

# INSTALLATION INSTRUCTIONS STONEWOOD EXPOSED FASTENER SYSTEM

SOLID PHENOLIC CORE PANELS AND EXPOSED FASTENING SYSTEM

#### PRODUCT OVERVIEW



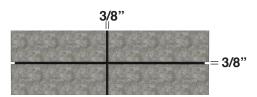
Stonewood Panels are solid phenolic core panels for use as open joint exterior cladding in a ventilated facade system.

#### Ventilated Facade

A ventilated façade requires unobstructed continuous air flow for proper performance. The sub-framing used to create the air flow cavity must be installed in a vertical direction. Installation **should not** allow for standing water to accumulate anywhere on the panel surface. If conditions require battens, weep holes are required.

#### **INSTALLATION BEST PRACTICES**

#### **Panel-to-Panel Joints**



Minimum distance of 3/8" between panels to accommodate hygrothermal movement.

#### **Single-sided Panels**



Panels are NOT identical on both sides. The front side faces outward (away from the building) and has the removable peel coat. Installers are responsible for making sure that the (front) side is visible and removing the peel coat AFTER installation.

#### **Panel Repairs**

There is no approved method to repair panels. Damaged panels must be replaced. Contact Stonewood Customer Service for additional information, 262-567-4427.

#### Field Drilling Required Equipment Provided by Installer



Olsa Tools Torque Screwdriver with Hex head and T-handle, 10-50 in-lb, +/-6% accuracy or equivalent (not supplied by Fiberesin).

#### **Specs**

- 0-2000 rpm screw gun equipped with depth sensing nosepiece.
- T25 Torx® Drive Bit required for SX3-D16 Fastener.
- Stonewood panels are drilled using hard metal drill bits or steel bits with diamond or carbide tips and a cutting angle of 60°. Bits designed for perforating metal may also be used.
- Important Note: Do not use impact drivers

#### **EXPANSION JOINT REQUIREMENTS**

Stonewood Architectural Panels are designed to be installed on a continuous substructure. Panels are not to installed such that they span areas where there is a discontinuity in the substructure, such as vertical or horizontal expansion joints. It is the responsibility of the project designer to ensure that panels do not span these substructure discontinuities.

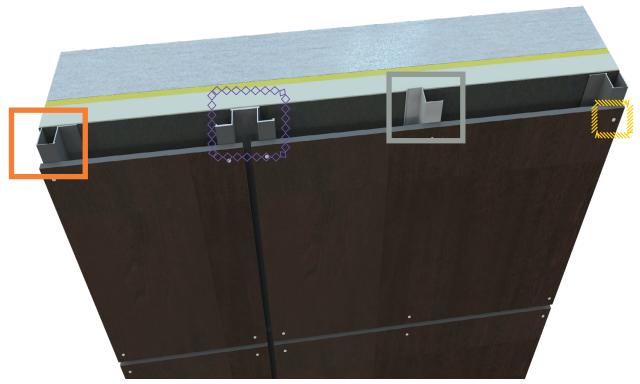
#### Scan to Review Technical Documents Online:

- Handling and Storage
- Installation Equipment
- Required Cutting Procedures
- Cleaning and Maintenance

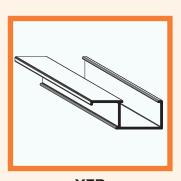




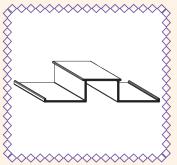
#### PARTS PLACEMENT OVERVIEW



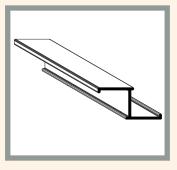
#### **PARTS OVERVIEW**



**XEB**Vertical Termination Edge
Closure



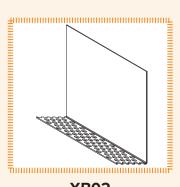
**XHB**Vertical Hat Channel



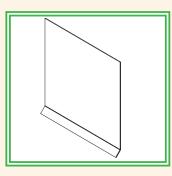
**XZB**Vertical Z Channel



**XB01**Top Ventilated Closure



**XB02**Perforated Sill Flashing



**XB03**Horizontal Joint Flashing



**SX3-D16**Fastener

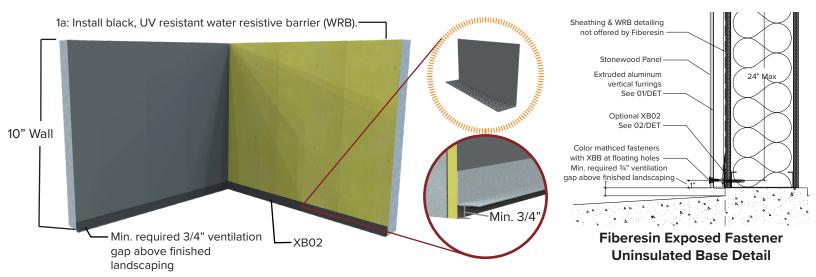


**XBB**Centering Grommet



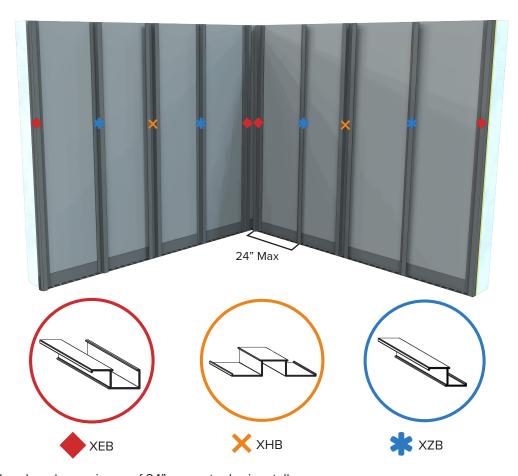
SOLID PHENOLIC CORE PANELS AND EXPOSED FASTENING SYSTEM

#### STEP 1



- 1b. Use laser level to ensure XB02 is LEVEL and FLUSH.
- 1c. Starting at the bottom of the wall install XB02 a minimum of 3/4" ABOVE the finished landscaping, to ensure the required unobstructed air flow behind the panels.

#### STEP 2: RAIL PLACEMENT



2a. Rails must be placed a maximum of 24" on center horizontally.



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#### STEP 3: PREP STAGE

# Field Drilling Required Equipment Provided by Installer



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#### **Equipment Specs**

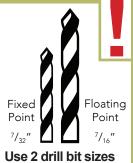
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#### **IMPORTANT NOTE**

Important Note: Do not use impact drivers

# FIXED AND FLOATING POINT PRE-DRILLING

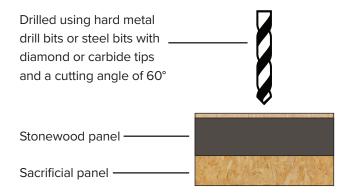
The **fixed point** (as close as possible to geometric center) is permanently fixed and is the **same size as the screw thread width.** There is one fixed point per panel. The fixed point ensures the panel movement is evenly distributed. The remaining holes must be fabricated as floating points.



#### Field Drilling

Stonewood panels are drilled using hard metal drill bits or steel bits with diamond or carbide tips and a cutting angle of 60°. Bits designed for perforating metal may also be used.

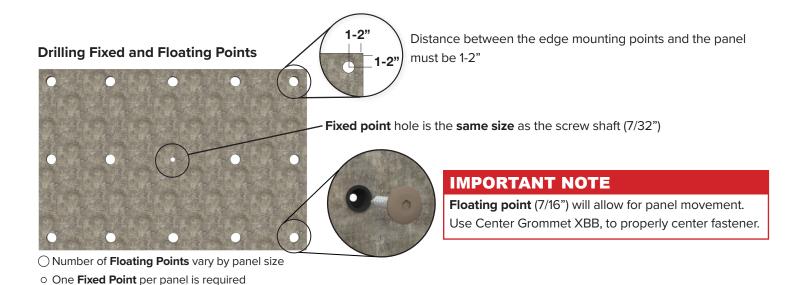
- Supporting sheets (plywood, chipboard) must be used under the panel to ensure clean hole and eliminate "breakout."
- To avoid breakout, the feed speed of the drill head and pressure applied should be gradually reduced when approaching the point of breakthrough.
- When properly drilled, there should not be any chipping around the hole.





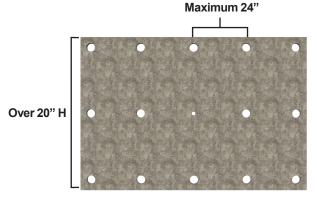
Solid Phenolic Core Panels and Exposed Fastening System

#### STEP 3: PREP STAGE Cont'd

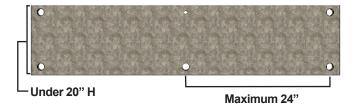


Fixed and floating point holes are required on every panel to allow for panel expansion and contraction.

#### **Support Points Per Panel**



Panels over 20"H require **3 rows of** horizontal fasteners and a minimum of **3 vertical supports.** 



Panels under 20"H require 2 rows of horizontal fasteners and a minimum of 3 vertical supports.

#### Requirements

- · Minimum of 3 supports, vertically and horizontally are required except for panels under 20".
- Maximum space between fasteners 24".
- Distance between the edge mounting points and the panel edges must be 1-2".
- The actual number of fastening points and distance between supports must be verified by a building professional for wind load as per local building code.



SOLID PHENOLIC CORE PANELS AND EXPOSED FASTENING SYSTEM

Min. required 3/4" ventilation

gap above finished landscaping

Black WRB

#### STEP 4: PANEL INSTALLATION

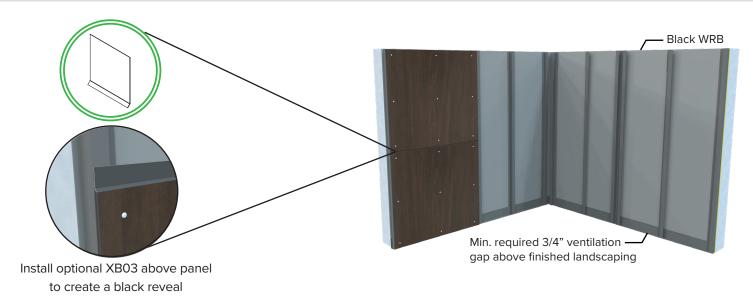
# Position of Centering Grommet and Fastener Insert the Centering Grommet, XBB, into the pre-drilled floating point hole. Insert Fastener SX3-D16 into the grommet centering hole. Tighten to min. 23 - max. 27 lb-in torque.

XBB, Centering Grommet

4a. Starting at the bottom of the wall install the first panel with one fixed point (7/32") and the remaining floating points (7/16") with an XBB Centering Grommet and SX3-D16 Fasteners.

#### STEP 5: XB03 PLACEMENT

XBB, Centering Grommet



5a. Install the optional XB03 above panel with a small piece of tape to hold it in place.

5b. Place second panel above first panel and install with one fixed point (7/32") and the remaining floating points (7/16") with an XBB Centering Grommet and SX3-D16 Fasteners. Make sure there is a 3/8" gap between panels.

Note: SX3-D16 Fasteners go through the XB03 to secure in place.



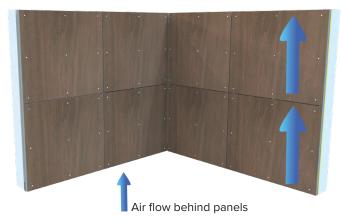
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#### STEP 6: CONTINUE PANEL INSTALLATION



6a. Continue installing panels per steps 4 and 5 making sure to leave a 3/8" between panels. 6b. Installation should not allow for standing water to accumulate anywhere on the panel.

#### STEP 7: FINISHED WALL



- 7a. The finished wall should have unobstructed continuous air flow for proper performance.
- 7b. Installation should not allow for standing water to accumulate anywhere on the panel.

#### STEP 8: COMPLETED WALL



`Terminate top of run with coping by others, extending a min. of 3/8" past panel face

8a. Where required, terminate the top of runs with coping or flashing by others extending a minimum of 3/8" past the panel face.



For window and penetration details, visit Stonewoodpanels.com

