

## Basis of Design

This section applies to rated and non-rated interior partitions.

### Fixed Partitions

- Studs: Steel, 16 inches on center, maximum deflection of L/240 at 5 lb. per square foot. Gauge shall be sufficient to support blocking and wall mounted elements and items.
- Steel studs, runners and tracks: Galvanized to G-60 per ASTM A525
- Deflection top runner: At all walls, 2-inch deep leg. Verify anticipated deflection.
- Rigid furring channels: Hat-shaped,  $\frac{7}{8}$  inches deep and 20 gauge
- Resilient furring channels:  $\frac{1}{2}$ -inches-deep channel in single-leg or double-leg configurations
- Backing/blocking: Galvanized steel, 20 gauge, width as appropriate for element to be mounted; provided for all wall mounted items
- Gypsum wallboard:  $\frac{5}{8}$  inches thick, Type X, tapered edges
- Water resistant gypsum wallboard:  $\frac{5}{8}$  inches thick, tapered edges; provide at all areas where water is normally used (restrooms, kitchens, wet labs, etc.)
- Trim accessories: Metal, galvanized or aluminum coated
- Sound attenuation: STC 50, minimum
- Fire rating: Assemblies per GA-600, "Fire Resistance Design Manual" or UL "Fire Resistance Directory"
- Environmental conditions: Per manufacturer's recommendations
- Provide shelves with clear plastic lips for seismic restraint. Provide  $\frac{3}{4}$  inch high lips above shelf surface for bookshelves and 1-1/2 inch high lips above shelf surface for breakable, chemical and similar types of hazardous materials.

### Folding Partitions

- Continuously hinged pairs
- Noise reduction coefficient (NRC) of .70 minimum.
- Sound transmission coefficient (STC) of 45 minimum.
- Provide UL electric operator when the weight of the paired panels exceeds manufacturer's recommendations. Control station shall be a keyed three-button open-stop-close type, recessed mounted
- All coverings must be Class A materials.

## Design Evaluation

### The following information is required to evaluate the design

- Schematic Design Phase: Indicate all fire rated partitions/assemblies for exit corridors, occupancy separations, area separations and suite concepts. Indicate structural partitions.
- Design Development Phase: Indicate all fire rated partitions/assemblies, sound rated partitions with SCT ratings and all partitions constructed of different materials--i.e. masonry, concrete, storefront, folding panel, etc. Outline specifications.
- Construction Document Phase: Complete design and final specifications.

### **Construction Submittals**

- Provide standard industry submittal requirements.

### **Related Sections**

- Facilities Services Design Guide - Finishes
- Facilities Services Design Guide - Structural – Nonstructural Component Seismic Design

### **Products, Materials and Equipment**

- Any product, material and/or equipment by a nationally recognized manufacturer is acceptable.
- Consider product, material and/ or equipment from salvaged sources or made with recycled content or FSC wood.

### **Installation, Fabrication and Construction**

- Comply with manufacturer's recommendations and industry standard practices.
- Any gypsum wallboard that gets wet shall be removed and replaced.

END OF DESIGN GUIDE SECTION