



Report of Materials and Equipment Acceptance Division

NYC Department of Buildings
280 Broadway, New York, NY 10007
Patricia Lancaster, FAIA, Commissioner
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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 481-04-M Vol. II

Manufacturer:

Metal-Span. 1497 North Kealy, Lewisville Texas, 75057.

Trade Name(s):

ThermalSafe

Product:

Laminated Sandwich fire rated panel for non-load bearing exterior and interior partition fire resistive walls.

Pertinent Code Section(s):

27-335.1 (a), 27-323 and 27-324.

Prescribed Test(s):

RS 5-5 (ASTM E 84), Toxicity, RS 5-2 (ASTM E119).

Laboratory:

Omega Point Laboratories Inc. and Southwest Research Institute.

Test Report(s):

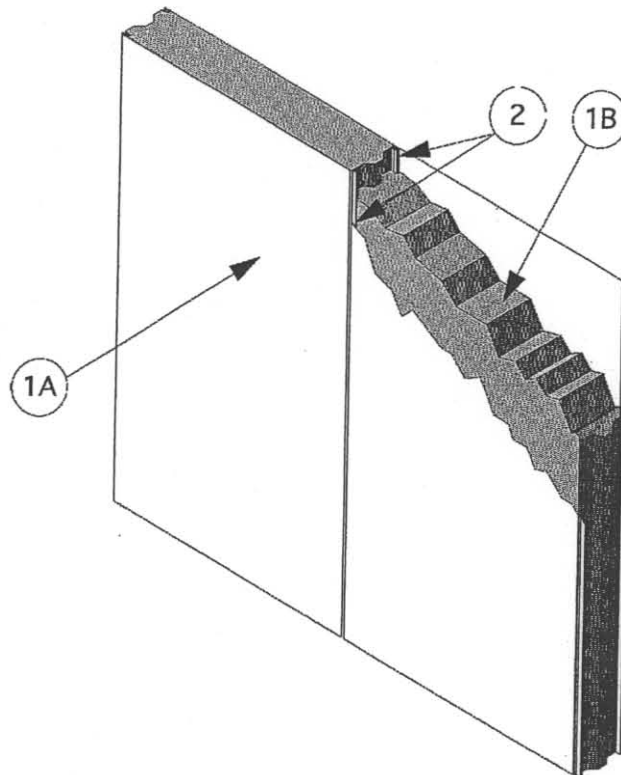
Omega Point Report No. 16989-123161 dated December 29, 2004 and SWRI project No. 01.10086.01.074 dated November 2004. Project No. 10580-114720 dated June 27, 2003, No. 16989-122055 dated November 1, 2004.

Description: Laminated sandwich panel consisting of G-90 galvanized steel facings bonded to a non-combustible structural mineral wool core. The mineral wool core is made from basalt rock and steel slag, spun to form a structural board. The product contains no VOC's or CFC's. Panels are made from raw materials that are 100% recyclable. The panels are used as non-load bearing exterior and partition fire resistive walls for industrial and commercial buildings like manufacturing plants and warehouses. The panels are designed to replace more traditional installations using gypsum board and studs to block construction. The assemblies should be constructed with the following; Omega Point design No. NBW344 (1 hour) and MBW345 (2 hours) and manufacturer instruction to achieve the following fire rating.

Flame Spread Rating- 0
Smoke Density Rating- 0

Design No. NBW 345
NON-BEARING WALL

Assembly Rating – 2 hr
ASTM E-119



1. **INSULATED WALL PANELS:** Steel or stainless steel faced panels, with a core of mineral wool insulation. The panels are nominally 42 in. wide, having a maximum length of 50 feet and a minimum thickness of 6 in. The panels are constructed with tongue and groove interfaces on the long dimension edges, that mate with adjacent panels. Panels may be installed with the long dimensions placed horizontally or vertically. When constructing a wall, the panel perimeter is secured with panel attachment angles or channel, as described in Item 3. The wall panels are constructed of the following materials:
- A. **Panel Facing** – The panel facing is constructed of min. 26 GA galvanized steel with painted or mill finish, or min 26 GA stainless steel with mill finish. The panels

are fashioned with tongue and groove mating edges located on the long dimension panel edges.

- B. **Mineral Wool Insulation** – The panel core consists of nominal 8.5 pcf mineral wool batt that is sandwiched between the panel facing and adhered to the panel facing with a polyurethane adhesive. The long dimension edges of the panel core are constructed with a tongue and groove interface that mates with adjoining panels.

Listed Manufacturer:

Metl-Span I, Ltd.

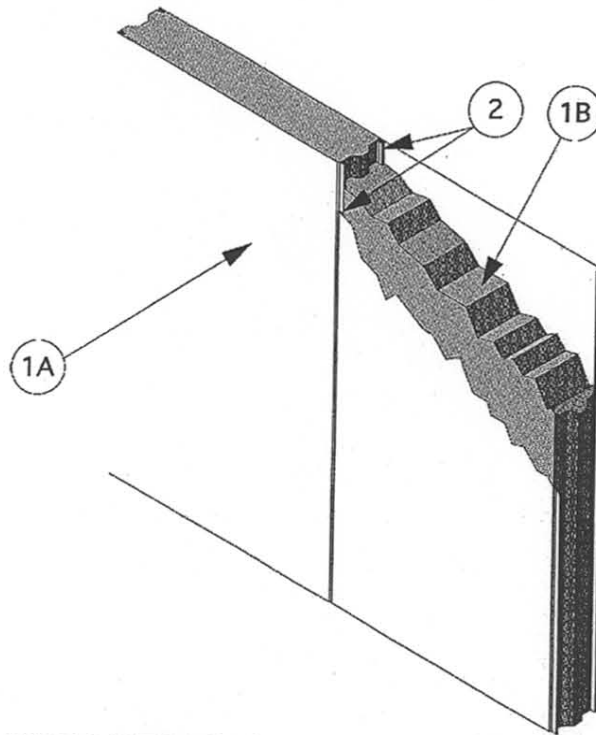
Roofing and Siding Panels

Metal Roof and Wall Panels

Thermalsafe® Panels

2. Silicone Sealant – (Optional - not required for fire resistance) Install a nominal 3/16 in. bead of one-component, medium modulus, non-corrosive silicone sealant to the female side of the panel facing (1A) joints prior to joining the panels.
3. Panel Supports: (not shown) – Panel Supports: (not shown) – Panels are attached to side perimeter panel supports when installed horizontally, or top and bottom panel supports when installed vertically. Secure the panel supports to the adjacent construction as required by code. Any of the following methods of panel attachment is recognized in this Listing:
 - A. Channel: Minimum 18 GA galvanized steel C-shaped channel, or track, having a web width 1/8 in. larger than the wall thickness and minimum flange length of 2 in. Secure panels to double supports with min. No. 12, self drilling or self tapping steel screws having sufficient length to extend through the support flange and fully engage the panel face. Space the screws max. 12 in. OC.
 - B. Single Supports: Min. 16 GA. steel sheeting angles having minimum 2 in. flanges, or equivalent structural member providing equal or greater support. Secure panels to single supports with min. No. 14, self drilling or self tapping steel screws with sufficient length to extend through the panel, and completely into the steel support on the opposite side. Space the screws max. 18 in. OC and 3 in. from each joint.
 - C. Double Supports: Min. 16 GA. steel sheeting angles having minimum 2 in. flanges, or equivalent structural member providing equal or greater support. Secure panels to double supports with min. No. 12, self drilling or self tapping steel screws having sufficient length to extend through the support flange and fully engage the panel face. Space the screws max. 12 in. OC.
 - D. Intermediate Supports: (Optional, not required for fire resistance) Where panel walls require additional support for project specific reasons, intermediate steel supports may be installed, in accordance with manufacturer's instructions, on the panel span between the end panel support connections, using #14 self-drilling or self-tapping screws having sufficient length to extend through the panel, and completely into the steel support on the opposite side, or #10 FabLok rivets. Spacing is determined by project requirements.

Design No. NBW 344
NON-BEARING WALL
Assembly Rating – 1 hr
ASTM E-119



1. **INSULATED WALL PANELS:** Steel or stainless steel faced panels, with a core of mineral wool insulation. The panels are nominally 42 in. wide, having a maximum length of 50 feet and a minimum thickness of 4 in. The panels are constructed with tongue and groove interfaces on the long dimension edges, that mate with adjacent panels. Panels may be installed with the long dimensions placed horizontally or vertically. When constructing a wall, the panel perimeter is secured with panel attachment angles or channel, as described in Item 3. The wall panels are constructed of the following materials:

- A. **Panel Facing** – The panel facing is constructed of min. 26 GA galvanized steel with painted or mill finish, or min 26 GA stainless steel with mill finish. The panels

are fashioned with tongue and groove mating edges located on the long dimension panel edges.

- B. **Mineral Wool Insulation** – The panel core consists of nominal 8.5 pcf mineral wool batt that is sandwiched between the panel facing and adhered to the panel facing with a polyurethane adhesive. The long dimension edges of the panel core are constructed with a tongue and groove interface that mates with adjoining panels.

Listed Manufacturer:

Metl-Span I, Ltd.

Roofing and Siding Panels

Metal Roof and Wall Panels

Thermalsafe® Panels

Fire-Resistant Walls

2. Silicone Sealant: (Optional - not required for fire resistance) Install a nominal 3/16 in. bead of one-component, medium modulus, non-corrosive silicone sealant to the female side of the panel facing (1A) joints prior to joining the panels.
3. Panel Supports: (not shown) – Panels are attached to side perimeter panel supports when installed horizontally, or top and bottom panel supports when installed vertically. Secure the panel supports to the adjacent construction as required by code. Any of the following methods of panel attachment is recognized in this Listing:
 - A. Channel: Minimum 18 GA galvanized steel C-shaped channel, or track, having a web width 1/8 in. larger than the wall thickness and minimum flange length of 2 in. Secure panels to double supports with min. No. 12, self drilling or self tapping steel screws having sufficient length to extend through the support flange and fully engage the panel face. Space the screws max. 12 in. OC.
 - B. Single Supports: Min. 16 GA. steel sheeting angles having minimum 2 in. flanges, or equivalent structural member providing equal or greater support. Secure panels to single supports with min. No. 14, self drilling or self tapping steel screws with sufficient length to extend through the panel, and completely into the steel support on the opposite side. Space the screws max. 18 in. OC and 3 in. from each joint.
 - C. Double Supports: Min. 16 GA. steel sheeting angles having minimum 2 in. flanges, or equivalent structural member providing equal or greater support. Secure panels to double supports with min. No. 12, self drilling or self tapping steel screws having sufficient length to extend through the support flange and fully engage the panel face. Space the screws max. 12 in. OC.
 - D. Intermediate Supports: (Optional, not required for fire resistance) Where panel walls require additional support for project specific reasons, intermediate steel supports may be installed, in accordance with manufacturer's instructions, on the panel span between the end panel support connections, using #14 self-drilling or self-tapping screws having sufficient length to extend through the panel, and completely into the steel support on the opposite side, or #10 FabLok rivets. Spacing is determined by project requirements.

Terms and Conditions- The above described exterior fire rated wall finish system, for use where noncombustible construction is required, be accepted for use in either new or existing noncombustible construction group I buildings, when members framing into the column have at least the same fire resistance rating and provided that the boards are protected from abrasion or displacements for the full height of the column. The installation of the fireproofing material shall be subject to table 27-132. Installation shall be in accordance with Section 27-335.1 following manufacturer supplied instructions. All shipments and deliveries of such materials shall be provided with a label or metal tag certifying that the materials shipped or delivered are equivalent to those tested and acceptable for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance November 10, 2005

Examined By Simon Derksholm