

FACILITIES MANAGEMENT AND ANCILLARY SERVICES

FINISHES - DIVISION 09 Suspended Ceiling - 09 22 27

## 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 Where ceiling-mounted items obstruct the regular spacing of hanger wires, design "trapeze" structures with additional steel supports to bridge the obstruction.
- .2 Fire-rated acoustical ceiling systems are not recommended. To achieve the desired fireresistance rating, specify fire-rated gypsum ceiling assemblies.
- .3 For localized ceiling interventions requiring replacement acoustical tiles, specify ceiling tiles that match existing tiles.

# 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 <u>anything (including electrical conduit)</u> 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

# LEED 2.1

#### Sustainable Performance Requirements

.1 Products must be sourced following the hierarchy of sustainable performance requirements outlined in 01 60 00 – Product Requirements.

## 2.2 Acoustic Panels

- .1 Modules of 610 mm x 1220 mm (24" x 48") ceiling tiles are preferred. Alternate size of 610 mm x 610 mm (24" x 24") is permitted to match existing adjacent spaces.
- .2 For ease of maintenance, square lay-in panels are preferred.
- .3 All acoustic panels shall have a flame spread index Class 25 or under.



FACILITIES MANAGEMENT AND ANCILLARY SERVICES

FINISHES - DIVISION 09 Suspended Ceiling - 09 22 27

- .4 Preferred products:
  - .1 Circulation, public areas and offices:
    - .1 "Fissured #755" by Armstrong, "Directional fissured #FH-197" by CertainTeed or approved equivalent.
    - .2 "Fine Fissured #466" by Armstrong , "Fine Fissured #HHF-197" by CertainTeed or approved equivalent.
    - .3 "Fine Fissured #1755" by Armstrong, "Fine Fissured Sereno #497HRNC" by CertainTeed or approved equivalent.
  - .2 Classrooms:
    - .1 "Optima Lay-in #3153" by Armstrong, "Symphony F #1340-IOF-1" by CertainTeed or approved equivalent.
    - .2 "Calla #2820" by Armstrong , "Symphony M #1222-80-1" by CertainTeed or approved equivalent.
  - .3 Animal facilities, clean rooms, tissue culture labs, food service areas and wet laboratories that require frequent cleaning of the ceiling:
    - .1 "VL #870" by Armstrong, "Clean room Class 100" by CGC, "Vinylsheild A #1100 CRF-1" by CertainTeed or approved equivalent.
    - .2 When a tile has to be cut to fit room's dimensions or configuration, the cut must be done so the face material stays continuous and can be folded and sealed to the cut edge(s).
    - .3 Tiles shall be installed with hold down clips (retention clips) capable of maintaining the tiles in place during cleaning and under positive pressure HVAC conditions in the room.
  - .4 Teaching laboratories that do not require frequent cleaning of the ceiling:
    - .1 "Optima Health Zone #3115PB" by Armstrong , "Symphony F RX #1340 RXS-1" by CertainTeed' or approved equivalent.
  - .5 Washrooms:
    - .1 "Ultima Health Zone #1938" by Armstrong, "Mars # 88185" by CGC, "Symphony M RX #1220-RXS-1" by CertainTeed or approved equivalent.

## 2.3 Ceiling Grid System

- .1 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. Preferred products:
  - .1 "Prelude XL" by Armstrong, "Donn DX/DXL" by CGC, "EZ Stab 15/16 Classic system" by CertainTeed or approved equivalent.
- .2 Framing for animal facilities, clean rooms, food services, and wet laboratories: Shall be noncorrosive aluminium. The perimeter of light fixtures shall be sealed with latex silicone. Preferred products:
  - .1 "Prelude Plus XL Aluminum" by Armstrong, "Donn AX" by CGC, "EZ Stab 15/16 Classic Environmental System" by CertainTeed or approved equivalent.



FACILITIES MANAGEMENT AND ANCILLARY SERVICES

FINISHES - DIVISION 09 Suspended Ceiling - 09 22 27

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

## Part 3 Related Technical Sections

The technical sections of the McGill Building Design and Technical Standards should be consulted with the current document, most notably (but not limited to) the following:

Section Number	Title of Section
Special Building Areas	Animal Facilities
Special Building Areas	Classrooms
Special Building Areas	Laboratories
Special Building Areas	Offices
Special Building Areas	Washrooms
09 21 26	Gypsum Board Assemblies
09 84 10	Acoustic Treatment
26 50 00	Éclairage

## **END OF SECTION**