

SECTION 093000 – LIQUID WATERPROOFING MEMBRANE

PART 1 - GENERAL

1.1 SUMMARY

Typical Floors: AquaBlue™ is a ready-to-use liquid waterproofing membrane appropriate for interior environments.

Acceptable Floor Substrates: ProBase® II, concrete, mortar bed, or tile backer board.

Acceptable Wall Substrates: Concrete, mortar bed, or tile backer board.

Acceptable Backer Boards: See current TCNA recommendations and ANSI standards.

Acceptable Waterproofing Membrane: AquaBlue™

- A. Section Includes:
 - 1. Waterproofing.
 - 2. Drains.
 - 3. Shower System Accessories.
 - 4. Waterproofing Accessories.

1.2 RELATED REQUIREMENTS

- A. Section 093013 Ceramic Tiling.
- B. Section 093021 Glass Tiling.
- C. Section 093023 Glass Mosaic Tiling.
- D. Section 093033 Stone Tiling.

1.3 REFERENCE STANDARDS

- A. ANSI A108.01 - General Requirements: Subsurfaces and Preparations by Other Trades.
- B. ANSI A118.4 - American National Standard Specifications for Modified Dry-Set Cement Mortar.
- C. ANSI A118.10 – Standard for Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimensional Stone Applications.
- D. ASTM F710 - Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.

- E. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
- F. ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.
- G. TCNA Handbook – Tile Council of North America Handbook for Ceramic, Glass, and Stone Tile Installation.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of shower system assembly, indicate component materials, dimensions, and application details including:
 - 1. Waterproofing membrane, waterproofing accessories, curbs, transitions, sealants, and accessories.
 - 2. Preparation and treatment requirements for installation and bonding waterproofing to substrates and shower system materials compatibility information.
 - 3. Include standard drawings illustrating manufacturer’s written installation and finishing instructions applicable to project, including details for assembly. Coordinate with Architect for finish material joints, accessories, and plumbing fixture requirements.
 - a. Illustrate shower assembly and how assembly interfaces with other work that forms part of shower system.
 - b. Where standards do not address project conditions, provide shop drawings prepared for project to illustrate proposed construction.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer: Noble Manufacturing LLC, 7300 Enterprise Drive, Spring Lake, MI 49456 TEL: 800.878.5788 FAX: 231.799.8850 Email:info@noblecompany.com WEB: www.noblecompany.com
- B. Substitutions: Not Permitted.
- C. Requests for substitutions will be considered in accordance with Section 012500.

2.2 LIQUID WATERPROOFING MEMBRANE

- A. Waterproofing membrane, AquaBlue, that complies with ANSI A118.10. Include accessories recommended by manufacturer.
 - 1. AquaBlue: ready-to-use liquid waterproofing membrane appropriate for interior environments.

- a. ICC listed
- b. ANSI A118.10 compliant

2.3 DRAINS

A. FreeStyle Linear Drain™:

1. Construction: [PVC] [ABS] drain body with 304L stainless steel clamping collar.

****NOTE TO SPECIFIER**** Custom sizes are available with minimum quantity of 50 pieces. Delete sizes not required.

2. Size: [24] [32] [36] [40] [48] [54] [60] inches.
3. Drain Location [center drain][off-set].
4. Drain Strainer Pattern: [316L stainless steel pyramid] [316L stainless steel slotted] [316L stainless steel wave] [316L stainless steel cross-hatch] [316L stainless steel tile top].
5. For proper drain installation and location, reference installation guide for additional information.
6. Minimum Flow Rate: 36.0 gpm.

B. FreeStyle Thin-Bed Drain: Square Only Strainer

1. Construction: [PVC] [ABS] drain body with 304L stainless steel clamping ring.
2. Drain piping: 2 inch [PVC] [ABS].
3. Drain Strainer Finish: [Chrome] [Brushed Nickel] [Oil Rubbed Bronze] [Brushed Golden Nickel][Flat Black].
4. Minimum Flow Rate: 8 gpm.

2.4 AQUABLUE SHOWER SYSTEM ACCESSORIES

A. Noble Solid Curb

1. Preformed solid EPS waterproof curb with acrylic polymer finish.

****NOTE TO SPECIFIER**** Custom sizes are available with minimum quantity of 50 pieces. Delete sizes not required.

2. #3001 Size 5 1/8" x 4 1/2" x 3' long.
3. #3002 Size 5 1/8" x 4 1/2" x 4' long.
4. #3003 Size 5 1/8" x 4 1/2" x 5' long.
5. #3011 Size 5 1/8" x 4 1/2" x 6' long.

B. Noble Niches

1. Noble Niches: Wall shelving made of high density extruded polystyrene with acrylic polymer finish.

****NOTE TO SPECIFIER**** Custom sizes are available with minimum quantity of 50 pieces. Delete Niches not required.

2. All Niches are 4" deep.
 - a. #278 Spice Rack 2-internal compartments 6" x 12".
 - b. #301 Square 1-internal compartment 12" x 12".
 - c. #302 Peaked 1-triangular topped compartment 20" x 12".
 - d. #2885 Double Square 2-internal compartments 12" x 12".
 - e. #303 Wide Arch Combo 1-semi-circle topped compartment 11 1/4" x 12"
1-rectangle compartment below 6" x 12".
 - f. #304 Wide Combo 1-square compartment 12" x 12" 1-rectangle compartment
6" x 12".
 - g. #314 Rectangular (adjustable shelf) 20" x 12" shelf is 1 3/8" width.
 - h. #305 Narrow Combo 1-rectangular topped compartment 12" x 6" 1-lower square
compartment 6" x 6".
 - i. #306 Narrow Arch Combo 1-semi-circle topped compartment 11 1/4" x 6" 1-square
compartment below 6" x 6".
 - j. #308 Soap 1-square compartment 6" x 6"
 - k. #2942 31 1/2 Tall (2 adjustable shelves) 1-rectangular compartment 29 1/4" x 12".
 - l. # 2943 4' Tall (3 adjustable shelves) 1-rectangular compartment 45 3/4" x 12".
 - m. #2781 4-Shelf Corner 4-rectangular compartments 14 1/2" x 6".
 - n. #2782 2-Shelf Corner 2-rectangular compartments 14 1/2" x 6".

C. Noble Benches

1. Benches made of high density EPS with acrylic polymer finish.

****NOTE TO SPECIFIER**** Custom sizes are available with minimum quantity of 50 pieces. Delete Benches not required.

- a. #400 Small Triangle 20"H x 22"W x 15 1/2"D.
- b. #402 Large Triangle 20"H x 32 1/2"W x 23"D.
- c. #404 Square 20"H x 11 1/2"W x 11 1/2"D.
- d. #406 Curved 20"H x 15 1/2"R.
- e. #411 Large Rectangular 20"H x 36"W x 15 1/2"D.
- f. #412 Small Rectangular 20"H x 36"W x 11 1/2"D.

D. Noble Shelf Bench

1. High density extruded polystyrene with acrylic polymer finish and aluminum framing for suspension.
 - a. 4"H x 32 5/16"W x 22 7/8"D.

2.5 AQUABLU WATERPROOFING ACCESSORIES

- A. Thin-Line™ Inside and Outside Corners.
- B. Thin-Line Pipe Collar.
- C. Thin-Line Mixing Valve Collar.
- D. NobleSealant (one tube = 40 linear feet @ 3/16" bead).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates for unacceptable conditions. Verify substrate is smooth, solid, flat, free from bond breakers, and acceptable for waterproofing application.
 - 1. Examine substrate surface tolerance. Verify maximum variation complies with ANSI A108.01 Section 3.0 for the tile being used.
- B. Review manufacturer's installation instructions, requirements, and limitations.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.
- D. If preparation is responsibility of another installer, notify Authority Having Jurisdiction (GC, Site Foreman) of unsatisfactory preparation before proceeding.

3.2 PREPARATION

Floor slab moisture content may be measured by relative humidity test.

- A. Examine, prepare, and test concrete floors for finish flooring installation in accordance with ASTM F710. Perform one relative humidity test in accordance with ASTM F2170.
- B. Include relative humidity requirements. RH should not exceed 75% or be rising. Coordinate with tests specified above.
- C. If tested RH% is greater than 75% or rising, additional curing time or correction is necessary.

3.3 INSTALLATION GENERAL

- A. Comply with manufacturer's written installation instructions and application indicated on drawings. If printed instructions are not available or do not apply to project conditions, consult manufacturer's technical data or support for specific recommendations before proceeding with installation of system.

- B. Installation: See manufacturer's installation information.
- C. Set tile in accordance with TCNA Handbook recommendations, ANSI A108 standards, and setting material manufacturer's directions.

3.4 PROTECTION

- A. Protect drain and surfaces against penetrations and debris.
- B. Protect installed products until completion of project.
- C. Repair or replace any damaged products before Substantial Completion using manufacturer recommended procedures only.

END OF SECTION 093000

