



Design No. G 540

Restrained Assembly Rating – 1 hr.

Unrestrained Assembly Rating – 1 hr.

1. **Structural Steel Members*** - Pre-fabricated light gauge steel truss system consisting of cold formed, galvanized steel chord and web sections. Trusses fabricated in various sizes, depths, and from various steel thicknesses. Trusses spaced a max of 48 in. OC.

MiTek Industries, Inc. – Ultra-Span® Prefabricated Light Gauge Steel Truss System

**Fabrication & installation by: Superior Truss & Panel, Inc. 2204 West 159th Street,
Markham, Illinois 60426**

Contact: Mike Goncher or Bryce Welty Ph. 708-339-1200 Fx. 708-339-1248

2. **Bridging**–(not shown)–Location of lateral bracing for truss chord and web sections to be specified on truss engineering.
3. **Metal Lath** – 3/8-in. rib, 3.4 lb/yd² expanded steel lath tied to each truss at every other rib and midway between trusses at side labs with 18 SWG galv. steel wire. As an alternate, the form material for the concrete may be corrugated steel deck, min 9/16 in. deep, 28 MSG galv. steel, mechanically fastened to trusses 15 in. OC. The concrete topping thickness shall be measured to the top plane of the steel deck.
4. **Welded Wire Fabric** – 6 by 6 in., 10/10 SWG.
5. **Normal Weight or Lightweight Concrete** – Carbonate or siliceous aggregate, 150 +/- 3pcf unit weight, 3000 psi compressive strength. Lightweight concrete expanded shale, clay or slate aggregate by rotary kiln method, 117+/- 3pcf-unit weight, and 3000-psi compressive strength.
6. **Resilient Channels** – Formed of 25 MSG galv. steel, installed perpendicular to the steel trusses (item 1), spaced a max of 16 in. OC when no insulation (item 8) is fitted in the concealed space, or a max of 12 in. OC when insulation (item 8) is fitted in the concealed space, draped over the resilient channel/gypsum wallboard ceiling membrane. Two courses of resilient channel positioned 6 in. OC at wallboard butt joints (3 in. from each end of wallboard). Channels orientated opposite at wallboard butt joints. Channel splices overlapped 4 in. beneath steel trusses. Channels secured to each truss with Type S12 by ½ in. long screws.

6a. Resilient Channels - As an alternate to item 6, Resilient Channels, double legged formed of 25 MSG

Galv. steel, 2 ^{7/8} in. wide by ½ in. deep, installed perpendicular to the steel trusses (item 1), spaced a max of 16 in. OC when no insulation (item 8) is fitted in the concealed space, or a max of 12 in. OC when insulation (item 8) is fitted in the concealed space, draped over the resilient channel/gypsum wallboard ceiling membrane. Two courses of resilient channel positioned 6 in. OC at wallboard butt joints (3 in. from each end of wallboard). Channel splices overlapped 4 in. beneath steel trusses. Channels secured to each truss with Type S12 by ½ in. long screws or

with No. 18 SWG steel wire double strand saddle ties. Channels tied together with double strand of No. 18 SWG galv. steel wire at each end of overlap.

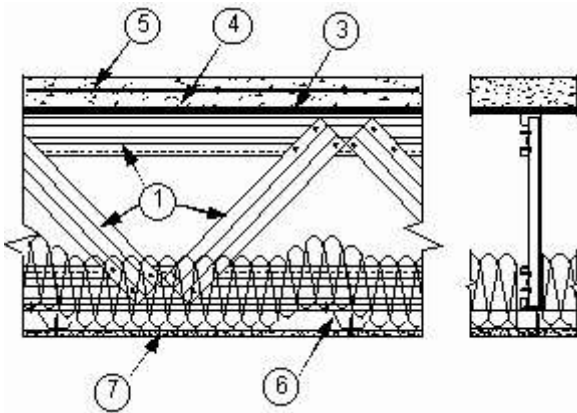
7. **Wallboard, Gypsum*** - One layer of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to trusses. Attach to the resilient channels using 1 in. long Type S bugle head screws. Screws spaced a max of 12 in. OC along butted end-joints and in the field when no insulation (item 8) is fitted in the concealed space, or a max of 8 in. OC along butted end joints and in the field when insulation (item 8) is fitted in the concealed space, draped over the resilient channel/gypsum wallboard ceiling membrane.

Canadian Gypsum Company – Type C or IP-X2 United States Gypsum Company – Type C or IP-X2

8. **Batts and Blankets*** - Optional – Any thickness mineral wool or glass fiber insulation bearing the UL Classification Marking for surface burning characteristics, having a flame spread value of 25 or less and a smoke value of 50 or less. Insulation fitted in the concealed space, draped over the resilient channel/gypsum wallboard ceiling membrane.
9. **Finishing System** – (not shown) – Vinyl, dry or premixed joint compound, applied in two coats to joints and screw heads; paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, nom 3/32-in. thick veneer plaster may be applied to the entire surface of gypsum wallboard.
10. **Steel Beam** – Optional – (not shown) – W8 x 35 min size, used to support structural steel members (item 1) at ends.

*** Bearing the UL Classification Marking**

This design was reproduced from the original UL design Document.



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