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| **plyboo logo square****The living HINGE collection™** **decorative / acoustical panels for wall****product specification****in CSi 3-part format** | **Smith & Fong Company**394 Bel Marin Keys, Suite 6Novato, CA 94949  Phone: (415) 896-0577Toll Free: (866) 835-9859 Fax: (415) 896-0583   Website: www.plyboo.com E-mail: sales@plyboo.comThe Living Hinge Collection™  |

# section 09 84 00 (09710)

**DECORATIVE ACOUSTICAL WALL PANELS**

# PART 1–GENERAL

* 1. **RELATED DOCUMENTS**

 General conditions and shop drawings of Contract, including General and Supplementary Conditions including Division-1 sections should they apply to the work of this section.

* 1. **SUMMARY**
1. Section Includes:
2. Wall panels, unfinished or prefinished decorative acoustical wall panels, and components.
3. Related Sections:
4. EPA TSCA Title VI or California Air Resources Board (CARB) ATCM
5. Division 26 (16) Sections – Electrical Work
6. Substitutions
7. Submittals which do not provide adequate product information required in the specification will not be considered. The proposed substitution shall meet all requirements of this section to be considered.
	1. **REFERENCES**
8. Test Methods:
9. ASTM C 423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
10. ASTM E 90 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions.
11. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.
12. ASTMD6007 Standard Test Method for Determining Formaldehyde Concentrations in Air from Wood Products using a Small-Scale Chamber.
	1. **SUBMITTALS**
13. Product Data: Submit manufacturer’s data for each type of wall panel required.
14. Samples: For each specified wall panel, submit 6-inch by 6-inch samples of panels.
15. Certifications: Submit copies of independent third-party certifications which meet specified requirements and related certified independent laboratory reports showing compliance with specified tests and standards.
16. Shop Drawings: Submit shop drawings indicating wall panel layout, required trim, and seam locations for this project.
	1. **QUALITY ASSURANCE**
17. Manufacturer Qualifications: Minimum 10 years of experience in producing bamboo wall panel products.
18. Emissions Levels: Where indicated in Division 1 and, or Part 2, Products, quality assurance includes a copy of the laboratory report verifying the product meets or surpasses ULEF (ultra low emitting formaldehyde) standards under CARB II.
19. Applicable LEED™ Credits:

 **1.Low-Emitting Materials** - **Formaldehyde emissions evaluation**

Product meets one of the following: EPA TSCA Title VI or California Air Resources Board (CARB) ATCM for formaldehyde requirements for ultra-low-emitting formaldehyde (ULEF) resins or EPA TSCA Title VI or CARB ATCM formaldehyde requirements for no added formaldehyde resins (NAF).

 2.Building product disclosure and optimization - sourcing of raw materials Bio-based materials.

Bio-based products must meet the Sustainable Agriculture Network’s Sustainable Agriculture Standard. Bio-based raw materials must be tested using ASTM Test Method D6866 and be legally harvested, as defined by the exporting and receiving country. Exclude hide products, such as leather and other animal skin material. Products meeting bio-based materials criteria are valued at 100% of their cost for the purposes of credit achievement calculation. (FSC 100% certified)

* 1. DELIVERY, STORAGE AND HANDLING
1. Wall panels are to be delivered to the project site in original, unopened packages and must be protected from moisture, direct sunlight, and damage.

1. Storage temperatures should not be different from normal conditions of an occupied space, between 50 degrees F and 80 degrees F, with relative humidity between 30 - 50 percent.

C. Before installing wall panels, allow to achieve room temperature of the conditioned environment.

**1.7 WARRANTY**

1. Submit a written warranty from the manufacturer available at: <https://www.plyboo.com/wp-content/uploads/2021/03/20210311_SF_RLS-Warranty.pdf>

**1.8 MAINTENANCE**

A. Extra Materials:

1. Wall Panels: Furnish extra quantity of units equal to 5.0 percent of amount installed.

**PART 2 - PRODUCTS**

**2.1 MANUFACTURERS**

A. Wall Panels:

 1. Manufacturer: Smith & Fong Company

 a. 394 Bel Marin Keys, Suite 6, Novato, CA 94949

 b. Telephone: 415-896-0577

 c. Website: www.plyboo.com

**2.2 WALL PANELS**

1. Wall Panels: Type AWP-1:
2. Material: 100% Bamboo (FSC 100% Certified)
3. Surface Texture: Smooth
4. Surface Type: Species: Moso bamboo (Phyllostachys Pubescens)
5. Base/Core Composition: REALCORE™; Species: Moso bamboo (Phyllostachys Pubescens)
6. Sound Absorption: QuietWall™ Technology
7. Flexibility: 24” radius max.
8. Color: (Amber) or (Natural) or (Fog) or (Storm) or (Mist) or (Noir)
9. Patterns: (LH-51) (LH-52) (LH-53) (LH-55) (LH-56) (LH-57)
10. Standards/Certifications: (CARB ULEF) (ULEF/FSC 100%)
11. Thickness: 1/2-inch (12mm)
12. Width:47-1/2 inches (1206mm)
13. Panel Heights:95-1/2 inches (2426mm)
14. Edge Profile: Straight edge
15. ASTM Procedure C 423--‐09a, *Standard Test Method For Sound Absorption And Sound* *Absorption*: avg. 0.70
16. Sound Transmission Class (STC): ASTM E 795A: Rating 0.00
17. 43 – Wall Panel on one side of 5/8” drywall on 3-5/8” metal studs
18. 46 – Wall Panel on two sides of 5/8” drywall on 3-5/8” metal studs
19. 52 - Wall Panel on one side of 5/8” drywall on 3-5/8” metal studs with R-11 fiberglass insulation in cavity
20. Flame Spread: ASTM E84; Class C (Class B available).
21. Emission Testing: ASTM D6007: 0.04ppm – Ultra Low Emitting Formaldehyde
22. Dimensional Stability: Standard – space must be enclosed with HVAC systems operating and with appropriate humidity levels maintained between 30%RH-50%RH at all times.
23. Acceptable Product: The Living Hinge Collection, as manufactured by Smith & Fong Company.

**PART 3 - EXECUTION**

**3.1 EXAMINATION**

A. All wet work such as concrete, terrazzo, plastering and painting must be completed and thoroughly dried out before installing the product specified, unless expressly permitted by manufacturer’s printed recommendations.

**3.2 PREPARATION**

A. Measure the wall area(s) and establish layout of wall panel units per shop drawings and to ensure border widths are balanced at opposite edges. Coordinate panel layout with mechanical and electrical fixtures.

**3.3 INSTALLATION**

1. Install wall panels by attaching the panels to an existing wall per the manufacturer’s instructions and in accordance with the authorities having jurisdiction.
2. Install panels using a standard Z-clip system.

**3.4 ADJUSTING AND CLEANING**

1. Replace damaged and broken panels.
2. Perform routine maintenance involving frequent vacuuming to mitigate dirt accumulation. When needed, clean with a damp (not wet) cloth.

**END OF SECTION**