



Buildings

NYC Department of Buildings
280 Broadway, New York, NY 10007
Robert D. LiMandri, 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 206-08-M

Manufacturer:

Marino/WARE-Ameriform Industries
137 Broadway
Amityville, N.Y. 11701

Trade Name(s):

Amoroc (by Ameriform)/JoistRite

Product:

2-hour and 1-hour fire-rated floor-ceiling assemblies
for class 1 construction
MEA Index #310-100 – Floor-Ceiling Assembly

Pertinent Code Section(s):

27-324, 27-323, 27-380

Prescribed Test(s):

RS 5-2 (ASTM E119)

Laboratory:

VTEC Laboratories

Test Report(s):

V100-2949-1 and V100-2949-2 (2-hour and 1-hour fire-rated assemblies, dated May 27, 2008.

Description:

The JoistRite Galvanized Steel Joist with a 10" minimum depth 16 gauge channel-shaped steel joists 16" o.c. with ¾ "ARMOROC Panel screw applied to top of joists 4" thick Termafiber insulation nominal density 4 lb/cu. ft. friction-fit to the underside of the cement board floor. One layer 5/8 thick Firecode C gypsum board attached to 25 gauge galvanized resilient channels secured perpendicular to the joist 16" o.c. with one #10-16 x ½ inch screw. The floor-ceiling assembly shall be constructed in accordance with thickness and installation requirements in VTEC V100-2949-1 and V100-2949-2 and manufacturer's requirements in achieving the fire-resistance ratings in accordance with the testing procedure.

Armoroc Panel is a highly fire-resistant cement bonded particle floor board that is mechanically fastened to the top of floor framing members as a sub-floor. In addition, it is load-bearing (to carry over a maximum of 24" on the center support spacing while limiting deflection to a maximum of L/240, as per project engineer) and shall have a finished floor applied over it. It is at a minimum thickness of 3/4" (19 mm) and 4' x 8' (1220mm x 2440mm) and is factory-sealed, complete with a fabricated tongue and groove edges on long 8' dimensions of the panel. The minimum mechanical properties are: ± 75 lbs/ft³ density, >652,000 psi modulus of elasticity, >1302 psi shear strength, >963 psi tensile strength (parallel to surface), and >2,938 psi compressive strength. Armoroc Panel will comply with applicable Building Codes for wind, seismic, snow, uniformly distributed live-loads and other loading requirements, as determined by project engineer and architect.

Key for JR with ARMOROC Fire Test Set-Up

By VTEC

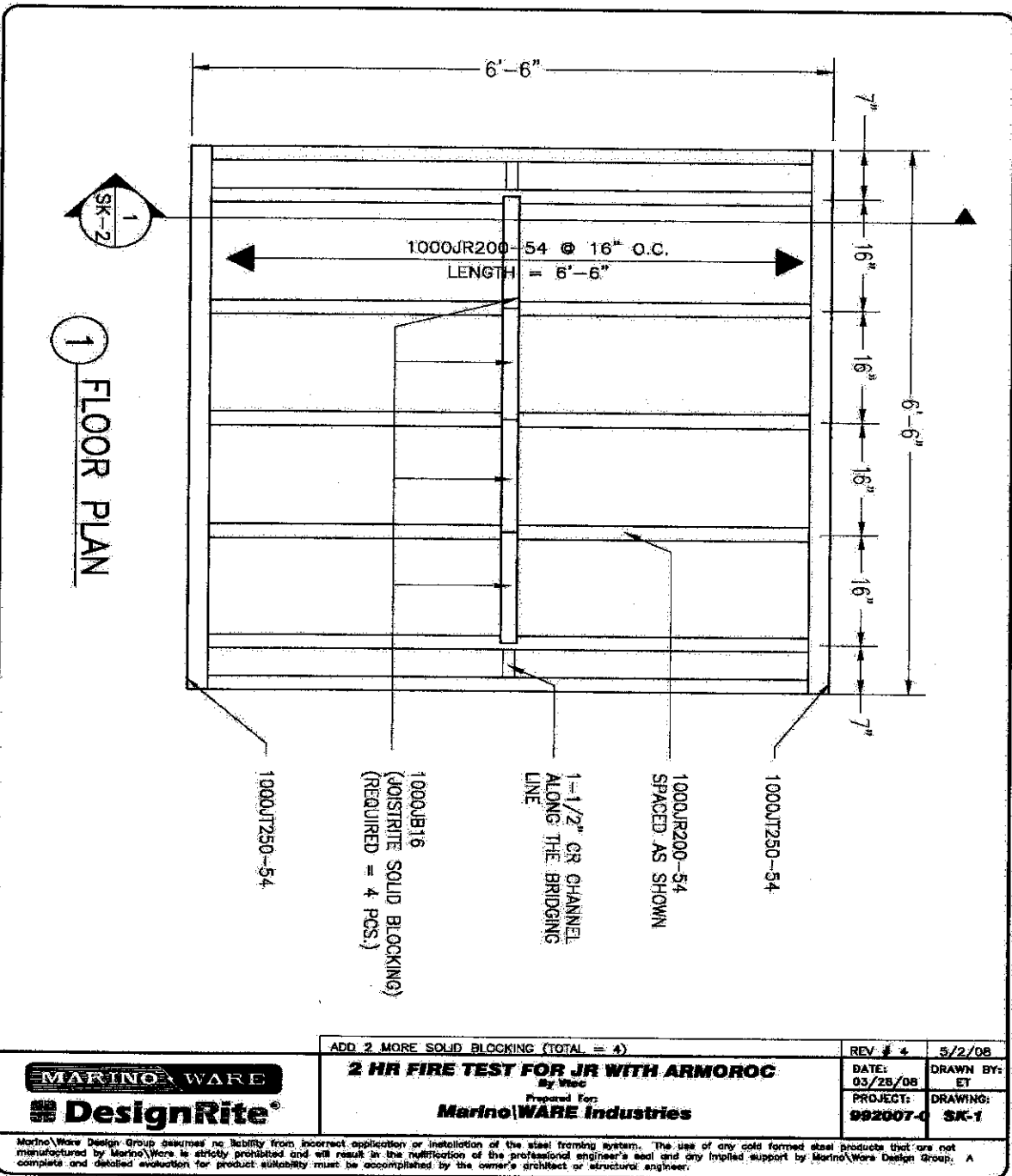
- (1)-Marino/WARE RC-1 Single Leg Galvanized Resilient Channel, ½" Deep x 25 Gauge Spaced at 12" O.C., Screw Fastened to Bottom of JoistRite with #10-16 x ½" Long Corrosion Resistant Self Drilling Screws.
- (2)-1-1/2" CR Channel, Attach to the Bottom of the Joist.
- (3)-1000JB16 (JoistRite Solid Blocking) (Required = 4 Pcs.)
- (4)-1000JT250-54
- (5)-1000JR200-54
- (6)-One Layer of 5/8" Type "C" Gypsum Board, Screw Fastened to Resilient Channel with #6 x 1" Drywall Screws @ 12" O.C.
- (7)-JoistRite Galvanized Steel Joist, Min. 10" Depth x 16-Gauge Thickness, 2" Min. Flange Width, 2" Min. Flange Width, Joist Spaced 16" O.C. Max.
- (8)-4" Thermafiber Insulation

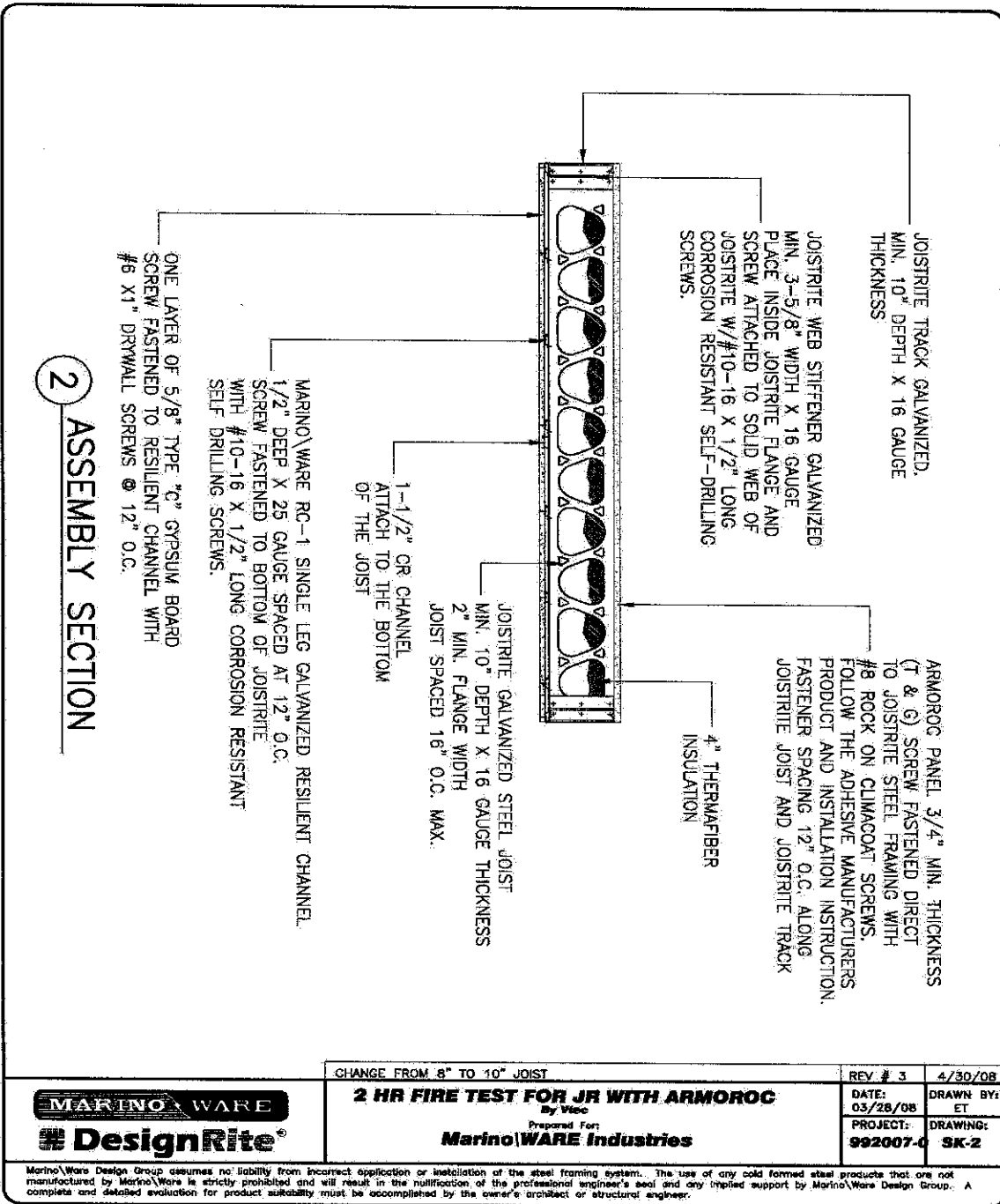
- (9)-Armoroc Panel $\frac{3}{4}$ " Min. Thickness, (T & G) Screw Fastened Direct to JoistRite Steel Framing with #8 Rock on Climacoat Screws. Follow the Adhesive Manufacturers Product and Installation Instruction. Fastener Spacing 12" O.C. along JoistRite Joist and JoistRite Track.
- (10)-JoistRite Web Stiffener Galvanized, Min. 3-5/8" Width x 16-Gauge Place Inside JoistRite Flange and Screw Attached to Solid Web of JoistRite W/#10-16 x $\frac{1}{2}$ " Long Corrosion Resistant Self-Drilling Screws.
- (11)-JoistRite Track Galvanized, Min. 10" Depth x 16-Gauge Thickness.

Key for JR with ARMOROC Fire Test Set-Up

By VTEC

- (1)-Marino/WARE RC-1 Single Leg Galvanized Resilient Channel, 1/2" Deep x 25 Gauge Spaced at 12" O.C., Screw Fastened to Bottom of JoistRite with #10-16 x 1/2" Long Corrosion Resistant Self Drilling Screws.
- (2)-1-1/2" CR Channel. Attach to the Bottom of the Joist.
- (3)-1000JB16 (JoistRite Solid Blocking) (Required = 4 Pcs.)
- (4)-1000JT250-54
- (5)-1000JR200-54
- (6)-One Layer of 5/8" Type "C" Gypsum Board, Screw Fastened to Resilient Channel with #6 x 1" Drywall Screws @ 12" O.C.
- (7)-JoistRite Galvanized Steel Joist, Min. 10" Depth x 16 Gauge Thickness, 2" Min. Flange Width, 2" Min. Flange Width. Joist Spaced 16" O.C. Max.
- (8)-4" Thermafiber Insulation
- (9)-Armoroc Panel 3/4" Min. Thickness, (T & G) Screw Fastened Direct to JoistRite Steel Framing with #8 Rock on Climacoat Screws. Follow the Adhesive Manufacturers Product and Installation Instruction. Fastener Spacing 12" O.C. along JoistRite Joist and JoistRite Track.
- (10)-JoistRite Web Stiffener Galvanized, Min. 3-5/8" Width x 16 Gauge Place Inside JoistRite Flange and Screw Attached to Solid Web of JoistRite W/#10-16 x 1/2" Long Corrosion Resistant Self-Drilling Screws.
- (11)-JoistRite Track Galvanized, Min. 10" Depth x 16 Gauge Thickness.



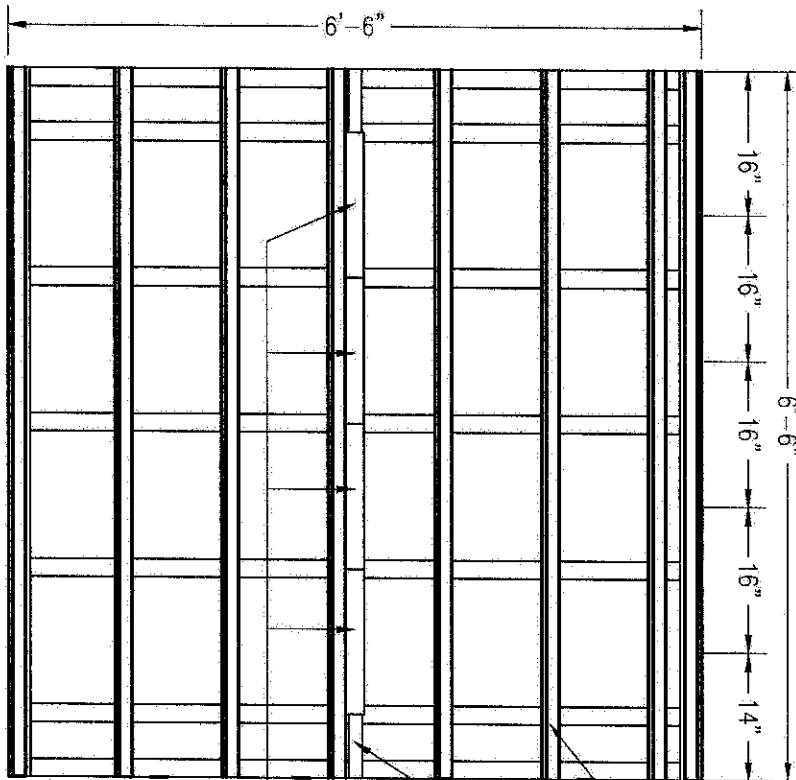


2 ASSEMBLY SECTION

CHANGE FROM 8" TO 10" JOIST		REV. # 3	4/30/08
2 HR FIRE TEST FOR JR WITH ARMOROC By Weld Prepared For: MarinoWARE Industries		DATE: 03/28/08	DRAWN BY: ET
		PROJECT: 992007-0	DRAWING: SK-2



MarinoWare Design Group assumes no liability from incorrect application or installation of the steel framing system. The use of any cold formed steel products that are not manufactured by MarinoWare is strictly prohibited and will result in the nullification of the professional engineer's seal and any implied support by MarinoWare Design Group. A complete and detailed evaluation for product suitability must be accomplished by the owner's architect or structural engineer.





1 RC-1 LOCATION PLAN

1000UB16
(JOISTRITE SOLID BLOCKING)
(REQUIRED = 4, PCS.)

1-1/2" CR CHANNEL
ALONG THE BRIDGING LINE

MARINO WARE RC-1 SINGLE LEG
GALVANIZED RESILIENT CHANNEL
1/2" DEEP X 25 GAUGE SPACED
AT 12" O.C. WITH #10-16 X 1/2"
LONG CORROSION RESISTANT SELF
DRILLING SCREWS.

ADD 2 MORE SOLID BLOCKING (TOTAL = 4)		REV # 3	5/2/08
 	2 HR FIRE TEST FOR JR WITH ARMOROC <i>By Vtec</i> Prepared For: MarinoWARE Industries	DATE: 04/25/08	DRAWN BY: ET
		PROJECT: 992007-0	DRAWING: SK-3

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Terms and Conditions: The above-described fire-rated floor-ceiling assemblies are accepted as having the fire-resistance ratings as indicated, when used where combustible or non-combustible construction is required in accordance with the New York City Building code under the following conditions:

1. This acceptance does not include structural adequacy or designs which must be checked by a professional engineer or registered architect for particular structure for compliance with New York City Building Code.
2. Structural requirements shall comply with Subchapter 10, Reference Standard RS 10-3 and other applicable provisions of the New York City Building Code.
3. Installation shall comply with New York City Building Code and Intertek Testing Services fire-resistance rating as specified above.
4. All shipments and deliveries of such material shall be provided with a certificate or label certifying that the material shipped or delivered are equivalent to that tested and accepted 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 January 14, 2009

Examined By Suep Derfludom