

Section 09 77 00 | Special Wall Surfacing

PART 1: GENERAL

1.01 Summary

A. Section Includes: Durable, decorative wall panels with smooth or textured finishes. Mounting hardware, adhesives, accessories and trims.

B. Related Sections:

1. Division 06 Section: Rough and Finish Carpentry.
2. Division 09 Section: Gypsum Board Assemblies.

1.02 References

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain References Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Division 01 References Section may establish the edition date of standards. This article does not require compliance with standard, but is merely a listing of references used. Article below should list only those industry standards referenced in this section.

A. General: Standards listed by reference, including revisions by issuing authority, form a part of this specification section to the extent indicated. Standards listed are identified by issuing authority, authority abbreviation, designation number, title or other designation established by issuing authority. Standards subsequently referenced herein are referred to by issuing authority abbreviation and standard designation.

B. ASTM International:

1. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
2. ASTM D256 Standard Test Methods for Determining the Izod Pendulum Impact Resistance of Plastics.
3. ASTM D638 Standard Test Method for Tensile Properties of Plastics.
4. ASTM D790 Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
5. ASTM D2583 Standard Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.

1.03 System Description

A. Performance Requirements: Provide durable, decorative wall panels which have been manufactured and installed to maintain performance criteria stated by manufacturer without defects, damage or failure.

1.04 Submittals

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor before, during or after construction. Coordinate this article with Architect's and Contractor's duties and responsibilities in Conditions of the Contract and Division 01 Submittal Procedures Section.

A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 01300 Submittal Procedures Section.

B. Product Data: Submit manufacturer's product data, storage, handling and preparation requirements and installation instructions.

C. Shop Drawings: Submit shop drawings showing layout, profiles and product components, including anchorage, accessories, finish colors, patterns and textures. Indicate location and dimension of joints and fastener attachment.

D. Samples: Submit selection and verification samples for finishes, colors and textures. Submit 2 samples of each type of panel, trim and fastener.

General: Firm experienced in successful production of wall system similar to that indicated for the Project.

Quality Assurance/Control Submittals: Submit the following:

1. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.
2. Certificates:
 - a. Submit manufacturer's certificate that products meet or exceed specified requirements.
 - b. Submit certificate of installer's qualifications.

Specifier Note: For more information on installation recommendations, visit manufacturer's website at www.nudo.com.

3. Manufacturer's Instructions: Manufacturer's installation instructions.

F. Closeout Submittals: Submit the following:

1. Operations and Maintenance Data: Operation and maintenance data for installed products in accordance with Division 01 Closeout Submittals (Maintenance Data and Operation Data) Section. Include methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance.
2. Warranty documents specified herein.

1.05 Quality Assurance

Specifier Note: Article below should include prerequisites, standards, limitations and criteria that establish an overall level of quality for products and workmanship for this section. Coordinate article below with Division 01 Quality Assurance Section.

A. Installer Qualifications: Installer shall have a minimum of 5 years experience with composite wall panel work similar in scope and size to this project.

Specifier Note: Paragraph below should list obligations for compliance with specific code requirements particular to this section. General statements to comply with a particular code are typically addressed in Conditions of the Contract and Division 01 Regulatory Requirements Section. Repetitive statements should be avoided.

B. Regulatory Requirements and Approvals: [Specify applicable requirements of regulatory agencies.].

Specifier Note: Retain paragraph below if mock-up is required.

C. Mock-Ups: [Specify requirements for mock-up.].

1. Subject to acceptance by owner, mock-up may be retained as part of finish work.
2. If mock-up is not retained, remove and properly dispose of mock-up.

Specifier Note: Retain paragraph below if preinstallation meeting is required.

D. Preinstallation Meetings: [Specify requirements for meeting].

1.06 Delivery, Storage & Handling

Specifier Note: Article below should include special and unique requirements. Coordinate article below with Division 01 Product Requirements Section.

A. General: Comply with Division 01 Product Requirements Section.

B. Lead Time: Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.

C. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

D. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

1. Store panels indoors.
2. Lay panels flat. Do not stand panels on edge.
3. Protect panels from moisture.
4. Do not store panels in contact with the floor or against an outside wall.
5. Do not remove protective film from panel surface until after installation (if applicable).
6. Maintain optimum storage conditions of 60-75 degrees F (16-24 degrees C) at 35 - 55% relative humidity. Avoid extremes in temperature and humidity.

E. Handling: Remove foreign matter from face of panel by using a soft bristle brush, avoiding abrasive action.

1.07 Project/Site Conditions

Specifier Note: In article below, state physical or environmental limitations or criteria for installation such as weather, temperature, humidity, ventilation or illumination required for proper installation or application.

A. Environmental Requirements:

1. Installation shall not begin until building is enclosed, permanent heating and cooling equipment is in operation and residual moisture from plaster, concrete or terrazzo work has dissipated.
2. Install panels between 60 degrees F - 75 degrees F (15 - 24 degrees C) and relative humidity below 55%, ideally at the same conditions as the room's normal operating temperatures after building is occupied.
3. Provide ventilation to disperse fumes during application of adhesive as recommended by adhesive manufacturer.
4. Do not install wall system until normal lighting conditions exist. Normal lighting conditions are described as those in place when the project is finished.

B. Field Measurements: Verify actual measurements/openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.

1. Wall, ceilings, floors and openings must be level, plumb, straight, in-line and square

1.08 Warranty

Specifier Note: Coordinate article below with Conditions of the Contract and with Division 01 Closeout Submittals (Warranty) Section.

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under Contract Documents.

Specifier Note: Coordinate paragraph below with manufacturer's warranty requirements.

- C. Warranty Period: [Specify term.] years commencing on Date of Substantial Completion.
 - 1. Warranty extends to products assembled / installed and used in the manner intended and does not cover damage or failure caused by: misuse, abuse or accidents, exposure to extreme temperature, improper installation, improper maintenance and exposure to water or excessive humidity or excessive moisture.

1.09 Maintenance

Specifier Note: Retain article below for proprietary method specification. Add product attributes; performance characteristics, material standards and descriptions as applicable. Use of such phrases as "or equal" or "or approved equal" or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "or equal" products

- A. Extra Materials: Provide [A recommended percentage of] [Specify percentage.] additional material for use by owner in building maintenance and repair.

PART 2: PRODUCTS

2.01 Composite Wall Panels

Specifier Note: Retain article below for proprietary method specification. Add product attributes; performance characteristics, material standards and descriptions as applicable. Use of such phrases as "or equal" or "or approved equal" or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "or equal" products.

A. Manufacturer: Nudo

- 1. Contact: 1500 Taylor Avenue, Springfield, IL 62703; Telephone: (800) 826-4132, (217) 528-5636; Fax: (217) 528-8722; E-mail: info@nudo.com ; website: www.nudo.com

B. Proprietary Products/Systems: Composite wall & ceiling panels, including the following:

SecureShield® Wall Panels:

SecureShield: Security wall panel combining 5/8" fire-rated gypsum, polycarbonate and optional fiberglass reinforced plastic (FRP) or PVC face.

Texture: [Unfinished, Smooth, Pebbled]

Polycarbonate thickness: [Specify in inches]

Thickness: 0.655" (5/8" gypsum with 0.030" polycarbonate)

Fire-Rating Class: A

Color: [Specify standard and/or custom colors as available for product] [Standard Finish: Black (806), Brown (277), Light Green (467), Yellow (334), Dark Gray (720), Pearl Gray (750), Blue (525), Bordeaux (139), Red (132), Orange (131), Beige (293), Khaki (203), Almond (698), White (050)]

Size: [Specify size, or as indicated on drawings.] [4 feet x 8 feet (1.2 x 2.4 m)] [4 feet x 10 feet (1.2 x 3.0 m)]. (larger sizes available through special order.)

Physical Properties:

- 1) Flexural Strength (ASTM D790): 4,431 lbf/in².
- 2) Flexural Modulus (ASTM D790): 46,502 psi.
- 3) Tensile Strength (ASTM D638): 1,048 psi.
- 4) Barcol Hardness (ASTM D2583): --
- 5) Izod Impact (ASTM D256): 5.54 ft-lb/in.
- 6) Surface Burning Characteristics (ASTM E84): Class A.

2.02 Product Substitutions

Substitutions: No substitutions permitted.

— END OF SECTION —