

SECTION 093000 - SHEET MEMBRANE WATERPROOFING

PART 1 - GENERAL

This specification includes the sheet membrane used as waterproofing, on walls in interior installations including showers. The content of this section should be combined with the specification for the tile and stone finishes including the setting materials required to complete the sheet membrane installation.

1.1 SUMMARY

Typical Walls: Wall Seal sheet membrane may be installed for waterproofing on wall substrates for interior installation.

Acceptable Wall Substrates: Concrete, masonry, backer board.

Acceptable Backer Boards: Cementitious backer board, glass mat water-resistant gypsum board, fiber-cement backer board, fiber-reinforced water-resistant gypsum backer board, cementitious coated extruded foam backer board in accordance with TCNA Handbook.

A. Section Includes:

1. Sheet membrane waterproofing for interior walls including **[tile] [and] [dimension stone]** installations.
 - a. Sheet membrane bonded to tile substrate with thin-set mortar for walls at showers and tub surrounds.

When Wall Seal is installed under the backer board, the board may be subject to water. Consider using cementitious backer board to avoid water degradation.

- b. Sheet membrane adhered to framing supporting backer board for walls.

1.2 REFERENCES

- A. ANSI A108.13 - Installation of Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone.
- B. ANSI A118.10 - American National Standard Specifications for Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation.
- C. ASTM E 96/E96M - Standard Test Methods for Water Vapor Transmission of Materials.
- D. TCNA Handbook - TCNA Handbook for Ceramic, Glass, and Stone Tile Installation.

1.3 ACTION SUBMITTALS

- A. Product Data: For each specified product.
- B. LEED Submittals:
 - 1. Data for Credit MR 4: For recycled content materials, indicating percentages by weight of postconsumer and preconsumer recycled content and cost for each product.

Include the next paragraph for LEED NC, LEED CS, and LEED for Schools.

- 2. Certificates for Credit MR 5: For regional materials, indicating location of manufacturer and point of extraction, harvest, or recovery. Include distance to Project, cost, and fraction by weight for regional components.

Include the next paragraph for LEED CI, only.

- 3. Certificates for Credit MR 5: For regionally manufactured [**and regionally extracted and manufactured**] materials indicating location of manufacturer [**and point of extraction, harvest, or recovery**]. Include distance to Project, cost, [**and fraction by weight**] for regional components.
- C. Shop Drawings:
 - 1. Include details sheet membrane waterproofing installation, with flashings and terminations.

1.4 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.

PART 2 - PRODUCTS

2.1 SHEET MEMBRANE WATERPROOFING

- A. Sheet Membrane: ANSI A118.10; composite, sheet membrane made from PVC with non woven fiber laminated to both sides.
 - 1. Basis of Design Manufacturer: Noble Company.
 - 2. Basis of Design Product: Wall Seal.
- B. Performance:
 - 1. Water Vapor Permeance: ASTM ASTM E 96/E96M, Procedure A, maximum .22 perms, Procedure E; maximum **0.42 perms**.

2.2 ACCESSORIES

- A. Bonding Mortar:
 - 1. Latex-Portland Cement Mortar (Thin Set): ANSI A118.4.

**** OR ****

- B. Bonding Adhesive: Type recommended by sheet membrane manufacturer to suit application [**with VOC less than LEED allowable limits**].

Include NobleBond EXT for vertical interior locations used in horizontal applications.

- 1. Basis of Design Product: NobleBond EXT.

- C. Perimeter Sealant: Type recommended by sheet membrane manufacturer [**with VOC less than LEED allowable limits**].

- 1. Basis of Design Product: NobleSealant 150.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, including for unacceptable conditions affecting sheet membrane installation.
- B. Examine roughing-in for plumbing piping to verify actual locations of piping connections before sheet membrane installation.
- C. Correct unacceptable conditions before installing sheet membrane.

3.2 PREPARATION

- A. Examine substrates to verify they are ready to receive tile and membrane with no deficiency that could result in a potentially defective installation. Prepared substrates in accordance with ANSI A108, A3.1 and Tile Council of North America (TCNA) recommendations.

3.3 INSTALLATION - SHEET MEMBRANE WATERPROOFING

- A. Comply with ANSI A108.13, TCNA Handbook, and the manufacturers instructions for installation of sheet membrane waterproofing.

Include the next paragraph for thin-set wall applications.

- B. Bonded Installation for Thin-Set Applications:
 - 1. Apply bonding [**mortar**] [**adhesive**] for full coverage of substrate.
 - 2. Install sheet membrane and fully embed into bonding material.
- C. Seal sheet membrane watertight to items penetrating sheet membrane.

3.4 PROTECTION

- A. Protect sheet membrane from jobsite damage and prolonged exposure to sunlight.
- B. Keep sheet membrane clean until finishes are installed.

END OF SECTION 093000