

F3 STEEL BEAM 1 HOUR RATED PROTECTION

G.A. File No. BM 1137

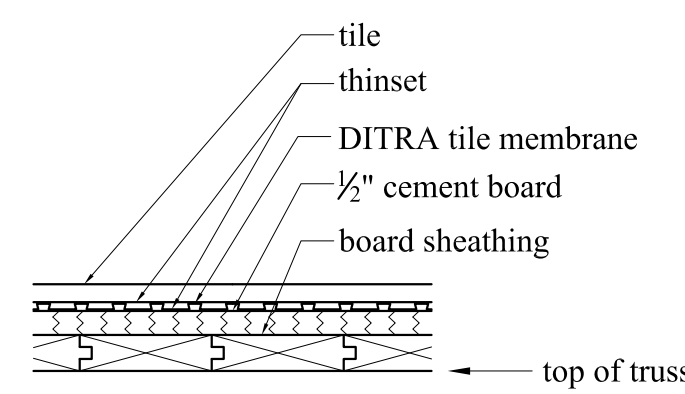
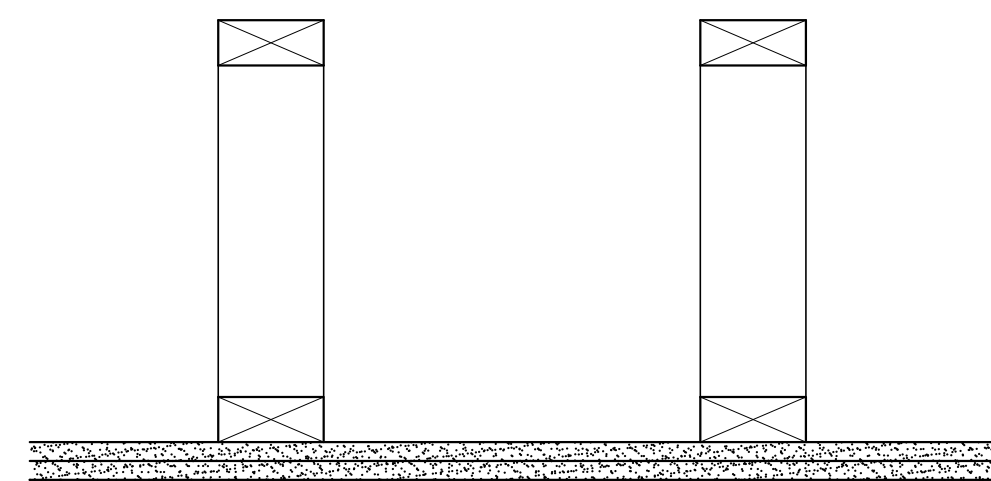
1. Base layer 1/2" type X gypsum wallboard applied to beam cage with 1" Type S-12 drywall screws 12" o.c.
2. Face layer 1/2" proprietary type X gypsum wallboard applied to beam cage with 1 5/8" Type S-12 drywall screws 12" o.c. Joints offset from base layer joints.
3. Beam cage fabricated from No. 24 gage 7/8" x 13/8" steel angles screw attached to steel joists at beam top flange and No. 25 gage 2 1/2" steel runners hooked over beam lower flange and supporting 1 5/8" steel studs 24" o.c.
4. Minimum beam size W8x15.

C1: One-Hour Ceiling:

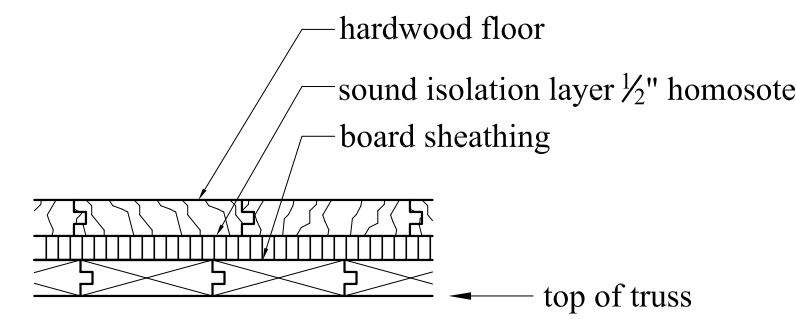
(Based on GA File Nos. FC 5406 and RC 2601)

(At Stairs and elevator shaft)

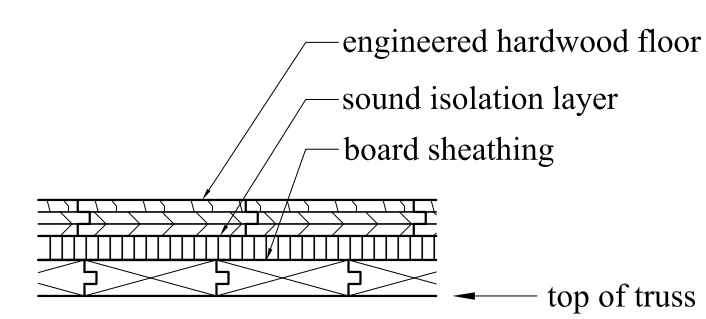
The ceiling membrane consists of two layers of 5/8" type X gypsum board directly applied to the framing or furring. The base layer of gypsum board is applied at right angles to ceiling framing 24" on center and attached with 1" Type S or S-12 drywall screws (for steel framing) or 1-1/4" Type W or S drywall screws (for wood framing) spaced 24" on center. The face layer of gypsum board is applied at right angles to the framing and attached with 1-5/8" Type S or S-12 drywall screws (for steel framing) or 1-7/8" Type W or S drywall screws (for wood framing) 12" on center at end joints and intermediate joints and 1-1/2" Type G drywall screws 12" on center placed 2" back on either side of end joints. Joints of the face layer are offset 24" from the joints in the base layer. Face layer joints and fasteners are finished to Level 1 as specified in GA-214, Levels of Gypsum Board Finish.



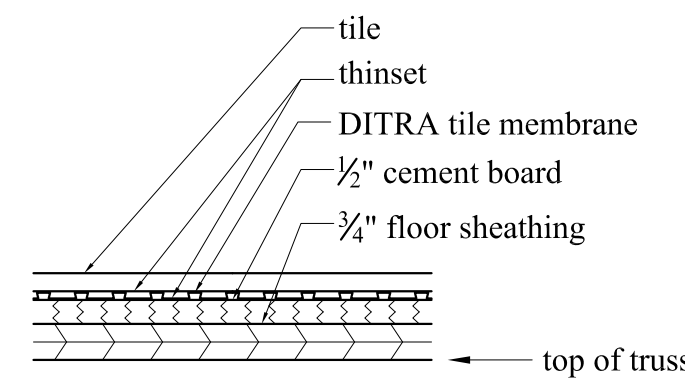
3RD FLOOR UNIT: TILE LOCATIONS



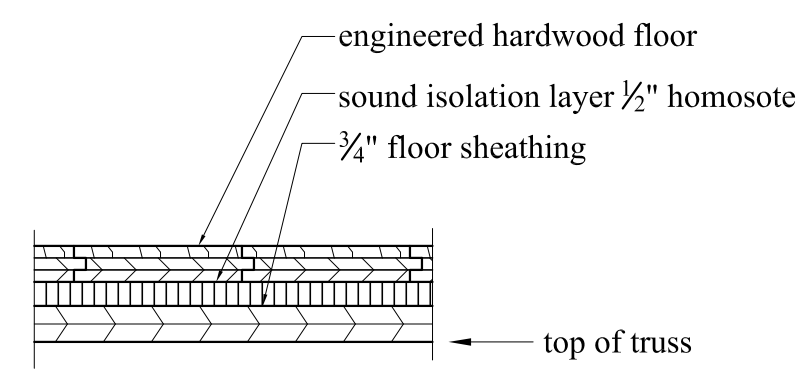
3rd floor unit: hardwood floor site finished WOOD FLOOR LOCATIONS



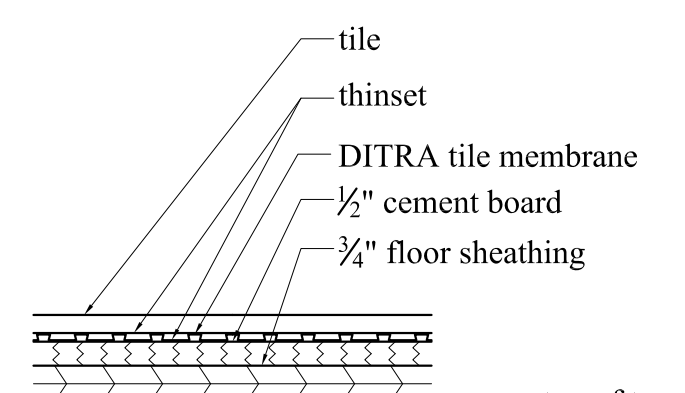
3rd floor unit: engineered wood floor WOOD FLOOR LOCATIONS



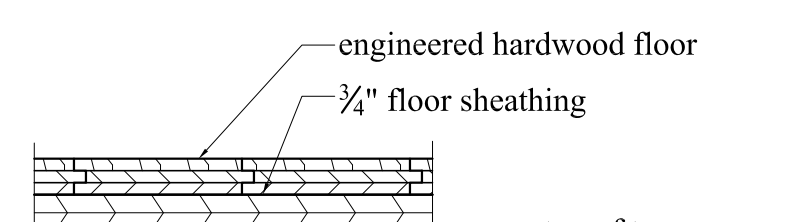
Units 2A, 2B TILE LOCATIONS



Units 2A, 2B WOOD FLOOR LOCATIONS

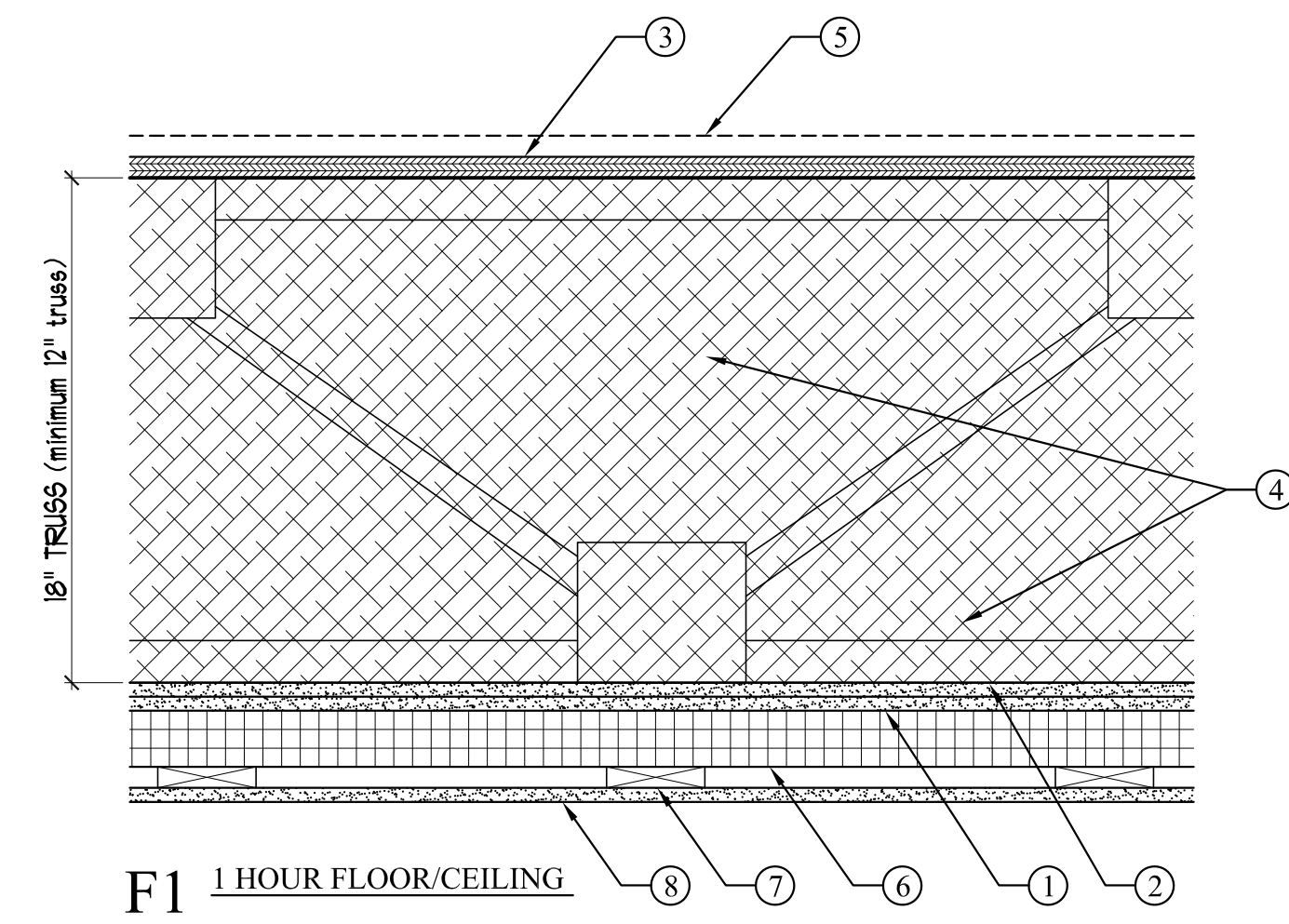


units 1A and 1B TILE LOCATIONS

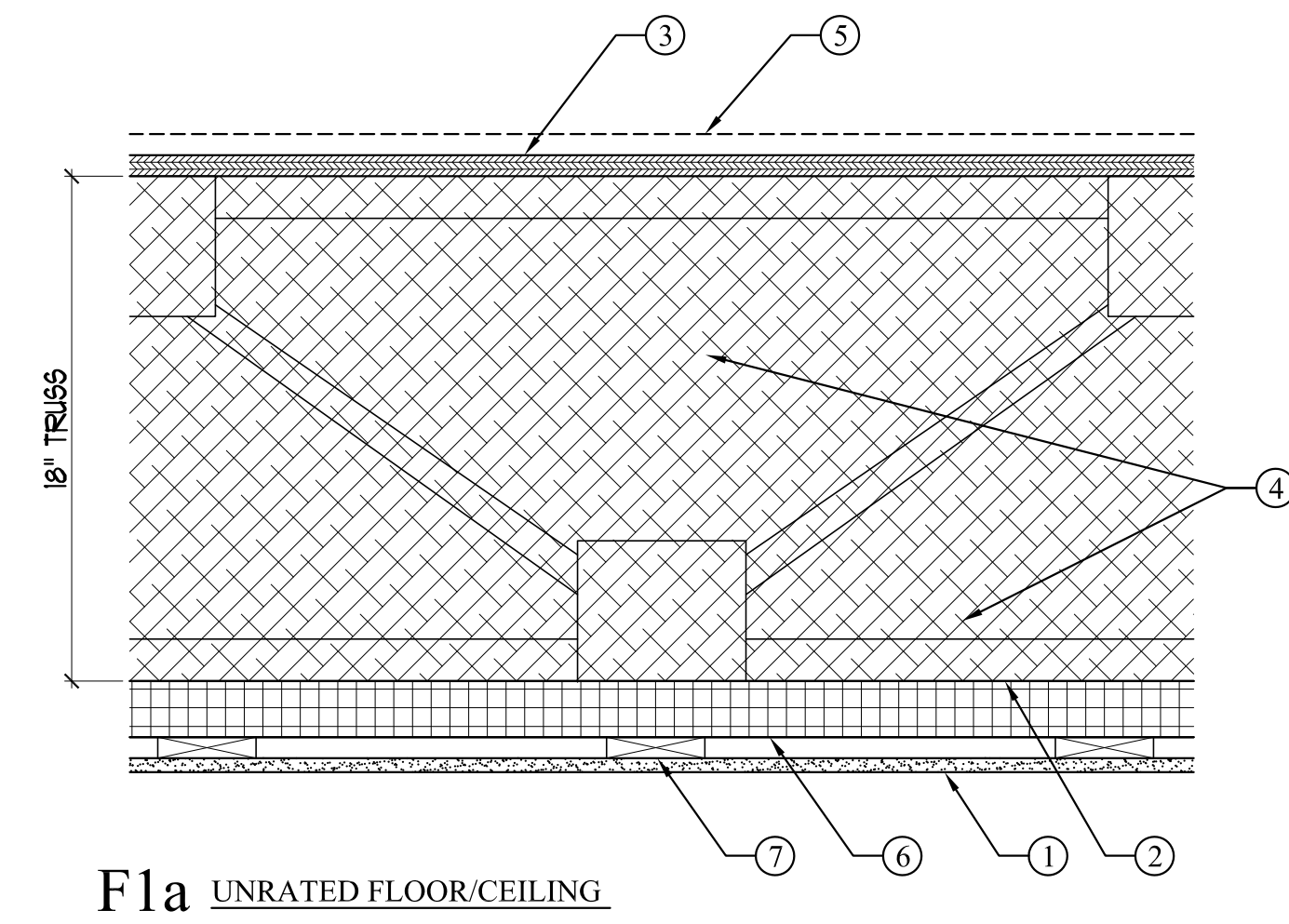


1st units and 2nd floor duplex: WOOD FLOOR LOCATIONS

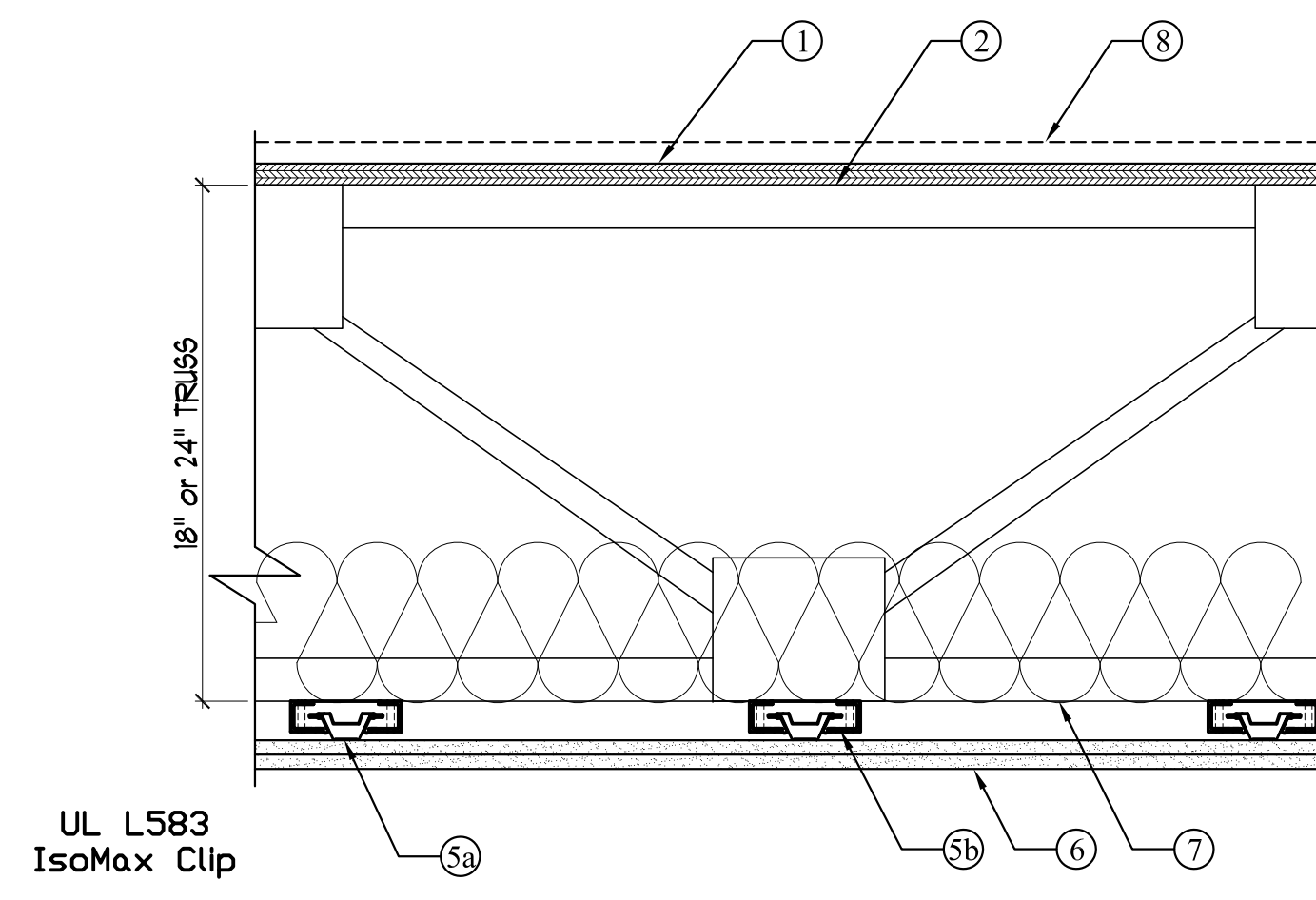
Floor Finish Buildups
3" = 1'-0"



F1 1 HOUR FLOOR/CEILING



F1a UNRATED FLOOR/CEILING



UL L583 IsoMax Clip

F2 1 HOUR FLOOR/CEILING

NOTE:
GYPSUMBOARD CEILING OF ASSEMBLY SHALL BE CONTINUOUS OVER ENTIRE UNIT. WHERE THERE IS A LOWER CEILING OVER KITCHEN OR BATHROOM TO ACCOMMODATE EXHAUST VENTS F3 ASSEMBLY SHALL BE CONTINUOUS ABOVE LOW CEILING

F1 FLOOR/CEILING ASSEMBLY RATING - 1 HOUR (Above Garage Only)

G.A. File No. FC5512
Approx. Ceiling Weight: 4 psf
Fire Test: FM FC214 - 1 hour, 7-6-78

1. Base layer 1/2" type X gypsum wallboard applied perpendicular to wood trusses 24" o.c. with 1-1/4" Type S drywall screws 24" o.c. Face layer 1/2" type X gypsum wallboard applied perpendicular to trusses with 1-7/8" Type S drywall screws 12" o.c. and 1-1/2" Type G drywall screws 12" o.c. placed 3" back from either side of end joints. Joints offset 24" from base layer joints.
2. Trusses: Chord and web members fabricated from 2 x 4 lumber with 20 gage steel connector plates having a minimum tooth length of 5/16". Plate design values based upon a safety factor of 4. Trusses have a minimum depth of 12".
3. Subfloor: 3/4" APA rated T&G plywood with exterior glue applied at right angles to top of trusses with 6d common nails 6" o.c. Plywood end joints staggered 48".
4. Fiber, Sprayed -- Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 lb/ft3, density of 2.5 lb/ft3.
5. Underlayments and FloorFinish:
6. Exterior Insulation - 2-1/2 inch extruded polystyrene rigid insulation, with a min. R-value of 5 per inch.
7. strapping at 16" o.c. fastened to bottom chord of trusses with 5" screws
8. 1/2" gypsum board

F1a FLOOR/CEILING ASSEMBLY (unrated) First Apartments

1. 1/2" exterior rated gypsum wallboard
2. 18" deep wood floor trusses (see structural drawings)
3. 3/4" APA rated wood structural panels fastened at right angles to trusses with screws and construction adhesive according to structural drawings.
4. Fiber, Sprayed -- Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 lb/ft3, density of 2.5 lb/ft3.
5. Underlayments and FloorFinish:
6. Exterior Insulation - 2-1/2 inch extruded polystyrene rigid insulation, with a min. R-value of 5 per inch.
7. strapping at 16" o.c. fastened to bottom chord of trusses with 5" screws

F2 FLOOR/CEILING ASSEMBLY RATING - 1 HOUR UL Design No. L583

STC minimum 50 required, IIC minimum 50 required

1. Subflooring - Min 23/32 in. thick T & G APA rated wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. 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. 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 12 in. Truss members secured together with min 0.0356 in. thick galv steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approx. 7/8 in. centers with four rows of teeth per inch of plate width. The finish rating has only been determined when parallel chord trusses are used.
3. Bearing (Not Shown) — When the wood and steel trusses described in Item 2A are used, factory-installed bearing clips, formed of min 0.084 in. (13 gauge) galv steel shall be used to attach the joists to the bearing plate
4. Bridging (Not Shown) — When the wood Parallel chord trusses, described in Item 2 are used, nom 2 by 6 in. lumber attached to bottom chord of each joist with two, min 0.045 in. thick (18-gauge) galv bridging clips. The bridging clips are pin-connected to the bottom chord of the joists and nailed to the bridging lumber with four 3 in. long 10d nails.
5. Steel Framing Members:
 - a. Furring Channels — Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep, spaced max. 24 in. OC perpendicular to trusses or joists. Channels secured to trusses or joists as described in Item b. Ends of adjoining channels overlapped 4 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap.
 - b. Steel Framing Members: IsoMax by KINETICS NOISE CONTROL INC. Used to attach furring channels (Item a) to trusses or joists (Item 2, 2A, 2B or 2C). Clips spaced max. 48 in. OC, and secured to the bottom chord of trusses or joists with two No. 8 x 2-1/2 in. course thread drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in item a.
 - c. G Gypsum Board* — Two layers of nom 5/8 in. thick, 4 ft wide gypsum board panels are installed with long dimensions perpendicular to furring channels (Item 6a). Base layer attached to the furring channels using 1 in. long Type S bugle-head steel screws spaced 12 in. OC in the field of the board and along butted end joints, with the two end screws located 1-1/2 in. from the board edge. Butted end joints centered on the continuous furring channels. Butted base layer end joints to be offset a min of 24 in. in adjacent courses. Outer layer attached to the furring channels using 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC in the field and along butted end joints, with the last two screws located 1-1/2 in. and 6 in. from the board edge. Butted end joints centered on the continuous furring channels and offset a min of 24 in. from butted end joints of base layer. Butted side joints of outer layer to be offset min 12 in. from butted side joints of base layer. Outer layer shall be finished as described in Item 8.
8. Proprietary assembly: Gypsum board to be one of the following
 - a. CGC INC — Types C, IP-X2, IPC-AR
 - b. UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR
 - c. USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR
7. Batts and Blankets* — Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. Nom 6-1/4 in. thick, nom 0.5 pcf density insulation shall be draped over the furring channels (Item 6a) and gypsum board ceiling membrane, and friction-fitted between trusses or joists.
8. Underlayments and FloorFinish: see details at left



Prepared For:
New Day Farm LLC
Gorham Maine

Consultant:
ARCHETYPE architects
48 Union Wharf Portland, Maine 04101
(207) 772-6022 Fax (207) 772-4056

Project:
Sheridan Street Townhouses
152 Sheridan Street Portland Maine 04101

Scale: Not To Scale

Date: March 07, 2014

FLOOR AND CEILING TYPES

a4.2