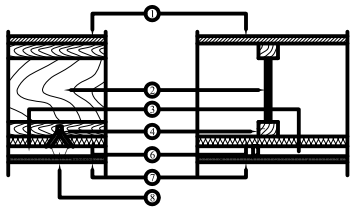
FLOOR CEILING & ROOF



201 1 HOUR FLOOR/CEILING AND 1 HOUR CEILING/ROOF ASSEMBLY

201 **1 HOUR FLOOR CEILING ASSEMBLY**

Fire Test - UL L530
Sound Test - NGC-5209 Assembly "D" STC 47

1. Finish Flooring - 4ft x 8ft x 3/4" thick wood structural panels,"Single-Floor". Panels installed perpendicular to joists with end joints staggered 4ft. Plywood secured to joists with construction adhesive and No.8d cement coated sinkers. Adhesive applied as 3/8" diam bead to top flange of joists and grooved edges of plywood. Nails spaced 12" O.C along each joist.

2. Structural Wood Members - Min 9-1/2" deep "I" shaped wood joists spaced a max 24" O.C min joist bearing on bearing plates with two No.8d nails at each end. Circular holes may be cut in the web of the joists in accordance with the manufacturer's published installation instructions.

3. Furring Channels - 7/8" deep, formed of min 0.019" thick (26 gauge) galv steel installed perpendicular to joists. Furring channels spaced 1-1/2" from and on each side of wallboard end joints and 24" O.C away from end joints. Channels secured to joists with support clips (Item 4) at each joist location. At channel splices, adjacent pieces overlapped 6" and tied with double strand of no.18 SWG galv steel wire at each end of overlap.

4. Support Clip - Steel Framing Members - One support clip to be used to support furring channels at the interscection with each joist. Support clips nailed to side of joist bottom flange with one 1-1/2" long no.11 guage (0.125" diam shank) nail.

SIMPSON STRONG-TIE CO INC - Type CSC

5. Stabilizer Strap (not shown) - 3/4 x 6 x min0.023" thick (24 guage) galv steel strap used to prevent rotation of the support clips at wallboard end joints and along walls. At wallboard end joints (3" O.C spacing of furring channels), stabilizer straps span between the channels and are screw-attached to the furring channels adjacent to each support clip location using no.8 self-tapping steel screws. On furring channels nearest to and parallel with wall, one end of the stabilizer strap is screw-attached to the furring channel, adjacent to each support clip location, using no.8 self-tapping steel screws. The free end of the stabilizer strap is twisted 90 degree, bent upward, and screw- or nail-attached to the side of the structural wood member bottom flange on the side of the support clipnearest the wall.

6. Batts and Blankets* - 1" thick thermafiber (at floor ceiling) 10-1/4" R38 faced batts (16" wide at roof assembly), 48" long with width of batt equal to on center spacing of structural wood members (max 24"). Batts inserted between furring channels and bottom flange of joist with long dimension perpendicular to furring channels and with butted end joints centered over furring channels.

THERMAFIBER L L C - Type FR

7. Wallboard, Gypsum* -1/2 or 5/8" thick, 4 ft wide. Sheets of wall-board installed with long dimension perpendicular to furring channels and fastened to channels with 1" long wallboard screws located 3/4" and 6" from wallboard side joints and 12" O.C in the field. At butted end joints, two furring channels are used which extend to a min of 6" beyond each end of joint.

8. Screws, Wallboard - 1" long, Type S, 9/64" diam, Hi-Lo thread, self-drilling and self-tapping, bugle head steel screws.

9. Finishing System (not shown) - Paper tape embedded in cementitous compound over joints with edges of compound feathered-out and exposed screw heads covered with compound.

* Bearing the UL Classification Marking.

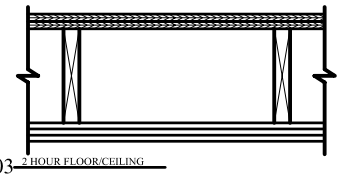
See drawings for roofing details

202 1 HOUR FLOOR/CEILING

202 WOOD FRAMED FLOOR/CEILING - 1 HOUR

GA FC 5406 and RC2601

Base Layer : 5/8" gypsum panels, Firecode Core - screw attach at right angle to 2X10 joists at 24" O.C. **Face Layer**: 5/8" Gypsum panels, Firecode Core screw attach 12" O.C. at right angle to joists - joints of second layer offset 24" and finished.
Floor: 3/4" plywood with ext glie applied at right angle to joists with 8d nails.
1" Thermafiber LLC - Type FR - (sidth equal to on center spacing of wood members)



203 2 HOUR FLOOR/CEILING

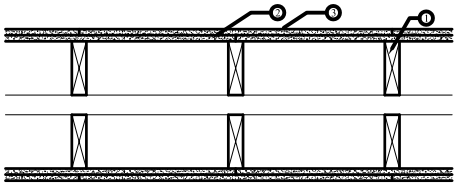
END JOINT DETAIL

203 WOOD FRAMED FLOOR/CEILING - 2 HOUR

UL L511

Subflooring : 19/32" thick wood structural panels, min. grade "Underlayment" or "Single Floor". Face grain of plywood to be perpendicular to joists with joints staggered.
Vapor Retarder : Optional
Finish Flooring: 15/32" thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood to be perpendicular to joists.
Framing: 2x10 spaced 16" OC, firestopped, with 1x3 Cross Bridging.
Resilient Furring Channels: Formed of 25 MSG electrogalvanized steel, spaced 24" OC perpendicular to joists and located 12" from each long edge of base layer wallboard. Channels placed with 1/4" clearance at the ends and fastened to each joist with 1 7/8" long furring channel screws. Min end clearance of channels to walls: 3/8". Additional pieces, 60" long, placed immediately adjacent to channels for attachment of end joints of second layer, secured with 1 7/8" long furring channel screws driven through wallboard to joists. Ends to extend 6" beyond each side of end joint.
Wallboard: Base layer 5/8" thick, 4'-0" wide gypsum wallboard installed perpendicular to joists with butted end joints of the board located at the joists. Nailed to joists with 8d cement coated cooler nails spaced and spaced 7" oc in the field of the board. Nails to be 1/2" from the butted end joints.
Second layer 5/8" gypsum wallboard secured to furring channels by 1" long wallboard screws, with long edge perpendicular to to the furring channels, with the center line of boards located under a joist and so placed that the long edge joints are staggered with the butted end joints of the first layer. Secured to furring channels with 1" wallboard screws 12" oc. Butted end joints of wallboard fastened at additional furring channels as shown in end joint detail. All screws located 1" and 1 3/4" from the long edges and the butted ends of boards, respectively.

INTERIOR WALLS



108 2 HOUR ELEVATOR SHAFT

108 2 HOUR ELEVATOR & STAIR SHAFTS (Load Bearing)

1. Double row of 2x6 wood studs 16" o.c. on separate plates.
Horizontal bracing required at mid height

2. Base layer - 5/8" Type X gypsum wallboard or gypsum veneer base applied at right angles to each side with 6d coated nails, 1-7/8" long, 0.085" shank, 1/4" heads, 24" o.c.

3. Face layer - 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to each side with 8d coated nails, 2-3/8" long, 0.100" shank, 1/4" heads, 8" o.c.

Joints staggered 16" each layer and side.
Sound tested with 3-1/2" glass fiber insulation stapled to studs in stud spaces on one side and with nails for base layer spaced 6" o.c.

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May 28, 2003
Scale: 1/2" = 1'-0"
Revisions

FLOOR/CEILING TYPES

A14

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