



# wedi Building Panel Architectural Specification

## Chapter 1 - General Data

### 1.1 Descriptive Part

a. Application in this sector contains but is not limited to:

1. Backer board for ceramic tile on interior walls and ceilings (1/8", 1/4", 1/2", 5/8", 1", 1 1/2", 2" panels).
2. Underlayment for ceramic tile installation on interior floors (1/4" panel or thicker).
3. Substrate for ceramic tile installation on countertops (see 1).
4. Substrate for ceramic tile installation on bath tub framing (see 1).

b. Complementary work specified elsewhere:

1. Ceramic Tile and Stoneware
2. Rough Carpentry/Finish Carpentry
3. Plumbing
4. Tile Grouts & Adhesives

### 1.2 Confirmations and Submittal

a. Product characteristics and data:

Submit the manufacturers technical data concerning material composition, sizes, thickness, flame resistance and that the product meets specified requirements.

### 1.3 Storage, Handling, Transport & Delivery

a. Storage and Handling: Store all products on a level surface; protect from direct sun exposure, volatile compounds, harsh chemicals and contact with moisture. Protect the exposed edges. Avoid contact with temperatures greater than 160 °F.

b. Transport & Delivery: Deliver the material in its original manufacturers packaging with manufacturers brand name and identification visible.

### 1.4 Limitations

a. wedi Building Panel is not to be used where temperatures exceed 160 °F.

- b. wedi Building Panel is not to be used in extremely humid or cold applications (e.g.: swimming pool areas, freezers, commercial steam rooms/saunas/radiant barriers at fireplaces) without consulting wedi Technical Services. Special installation methods can be provided by wedi Technical Services for these applications.
- c. Do not use wedi Building Panel as a structural load bearing member.
- d. Steel frames must be 20 gauge or heavier. Maximum framing spacing should not exceed 16" (.4m) on center. The framing should comply with local building code requirements. Stud depth 3 - 5/8".
- e. Minimum ceramic tile size requirements for 1/4" or 1/2" wedi Building Panel on floors:
  - 1. Residential & Light Commercial Use – 4" x 4" installed with modified thinset mortar and cementitious grout.
  - 2. Medium to Heavy Commercial Use – 8" x 8" installed with modified thinset mortar and epoxy joint filler compound.

Consult wedi Technical Services for additional information on appropriate tile formats and setting material recommendations.

- f. Do not use wedi Building Panel as a base for mechanical fastening or nailing.
- g. Do not use wedi Building Panel in exterior applications without special installation instructions from wedi Technical Services.
- h. Do not use wedi Building Panel in combination with passive solar heat systems prior to consulting wedi Technical Services.
- i. Do not use wedi Building Panel in combination with mastic adhesives.
- j. wedi Building Panel is not to be used as a tile backer for flexible and soft flooring.
- k. Do not use wallpaper or paint on wedi Building Panel prior to consultation with wedi Technical Services.
- l. Deflection of structural wooden subfloors shall not exceed 1/360 (ASTM C627). Plywood should be a minimum of 5/8" (15 mm) thick. OSB should be a minimum of 3/4" (20 mm) thick. Joist spacing should not exceed 16" (.4m) on center or 19.2" o.c. (.5m) with engineered lumber/OSB 7/8" tongue & groove system with an L/360 deflection limitation for the span, including live and dead loads. Follow local building, IRC and ICC codes.

- m. wedi Building Panel is not to be used on shower floors or placed under a shower pan mortar bed.
- n. Do not use wallboard joint compound and paper tape on wedi Building Panel. Use the wedi Joint Sealant or fiberglass mesh tape in dry areas.
- o. Do not use wedi Building Panel on top of radiant heating systems (insulating). wedi Building Panel can be installed under most electric floor warming systems.

## **Chapter 2 - Products**

### **2.1 Tile Backer Board**

#### a. Suitable Products:

- 1. 1/8", 1/4", 1/2", 5/8", 1", 1 1/2", 2" wedi Building Panel

#### b. Properties

##### 1. Size:

- a. 1/8", 1/4", 1/2", 5/8", 1", 1 1/2", 2": 2' x 4', 3' x 5', 2' x 8' sheets

##### 2. Composition:

The product consists of a Styrofoam™ Brand foam insulation core coated on both sides with a fiberglass mesh and polymer-modified mortar. The core is extruded polystyrene providing a closed cell matrix throughout and making it 100% waterproof.

##### 3. Standards: ASTM C-627

### **2.2 Accessories**

#### a. Trim: standard utility knife and/or jigsaw for exact hole cut outs.

b. Metal framing fastening: Use screws for light-gauge metal framing (Type S, bugle or wafer head, self tapping, corrosion resistant) and heavy gauge metal framing (Type S-12, bugle or wafer head, corrosion resistant). Both should be used in combination with wedi washers to avoid the screw head pulling through the wedi Building Panel.

#### c. Wood framing fastening: Use wedi screws or nails with washer head.

### **2.3 Joint Treatment Materials**

- a. Joint tape for dry areas: 2" fiberglass mesh tape.
- b. Joint tape for wet areas: wedi Waterproof Sealing Tape.
- c. Joint sealant for wet areas: wedi Joint Sealant as alternative to wedi Waterproof Tape.
- d. Butt all panel joints closely.

### **2.4 Tile Setting Materials**

- a. Use ANSI 118.4 latex-modified thin set mortar as recommended by wedi Corp. Mastic adhesives should not be used in any wedi application.

## **Chapter 3 - Implementation**

### **3. 1 General data**

- a. Install wedi Building Panel where indicated on drawings using wedi fastener systems. Follow the recommendations in the current TCNA Handbook under the heading "Cementitious-Coated Foam Backer Board Installation Systems".
- b. Avoid continuous joints by staggering all joints. Use the wedi fastener systems (6-8 per 3' x 5' x ½" panels on walls, 15 (1 every 12") per 3' x 5' x ¼" panels on floors as illustrated in the manufacturers installation drawings. Lay out wedi Building Panels perpendicular to substrate joints.
- c. Tape the joints in all applications.
- d. Where waterproof qualities are required, treat all washer/fastener heads with wedi Joint Sealant or wedi Waterproof Sealing Tape.

### **3.2 Tile Backer Board**

- a. Wall & Ceiling Installation:
  - 1. wedi Building Panels can be installed horizontally or vertically.
  - 2. Follow manufacturers recommendations & current TCNA Handbook Methods (W246-03; C31 5-03).

3. On ceilings use wedi fasteners in all applications. The total weight applied to the ceiling frame should not exceed 15 lbs. per sq. ft. Weight of veneer to be applied should not exceed 23 psf (112 kg/m<sup>2</sup>) on wedi Building Panel with framing 16" on center.

b. Floor installation/residential & light commercial floors:

1. Follow manufacturers recommendations & current TCNA Handbook Methods under the heading "Cementitious Coated Foam Backer Boards".
2. Stagger the joints in all applications.
3. For heavy duty commercial flooring applications, consult wedi Technical Services.

c. Bathtubs:

1. Follow manufacturers recommendations & current TCNA Handbook Methods (B425-03).

d. Showers:

1. Follow manufacturers recommendations & current TCNA Handbook Methods (B426-03).