

# Report of Materials and Equipment Acceptance Division

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

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 214-07-M

Manufacturer: United States Gypsum Co., 550 West Adams Street,

Chicago, IL 60661

**Trade Name(s):** FORTACRETE<sup>®</sup> Structural Panels

**UL Designation Type FORTACRETE** 

**Product:** Fire-rated structural cement panels for use in floor/ceiling

assemblies

**Pertinent Code Section(s):** 27-131, 27-323, 27-345, 27-348

Prescribed Test(s): RS 5-2 (ASTM E119-05a), RS 5-19 (ASTM E814-06),

RS 5-5 (ASTM E84-06), ASTM E136-04

**Laboratory:** Underwriters Laboratories, Inc.

**Test Report(s):** UL Project numbers with test reports:

05CA34168 dated 6/6/2006, 6/16/2006 & 8/15/2006

06CA50356 dated 1/8/2007 06CA19597 dated 12/12/2006 06CA22242 dated 2/13/2007 06NK09877 dated 6/26/2006

07NK09368 dated 5/18/2007 and 5/19/2007

**Description:** 1, 1-1/2, and 2-hour fire-rated floor/ceiling assemblies and through-penetration firestop systems. Each system constructed with FORTACRETE® Structural Panels UL-Type designation FORTACRETE. Panels comply with Non-combustibility and Surface Burning Characteristics code requirements for ICC-ES AC318 "Acceptance Criteria for Structural Cementitious Floor Sheathing Panels" (see UL test report for project # 06NK09877 dated 6/26/2006).

# A. Floor/Ceiling Assemblies

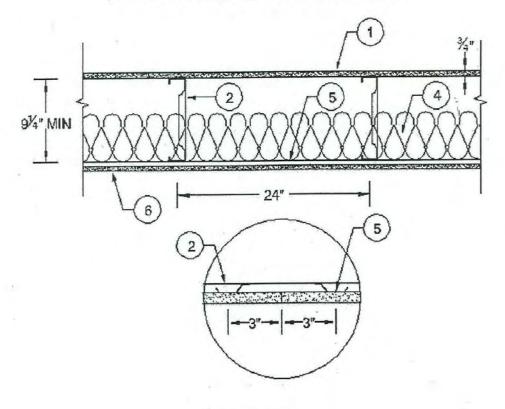
UL Designs: G535, G536, G556, G557, G558, and G562 (see published designs in UL directory for complete details).

- 1. <u>Flooring</u> ¾" FORTACRETE® Structural Panels Type FORTACRETE with long edges tongue and grooved applied perpendicular to joists.
- 2. <u>Structural Steel Members</u> Proprietary or generic channel-shaped joists fabricated from min No. 16 MSG or 18 MSG galvanized steel, per applicable UL design, spaced at a max 24 in. OC.
- 3. <u>Batts and Blankets</u> 3-5/8" thick fiber batt insulation draped over the resilient channels or suspension system grid. Insulation to bear the UL Classification Marking for Surface Burning Characteristics having a flame spread index of 25 or less and smoke developed index of 50 or less.
- 4. Resilient Channels Formed of No. 25 MSG galvanized steel, ½ in. deep, spaced 12 in. OC perpendicular to joists.
- 5. <u>Ceiling</u> One or two layers of 5/8" Sheetrock Brand Gypsum Panels Type C, Type IP-X2 or Type IPC-AR applied the long dimension perpendicular to resilient channels or cross tees of suspension system.
- 6. <u>Finishing System</u> Vinyl, dry or premixed joint compound applied in two coats to joints and screw-heads. Nom 2 in. wide tape embedded in first layer of compound over all joints.

#### Design No. G535

July 26, 2007

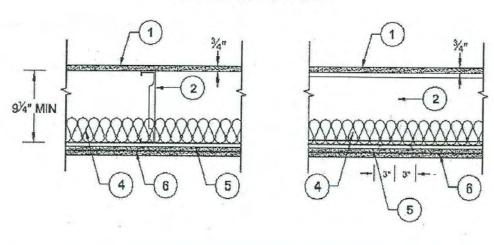
# Unrestrained Assembly Rating - 1-1/2 and 2 Hrs (See Item 1)



### Design No. G536

July 26, 2007

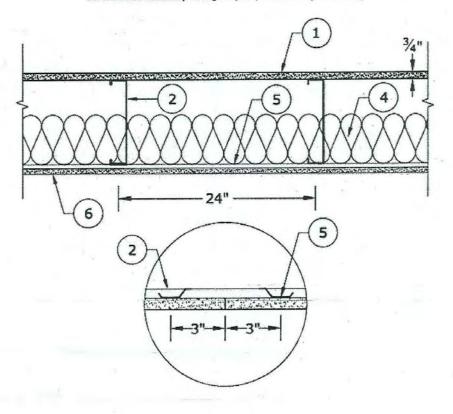
## Unrestrained Assembly Rating - 2 Hr



Design No. G556

July 26, 2007

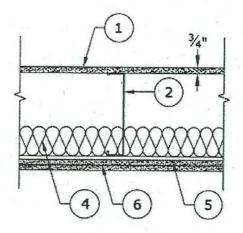
Unrestrained Assembly Rating - 1, 1-1/2 and 2 Hr (See Item 1)

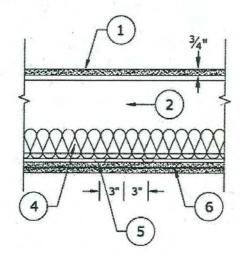


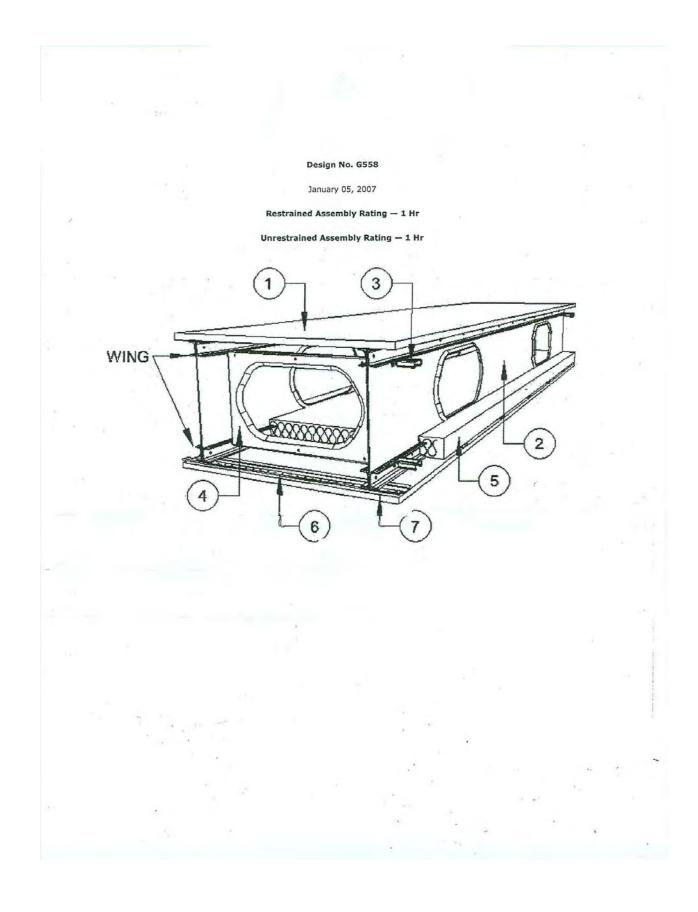


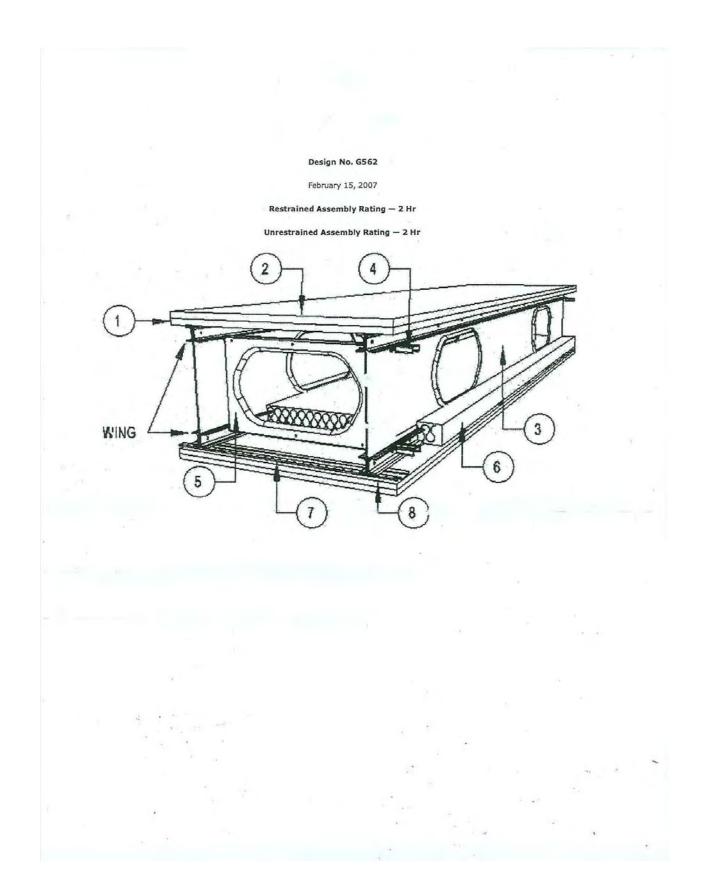
July 26, 2007

## Unrestrained Assembly Rating - 2 Hr









Terms and Conditions: The above-described non-load-bearing fire-rated floor/ceiling assembly, using above component, is accepted under the following conditions:

- 1. Structural requirements shall comply with Subchapter 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. Structural and other requirements shall be in accordance with pertinent Building Code, Laboratories' listing and manufacturer's requirements.
- 3. All shipments and deliveries of such equipment shall be provided with print marking on the equipment, 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 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 August 1, 200

Examined By Sinn Derfold