#### DELTA®-FL

Section 07 10 00 - Dampproofing and Waterproofing

## PART 1 GENERAL

## 1.1 SECTION INCLUDES

A. Underflooring vapor barrier.

#### 1.2 RELATED SECTIONS

A. Section 06 10 00 - Rough Carpentry: Subflooring/underlayment to be installed over underflooring vapor barrier.

## 1.3 ALTERNATIVES

A. See Section 01230 - Alternatives, for product alternatives affecting this section.

## 1.4 REFERENCES

- A. AATC 127 Water Resistance: Hydrostatic Pressure Test; 1998.
- B. ASTM C 1311 Standard Specification for Solvent Release Sealants; 2002.
- C. ASTM D 1621 Standard Test Method for Compressive Properties of Rigid Cellular Plastics; 2004a
- D. ASTM E 96/E 96M Standard Test Methods for Water Vapor Transmission of Materials; 2005.

## 1.5 SUBMITTALS

- A. See Section 01300 Administrative Requirements, for submittal procedures.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
  - 4. Specimen warranty.
- C. Samples: 3 by 5 inch (76.2 mm by 127 mm) piece of each type of sheet; minimum 12 inch (300 mm) long piece of each type of strip; each type of fastener.
- D. Test Reports: Evaluation service reports or other independent testing agency reports showing compliance with specified requirements.
- E. Installer Qualifications: Include minimum of 5 project references.
- F. Executed warranty.

## 1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in performing work of this type and approved by the membrane manufacturer.
- B. Field Services: Provide the services of a representative accredited by the sheet manufacturer to examine substrates before starting installation, periodically review installation procedures, and review final installed systems.

## 1.7 DELIVERY, STORAGE, AND PROTECTION

- A. Deliver products to project site in original packaging with labels intact.
- B. Store products in manner acceptable to membrane manufacturer.
- C. When products must be stored for extended periods, keep out of direct sunlight and at temperatures above minus 22 degrees F (minus 30 degrees C).
- D. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

#### 1.8 WARRANTY

A. 20 year product warranty

#### PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. All Products of This Section:
  - 1. Cosella-Dörken Products Inc: <a href="www.cosella-dorken.com">www.cosella-dorken.com</a>
  - 2. Substitutions: [[See Section 01600 Product Requirements][Not permitted]].

# 2.2 APPLICATIONS

A. Underflooring Vapor Barrier: Install on top of floor slabs on grade, to be covered with underlayment and finish flooring indicated on drawings by others.

## 2.3 MATERIALS

- A. Underflooring Vapor Barrier: High density polyethylene sheet, dimpled throughout field of sheet.
  - 1. Product: Cosella-Dörken DELTA®-FL.
  - 2. Color: Grey
  - 3. Dimpled Thickness: 5/16 inch (8 mm), nominal.
  - 4. Compressive Strength: 5200 psf (250 kN/sq m), when tested in accordance with ASTM D 1621.
  - 5. Air Gap Volume: 0.13 gal/ft² (5.3 L/m²).
  - 6. Sheet Width: As required to result in as few seams as possible.
- B. Moisture-proof Tape: As approved by membrane manufacturer

## PART 3 EXECUTION

## 3.1 EXAMINATION

- A. Verify that substrates are sound enough to retain fasteners and suitable for bonding of sealant.
- B. Verify that there are no active leaks within area to be waterproofed.
- C. Do not begin installation until substrates have been properly prepared.
- D. If substrate preparation is the responsibility of another trade, notify Architect of unsatisfactory preparation before proceeding.

## 3.2 PREPARATION

- A. Clean surfaces "broom clean" prior to installation.
- B. Ensure the area to be covered is free of organic contaminants.
- C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
  - 1. Remove projections larger than 1/4 inch (6 mm); remove sharp edges.
  - 2. In concrete and masonry, patch cracks and holes so that they provide suitable substrate as recommended by membrane manufacturer.

## 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Do not install when:
  - 1. Ambient temperature is below minus 22 degrees F (minus 30 degrees C).
  - 2. Concrete has been cured for less than 3 days.
  - 3. Standing water is present.
- C. Underflooring Vapor Barrier: Lay sheets on top of slab, butt edges tightly, and tape seams. Secure to slab with fasteners recommended by sheet manufacturer. Perimeter placement shall be as close as possible to the substrate (ie: concrete walls, stud walls, etc.).
- D. Repairs to Dimpled Sheet: Apply patch made of same material interlocked, with continuous sealant bead around tear or penetration.

## 3.4 FIELD QUALITY CONTROL

A. Provide the services of a field service representative to inspect substrates for suitability for installation, to review procedures during construction, and to review the finished work.

## 3.5 PROTECTION

A. Protect installed products until completion of project.

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

END OF SECTION