DELTA®-DRY is a premier choice in a rainscreen solution, ideal behind absorptive cladding such as manufactured stone veneer, conventional stucco, cement board cladding, brick veneer and natural stone. DELTA®-DRY sheds water at the outer cladding and prevents water from collecting at the building face; provides an appropriately sized cavity for pressure moderation and capillary break; and allows for continuous drainage of the cavity at the outer face of the wall.

SECTION 070510

VENTILATED RAINSCREEN FOR ABSORPTIVE CLADDING

1. GENERAL
   * + 1. SUMMARY
          1. Provide ventilated rainscreen (drainage membrane) behind absorptive cladding. (DELTA®-DRY) (DELTA®-DRY STUCCO & STONE)
          2. Related Work: Coordinate with the following items which are specified in other sections:

Section 061600 - SHEATHNG for sheathing behind ventilated rainscreen.

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 wall mock-up.
         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 ventilated rainscreen, 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®-DRY) (DELTA®-DRY STUCCO & STONE) 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. Ventilated Rainscreen: Provide ventilated rainscreen with the following characteristics:

Color: Silver-gray.

Material: High-density polyethylene, stabilized (oxidation & UV)

Dimple Height: Approx. 2/5” (10.5 mm) ASTM D1777.

Compressive Strength: 93 kPa (1,946 psf) @ 8 % strain ASTM D6364/

Drainage Efficiency: Approx. 95% ASTM 2273.

Fungus Resistance: Does not support fungus growth ASTM C1338.

Fire Resistance: B2 DIN 4102.

Flame Spread: 210 CAN/ULC-S102.2.

Smoke Developed: 105-190 CAN/ULC-S102.2.

Water Penetration Resistance: 118 psi (813 kPa) Watertight AATCC 127.

Water Vapor Transmission: 22 ng/(Pa s m²) ASTM E96, Method A.

Vapor Permeance: 0.14 perms [grains/h/ft²/in Hg] ASTM E96, Method A.

Contact Surface of Rainscreen to Water-Resistive Barrier: Less than 20%, greater than 80% open.

Chemical Properties: Excellent chemical resistance, rot-proof.

Toxicity: Non-toxic, non-polluting.

Temperature Range: -22°F to +176°F (-30°C to +80°C).

Maximum UV (Sunlight) Exposure: Do not expose to UV light for longer than 30 days.

* + - * 1. Accessory Products:

Butyl Rubber Tape at Penetrations: DELTA®-FLEXX BAND.

Fasteners: Manufacturer’s recommended corrosion-resistant nails and screws.

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 ventilated rainscreen sheets horizontally with stud side facing the water-resistive barrier

Install sheets tight at side laps and end laps. Do not overlap or interlock.

Secure to substrate at edges and in the field of the sheet using fasteners and methods recommended by manufacturer.

Do not seal or block rainscreen at top or bottom of installation.

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

END OF SECTION