DELTA®-TRELA is the optimum underlayment for metal-clad roofs, for protection against corrosion and moisture. DELTA®-TRELA is a waterproof and breathable membrane, that drains moisture, ventilates and reduces rainfall noise by up to 15 dB.

SECTION 074114

UNDERLAYMENT FOR METAL-CLAD ROOFS

1. GENERAL
   * + 1. SUMMARY
          1. Provide vapor-permeable waterproof underlayment for metal-clad roofs. (DELTA-TRELA) (DELTA-TRELA PLUS)
          2. Related Work: Coordinate with the following items which are specified in other sections:

Section 061600 - SHEATHNG for sheathing beneath underlayment.

Section 074200 – METAL ROOFING for roof assembly.

Section 076200 - Sheet Metal Flashing and Trim for flashings, and other sheet metal work.

* + - 1. SUBMITTALS
         1. Product Data: Submit manufacturer’s product data, including installation instructions, detail drawings, test reports on physical and performance properties, and building code compliance reports.
         2. Verification Samples: Submit clearly labeled samples of each material specified.
         3. Warranty at Closeout: Submit manufacturer’s executed warranty form with authorized signatures and endorsements indicating date of Substantial Completion.
      2. QUALITY ASSURANCE
         1. Manufacturer: Minimum of 3 years experience manufacturing similar products.
         2. Installer: Minimum of 2 years experience installing similar products and acceptable to the manufacturer.
         3. Mock-Up: If required under Division 01, provide materials and labor for exterior mock-ups.
         4. Pre-Installation Meeting: Conduct a pre-installation meeting a minimum of two weeks prior to commencing the Work of this Section.

Agenda shall include review of requirements and submittals for underlayment, including surface preparation requirements specified under other sections, status of substrate work and preparation, compatibility of materials, special details and flashings, installation procedures, testing and inspection procedures, protection, and repairs.

Attendance by related trades is required.

* + - 1. DELIVERY, STORAGE AND HANDLING
         1. Deliver materials and products in unopened factory labeled packages. Store and handle in strict compliance with manufacturer's instructions and recommendations.
      2. WARRANTY
         1. Manufacturer’s Warranty: Submit manufacturer’s standard limited warranty for defects in materials.

1. PRODUCTS
   * + 1. MANUFACTURER
          1. Basis-of-Design: DELTA®-TRELA by Dörken Systems Inc., 4655 Delta Way, Beamsville, ON L0R 1B4, Canada. Toll Free: 888-4DELTA4 (433-5824) Phone: 905-563-3255. Fax: 905-563-5582. www.dorken.com.
          2. Underlayment for Metal-Clad Roofs: Provide underlayment with the following characteristics:

Material: 0.3 inch (8 mm) thick dimpled spacer mat adhered to 3-ply spun-bonded polypropylene breather underlay.

Color: Black/gray.

Water Vapor Transmission: 820 g/m²/24 h ASTM E96, Proc. A; 472 g/m²/24 h ASTM E96, Proc. B

Vapor Permeance: 69 perms [grains/h/ft²/in Hg] ASTM E96, Proc. A; 120 perms [grains/h/ft²/in Hg] ASTM E96, Proc. B.

Fire Resistance: Class B2 DIN 4102.

Structured Separation Layer Height: Approx. 5/16” (8mm).

Temperature Range: -40 °F to +176 °F (-40 °C to +80 °C).

Maximum UV (Sunlight) Exposure: Maximum exposure 6 weeks.

* + - * 1. Accessory Products:

Galvanized Wide-Head Nails with EPDM Sealing Gasket: DELTA-SEALING NAIL.

Adhesive Tape at Overlaps: DELTA-MULTI-BAND.

Butyl Rubber Tape at Penetrations: DELTA-FLEXX BAND.

Elastic Rubber Compound Sealant and Adhesive: TELTA-TILAXX.

Air and Vapor Sheet Over Substrate When Required: DELTA-REFLEX.

1. EXECUTION
   * + 1. EXAMINATION
          1. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

Clean substrate of dirt and bond breaking substances prior to beginning installation.

* + - 1. INSTALLATION
         1. Install products in strict accordance with manufacturer’s instructions, approved submittals and the following:

Install directly below metal roofing material with dimple texturing side up.

Seal seams of underlayment with approved seam tape at all vertical and horizontal overlapping seams.

Seal cuts and tears as recommended by manufacturer.

* + - 1. PROTECTION
         1. Protect installed underlayment from damage during application and remainder of construction period, according to manufacturer’s written instructions.
         2. Coordinate with installation of materials which cover the underlayment, to ensure exposure period does not exceed that recommended by the manufacturer.

END OF SECTION