



NYC Department of Buildings  
280 Broadway, New York, NY 10007  
Patricia Lancaster, FAIA, Commissioner  
(212) 566-5000, TTY: (212) 566-4769

## Report of Materials and Equipment Acceptance Division

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

### MEA 298-06-M

**Manufacturer:** Deluxe Building Systems, Inc  
499 West Third Street  
Berwick, PA. 18603

**Trade Name(s):** Deluxe Building Systems.

**Product:** TWO HOUR FIRE RATED FLOOR / CEILING ASSEMBLY

**Pertinent Code Section(s):** § 27-323

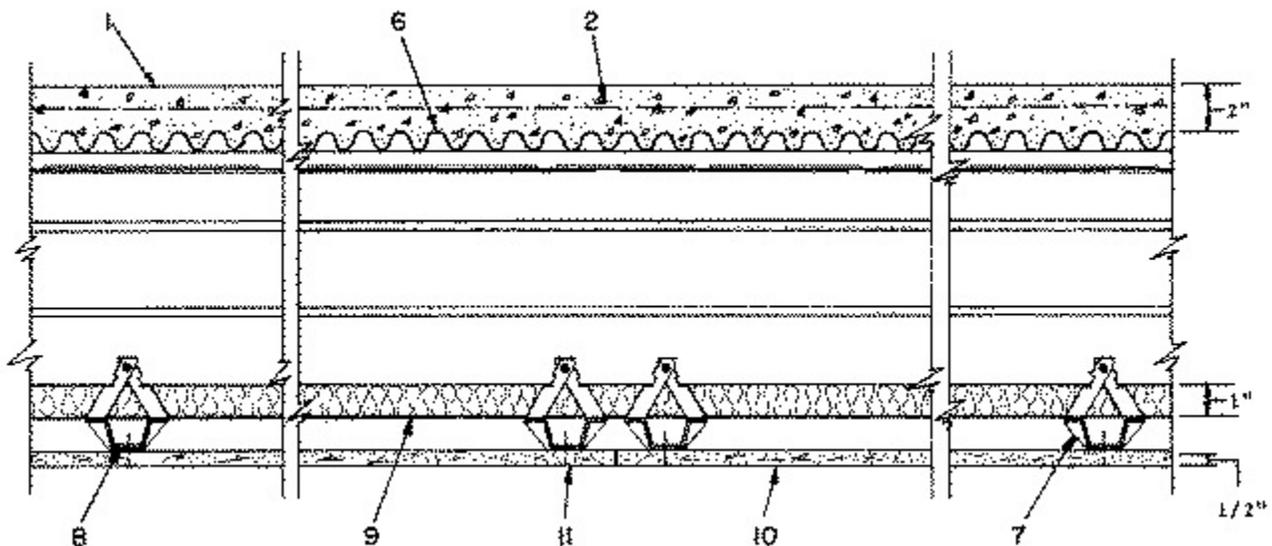
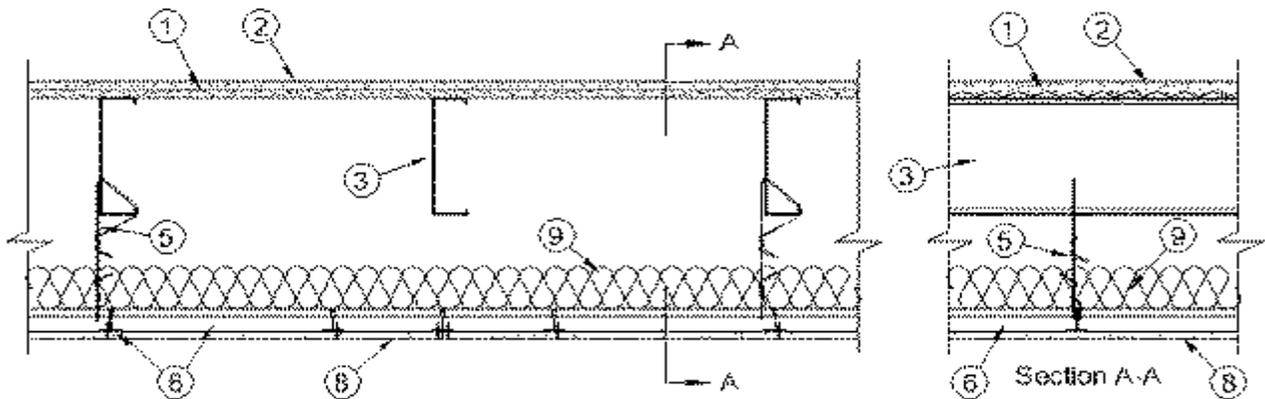
**Prescribed Test(s):** RS5-6 (ASTM E119)

**Laboratory:** UNDERWRITER'S LABORATORIES  
333 PFINGSTEN ROAD  
NORTHBROOK, IL. 60062-2096

**Test Report(s):** UL. DESIGN G-533

**Description:** Lightweight concrete floor over corrugated steel deck, channel shaped steel joist with furring channels attached and mineral fiber blankets over, single layer ½" fire rated gypsum panels screw attached and finished with a joint compound, are designed for two hour fire rated floor/ceiling assembly UL Designed No. G-533.

**Restrained Assembly Rating-2 Hr.**  
**Unrestrained Assembly Rating-2 Hr.**



1. Lightweight Concrete — Expanded shale, clay or slate aggregate by rotary kiln method, 115 + or - 6 pcf unit weight, 3400 psi minimum compressive strength, 5 to 7 percent entrained air.
2. Welded Wire Fabric — 6 X 6-W1.4 X W1.4.
3. Steel Joist — Non-Composite Design — Spaced 24 in. OC Channel-shaped, 7-3/16 in. deep with min 1-5/8 in. flanges and 9/16 in. stiffening flanges. Fabricated from min 18 MSG, galv steel. Min yield strength of steel is 33,000 psi with corresponding max working stress of 20,000 psi.

4. Bridging — (Not Shown) — Same as steel joist (Item 3). Located 8 ft max OC perpendicular to the joists, 2 by 2 by 6 in. angle clips used to connect web back to web back, 2 by 4 by 6 in. angle clips used to connect web back to web inside. Six ½ in. Type S-12 self-drilling, self-tapping screws used with each angle clip.
5. Angle Clips — 2 by 2 by 6 in., 0.075 in. thick (No. 14 gauge) clips used to fasten joists to joist headers and bridging to joists with clip located on the web side opposite the flanges. 2 by 4 by 6 in., 0.034 in. thick (No. 20 gauge) clips used to fasten bridging to joists on the flange side of the bridging.
6. Steel Form Units — Min. 19/32 in. deep, 30 in. wide corrugated steel deck. Crests ½ in. wide, pitch 2-9/16 in., No. 28 MSG (0.018 in. thick) galvanized steel. Overlapped one corrugation at each side and attached to each joist with 5/8 in. long Type S-12 steel screws at each side joint and not more than 12-3/8 in. OC between sides. Concrete thickness measured at crests.
7. Steel Framing Members\* — Hanger Clips — AS required for support of furring channels. Nominal 3 in. long clips made from No. 24 MSG galvanized steel. Attached to web of joists with ½ in. long Type S-12 pan head steel screws.

SIMPSON STRONG-TIE CO INC

8. Furring Channels — No. 26 MSG galvanized steel 1-1/4 in. wide with two 15/32 in. flanges, (overall width approx. 2-3/16 in.) spaced 24 in. OC perpendicular to joists and supported at each joist by Hanger Clip (Item 6). Adjoining lengths of channels overlapped 6 in. and tied together with double strand of No. 18 SWG galvanized steel wire at each end of overlap. Two courses of channels used at each end joint of gypsum wallboard located 1-5/8 in. on each side of each end joint. The two courses of channels tied together 24 in. OC approx. midway between joists with 0.022 in. thick, ¾ in. wide by 3-1/2 in. long galvanized steel plate attached to each channel with ½ in. long Type S-12 pan head steel screw.
9. Batts and Blankets\* — Nom 1 in. thick mineral wool batts. Installed below joists on top of furring channels (between hanger clips) with butted ends of adjoining batts located over furring channels.

UNITED STATES MINERAL PRODUCTS CO,

DBA ISOLATEK INTERNATIONAL — Type CB.

10. Gypsum Board\* — ½ in. thick, 4 ft wide, installed with the long dimension perpendicular to the furring channels. End joints of boards staggered or in line, to occur between channels spaced 3-1/4 in. OC. Attached to each channel with wallboard screws spaced 8 in. OC and 1 in. from each edge of board.

AMERICAN GYPSUM CO — Type AG-C.

BPB AMERICA INC — Types FRPC, ProRoc Type C.

BPB CANADA INC — ProRoc Type C.

CANADIAN GYPSUM COMPANY — Types C, IP-X2.

G-P GYPSUM CORP, SUB OF

GEORGIA-PACIFIC CORP — Type 5.

LAFARGE NORTH AMERICA INC — Types LGFC-C, LGFC-C/A.

NATIONAL GYPSUM CO — Types FSK-C, FSW-C.

PABCO BUILDING PRODUCTS L L C, DBA

PABCO GYPSUM — Type PG-C.

STANDARD GYPSUM L L C — Type SG-C.

TEMPLE-INLAND FOREST PRODUCTS CORP — Type TG-C.

UNITED STATES GYPSUM CO — Types C, IP-X2.

USG MEXICO S A DE C V — Types C, IP-X2.

11. Screw, Wallboard — Type S, self-drilling and self-tapping. 1 in. long with bugle head.
12. Finishing System — (Not Shown) — Paper tape embedded in compound over joints and covered with additional compound. Exposed screw heads covered with compound. Edges of compound feathered out.

\*Bearing the UL Classification Mark

**Terms and Conditions:** The above described load bearing floor/ceiling assembly, UL Design Number G-533, be accepted as having the fire resistance ratings as indicated when used where combustible or noncombustible construction as required in accordance with the Building Code. This acceptance does not include structural adequacy of wall design, which must be checked for particular structure for compliance with Building Code.

All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and acceptable for use, as provided in Section 27-131 of the Building Code.

Final Acceptance May 9, 2006  
Examined by Simon P. [Signature]