

09510: ACOUSTICAL CEILINGS

GENERAL REQUIREMENTS

Selection of acoustical ceiling systems shall be based on careful analysis of function, aesthetic, cost, sound absorption and noise reduction, and durability.

For special assembly areas, retaining of an acoustical consultant should be considered to provide assistance and advise in the design and acoustical treatment.

Review need for extra stock with Project Manager.

QUALITY ASSURANCE

Seismic Requirements: Ceilings shall comply with CCR T-24 and CBC code requirements for seismic bracing of ceiling suspension system.

Surface Burning Characteristics: Provide products complying with ASTM E 1264 for Class A products and meeting the following when tested in accordance with ASTM E84.

Flame Spread: 25 or less

Smoke Developed: 50 or less

Fire-rated ceilings shall be rated in accordance with ASTM E119 and bear an Underwriters Laboratories Inc. (UL) Time Design number applicable to the proposed installation.

Tolerances:

Deflection, ASTM C635: Maximum 1/360 of span. Applies to suspension system components, hangers, and fastening devices supporting light fixtures, ceiling grilles, and acoustical panels.

Allowable Tolerance of Finished Acoustical Ceiling System: Level within 1/8 inch in 12 feet.

WARRANTY

Acoustical ceiling products shall be provided with the following extended product warranties by manufacturer:

Acoustical Panels: 10 years.

Suspension Grid: 10 years.

MATERIALS

Suspension Systems: Exposed grid type. Do not use concealed spline systems.

Comply with ASTM C635.

Structural Classification: Not less than Intermediate-duty.

Main, Cross Members, Edge Moldings: Zinc coated; electrogalvanized or hot-dip galvanized cold-rolled steel. Use hot-dip galvanized system at damp locations.

Rough Suspension: Galvanized, soft-annealed, mild steel wire.

Power-driven fasteners shall conform to Division 1 requirements.

Acoustical Panels and Tiles:

Acoustical panels shall conform to FS SS-S-118B, Type III (mineral fiber), Class 25, unless otherwise accepted by Project Manager for Project aesthetic or acoustical requirements.

Provide USDA/FSIS approved panels at food preparation areas.

Minimum Performance Requirements:

Color/Light Reflectance (LR): 0.75.

Noise Reduction Coefficient (NRC): 0.55.

Ceiling Attenuation Class (CAC): 35.

Products shall be selected with consideration of IAQ requirements.

Consideration shall be given to products with recycled material content and that can be recycled.

In renovation products, match existing adjacent acoustical units where possible. Do not mix new and existing units in any given space.

Coordinate selection of acoustical units with existing building standard.

Adhesive for Tiles: VOC compliant, ASTM D1779 bearing UL label for Class 0-25 flame spread.

Leveling Splines for Tiles: Fiber, metal, or plastic, manufactured specifically for leveling adhesive-applied tile, as recommended by tile manufacturer.

INSTALLATION

Suspension system, including necessary hangers, grillage, and other supporting hardware, shall conform to requirements of UBC Standard 25-2, "Metal Suspension Systems for Acoustical Tile and for Lay-in Panel Ceilings" and ASTM C636.

Acoustical panels shall be installed in grid system in accordance with CISCA publication "Acoustical Ceiling Use and Practice."

CBC Standard shall govern if in conflict or more restrictive than industry standards and publications.

Where tegular edge panels are used, panel edges shall be trimmed or routed to provide tegular edge at perimeter moldings.

UC BERKELEY CAMPUS DESIGN STANDARDS

Suspension system shall not be secured to ductwork.

Exit signs, sprinkler cases, signage and other items shall not be attached to lay-in panels.

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