ASSEMBLY DESCRIPTION

1. 1/2" GyProc® Fireguard® C gypsum board installed with long dimension perpendicular to furring channels. Inner layer positioned with end joints midway between joists. Secured to furring channels with 1" long Type S-12 screws spaced 12" o.c. and located 5/8" from end joints and 2" from side joints. Outer layer positioned with end joints midway between joists. End joints offset 24" and side joints offset 16" to 24" from end and side joints, respectively, of inner layer. Outer layer secured to furring channels with 1-5/8" long Type S-12 screws spaced 12" o.c. End joints of outer layer attached to inner layer with 1-1/2" long Type G bugle head steel screws spaced 8" o.c. and 3/4" from end of boards.

2. 1/2" GyProc Fireguard C gypsum board installed with long dimension perpendicular to joists. Inner layer attached to steel joists using 1" long, Type S12 bugle head steel screws spaced 8" o.c. at the end joints and located from 1/2" to 2" from all edges and spaced 12" o.c. in the field. End joints to occur under joists. Outer layer attached to inner layer using 1-1/2" long, Type G bugle head steel screws spaced 8" o.c. at the end joints and located from 3/4" to 2" from all edges. In the field outer layer board is attached with 1-5/8" long, Type S12 bugle head steel screws driven into the joists and spaced 12" o.c. End joints of outer layer to occur between joists. Side joints to be staggered from inner layer. When resilient channels (Item 11) are used, two layers of 1/2" thick by 48" wide sheets installed with long dimension perpendicular to resilient channels. Inner layer positioned so that side joints occur between joists; secured to resilient channels with 1" long Type S-12 steel screws spaced 8" o.c. at the end joint resilient channels and from 1/4" to 2" from side edges; spaced 12" o.c. in the field. Outer layer attached to inner layer at end joints of outer layer using 1-1/2" long Type G bugle head steel screws spaced 8" o.c. and located from 3/4" to 2" from the end joints. Outer layer attached to resilient channels in the field, with 1-5/8" long Type S-12 screws spaced 12" o.c. and located from 3/4" to 2" from the side joints. End joints of outer layer to occur between resilient channels. Side joints to be staggered 24" from inner layer.

GENERAL EXPLANATORY NOTES

1. Nail dimensions included in system descriptions shall comply with ASTM F 547 or ASTM C 514. Other nails, suitable for the intended use, and having dimensions not less than those specified in the descriptions in this electronic program shall be permitted as substitutions.

2. Fasteners installed along the edges of gypsum board shall be placed along the paperbound edges on the long dimension of the board. Fasteners at the end shall be placed along mill or field cut ends on the short dimension. Fasteners on the perimeter of the board shall be placed along both edges and ends.

3. Screws meeting ASTM C 1002 or ASTM C 954 shall be permitted to be substituted for prescribed nails, one for one, when the head diameter, length and spacing equal or exceed the requirements for the nails used in the tested system.

4. Vertically applied gypsum board shall have the edges parallel to framing members. Horizontally applied gypsum board shall have the edges at right angles to the framing members. Intermediate vertical framing members are those between the vertical edges or ends of the board.

5. When a fire-resistance rated partition extends above the ceiling, the gypsum board joints occurring above the ceiling need not be taped when all of the following conditions are met.
   a. The ceiling is part of a fire-resistance rated floor-ceiling or roof-ceiling system;

b. All vertical joints occur over framing members;
c. Horizontal joints are either staggered 24" o.c. on opposite sides of the partition, or are covered with strips of gypsum board not less than 6 inches wide; or the partition is a two-ply system with joints staggered 16" or 24" o.c.; and
d. The partition is not part of a smoke or sound control system.
Where joint treatment is discontinued at or just above the ceiling line, the vertical joint shall be cross taped at this location to reduce the possibility of joint cracking.

6. Metallic outlet boxes shall be permitted to be installed in wood and steel stud walls or partitions having gypsum board facings and classified as two-hours or less. The surface area of individual boxes shall not exceed 16 square inches. The aggregate surface area of the boxes shall not exceed 100 square inches in any 100 square feet. Boxes located on opposite sides of walls or partitions shall be separated by a minimum horizontal distance of 24 inches. Approved non-metallic outlet boxes shall be permitted as allowed by local code.

7. Water-resistant gypsum backing board shall be installed over or as part of the fire-resistance rated system in shower and tub areas to receive ceramic or plastic wall tile or plastic finished wall panels. When fire or sound ratings are necessary, the gypsum board required for the rating shall extend down to the floor behind fixtures so that the construction will equal that of the tested system.

8. When not specified as a component of a fire tested wall or partition system, mineral or glass fiber insulation of a thickness not exceeding that of the stud depth shall be permitted to be added within the stud cavity. In floor-ceiling or roof-ceiling systems, the addition or deletion of mineral or glass fiber insulation in ceiling joist spaces could possibly reduce the fire-resistance rating.

9. Although the systems in this electronic program are arranged in general groupings (i.e. walls and interior partitions, floor-ceilings, roof-ceilings, etc.) this is not intended to limit their use only to the specific category in which they are listed.

10. Metal studs and runners are nominal 25 gage unless otherwise specified.

11. Greater stud sizes (depths) shall be permitted to be used in metal- or wood-stud systems. Metal studs of heavier gage than those tested shall be permitted. The assigned rating of any load-bearing system shall also apply to the same system when used as a nonload-bearing system. Indicated stud spacings are maximums.

12. Within design limitations, the distance between parallel rows of studs, such as in a chase wall, shall be permitted to be increased beyond that tested.

13. Systems tested with metal furring channels attached directly to the bottom chords of steel beams or bar joists shall be permitted to be suspended. Generally furring channels are attached to 1-1/2" cold rolled carrying channels 48" o.c. suspended from joists by 8 gage wire hangers spaced not greater than 48" o.c.

14. Floor-ceiling and roof-ceiling systems were fire tested at less than 36" total depth. However, the total depth of the systems, with either directly attached or suspended ceiling membranes, shall be permitted to extend greater than 36".

15. GyProc Fireguard gypsum board is designated and may be substituted for type X gypsum

board.

16. 5/8" Dens-Glass® Gold Fireguard and 5/8" Dens-Shield® Fireguard qualify as type X as defined in ASTM C 36 and may be substituted for type X gypsum board.