

UL System No. HW-D-0479

December 13, 2016

ANSI/UL2079

Assembly Rating – 2 Hr
Nominal Joint Width – 2 in.

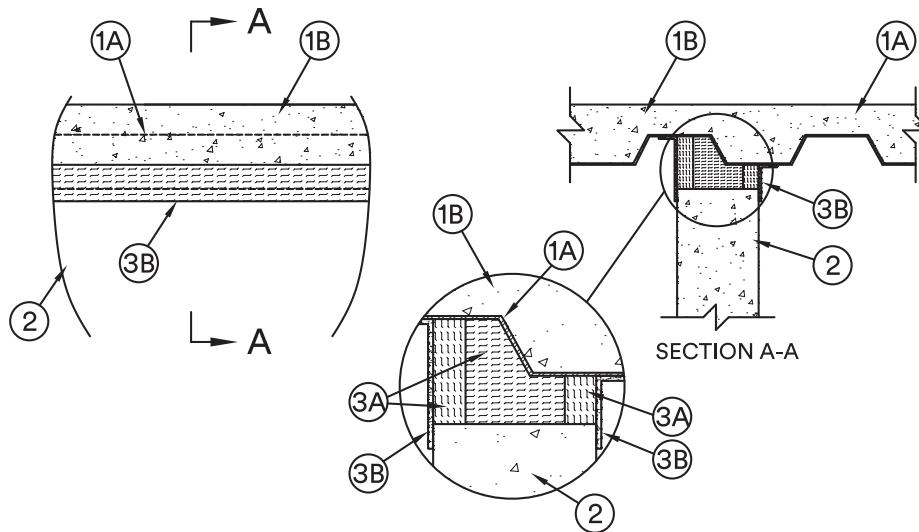
Class II Movement Capabilities – 25% Compression or Extension

CAN/ULC S115

F Rating – 2 Hr
FT Rating – 2 Hr
FH Rating – 2 Hr
FTH Rating – 2 Hr

Nominal Joint Width – 51 mm

Class II Movement Capabilities – 25% Compression or Extension



1. Floor Assembly – The fire rated fluted steel deck/concrete floor assembly shall be constructed of the materials and in the manner described in the individual Floor-Ceiling Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Steel Floor And Form Units* – Max 3 in. (76 mm) deep fluted galv steel deck.

B. Concrete – Min 2-1/2 in. (64 mm) thick reinforced concrete, as measured from the top plane of the floor units.

2. Wall Assembly – Min 6-1/8 in. (156 mm) thick steel-reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Wall assembly to be installed parallel with fluted steel floor deck with a min of 2 in. (51 mm) of the wall thickness beneath valley of deck.

See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers

3. Joint System – Max separation between bottom plane of steel deck floor and top of wall is 2 in. (51 mm). The joint system is designed to accommodate a max 25 percent compression or extension from its installed width. The joint system consists of the following:

A. Forming Material* – The area between the top of the wall and the steel deck is to be tightly packed with min 4 pcf (64 kg/m³) mineral wool batt insulation inserted cut-edge first and compressed min 33 percent in thickness. The forming material is to be recessed 1-1/4 in. (32 mm) from each surface of the wall to accommodate vertically-oriented strips of forming material. Nom 1-1/4 in. (32 mm) thick strips of min 4 pcf (64kg/m³) mineral wool batt insulation to be cut to a width which is 1 in. (25 mm) greater than the vertical distance between the top of the wall and the steel deck on each side of the wall. Mineral wool strips to be compressed in width and installed to fill the gap between the top of the wall and the bottom of the steel floor deck flush with the wall surface on each side of the wall.

INDUSTRIAL INSULATION GROUP LLC – MinWool-1200 Safing

JOHNS MANVILLE – Safing

ROCK WOOL MANUFACTURING CO – Delta Board or Delta -8

ROCKWOOL MALAYSIA SDN BHD – Type Safe

ROXUL INC – Type Safe

THERMAFIBER INC – Type SAF


B. Fill, Void or Cavity Material* – Sealant – Min 1/8 in. (3.2 mm) wet thickness or 1/16 in. (1.6 mm) dry thickness of fill material spray applied over the forming material on each side of the wall. Fill material to overlap min 2 in. (51 mm) onto steel deck and min 1 in. (25 mm) onto the wall surface on both sides of the wall.

3M COMPANY

3M FIRE PROTECTION PRODUCTS – FireDam 200 Spray

B1. Fill, Void or Cavity Material* – Tape – As an alternate to Item B, Tape cut to size and press applied over the mineral wool forming material and lapping min 1 in. (25 mm) onto the steel floor units and concrete wall. Tape applied in minimum 1 ft (305 mm) lengths along joint and adjoining lengths of Tape shall overlap min 1/2 in. (13 mm). Tape shall be applied at both sides of wall.

3M COMPANY – 3M Fire and Water Barrier Tape

*Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively. 

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Construction Joints

Head of Wall

HWD