SECTION 093000 - Noble Company Complete Shower System

## PART 1 - GENERAL

### 1.1 SUMMARY

Typical Floors: ProBase ${ }^{\circledR}$ II shower base is installed as a substrate for a bonded waterproofing membrane in a tile installation.

Acceptable Floor Substrates: Concrete, mortar bed, plywood, or backer board.

Acceptable Backer Boards For Wall: 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.

Acceptable Waterproofing Membrane: NobleSeal ${ }^{\circledR}$ TS, NobleSeal CIS, ValueSeal ${ }^{\circledR}$
A. Section Includes:

1. Sloped waterproof shower base for custom tile shower installations
2. Waterproofing
3. Linear Drain
4. Clamping Ring Drain
5. Accessories
1.2 Related Sections
A. Section 093013 Ceramic Tiling
B. Section 093021 Glass Tiling
C. Section 093033 Stone Tiling

### 1.3 REFERENCES

A. ASTM 2394-17 Section 18
B. ANSI A108.01 General Requirements: Subsurfaces and Preparations by Other Trades
C. ANSI A108.13 - Installation of Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone.
D. ANSI A118.10-American National Standard Specifications for Load Bearing, Bonded, Waterproof Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation.
E. ANSI A118.12 Section 5.4 - American National Standard Specifications for Crack Isolation Membranes for Thin-Set Ceramic Tile and Dimensional Stone Installation
F. ANSI A118.14 - American National Standard Specifications for Modified Dry-Set Cement Mortar
G. ASTM C365/C365M - Test Method for Flatwise Compressive Properties of Sandwich Cores.
H. ASTM E96/E96M Procedure E - Standard Test Methods for Water Vapor Transmission of Materials.
I. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
J. ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes.
K. 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 or transitions, sealants and accessories.
2. Preparation and treatment requirements for installation and bonding waterproofing to adjacent substrates, and finish 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 the assembly interfaces with other work that forms part of the 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 provisions of Section 016000

### 2.2 Prefabricated Sloped Shower Base: Noble Company ProBase II

A. Shower Base: sloped composite, made from high-strength layer of polypropylene honeycomb and high density expanded polystyrene (EPS)

1. $\quad * * * *$ NOTE TO SPECIFIER**** Delete style not required
2. Single slope for use with Noble Company Freestyle Linear Drain
3. Multi-Pitch slope for use with Noble Company Freestyle Thin-Bed Drain
B. ${ }^{* * * *}$ NOTE TO SPECIFIER**** Delete size not required
4. Size: $32^{\prime \prime}$ by $60^{\prime \prime}$ single slope [center drain][end drain]
5. Size $64^{\prime \prime}$ by $64^{\prime \prime}$ single slope [center drain][end drain]
6. Size: $32^{\prime \prime}$ by $60^{\prime \prime}$ multi-pitch [center drain][end drain]
7. Size: $48^{\prime \prime}$ by $48^{\prime \prime}$ multi-pitch [center drain][end drain]
8. Size $72^{\prime \prime}$ by $72^{\prime \prime}$ multi-pitch [center drain][end drain]
9. CUSTOM SIZES AVAILABLE MIN. QUANTITY 50 pieces
C. Performance:
10. Falling Ball Indentation in accordance with ASTM D2394 Section 18. Max . 030 @ 48"
11. Compressive Strength (Bare Honeycomb): ASTM C365, Min. 235 psi
12. Slope: min. $1 / 4 \mathrm{inch} / \mathrm{ft}$. to drain location from all corners and edges

### 2.3 Sloped Shower Base System Accessories

A. Noble Solid Curb

1. Preformed solid EPS waterproof curb with acrylic polymer finish
2. ${ }^{* * * *}$ NOTE TO SPECIFIER ${ }^{* * * *}$ Delete size not required
3. \#3001 Size $51 / 8^{\prime \prime} \times 41 / 2^{\prime \prime} \times 3$ long
4. \#3002 Size $51 / 8^{\prime \prime} \times 41 / 2^{\prime \prime} \times 4^{\prime \prime}$ long
5. \#3003 Size $51 / 8^{\prime \prime} \times 41 / 2^{\prime \prime} \times 5^{\prime}$ long
6. \#3011 Size $51 / 8^{\prime \prime} \times 41 / 2^{\prime \prime} \times 6^{\prime}$ long
7. CUSTOM SIZES AVAILABLE MIN. QUANTITY 50 pieces
B. Shower Accessories
8. Noble Niches: Wall shelving made of high density extruded polystyrene with acrylic polymer finish.
9. ${ }^{* * * *}$ NOTE TO SPECIFIER**** Delete niche not required
10. All niches are 4" deep
a. \#278 Spice Rack 2-internal compartments 6" $\times 12$ "
b. \#301 Square 1-internal compartment $12^{\prime \prime} \times 12^{\prime \prime}$
c. \#302 Peaked 1-triangular topped compartment $20^{\prime \prime} \times 12^{\prime \prime}$
d. \#2885 Double Square 2-internal compartments 12" $\times 12^{\prime \prime}$
e. \#303 Wide Arch Combo 1-semi-circle topped compartment 11 1/4" x 12" 1-rectangle compartment below 6" $\times 12^{\prime \prime}$
f. \#304 Wide Combo 1-square compartment $12^{\prime \prime} \times 12^{\prime \prime}$ 1-rectangle compartment $6^{\prime \prime} \times 12^{\prime \prime}$
g. \#314 Rectangular (adjustable shelf) $20^{\prime \prime} \times 12^{\prime \prime}$ shelf is $13 / 8^{\prime \prime}$ width
h. \#305 Narrow Combo 1-rectangular top compartment 12" x 6" 1-lower square compartment 6" x 6"
i. \#306 Narrow Arch Combo 1-semi-circle topped compartment $111 / 4^{\prime \prime} \times 6^{\prime \prime}$ 1-square compartment below $6^{\prime \prime} \times 6^{\prime \prime}$
j. \#308 Soap 1-square compartment 6" x 6"
k. \#2942 $31 \frac{1}{2}$ Tall ( 2 adjustable shelves) 1-rectagular compartment $291 / 4 \prime \times 12^{\prime \prime}$
I. \# $29434^{\prime}$ Tall (3 adjustable shelves) 1-rectangular compartment 45 3/4" x 12"
m. \#2781 4-Shelf Corner 4-rectangular compartments $141 / 2^{\prime \prime} \times 6$ "
n. \#2782 2-Shelf Corner 2 rectangular compartments $141 / 2^{\prime \prime} \times 6$ "
o. CUSTOM SIZES AVAILABLE MIN. QUANTITY 50 pieces
11. Noble Benches: Benches made of high density EPS with acrylic polymer finish.
12. $\quad * * * *$ NOTE TO SPECIFIER**** Delete Bench Not Required
a. \#400 Small Triangle Bench $20 " \mathrm{H} \times 22$ "W x $151 / 2 \prime \mathrm{D}$
b. \#402 Large Triangle Bench $20^{\prime \prime} \mathrm{H} \times 321 / 2^{\prime \prime} \mathrm{W} \times 23^{\prime \prime} \mathrm{D}$
c. \#404 Square Bench 20 " $\mathrm{H} \times 111 / 2^{\prime \prime} \mathrm{W} \times 111 / 2^{\prime \prime} \mathrm{D}$
d. \#406 Curved Bench 20" H x 15 1/2R
e. \#411 Large Rectangular Bench 20 " $\mathrm{H} \times 36^{\prime \prime} \mathrm{W} \times 151 / 2^{\prime \prime} \mathrm{D}$
f. \#412 Small Rectangular Bench 20"H x $36^{\prime \prime} \mathrm{W} \times 111 / 2^{\prime \prime} \mathrm{D}$
g. CUSTOM SIZES AVAILABLE MIN. QUANTITY 50 pieces
13. Noble Shelf Bench: High density extruded polystyrene with acrylic polymer finish and aluminum framing for suspension
a. $4^{\prime \prime} \mathrm{H} \times 325 / 16^{\prime \prime} \mathrm{W} \times 227 / 8^{\prime \prime} \mathrm{D}$

### 2.4 THIN-BED BONDED WATERPROOFING SYSTEM

A. Composite waterproofing membrane [ValueSeal] [NobleSeal TS][NobleSeal CIS] that complies with ANSI A118.10. Include accessories recommended by manufacturer.

1. $\quad * * * *$ NOTE TO SPECIFIER ${ }^{* * * *}$ Delete Waterproofing Membrane not used
2. 16 mil thick polyethylene sheet membrane with polyester laminated to both sides [ValueSeal]
a. Perm Rating (per ASTM E96 Procedure E) 0.20 perms
3. 30 mil thick composite sheet membrane made from chlorinated polyethylene (CPE) with polyester laminated to both sides [NobleSeal TS][NobleSeal CIS]
a. Perm Rating (per ASTM E96 Procedure E) 0.15 perms
b. High Performance crack isolation rating per ANSI A118.12 Section 5.4
B. Waterproofing Accessories
4. Prefabricated waterproof membrane corners
a. Noble Company Thin-Line ${ }^{\mathrm{TM}}$ Inside and Outside Corners
b. Noble Company CPE Inside and Outside Corners
5. Noble Company Thin-Line Pipe Collar
6. Noble Company Thin-Line Mixing Valve Collar
7. NobleSealant (one tube $=40$ linear feet $@ 3 / 16^{\prime \prime}$ bead)

## 2.5 <br> SETTING MATERIALS

A. For non-steam room applications, membrane can be set with NobleBond EXT or a modified thin-set that meets or exceeds ANSI A118.4. Complete coverage of the membrane by the bond coat is required.
B. For a steam room application membrane should be set with a modified thin-set that meets or exceeds ANSI A118.4 and is manufacturer recommended for use in steam rooms. Complete coverage of the membrane by the bond coat is required.
C. Set tile in accordance with TCNA Handbook recommendations, ANSI A108 standards, and bond coat manufacturer's directions. Complete coverage of waterproofing sheet membrane by the bond coat is required.

### 2.6 DRAINS

A. Noble Company Freestyle Linear Drain

1. $\quad[P V C][A B S]$ drain body with 304L Stainless Steel Clamping Collar: [24 inch][32 inch][36 inch][40 inch][48 inch][54 inch][60 inch][custom sizes available min. quantity 50 pieces]
2. Drain Location [center drain][off-set]
3. 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]
4. For proper drain installation and location, reference installation guide for additional information.
5. Minimum flow rate for drain: 36.0 gpm
B. Noble Company Freestyle Thin-Bed Drain
6. $\quad[P V C][A B S]$ drain body with 304L Stainless Steel Clamping Ring
7. Drain piping: 2" (51 mm) [PVC][ABS]
8. Drain Strainer Finish: [Chrome][Brushed Nickel][Oil Rubbed Bronze][Brushed Golden Nickel]
9. Minimum flow rate for drain: 8 gpm

## PART 3 - EXECUTION

### 3.1 EXAMINATION

A. Examine substrates, with installer present, for unacceptable conditions affecting shower base installation. Substrate must be smooth, solid, flat, free from bond breakers, and acceptable for shower application.
B. Review manufacturer's installation instructions and requirements and limitations.
C. Examine rough-in for plumbing piping to verify actual locations of piping connections before shower base installation.
D. Proceed with installation only after unsatisfactory conditions have been corrected.
E. If preparation is the responsibility of another installer, notify architect of unsatisfactory preparation before proceeding.

### 3.2 PREPARATION

Floor slab moisture content may be measured by moisture emission test, by relative humidity test, or both.
A. Examine, prepare, and test concrete floors for finish flooring installation in accordance with ASTM F710. Perform one [moisture emission test in accordance with ASTM F1869] [relative humidity test in accordance with ASTM F2170] and one alkalinity test for every 2,000 sf (185 sq. $m$ ).

1. Surface Tolerance: Maximum variation shall follow guidelines as set forth in ANSI A108.01 Section 3.0

Include moisture emission rate or relative humidity requirements, or both. Coordinate with tests specified above.
B. When tested moisture emission rate exceeds specified maximum, consult modified thin-set manufacturer for acceptable mitigation methods and materials.

### 3.3 INSTALLATION GENERAL

A. Comply with manufacturers written installation instructions applicable to products and application indicated on drawings. If printed instructions are not available or do not apply to project conditions, consult manufacturers' technical data or support for specific recomendations before proceeding with installation of system.
B. Installation : See manufacturers' installation information.

### 3.4 PROTECTION

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

END OF SECTION 093000
Noble Company

