

BOARD OF
BUILDING AND SAFETY
COMMISSIONERS

MARSHA L. BROWN
PRESIDENT

VAN AMBATIELOS
VICE-PRESIDENT

VICTOR H. CUEVAS
HELENA JUBANY
ELENORE A. WILLIAMS

CITY OF LOS ANGELES

CALIFORNIA



ANTONIO R. VILLARAIGOSA
MAYOR

DEPARTMENT OF
BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

ROBERT R. "BUD" OVROM
GENERAL MANAGER

RAYMOND S. CHAN, P.E., S.E.
EXECUTIVE OFFICER

JMW Truss LLC
35-325 Date Palm Dr Ste. 225
Cathedral City, California 92234

RESEARCH REPORT: RR 25766
(CSI # 09260)

Attn: Richard D. Wilson
(760) 202-3699

Expires: March 1, 2012
Code: 2008 LABC
Issued: March 1, 2010

GENERAL APPROVAL – Technical Modification/Renewal - JMW Green Floor Truss
1-Hour Fire Rated and Sound Rated Floor-Ceiling Assembly.

DETAILS

Assemblies 1 thru 9 meet or exceed the Sound Transmission Class of 50 (STC50) and the Impact Insulation Class of 50 (IIC50).

Sound Rated Floor-Ceiling Assembly 1

- Structural Member:** Parallel Chord Truss (457 mm. (18 in.) high spaced at 24 inches on center
- Sub-floor:** 18 mm (23/32 in.) tongue and groove APA rated Sturd-I-Floor plywood attached using 51 mm. (2in.) steel screws spaced at 305 mm. (12 in.).
- Insulation:** A layer of 89 mm. (3.5 in.) thick by 610 mm. (24 in.) wide unfaced R-11 fiberglass SAFB insulation in the cavities of the joist.
- Ceiling Fasteners:** 22 mm. (0.875 in.) deep by 65 mm. (2.56 in.) wide, 25 gauge roll formed furring channel (hat track) and Resilient Sound Isolation Clips RSIC-1
- Ceiling:** 16 mm. (0.625 in.) thick, USG Firecode "C" Type-X gypsum board (joist taped and finished with 2 coats of compound)
- Underlayment:** 6 mm. (0.25 in.) ceramic tile mortar set over 25 mm (1 in.) thick lightweight gypsum concrete poured on a 0.71 mm (0.028 in.) thick damp proofing membrane.
- Toppings:** 100% PET Polyester 11 mm. (0.438 in.) tick Carpet over 6 pcf, 10 mm. (0.4 in.) thick Pad. **(STC 60, IIC 74)**

RR 25766
Page 1 of 6

JMW Truss LLC

Re: JMW Green Floor Truss Sound Rating Flore-Ceiling Assembly

Sound Rated Floor-Ceiling Assembly 2

- Structural Member:** Parallel Chord Truss (457 mm (18 in.) high spaced at 24 inches on center)
- Sub-floor:** 18 mm (23/32 in.) tongue and groove APA rated Sturd-I-Floor plywood attached using 51 mm (2in.) steel screws spaced at 305 mm. (12 in.).
- Insulation:** A layer of 89 mm (3.5 in.) thick by 610 mm. (24 in.) wide unfaced R-11 fiberglass SAFB insulation in the cavities of the joist.
- Ceiling Fasteners:** 22 mm. (0.875 in.) deep by 65 mm. (2.56 in.) wide, 25 gauge roll formed furring channel (hat track) and Resilient Sound Isolation Clips RSIC-1
- Ceiling:** 16 mm. (0.625 in.) thick, USG Firecode "C" Type-X gypsum board (joist taped and finished with 2 coats of compound)
- Underlayment:** 6 mm (0.25 in.) ceramic tile mortar set over 25 mm (1 in.) thick lightweight gypsum concrete poured on a 0.71 mm (0.028 in.) thick damp proofing membrane.
- Toppings:** Ceramic tile. **(STC 60, IIC 53)**

Sound Rated Floor-Ceiling Assembly 3

- Structural Member:** Parallel Chord Truss (18 inches high spaced at 24 inches on center)
- Sub-floor:** ¾ in thick OSB
- Insulation:** 3.5 in. of fiberglass insulation into the top cavities.
- Ceiling Fasteners:** Dietrich RC Deluxe resilient channels spaced 16 inches on center.
- Ceiling:** 5/8 inch Type-X gypsum board (taped and finished with 2 coats of compound)
- Underlayment:** Nominal 1.0 in. thick Firm Fill gypsum concrete concrete¾ inch thick gypcrete 2000
- Toppings:** Bare Gypsum – No finished flooring-Quite Qurl 55 025 MC acoustical mat **(STC 54, IIC 51)**

Sound Rated Floor-Ceiling Assembly 4

- Structural Member:** Parallel Chord Truss (18 inches high spaced at 24 inches on center)
- Sub-floor:** ¾ in thick OSB
- Insulation:** 3.5 in. of fiberglass insulation into the top cavities.
- Ceiling Fasteners:** Dietrich RC Deluxe resilient channels spaced 16 inches on center.

JMW Truss LLC

Re: JMW Green Floor Truss Sound Rating Flore-Ceiling Assembly

Ceiling: 5/8 inch Type-X gypsum board (taped and finished with 2 coats of compound)

Underlayment: Nominal 1.0 in. thick Firm Fill gypsum concrete concrete³/₄ inch thick gypcrete 2000

Toppings: Quite Qurl 55 025 MC acoustical mat
Mohawk Engineer Hardwood flooring (15/32 in. thick) over 2 mm. thick Step Soft rubber underlayment (glue down applicable). **(STC 54, IIC 54)**

Sound Rated Floor-Ceiling Assembly 5

Structural Member: Parallel Chord Truss (18 inches high spaced at 24 inches on center)

Sub-floor: ³/₄ in thick OSB

Insulation: 3.5 in. of fiberglass insulation into the top cavities.

Ceiling Fasteners: Dietrich RC Deluxe resilient channels spaced 16 inches on center.

Ceiling: 5/8 inch Type-X gypsum board (taped and finished with 2 coats of compound)

Underlayment: Nominal 1.0 in. thick Firm Fill gypsum concrete concrete³/₄ inch thick gypcrete 2000

Toppings: Quite Qurl 55 025 MC acoustical mat
Congeleum Commercial Tile Flooring (12 in. square by 1/8 in. thick) (glue down applicable) **(STC 54, IIC 53)**

Sound Rated Floor-Ceiling Assembly 6

Structural Member: Parallel Chord Truss (18 inches high spaced at 24 inches on center)

Sub-floor: ³/₄ in thick OSB

Insulation: 3.5 in. of fiberglass insulation into the top cavities.

Ceiling Fasteners: Dietrich RC Deluxe resilient channels spaced 16 inches on center.

Ceiling: 5/8 inch Type-X gypsum board (taped and finished with 2 coats of compound)

Underlayment: Nominal 1.0 in. thick Firm Fill gypsum concrete concrete³/₄ inch thick gypcrete 2000

JMW Truss LLC

Re: JMW Green Floor Truss Sound Rating Flore-Ceiling Assembly

Toppings: Quite Qurl 55 025 MC acoustical mat
Antica Ceramic Tiles (12 in. square by 5/16 in. thick) installed with Latex Modified Thin Set and grouted (24 hour curing time) **(STC 54, IIC 53)**

Sound Rated Floor-Ceiling Assembly 7

Structural Member: JMW Green Floor Truss ® Parallel Chord Floor Truss 12 inch (11.25 in.) thru 18 inch (18.0 in.) depth at 24 inch on center.

Sub-floor: 23/32 inch (0.72 in.) T&G OSB fastened with 6d ring shanked nails 12 inch on center.

Insulation: **OPTIONAL** – 3.5 inch thick by 24 inch wide unfaced R-11 fiberglass insulation.

Ceiling Fasteners: 25 gauge (0.022 in.) thick Resilient Channels (aka Hat Track) space 16 inch on centers.

Ceilings: One Layer 5/8 inch (0.625in.) thick USG 5/8” SHEETROCK ® Brand FIRECODE ® “C” Type X gypsum Board.

Underlayment: **OPTIONAL** – ¼ (0.25in) thick insolation material

Toppings: 1.5 inch thick Light Weight Concrete

Floor coverings: (0.438in.) thick Carpet with (0.4in.) thick Pad or (0.138 in.) thick Vinyl/Linoleum

Sound Rated Floor-Ceiling Assembly 8

Structural Member: JMW Green Floor Truss ® Parallel Chord Floor Truss 12 inch (11.25 in.) thru 18 inch (18.0 in.) depth at 24 inch on center.

Sub-floor: 23/32 inch (0.72in.) T&G OSB fastened with 6d ring shanked nails 12 inch on center.

Insulation: 3.5 inch thick by 24 inch wide unfaced R-11 fiberglass insulation

Ceiling Fasteners: 25 gauge (0.022in.) thick Resilient Channels space 16 inch on centers.

Ceilings: One Layer 5/8 inch (0.625in.) thick USG 5/9” SHEETROCK ® Brand FIRECODE ® “C” Type S gypsum Board

Underlayment: ¼ inch (0.25 in) thick insolation material

JMW Truss LLC

Re: JMW Green Floor Truss Sound Rating Flore-Ceiling Assembly

Toppings: 1.5 inch thick Light Weight Concrete

Floor coverings: Bare Concrete or
(0.25in.) thick Ceramic Tile embedded in (0.375in.) thin set mortar
or
(.0375 in.) Engineered Wood Flooring on (0.095 in.) thick foam
Underlayment

Sound Rated Floor-Ceiling Assembly 9

Structural Member: JMW Green Floor Truss ® Parallel Chord Floor Truss 12 inch
(11.25in.) thru 18 inch (18.0in.) depth at 24 inch on center.

Sub-floor: 23/32 inch (0.72in.) T&G OSB fastened with 6d ring shanked nails
12 inch on center.

Insulation: 3.5 inch thick by 24 inch wide unfaced R-11 fiberglass insulation

Ceiling Fasteners: 25 gauge (0.022in.) thick Furring Channels (aka hat track)
(0.875in.) deep by (2.56in.) wide space 24 inch on centers with
PAC International RSIC-1 ® clips spaced 48 inch on center

Ceilings: Two (2) layer-Base layer 5/8 inch (0.625in.) thick 5/8" Type X
gypsum board attached to hat track with (1 in.) type S screws at
(12 in.) on centers in the field and (8 in.) on center at the butt
joints. Face layer 5/8 inch (0.625in.) thick 5/8" Type X gypsum
board attached with Type S screws at (12 in.) on center in the field
and (8 in.) on center at the butt joints.

Floor coverings: (0.438 in.) thick Carpet with (0.4 in.) thick Pad
or
(0.138 in.) thick Vinyl/Linoleum
or
(0.25 in.) thick Ceramic Tile embedded in (0.375 in.) thin set
mortar
or
(.0375 in.) Engineered Wood Flooring on (0.095 in.) thick foam
underlayment

JMW Truss LLC

Re: JMW Green Floor Truss Sound Rating Flore-Ceiling Assembly

The approval is subject to the following conditions:

1. The approval is for new construction only.
2. Complete detail and description of the assembly shall be shown on the approved set of plans.
3. Finish materials must comply with Chapter 8 of the 2008 LABC.
4. For fire-rated assemblies shall be the assembly listed on Gypsum Manual Assemblies per Section I.B.3b of Information Bulletin P/BC 2008-119. Any proprietary assembly shall carry the label of any Los Angeles City licensed testing agency to perform the required fire test for the assembly.

DISCUSSION

The technical modification is to add approval condition No. 4 and the Sound rated Floor-Ceiling Assemblies 7, 8 and 9.

The approval is based on gypsum manual for fire rating and sound test for sound rating. Addressee to whom this Research Report is issued is responsible for providing copies of it, complete with any attachments indicated, to architects, engineers and builders using items approved herein in design or construction which must be approved by Department of Building and Safety Engineers and Inspectors.

This general approval of an equivalent alternate to the Code is only valid where an engineer and/or inspector of this Department has determined that all conditions of this Approval have been met in the project in which it is to be used.

YEUAN CHOU, Chief
Engineering Research Section
201 N. Figueroa St., Room 880
Los Angeles, CA 90012
Phone (213) 202-9814
Fax (213) 202-9943

YC:elcm
RR25766/MSW2003
R03/18/10
1A2/703.2/1207

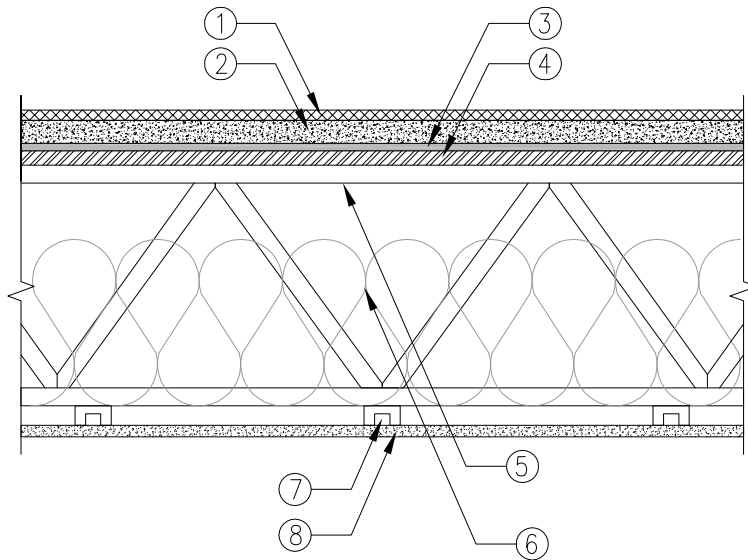
Attachment: Details of Assemblies 7, 8 and 9. (3 pages)

JMW Green Floor Truss® - LARR 25766

STC & IIC OF 50 OR GREATER

1-HR FIRE RATED

FLOOR-CEILING ASSEMBLY - 7

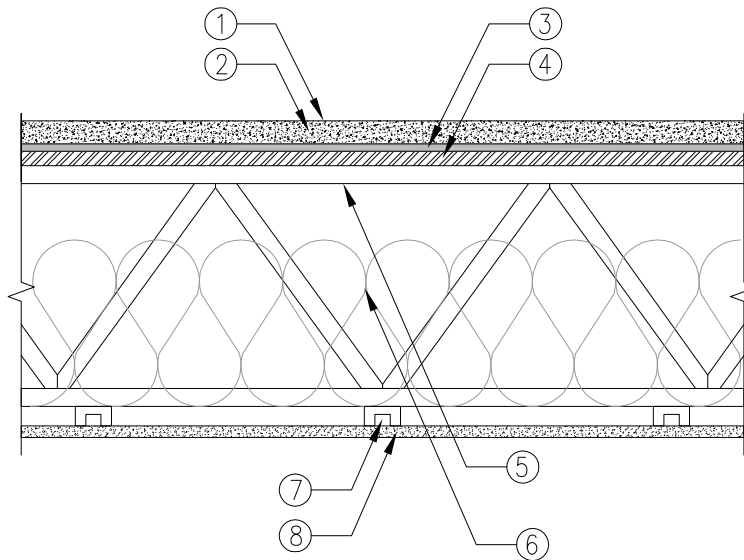


Legend

- ① — CARPET W/PAD OR VINYL/LINLOLEUM
- ② — 1-1/2" LIGHT WEIGHT CONCRETE
- ③ — **(OPTIONAL)** 1/4" ACOUSTICAL UNDERLAYMENT
- ④ — 23/32" OSB T&G FLOOR SHEATHING
- ⑤ — JMW GREEN OPEN WEB FLOOR TRUSS, 24" O.C.
12"-18" DEPTH
- ⑥ — **(OPTIONAL)** 3-1/2" BATT INSULATION
- ⑦ — 1/2" RESILIENT CHANNEL, 16" O.C.
- ⑧ — (1) LAYER OF 5/8" TYPE X GYPSUM BOARD

JMW Green Floor Truss® - LARR 25766

STC & IIC OF 50 OR GREATER
1-HR FIRE RATED
FLOOR-CEILING ASSEMBLY - 8



Legend

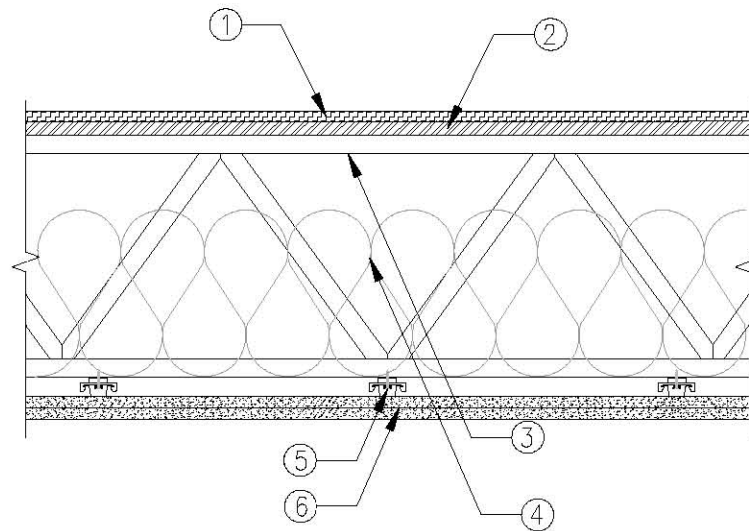
- ① — BARE CONCRETE OR CERAMIC TILE OR ENGINEERED WOOD FLOORING/FOAM PAD
- ② — 1-1/2" LIGHT WEIGHT CONCRETE
- ③ — 1/4" ACOUSTICAL UNDERLAYMENT
- ④ — 23/32" OSB T&G FLOOR SHEATHING
- ⑤ — JMW GREEN OPEN WEB FLOOR TRUSS, 24" O.C. 12"-18" DEPTH
- ⑥ — 3-1/2" BATT INSULATION
- ⑦ — 1/2" RESILIENT CHANNEL, 16" O.C.
- ⑧ — (1)LAYER OF 5/8" TYPE X GYPSUM BOARD

JMW Green Floor Truss® - LARR 25766

STC & IIC OF 50 OR GREATER

1-HR FIRE RATED

FLOOR-CEILING ASSEMBLY - 9



Legend

- ① — CARPET W/PAD OR VINYL/LINOLEUM OR ENGINEERED WOOD FLOORING/FOAM PAD
- ② — 23/32" OSB T&G FLOOR SHEATHING
- ③ — JMW GREEN OPEN WEB FLOOR TRUSS, 24" O.C. 12"-18" DEPTH
- ④ — 3-1/2" BATT INSULATION
- ⑤ — RSIC-1 CLIP, 48" O.C.
- ⑥ — (2) LAYER OF 5/8" TYPE X GYPSUM BOARD