

ACOUSTICAL PANEL CEILINGS

GENERAL INFORMATION

- 1.1 Acoustical Panel Ceilings includes suspended acoustical panels, exposed grid suspension systems, accessories, hardware and supports required for a complete installation.
- 1.2 The latest edition of the following standards of the American Society for Testing and Materials (ASTM) shall apply to the work:
 - a. A641 Specification for Zinc-Coated (Galvanized) Carbon Steel Wire.
 - b. C635 Specification for Metal Systems for Acoustical Tile and Lay-in Panel Ceilings.
 - c. C636 Recommended Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
 - d. C841 Specification for Installation of Interior Lathing and Furring.
 - e. E1264 Classification for Acoustical Ceiling Products.

DESIGN REQUIREMENTS

- 2.1 24" x 24" lay-in tile units in exposed grids, unless otherwise specifically approved by the Project Manager.
- 2.2 Pre-approved products:
 - a. Open plan areas - Armstrong "Optima"
 - b. Offices – Armstrong "Ultima"
- 2.3 No concealed spline grids shall be specified.
- 2.4 Acoustical Panels shall be noncombustible, molded mineral fiber with scrub-resistant, fine-textured face; complying with ASTM E1264, with 0-25 Flame Spread, and high Light Reflectance.

CONSTRUCTION REQUIREMENTS

- 3.1 Work spaces shall be satisfactorily closed and protected against weather. They shall be dry and all work that introduces dampness shall be completed.
- 3.2 Field check Project for access, construction tolerances, and other conditions that affect work. Do not install products until unsatisfactory conditions are corrected. Defects resulting from unsatisfactory conditions or untimely installation shall be corrected at no cost to the Owner.

- 3.3 Work Attached to Spray-Fireproofed Surfaces: Install ceiling anchors and hangers before fireproofing is applied. After fireproofing is applied, remove only as much fireproofing as necessary to complete installation. Protect adjoining and adjacent fireproofing from damage.
- 3.4 Installation shall be carried out only in temperature conditions between 50 degrees F (10 deg. C) and 86 degrees F (30 deg. C) in spaces where the HVAC systems are functioning and will be in continuous operation from that point forward.
- 3.5 Ceiling Suspension: comply with ASTM C636 to meet specified performance requirements and allowable tolerances; install lather's channel bridging and additional anchors, hangers, and braces necessary to span obstructions and keep spans and loads within acceptable limits; keep hangers and braces at least 2" clear of ducts, pipes and conduits.
- 3.6 Anchorage: Secure hangers to anchorage devices in concrete-filled metal deck by means of rod hanger brackets. Secure hangers to structural steel framing with beam/flange clamps and/or drill screws and rod hanger brackets. Clamp rod hangers to lather's channel bridging.
- 3.7 Carrying Channels: Install lather's channels 48" (max.) o.c. Support channels 36" (max.) o.c. with hanger flats. Sway-brace suspended channels with hanger rods or 12 gage (min.) galvanized steel wire.
- 3.8 Grid and Tee System Installation:
 - a. Main Runners: Attach main runners to carrying channels with direct-hang clips. Install runners continuously, in long lengths. Secure end joints with concealed splicers. Space main runners on 24" (max.) centers.
 - b. Cross Runners: Align and lock them securely to main runners. Butt exposed cross-runners to main runners with hairline flush joints.
 - c. Moldings: Install moldings at walls and at all interrupting vertical surfaces. Use one-piece-for-length where possible; do not piece out runs with short lengths. Install concealed splicers to maintain alignment.
- 3.9 Lay-In Panel Installation: Except to brace and stabilize grid, do not install final ceiling tiles until all work above ceiling is complete and inspected.
 - a. Install panels with continuous 4-sided bearing on runner flanges.
 - b. Trim panels at interrupting vertical surfaces and at items that penetrate ceilings; conceal cut edges in ceiling system perimeter molds and behind flanges of items that penetrate panels. Discard (do not install) panels that are deformed or defaced by field fabrication. Field cutting is only permitted where manufacturer cannot provide factory-made panels in the sizes required, and with the prior

approval of the Architect. Field cut edges shall match factory edges, and cutting shall be performed in accordance with manufacturer's recommendations.

- c. Hold-Down Clips: Install for panels adjacent to exterior doors and for panels in corridors and vestibules leading to exterior, except where access is required to above-ceiling mechanical controls.

- 3.10 Adjusting, Cleaning, and Protection: Correct nonconforming and damaged work. Replace damaged panels and other work that cannot be field corrected. Clean finished surfaces of dirt and finger marks. Protection: Protect work from damage.