



Design Data for Suspended Ceilings

Architects, Engineers and Contractors often need to know how much an installed ceiling system will approximately weigh. The following are suggested guidelines of material weights are for hanger wire and fastener selection. The actual weights may vary with proprietary products or additional materials added.

SUSPENDED CEILING WEIGHTS:

This data is to assist designers/contractors in materials selection. A typical hanger wire is installed at 4 foot on center for suspended ceiling systems (except for plaster*). The hanger wire is assumed to carry 16 s/f of the ceiling weight. The following weights are based on generic ceiling systems. For proprietary systems, refer to the manufacturer.

PSF = pounds per square foot

Gypsum Lath & Plaster

8–9 PSF assume 144 lbs = 16 s/f

Gypsum Wallboard & Veneer Plaster

One-layer wallboard

4–5 PSF assume 80 lbs = 16 s/f

Two-layers wallboard

6–7 PSF assume 112 lbs = 16 s/f

Acoustical Grid and Lay-in Tiles

2–4 PSF assume 64 lbs = 16 s/f

Portland cement plaster*

10–13 PSF assume 208 lbs = 16 s/f

Deflection

L/360 of 4 foot span (0.133 inch)

Uniform Load

Hanger Wires

Lath and Plaster

#8 GA Wire

Drywall

#9 GA Wire

Grid and Tile

#12 GA Wire

The suggested gage of hanger wire may be altered with closer spacing with approval from code authority and/or the Architect of record/Engineer.

* Suspended plaster ceiling with wire tied Cold Rolled Channels (CRC), metal lath and a 3/4-inch portland cement plaster will typically require spacing of hanger wire at 3 foot x 4 foot pattern (CRC 4 foot on center) rather than the standard 4 foot x 4 foot pattern for gypsum wallboard ceilings.

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