**SECTION 09305**

**TI-ProBoard® Structural Ribbed Self-supporting Board (SRSB)**

**\*\*NOTE TO SPECIFIER\*\* FinPan; TI-ProBoard Structural Ribbed Self-supporting Board**

This section is based on the products of FinPan, Inc. which is located at:

3255 Symmes Rd.

Hamilton, OH 45015

Toll Free: 800-833-6444

Telephone: 513-870-9200

Fax: 513-870-9606

Email: sales@finpan.com

Web: [www.finpan.com](http://www.finpan.com)

TI-ProBoard Structural Ribbed Self-supporting Board offers a sustainable, durable and virtually maintenance free deck installation. With TI-ProBoard, deck boards or plywood is not needed to create a sound substrate for tile or slate on an outdoor deck. TI-ProBoard is unaffected by expansion, contraction or weather conditions. TI-ProBoard is “The Exterior Deck Solution”.

PART 1 GENERAL

* 1. SECTION INCLUDES

\*\*NOTE TO SPECIFIER\*\* Delete products not required.

1. Tile Underlayment
2. Tile Waterproofing Membrane
3. Trim Profiles
	1. RELATED SECTIONS

\*\*NOTE TO SPECIFIER\*\* Delete sections below not relevant to this project; add others as required.

1. Section 03300 – Concrete
2. Section 06160 - Sheathing
3. Section 07500 – Membrane Roofing
4. Section 09300 – Tile
	1. REFERENCES

\*\*NOTE TO SPECIFIER\*\* Delete references from the list below that are not actually required by the text of the edited sections.

1. ASTM International (ASTM):
2. ASTM E 84-07 – Standard Test Methods for Surface Burning Characteristics of Building Materials.
3. ASTM C 627 – Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester.
4. ASTM D 790 – Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
5. ASTM C 1026 – Standard Test Method for Measuring the Resistance of Ceramic and Glass Tile to Freeze-Thaw Cycling.
6. Tile Council of North America (TCNA):
7. TCNA Handbook.

1.4 SUBMITTALS

 A. Submit under provisions of Section 01300.

 B. 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.

\*\*NOTE TO SPECIFIER\*\* Delete if USGBC LEED Certification not required.

1. LEED Green Building Rating System: Submit manufacturer’s documentation of

recycled content, in accordance with LEED credit calculations.

1.5 QUALITY ASSURANCE

 A. Manufacturer’s Qualifications: Minimum 5 years manufacturing similar product.

 B. Regulatory Compliance Requirements: Comply with requirements of authorities

 having jurisdiction for materials, installation and testing.

1.6 DELIVERY, STORAGE AND HANDLING

A. Product needs to be shielded from sunlight when stored outdoors for long periods (excess of two months). Cover with tarp to prevent damage from UV.

B. Handle product with care so as not to damage the tongues and grooves that hold the planks together.

C. Care should be taken during the cutting of board due to the dust or small amounts of glass fibers that can become airborne. A wet saw is highly recommended.

1.7 PROJECT CONDITIONS

A. Make sure that the deck frame is in good condition, sloped away from the structure and with joists 16 inches on center.

1.8 WARRANTY

\*\*NOTE TO SPECIFIER\*\* Delete warranty provisions for products not required.

1. Manufacturer’s Standard: Provide manufacturer’s standard 10-year limited warranty.

PART 2 PRODUCTS

2.1 MANUFACTURER’S

\*\*NOTE TO SPECIFIER\*\* Delete Protecto-Wrap if waterproofing membrane information is not required.

 A. Acceptable Manufacturer: FinPan, 3255 Symmes Road, Hamilton, OH 45015.

 Toll Free: 800-833-6444. Phone: 513-870-9200. Fax: 513-970-9606.

 Email: sales@finpan.com Web: [www.finpan.com](http://www.finpan.com)

1. Acceptable Manufacturer: Protecto Wrap Company, 1955 South Cherokee, Denver, CO 80223.

Toll Free: 800-759-9727. Phone: 303-777-3001. Fax: 303-777-9272.

Web: [www.protectowrap.com](http://www.protectowrap.com)

\*\*NOTE TO SPECIFIER\*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

1. Substitutions: Not permitted.
2. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 TILE UNDERLAYMENT

\*\*NOTE TO SPECIFIER\*\* Delete types and material not required.

1. Basis-of-Design Product: TI-ProBoard Structural Ribbed Self-supporting Board by FinPan.
2. Tile Underlayment: A structural pultruded fiberglass and composite board.
3. Thickness: 3/8 inch (9.5 mm).
4. Width: 1 feet (305 mm).
5. Length: 8 feet and 12 feet (2438 mm and 3658 mm).
6. Edges: tongue and groove.
7. Fasteners: TI-ProBoard 1-5/8 inch Coated Deck Screw with ½ inch pancake head.
8. Mortar: ANSI A 108.1B.
9. Membrane: ANSI A 108.13; 2.1.1.
10. Modified Thinset: ANSI A 118.4 or better.
11. Grout: ANSI A 118.3, A 118.6 or A 118.7.

2.3 TILE WATERPROOFING MEMBRANE

1. Basis-of-Design Product: AFM-WM by Protecto Wrap.
2. Tile Waterproofing Membrane: For use under thinset tile, stone and marble as a crack suppression, anti-fracture and waterproofing membrane.
3. Standards: ANSI A 108.13; 2.1.1.
4. Thickness: 40 mils.
5. Width: 3 feet (914 mm)
6. Length: 75 feet (22,860 mm).
7. Edges: Peel and stick.
8. Fasteners: N/A.
	1. TRIM PROFILES

 C. Basis-of-Design Product: TI-Edging by FinPan.

1. Trim Profile: Durable trim profile to conceal TI-ProBoard and mortar edge.
2. Length: 8 feet (2438 mm).
3. Edges: Square.
4. Fasteners: N/A.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that surfaces and site conditions are ready to receive work and conform to manufacturer’s requirements.

B. Do not use materials with defects that would interfere with installation quality.

3.2 TI-PROBOARD INSTALLATION

 A. General Requirements: Install products in accordance with manufacturer’s

 instructions, approved submittals and in proper relationship with adjacent

 construction.

1. Joints and edges must be located over and supported by framing members or structural components acceptable to the project engineer.
2. The maximum variation in the joist system is ¼ inch in 10 feet and 1/16 inch in 1 foot from required plane.
3. The maximum joist span allowed is 16 inches on center.
4. Width of joists should be considered with workloads.
5. Expansion joints are mandatory with method EJ171 of the TCNA Handbook. DO NOT cut the TI-ProBoard to achieve this.

3.3 MEMBRANE INSTALLATION

\*\*NOTE TO SPECIFIER\*\* Delete Membrane Installation if not applicable.

 A. General Requirements: Install products in accordance with manufacturer’s

 instructions, approved submittals and in proper relationship with adjacent

 construction.

1. The surface to receive AFM-WM must be clean, dry and free of any foreign matter that may adversely affect the membrane’s adhesion.
2. Fully adhere membrane to substrate in accordance with manufacturer’s instructions.

3.4 TRIM PROFILES

A. General Requirements: Install products in accordance with manufacturer’s

 instructions, approved submittals and in proper relationship with adjacent

 construction.

1. Press TI-Edging into thinset with the long side pressed against the vertical board.

Leave a ¼ inch gap between the tile and TI-Edging.

1. Caulk the ¼ inch gap prior to grouting with a caulk/grout that matches the grout color.

3.5 CLEANING

A. Remove all excess and waste materials from the job site in accordance with the Owner’s construction waste management requirements.

3.6 PROTECTION

 A. Repair or replace damaged products prior to Substantial Completion.

END OF SECTION