NYC Department of Buildings
280 Broadway, New York, NY 10007
Patricia Lancaster, FAIA, Commissioner
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Report of Materials and Equipment Acceptance Division

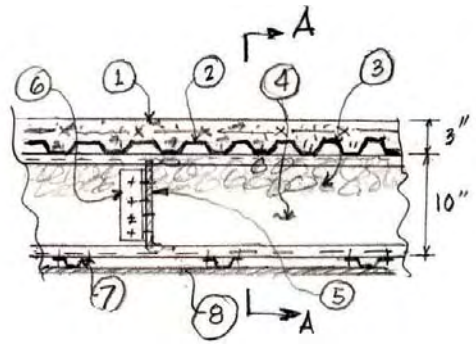
Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

MEA 485-06-M

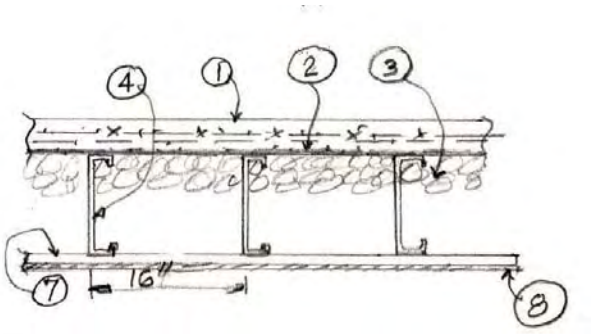
Manufacturer:	Hephaistos Building Supplies, Inc., 44-01 Broadway, Astoria, Queens 11106
Trade Name(s):	Hermes/Hephaistos Floor Assembly
Product:	One-hour, fire-rated light-gauge steel joists in floor/ceiling assembly for Construction Class I-D
Pertinent Code Section(s):	27-323, 27-324
Prescribed Test(s):	RS 5-2 (ASTM E-119)
Laboratory:	VTEC Laboratories, Inc.
Test Report(s):	File V100-2169, dated May 4, 2006

Description: Floor-ceiling assembly includes 3” concrete floor on 22-gauge metal deck on top of joists. Joists are 10” min. depth 16-gauge channel-shaped steel joists, spaced 16” o.c. 4” thick mineral insulation, nominal density 4.5-lb/cu. ft., is friction-fit to the underside of the concrete floor. One 5/8 in. thick Firecode C gypsum board attached to 25 MSG galvanized furring channels secured perpendicular to the joists, spaced 16” o.c. with (2) #10-16 x 5/8 in. screw.

Fire-Resistance Rating:
Restrained Assembly – 1 hour



ELEVATION



SECTION A-A

1. Flooring – 3 in. thick (including metal deck – item 2) concrete with 6 x 6 – 1.4 welded wire mesh. Minimum compressive strength of concrete cylinder in 28 days = 3,000 psi.

2. Metal Deck – 22 gauge 9/16" deep galvanized metal deck fastened to top flange of c-joists with #12-14 x ¾ @12" o.c.

3. Mineral and Fiber Board – Mineral wool insulation, nominal 4 in. thick, nominal density 4.5 lb/cu. ft. Surface burning characteristics of a flame spread value of 5 or less and a smoke value of 0. Insulation in the concealed space, friction-fit to underside of metal deck.

4. Structural Steel Members – The proprietary joists of Hermes / Hephaistos are channel shaped, 10 in. min depth, with 2 in. min wide flanges and 5/8 in. long stiffening lips. The joists are fabricated from min. 16 MSG galvanized steel. Spacing of joists to be 16 in. o.c. maximum. Floor joists attached to supports using channel-shaped web stiffeners.

5. Blocking & Bridging – Installed immediately after joists are erected and before construction loads are applied. The blocking consisting of cut-to-length solid joist section, 16 gauge min., placed between joists at 8'-0" o.c. maximum and 7'-0" in. o.c. maximum along the joist length. In addition, bridging will consist of 2 in. strap, 18-gauge min., attached to the bottom of the joist at the location of solid bridging. Attach to each blocking piece with (4) #10-16 x 5/8 in. screws.

6. Angle Clips – Minimum 16 MSG, length to be equal to joist depth w/ 2 in. long legs min. Secure to blocking and joists with (4) #10-16 x 5/8 in. screws.

7. Furring Channels – 7/8 in. deep, 25 MSG galvanized steel channels spaced at 16 in. o.c. perpendicular to the joists, with double rows for support of gypsum board end joint. Fasten channel to the bottom of each joist with (2) #10-16 x 5/8 in. screws.

8. Gypsum Board – One layer of 5/8 in. thick by 48 in. wide. Installed with long dimension perpendicular to furring channels. Gypsum board secured to the furring channel with 1-1/4 in. long Type S steel screws spaced 8 in. OC. Screws located min. 1-1/2 in. from both side joints and end joints. End joints staggered min. 48 in. in adjacent rows. Gypsum board fabricated by:

UNITED STATES GYPSUM CO. – TYPE C
Lafarge North America Inc. – Types LGFC – C
LGFC-C/A

9. Joint System – Paper tape embedded in joint compound over joints and covered with 2 layers of joint compound with edges feathered out. Wallboard screw heads covered with 2 layers of joint compound.

10. Fasteners – All steel-to-steel fasteners to be #10-16 x 5/8 in. low profile screws.

Terms and Conditions: The assembly shown above is accepted for use in New York City provided the following conditions are complied with:

1. Structural requirements shall comply with Article 10, Reference Standard RS 10-3 and other applicable provisions of the New York City Building Code.

2. The acceptance of this assembly is limited to fire-resistance only, as described above.

3. Structural and other requirements shall be checked by a professional engineer or registered architect for particular structure for compliance with pertinent Building Code provisions and above-mentioned limitations.

4. All shipments and deliveries of joist of Hermes/Hephaistos as a part of floor/ceiling assembly shall be provided with a metal tag, suitably placed, certifying that the material are equivalent to those tested and acceptable for use, as provided for in Article 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 December 13, 2006

Examined By Simin Dorpkudar