ARCHITECTURAL SPECIFICATIONS

WOOD VENEER ACOUSTICAL PANELS FOR WALLS & CEILINGS

Division 09 finishes: Specification Sections 095100, 098430, 098400, 095126, 095426

PART 1: GENERAL

The general and supplementary conditions of Division 1 of the specifications shall apply to all work of this section.

1.1 SECTION INCLUDES

A. Acoustic wood veneer wall and ceiling panels.

1.2 RELATED WORK NOT INCLUDED

A. Components for walls or ceilings, other than TerrAcoustics™ panel, are not included. The layout and installation of TerrAcoustics™ panels shall be coordinated with other trades whose work is related/adjacent to TerrAcoustics™ installation.

1.3 COORDINATED OF WORK

A. Coordinate wall or ceiling work with installers of related work including but not limited to building insulation, paint, wall coverings, gypsum board, light fixtures, mechanical systems, electrical systems and sprinklers.

1.4 REFERENCES

A. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.

B. ASTM C 423 and E 795 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.

C. ISO 354 Measurement of Sound Absorption in a Reverberation Room.

1.5 QUALITY ASSURANCE

A. Single Source: TerrAcoustics™ panels mentioned in this section shall be supplied by a single manufacturer.

B. Installer Qualifications: Installation contractor shall have at least two (2) years of experience in installing similar acoustical panels.

1.5 QUALITY ASSURANCE (continued)

C. The TerrAcoustics™ panels are fabricated using class A fire rated materials. The panel cores and/or finish coatings shall comply with fire code requirements. Submittal data is based on material supplier tests. Due to the variety of patterns and veneer combinations available that differ on a project-by-project basis, panel composite testing has not been completed. TerrAcoustics™ offers five options of panel construction based on the requirements of the installation:

Option 1: Class A fire rated MDF substrate, standard wood veneer panel face and clear finish coating.

- Standard Wood Veneers offered: walnut (quarter cut and crown cut), maple, ash (quarter cut, crown cut and crown cut-strong), bamboo, anigre, teak, oak, sapele, cherry and beech. Custom veneers may also be available at an additional price.
- Standard finish: CLEAR.
  - Custom stain panels available.
  - Solid, marble, wood, and many HPL patterns available

Option 2: Non fire rated MDF substrate, standard wood veneer panel face and clear finish coating.

D. Environmental Standards: upon request, TerrAcoustics™ panels shall comply with environmental standards set by accredited industry organizations.

E. Alternate Bids: alternate products shall be submitted to the Architectural/Design firm ten (10) days prior to bid closing. Alternate bids can only be considered as an alternate to the specified base bid product.

1.6 SUBMITTALS

A. Product Data: TerrAcoustics™ shall provide technical specifications and installation guidelines for all required panels.

B. Samples: When required, one (1) 12" x 12" TerrAcoustics™ panel, in the specified TerrAcoustics™ panel style, with finish applied, shall be submitted for approval.

1.7 DELIVERY, INSPECTION, STORAGE, AND HANDLING

A. TerrAcoustics™ panels shall be delivered to the project site in original, unopened packages. Any damage to package material, discrepancy in quantity or errors should be put in writing and submitted immediately to the Contractor.

B. The TerrAcoustics™ panels shall be stored flat and level, in a fully enclosed space as per section 1.8 of these specifications. The panels shall be stored in the room in which they will be installed at least 96 hours before the installation takes place and allow to acclimatize. Factory finished products require up to a week or more on site for acclimatization. The room conditions, namely the room's temperature and humidity, shall match the conditions that will be normal in the occupied space.

C. Store the TerrAcoustics™ panels off the ground, on a pallet.

D. TerrAcoustics™ panels shall be handled in a manner that will protect them from any type of damage.

E. Review the TerrAcoustics™ Installation Guidelines (available upon request from your local dealer) for details on how to store, handle and acclimatize the panels prior to installation.

1.8 PROJECT CONDITIONS

A. Installation shall be done only when all wet work has been completed and dried. Temperature and humidity conditions must match the normal conditions in the occupied space. The humidity of the room shall not drop under 25% or exceed 55%. The HVAC system shall be functioning continuously before, during and after installation.

B. It is important that plenums have proper ventilation, especially in high moisture areas. There shall be no excessive buildup of heat in the installation areas.

C. Prior to the start of installation, all exterior windows and doors are to be in place, glazed, and weatherstripped. The roof is to be watertight.

D. Mechanical, electrical, and other utility service installations beyond the wall or ceiling plane shall be completed. No materials should rest against, or wrap around, the wall or ceiling attachment components.

E. Mechanical, electrical, and other utility service installations beyond the wall or ceiling plane shall be completed. No materials should rest against, or wrap around, the wall or ceiling attachment components.

1.9 WARRANTY

A. All TerrAcoustics™ panels have a one (1) year limited warranty by the manufacturer, for manufacturing defects only. Review the TerrAcoustics™ Warranty for complete details on the conditions of the warranty.

B. The Contractor and/or Installation Company shall provide a one (1) year limited installation warranty from final acceptance of completed work and/or date of substantial completion of work.

PART 2: PRODUCT

2.1 MANUFACTURERS

A. Basis-Of-Design Product:

1. TerrAcoustics™

B. For the authorized dealer in your area, contact:

The Bartley Group, Inc.
27071 Cabot Road, Suite 125
Laguna Hills, CA 92653
Toll Free: 888-987-6872
Fax: 877-376-8726
info@terracoustics.com
www.terracoustics.com

**LOCAL AUTHORIZED DEALER/
LOCAL REPRESENTATIVE:**

2.1 MANUFACTURERS (continued)

C. Substitutions:

1. Unless otherwise provided in Contract Documents, proposed substitutions shall be submitted to Architect no later than 10 days prior to date established for receipt of bid.
2. Architect will determine acceptability of proposed substitution and will notify bidder of acceptance or rejection in writing. Proposed substitutions accepted for use on this project by Architect shall be set forth by addenda.
3. Requests for substitution shall include a mock-up panel, which incorporates a mid-wall condition, not less than 18" x 18" in size along with documentation consisting of complete product data, test reports and comparative analysis substantiating compliance of proposed substitution with Contract Documents.
4. Wherever proposed substitution involves changes or modifications to elements of Project, submit drawings showing changes and modifications made necessary by proposed substitution.
5. Proposed substitution shall meet or exceed requirements of this specification including but not limited to, items as follows:
    a. Acoustic performance
    b. Fire resistance performance
    c. Core material composition
    d. Panel size and design
6. Requests for substitution constitute a representation that Bidder/Contractor:
    a. Has personally investigated proposed substitute product and determined it is equal or superior in all respects to specified product;
    b. Will provide same warranty for substitution as for specified product;
    c. Waives claims for additional costs related to substitution which subsequently become apparent; and
    d. Will coordinate installation substitution if accepted, making such changes as may be required for work to be complete in all respects.
7. Requests for substitution which do not provide adequate data for evaluation by Architect will not be considered.
8. Substitution will not be considered which are not presented prior to Bid and will be rejected outright when they are indicated or implied on shop drawings or product data submittals without prior approval by Architect prior to bid submission.

D. The TerrAcoustics™ panels shall be of a no-added-urea-formaldehyde fire rated MDF core with a natural wood veneer face and a clear finish coating. Select from the standard wood veneer selection: walnut (quarter cut and crown cut), maple, ash (quarter cut, crown cut and crown cut-strong), bamboo, teak, anigre, oak, sapele, cherry, beech, bamboo natural, bamboo caramelized, solid, marble, wood and many HPL patterns available. A factory installed Sound Tex™ nonwoven acoustic material is applied to the back of each panel.

E. The TerrAcoustics™ panels shall be [part number]. Each part number indicates the pattern / design preference. Indicate the size / dimension in [X] inches/millimeters wide x [X] inches/millimeters long and be [X] inches/millimeters thick. Use the "TerrAcousticsTM Styles & Dimensions Sheet" for guidance on the available sizes for each pattern. The NRC rating of the TerrAcoustics™ panels shall be [X]. (Note: a higher NRC rating can be achieved with the addition of insulation material behind the panel.)

F. TerrAcoustics™ Non-Acoustical/Reflective panels are also available upon request.

G. For perforated and slotted patterns, panel sizes should not be mixed in order to maintain the same size for the non-perforated border around the perimeter of the panels.

2.2 SUPPORT SYSTEMS

A. TerrAcoustics™ panels shall be attached to a framing substrate system or ceiling grid provided by the installation company, in accordance with the current architectural drawings.

2.3 FINISHES AND COLORS

A. TerrAcoustics™ panels shall be factory-finished with clear finish coatings. Custom stain finishes are also available upon request at an additional price. Custom stain finished panels require a longer lead time. All finishes shall be selected by the designer, architect, or designated owner's representative.

B. Wood is a natural product with variations in grain, texture, and color. Product finishes shall be stained or sealed, factory spray-applied to achieve a smooth surface.

PART 3: EXECUTION

3.1 FABRICATION

A. Factory finished TerrAcoustics™ panels shall be square, true to size and free from twist or other defects that could affect their strength or appearance. Factory applied finish should be uniform, smooth and without blemishes.

3.2 PREPARATION

A. Layout: The Contractor and/or Installation Company shall measure all wall or ceiling areas, and establish the layout of the TerrAcoustics™ panels and support framing, in accordance with installation guidelines.

3.3 INSTALLATION

A. General: The Contractor and/or Installation Company shall install materials in accordance with all applicable regulations and industry standards.

B. All panels shall be installed plumb, squared and rigidly anchored maintaining uniform clearances and accurate alignment measurements.

3.4 CLEANING AND PROTECTION INSTALLATION

A. Upon completion of the TerrAcoustics™ installation, remove dust from surface, grooves and penetrations by vacuuming using only a soft brush. Do NOT scratch wood surface with sharp metal or plastic vacuum attachment. Remove pencil marks with soft erasure. Remove general surface dirt, dust, grease, oils and fingerprints with a soft damp warm cloth with a mild diluted cleaning agent. Wipe dry with a soft dry cloth. Do not use cleaners with grit or cloths that could scratch the wood surface.

B. Contractor shall protect completed TerrAcoustics™ panels from damage by other trades.

C. Review the “TerrAcoustics™ Maintenance Guidelines” document (available upon request from your local dealer) for details on how to clean and protect the panels.

END OF SECTION

MAINTENANCE GUIDELINES

BASIC CONSIDERATIONS

TerrAcoustics™ panels are wood based products made of a fire rated medium density fiberboard substrate, or non fire rated MDF core, and a natural wood veneer or HPL face. By nature, wood is a hygroscopic material, and under normal use and conditions all wood products contain some moisture. Therefore, in high humidity, wood picks up moisture and swells and in low humidity, wood releases moisture and shrinks. Panels are 19 mm thick and are manufactured with a tongue and groove edge or square edge profile, creating a perfect finish when installed.

RECOMMENDATIONS

TerrAcoustics™ panels shall be maintained in the same environmental conditions as during their storage and installation throughout the entire lifetime of the panels. The room humidity needs to be maintained between 25% and 55% with the following exceptions: the damp Southern Coastal areas of the U.S. the relative humidity shall be maintained between 43% and 70% inclusive and the dry Southwestern U.S. shall be maintained between 17% and 50% inclusive. The temperatures need to be maintained between 50° F and 86° F. These humidity and temperature conditions need to be maintained throughout the lifetime of the wood panels.

Uncontrolled extremes, such as relative humidity above or below the above mentioned ranges or sudden changes in the allowable relative humidity and temperature, will likely cause problems.

Avoid localized high heat, such as a hot light source, close to or in contact with the finished surface. Exposure to direct sunlight will alter the appearance of the TerrAcoustics™ panels over time.

Prevent direct contact with moisture, and wipe it dry immediately should any occur. Allowing moisture to accumulate or stay in contact with any wood surface, no matter how well finished, will cause damage.

Remove oil or grease deposits on the panels using a mild flax soap, following its directions for dilution.

Do not use abrasive or chemical or ammonia cleaners on the TerrAcoustics™ panels. Severe damage can result from not adhering to the above recommendations. TerrAcoustics™ and the installation company shall not be held responsible for the damage caused by not adhering to the above.

Accomplish routine cleaning of the panels with a soft, lint-free cloth lightly dampened with water. Allowing airborne dust to build up will tend to dull the finish of the panels over time.

Severe damage can result from not adhering to the above recommendations.

TerrAcoustics™ distributors and/or the installation company shall not be held responsible for the damage caused by not adhering to the above recommendations.

SERVICES

INSTALLATION SERVICES

All authorized dealers offer affordable, professional installations by trained installers. Installers review all orders and confirm layouts prior to installation. Schedules are determined and agreed to in advance so expectations can be managed and the client remains 100% satisfied. Installers schedule layout walks, as needed, with architects and designers to ensure design integrity. Turnover walks are scheduled upon completion to ensure client satisfaction, review maintenance and product warranty.

WARRANTY

TerrAcoustics™ products have a one (1) year limited warranty by the manufacturer for manufacturing defects only. The warranty is subject to the recommended preparation of the job site and proper acclimatization and installation of the panels.

Wood is a natural product and it is normal for color inconsistencies to occur. Inconsistencies can occur within the same panel or between panels. Colors may also vary due to wood grain, species and age and are excluded from this warranty.

All contractor work is guaranteed for one (1) year from final acceptance of completed work and/or date of certificate of substantial completion.

A preferred service contract agreement may be available through your local installation company.

ONE (1) YEAR LIMITED WARRANTY

The Bartley Group, Inc. (BGI), the exclusive U.S. Distributor of the TerrAcoustics™ product line, offers a one (1) year limited time warranty for the TerrAcoustics™ Products.

TerrAcoustics™ panels will be free of defects in materials and workmanship for one (1) year from the date of installation of panels supplied by BGI in accordance with the requirements specified in the Purchase Order provided to BGI by an authorized TerrAcoustics™ distributor / installation company.

This does not apply to obvious defects or deviations from the requirements specified on the Purchase Order provided to BGI. For such defects and deviations warranty claims need to be made to BGI within five (5) days of receipt of the Acoustical Panel shipment. If BGI does not receive written notice of any deficiency as to the TerrAcoustics™ panels within five (5) days after delivery, it shall be presumed that the TerrAcoustics™ panels are without defect. Variations in color, texture or grain are normal characteristics of wood veneer and are not considered defects. These variations are not covered by the one (1) year limited time warranty.

In case of any defects due to a quality nature, and the product cannot be used or requires re-treatment to be used, BGI shall make every effort to correct the imperfection by means of replacing the defective products or having them fixed for TerrAcoustics™ account. In all cases, BGI's liability for defective products will not exceed the total amount of the relevant purchase order value.

This warranty applies solely to TerrAcoustics™ panels supplied by BGI that are subject to the following conditions described below.

WARRANTY CONDITIONS PRIOR TO INSTALLATION

To be protected by this warranty, products must not be stored in damp warehouses, placed in moist or freshly plastered buildings, and/or subjected to abnormal heat or dryness. The panels are to be installed in controlled environments and are not to be directly exposed to sunlight, sources of heat or cold air, water, fire, high or low levels of humidity or moisture, dust, extreme temperatures either low or high, and chemical fumes.

Installation shall be done only when: all wet work had been completed and dried; all mechanical, electrical, and other utility service installations have been completed; all exterior windows and doors are in place, glazed, and weather-stripped; the roof is to be watertight; the area is broom clean.

Temperature and humidity conditions before and during the installation of the TerrAcoustics™ panels must match the normal conditions in the occupied space. The relative humidity of the area shall not drop under 25% or exceed 55% with the following exceptions: the damp Southern Coastal areas of the U.S. the relative humidity shall be maintained between 43% and 70% inclusive and the dry Southwestern U.S. shall be maintained between 17% and 50% inclusive.

The temperature of the room shall not drop under 50° F or exceed 86° F. The HVAC system shall be functioning continuously before, during and after installation.

The TerrAcoustics™ panels shall be acclimatized to the final environment in which they will be installed for at least 96 hours prior to their installation. Factory finished products require up to a week or more on site for acclimatization. No materials should rest against, or wrap around the TerrAcoustics™ panels.

ONE (1) YEAR LIMITED WARRANTY (CONTINUED)

Damage such as warping, sagging, extreme dimensional changes in the panels, mold growth, fading in wood veneer color, etc. resulting from such exposures are not covered by the one (1) year limited time warranty.

The TerrAcoustics™ dealer/representative in the area of installation shall be responsible for communicating the storage and installation requirements to the installation Company and General Contracting Company and for ensuring that the installation owner understands how to care for and preserve the installation.

WARRANTY CONDITIONS AFTER TO INSTALLATION

TerrAcoustics™ panels shall be maintained in the same environmental conditions as during their storage and installation throughout the entire lifetime of the panels. No localized high heat, such as a hot light source, shall come close to or in contact with the finished surface. Exposure to direct sunlight will alter the appearance of the TerrAcoustics™ panels over time.

TerrAcoustics™ panels shall not be exposed to direct contact with moisture. Moisture allowed to accumulate or stay in contact with any wood surface, no matter how well finished, will cause damage. No abrasive or chemical or ammonia cleaners shall be used on the TerrAcoustics™ panels.

Damage such as warping, sagging, extreme dimensional changes in the panels, mold growth, fading in wood veneer color, etc. resulting from such exposures are not covered by the one (1) year limited time warranty.

Damage caused by not complying with the warranty conditions prior to and after the installation render this warranty null and void.

BGI does not make, and expressly disclaims, all representations and warranties not expressly made in this warranty document, including, without limitation, implied warranties of merchantability fitness for a particular purpose and non-infringement.