

# Design No. M551

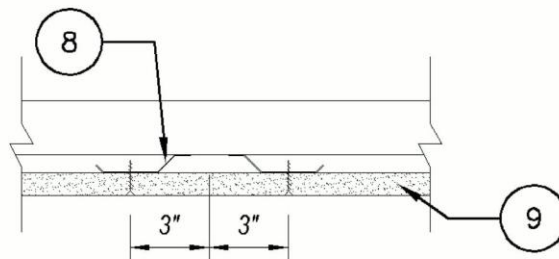
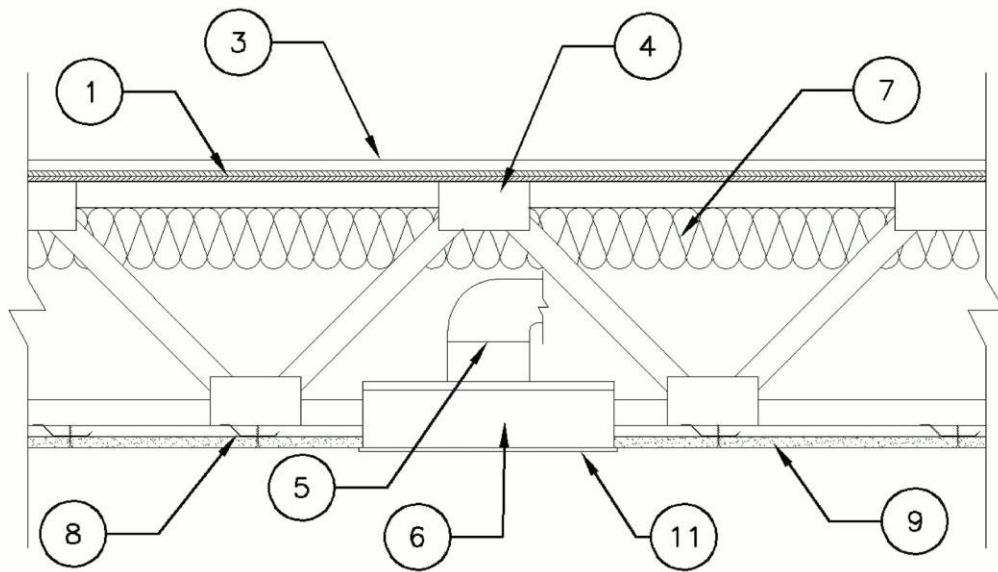
August 19, 2020

Unrestrained Assembly Rating - 1 Hr.

Finish Rating - 24 Min.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide [BXUV](#) or [BXUV7](#)

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



End Joint Detail

1. **Subflooring** — Min 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered 48 in. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails, spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

2. **Finish Flooring** — Min 2025 mm (79.72 in.) by 244 mm (9.6 in.) by 14 mm (0.67 in.) thick wood laminate floor covering installed perpendicular to trusses.

**SWISS KRONO AG** — Type Grand Selection Origin

3. **Trusses** — Parallel chord trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Min truss depth is 18 in. Truss members secured together with min 0.0356 in. thick galvanized steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate.

4. **Air Duct\*** — (Optional) — Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer.

5. **Ceiling Damper\*** — (Optional. To be used with Air Duct Item 4) — Plenum box max size nom 12 in. long by 12 in. wide by 3 in. high fabricated from either galvanized steel or Classified Air Duct Materials bearing the UL Classification Marking for Class 0 or Class 1 rigid air duct material. Installed in accordance with the instructions provided by the manufacturer. Max damper openings not to exceed 144 sq in. per 100 sq ft of ceiling area.

**NAILOR INDUSTRIES INC** — Type 0755

6. **Batts and Blankets\*** — (Optional) - Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. Max thickness of 3-1/2 in. thick. Shall be secured against the subflooring in the concealed space with 0.090 in. diam galv steel rods attached to the wood trusses at 12 in. OC.

7. **Resilient Channels** — Resilient channels formed from min 25 MSG galv steel, spaced 16 in. OC perpendicular to trusses. Channels secured to each truss with 1-1/4 in. long Type S steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in OC, oriented opposite each gypsum board end joint as shown in the End Joint Detail in the above illustration. Additional channels shall extend 6 in beyond each side edge of board.

7A. **Steel Framing Members\*** — (Optional, Not Shown) — Used as an alternate method to attach resilient channels to structural members. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 24 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the screws supplied with the accessory and per the accessory manufacturer's installation instructions. Gypsum Board butt joints staggered minimum 24 in. OC and Gypsum Board screws spaced 8 in. OC (in lieu of 12 in.) when used.

**PAC INTERNATIONAL L L C** — Type RC-1 Boost

8. **Gypsum Board\*** — Nom 5/8 in. thick, 48 in. wide gypsum board. When resilient channels (Item 7) are used, gypsum board installed with long dimension perpendicular to resilient channels. Gypsum board secured with 1 in. long Type S bugle head screws spaced 12 in. OC and located a min of 1/2 in. from side joints and 1-1/2 in. from end joints. End joints secured to both resilient channels as shown in end joint detail. At butted end joints, each end of each gypsum board shall be supported by a single length of resilient channel equal to the width of the gypsum board plus 6 in. on each end. The two resilient channels shall be spaced approximately 3 in. OC and be attached to underside of the joist. Screw spacing along the end joint shall be 8 in. OC.

**CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C** — Type FireCheck Type C

**GEORGIA-PACIFIC GYPSUM L L C** — Type FireGuard C

**UNITED STATES GYPSUM CO** — Type FireCode C

9. **Finishing System** — (Not Shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads. Nom 2 in. wide paper tape 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 board.

10. **Grille** — Steel grille, installed in accordance with the installation instructions provided with the ceiling damper (item 5).

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[Last Updated](#) on 2020-08-19