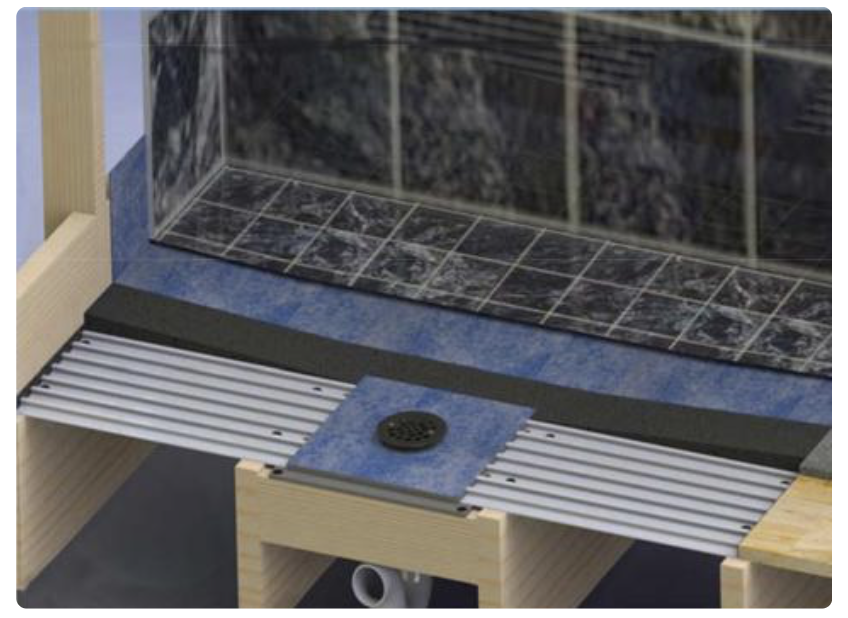
1. 
2. Note: Shower floor and wall system for wood framed structures, including residential, multifamily and other structures where zero (curb less) entry shower areas are desired.
3. Released 11/2018
4. Note: Recommended for residential, commercial, industrial projects at interior and exterior areas subjected to moisture, steam and water.
5. Edit and update items of this specification that are in “BOLD” letters or numbers.

For assistance on the use of the products in this section, contact FinPan, Inc. by calling (800) 606-5820, by email at renee@finpan.com , or visit their website at www.finpan.com

SECTION 22 41 23

RESIDENTIAL SHOWERS

\*\*\*\*\*\*\*OR \*\*\*\*\*\*\*\*

SECTION 22 42 23

COMMERICAL SHOWERS

1. **GENERAL**
   1. SUMMARY
      1. Section Includes:
         1. Curbless, zero entry shower systems for above grade wood steel joints subfloors
2. Note: Edit the below **BOLD** items to identify related of application for the project.
   1. RELATED SECTIONS

Note: Edit the following paragraphs to suit project requirements and to coordinate with other sections in the project manual.

* + 1. Division 01: Administrative, procedural, and temporary work requirements
    2. Section [**06 11 00 – Wood Framing**]
    3. Section [**09 21 16.33** - **Gypsum Board Area Separation Wall Assemblies**]
    4. Section [**09 30 00 – Tiling**]
    5. Section [**22 43 23 Healthcare Showers**]
    6. Section [**22 45 13 Emergency Showers**]
    7. Section [**22 46 19 Security Showers**]
  1. REFERENCES

Note: Delete references from the list below that are not required or used as reference in other areas of this specification. Add to the list as needed.

* + 1. American National Standards Institute ([www.ANSI.org](http://www.ANSI.org))
       1. A118.9 - Test Methods and Specifications for Cementitious Backer Units.
       2. A118.10 - American National Standard Specifications for Load Bearing, Bonded, Waterproof Membranes for Thin-set Ceramic Tile and Dimension Stone Installation.
       3. A108.11 - Interior Installation of Cementitious Backer Units.
    2. ASTM International ([www.ASTM.org](http://www.ASTM.org)) ([www.astm.org](http://www.astm.org))
       1. C947Standard Test Method for Flexural Properties of Thin-SectionGlass-Fiber-Reinforced Concrete
       2. C1325 Standard for Non-Asbestos Fiber-Mat Reinforced Cementitious Backer Units
       3. C1629 - Standard Classification for Abuse-Resistant Non-decorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels
    3. International Association of Plumbing and Mechanical Officials ([www.IAPMO.org](http://www.IAPMO.org))
       1. PS 46-2012, Field-Fabricated Tiling Kits
    4. Tile Council of North America ([www.TCNAtile.org](http://www.TCNAtile.org))
       1. TCNA Handbook.
  1. SUBMITTALS

1. Note: Verify the Section number is correct for administrative requirements for your product.
   * 1. Submit under provisions of Section [**01 30 00**] - Administrative Requirements.
     2. Manufacturer's data:
        1. Each product to be installed
        2. Accessory data
        3. Installation requirements
        4. Installer acceptance

C. Shop Drawings:

1. Dimensioned plans indicated layout of showers Note: Add or update sustainability submittals for a project. Delete if the project has no “green” credit requirements. (LEED, Well, Red List, Collaborative for High Performance Schools)

* + 1. Sustainable Design Submittals:
       1. Regional Materials
       2. Low-Emitting Materials
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Ten (10) years manufacturing moisture resistant backer boards.
     2. Installer Qualifications: Five (5) years commercial tile or drywall installation experience.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Deliver, store and handle product following manufacturer instructions.
     2. Store indoors in manufacturer's packaging and protect from damage prior to installation.
     3. Inspect components for damage and notify manufacturer of materials requiring replacement.
  3. PROJECT CONDITIONS
     1. Weatherproof and enclose building to maintain a minimum of 60 degrees F (15 degrees C) and 60% relative humidity.
  4. WARRANTY
     1. Provide manufacturer's ten (10) year repair or replacement warranty.

1. **PRODUCTS**
   1. MANUFACTURERS
      1. Acceptable Manufacturer: FinPan, Inc. Hamilton, OH 45015; (800) 833-6444; www.finpan.com

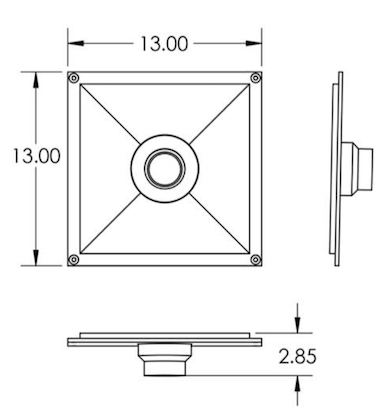
Note: Select one of the below items; coordinate with Division 1 substitutions procedures.

* + 1. Substitutions: [**Not permitted**] [In accordance with Section **01 16 00**]
  1. MATERIALS
     1. Curbless Shower, zero entry system by FinPan, Inc.
        1. Site fabricated assembly of the following components to produce a seamless tile ready wall and floor substrate for tiling.
           1. Drain Plate: UPC rated drain, pre-sealed in drain plate for wood floor joists attachment.

1. Size: **[13 x 13 inch Drain]**

2. Material: Plastic

3. Color: Grey



b. Drain Cover: Decorative cover finish.

1. Shape: **[Round] [Square] [ClearLine 60 inch x 2.72 inch wide]**

Note: Manufacturer provides various drain options. Select desired drain shape and one of the below cover color options.

2. Round: **[Stainless] [Oil Rubbed Bronze] [Bushed Nickel] [Antique Brass]**

**[Polished Brass]**

**\*\*\*\*\*\*\*OR\*\*\*\*\*\*\*\*\***

Cast Square: **[Antique Bronze] [Brushed Nickel] [Oil Rubbed Bronze]**

**[Stainless Steel]**

**\*\*\*\*\*\*\*OR\*\*\*\*\*\*\*\*\***

Cast Round**: [Brushed Brass] [Brushed Nickel]**

**\*\*\*\*\*\*\*OR\*\*\*\*\*\*\*\*\***

ClearLine: Stainless Steel **[Standard] [Long Slot Grate] [Vertical Slot Grate] [Small Rectangles Grate]**

* + - * 1. Composite Structural Underlayment: TI-Proboard for interior and exterior wood substrates to provide a water resistant, non-warp, non-flex substrate for tiling.

Width: 1 foot

Length: up to 8 foot

Thickness: 3/8 inch

Composition: Fiberglass

* + - * 1. PE Waterproofing Sheet Membrane:

Width: 39 inches

Length: Up to 25 feet

Thickness: 0.008 inches

Composition: Polyethylene

2.3 ACCESSORIES

A. Fasteners

1. Manufacturer’s recommended corrosion resistant screws.

B. Sealant/Adhesive:

1. Manufacturer’s recommended SIKA Flex 11 FC one part advanced polyurethane elastomeric sealant/adhesive.

C. Liquid Waterproofing:

1. Water Armor AWB VOC compliant, 100% acrylic air and water barrier for interior and exterior applications.

* + 1. Seaming Tape:
       1. Manufacturer’s alkali-resistant 2-inch (51 mm) wide fiberglass mesh tape for joint reinforcement.

E. Mortar Mix:

1. 4.1 Sand/ mortar mix as recommended by manufacturer.

F. Backer Board: ProPanel lightweight waterproof, insulated polystyrene polymer cement coated board. Wall Panel: ProPanel lightweight waterproof, insulated polystyrene polymer cement coated board.

1. Composition: High-density, polystyrene, fiber reinforced cement panel

2. ANSI A118.10: Section 4-5 Waterproofness

3. Thickness: [**1/4 inch]** [**1/2 inch]**

4. Weight: 6 pounds per panel

5. Width: 3 feet (914 mm).

6. Length: 5 feet (1524 mm).

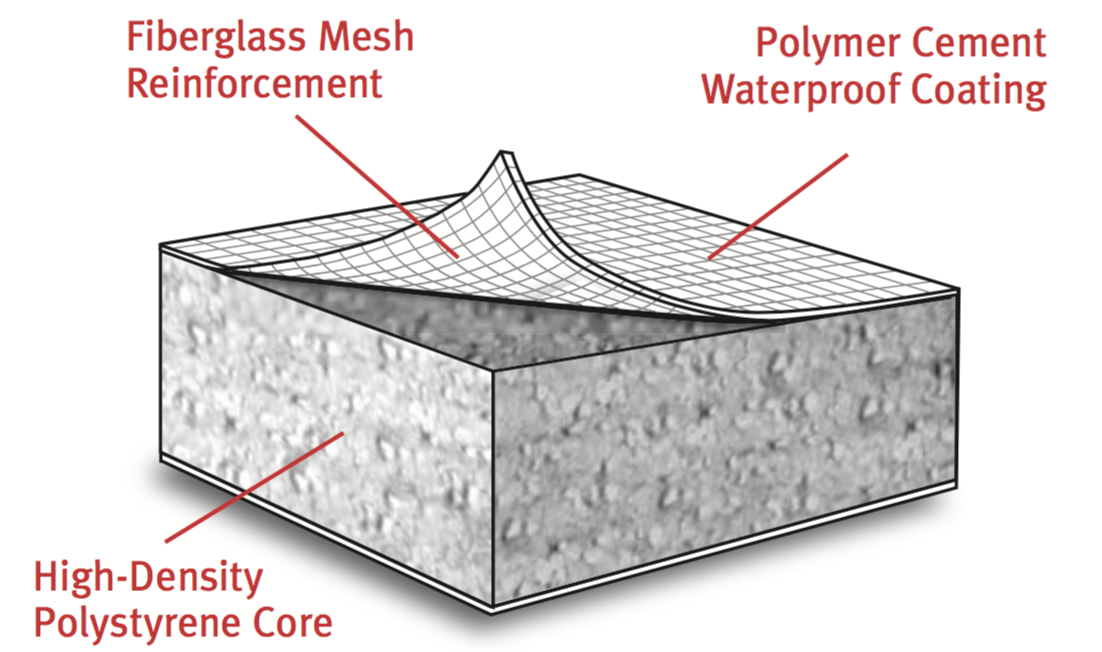
7. Edges: Square.

8. Density: 2 lb. Density EPS Core

9. ASTM D4068: Pass, hydrostatic Water Pressure Test

10. ASTM G21: <10% , resistance to Fungi

11. ASTM C-627: Light commercial and Residential



ProPanel Composition

1. **EXECUTION**
   1. EXAMINATION
      1. Verify framing and joists are level, plumb and adjacent surfaces meet tolerances for installation.
      2. For Floors, verify wall substrates are not to exceed maximum deflection allowed under all live, dead and impact and concentrated loads: "L" equals span length in inches.
         1. L inches / 360 (L mm / 9144): For thin bed ceramic tile and brick installations.
         2. L inches /480 (L mm / 12192): For thin bed stone installations.
      3. Verify floor joists spacing do not exceed 19 inches on center.
      4. Verify shower and drain plate locations will not impact under joists installations of sprinklers, electrical, plumping, hvac or other work to be installed.
      5. Do not proceed with installation until unsatisfactory conditions have been corrected. Installation deems acceptance.
   2. INSTALLATION
      1. Review manufacturers instructions and submittals prior to installation. Install components in accordance with manufacturers requirements for a warranted installation.
      2. Install drain plate to floor joists and any required blocking using recommended screws at each corner.
         1. Maintain drain plate protection to prevent mortar and debris accumulation.
      3. Loose lay composite structural panel perpendicular to the floor joists starting at drain plate edge.
         1. Secure panel at using screws at each joist as required.
      4. Install backer board to perimeter walls, securing to studs with screws.
2. E. Verify drain selection and proceed with installation as required.
3. Note: Slope to drain is achieved prior to thin-set and tile application. Select desired % of slope
   * 1. Mix and apply 4:1 mortar and sand mix to fill in composite structure panel ribs.
        1. Maintain a **[5 percent][10 percent]** slope to drain.

G. Apply thin-set to mortar surface and install waterproofing membrane to shower base and 6” up

backer board base.

1. Waterproofing membrane is required on the face or behind backer boards that are not non-waterproof.
2. Apply sealant and seaming tape to backer board joints and areas not watertight.

H. Apply liquid waterproofing as required, to maintain a watertight shower system.

I. Insert drain cover upon completion and secure to drain plate. Apply protective covering.

* 1. FIELD QUALITY CONTROL
     1. Inspect drain, backer board and slope to drain upon completion. Repair as required for a warranted installation.

3.4 PROTECTION

A. Cover mortar and walls to protect from contamination and damage prior to tiling.

1. Note: The below SCHEDULE may be deleted if Part 1 clearly identifies where products are to be installed.
2. Update and edit the below to identify where to install each backer board system.
3. Specify High Impact Board at all locations (Util-A-Crete board) where 1-hr fire rating wall assembly component is desired.
   1. SCHEDULES
      1. Shower:
         1. Install at above grade **[enter location]**

END OF SECTION