Tests for Fire Resistance of Roof Covering Materials.

1.3 Submittals

- A. Submit under provisions of Section 013300.
- B. Product Data: Submit manufacturer's product data, building code compliance reports or test reports and the manufacturer's printed installation guidelines.
- C. Samples: Submit clearly labelled samples, 8-1/2 inches by 11 inches of each material specified.

1.4 Quality Assurance

- A. Manufacturer Qualifications: Obtain primary roof underlayment from a single manufacturer regularly engaged in manufacturing roof underlayment products.
- B. Installer Qualifications: Installer shall have experience with the installation of synthetic roof underlayment under similar conditions, and installation shall be in accordance with roof underlayment manufacturer's installation guidelines and recommendations.

1.5 Delivery, Storage and Handling

- A. Deliver roof underlayment in manufacturer's original, unopened, undamaged containers with identification labels intact.
- B. Store the roof underlayment as recommended by the manufacturer or in a clean, dry, protected location stored away from direct sunlight.

1.6 Project Conditions

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

1.7 Warranty

- A. At project closeout, provide to the owner or owners representative a copy of the manufacturer's Limited Warranty against Manufacturing Defect.
 1. NovaSeal Ultra® – Limited Lifetime

PART 2 - PRODUCTS

2.1 Manufacturer

- A. Intertape Polymer Group, 50 Abbey Avenue, Truro, NS, Canada, B2N 6W4, 1-800-565-2000; www.itape.com

2.2 Application/Scope

- A. Provide a temporary moisture resistant barrier over installed sloped roof decks equal to or greater than 4:12 pitch to Dry-In the structure. Finished roofing material must be installed over products specified in this section within:
 - (6 months) for NovaSeal Ultra
- B. Performance Characteristics:

NOVASEAL ULTRA ROOF UNDERLAYMENT: 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 D226 Type I (#15) or Type II (#30) felt. AC188, CCRR-1105
 2. Fire Performance: Class A Fire ASTM E108, Pass.
 3. Permeability: ASTM E96, <0.05 perms.
 4. Water Transmission: ASTM D4869, Pass.



5. Tear Strength: ASTM D4533, MD 50 lbs, CD 40 lbs
6. Tensile Strength: ASTM D5034, MD 150 lbs, CD 150 lbs
7. Burst Strength: ASTM D3786, 250 psi
8. Elongation: ASTM D5035, MD 18%, CD 15%
9. Weight per Square: ASTM D5261, 4.9 oz/yd²
10. Minimum Thickness: ASTM D1777, 13mil (0.33 mm)
11. Temperature Service Range: -40°C to 115°C (-40°F to 240°F)
12. Roll Size: 48 inches by 250 feet (1219 mm x 76200 mm), 10sq (92.9 sm).

2.3 Accessories

A. Permanent Fasteners.

1. 1" diameter (min) metal or plastic cap nails or cap staples are required when used under all roof claddings.

PART 3 - EXECUTION

3.1 Examination

- A. Examine substrates, areas and conditions under which the roof underlayment will be installed for compliance with manufacturer's installation requirements.

3.2 Installation

1. Install roof underlayment over roof sheathing, drip edges along eave edge and under drip edges along rake edges in accordance with manufacturer recommendations.
2. Line valleys with roof underlayment prior to overall roof installation.
3. Lay courses of NovaSeal® Ultra horizontally in shingle style fashion following the lap lines provided in 4" course overlaps and 6" end laps beginning along the eave edge. Offset end laps in successive courses by 6 feet.
4. Attach roof underlayment to roof sheathing with appropriate fasteners.
5. Permanent Installation: Install fasteners 6" on center along course and end overlaps and a single row 12" on center along the middle line of the field. Use the printed pattern on the product as a guide.
6. In high wind zones (at or above 110 mph (177 km/h) per IRC R301.2), fasteners must be installed at 4" on center on head and end laps with 12" on center in the field area.
7. For areas required to have an ice barrier under the IBC or IRC, a self-adhered polymer modified bitumen sheet, complying with ASTM D1970 or AC48 shall be used. NovaSeal® Ultra shall overlap the severe climate underlayment.

3.3 Field Quality Control

- A. Allow access to work areas for inspection and testing by manufacturer's designate, if required for warranty purposes. Daily inspection and testing may be required. Do not cover work until testing and inspection is accepted.

3.4 Protecting and Cleaning

- A. Protect installed roof underlayment from damage during installation, and the remainder of the construction period, per the manufacturer's written instructions.
- B. Touchup, repair or replace damaged products before substantial project completion.

END OF SECTION



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SECTION 073010 - ROOFING UNDERLAYMENT

SPEC NOTE: Following are suggested specification paragraphs to be used when specifying a premium roof underlayment under Section 073010. Insert the required paragraphs into the Section under the noted Articles, and make any required selections, such as roll size. Where selection is indicated with an [OR] statement, select the appropriate paragraph and delete the inappropriate statement. Delete all SPEC NOTES and [OR] statements prior to final printing.

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DISCLAIMER: The manufacturer has reviewed the product information contained in this short form specification and is responsible for its accuracy. The information is organized and presented to assist the specification writer working on a construction project to select the appropriate products and to save time in writing the project specification Section and is not intended to replace the manufacturers installation instructions.

PART 1 - GENERAL

1.1 Introduction

- A. Synthetic roofing underlayment (NovaSeal® Elite).

1.2 References

- A. ASTM International (ASTM)
 1. ASTM D146 – Standard Test Methods for Sampling and Testing Bitumen-Saturated Felts and Woven Fabrics for Roofing and Waterproofing.
 2. ASTM D226 – Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
 3. ASTM D1777 – Standard Test Method for Thickness of Textile Materials.
 4. ASTM D1970 – Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
 5. ASTM D1709 – Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method.
 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 D3786 – Standard Test Method for Bursting Strength of Textile Fabrics – Diaphragm Bursting Strength Tester Method.
 8. ASTM D4533 – Standard Test Method for Trapezoidal Tearing Strength of Geotextiles.
 9. ASTM D4869 – Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing (Liquid Water Transmission).
 10. ASTM D5034 – Standard Test Method for Breaking Strength of Geotextiles and Elongation of Textile Fabrics.
 11. ASTM D5035 – Standard Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)
 12. ASTM E108 – Standard Test Methods for Fire Tests of Roof Coverings.
 13. ASTM E96 – Standard Test Methods for Water Vapor Transmission of Materials.
 14. ASTM G154 – Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Non-metallic Materials.
- B. International Code Council (ICC): AC48 – Acceptance Criteria for Roof Underlayment For Use in Severe Climate Areas.



- C. CAN/CSA A220.1 (Section 4.4 Underlayment Materials)
- D. CAN/CSA A123.3 – Asphalt Saturated Organic Roofing Felt (Unrollability, Breaking Strength, Pliability, Felton Heating, Liquid Water Transmission)
- E. UL790 – Tests for Fire Resistance of Roof Covering Materials.

1.3 Submittals

- A. Submit under provisions of Section 013300.
- B. Product Data: Submit manufacturer's product data, building code compliance reports or test reports and the manufacturer's printed installation guidelines.
- C. Samples: Submit clearly labelled samples, 8-1/2 inches by 11 inches of each material specified.

1.4 Quality Assurance

- A. Manufacturer Qualifications: Obtain primary roof underlayment from a single manufacturer regularly engaged in manufacturing roof underlayment products.
- B. Installer Qualifications: Installer shall have experience with the installation of synthetic roof underlayments under similar conditions, and installation shall be in accordance with roof underlayment manufacturer's installation guidelines and recommendations.

1.5 Delivery, Storage and Handling

- A. Deliver roof underlayment in manufacturer's original, unopened, undamaged containers with identification labels intact.
- B. Store the roof underlayment as recommended by the manufacturer or in a clean, dry, protected location stored away from direct sunlight.

1.6 Project Conditions

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

1.7 Warranty

- A. At project closeout, provide to the owner or owners representative a copy of the manufacturer's Limited Warranty against Manufacturing Defect.
 1. NovaSeal® Elite – 40 Years.

PART 2 - PRODUCTS

2.1 Manufacturer

- A. Intertape Polymer Group, 50 Abbey Avenue, Truro, NS, Canada, B2N 6W4, 1-800-565-2000; www.itape.com

2.2 Application/Scope

- A. Provide a temporary moisture resistant barrier over installed sloped roof decks equal to or greater than 4:12 pitch to Dry-In the structure. Finished roofing material must be installed over products specified in this section within:
 - (6 months) for NovaSeal® Elite
- B. Performance Characteristics:
 NOVASEAL® ELITE ROOF UNDERLAYMENT: 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 D226 Type I (#15) or Type II (#30) felt. AC188, CCRR-1105
 2. Fire Performance: Class A Fire ASTM E108, Pass.
 3. Permeability: ASTM E96, <0.05 perms.
 4. Water Transmission: ASTM D4869, Pass.



5. Tear Strength: ASTM D4533, MD 30 lbs, CD 28 lbs
6. Tensile Strength: ASTM D5034, MD 115 lbs, CD 120 lbs
7. Burst Strength: ASTM D3786, 180 psi
8. Elongation: ASTM D5035, MD 18%, CD 15%
9. Weight per Square: ASTM D5261, 4.0 oz/yd²
10. Minimum Thickness: ASTM D1777, 10mil (0.25 mm)
11. Temperature Service Range: -40°C to 115°C (-40°F to 240°F)
12. Roll Size: 48 inches by 250 feet (1219 mm x 76200 mm), 10sq (92.9 sm).

2.3 Accessories

A. Permanent Fasteners.

1. 1" diameter (min) metal or plastic cap nails or cap staples are required when used under all roof claddings.

PART 3 - EXECUTION

3.1 Examination

- A. Examine substrates, areas and conditions under which the roof underlayment will be installed for compliance with manufacturer's installation requirements.

3.2 Installation

1. Install roof underlayment over roof sheathing, drip edges along eave edge and under drip edges along rake edges in accordance with manufacturer recommendations.
2. Line valleys with roof underlayment prior to overall roof installation.
3. Lay courses of NovaSeal® Elite horizontally in shingle style fashion following the lap lines provided in 4" course overlaps and 6" end laps beginning along the eave edge. Offset end laps in successive courses by 6 feet.
4. Attach roof underlayment to roof sheathing with appropriate fasteners.
5. Permanent Installation: Install fasteners 6" on center along course and end overlaps and a single row 12" on center along the middle line of the field. Use the printed pattern on the product as a guide.
6. In high wind zones (at or above 110 mph (177 km/h) per IRC R301.2), fasteners must be installed at 4" on center on head and end laps with 12" on center in the field area.
7. For areas required to have an ice barrier under the IBC or IRC, a self-adhered polymer modified bitumen sheet, complying with ASTM D1970 or AC48 shall be used. NovaSeal Elite shall overlap the severe climate underlayment.

3.3 Field Quality Control

- A. Allow access to work areas for inspection and testing by manufacturer's designate, if required for warranty purposes. Daily inspection and testing may be required. Do not cover work until testing and inspection is accepted.

3.4 Protecting and Cleaning

- A. Protect installed roof underlayment from damage during installation, and the remainder of the construction period, per the manufacturer's written instructions.
- B. Touchup, repair or replace damaged products before substantial project completion.

END OF SECTION



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PART 1 - GENERAL

1.1 Introduction

- A. Synthetic roofing underlayment (NovaSeal® Prime).

1.2 References

- A. ASTM International (ASTM)
 1. ASTM D146 – Standard Test Methods for Sampling and Testing Bitumen-Saturated Felts and Woven Fabrics for Roofing and Waterproofing.
 2. ASTM D226 – Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
 3. ASTM D1777 – Standard Test Method for Thickness of Textile Materials.
 4. ASTM D1970 – Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
 5. ASTM D1709 – Standard Test Methods for Impact Resistance of Plastic Film by the Free-Falling Dart Method.
 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 D3786 – Standard Test Method for Bursting Strength of Textile Fabrics – Diaphragm Bursting Strength Tester Method.
 8. ASTM D4533 – Standard Test Method for Trapezoidal Tearing Strength of Geotextiles.
 9. ASTM D4869 – Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing (Liquid Water Transmission).
 10. ASTM D5034 – Standard Test Method for Breaking Strength of Geotextiles and Elongation of Textile Fabrics.
 11. ASTM D5035 – Standard Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)
 12. ASTM E108 – Standard Test Methods for Fire Tests of Roof Coverings.
 13. ASTM E96 – Standard Test Methods for Water Vapor Transmission of Materials.
 14. ASTM G154 – Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Non-metallic Materials.
- B. International Code Council (ICC): AC48 – Acceptance Criteria for Roof Underlayment For Use in Severe Climate Areas.
- C. CAN/CSA A220.1 (Section 4.4 Underlayment Materials)



- D. CAN/CSA A123.3 – Asphalt Saturated Organic Roofing Felt (Unrollability, Breaking Strength, Pliability, Felton Heating, Liquid Water Transmission)
- E. UL790 – Tests for Fire Resistance of Roof Covering Materials.

1.3 Submittals

- A. Submit under provisions of Section 013300.
- B. Product Data: Submit manufacturer's product data, building code compliance reports or test reports and the manufacturer's printed installation guidelines.
- C. Samples: Submit clearly labelled samples, 8-1/2 inches by 11 inches of each material specified.

1.4 Quality Assurance

- A. Manufacturer Qualifications: Obtain primary roof underlayment from a single manufacturer regularly engaged in manufacturing roof underlayment products.
- B. Installer Qualifications: Installer shall have experience with the installation of synthetic roof underlayments under similar conditions, and installation shall be in accordance with roof underlayment manufacturer's installation guidelines and recommendations.

1.5 Delivery, Storage and Handling

- A. Deliver roof underlayment in manufacturer's original, unopened, undamaged containers with identification labels intact.
- B. Store the roof underlayment as recommended by the manufacturer or in a clean, dry, protected location stored away from direct sunlight.

1.6 Project Conditions

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

1.7 Warranty

- A. At project closeout, provide to the owner or owners representative a copy of the manufacturer's Limited Warranty against Manufacturing Defect.
 1. NovaSeal® Prime – 20 Years.

PART 2 - PRODUCTS

2.1 Manufacturer

- A. Intertape Polymer Group, 50 Abbey Avenue, Truro, NS, Canada, B2N 6W4, 1-800-565-2000; www.itape.com

2.2 Application/Scope

- A. Provide a temporary moisture resistant barrier over installed sloped roof decks equal to or greater than 4:12 pitch to Dry-In the structure. Finished roofing material must be installed over products specified in this section within:
 - (3 months) for NovaSeal® Prime
- B. Performance Characteristics:
 NOVASEAL PRIME ROOF UNDERLAYMENT: 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 D226 Type I (#15) or Type II (#30) felt. (CCRR-1105)
 2. Fire Performance: Class A Fire ASTM E108, Pass.
 3. Permeability: ASTM E96, <0.05 perms.
 4. Water Transmission: ASTM D4869, Pass.
 5. Tear Strength: ASTM D4533, MD 24 lbs, CD 24 lbs
 6. Tensile Strength: ASTM D5034, MD 90 lbs, CD 90 lbs
 7. Burst Strength: ASTM D3786, 140 psi
 8. Elongation: ASTM D5035, MD 18%, CD 15%



9. Weight per Square: ASTM D5261, 3.0 oz/yd²
10. Minimum Thickness: ASTM D1777, 7.3mil (0.19 mm)
11. Roll Size: 48 inches by 250 feet (1219 mm x 76200 mm)

2.3 Accessories

A. Permanent Fasteners.

1. 1" diameter (min) metal or plastic cap nails or cap staples are required when used under all roof claddings.

PART 3 - EXECUTION

3.1 Examination

- A. Examine substrates, areas and conditions under which the roof underlayment will be installed for compliance with manufacturer's installation requirements.

3.2 Installation

1. Install roof underlayment over roof sheathing, drip edges along eave edge and under drip edges along rake edges in accordance with manufacturer recommendations.
2. Line valleys with roof underlayment prior to overall roof installation.
3. Lay courses of NovaSeal Prime horizontally in shingle style fashion following the lap lines provided in 4" course overlaps and 6" end laps beginning along the eave edge. Offset end laps in successive courses by 6 feet.
4. Attach roof underlayment to roof sheathing with appropriate fasteners.
5. Permanent Installation: Install fasteners 6" on center along course and end overlaps and a single row 12" on center along the middle line of the field. Use the printed pattern on the product as a guide.
6. In high wind zones (at or above 110 mph (177 km/h) per IRC R301.2), fasteners must be installed at 4" on center on head and end laps with 12" on center in the field area.
7. For areas required to have an ice barrier under the IBC or IRC, a self-adhered polymer modified bitumen sheet, complying with ASTM D1970 or AC48 shall be used. Umbra shall overlap the severe climate underlayment.

3.3 Field Quality Control

- A. Allow access to work areas for inspection and testing by manufacturer's designate, if required for warranty purposes. Daily inspection and testing may be required. Do not cover work until testing and inspection is accepted.

3.4 Protecting and Cleaning

- A. Protect installed roof underlayment from damage during installation, and the remainder of the construction period, per the manufacturer's written instructions.
- B. Touchup, repair or replace damaged products before substantial project completion.

END OF SECTION



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SECTION 072500 - WEATHER BARRIERS

SECTION 072700 - AIR BARRIERS

SECTION 072800 - WATER RESISTIVE BARRIERS

SPEC NOTE: Following are suggested specification paragraphs to be used when specifying a building wrap membrane as a water-resistive barrier under Section 072700. Insert the required paragraphs into the Section under the noted Articles, and make any required selections, such as roll size. Where selection is indicated with an [OR] statement, select the appropriate paragraph and delete the inappropriate statement. Delete all SPEC NOTES and [OR] statements prior to final printing.

DISCLAIMER: The manufacturer has reviewed the product information contained in this short form specification and is responsible for its accuracy. The information is organized and presented to assist the specification writer working on a construction project to select the appropriate products and to save time in writing the project specification Section and is not intended to replace the manufacturers installation instructions.

PART 1 - GENERAL

1.1 Introduction

A. Includes but not limited to:

1. Furnish and install mechanically-fastened, thin sheet building wraps used as water-resistive barriers on exterior side of exterior wall assemblies as described in Contract Documents.

1.2 References

- A. ASTM E96 "Standard Test Method for Water Transmission of Materials"
- B. AATCC 127 "Hydrostatic Head Test"
- C. ASTM D4533 "Standard Test Method for Trapezoidal Tearing Strength of Geotextiles"
- D. ASTM E2178 "Standard Test Method for Air Permeance of Building Materials"
- E. TAPPI T460 "Air Resistance of Paper"

1.3 Submittals

- A. Submit in accordance with Division 1 requirements
- B. Product Data: Submit manufacturer's product data, building code compliance reports or test reports and the manufacturer's printed installation guidelines.
- C. Samples: Submit clearly labelled samples, 3 by 4 in. minimum size of each material specified.
- D. Quality Assurance – Installer Qualifications:
 1. Installer shall have experience with installation of water-resistive barrier materials; and
 2. Installation shall be in accordance with the water-resistive building material manufacturer's installation guidelines.
- E. Shop Drawing of Wall Assembly Mock-Up: Submit shop drawings of proposed wall assembly mock-ups showing the location of the water-resistive barrier building wrap in the wall assembly and location of all window and door openings, penetrations and terminations involving structures attached to the exterior wall.

1.4 Quality Assurance – Water-Resistive Barrier Building Wrap

- A. Manufacturer: Obtain primary water-resistive barrier building wrap from a single manufacturer regularly engaged in manufacturing water-resistive barrier building wrap products.



- B. Accredited Laboratory Testing for Water-Resistive Barrier Building Wrap: Laboratory accredited by the International Accreditation Service Inc. (IAS) or the Standards Council of Canada (SCC).
 - C. Pre-Construction Meeting: At least 2 weeks prior to the installation of the water-resistive building wrap, hold a pre-installation meeting. Attendees shall include representatives of related trades. Agenda shall include a review of wall assembly mock-up drawings, sequence of construction, coordination with substrate preparation, materials approved for use, compatibility of materials, coordination with installation of adjacent and covering materials, and details of construction.
 - D. Wall Assembly Mock-Up: Build a mock-up representative of the primary exterior wall assemblies using approved water-resistive barrier building wrap, fasteners, flashing tape and related accessories as per the water-resistive barrier building wrap manufacturer's installation guidelines. Mock-up shall be approximately 8 feet long by 8 feet high and include all components of the exterior wall assembly.
- 1.5 Delivery, Storage and Handling
- A. Deliver water-resistive barrier building wrap and components in the manufacturer's original, unopened packaging labelled with the manufacturer's information and product name.
 - B. Store the water-resistive barrier building wrap in the original, unopened packaging or in a clean, dry, protected location stored away from direct sunlight.
- 1.6 Scheduling
- A. Review requirements for sequencing of installation of water-resistive barrier building wrap with the installation of windows, doors, louvers and flashing materials to ensure a weather-tight barrier assembly.
 - B. Schedule installation of exterior cladding within 60 days of the water-resistive barrier building wrap installation.
- 1.7 Warranty
- A. Material Warranty: Provide manufacturer's water-resistive and air barrier building wrap warranty.

PART 2 - PRODUCTS

2.1 Manufacturer

- A. Intertape Polymer Group, 50 Abbey Avenue, Truro, NS, Canada, B2N 6W4, 1-800-565-2000; www.itape.com

2.2 Water-Resistive and Air Barrier Building Wrap

- A. NovaWrap™ Aspire™ Building Wrap
- B. Performance Characteristics:
 1. Air Penetration: < 0.02 L/S.M2 @ 75 Pa
 2. Water Vapor Transmission \geq 5 Perms & \leq 20 Perms as tested by ASTM E96, Method B
 3. Water Penetration Resistance of >400 cm on hydrostatic head when tested in accordance with AATCC 127
 4. Air Infiltration Resistance at >1800 seconds/100 cc when tested in accordance with TAPPI T460
 5. Surface Burning Characteristics: Class A when tested in accordance with ASTM E84
 6. Mechanically fastened, membrane air barrier shall meet requirements of ICC-ES AC38, "Acceptance Criteria for Water-Resistive Barriers", CCMC Technical Guide 07102, "Sheathing Membrane, Breather-Type, CCMC Technical Guide 07273, "Air Barrier Materials".

2.3 Auxiliary Material

- A. Specify auxiliary materials as shown below or other alternative materials approved by the water-resistive barrier & air barrier building wrap manufacturer.
 1. NovaFlash™ SA Ultra Self-Adhered Flashing
 2. Tuck® Tape Sheathing Tape



PART 3 - EXECUTION

3.1 Examination

- A. Examine substrates, areas and conditions under which the water-resistive & air barrier will be installed, with installer present, for compliance with manufacturer's requirements.

3.2 Installation

1. One layer of NovaWrap™ Aspire™ should be installed after the wall framing is completed and before the windows and doors are installed. The NovaWrap™ Aspire™ should be installed on the outside of the insulation cavity, preferably over approved exterior sheathing board or insulation with the printed side installed so that it faces out.
2. NovaWrap™ Aspire™ should start at an outside corner, ensuring the roll remains vertical, unroll the material across the face of the sheathing making sure the roll remains plumb and that the bottom edges of NovaWrap™ Aspire™ extend over the foundation by 2 inches (5 cm). The application should start at an outside corner extending around the starting point corner by at least 6 inches (15 cm). Attach NovaWrap™ Aspire™ so that it is tight and flat.
3. NovaWrap™ Aspire™ must be fastened with plastic capped fasteners with sufficient length to penetrate the stud framing or foam board. When installing over metal framing, use capped screws with washers. Fasteners should be spaced at maximum 32 inches (81 cm) oncenter (both vertically and horizontally)
4. Material higher on the wall should overlap materials lower on the wall. Ensure proper shingling throughout the installation to properly shed water. Horizontal overlaps should be at least 6 inches (15 cm), and vertical flaps at least 4 inches (10 cm). For air barrier installations, the horizontal and vertical seams must be taped with Tuck® Tape Sheathing Tape.
5. When installing around window or door openings, use an inverted Y-cut in the housewrap, pulling the flaps in, folding excess material (or trimming excess material), fastening securely through all layers to a framing membrane. Use NovaFlash SA Flashing Tape for flashing around window and door penetrations. Refer to NovaFlash SA install instructions.
6. When used over wood-based sheathing in exterior plaster applications, 2 layers of product shall be applied over sheathing in accordance with Section 2510.6 of the IBC, as applicable, except for cementitious coatings or exterior insulation and finishing systems, application shall be in accordance with the evaluation report on the exterior coating.
7. When installed In Canada, NovaWrap™ Aspire™ should be installed in accordance to Article 9.27.3.3 of the NBC 2015 and manufacturer's current instructions. Failure to follow these instructions will void product warranty.
8. After installation is complete, and before exterior cladding is installed, inspect the NovaWrap™ Aspire™ for tears. If issues are found, tape the imperfections with Tuck® Tape Sheathing Tape. NovaWrap™ Aspire™ should be installed with a minimum 1/2 inch (1 cm) air space between the sheathing membrane and cladding, unless otherwise specified. A concealed airspace exceeding 1 inch (2.5 cm) in width must contain proper fire stopping in accordance with Subsection 9.10.16 of the NBC 2015.
9. Although NovaWrap™ Aspire™ is stabilized with respect to degradation from sunlight for six (6) months, it should not be left exposed to sunlight indefinitely. IPG® recommends that NovaWrap™ Aspire™ should be covered with cladding and the wall cavity closed within 60 days of installation.

3.3 Field Quality Control

- A. Allow access to work areas for inspection and testing by manufacturer's designate, if required for warranty purposes. Daily inspection and testing may be required. Do not cover work until testing and inspection is accepted.

3.4 Protecting and Cleaning

- A. Protect installed building wrap from damage during installation, and the remainder of the construction period, according to the manufacturer's written instructions.



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SECTION 076500 - FLEXIBLE FLASHING

SPEC NOTE: Following are suggested specification paragraphs to be used when specifying a self-adhering flashing incorporated under Section 076500. Insert the required paragraphs into the Section under the noted Articles, and make any required selections, such as roll size. Where selection is indicated with an [OR] statement, select the appropriate paragraph and delete the inappropriate statement. Delete all SPEC NOTES and [OR] statements prior to final printing.

This guide is for self-adhered flashing applications in conjunction with weather barrier assemblies. These high performance flashing membranes are designed to help stop the passage of bulk water and airflow movement and are vapor non-permeable. This flashing offers protection for the building envelope by providing a water-resistant barrier around penetrations and rough openings. This flashing is specifically designed for above grade, vertical wall surface openings (window, door and skylight) penetrations.

DISCLAIMER: The manufacturer has reviewed the product information contained in this short form specification and is responsible for its accuracy. The information is organized and presented to assist the specification writer working on a construction project to select the appropriate products and to save time in writing the project specification Section and is not intended to replace the manufacturers installation instructions.

PART 1 - GENERAL

1.1 Introduction

- A. Self-adhering flashing membrane (NovaFlash SA)
- B. Related Work
 - 1. Section 06100 – Rough Carpentry
 - 2. Section 07260 – Vapor Retarders (Weather-Resistant Barriers)
 - 3. Section 07270 – Air Barriers
 - 4. Section 07620 – Sheet Metal Flashing and Trim
 - 5. Section 07900 – Joint Sealers
 - 6. Section 08050 – Basic Door and Window Materials and Methods
 - 7. Section 08500 – Windows
 - 8. Section 08600 – Skylights

1.2 References

- A. ASTM International (ASTM)
 - 1. ASTM E2112 – Standard Test Methods for Installation of Exterior Windows, Doors and Skylights.
 - 2. ASTM D1777 – Standard Test Method for Thickness of Textile Materials.
 - 3. ASTM D1970 – Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
 - 4. ASTM D5035 – Standard Test Method for Breaking Force and Elongation of Textile Fabrics (Strip Method)
 - 5. ASTM E96 – Standard Test Methods for Water Vapor Transmission of Materials.
- B. AAMA 711.13 – Voluntary Specification for Self-Adhering Flashing Used for Installation of Exterior Wall Fenestration Products

1.3 Submittals

- A. Submit under provisions of Section 013300.
- B. Product Data: Submit manufacturer's product data, building code compliance reports or test reports and the manufacturer's printed installation guidelines.



C. Samples: Submit clearly labelled samples of each material specified.

1.4 Quality Assurance

A. Installer Qualifications: Installer shall have documented, successful experience with the installation of self-adhering flashing membrane under similar conditions, and installation shall be in accordance with product manufacturer's installation guidelines and recommendations.

1.5 Delivery, Storage and Handling

- A. Deliver materials to job site in manufacturer's original, unopened, undamaged containers with identification labels intact.
- B. Store the flashing material as recommended by the manufacturer or in a clean, dry, protected location stored away from direct sunlight.
- C. Read and follow instructions from SDS for proper handling and disposal of materials.

1.6 Project Conditions

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimal results.
- B. Do not install self-adhered flashing on wet or damp surfaces. Apply to surfaces free of dirt, oils, lubricants and other debris.

1.7 Warranty

- A. At project closeout, provide to the owner or owners representative a copy of the manufacturer's Limited Warranty against Manufacturing Defect.
 1. NovaFlash SA – 10 Years.

PART 2 - PRODUCTS

2.1 Manufacturer

- A. Intertape Polymer Group, 50 Abbey Avenue, Truro, NS, Canada, B2N 6W4, 1-800-565-2000; www.itape.com

2.2 Materials

- A. Self-Adhering – NovaFlash SA Ultra Self-Adhered Flashing
 1. Basis of Design: Self-adhering straight flashing tape is based on NovaFlash SA
 2. Description:
 - a. Face Material Composition: Woven, coated polypropylene laminate barrier.
 - b. Face Color: Beige
 - c. Adhesive Composition: Synthetic Butyl Adhesive
 - d. Thickness: 13mil
 - e. Release Liner: 1 piece polypropylene liner
 - f. Dimension: 4 inches, 6 inches, 9 inches or 12 inches wide by 75 feet
- B. Performance Characteristics:

NOVAFLASH SA SELF-ADHERED FLASHING: Polyolefin based, asphalt free, high strength, reinforced self-adhered flashing tape for use in flashing window and door penetrations.

 1. AAMA 711-13: Adhesion rating Type A, thermal exposure Class 3
 2. Nail Sealability: ASTM D1970M-13 7.9 – Pass (Initial Observation & After Thermal Cycling)
 3. Peel Adhesion: AAMA 711-13
 - a. OSB – 0.61 N/mm
 - b. Aluminum – 0.73 N/mm
 - c. Vinyl – 0.74 N/mm
 - d. Plywood – 0.71 N/mm
 - e. Elevated Temperature – 0.92 N/mm
 - f. Thermal Cycling – 1.00 N/mm
 - g. Accelerated Aging – 0.99 N/mm
 4. Minimum Thickness: ASTM D1777, 13mil (0.33 mm)



2.3 Accessories

- A. Sheathing Tape: Tuck® Tape Sheathing Tape as manufactured by IPG Cantech.
 1. Description: Pressure Sensitive, polypropylene substrate with acrylic based adhesive.

PART 3 - EXECUTION

3.1 Examination

- A. Examine substrates, areas and conditions under which the self-adhered flashing will be installed for compliance with manufacturer's installation requirements.
- B. Review requirements for sequencing of installation of self-adhered flashing assembly with installation of windows, doors, louvers and wall penetrations to provide a weather-tight flashing assembly. (Specifier Note: Flashing manufacturer recommends weather barrier be installed before the installation of the windows or doors. Use these opening preparation and flashing articles for flashing non-flanged windows when they will be installed after the installation of a weather barrier.)

3.2 Opening Preparation (for use with non-flanged windows – all cladding types)

- A. Prepare an inverted "Y" cut in the weather barrier membrane, pulling the side flaps in, folding or trimming excess material, and fastening securely through all layers to framing.
- B. Cut a head flap at 45 degree angle in the weather barrier membrane at window head to expose 8 inches of sheathing. Temporarily secure weather barrier membrane flap away from sheathing with Tuck Tape.

3.3 Flashing (for use with non-flanged windows – all cladding types)

- A. Cut a piece of NovaFlash SA the width of the sill plus an additional 2 x flashing width.
- B. Cover horizontal sill by aligning NovaFlash SA edge with inside edge of sill. Adhere to rough opening across sill. Cut flashing in each corner to create a flap. Fold flap on to sill, then place second strip of flashing overlapping first piece and ensuring at least 6 inches (15 cm) goes up each side of window jam.
- C. Install window according to manufacturer's instructions.
- D. Apply a minimum 4 inch (10 cm) wide strip of NovaFlash SA at jambs overlapping entire mounting flange. Extend jamb flashing 1 inch (2.5 cm) above the top of rough opening.
- E. Apply a bead of sealant along top flange of window.
- F. Position head flashing so bottom edge of flashing butts up against top edge of window. And should overhang and over the jamb by 1 inch (2.5 cm).

3.4 Protecting and Cleaning

- A. Protect installed self-adhered flashing from damage during installation, and the remainder of the construction period, per the manufacturer's written instructions.
- B. Touchup, repair or replace damaged products before substantial project completion.

END OF SECTION



NovaSeal[®] ULTRA by Tuck

Specially Designed For Tile, Shingles, Metal, Slate and Shake



PROTECT WHAT'S UNDER
YOUR ROOF.



SUPERIOR RESISTANCE TO THE ELEMENTS



FEATURES & BENEFITS

NovaSeal® Ultra is a superior, mechanically attached synthetic roof underlayment for use on sloped roofs.

- Lifetime Warranty
- Safer work environment preventing tool slippage
- Up to 6 months UV resistance
- ICC-ES AC 188 Approved
- Miami-Dade County Approved
- Florida Building Code Approved
- Texas Department of Insurance Listed
- Class A ASTM E108
- CAN/CSA A220.1, CSA A123.3
- All temperature performance -40°C to 115°C (-40°F to 240°F)
- Will not crack or dry out under tile or metal
- Contributes to LEED points, 100% recyclable
- Tan surface keeps roof cooler to work on
- Strong and pliable material for all-temperature installations
- Durable, woven construction holds up to rugged tile, metal and slate installs
- 5X lighter and 20X stronger than organic oil saturated felts



CAN/CSA A220.1
 CSA A123.3
 FLORIDA BUILDING CODE
 CLASS A ASTM E108



TECHNICAL DATA

		NovaSeal® Ultra
Base Weight	ASTM D5261	4.9 oz/y ²
Class A Fire	ASTM E108	Pass
Nail Sealability	ASTM D1970 Modified	Pass
Permeability	ASTM E96	<0.05 perms
Water Transmission	ASTM D4869	Pass
Trapezoidal Tear Strength	ASTM D4533	50 lbs md, 40 lb xd
Tensile Strength	ASTM D5034	150 lbs md, 150 lb xd
Tongue Tear Strength	ASTM D2261	48 lbs md, 48 lb xd
Burst Strength	ASTM D3786	250 psi
Elongation	ASTM D5035	18% MD, 15% CD
Minimum Thickness	ASTM D1777	13 mil (0.33 mm)
Ultraviolet Light Exposure Resistance		6 months
Service Temperature Range		-40°C to 115°C (-40°F to 240°F)

Roll & Pallet Specifications

		NovaSeal Premium
Length per Roll		250' / 76.2 m
Width per Roll		48" / 122 cm
Weight per Roll		35 lbs / 16 kg
Roll Size		10 sq / 93 m ²
Rolls per Pallet		36

NovaSeal Ultra Compliance & Building Codes

- Meets and Exceeds ASTM D226 & D4869
- Miami Dade County Approved
- Florida Building Code Approved – FL26367
- Texas Department of Insurance Listed
- Class A ASTM E108
- CAN/CSA A220.1, CSA A123.3
- AC 188, CCRR-1105



MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Polypropylene Fabrics

PRODUCT CODE(S): NovaSeal® Prime, Elite & Ultra Synthetic Roof Underlayments

WHMIS Classification: Not Controlled

HMIS CODES: H F R P
0 1 0 B

SECTION I - MANUFACTURER IDENTIFICATION

Manufacturer's Name: Intertape Polymer Incorporated

Manufacturer's Address: 50 Abbey Avenue, Truro, Nova Scotia, Canada

Emergency Phone: 902.896.1033

Information Phone: 800.565.2000

Date Prepared: February 25, 2021

Prepared by: Tawnya MacNeil

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Non-hazardous, comprised mainly of polypropylene. Colored and printed fabrics contain small quantities of proprietary pigments that may be health hazards in concentrated form. Contained in the matrix of the fabric, they do not make the fabric hazardous. More details on specific colors may be available upon request.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance and Odor: Flexible sheet, slight odor

Boiling Point: Not Available

Specific Gravity: 0.90 – 0.95

Vapor Density: Not Available

Evaporation Rate: Not Available

Solubility in Water: Insoluble in cold and hot water

pH: Not Available

Vapor Pressure: Not Available

Melting Point: 120-170°C

Coefficient of Oil/Water Distribution: Not soluble in water or oil.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flashpoint: 315°C

Flammable Limits in Air by Volume: Lower: Not Available Upper: Not Available

Extinguishing Media: Foam, CO₂, Dry Chemical, Water

Special Firefighting Procedures: All individuals required to enter the hazard area must wear full-face, NIOSH-approved self-contained breathing apparatus and appropriate protective clothing.

Unusual Fire and Explosion Hazards: Polypropylene products are not highly flammable, but will melt and/or burn when exposed to heat or open flame. Avoid contact with molten, dripping plastic. When heated to decomposition, product emits carbon monoxide, acrid smoke and irritating fumes. Material can accumulate static charges which can cause an electrical discharge.



SECTION V - REACTIVITY DATA

Stability: Stable. Decomposition temperature > 300°C.

Conditions to Avoid: Temperatures Above 175°F (80°C), oxidants

Incompatibilities (Conditions to Avoid): Consult manufacturer before using as containment or barrier for chemicals other than water. Very slightly reactive with oxidizing agents, acids, alkalis.

Hazardous Decomposition or Byproducts: Carbon monoxide, carbon dioxide, oxides of nitrogen, and hydrocarbons may be generated during thermal decomposition and combustion.

Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH HAZARD DATA

Inhalation Health Risks, Symptoms of Exposure: None at ambient temperatures (-18° to 38°C; 0° to 100°F). Vapours which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

Skin/Eye Contact Health Risks, Symptoms of Exposure: Prolonged and/or repetitive contact can cause abrasion and irritation. Contact with molten product will burn unprotected skin and eyes. Should a burn occur, cool burn area immediately with cool, clean, running water until no heat is emitted from burn area. Cover with light, dry dressing. Do not apply oily ointments or puncture blisters. Obtain medical assistance.

Ingestion Health Risks, Symptoms of Exposure: Products should not be eaten, nor used as food wrapping without consulting the manufacturer.

Health Hazards (Acute and Chronic): None.

Carcinogenicity: NTP - No IARC Monographs - No OSHA Regulated - No

Mutagenic Effects: None known.

Developmental Toxicity: Not toxic.

Teratogenic Effects: None known.

Medical Condition Generally Aggravated by Exposure: None identified.

Emergency and First Aid Procedures: If in contact with hot or molten plastic, treat the affected area with cool water and seek medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled: Normal, good housekeeping practices. Use a shovel, or other appropriate instrument, to put the material into a convenient waste disposal container. Recycle to process, if possible. Spilled product may create a slipping hazard (especially if wet).

Waste Disposal Method: In accordance with local, state/provincial and federal regulations. Preferred disposal methods are (1) clean and reuse if possible; (2) contact plastic supplier; (3) incinerate with waste heat recovery, and/or (4) landfill.

Precaution to be Taken in Handling and Storage: Products may be slippery to walk on when wet. Charges of static electricity may be generated during handling and processing. Store in a cool, well-ventilated area away from incompatible materials. Do NOT store or handle near an open flame, heat or other sources of ignition.



SECTION VIII - EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection: Not required under normal handling and ventilation. Should conditions exist that require respiratory protection, an organic vapor protection mask is recommended.

Ventilation: Local exhaust. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Small amounts of fines or dust may accumulate in material handling systems. If permitted to accumulate, these fines and dust can, under certain conditions, pose an explosion hazard. Every effort should be made to prevent the concentration or accumulation of fines or dust in, or around, material handling systems.

Protective Gloves: Recommended in cases of repetitive contact, such as sewing operations. Where contact may occur with hot material, wear thermal resistant gloves and arm protectors.

Eye Protection: Safety glasses or goggles with side shields where contact is likely at ambient temperatures (-18° to 38°C; 0° to 100°F). Where contact may occur with hot material, wear a face shield.

Other Protective Equipment or Clothing: None at ambient temperatures. Wear heat protective clothing if there is a potential for contact with molten material.

Work/Hygienic Practices: Wash hands after handling and before eating.

SECTION IX - REGULATORY

SARA Title III Hazard Category: No applicable information found.

DISCLAIMER

To the best of Intertape Polymer Incorporated's knowledge and belief, the information and recommendations contained herein is accurate and reliable as of the date issued. Intertape Polymer Incorporated furnishes this data in good faith without and liability or legal responsibility for it whatsoever, and no warranty or guarantee, expressed or implied, is made with respect to such data. Since conditions of use are beyond the control of Intertape Polymer Incorporated, the user assumes all responsibility and risk.



INSTALLATION INSTRUCTIONS

FOR USE UNDER METALS, SHINGLES, SHAKE and TILES

MEETS THE FOLLOWING CERTIFICATIONS: ICC-ES AC 188 (CCRR-1105); FLORIDA (FL26367); MIAMI-DADE COUNTY (NOA 18-0207.01); CAN/CSA A220.1; CAN/CSA A123.3; ASTM D226; ASTM D4869; ASTM E108

INSTALLATION GUIDELINES

- NovaSeal® Ultra Synthetic Roof Underlayment must be installed above properly ventilated spaces per local building codes, and is considered to be a vapor barrier.
- To prevent harmful condensation or heat buildup, air must circulate freely under the roof deck. All roof structures must have thorough ventilation to prevent entrapment of moisture laden air behind the roof sheathing. Ventilation provisions must meet or exceed adopted building codes.
- The roof deck should be swept clean of dirt and debris and be smooth and dry prior to installation.
- A sharp, straight edge cutting blade is recommended for cutting NovaSeal Ultra Synthetic Roof Underlayment.
- NovaSeal Ultra Synthetic Roof Underlayment should be installed when the ambient air and substrate temperatures, at the time of installation, are above 40°F (4°C). NovaSeal Ultra Synthetic Roof Underlayment is laid horizontally (parallel to the eave) with the print side up with 4 inch (10 cm) horizontal laps and 6 inch (15 cm) side laps. Align head laps with the expected direction of flow of water in a shingling fashion.
- NovaSeal Ultra Synthetic Roof Underlayment should generally be used at slopes of 2:12 or greater. For low slope applications between 2:12 to 4:12, it is recommended to overlap 50% plus 1".
- Any material splice must be removed by cutting it out, then continue with the product install using standard overlap and fastening pattern.
- In normal wind zones, NovaSeal Ultra Synthetic Roof Underlayment is attached to the roof with corrosive resistant 1" plastic or metal cap-nails or cap-staples spaced at 6 inches (15 cm) on center on both head and end laps, and 12 inches (30 cm) on center in the field area in the middle of the roll. Staples without caps should not be used when installing NovaSeal Ultra Synthetic Roof Underlayment as it may result in blow off or leakage around the fasteners.
- Capped fasteners may be hand or machine applied, but should be driven squarely into the deck to secure caps flush to the underlayment.
- In high wind zones or coastal applications, decrease the spacing to 4 inches (10 cm) on center on both head and end laps with 12 inches (30 cm) on center in the field area.
- In areas subject to wind speeds in excess of 110 miles per hour (177 km/h) (IBC and IRC), NovaSeal Ultra Synthetic Roof Underlayment should be applied per Sections 1507.2.8.1 and 1507.3.3 of the IBC and Sections R905.3.3.3 and R905.2.7 of the IRC.
- For roofs required to have an ice barrier under the IBC or IRC, a self-adhered polymer modified bitumen sheet, complying with ASTM D1970 or the ICC-ES Acceptance Criteria for Self-Adhered Roof Underlayments for Use as Ice Barriers (AC48) shall be applied. The severe climate underlayment shall be applied over the solid substrate in sufficient courses that the underlayment extends up the roof a distance equal to the distance inside the exterior wall line of the building that is specified in the appropriate section of the applicable code. NovaSeal Ultra Synthetic Roof Underlayment shall overlap the severe climate underlayment.
- NovaSeal Ultra Synthetic Roof Underlayment should be covered by the final roof covering as soon as possible as it not designed for indefinite outdoor exposure. It is recommended that the final roof covering should be installed no later than 180 days after the installation of NovaSeal Ultra Synthetic Roof Underlayment.
- The procedures for new construction also apply for re-roofing applications after removal of the old roof covering and underlayment's to expose the roof deck.





To the extent, in the manner and subject to the provisions hereinafter set forth, Intertape Polymer Corp. (for sales in U.S.A.) and Intertape Polymer Inc. (for sales in Canada) (together, "Intertape Polymer Group®") warrants to Customer that NovaSeal® Ultra roof underlayments shall:

- 1) at time of delivery, be in accordance with the published specifications;
- 2) for the lifetime of the subject property, be free from material defects in components and workmanship which could affect its ability to shed water, if installed at the subject project strictly, and in a professional way, in accordance with Intertape Polymer Group's installation instructions.

The above warranty only applies to product applied on an owner-occupied, single family residence.

The above warranty does not apply, if the NovaSeal® Ultra roof underlayment has been installed and left uncovered and without roof cladding for more than six (6) months or, if any part of the product is exposed to natural or artificial ultra-violet (UV) light after roof cladding installation.

The above warranty does not cover leaks or damage caused by unusually severe rainy weather conditions and water ingress due to unusually severe natural weather conditions prior to the installation of the roof cladding.

The above warranty does not cover leaks or damage caused by any penetrations (including penetrations by fasteners), or damage caused to NovaSeal® Ultra roof underlayment during installation or due to existence of other materials, inadequate or faulty structural design, structural defects, building alterations, cracks in the structural base exceeding 1/16 inch in width at any point.

The foregoing warranty shall be void and of no effect whatsoever in the event NovaSeal® Ultra roof underlayment shall have been exposed to harmful chemicals, abused by machinery, animals, equipment or any persons, or exposed to excessive pressures or sources, or, in the event of defects, shall have been caused by abnormal weather conditions, acts of God, falling objects, explosions, fire, riots, civil commotion, external forces, faulty or inadequate or improper installation, acts of war, radiation, harmful fumes or foreign substances in the atmosphere, floods, accidents, or any circumstances or cause other than normal wear during the conduct of business.

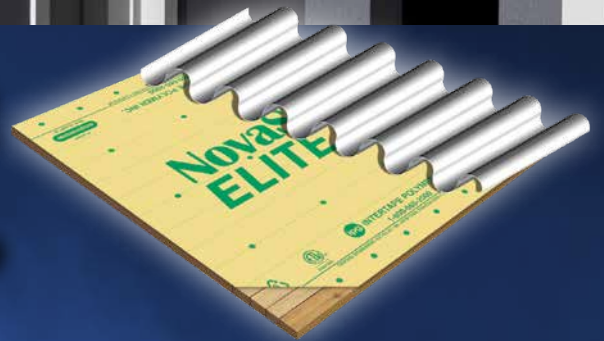


NovaSeal[®] **ELITE** by Tuck

Specially Designed For: Tile, Shingles, & Specialty Materials



PROTECT WHAT'S UNDER
YOUR ROOF.



SUPERIOR RESISTANCE TO THE ELEMENTS



FEATURES & BENEFITS

NovaSeal® Elite is a superior, mechanically attached synthetic roof underlayment for use on sloped roofs.

- 40 Year Warranty
- Safer work environment preventing tool slippage
- Up to 6 months UV resistance
- ICC-ES AC 188 Approved
- Miami-Dade County Approved
- Florida Building Code Approved
- Texas Department of Insurance Listed
- Class A ASTM E108
- CAN/CSA A220.1, CSA A123.3
- All temperature performance -40°C to 115°C (-40°F to 240°F)
- Will not crack or dry out under tile or metal
- Contributes to LEED points, 100% recyclable
- Beige surface keeps roof cooler to work on



CAN/CSA A220.1
CSA A123.3
FLORIDA BUILDING CODE
CLASS A ASTM E108



TECHNICAL DATA

		NovaSeal® AP
Base Weight	ASTM D5261	4.0 oz/y ²
Class A Fire	ASTM E108	Pass
Nail Sealability	ASTM D1970 Modified	Pass
Permeability	ASTM E96	<0.05 perms
Water Transmission	ASTM D4869	Pass
Trapezoidal Tear Strength	ASTM D4533	30 lbs md, 28 lbs xd
Tensile Strength	ASTM D5034	115 lbs md, 120 lbs xd
Tongue Tear Strength	ASTM D2261	30 lbs md, 30 lbs xd
Burst Strength	ASTM D3786	180 psi
Elongation	ASTM D5035	18% MD, 15% CD
Minimum Thickness	ASTM D1777	10 mil (0.25 mm)
Ultraviolet Light Exposure Resistance		6 months
Service Temperature Range		-40°C to 115°C (-40°F to 240°F)

Roll & Pallet Specifications

		NovaSeal AP
Length per Roll		250' / 76.2 m
Width per Roll		48" / 122 cm
Weight per Roll		29 lbs / 13 kg
Roll Size		10 sq / 93 m ²
Rolls per Pallet		42

NovaSeal Elite Compliance & Building Codes

- Meets and Exceeds ASTM D226 & D4869
- Miami Dade County Approved
- Florida Building Code Approved – FL26367
- Texas Department of Insurance Listed
- Class A ASTM E108
- CAN/CSA A220.1, CSA A123.3
- ICC-ES, AC 188, CCRR-1105



MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Polypropylene Fabrics

PRODUCT CODE(S): NovaSeal® Prime, Elite & Ultra Synthetic Roof Underlayments

WHMIS Classification: Not Controlled

HMIS CODES: H F R P
0 1 0 B

SECTION I - MANUFACTURER IDENTIFICATION

Manufacturer's Name: Intertape Polymer Incorporated

Manufacturer's Address: 50 Abbey Avenue, Truro, Nova Scotia, Canada

Emergency Phone: 902.896.1033

Information Phone: 800.565.2000

Date Prepared: February 25, 2021

Prepared by: Tawnya MacNeil

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Non-hazardous, comprised mainly of polypropylene. Colored and printed fabrics contain small quantities of proprietary pigments that may be health hazards in concentrated form. Contained in the matrix of the fabric, they do not make the fabric hazardous. More details on specific colors may be available upon request.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance and Odor: Flexible sheet, slight odor

Boiling Point: Not Available

Specific Gravity: 0.90 – 0.95

Vapor Density: Not Available

Evaporation Rate: Not Available

Solubility in Water: Insoluble in cold and hot water

pH: Not Available

Vapor Pressure: Not Available

Melting Point: 120-170°C

Coefficient of Oil/Water Distribution: Not soluble in water or oil.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flashpoint: 315°C

Flammable Limits in Air by Volume: Lower: Not Available Upper: Not Available

Extinguishing Media: Foam, CO₂, Dry Chemical, Water

Special Firefighting Procedures: All individuals required to enter the hazard area must wear full-face, NIOSH-approved self-contained breathing apparatus and appropriate protective clothing.

Unusual Fire and Explosion Hazards: Polypropylene products are not highly flammable, but will melt and/or burn when exposed to heat or open flame. Avoid contact with molten, dripping plastic. When heated to decomposition, product emits carbon monoxide, acrid smoke and irritating fumes. Material can accumulate static charges which can cause an electrical discharge.



SECTION V - REACTIVITY DATA

Stability: Stable. Decomposition temperature > 300°C.

Conditions to Avoid: Temperatures Above 175°F (80°C), oxidants

Incompatibilities (Conditions to Avoid): Consult manufacturer before using as containment or barrier for chemicals other than water. Very slightly reactive with oxidizing agents, acids, alkalis.

Hazardous Decomposition or Byproducts: Carbon monoxide, carbon dioxide, oxides of nitrogen, and hydrocarbons may be generated during thermal decomposition and combustion.

Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH HAZARD DATA

Inhalation Health Risks, Symptoms of Exposure: None at ambient temperatures (-18° to 38°C; 0° to 100°F). Vapours which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

Skin/Eye Contact Health Risks, Symptoms of Exposure: Prolonged and/or repetitive contact can cause abrasion and irritation. Contact with molten product will burn unprotected skin and eyes. Should a burn occur, cool burn area immediately with cool, clean, running water until no heat is emitted from burn area. Cover with light, dry dressing. Do not apply oily ointments or puncture blisters. Obtain medical assistance.

Ingestion Health Risks, Symptoms of Exposure: Products should not be eaten, nor used as food wrapping without consulting the manufacturer.

Health Hazards (Acute and Chronic): None.

Carcinogenicity: NTP - No IARC Monographs - No OSHA Regulated - No

Mutagenic Effects: None known.

Developmental Toxicity: Not toxic.

Teratogenic Effects: None known.

Medical Condition Generally Aggravated by Exposure: None identified.

Emergency and First Aid Procedures: If in contact with hot or molten plastic, treat the affected area with cool water and seek medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled: Normal, good housekeeping practices. Use a shovel, or other appropriate instrument, to put the material into a convenient waste disposal container. Recycle to process, if possible. Spilled product may create a slipping hazard (especially if wet).

Waste Disposal Method: In accordance with local, state/provincial and federal regulations. Preferred disposal methods are (1) clean and reuse if possible; (2) contact plastic supplier; (3) incinerate with waste heat recovery, and/or (4) landfill.

Precaution to be Taken in Handling and Storage: Products may be slippery to walk on when wet. Charges of static electricity may be generated during handling and processing. Store in a cool, well-ventilated area away from incompatible materials. Do NOT store or handle near an open flame, heat or other sources of ignition.



SECTION VIII - EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection: Not required under normal handling and ventilation. Should conditions exist that require respiratory protection, an organic vapor protection mask is recommended.

Ventilation: Local exhaust. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Small amounts of fines or dust may accumulate in material handling systems. If permitted to accumulate, these fines and dust can, under certain conditions, pose an explosion hazard. Every effort should be made to prevent the concentration or accumulation of fines or dust in, or around, material handling systems.

Protective Gloves: Recommended in cases of repetitive contact, such as sewing operations. Where contact may occur with hot material, wear thermal resistant gloves and arm protectors.

Eye Protection: Safety glasses or goggles with side shields where contact is likely at ambient temperatures (-18° to 38°C; 0° to 100°F). Where contact may occur with hot material, wear a face shield.

Other Protective Equipment or Clothing: None at ambient temperatures. Wear heat protective clothing if there is a potential for contact with molten material.

Work/Hygienic Practices: Wash hands after handling and before eating.

SECTION IX - REGULATORY

SARA Title III Hazard Category: No applicable information found.

DISCLAIMER

To the best of Intertape Polymer Incorporated's knowledge and belief, the information and recommendations contained herein is accurate and reliable as of the date issued. Intertape Polymer Incorporated furnishes this data in good faith without and liability or legal responsibility for it whatsoever, and no warranty or guarantee, expressed or implied, is made with respect to such data. Since conditions of use are beyond the control of Intertape Polymer Incorporated, the user assumes all responsibility and risk.



INSTALLATION INSTRUCTIONS

FOR USE UNDER METALS, SHINGLES, SHAKE and MOST TILES

MEETS THE FOLLOWING CERTIFICATIONS: ICC-ES AC 188 (CCRR-1105); FLORIDA (FL26367); MIAMI-DADE COUNTY (NOA 18-0207.01); CAN/CSA A220.1; CAN/CSA A123.3; ASTM D226; ASTM D4869; ASTM E108

- NovaSeal® Elite Synthetic Roof Underlayment must be installed above properly ventilated spaces per local building codes, and is considered to be a vapor barrier.
- To prevent harmful condensation or heat buildup, air must circulate freely under the roof deck. All roof structures must have thorough ventilation to prevent entrapment of moisture laden air behind the roof sheathing. Ventilation provisions must meet or exceed adopted building codes.
- The roof deck should be swept clean of dirt and debris and be smooth and dry prior to installation.
- A sharp, straight edge cutting blade is recommended for cutting NovaSeal Elite Synthetic Roof Underlayment.
- NovaSeal Elite Synthetic Roof Underlayment should be installed when the ambient air and substrate temperatures, at the time of installation, are above 40°F (4°C).
- NovaSeal Elite Synthetic Roof Underlayment is laid horizontally (parallel to the eave) with the print side up with 4 inch (10 cm) horizontal laps and 6 inch (15 cm) side laps. Align head laps with the expected direction of flow of water in a shingling fashion.
- NovaSeal Elite Synthetic Roof Underlayment should generally be used at slopes of 2:12 or greater. For low slope applications between 2:12 to 4:12, it is recommended to overlap 50% plus 1".
- Any material splice must be removed by cutting it out, then continue with the product install using standard overlap and fastening pattern.
- In normal wind zones, NovaSeal Elite Synthetic Roof Underlayment is attached to the roof with corrosive resistant 1" plastic or metal cap-nails or cap-staples spaced at 6 inches (15 cm) on center on both head and end laps, and 12 inches (30 cm) on center in the field area in the middle of the roll. Staples without caps should not be used when installing NovaSeal Elite Synthetic Roof Underlayment as it may result in blow off or leakage around the fasteners.
- Capped fasteners may be hand or machine applied, but should be driven squarely into the deck to secure caps flush to the underlayment.
- In high wind zones or coastal applications, decrease the spacing to 4 inches (10 cm) on center on both head and end laps with 12 inches (30 cm) on center in the field area.
- In areas subject to wind speeds in excess of 110 miles per hour (177 km/h) (IBC and IRC), NovaSeal Elite Synthetic Roof Underlayment should be applied per Sections 1507.2.8.1 and 1507.3.3 of the IBC and Sections R905.3.3.3 and R905.2.7 of the IRC.
- For roofs required to have an ice barrier under the IBC or IRC, a self-adhered polymer modified bitumen sheet, complying with ASTM D1970 or the ICC-ES Acceptance Criteria for Self-Adhered Roof Underlayments for Use as Ice Barriers (AC48) shall be applied. The severe climate underlayment shall be applied over the solid substrate in sufficient courses that the underlayment extends up the roof a distance equal to the distance inside the exterior wall line of the building that is specified in the appropriate section of the applicable code. NovaSeal Elite Synthetic Roof Underlayment shall overlap the severe climate underlayment.
- NovaSeal Elite Synthetic Roof Underlayment should be covered by the final roof covering as soon as possible as it not designed for indefinite outdoor exposure. It is recommended that the final roof covering should be installed no later than 180 days after the installation of NovaSeal Elite Synthetic Roof Underlayment.
- The procedures for new construction also apply for re-roofing applications after removal of the old roof covering and underlayment's to expose the roof deck.



SAFETY PRECAUTIONS

Read before use. Refer to MSDS for additional information

- **CAUTION!** NovaSeal® Elite roof underlayment may be slippery when wet or covered with mud, dust, frost, ice or snow.
- Comply with all OSHA or other standards and codes for roof work. Always use a Fall Protection System when working on roofs.
- Use roof jacks with planks, toe boards or storage platforms secured to the substrate to prevent slippage of stored material.
- Stay away from power lines, do not contact with body or equipment.
- On steep pitched surfaces, roof jacks with planks should be used for standing.
- Follow all ladder safety standards and codes.
- Never leave scraps, wrappers or other debris on the roof surface. Dispose of waste in accordance with local regulations.





NOVASEAL® ELITE 40 YEAR LIMITED WARRANTY

To the extent, in the manner and subject to the provisions hereinafter set forth, Intertape Polymer Corp. (for sales in U.S.A.) and Intertape Polymer Inc. (for sales in Canada) (together, "Intertape Polymer Group") warrants to the Customer named below that NovaSeal® Elite roof underlayment shall:

- 1) at time of delivery, be in accordance with the published specifications;
- 2) be free from material defects in components and workmanship which could affect performance;
- 3) for a forty-year period commencing on the Original Installation Date stated below, will retain its ability to shed water, except as noted below, if installed at the subject project strictly, and in a professional way, in accordance with Intertape Polymer Group's installation instructions.

The above warranty does not apply if the NovaSeal® Elite roof underlayment has been installed and left uncovered and without roof cladding for more than six (6) months or, if any part of the product is exposed to natural or artificial ultra-violet (UV) light after roof cladding installation. The above warranty does not cover leaks or damage caused by unusually severe rainy weather conditions and water ingress due to unusually severe natural weather conditions prior to the installation of the roof cladding. The above warranty does not cover leaks or damage caused by any penetrations (including penetrations by fasteners), or damage caused to NovaSeal® Elite roof underlayment during installation or due to existence of other materials, inadequate or faulty structural design, structural defects, building alterations, cracks in the structural base exceeding 1/16 inch in width at any point.

The foregoing warranty shall be void and of no effect whatsoever in the event NovaSeal® Elite roof underlayment shall have been exposed to harmful chemicals, abused by machinery, animals, equipment or any persons, or exposed to excessive pressures or sources, or, in the event of defects, shall have been caused by abnormal weather conditions, acts of God, falling objects, explosions, fire, riots, civil commotion, external forces, faulty or inadequate or improper installation, acts of war, radiation, harmful fumes or foreign substances in the atmosphere, floods, accidents, or any circumstances or cause other than normal wear during the conduct of business. The above warranty does not cover any costs or expenses associated with the removal or replacement of applied roofing materials, plywood, or other substrates or materials in connection with testing, repair, removal, or replacement of the NovaSeal® Elite roof underlayment. The Customer must give Intertape Polymer Group written notice of any defects within 30 days from the date that the defect was discovered. Such notice shall be sent to an authorized representative of Intertape Polymer Group. Intertape Polymer Group shall, at its sole option, and as the Customer's sole remedy, either repair, refund the purchase price of, or provide replacement for, that portion of NovaSeal® Elite roof underlayment, which has been proven to be defective within the written warranty conditions. The Customer shall pay all handling and transport costs. Any such replacement or refund shall constitute the limit of Intertape Polymer Group's liability or obligation for any defective material. This warranty shall become VOID if anyone not expressly authorized by Intertape Polymer Group performs any repairs or alterations within the period of this warranty or if Customer fails to give notice of defect within the period set out above.

THIS WARRANTY AND THE OBLIGATION OF INTERTAPE POLYMER GROUP HEREUNDER IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR (WITHOUT LIMITATION) AS TO THE FITNESS FOR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, A CUSTOM OR USAGE OF TRADE AND INTERTAPE POLYMER GROUP SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF NOVASEAL® ELITE OR FOR CONSEQUENTIAL DAMAGES. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

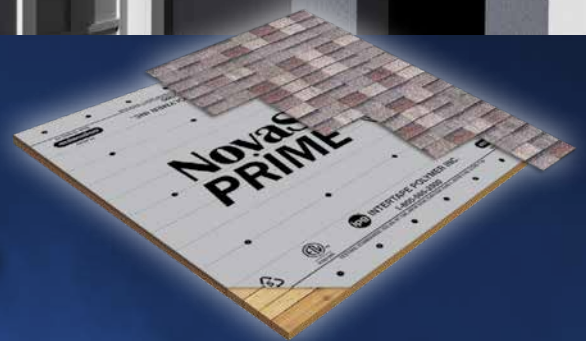


NovaSeal[®] PRIME[™] by Tuck

Specifically Designed For: Shingles, Metal & Primed Cedar Shake



PROTECT WHAT'S UNDER
YOUR ROOF.



SUPERIOR RESISTANCE TO THE ELEMENTS



FEATURES & BENEFITS

NovaSeal® Prime is a synthetic underlayment for use under asphalt shingles that delivers long-term weather barrier performance compared to traditional asphalt felt products.

- 20 Year Limited Warranty
- Up to 3 month UV resistance
- Will not crack or dry out
- Contributes to LEED points, 100% recyclable
- ICC-ES AC188 Approved
- Miami-Dade County Approved
- Florida Building Code Approved
- Texas Department of Insurance Listed
- Class A ASTM E108
- CSA A123.3, CAN/CSA A220.1



CAN/CSA A220.1
CSA A123.3
FLORIDA BUILDING CODE
CLASS A ASTM E108



TECHNICAL DATA

		NovaSeal Prime
Base Weight	ASTM D5261	3.0 oz/y ²
Class A Fire	ASTM E108	Pass
Permeability	ASTM E96	<0.05 perms
Water Transmission	ASTM D4869	Pass
Tensile Strength	ASTM D5034	90 lbs md, 90 lbs xd
Tongue Tear Strength	ASTM D2261	25 lbs md, 25 lbs xd
Burst Strength	ASTM D3786	140 psi
Elongation	ASTM D5035	18% MD, 15% CD
Minimum Thickness	ASTM D1777	7.3 mil (0.19 mm)
Ultraviolet Light Exposure Resistance		3 months

Roll & Pallet Specifications

	Umbra
Length per Roll	250' / 76.2 m
Width per Roll	48" / 122 cm
Weight per Roll	23 lbs / 10.4 kg
Roll Size	10 sq / 93 m ²
Rolls per Pallet	56

Umbra Compliance & Building Codes

- Meets and Exceeds ASTM D226 & D4869
- Miami Dade County Approved
- Florida Building Code Approved – FL26367
- Texas Department of Insurance Listed
- Class A ASTM E108
- CSA A123.3
- ICC-ES AC188 – CCRR-1105



MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Polypropylene Fabrics

PRODUCT CODE(S): NovaSeal® Prime, Elite & Ultra Synthetic Roof Underlayments

WHMIS Classification: Not Controlled

HMIS CODES: HFRP
010B

SECTION I - MANUFACTURER IDENTIFICATION

Manufacturer's Name: Intertape Polymer Incorporated

Manufacturer's Address: 50 Abbey Avenue, Truro, Nova Scotia, Canada

Emergency Phone: 902.896.1033

Information Phone: 800.565.2000

Date Prepared: February 25, 2021

Prepared by: Tawnya MacNeil

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Non-hazardous, comprised mainly of polypropylene. Colored and printed fabrics contain small quantities of proprietary pigments that may be health hazards in concentrated form. Contained in the matrix of the fabric, they do not make the fabric hazardous. More details on specific colors may be available upon request.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance and Odor: Flexible sheet, slight odor

Boiling Point: Not Available

Specific Gravity: 0.90 – 0.95

Vapor Density: Not Available

Evaporation Rate: Not Available

Solubility in Water: Insoluble in cold and hot water

pH: Not Available

Vapor Pressure: Not Available

Melting Point: 120-170°C

Coefficient of Oil/Water Distribution: Not soluble in water or oil.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flashpoint: 315°C

Flammable Limits in Air by Volume: Lower: Not Available Upper: Not Available

Extinguishing Media: Foam, CO₂, Dry Chemical, Water

Special Firefighting Procedures: All individuals required to enter the hazard area must wear full-face, NIOSH-approved self-contained breathing apparatus and appropriate protective clothing.

Unusual Fire and Explosion Hazards: Polypropylene products are not highly flammable, but will melt and/or burn when exposed to heat or open flame. Avoid contact with molten, dripping plastic. When heated to decomposition, product emits carbon monoxide, acrid smoke and irritating fumes. Material can accumulate static charges which can cause an electrical discharge.



SECTION V - REACTIVITY DATA

Stability: Stable. Decomposition temperature > 300°C.

Conditions to Avoid: Temperatures Above 175°F (80°C), oxidants

Incompatibilities (Conditions to Avoid): Consult manufacturer before using as containment or barrier for chemicals other than water. Very slightly reactive with oxidizing agents, acids, alkalis.

Hazardous Decomposition or Byproducts: Carbon monoxide, carbon dioxide, oxides of nitrogen, and hydrocarbons may be generated during thermal decomposition and combustion.

Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH HAZARD DATA

Inhalation Health Risks, Symptoms of Exposure: None at ambient temperatures (-18° to 38°C; 0° to 100°F). Vapours which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

Skin/Eye Contact Health Risks, Symptoms of Exposure: Prolonged and/or repetitive contact can cause abrasion and irritation. Contact with molten product will burn unprotected skin and eyes. Should a burn occur, cool burn area immediately with cool, clean, running water until no heat is emitted from burn area. Cover with light, dry dressing. Do not apply oily ointments or puncture blisters. Obtain medical assistance.

Ingestion Health Risks, Symptoms of Exposure: Products should not be eaten, nor used as food wrapping without consulting the manufacturer.

Health Hazards (Acute and Chronic): None.

Carcinogenicity: NTP - No IARC Monographs - No OSHA Regulated - No

Mutagenic Effects: None known.

Developmental Toxicity: Not toxic.

Teratogenic Effects: None known.

Medical Condition Generally Aggravated by Exposure: None identified.

Emergency and First Aid Procedures: If in contact with hot or molten plastic, treat the affected area with cool water and seek medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled: Normal, good housekeeping practices. Use a shovel, or other appropriate instrument, to put the material into a convenient waste disposal container. Recycle to process, if possible. Spilled product may create a slipping hazard (especially if wet).

Waste Disposal Method: In accordance with local, state/provincial and federal regulations. Preferred disposal methods are (1) clean and reuse if possible; (2) contact plastic supplier; (3) incinerate with waste heat recovery, and/or (4) landfill.

Precaution to be Taken in Handling and Storage: Products may be slippery to walk on when wet. Charges of static electricity may be generated during handling and processing. Store in a cool, well-ventilated area away from incompatible materials. Do NOT store or handle near an open flame, heat or other sources of ignition.



SECTION VIII - EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection: Not required under normal handling and ventilation. Should conditions exist that require respiratory protection, an organic vapor protection mask is recommended.

Ventilation: Local exhaust. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Small amounts of fines or dust may accumulate in material handling systems. If permitted to accumulate, these fines and dust can, under certain conditions, pose an explosion hazard. Every effort should be made to prevent the concentration or accumulation of fines or dust in, or around, material handling systems.

Protective Gloves: Recommended in cases of repetitive contact, such as sewing operations. Where contact may occur with hot material, wear thermal resistant gloves and arm protectors.

Eye Protection: Safety glasses or goggles with side shields where contact is likely at ambient temperatures (-18° to 38°C; 0° to 100°F). Where contact may occur with hot material, wear a face shield.

Other Protective Equipment or Clothing: None at ambient temperatures. Wear heat protective clothing if there is a potential for contact with molten material.

Work/Hygienic Practices: Wash hands after handling and before eating.

SECTION IX - REGULATORY

SARA Title III Hazard Category: No applicable information found.

DISCLAIMER

To the best of Intertape Polymer Incorporated's knowledge and belief, the information and recommendations contained herein is accurate and reliable as of the date issued. Intertape Polymer Incorporated furnishes this data in good faith without and liability or legal responsibility for it whatsoever, and no warranty or guarantee, expressed or implied, is made with respect to such data. Since conditions of use are beyond the control of Intertape Polymer Incorporated, the user assumes all responsibility and risk.



INSTALLATION INSTRUCTIONS

FOR USE UNDER SHINGLES, METAL & PRIMED, CEDAR SHAKE

MEETS THE FOLLOWING CERTIFICATIONS: ICC-ES AC 188 (CCRR-1105); FLORIDA (FL26367); MIAMI-DADE COUNTY (NOA 18-0207.01); CAN/CSA A220.1; CAN/CSA A123.3; ASTM D226; ASTM D4869; ASTM E108

- NovaSeal® Prime Synthetic Roof Underlayment must be installed above properly ventilated spaces per local building codes, and is considered to be a vapor barrier.
- To prevent harmful condensation or heat buildup, air must circulate freely under the roof deck. All roof structures must have thorough ventilation to prevent entrapment of moisture laden air behind the roof sheathing. Ventilation provisions must meet or exceed adopted building codes.
- The roof deck should be swept clean of dirt and debris and be smooth and dry prior to installation. NovaSeal Prime Synthetic Roof Underlayment is limited to use with asphalt shingles.
- A sharp, straight edge cutting blade is recommended for cutting NovaSeal Prime Synthetic Roof Underlayment.
- NovaSeal Prime Synthetic Roof Underlayment should be installed when the ambient air and substrate temperatures, at the time of installation, are above 40°F (4°C).
- NovaSeal Prime Synthetic Roof Underlayment is laid horizontally (parallel to the eave) with the print side up with 4 inch (10 cm) horizontal laps and 6 inch (15 cm) side laps. Align head laps with the expected direction of flow of water in a shingling fashion.
- NovaSeal Prime Synthetic Roof Underlayment should generally be used at slopes of 2:12 or greater. For low slope applications between 2:12 to 4:12, it is recommended to overlap 50% plus 1".
- Any material splice must be removed by cutting it out, then continue with the product install using standard overlap and fastening pattern.
- In normal wind zones, NovaSeal Prime Synthetic Roof Underlayment is attached to the roof with corrosive resistant 1" plastic or metal cap-nails or cap-staples spaced at 6 inches (15 cm) on center on both head and end laps, and 12 inches (30 cm) on center in the field area in the middle of the roll. Staples without caps should not be used when installing NovaSeal Prime Synthetic Roof Underlayment as it may result in blow off or leakage around the fasteners.
- Capped fasteners may be hand or machine applied, but should be driven squarely into the deck to secure caps flush to the underlayment.
- In high wind zones or coastal applications, decrease the spacing to 4 inches (10 cm) on center on both head and end laps with 12 inches (30 cm) on center in the field area.
- In areas subject to wind speeds in excess of 110 miles per hour (177 km/h) (IBC and IRC), NovaSeal Prime Synthetic Roof Underlayment should be applied per Sections 1507.2.8.1 and 1507.3.3 of the IBC and Sections R905.3.3.3 and R905.2.7 of the IRC.
- For roofs required to have an ice barrier under the IBC or IRC, a self-adhered polymer modified bitumen sheet, complying with ASTM D1970 or the ICC-ES Acceptance Criteria for Self-Adhered Roof Underlayments for Use as Ice Barriers (AC48) shall be applied. The severe climate underlayment shall be applied over the solid substrate in sufficient courses that the underlayment extends up the roof a distance equal to the distance inside the exterior wall line of the building that is specified in the appropriate section of the applicable code. NovaSeal Prime Synthetic Roof Underlayment shall overlap the severe climate underlayment.
- NovaSeal Prime Synthetic Roof Underlayment should be covered by the final roof covering as soon as possible as it not designed for indefinite outdoor exposure. It is recommended that the final asphalt shingle roof covering should be installed no later than 90 days after the installation of NovaSeal Prime Synthetic Roof Underlayment.





NOVASEAL® PRIME ROOF UNDERLAYMENT YEAR LIMITED WARRANTY

To the extent, in the manner and subject to the provisions hereinafter set forth, Intertape Polymer Corp. (for sales in U.S.A.) and Intertape Polymer Inc. (for sales in Canada) (together, "Intertape Polymer Group") warrants to the Customer named below that NovaSeal® Prime synthetic roof underlayment shall:

- 1) at time of delivery, be in accordance with the published specifications;
- 2) be free from material defects in components and workmanship which could affect performance;
- 3) for a twenty-year period commencing on the Original Installation Date stated below, will retain its ability to shed water, except as noted below, if installed at the subject project strictly, and in a professional way, in accordance with Intertape Polymer Group's installation instructions.

The above warranty does not apply if the NovaSeal® Prime has been installed and left uncovered and without roof cladding for more than thirty (30) days or, if any part of the product is exposed to natural or artificial ultra-violet (UV) light after roof cladding installation.

The above warranty does not cover leaks or damage caused by unusually severe rainy weather conditions and water ingress due to unusually severe natural weather conditions prior to the installation of the roof cladding.

The above warranty does not cover leaks or damage caused by any penetrations (including penetrations by fasteners), or damage caused to NovaSeal® Prime during installation or due to existence of other materials, inadequate or faulty structural design, structural defects, building alterations, cracks in the structural base exceeding 1/16 inch in width at any point. The foregoing warranty shall be void and of no effect whatsoever in the event NovaSeal® Prime shall have been exposed to harmful chemicals, abused by machinery, animals, equipment or any persons, or exposed to excessive pressures or sources, or, in the event of defects, shall have been caused by abnormal weather conditions, acts of God, falling objects, explosions, fire, riots, civil commotion, external forces, faulty or inadequate or improper installation, acts of war, radiation, harmful fumes or foreign substances in the atmosphere, floods, accidents, or any circumstances or cause other than normal wear during the conduct of business.

The above warranty does not cover any costs or expenses associated with the removal or replacement of applied roofing materials, plywood, or other substrates or materials in connection with testing, repair, removal, or replacement of the NovaSeal® Prime.

The Customer must give Intertape Polymer Group written notice of any defects within 30 days from the date that the defect was discovered. Such notice shall be sent to an authorized representative of Intertape Polymer Group.

Intertape Polymer Group shall, at its sole option, and as the Customer's sole remedy, either repair, refund the purchase price of, or provide replacement for, that portion of NovaSeal® Prime, which has been proven to be defective within the written warranty conditions. The Customer shall pay all handling and transport costs. Any such replacement or refund shall constitute the limit of Intertape Polymer Group's liability or obligation for any defective material.

This warranty shall become VOID if anyone not expressly authorized by Intertape Polymer Group performs any repairs or alterations within the period of this warranty or if Customer fails to give notice of defect within the period set out above.

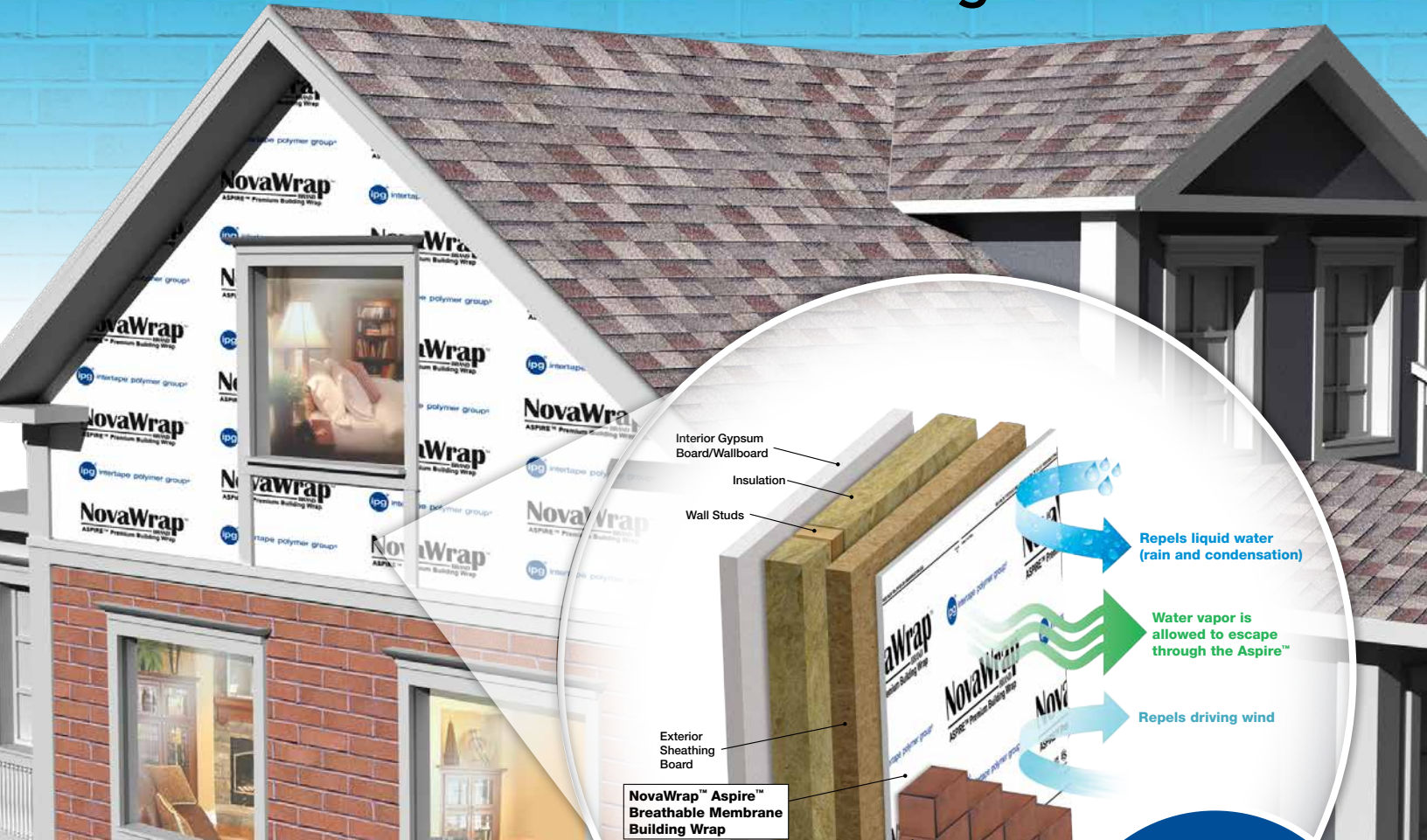
THIS WARRANTY AND THE OBLIGATION OF INTERTAPE POLYMER GROUP HEREUNDER IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR (WITHOUT LIMITATION) AS TO THE FITNESS FOR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, A CUSTOM OR USAGE OF TRADE AND INTERTAPE POLYMER GROUP SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF NOVASEAL® PRIME OR FOR CONSEQUENTIAL DAMAGES. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.



NovaWrap™ BRAND

ASPIRE™ Building Wrap

Breathable and strong!



THE BALANCED, BREATHABLE MEMBRANE WRAP.



SUPERIOR RESISTANCE TO THE ELEMENTS



FEATURES & BENEFITS

NovaWrap™ Aspire™ is a superior, breathable building wrap with the ideal level of vapor transmission, ensuring the wall cavity has the proper level of air and vapor flow.

- 15 Year Warranty
- 6 months UV resistance
- ICC-ES Approved
- CCMC Listed as Air Barrier and Sheathing Membrane
- Within "Sweet Spot" of vapor transmission
- For use up to 6 stories
- Contributes to LEED points, 100% recyclable
- Translucent and lightweight material for easy install
- Quiet and soft to work with
- Strong and durable reducing job site patching
- Class A fire rated ASTM E84
- Reduces vapor drive caused by high perm wall cavity material
- Made in Canada



TECHNICAL DATA

		NovaWrap™ Aspire™
Base Weight	ASTM D 5261	2.9 oz/y ²
Bursting Strength	ASTM D 3786	102 psi
Dry Tensile Strength	ASTM D 5034	50 lbs md, 40 lb xd
Trapezoidal Tear	ASTM D 4533	20 lbs md, 15 lb xd
Hydrostatic Pressure Resistance	AATCC 127	581 cm
Ultraviolet Light Exposure Resistance		6 months
Moisture Vapor Transmission Rate	ASTM E 96, Procedure B	11 Perms
Air Leakage Test	CCMC Technical Guide MF-07273	0.0014 L/(s.m ²)
Air Porosity	TAPPI T460	>1800 seconds/100 cc
Water Resistance Test	ASTM D 779	Pass
Water Ponding Test	CCMC Technical Guide MF-07193	Pass
Surface Burning Characteristics	ASTM E 84	Class A
Service Temperature Range		-40°C to 115°C (-40°F to 240°F)

Roll Sizes

36" X 100' 108" X 100' 120" X 100' 108" X 150'

NovaWrap Aspire Compliance

ICC #ESR-2235, CCMC #13329-R, CCMC #13292-R



MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Polypropylene Fabrics

PRODUCT CODE(S): NovaWrap™ Aspire™ Housewrap

WHMIS Classification: Not Controlled

HMIS CODES: H F R P
0 1 0 B

SECTION I - MANUFACTURER IDENTIFICATION

Manufacturer's Name: Intertape Polymer Incorporated

Manufacturer's Address: 50 Abbey Avenue, Truro, Nova Scotia, Canada

Emergency Phone: 902.896.1033

Information Phone: 800.565.2000

Date Prepared: July 21, 2016

Prepared by: Tawnya MacNeil

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Non-hazardous, comprised mainly of polypropylene. Colored and printed fabrics contain small quantities of proprietary pigments that may be health hazards in concentrated form. Contained in the matrix of the fabric, they do not make the fabric hazardous. More details on specific colors may be available upon request.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance and Odor: Flexible sheet, slight odor

Boiling Point: Not Available

Specific Gravity: 0.90 – 0.95

Vapor Density: Not Available

Evaporation Rate: Not Available

Solubility in Water: Insoluble in cold and hot water

pH: Not Available

Vapor Pressure: Not Available

Melting Point: 120-170°C

Coefficient of Oil/Water Distribution: Not soluble in water or oil.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flashpoint: 315°C

Flammable Limits in Air by Volume: Lower: Not Available Upper: Not Available

Extinguishing Media: Foam, CO₂, Dry Chemical, Water

Special Firefighting Procedures: All individuals required to enter the hazard area must wear full-face, NIOSH-approved self-contained breathing apparatus and appropriate protective clothing.

Unusual Fire and Explosion Hazards: Polypropylene products are not highly flammable, but will melt and/or burn when exposed to heat or open flame. Avoid contact with molten, dripping plastic. When heated to decomposition, product emits carbon monoxide, acrid smoke and irritating fumes. Material can accumulate static charges which can cause an electrical discharge.



SECTION V - REACTIVITY DATA

Stability: Stable. Decomposition temperature > 300°C.

Conditions to Avoid: Temperatures Above 175°F (80°C), oxidants

Incompatibilities (Conditions to Avoid): Consult manufacturer before using as containment or barrier for chemicals other than water. Very slightly reactive with oxidizing agents, acids, alkalis.

Hazardous Decomposition or Byproducts: Carbon monoxide, carbon dioxide, oxides of nitrogen, and hydrocarbons may be generated during thermal decomposition and combustion.

Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH HAZARD DATA

Inhalation Health Risks, Symptoms of Exposure: None at ambient temperatures (-18° to 38°C; 0° to 100°F). Vapours which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

Skin/Eye Contact Health Risks, Symptoms of Exposure: Prolonged and/or repetitive contact can cause abrasion and irritation. Contact with molten product will burn unprotected skin and eyes. Should a burn occur, cool burn area immediately with cool, clean, running water until no heat is emitted from burn area. Cover with light, dry dressing. Do not apply oily ointments or puncture blisters. Obtain medical assistance.

Ingestion Health Risks, Symptoms of Exposure: Products should not be eaten, nor used as food wrapping without consulting the manufacturer.

Health Hazards (Acute and Chronic): None.

Carcinogenicity: NTP - No IARC Monographs - No OSHA Regulated - No

Mutagenic Effects: None known.

Developmental Toxicity: Not toxic.

Teratogenic Effects: None known.

Medical Condition Generally Aggravated by Exposure: None identified.

Emergency and First Aid Procedures: If in contact with hot or molten plastic, treat the affected area with cool water and seek medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled: Normal, good housekeeping practices. Use a shovel, or other appropriate instrument, to put the material into a convenient waste disposal container. Recycle to process, if possible. Spilled product may create a slipping hazard (especially if wet).

Waste Disposal Method: In accordance with local, state/provincial and federal regulations. Preferred disposal methods are (1) clean and reuse if possible; (2) contact plastic supplier; (3) incinerate with waste heat recovery, and/or (4) landfill.

Precaution to be Taken in Handling and Storage: Products may be slippery to walk on when wet. Charges of static electricity may be generated during handling and processing. Store in a cool, well-ventilated area away from incompatible materials. Do NOT store or handle near an open flame, heat or other sources of ignition.



SECTION VIII - EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection: Not required under normal handling and ventilation. Should conditions exist that require respiratory protection, an organic vapor protection mask is recommended.

Ventilation: Local exhaust. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Small amounts of fines or dust may accumulate in material handling systems. If permitted to accumulate, these fines and dust can, under certain conditions, pose an explosion hazard. Every effort should be made to prevent the concentration or accumulation of fines or dust in, or around, material handling systems.

Protective Gloves: Recommended in cases of repetitive contact, such as sewing operations. Where contact may occur with hot material, wear thermal resistant gloves and arm protectors.

Eye Protection: Safety glasses or goggles with side shields where contact is likely at ambient temperatures (-18° to 38°C; 0° to 100°F). Where contact may occur with hot material, wear a face shield.

Other Protective Equipment or Clothing: None at ambient temperatures. Wear heat protective clothing if there is a potential for contact with molten material.

Work/Hygienic Practices: Wash hands after handling and before eating.

SECTION IX - REGULATORY

SARA Title III Hazard Category: No applicable information found.

DISCLAIMER

To the best of Intertape Polymer Incorporated's knowledge and belief, the information and recommendations contained herein is accurate and reliable as of the date issued. Intertape Polymer Incorporated furnishes this data in good faith without and liability or legal responsibility for it whatsoever, and no warranty or guarantee, expressed or implied, is made with respect to such data. Since conditions of use are beyond the control of Intertape Polymer Incorporated, the user assumes all responsibility and risk.



INSTALLATION INSTRUCTIONS

Step 1

- One layer of NovaWrap™ Aspire™ should be installed after the wall framing is completed and before the windows and doors are installed.
- NovaWrap™ Aspire™ should be installed on the outside of the insulation cavity, preferably over approved exterior sheathing board or insulation with the printed side installed so that it faces out.
- NovaWrap™ Aspire™ should start at an outside corner, ensuring the roll remains vertical, unroll the material across the face of the sheathing making sure the roll remains plumb and that the bottom edges of NovaWrap™ Aspire™ extend over the foundation by 2 inches (5 cm).
- The application should start at an outside corner extending around the starting point corner by at least 6 inches (15 cm).
- Attach NovaWrap™ Aspire™ so that it is tight and flat.

Step 2

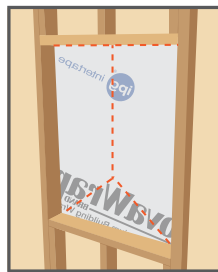
- NovaWrap™ Aspire™ must be fastened with plastic capped fasteners with sufficient length to penetrate the stud framing or foam board.
- When installing over metal framing, use capped screws with washers.
- Fasteners should be spaced at maximum 32 inches (81 cm) OC (both vertically and horizontally).

Step 3

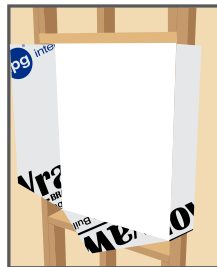
- Material higher on the wall should overlap materials lower on the wall. Ensure proper shingling throughout the installation to properly shed water.
- Horizontal overlaps should be at least 6 inches (15 cm), and vertical flaps at least 4 inches (10 cm). For air barrier installations, the horizontal and vertical seams must be taped with Tuck® Tape Sheathing Tape.

Window & Door Preparation

- When installing around window or door openings, use an inverted Y-cut in the housewrap, pulling the flaps in, folding excess material (or trimming excess material), fastening securely through all layers to a framing membrane.
- Use NovaFlash SA Flashing Tape for flashing around window and door penetrations, please refer to NovaFlash SA installation instructions.
- When used over wood-based sheathing in exterior plaster applications, 2 layers of product shall be applied over sheathing in accordance with Section 2510.6 of the IBC, as applicable, except for cementitious coatings or exterior insulation and finishing systems, application shall be in accordance with the evaluation report on the exterior coating.
- When installed In Canada, NovaWrap™ Aspire™ should be installed in accordance to Article 9.27.3.3 of the NBC 2015 and manufacturer's current instructions.
- Failure to follow these instructions will void product warranty.

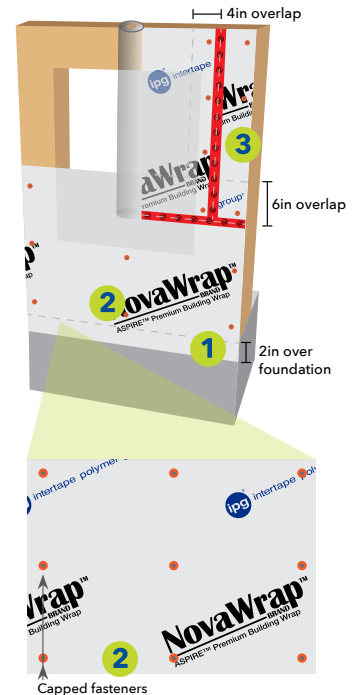


Inverted Y cut



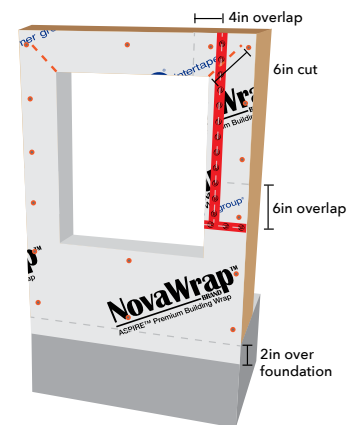
Fold back and fasten to frame

- After installation is complete, and before exterior cladding is installed, inspect the NovaWrap™ Aspire™ for tears. If issues are found, tape the imperfections with Tuck® Tape Sheathing Tape.
- NovaWrap™ Aspire™ should be installed with a minimum 1/2 inch (1 cm) air space between the sheathing membrane and cladding, unless otherwise specified.
- A concealed airspace exceeding 1 inch (2.5 cm) in width must contain proper fire stopping in accordance with Subsection 9.10.16 of the NBC 2015.
- Although NovaWrap™ Aspire™ is stabilized with respect to degradation from sunlight for six (6) months, it should not be left exposed to sunlight indefinitely.
- IPG® recommends that NovaWrap™ Aspire™ should be covered with cladding and the wall cavity closed within 60 days of installation.



SAFETY PRECAUTIONS

- **CAUTION!** NovaWrap™ Aspire™ is slippery and should not be used in any applications where it can be walked on.
- IPG® recommends that kick jacks or scaffolding be used for exterior work above the first floor.
- If ladders are used, extra caution should be taken to use them safely by following the requirements set out in ANSI Standards 14.1, 14.2, and 14.5 for ladders made of wood, aluminum and fiber glass, respectively.





NOVAWRAP™ ASPIRE™ 15 YEAR LIMITED WARRANTY

Intertape Polymer Group® warrants to the initial owner of a home using its NovaWrap™ Aspire™ building wrap that it will perform according to the Intertape Polymer Group published specifications for a period of fifteen (15) years from date of purchase, if installed in strict accordance with installation instructions provided by Intertape Polymer Group and accepted industry standards in a properly designed and constructed water-resistive barrier vertical wall application. Installation must include the use of NovaFlash™ SA self-adhered flashing and Intertape Polymer Group's branded sheathing tape, including, but not limited to Cantech's Tuck®Tape, in a properly designed and constructed wall system. Intertape Polymer Group will pay for the cost of labor and will provide replacement product for that portion of defective product to correct problems found to be caused solely by failure of NovaWrap™ Aspire™ building wrap which failed to perform in accordance with the product specifications as per the Limited Warranty stated above. This Limited Warranty does not apply to damage due to abuse or mishandling of the product, improper installation, or damage which is caused primarily by someone or something other than Intertape Polymer Group product. This Limited Warranty is the user's sole and exclusive remedy under tort, contract, or statutory law. The Limited Warranty is provided to all homeowners who have NovaWrap™ Aspire™ Building Wrap installed on their homes on or after January 1, 2012, and who have registered with Intertape Polymer Group as provided below.

For warranty registration to be valid, the initial homeowner must submit proof of purchase/ownership, which may be a letter or invoice from the builder or a building material supply company invoice with proof of location installation, to Intertape Polymer Group at the following address:

Intertape Polymer Group, 50 Abbey Avenue, Truro, Nova Scotia Canada B2N 6W4

Any claims under this Limited Warranty must be made in writing to Intertape Polymer Group at the above address within 90 days of discovery of the issue giving rise to the claim. To be valid, all claims must identify the residence address, the warranty claimant and the nature of the claim. If Intertape Polymer Group determines that an investigation of the claim is necessary, the claimant must allow access to an Intertape Polymer Group representative to view the property specified in the claim, including the taking of photographs and samples as required.

EXCEPT FOR THE ABOVE LIMITED WARRANTY, INTERTAPE POLYMER GROUP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL OTHER SUCH WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF SUCH IMPLIED WARRANTIES CANNOT BE WAIVED UNDER APPLICABLE LAW, THEY WILL ONLY BE APPLICABLE FOR ONE YEAR AFTER THE INITIAL PURCHASE OF THE PRODUCT. OTHER THAN ITS OBLIGATIONS UNDER THE LIMITED WARRANTY ABOVE STATED, IN NO EVENT SHALL INTERTAPE POLYMER GROUP BE LIABLE TO ANY PERSON FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO LOST PROFITS OR REVENUE, LOSS OF USE, PERSONAL INJURY OR DAMAGE TO PROPERTY OR PROPERTY CONTENTS.



NovaFlash™ BRAND

Ultra Self-Adhered Flashing



- Window Header Flashing
- Exterior Wall Cladding/Siding
- Installed Window
- Window Flange Flashing
- Side Wall Flashing
- Window Flange
- Building Wrap
- Window Sill Flashing
- Outside Sheathing



Protect your view.
Use **NovaFlash™ SA Ultra.**



SUPERIOR RESISTANCE TO THE ELEMENTS



FEATURES & BENEFITS

NovaFlash™ SA is

- Unique “self-adhering” high strength flashing prevents air and water intrusion around doors and windows, protecting your walls, window and door investments
- Easy self-stick solution covers all nails, screws and staples as recommended by Energy Star Home Sealing guidelines preventing against air infiltration points
- High performance, high tack flashing withstands direct UV exposure up to 6 months allowing for greater dry-in/ close-up time
- Will not react with plasticizers so works with most all building wraps without priming
- Can be applied to damp surfaces so works great in a wide variety of weather conditions, offering more installation working time
- This all-weather (-10°F to 125°F (-23°C to 52°C) application temperatures) self-adhering material opens up more field installation activity, especially in cooler months
- Split release liner allows installers quicker and more accurate installation, to more properly position material around openings and flanges
- Available in 4”, 6” and 9” widths, 75’ long rolls to meet the most common wall thicknesses and optimize the proper flashing coverage
- Environmentally conscience product choice, as it offers no VOC’s, HFCC’s or CFC’s and is non-toxic and non-allergenic



TECHNICAL DATA

		NovaFlash™ SA Self-Adhered Flashing
Base Weight	ASTM D751	9.1 oz/y ²
Permeability	ASTM E96	<0.1 perms
Minimum Thickness	ASTM D1777	13 mil (0.325 mm)
Ultraviolet Light Exposure Resistance		6 months
Nail Sealability	ASTM D1970M	Pass – Initial & Post Thermal Cycling
Peel Adhesion (90°)	AAMA 711-13	0.61 N/mm – OSB
		0.73 N/mm - Aluminum
		0.74 N/mm – Vinyl
		0.71 N/mm – Plywood
		0.92 N/mm – Elevated Temperature
		1.00 N/mm – Thermal Cycling
		0.99 N/mm – Accelerated Aging

Roll & Pallet Specifications

		NovaFlash™ SA
Length per Roll		75' / 22.9 m
Width per Roll		4"/10.2cm, 6" / 15 cm, 9"/23 cm, 12"/30 cm

NovaFlash™ SA Compliance & Building Codes

- Meets and Exceeds AAMA 711-13, Adhesion Rating A, Thermal Exposure Class 3
- CSA A440.1
- Meets ASTM E2112



MATERIAL SAFETY DATA SHEET

PRODUCT NAME: Polypropylene Fabrics

PRODUCT CODE(S): NovaFlash™ SA Ultra Self-Adhered Flashing

WHMIS Classification: Not Controlled

HMIS CODES: H F R P
0 1 0 B

SECTION I - MANUFACTURER IDENTIFICATION

Manufacturer's Name: Intertape Polymer Incorporated

Manufacturer's Address: 50 Abbey Avenue, Truro, Nova Scotia, Canada

Emergency Phone: 902.896.1033

Information Phone: 800.565.2000

Date Prepared: October 3, 2017

Prepared by: Tawnya MacNeil

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Non-hazardous, comprised mainly of polypropylene. Colored and printed fabrics contain small quantities of proprietary pigments that may be health hazards in concentrated form. Contained in the matrix of the fabric, they do not make the fabric hazardous. More details on specific colors may be available upon request.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance and Odor: Flexible sheet, slight odor

Boiling Point: Not Available

Specific Gravity: 0.90 – 0.95

Vapor Density: Not Available

Evaporation Rate: Not Available

Solubility in Water: Insoluble in cold and hot water

pH: Not Available

Vapor Pressure: Not Available

Melting Point: 120-170 °C

Coefficient of Oil/Water Distribution: Not soluble in water or oil.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flashpoint: 315°C

Flammable Limits in Air by Volume: Lower: Not Available Upper: Not Available

Extinguishing Media: Foam, CO₂, Dry Chemical, Water

Special Firefighting Procedures: All individuals required to enter the hazard area must wear full-face, NIOSH-approved self-contained breathing apparatus and appropriate protective clothing.

Unusual Fire and Explosion Hazards: Polypropylene products are not highly flammable, but will melt and/or burn when exposed to heat or open flame. Avoid contact with molten, dripping plastic. When heated to decomposition, product emits carbon monoxide, acrid smoke and irritating fumes. Material can accumulate static charges which can cause an electrical discharge.



SECTION V - REACTIVITY DATA

Stability: Stable. Decomposition temperature > 300°C.

Conditions to Avoid: Temperatures Above 175°F (80°C), oxidants

Incompatibilities (Conditions to Avoid): Consult manufacturer before using as containment or barrier for chemicals other than water. Very slightly reactive with oxidizing agents, acids, alkalis.

Hazardous Decomposition or Byproducts: Carbon monoxide, carbon dioxide, oxides of nitrogen, and hydrocarbons may be generated during thermal decomposition and combustion.

Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH HAZARD DATA

Inhalation Health Risks, Symptoms of Exposure: None at ambient temperatures (-18° to 38°C; 0° to 100°F). Vapours which may be formed at elevated temperatures may be irritating to eyes and respiratory tract.

Skin/Eye Contact Health Risks, Symptoms of Exposure: Prolonged and/or repetitive contact can cause abrasion and irritation. Contact with molten product will burn unprotected skin and eyes. Should a burn occur, cool burn area immediately with cool, clean, running water until no heat is emitted from burn area. Cover with light, dry dressing. Do not apply oily ointments or puncture blisters. Obtain medical assistance.

Ingestion Health Risks, Symptoms of Exposure: Products should not be eaten, nor used as food wrapping without consulting the manufacturer.

Health Hazards (Acute and Chronic): None.

Carcinogenicity: NTP - No IARC Monographs - No OSHA Regulated - No

Mutagenic Effects: None known.

Developmental Toxicity: Not toxic.

Teratogenic Effects: None known.

Medical Condition Generally Aggravated by Exposure: None identified.

Emergency and First Aid Procedures: If in contact with hot or molten plastic, treat the affected area with cool water and seek medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled: Normal, good housekeeping practices. Use a shovel, or other appropriate instrument, to put the material into a convenient waste disposal container. Recycle to process, if possible. Spilled product may create a slipping hazard (especially if wet).

Waste Disposal Method: In accordance with local, state/provincial and federal regulations. Preferred disposal methods are (1) clean and reuse if possible; (2) contact plastic supplier; (3) incinerate with waste heat recovery, and/or (4) landfill.

Precaution to be Taken in Handling and Storage: Products may be slippery to walk on when wet. Charges of static electricity may be generated during handling and processing. Store in a cool, well-ventilated area away from incompatible materials. Do NOT store or handle near an open flame, heat or other sources of ignition.



SECTION VIII - EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection: Not required under normal handling and ventilation. Should conditions exist that require respiratory protection, an organic vapor protection mask is recommended.

Ventilation: Local exhaust. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Small amounts of fines or dust may accumulate in material handling systems. If permitted to accumulate, these fines and dust can, under certain conditions, pose an explosion hazard. Every effort should be made to prevent the concentration or accumulation of fines or dust in, or around, material handling systems.

Protective Gloves: Recommended in cases of repetitive contact, such as sewing operations. Where contact may occur with hot material, wear thermal resistant gloves and arm protectors.

Eye Protection: Safety glasses or goggles with side shields where contact is likely at ambient temperatures (-18° to 38°C; 0° to 100°F). Where contact may occur with hot material, wear a face shield.

Other Protective Equipment or Clothing: None at ambient temperatures. Wear heat protective clothing if there is a potential for contact with molten material.

Work/Hygienic Practices: Wash hands after handling and before eating.

SECTION IX - REGULATORY

SARA Title III Hazard Category: No applicable information found.

DISCLAIMER

To the best of Intertape Polymer Incorporated's knowledge and belief, the information and recommendations contained herein is accurate and reliable as of the date issued. Intertape Polymer Incorporated furnishes this data in good faith without and liability or legal responsibility for it whatsoever, and no warranty or guarantee, expressed or implied, is made with respect to such data. Since conditions of use are beyond the control of Intertape Polymer Incorporated, the user assumes all responsibility and risk.



INSTALLATION INSTRUCTIONS

This NovaFlash™ SA Ultra Self-Adhered Flashing installation guide is intended for use when building wrap is to be applied before window installation and the head, sill and jamb flashing will be applied over the face of an integral mounting flange on the window (i.e. ASTM E2112, Method A; AAMA 2400-02). Other installation methods may be employed. In all cases the installer should refer to the window manufacturer's installation instructions, as well as, local building codes and practices. Prior to the installation process, the flashing materials can be pre-cut using the rough opening (RO) dimensions and the following formulas:

- Sill Flashing = Rough Opening Width + (2 x Flashing Width)
- Jamb Flashing = Rough Opening Height + (2 x Flashing Width) – 1 inch (2.5 cm)
- Head Flashing = Rough Opening Width + (2 x Flashing Width) + 2 inches (5 cm)

Surfaces should be clean and free of debris and dust. Install on a dry surface without ice and snow. Cover within a 6 month time frame. Be sure to install building wrap prior to flashing installation.

STEP 1: Peel off one half of the pre-cut backing and center the flashing below the sill, leaving 2 inches (5 cm) above the top of the sill. Press down on the flashing then peel off the second half. Neatly pull the flashing over the opening to create a tight seal. Cut the flashing on each corner creating a flap. Fold the flap onto the sill, and then place a second strip of flashing and center on the sill overlapping the first piece (making sure that 2 inches (5 cm) extends out from the exterior wall and 6 inches (15 cm) goes up each side of the window jams). Make cuts and fold over making sure that the flashing is firmly bonded to achieve maximum water tightness. See Figure 1.

STEP 2: Install window following window manufacturer's installation instructions including recommended sealants and approved fasteners.

STEP 3: Align the edge of the jamb flashing to the bottom edge of the sill flashing and attach to the jamb/sheathing with approved fasteners described above. **DO NOT** attach the bottom section of the flashing (equal to the un-secured bottom edge of the sill). Repeat for the jamb on the opposite side of the window. Be sure both are flush to the rough opening.

Note: The window must be installed and set prior to installation of the head flashing (Step 4). **DO NOT PROCEED WITH STEP 4 UNTIL THE WINDOW HAS BEEN PROPERLY SET**, as per manufacturer's instructions.

STEP 4: Apply a 3/8 inch (0.95 cm) bead of sealant along the top flange of the window. Position the head flashing so the bottom edge of flashing butts up against the top edge of the window. The flashing should overhang the window and over the jamb by 1 inch (2.5 cm). Press the flashing into the sealant and work upwards to flatten into place. Once in position, fasten the top edge of the flashing.





NOVAFLASH™ SA 10 YEAR LIMITED WARRANTY

To the extent, in the manner and subject to the provisions hereinafter set forth, Intertape Polymer Corp. (for sales in U.S.A.) and Intertape Polymer Inc. (for sales in Canada), including their affiliates (collectively, "Intertape Polymer Group", or "IPG") warrants to the initial owner of a home using its NovaFlash™ Ultra Self-Adhered Flashing that it will perform according to the IPG published specifications for a period of ten (10) years from date of purchase, if installed in strict accordance with installation instructions provided by IPG and accepted industry standards in a properly designed and constructed water-resistive barrier vertical wall application. Installation must include the use of NovaWrap™ Aspire or NovaWrap GP building wrap and IPG's branded sheathing tape, including, but not limited to Tuck® Tape Sheathing Tape in a properly designed and constructed wall system. IPG will provide replacement product for that portion of defective product to correct problems found to be caused solely by failure of NovaFlash™ Ultra Self-Adhered Flashing which failed to perform in accordance with the product specifications as per the Limited Warranty stated above. This Limited Warranty does not apply to damage due to abuse or mishandling of the product, improper installation, or damage which is caused primarily by someone or something other than IPG product. This Limited Warranty is the user's sole and exclusive remedy under tort, contract, or statutory law. The Limited Warranty is provided to all homeowners who have NovaFlash™ Ultra Self-Adhered Flashing installed on their homes on or after July 1, 2016, and who have registered with IPG as provided below.

For warranty registration to be valid, the initial homeowner must submit proof of purchase/ownership, which may be a letter or invoice from the builder or a building material supply company invoice with proof of location installation, to IPG at the following address:

Intertape Polymer Group, 50 Abbey Avenue, Truro, Nova Scotia Canada B2N 6W4

Any claims under this Limited Warranty must be made in writing to IPG at the above address within 90 days of discovery of the issue giving rise to the claim. To be valid, all claims must identify the residence address, the warranty claimant and the nature of the claim. If IPG determines that an investigation of the claim is necessary, the claimant must allow access to an IPG representative to view the property specified in the claim, including the taking of photographs and samples as required.

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