Fire Resistance Rated Walls
Horizontal joints

Q: Are horizontal joints allowed in gypsum board on fire-resistance-rated wall assemblies?

A: Yes, there are two applications in which horizontal joints are permitted in fire-resistance-rated gypsum board wall assemblies.

The first is when the specific design being utilized permits horizontal application of the gypsum board. In this situation, when the gypsum board is installed horizontally, horizontal joints will occur vertically 4 ft OC. These joints should be constructed as specified in the design. In most cases, the design will not require backing of the horizontal joints.

The second application occurs when the gypsum board is being installed vertically, but the wall height is greater than the height of the available gypsum board. Details on how the horizontal joints are to be constructed are contained in Section VI, covering Wall and Partition Assemblies, of the Fire Resistance Design Information Section of the UL Online Certifications Directory. Horizontal butt joints on opposite sides of the studs in single-layer applications should be staggered a minimum of 12 in. unless otherwise stated in the individual designs. Horizontal butt joints in adjacent layers on the same face of the assembly in multiple-layer applications should be staggered a minimum of 12 in. unless otherwise stated in the individual designs. In addition, except when gypsum board is allowed to be applied horizontally in the individual wall design, horizontal butt joints of the vertically applied gypsum board should be backed by the same type studs as specified in the design. Alternatively, minimum 25 gauge steel framing with a minimum attachment face of 1-1/4 in. may be used for the backing. Both edges of the gypsum board forming the horizontal joint should be attached to the backing with the same screws and spacing as specified in the design for the attachment of the gypsum board edges.

All horizontal joints are to be finished as specified in the design for the vertical joints.

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