



NYC Department of Buildings
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Patricia Lancaster, FAIA, Commissioner
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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 568-06-M

Manufacturer: Marinoware, 400 Metochen Road, South Plainfield, New Jersey 07080

Trade Name(s): Marinoware

Product: Fire-rated floor/ceiling assembly for Class II construction

Pertinent Code Section(s): 27-323 and 27-324

Prescribed Test(s): RS 5-2 (ASTM E119)

Laboratory: Intertek Testing Services

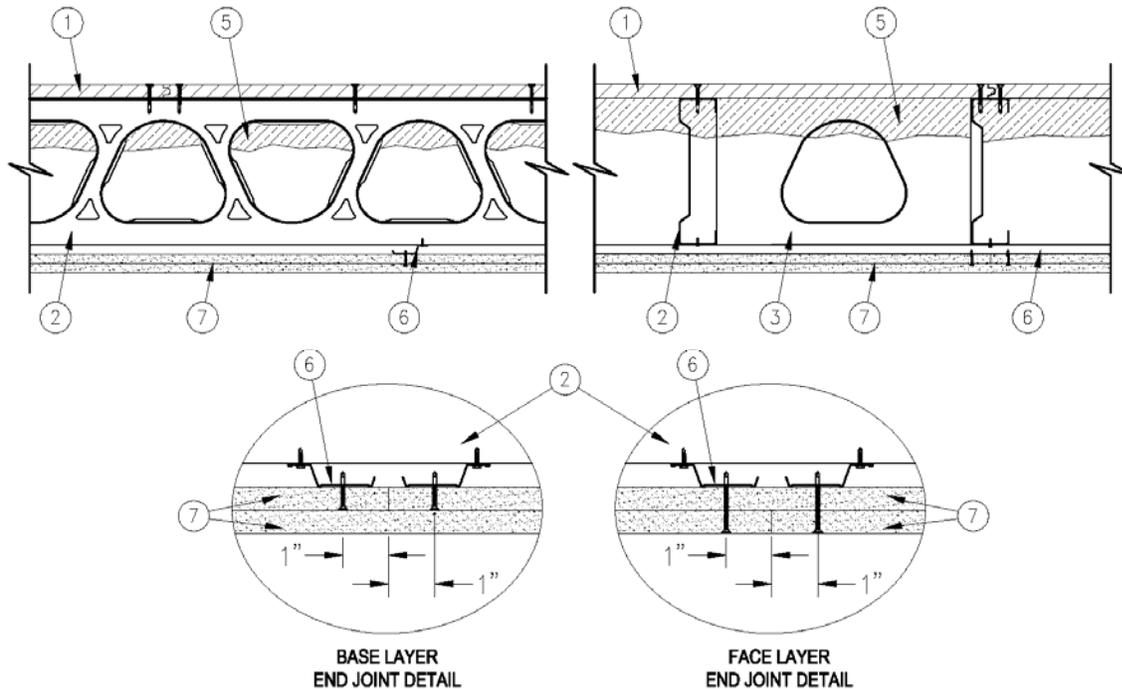
Test Report(s): Report No. 3101528 dated September 28, 2006

Description: Fire-rated floor/ceiling assembly for Class II construction using Joist Rite, Joist Rite Track and Joist Rite blocking consists of 10" minimum depth 16-gauge channel-shaped steel joists, 16" o.c., with 3/4" T & G plywood flooring adhesively applied to top of joists. 4" thick mineral insulation, nominal density 4 pcf, is friction fit to the underside of plywood floor. Double layer of 1/2" thick Firecode C gypsum board is attached to 25 msg galvanized resilient channels secured perpendicular to the joists at 16" o.c. with (1) #10-16 x 5/8-inch screw.

Project No. 3101528

August 31, 2006

Unrestrained Assembly, Rating-1 Hr



1. Flooring — Min 3/4 in. thick T & G plywood, minimum grade "Underlayment". Face grain of plywood to be perpendicular to joists with joints staggered. Plywood is secured to joists with polyurethane-based construction adhesive along with 1-7/16 in. long No. 10 Phillips wafer head winged plywood screws spaced 12 in. OC in the field and 6 in. OC along edges of board. Screws are located 5/8-in. from end joints and 1 in. from side joints of board. Adhesive may be applied on top of joists prior to placing plywood sheets.

2. Structural Steel Members — JoistRite channel-shaped joists, minimum 10 in. deep with minimum 2 in. wide flanges and 3/4 in. long stiffening flanges. The joists are fabricated from minimum 16 MSG galvanized steel. Joists are spaced maximum 16 in. OC. Floor joists attached to rim joist using channel-shaped steel web stiffeners.

MARINOWARE, div. of WARE INDUSTRIES INC — Type JR JoistRite floor joists, Type JT JoistRite track

3. Blocking & Bridging — Installed before construction loads are applied. The blocking consists of JoistRite solid blocking placed between joists spaced maximum 5 ft.-4 in. OC perpendicular to the joists and max 7 ft. - 0 in. OC along the joist length. In addition, bridging consists of 1/2 in. by 1-1/2 in. cold-rolled channel, minimum No. 16 GA, attached to the bottom of the joist and along the blocking. Attach to each blocking piece with four 5/8 in. long No. 10 x 16 low profile steel screws.

4. Web Stiffeners (not shown) — Minimum 3-5/8 in. wide, 16 GA, JoistRite web stiffeners are secured to each joist and track with 1/2 in. long No. 10 x 16 low profile steel screws.

5. Mineral and Fiber Board — Nominal 4 in. thick mineral wool insulation is friction-fit to underside of plywood between structural steel members. Any mineral wool insulation bearing the UL Classification Marking for Surface-Burning Characteristics having a flame spread index of 25 or less, a smoke developed index of 50 or less and a minimum density of 4.0 lb/cu ft may be used.

6. Resilient Channels — Resilient channels, formed of No. 25 MSG galvanized steel, 1/2 in. deep, spaced maximum 16 in. OC perpendicular to joists. Channels are secured to each joist with one 5/8 in. long No. 10 x16 low profile steel screw. Two additional rows of channels, spaced 3-1/2 in. OC, are oriented opposite each gypsum board end joint as shown in end joint detail.

7. Gypsum Board — Two layers of 1/2 in. thick by 48 in. wide gypsum board installed with long dimension perpendicular to resilient channels. Base layer is secured to resilient channel using 1 in. long Type S bugle head steel screws spaced 12 in. OC in the field and 6 in. OC along the end joints of the board. Screws shall be located 5/8 in. from end joints and 1 in. from long edges. End joints are secured to both resilient channels as shown in end joint detail. Face layer is attached to resilient channels through upper layer with 1-1/4 in. long Type S bugle head steel screws spaced a maximum 12 in. OC in the field and 6 in. OC along the end joints of the board. Screws are located 5/8 in. from end joint and 1 in. from the long edges. End joints are secured to both resilient channels as shown in end joint detail. All joints in face layer boards are to be offset from joints in base layer by minimum 16 in.

Any UL listed gypsum 1/2" boards including the following:

AMERICAN GYPSUM CO — Types AG-C

BPB AMERICA INC — ProRoc Type C

BPB CANADA INC — ProRoc Type C

CANADIAN GYPSUM COMPANY — Types C, IP-X2, IPC-AR

G-P GYPSUM CORP, SUBSIDIARY 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 GYPSUM, DIVISION OF PACIFIC COAST BUILDING PRODUCTS INC — 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, IPC-AR

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

8. Finishing System (not shown) — Vinyl, dry or premixed joint compound shall be applied in two coats to joints and screw-heads on both first and second layers of gypsum board. Nominal 2 in. wide paper tape embedded in first coat of compound over all joints. As an alternate, nominal 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

Terms and Conditions: The above-described one-hour fire-rated floor-ceiling assembly is accepted with the following conditions:

1. The design shall comply with the conditions of Intertek Project No. 3101528 test and with manufacturer's instructions.
2. Structural requirements shall comply with Subchapter 10, Reference Standard RS10-3 and other applicable provisions of the New York City Building Code.
3. The acceptance of this assembly is limited to fire resistance only. Structural and other requirements shall be in accordance with pertinent Building Code, laboratories' listing and the manufacturer's requirements.
4. All shipments and deliveries of such materials shall be provided with a certificate or label certifying that the material shipped or delivered is equivalent to that tested and acceptable for use, as provided for in Section 27-131 of the New York City Building Code.

NOTE: In accordance with Section 27-131(d), all materials tested and accepted for use shall be subject to periodic retesting as determined by the Commissioner; and any material which upon retesting is found not to comply with Code requirements or the requirements set forth in the approval of the Commissioner shall cease to be acceptable for the use intended. During the period for such retesting, the Commissioner may require the use of such material to be restricted or discontinued if necessary to secure safety.

Final Acceptance March 28, 2007

Examined By S. J. Derkshon