StonePly™

Honeycomb Backed Stone Panels.

SECTION 07420 - NATURAL STONE REINFORCED PANELS (EXTERIOR)
SECTION 09452 - NATURAL STONE REINFORCED PANELS (INTERIOR)

This section is based on the products of
StonePly
Suite A, 4400 Oneal
Greenville, TX 75404
Tel: (903) 454-0904
Fax: (903) 454-3642
www.stoneply.com
Verify lead times on custom items.

PART 1: GENERAL

1.1 SECTION INCLUDES
** NOTE TO SPECIFIER ** If necessary, make a brief list of the items required.

1.2 WORK INCLUDED:

A.   Furnish all materials, labor, tools, equipment, engineering, and services to install composite stone panels of natural stone bonded to aluminum honeycomb backing with high strength epoxy.

B.   Furnish and install supplementary framework, anchors and accessories as shown in drawings for a complete and secure installation.

1.3 RELATED SECTIONS:

A.   Dimensional Stone: Section 04400
B.   Cold Formed Metal Framing: Section 05400
C.   Metal Fabrications: Section 05500 Supplementary supports for large items.
D.   Rough Carpentry: Section 06100 Supplementary supports for large items.
E.   Insulation and Firesafing: Section 07200
F.   Flashing and Sheet Metals: Section 07620
G.   Joint Sealants: Section 07920
H.   Gypsum Sheathing: Section 09250

1.4 SUBMITTALS

A.   Product Data: Submit product specifications and manufacturer's installation instructions.
B.   Shop Drawings: Submit shop drawings for Architect's review and approval prior to fabrication, including pertinent details for installation, showing joint locations, layout plan, alignments, sizes, attachments, supports, , accessories, corner details and adaptation of system to specific project.
C.   Engineering Calculations: Submit engineering calculations to the Architect, stamped and certified by a Registered Professional Engineer attesting adequacy of system to meet required loads.
D.   Samples: Submit a minimum of one 6" x 6" sample for each type of stone required.
E.   Test Data: Submit a summary of testing conducted verifying panel performance characteristics.

1.5 QUALITY ASSURANCE

A.   Manufacturer Qualifications: The stone panel manufacturer shall have at minimum a 3 year demonstrated capability to produce panels of the quality and scope required.

B.   Installer Qualifications: Regularly engaged and experienced in the installation of composite natural stone veneer honeycomb.

1.6 WARRANTY

A.   The stone panel manufacturer shall supply a 5 year limited warranty for the panels covering defects in stone panel lamination.

1.7 DELIVERY, STORAGE, AND HANDLING

A.   Transport, lift, and handle units with care, avoiding excessive stress and preventing damage; use appropriate equipment.

B.   Store products in manufacturer's unopened packaging until ready for installation, in a clean dry area protected from weather, moisture and damage; store units upright and not stacked unless permitted by manufacturer.

PART 2: PRODUCTS

2.1 MANUFACTURERS

A.   Acceptable Manufacturer: Stoneply Co., 4400 Oneal, Greenville, TX 75404
Tel: (903) 454-0904. Fax: (903)454-3642. Email: sales@stoneply.com.
www.Stoneply.com.

B.   Substitutions: Not permitted.

2.2 MATERIALS

A.   The stone shall match the sample

1.   Stone Finish shall be (select one) [polished], [honed], [flamed] or [custom], [to match the approved sample].

B.   All reinforced stone panels shall have the following properties.

1.   Facing: ¼" thickness
2.   Reinforcing: ½" or ¾" honeycomb composite bonded with high strength epoxy.
3.   Average Weight: 3.3 lbs per sq. ft. (l6 kg per sq. m.)
4.   Dimensional Tolerance: Plus or minus 1/8" (3.2mm) in all directions. Plus or minus 1/8" (3.2mm) diagonally.

2.3 PERFORMANCE REQUIREMENTS

A.   The stone panel's performance shall meet or exceed the following properties.

1.   Acid-Freeze-Thaw: Loss in flexural strength shall not exceed 20% after 100 freeze thaw cycles + 170F to -10F immersed in dilute sulfuric acid.
2.   Large Missile Impact test per Dade County Protocol PA 201-94: Missile impact panel with a solid S4S nominal 2 x 4, #2 surface dry, Southern Pine of not less than 8'-6'. in

length and 9 lbs in weight at a velocity between 50 and 52 ft/sec. without defined specimen failure.

3. Tension Bond Capacity: 390 psi following accelerated aging by rapid freeze thaw temperature cycling from -20 degrees F to +130 degrees F.

4. Weather Resistance: No significant loss in strength or change in appearance after 200 hours accelerated weathering conducted in accordance with ASTM G 23.

5. Flame Spread ASTM E-84 : 5 Maximum smoke development: 5. Maximum fuel contribution: 0

6. Toxicity of smoke: Smoke is primarily water vapor. No more toxic than Douglas Fir wood.

2.4 ACCESSORIES

A. Anchorage and connection hardware, including Z clips, locking channels, concealed anchor plates, angle clips, structural silicone, epoxy and threaded metal inserts shall be furnished & installed under this contract. Such hardware shall be as engineered, and of sufficient size and strength to support the panels and resist the applied loads. All fastening shall be concealed. All panel mounting details shall be as approved by StonePly Co. Engineering Department prior to installation.

B. Joint sealants (as specified in Section 07920) shall be pre tested for compatibility with the natural stone panel facing selected.

PART 3 - EXECUTION

3.1 WORKMANSHIP

A. Installation shall be by experienced manufacturer trained installers.

3.2 PREPARATION

A. Before starting installation, ensure that concrete or stud wall assembly is plumb and dimensions are per the Shop Drawings and Layout Drawings, and installed per relevant codes and regulations.

3.3 INSTALLATION

A. Install in accordance with applicable code and manufacturer's recommendations, plumb and true to line; shim where necessary.

B. All panels shall be installed in proper alignment in accordance with the approved Shop Drawings.

3.4 CLEANING

A. Clean all dirt, marks and sealant from stone panels using methods appropriate for the type of stone and per manufacturer's recommendations.

B. Touch-up chipped and scratched surfaces per manufacturer's guidelines as approved by the Architect.

END OF SECTION