

Intertek ETL SEMKO

August 31, 2006

Fred Serpico
Marino/WARE
777 Greenbelt Parkway
Griffin, GA 30223

Re: Project No. 3101528
ASTM E119-05a Fire Tests of Building Construction and Materials
1-hour, Unrestrained, Loadbearing Floor/Ceiling Assy.

Dear Mr. Serpico:

This letter will summarize the results of today's test. A 13'2" x 20' floor assembly made of 10-in. deep JoistRITE cold formed steel C-Section spaced 16" o.c. The basic design from top to bottom was –

¾" thick CDX tongue and groove plywood
10" deep JoistRITE steel joists 16" o.c.
4", 4 pcf mineral wool insulation (friction fitted between joists just under plywood)
RC-1 resilient channel spaced 16" o.c. below joists
Two layers of ½" thick Type C gypsum wallboard

According to Marino Ware calculations, the allowable stress design of this assembly was 149 psf, minus a 10.2 psf dead load, resulting in an applied load of 138.8 psf.

This load was uniformly applied across the top of the plywood deck using concrete masonry units prior to the test.

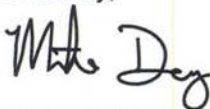
Four of the steel joists members were instrumented with thermocouples, and twelve additional thermocouples were placed on top of the plywood surface to measure unexposed surface temperatures. The average steel temperature limit was 1100°F, the average plywood temperature limit was 330°F, and the maximum plywood temperature limit was 415°F.

After one hour of exposure to the ASTM E119 time/temperature curve, the average steel temperature was 818°F, the average plywood temperature was 123°F, and the max plywood temperature was 168°F.

Based on this test, the assembly achieved a fire resistance rating of 1-hr.

If you have any questions or comments please feel free to contact me at your convenience. Congratulations on a good result.

Sincerely,



Michael E. Dey
Project Manager

Attachments: TC and Load Layout, Photographs, Temperature Data



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