



R12415
05CA17201

October 12, 2005

Mr. Ernest R. Bodnar
President
TMCP Building Systems Incorporated
1393 Grahams Lane
Burlington, ON
L7S 1W4

Subject Combustible Floor Assembly/1 Hour Unrestrained Assembly Rating

Dear Mr. Bodnar:

A Combustible Floor Assembly incorporating your TMCP 18 gauge, 8 inch deep steel joist was fire-tested on September 29, 2005 in accordance with the requirements of CAN/ULC-S101-04 and UL 263 Standards. The Floor Assembly successfully met the conditions for a 1 Hour Unrestrained Assembly Rating.

The 8 inch deep joists were spaced at 16" OC and braced perpendicularly at the centre of the assembly, at 85" OC, with 18 gauge solid and perforated joist sections and galvanized steel straps as specified in the attached drawings. The joists were reinforced at each end with 18 gauge TMCP web stiffeners.

The sub-floor consisted of one 3/4" thick layer of tongue and groove plywood installed perpendicular to the joists with ends staggered. Mineral wool insulation, 4" thick and 4.5 pcf, was friction fitted between the joists and the plywood underside in the concealed space.

On the ceiling side, standard 22 gauge furring channels were installed perpendicular to the joists at 16" OC. Two layers of 1/2" thick, ULC Listed, CGC FireCode C gypsum board were fastened to the furring channels. The base layer End-Joints and Side-Joints were offset by 64" and 15" respectively to those in the face layer. End-Joints were positioned over double furring channels.

All fasteners types and spacing and other construction details are shown in the attached drawings.

The test load applied was 77% of the allowable load specified in the manufacturer's load tables. This represents a uniform applied load of 42.3 psf.



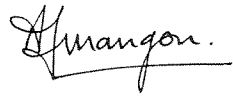
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We are currently in the process of finalizing the details to promulgate a UL / ULC Combustible Floor Assembly Design with 1 hour unrestrained assembly rating.

Please note that the ULC label or listed marking on a product is the only evidence provided by Underwriters' Laboratories of Canada to identify products which have been produced under the Listing and Follow-up Service.

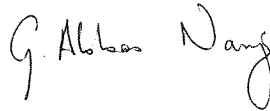
If you have any questions regarding the above, please do not hesitate to call us.

Yours truly,



Ahmad F. Mangou, P.Eng.
Senior Project Engineer
Fire Protection Division

Reviewed by:



G. Abbas Nanji, P.Eng.
Engineering Group Leader
Fire Protection Division

Working for a safer world....

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