### SECTION 09 50 00

### 09 51 26 WoodWorks Grille - Forté Solid Wood Wall Panels:

### PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

Drawings and general conditions of Contract, including General and Supplementary Conditions and Divisions-1 Specification sections apply to work of this section.

### 1.2 SUMMARY

1. Section Includes:
	1. WoodWorks Grille- Forté Solid Wood (Poplar) Wall Panels with Centered Notched and Flat Backers
	2. Wire hangers, fasteners, main runners, cross tees, wall angle moldings and accessories.
2. Related Sections:
	1. Section 09 20 00 - Plaster and Gypsum Board
	2. Divisions 23 (15) - HVAC
	3. Division 26 (16) Sections - Electrical Work
3. Alternates
	1. Prior Approval: Unless otherwise provided for in the Contract documents, submit proposed product substitutions no later than TEN (10) working days prior to the date established for receipt of bids. Acceptability of a proposed substitution is contingent upon the Architect’s review and acceptance. Approved products will be set forth by the Addenda. If a substitution is included in a Bid and is not approved by an Addendum, the specified products shall be provided as in place of the substitute without additional compensation.
	2. Submittals, which do not provide adequate data for the product evaluation, will not be considered. The proposed substitution must meet all requirements of this section, including but not necessarily limited to, the following: Single source materials suppliers (if specified in Section 1.5); panel design, size, composition, color, and finish; suspension system component profiles and sizes; compliance with the referenced standards.

### 1.3 REFERENCES

1. American Society for Testing and Materials (ASTM):
	1. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.
	2. ASTM C 423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
	3. ASTM E 1264 Classification for Acoustical Ceiling Products.
	4. Hardwood Plywood & Veneer Association (HPVA)
	5. International Building Code
	6. ASHRAE Standard 62 1 2004 Ventilation for Acceptable Indoor Air Quality
	7. NFPA 70 National Electrical Code
	8. ASCE 7 American Society of Civil Engineers, Minimum Design Loads for Buildings and Other Structures
	9. California Air Resources Board (CARB) compliant
	10. LEED - Leadership in Energy and Environmental Design is a set of rating systems for the design, construction, operation, and maintenance of green buildings

### 1.4 SUBMITTALS

1. **Shop Drawings:** Layout and details of walls. Show locations of items that are to be coordinated with or supported by the walls.
2. **Installation Instructions:** Submit manufacturer’s installation instructions as referenced in Part three, Installation.
3. **Product Data:** Submit manufacturer’s technical data for each type of wall unit and framing structure required.
4. **Samples:** 4-1/4”x 7”x 3/4 – Solid Wood Poplar Finishes - Semi-gloss tinted topcoat – Clear Finish
5. **Certifications:** Manufacturer’s certifications that products comply with specified requirements, including laboratory reports showing compliance with specified tests and standards.
6. **Non-Conformance:** All products not conforming to the requirements of this specification and or the manufacturer’s published values are to be disposed. The Contractor performing the work will replace with approved product at their expense.

### 1.5 QUALITY ASSURANCE

1. Single-Source Responsibility: Provide wall panel units and grid components by a single manufacturer.
2. Fire Performance Characteristics: Identify wall components with appropriate markings of applicable testing and inspecting organization.
	1. Surface Burning Characteristics: As follows, tested per ASTM E-84 and complying with ASTM E 1264 for Class C products.
	2. HPVA (Hardwood Plywood and Veneer Association) certification and audit program per ASTM E-84 tunnel test.
3. Woodworking Standards: Manufacturer must comply with specified provisions of Architectural Woodworking Institute quality standards.
4. Coordination of Work: Coordinate wall work with installers of related work including, but not limited to building insulation, gypsum board, light fixtures, mechanical systems, electrical systems, and sprinklers.

### 1.6 DELIVERY, STORAGE, AND HANDLING

1. Store wall components in a dry interior location in their cartons prior to installation to avoid damage. Store cartons in a flat, horizontal position. The protectors between the panels should not be removed until installation.
2. Do not store in unconditioned spaces with humidity greater than 55 percent or lower than 25percent relative humidity and temperatures lower than 50 degrees F or greater than 86 degrees F. Panels must not be exposed to extreme temperatures, for example, close to a heating source or near a window with direct sunlight.
3. Handle wall units carefully to avoid chipped edges or damage to units in any way.

### 1.7 PROJECT CONDITIONS

1. Wood wall materials should be permitted to reach room temperature and have a stabilized moisture content for a minimum of 72 hours before installation. (Remove plastic wrap to allow panels to climatize).
2. The wood panels should not be installed in spaces where the temperature or humidity conditions vary from the temperatures and conditions that will be normal in the occupied space.
3. As interior finish products, the solid wood panels are designed for installation in temperature conditions between 50 degrees F and 86 degrees F, in spaces where the building is enclosed, and HVAC systems are functioning and will be in continuous operation. Relative humidity should not fall below 25 percent or exceed 55 percent.

### 1.8 WARRANTY

1. WW Grille – Forté Solid Wood Panel: Submit a written warranty executed by the manufacturer, agreeing to repair or replace panels that fail within the warranty period. Failures include, but are not limited to:
	1. WW Grille – Forté Solid Wood Panels (Poplar): Defects in materials or factory workmanship.
2. Warranty Period:
	1. WW Grille – Forté Solid Wood panels (Poplar): One (1) year from date of installation.
3. The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

### 1.9 MAINTENANCE

1. Extra Materials: Deliver extra materials to Owner. Furnish extra materials described below that match products installed. Packaged with protective covering for storage and identified with appropriate labels.
	1. Wall Units: Furnish quality of full-size units equal to 2.0 percent of amount installed.

*Attention Design Professional please edit Part 2 based on your project needs. Select product attributes and Acceptable product item(s) that fit with the requirements for your project. Please refer to the Armstrong website* [*Click here to link to the Armstrong Walls website*](https://www.armstrongceilings.com/commercial/en/commercial-ceilings-walls/wood-wall-panels.html) *for additional Wall product, Suspension systems, Perimeter trim options and accessories. The related guide specification for these items is available on the website.*

### PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

1. Basis of Design WoodWorks Grille Forté Solid Poplar Walls Panels:
	1. Armstrong World Industries, Inc.

### 2.2.0 WOOD WALL UNITS

1. Wall Panels Type AP-1:
	1. Surface Texture: Smooth
	2. Composition: Solid Wood (Poplar)
	3. Finish(s): Solid Wood (Poplar):
* Bleached Gray (GBG)
* Classic Gray (GCG)
* Carbon Gray (GCB)
* Rich Mahogany (GRY)
* Antique Oak (GAO)
* Red Oak (GRK)
* English Chestnut (GEC)
* Golden Maple (GGM)
* Natural Walnut (GWN)
* Warm Oak (GWO)
* Forest Walnut (GFW)
* White (GWH)

*Custom finishes available*

* 1. Panel Width: 12-inch

Panel Length Size(s): With 1” reveal panel to panel @ length

* 48-inch (Nominal): 47-inch (Actual)
* 72-inch (Nominal): 71-inch (Actual)
* 96-inch (Nominal): 95-inch (Actual)
	1. Panel Length Size(s): 48-inch, 72-inch, 96-inch (Nominal): 47-inch, 71-inch, 95-inch (Actual) With 1” reveal panel to panel @ length

Slat Width 3/4-inch:

Height – Number of Slates (Spacing) [item#]

* + - 1. 1-3/8” – 4 Slats (2-1/4”) [6324L\_S01---], 5 Slats (1-13/20”) [6325L\_S01---], 6 Slats (1-1/4”) [6326L\_S01---], 8 Slats (3/4”) [6328L\_S01---]
			2. 2-1/4” – 4 Slats (2-1/4”) [6324L\_S02---], 5 Slats (1-13/20”) [6325L\_S02---], 6 Slats (1-1/4”) [6326L\_S02---], 8 Slats (3/4”) [6328L\_S02---]

Slat Width 1-inch:

Height – Number of Slates (Spacing) [item#]

1. 1-3/8” – 3 Slats (3”) [6323L\_S05---], 4 Slats (2”) [6324L\_S05---], 5 Slats (1-2/5”) [6325L\_S05---], 6 Slats (1”) [6326L\_S05---]
2. 2-1/4” – 3 Slats (3”) [6323L\_S06---], 4 Slats (2”) [6324L\_S06---], 5 Slats (1-2/5”) [6325L\_S06---]

Slat Width 1-1/4-inch:

Height – Number of Slates (Spacing) [item#]

1. 1-3/8” – 3 Slats (2-3/4”) [6323L\_S09---], 4 Slats (1-3/4”) [6324L\_S09---], 5 Slats (1-5/8”) [6325L\_S09---]
2. 2-1/4” – 3 Slats (2-3/4”) [6323L\_S10---], 4 Slats (1-3/4”) [6324L\_S10---]
	1. Acoustical Performance Infill Options:
		* 1. BioAcoustic Infill Panes - Item 5823 or 6657 – NRC 0.75, CAC N/A
	2. Flame Spread: Class C (flame stop coating available upon request)
	3. Acceptable Product: WoodWorks Grille Forté Panels –items 6323L\_ S05-S06, 6324L\_S01-S02, 6325L \_S09\_S10, as manufactured by Armstrong World Industries.

**Please use ordering format found on our data page:**

 

1. Accessories:
	* 1. Flat Backer Kit - item7920GBL
		2. Gallon Size Stain Can for Solid Wood Panels - item 5457GAL1(Stain Suffix)
		3. Quart Size Stain Can for Solid Wood Panels - item 5457QT1(Stain Suffix)

### 2.2.1 SUSPENSION SYSTEMS

1. Refer to Armstrong Grille Forte Soli Wall Installation Instruction (Section 4.2)
2. Accessories/Edge Moldings and Perimeter Trim:
	1. Backer Clip 3/8 x 11/16 x 7/8" Backer - item 5687

### PART 3 - EXECUTION

### 3.1 EXAMINATION

1. Do not proceed with installation until all wet work such as concrete, terrazzo, plastering and painting has been completed and thoroughly dried out.
2. Proper designs for both supply air and return air, maintenance of the HVAC filters and building interior space are essential to minimize soiling. Before starting the HVAC system, make sure supply air is properly filtered and the building interior is free of construction dust.

### 3.2 PREPARATION

1. Measure each wall area and establish layout of acoustical units to balance border widths at opposite edges of each wall. Avoid use of less than half width units at borders and comply with wall elevations. Coordinate panel layout with mechanical and electrical fixtures.
2. WoodWorks wall materials should be permitted to reach room temperature and have a stabilized moisture content for a minimum of 72 hours before installation. (Remove plastic wrap to allow panels to climatize).

### 3.3 INSTALLATION

1. Interior WoodWorks products, the solid wood panels are designed for installation in temperature conditions between 50 degrees F and 86 degrees F, in spaces where the building is enclosed, and HVAC systems are functioning and will be in continuous operation. Relative humidity should not fall below 25 percent or exceed 55 percent.

### 3.4 ADJUSTING AND CLEANING

1. Replace damaged and broken panels.
2. Clean exposed surfaces of walls panels, including trim, edge moldings, and suspension members. Comply with manufacturer’s instructions for cleaning and touch up of minor finish damage.

### END OF SECTION