

**Part 1 General****1.1 Summary**

- .1 Unless otherwise indicated, follow the standards below when specifying suspended ceilings work. These standards are not intended to restrict or replace professional judgment.

**1.2 Design Requirements**

- .1 Suspended ceilings are forbidden in all washrooms, except under special request approved by the Project Manager. In this case, the suspended ceiling shall be water resistant and washable.
- .2 Where ceiling-mounted items obstruct the regular spacing of hanger wires, design "trapeze" structures with additional steel supports to bridge the obstruction.

**1.3 Ceiling Suspension**

- .1 The Architect/Engineer (A/E) shall design the means of suspending systems from the slab above, and allow space for the hangers. Piping, ductwork, and equipment shall have independent support systems (i.e. piping shall not be supported from ductwork supports, etc.) Do not suspend anything (including electrical conduit) from ductwork. Show trapeze hangers on the drawings, and provide additional details as necessary to convey the A/E's intent to the Contractor. Verify that sufficient space exists above existing suspended ceilings for the design.
- .2 In existing buildings new piping, ductwork and equipment shall not be supported from existing hangers and/or existing supplementary steel without A/E verification of existing component conditions and loading capacities.

**Part 2 Products****2.1 Preferred Products**

- .1 Refer to MAT website ([www.materialanalysis.ca](http://www.materialanalysis.ca)) for selection of products for this section, except for prescribed items. Products selected on MAT should have score of 5 or above.

**2.2 Acoustic Panels**

- .1 Circulation, public areas and offices:
  - .1 Ceiling tiles: Shall be 610 mm x 1220 mm (24" x 48") "Fissured" #755 mineral fibre acoustical lay-in panels as manufactured by Armstrong or 610 mm x 610 mm (24" x 24") Fissured #756 mineral fiber acoustical lay-in panels as manufactured by Armstrong (see drawings for exact sizes) , or approved equivalent. Panels shall be 16 mm (5/8") thick with a flame spread index Class 25.
  - .2 Framing: Shall be 28 gauge, cold-rolled steel Tees, 38 mm (1 1/2") high with 25 mm (1") flanges. Tees shall be galvanized and prefinished on exposed surfaces in baked-enamel, white. Main Tees shall be installed at 1220 mm (4'-0") centre and fastened to wire hangers. Cross Tees shall be installed at 610 mm (2'-0") centres.

.2 Classrooms:

- .1 Ceiling tiles: Shall be 610 mm x 1220 mm (24" x 48") with a minimum STC of 50 and a minimum NRC of 0.85. Refer also to section 09 84 10, acoustical treatment. Panels shall be 16 mm (5/8") thick with a flame spread index Class 25.
- .2 Framing: Shall be 28 gauge, cold-rolled steel Tees, 38 mm (1 1/2") high with 25 mm (1") flanges. Tees shall be galvanized and prefinished on exposed surfaces in baked-enamel, white. Main Tees shall be installed at 1220 mm (4'-0") centre and fastened to wire hangers. Cross Tees shall be installed at 610 mm (2'-0") centres.

.3 Animal facilities, clean rooms, food service areas and laboratories:

- .1 Shall be 610 mm x 1220 mm (24" x 48") VL #870 mineral fibres lay-in panels as manufactured by Armstrong, or approved equivalent. Panels shall be 16 mm (5/8") thick with a flame spread index Class 25 or under.
- .2 Framing: Shall be as "Prelude" by Armstrong model ALXL, with clips # 414, or approved equivalent. The perimeter of light fixtures shall be sealed with latex silicone.

**2.3 Edge Molding**

- .1 Shall be 28 gauge, cold-rolled steel angles, 38 mm (1 1/2") high with 25 mm (1") flanges. Angles shall be galvanized and prefinished on exposed surfaces in baked-enamel, white.

**2.4 Hangers**

- .1 Shall be 3.6mm diameter, hot-dipped galvanized, mild steel wire anchored to structure above at 1220 mm (4'-0") centres in both directions.

**END OF SECTION 09 22 27**