DSA Structural Amendments under review are highlighted in GRAY and Marginal Markings

Template 25-02

2001 CBC - Chapter 25A
GYPSUM BOARD AND PLASTER

Section - 2501A.1 - SCOPE

Subsection(s) - 2501A.5 - 2501A.5.3

2501A.5 Suspended Acoustical Ceiling Systems for Public School, Hospital and State-owned or State-leased Essential Services Buildings. *Metal ceiling suspension systems used primarily to support acoustical tile or other types of lay-in panels shall be designed and installed in accordance with ASTM C 635, ASTM C 636 and this chapter. The member sizes, connections, support systems, light fixture and ventilating grille attachments, partition supports and installation of bracing to resist lateral forces shall be fully detailed on the approved plans and/or specifications.*

2501A.5.1 Scope. *ASTM C 635 and C 636 cover metal ceiling suspension systems used primarily to support acoustical tile or acoustical lay-in panels.*

2501A.5.2 Lay-in ceiling assemblies. *Lay-in ceiling assemblies in exitways of hospitals and state-owned or state-leased essential services buildings shall be installed with a main runner or cross runner surrounding all sides of each piece of tile, board or panel and each light fixture or grille. Splices or intersections of such runners shall be attached with through connectors such as pop rivets, screws, pins, plates with end tabs or other approved connectors. Expansion joints shall be provided in the ceiling at intersections of corridors and at junctions of corridors and lobbies or other similar areas. The lay-in ceiling assembly shall also comply with all the other requirements of these regulations.*

2501A.5.3 Classification. *The structural performance required from a ceiling suspension system shall be defined in terms of a suspension system structural classification.*

The load-carrying capacity shall be the maximum uniformly

distributed load in pounds per linear foot (kN/m) that a simply supported main runner section having a span length of 4 feet 0 inches (1219 mm) is capable of supporting, without a midspan deflection exceeding 0.133 inch (3 mm) or 1/360 of the 4-foot 0-inch (1219 mm) span length.

The structural classification listed in Table 25A-AA shall be determined by the capability of main runners or nailing bars to support a uniformly distributed load. These classifications shall be:

TABLE 25A-AA.MINIMUM LOAD-CARRYING CAPABILITIES OF MAIN RUNNER MEMBERS

MAIN RUNNER MEMBERS	DIRECT HUNG	SUSPENSION SYSTEM (pounds per lineal foot)	
		Indirect Hung	Furring Bar
Intermediate-duty	12.0	3.5	6.5
Heavy-duty	16.0	8.0	—

Ceiling suspension systems used shall be either intermediate-duty systems or heavy-duty systems. Ceilings that support light fixtures, air-ventilation grilles or partitions shall have a classification of heavy-duty systems.

Cross runners shall be capable of carrying the design load as dictated by job conditions without exceeding the maximum allowable deflection equal to 1/360 of its span. A cross runner that supports another cross runner is a main runner for the purpose of structural classification and shall be capable of supporting a uniformly distributed load at least equal to the intermediate classification.