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REPORT

on

FIRE TEST INVESTIGATION OF A STEEL STUD BEARING
WALL ASSEMBLY CONSISTING OF GYP-FAST FASTENERS

ITW Buildex
Itasca, IL

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DESCRIPTION

MATERIALS:

The materials used in the construction of the wall assembly are described below.

Floor and Ceiling Runner - The channel-shaped steel tracks used to support the wall assembly along the lintel and sill of the test frame were fabricated from No. 18 MSG (0.045 in. thick) galvanized steel and measured 3-3/4 in. wide with 1-1/4 in. wide flanges. The runners were supplied in 10 ft. lengths.

Steel Studs - The C-shaped studs were fabricated from No. 18 MSG (0.045 in. thick) galvanized steel and measured 3-5/8 in. deep with 1-23/32 in. long flanges and 1/2 in. long returns. The studs bore the marking "MBA Building Supplies 3-5/8 CSJ18GA." Oval cutouts spaced 24 in. OC, were punched lengthwise on the studs. The cutout area was 4 in. long by 1-1/2 in. wide. The studs were supplied in 10 ft. lengths.

Steel Bracing - The flat steel strapping was fabricated from No. 20 MSG (0.0365 in. thick) galvanized steel and measured 2 in. wide.

Batts and Blankets - The nominal 3-1/2 in. thick mineral wool batt insulation was supplied in boards measuring nominal 2 by 4 ft. before cutting into the desired sizes. The average density of the boards was 3.56 pcf. The boards were designated Delta-4 Board and manufactured by Rock Wool Manufacturing Company. The outer packaging bore the Classification Marking of Underwriters Laboratories Inc.

Gypsum Wallboard - The 5/8 in. thick UL Classified gypsum board designated Type 9 was manufactured by Georgia Pacific. The panels were supplied in 4 by 10 ft before being cut into the desired sizes.

Gypsum Sheathing - The 5/8 in. thick UL Classified gypsum sheathing designated Type DGG was manufactured by Georgia Pacific. The panels were supplied in 4 by 8 ft before being cut into the desired sizes.

Wall and Partition Facings and Accessories - The steel fasteners were 1-1/2 in. long, with a knurled shaft, designated Type Gyp-Fast Fasteners, and were manufactured by ITW Buildex.

Joint Tape and Compound - The wallboard joints on the exposed side of the assembly were covered with 2 in. wide paper tape and both the joints and the screwheads were covered with joint compound.

Steel Fasteners - The various types and sizes of other fasteners used in the construction of the wall assembly are described in the order of use under the heading "Erection of Test Assembly."