Design Guideline 095100
Acoustical Ceilings

Scope

This section provides guidance for designing and specifying acoustical ceilings. Reference Design requirements below for oversized or specialty type panels.

For University of Michigan Hospitals and Health Centers projects refer to Design Guideline 095000-H: Ceilings (09510-H).

Related Sections

U-M Master Specification Sections: (A digitally accessible version is pending; please email AEC-Digital Accessibility Support if assistance is needed)
7.0 MS 220500 – Common Work Results for Mechanical

Design and Installation Requirements

Submittals

For buildings subject to the jurisdiction of the State of Michigan Bureau of Fire Services (Instructional Spaces and Dormitory Spaces), include requirement for Affidavits of Compliance.

Design Requirements

In general, exposed grid suspended ceilings are preferred over concealed systems. Avoid spline and other non-accessible systems when any mechanical systems or equipment will be concealed above ceiling.

There are currently no standardized product types for acoustic panels. However, the following general guidelines apply:

- 2 foot by 2 foot panels are preferred over 2 foot by 4 foot panels.
- Rabbeted edge panels are preferred except where economy is paramount.
- All cut edges of tile shall be painted to match exposed surface color.
- 3/4 inch thick panels are preferred over 5/8 inch panels.
- If the acoustical ceiling has multiple levels, provide metal trim transitions between levels by ceiling manufacturer. Vertical application of ceiling tile is not acceptable.
- Fiberglass panels are not acceptable.
- Where possible, specify humidity-tolerant acoustical panels carrying a minimum 10 year warranty.
- Specify gypsum board or other washable panels and moisture resistant grid in food service areas. Product shall be certified for intended use, ie. USFDA for food service.
- Oversized or large format ceiling tiles and panels are allowable with caution. Due to panel size most panels in an application end up with at least one item, diffuser, sprinkler, light etc. anchoring them

down. This creates a ceiling plane that is virtually unaccessible. Large format panels are also susceptible to sagging long term. A thoroughly designed system that accounts for long term rigidity and accessibility would be accepted. Large format panel applications shall be reviewed with the Design Manager.

Where ceiling-mounted items obstruct the regular spacing of hanger wires, design "trapeze" structures with additional steel supports to bridge the obstruction.