

ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section describes the requirements for the materials and installation of acoustical ceiling panels.
- B. Related Sections:
 - 1. Metal acoustical ceiling suspension assemblies are specified in Section 09 53 23.

1.02 SUBMITTALS

- A. Product Data: Manufacturer's descriptive and technical data and illustrations. Include MSDS data sheets.
- B. Material Samples: Duplicate sets of full-size panels for each type and size of acoustical unit required.
- C. LEED Submittals:
 - 1. Credit MR 4: Product data and certification letter indicating percentages by weight of post-consumer and pre-consumer recycled content for products having recycled content. Include statement indicating costs for each product having recycled content.
 - a. Furnish the LEED Online Credit Template declaring that the credit requirements have been met and list the recycled content products used.
 - b. List total cost of all materials for the Project.
 - c. Required Audit Documentation:
 - 1) Manufacturer product data sheets, literature or letters highlighting the overall post-consumer and/or post-industrial recycled content percentages (by weight) of each product listed on the template.
 - 2) Materials invoices showing costs for each product listed on the template.
- D. Warranty.

1.03 ENVIRONMENTAL QUALITY ASSURANCE

- A. Credit MR 4: Provide building materials with recycled content such that post-consumer recycled content plus one-half of pre-consumer recycled content constitutes a minimum of 10-percent of cost of materials used for the Project.
 - 1. The cost of post-consumer content of an item shall be determined by dividing the weight of post-consumer recycled content in the item by the total weight of the item and multiplying by the cost of the item.
 - 2. The cost of post consumer recycled content plus one-half of pre-consumer recycled content of an item shall be determined by dividing the weight of post-consumer recycled content plus one-half of pre-consumer recycled content in the item by the total weight of the item and multiplying by the cost of the item.
 - 3. Mechanical, electrical and plumbing components and specialty items such as elevators shall not be included in this calculation. Only include materials permanently installed in the Project.
- B. Applicable LEED Credits:
 - 1. Credit MR 4 – Recycled Content.

1.04 EXTRA MATERIALS

- A. In addition to acoustical panels for completing installations required, furnish additional units, in typical field sizes, for each type of unit used in the work.
- B. Furnish quantities equal to not less than 3-percent of total installed area of each type of unit or greater to result in full carton lots for each type, except not less than one full carton for any one type of unit.
- C. Supply extra units from production lots or color runs the same as for units used in the work, and supply in cartons as factory packaged and labeled. Also identify cartons with Project name and type of ceiling panel.
- D. Deliver materials to project premises just prior to substantial completion, and store at location as directed.

1.05 WARRANTY

- A. Warrant acoustical ceiling panels to be free from visible sag and against mold, mildew and bacteria for a period of 30-years from Date of Substantial Completion. This warranty shall be in addition to and not a limitation of other rights the County may have against the Developer Design/Builder under the Contract Documents.

PART 2 - PRODUCTS

2.01 ACOUSTICAL PANELS

- A. Approved Manufacturer: CertainTeed "Ecophon Focus Dg" Item No. 3542 1560 or approved equal complying with ASTM D1264, Type XII, Form 2, Pattern G.
- B. Material: High-density fiberglass with painted edges.
- C. Typical Field Size: Nominal 24- x 24-inches, 3/4-inch thick.
- D. Edges: Semi-concealed.
- E. Noise Reduction Coefficient (NRC): 0.80.
- F. Ceiling Attenuation Class (CAC): N/A.
- G. Articulation Class (AC): 180.
- H. Sound Absorption: Class A.
- I. Light Reflectance: 0.85.
- J. Recycled Content: 75-percent.
- K. Flame Spread Classification: Class A.
- L. Finished Surface: Akutex FT.
- M. Finished Surface Color: White.
- N. Panel Backing: Single layer of smooth, resin-bonded glass tissue.

PART 3 - EXECUTION

3.01 AMBIENT CONDITIONS

- A. Building shall have been entirely enclosed and heated not less than 10-days before start of suspended-ceiling work.
- B. Before installation, acoustical units shall have been stored within the spaces where they are to be used for not less than 3-days, and with cartons opened and stripped sufficiently to permit units to stabilize to ambient conditions.
- C. Remove and replace all acoustical panel ceiling products that are exposed to water and display mold and mildew. Removal shall occur as soon as possible after exposure to water.

3.02 INSTALLATION

- A. Install acoustical panels in suspended grid system in accordance with manufacturer's instructions.
- B. Field-cut edges of tegular edge acoustical panels shall be routed to match the edge profile of uncut panels so that panels lay in grid system flush with adjacent un-cut panels and edges of cut panels match the appearance of uncut panels.
- C. Touch-up edges to match factory cut panels.

3.03 COMPLETION

- A. Acoustical panels shall rest uniformly on their supporting members and shall be flat and free from twist and warp.
- B. Exposed surfaces of acoustical units shall be clean and free from scratches, dents, tool marks, stains, discoloration, fingerprints, and other defects and damage.

3.04 WASTE MANAGEMENT

- A. General: Comply with Section 01 74 19.
- B. Separate waste and place in designated areas in the following categories for recycling:
 - 1. ½ panels and larger, set aside for reuse by County, non-profit organizations such as Habitat for Humanity, etc.
 - 2. Place scrap panels in designated areas for recycling or reuse.
 - 3. Separate cardboard waste and place in designated areas for recycling.

END OF SECTION