

Description:

The purpose of the section is to highlight the current applicable UMD Design Standards for the design and installation of interior partitions and finish materials.

Related Sections:

- TBD

Effective Date:

January 1, 2023

Applicable Standards:

- TBD

General Requirements:**Acoustics and Sound Abatement**

- Sound abatement is an important consideration in the design of a project. The wall design of the facility must ensure that all offices, classrooms, and labs will be insulated from unreasonable outside sources of noise.
- Mechanical and electrical rooms, and other major noise and vibration sources, (including noise generated by vehicular traffic) should be isolated/separated from spaces that would be sensitive to such intrusion.
- Whenever possible, walls should extend to the slab above, other interstitial spaces should be closed, and penetration of utilities should be sealed to provide the desired acoustic isolation.
- The HVAC system should use ducted returns. Relative to sound attenuation, plenum returns are undesirable.
- Mechanical and electrical rooms are to be constructed of masonry walls with slab to slab construction.
- Anticipated noise levels that will be generated by equipment and occupants of the building shall be determined and sound transmission coefficients (STC's) of walls, floors, and other elements of enclosure needed to maintain acceptable noise levels shall be specified.
- The noise levels within a space should not exceed 40 dB for executive offices and conference rooms, 45 dB for general offices, 40 dB for classrooms, and 55 dB for laboratories.
- The minimum Sound Transmission Coefficient (STC) levels must be 45 STC between offices, 35 STC between a laboratory and adjacent spaces, and 45 STC between instructional space and all other spaces (measurements with doors closed).
- **Partition Height**
 - It is preferable for partitions to be full height, floor to underside of floor slab or roof above, in areas requiring security, sound isolation and in compliance with code.
 - Fire rated walls shall be specified in accordance with code requirements.
- **Partition Finish Materials**
 - Durable wall finishes shall be specified to minimize maintenance.
 - Painted drywall is the preferred finish for maintenance reasons. Wall covering is strongly discouraged.
 - Walls specified to receive wallcovering shall be sealed prior to application of wallcovering.
 - Adhesive used shall be as recommended by manufacturer of wallcovering.
 - Extra materials (minimum of 5%) shall be labeled and submitted to customer.
 - Cleaning and maintenance instructions shall also be submitted to customer.
 - Masonry walls with bullnose corners are preferred for academic buildings.
 - Glazed CMU block is recommended for corridor walls with coved base and bullnose corners.
 - Include corner guards on exterior corners in heavy traffic areas.
 - Toilet room walls to have ceramic tile wainscot to a minimum height of four feet above finished floor.