



STENI STONE AGGREGATE PANELS

**** NOTE TO SPECIFIER **** Steni stone aggregate panels from Omnis - aggregate coated fiberglass reinforced resin panels for exterior and interior use.

SECTION 07 44 00 MasterFormat® 2011

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Section 07 44 13 - Aggregate Faced Wall Panels.
- B. Fasteners and Adhesives.

1.2 RELATED SECTIONS

- A. Section 05 40 00 - Cold Formed Metal Framing: Structural stud backing.
- B. Section 06 10 00 - Rough Carpentry: Structural stud backing.
- C. Section 07 21 00 – Thermal Insulation.
- D. Section 07 92 00 - Joint Sealants.
- E. Section 09 21 16 - Gypsum Board Assemblies: Gypsum sheathing.

1.3 REFERENCES

- A. ASTM C 177 - Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus.
- B. ASTM D 638 - Standard Test Method for Tensile Properties of Plastics.
- C. ASTM D 790 - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- D. ASTM D 790M - Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials (Metric).
- E. ASTM D 792 - Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement.
- F. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.



1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00.
- B. Product Data: 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.
- C. Shop Drawings: Include elevations and detail sections of installation. Include cutting and setting drawings indicating sizes, dimensions, sections, and profiles of panels; arrangements and provisions for jointing, supporting, anchoring, and bonding panels; and details showing relationship with, attachment to, and reception of related work. Include large-scale details of each system component, anchorage, and fastening device.
- D. Selection Samples: Architects selection from full range of color and texture combinations.
- E. Verification Samples: For each panel specified, two samples, minimum size 3 inches square, representing actual product, color, and texture.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Provide products by a manufacturer with experience completing at least five projects of the size, scope and quality required by this project within the last ten years. Provide all aggregate coated architectural panels by a single manufacturer.
- B. Installer Qualifications: Not less than three years of successful experience in completing exterior cladding systems similar in material and scope to this project.
- C. Mock-Up: Provide a mock-up for evaluation of installation techniques and finished appearance.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until Architect approves workmanship and overall appearance.
 - 3. Refinish mock-up area as required to produce acceptable work.
 - 4. Approved mock-up may be incorporated into the completed work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver panels in crates on wood pallets and wrapped in plastic sheets.
- B. Store panels flat in original shipping crates or on wood pallets under protective cover until needed for installation. Ventilate coverings to avoid condensation. Elevate above grade on level blocking to avoid standing water.
- C. Protect panels from scuffing during handling, and apply manufacturer's recommended remedial treatment immediately if panels are soiled or scratched. Carry panels on edge and handle carefully to avoid damage to surfaces and corners.



1.7 WARRANTY

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Comply with manufacturer's project review requirements and notification procedures to assure qualification for warranty.
- C. See Section 01 78 36 - Provide manufacturer's standard 10-year warranty for non-load bearing structural integrity of panels.

1.8 EXTRA MATERIALS

- A. See Section 01 60 00 – Product Requirements, for additional provisions.
- B. Provide extra material as recommended by the architect and or owner.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer's Representative: Omnis Panels, Inc., 22 E. Chicago Avenue, Suite 210; Naperville, IL 60540. ASD. Tel: (800) 450-6099 or (630) 355-4040. Fax: (630) 355-4995. Email: info@omnis-panels.com. www.omnis-panels.com.
- B. Approved local distributor representative: To be provided to the specifier by Omnis Panels, Inc.
- C. Substitutions: Not permitted.
- D. Requests for substitutions will be considered in accordance with provisions of Sec. 01 25 00.

2.2 AGGREGATE FACED ARCHITECTURAL PANELS

- A. Panels - General: Chopped glass fiber and granulated calcium carbonate organic filler successively built up, polyester resin impregnated and consolidated, surfaced with a natural stone aggregate resin bonded to panel substrate, then oven cured.
 - 1. Width: 47 ¾" inches.
 - 2. Width: [] inches.
 - 3. Length: As indicated on drawings.
 - 4. Length: [] inches.
 - 5. Nominal Density: 1954 kg/cu m, when tested in accordance with ASTM D 792.
 - 6. Water Absorption: 1.8 percent, when tested in accordance with ASTM D 790 (ASTM D 790M).
 - 7. Modulus of Elasticity: 870,000 psi (600,000 MPa).
 - 8. Tensile Strength: 2400 psi (16.5 MPa), when tested in accordance with ASTM D 638.
 - 9. Thermal Conductivity (k): 0.161 W/m degree C, when tested in accordance with ASTM C 177.
 - 10. Impact Strength: 40.61 (76 mm diameter ball at 17 degrees C).
 - 11. Flame Spread: 15, when tested in accordance with ASTM E 84.
 - 12. Fuel Contribution: 0, when tested in accordance with ASTM E 84.
 - 13. Texture: Fine Micro Grade Aggregate.
 - 14. Texture: Fine Grade Aggregate.
 - 15. Texture: Medium Grade Aggregate.
 - 16. Texture: Coarse Grade Aggregate.



- B. Fine Micro Grade Aggregate Panels:
 - 1. Nominal Panel Thickness: 1/4 inch.
 - 2. Nominal Substrate Thickness: 3/16 inch.
 - 3. Approximate Panel Weight: 2.2 lb/sq ft.
 - 4. Color: SN 150 Mexican Pink.
 - 5. Color: SN 190 Boston Brick.
 - 6. Color: SN 305 Java.

- C. Fine Grade Aggregate Panels:
 - 1. Nominal Panel Thickness: 5/16 inch.
 - 2. Nominal Substrate Thickness: 3/16 inch.
 - 3. Approximate Panel Weight: 2.4 lb/sq ft.
 - 4. Color: SN 100 Bermuda White
 - 5. Color: SN 106 Indian Ivory
 - 6. Color: SN 117 Smokey Mountain Grey
 - 7. Color: SN 140 Sahara Beige
 - 8. Color: SN 315 Dove

- D. Medium Grade Aggregate Panels:
 - 1. Nominal Panel Thickness: 3/8 inch.
 - 2. Nominal Substrate Thickness: 1/4 inch.
 - 3. Approximate Panel Weight: 2.9 lb/sq ft.
 - 4. Color: SN 100 Bermuda White
 - 5. Color: SN 106 Indian Ivory
 - 6. Color: SN 111 Nordic Spar
 - 7. Color: SN 116 Arctic Grey
 - 8. Color: SN 117 Smokey Mountain Grey
 - 9. Color: SN 130 Swedish Green
 - 10. Color: SN 140 Sahara Beige
 - 11. Color: SN 150 Mexican Pink.
 - 12. Color: SN 161 Rose
 - 13. Color: SN 170 French Rouget
 - 14. Color: SN 190 Boston Brick
 - 15. Color: SN 305 Java
 - 16. Color: SN 310 Sand
 - 17. Color: SN 320 Antique White
 - 18. Color: SN 340 Cocoa
 - 19. Color: SN 430 Autumn Gold

- E. Coarse Grade Aggregate Panels:
 - 1. Nominal Panel Thickness: 1/2 inch.
 - 2. Nominal Substrate Thickness: 5/16 inch.
 - 3. Approximate Panel Weight: 3.2 lb/sq ft.
 - 4. Color: SN 100 Bermuda White
 - 5. Color: SN 117 Smokey Mountain Grey
 - 6. Color: SN 140 Sahara Beige



2.4 ACCESSORIES

- A. Fasteners:
 - 1. Wood Framing: Stainless steel, length as required for application, heads colored to match panels.
 - 2. Metal Framing: Stainless steel self-tapping screws, length as required for application, heads colored to match panels.
- B. Sealants: Silicone or polyurethane joint sealer as specified in Section 07 92 00.
- C. Thermal Break: Exterior grade PVC compressive foam tape.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Measure areas of installation prior to fabrication, to minimize out of square or unbalanced border conditions.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions. Proceed with panel installation only when substrate is completely dry.

3.3 INSTALLATION

- A. Install in strict accordance with manufacturer's written instructions. Make adequate provisions for thermal and structural movement.
- B. Field Cutting: Perform field cuts with a dry cut diamond blade. Remove edge residue from cutting by using compressed air or a bristle brush.
- C. Space fasteners at a maximum of 12 inches on center around the perimeter and a maximum of 12 inches in the field of the panel. Space panels 1/4 in to 3/8 in apart. Support all panel edges on framing members.
- D. Seal joints between panels with polyurethane or silicone sealant in accordance with requirements of Section 07 90 00.

3.4 CLEANING AND PROTECTION

- A. Clean all panels of dirt, adhesive, and joint sealers, using detergents or solvents as appropriate and as recommended by the manufacturer.
- B. Remove and replace any damaged panels and those that cannot be adequately cleaned.
- C. Protect installed products until completion of project.

END OF SECTION