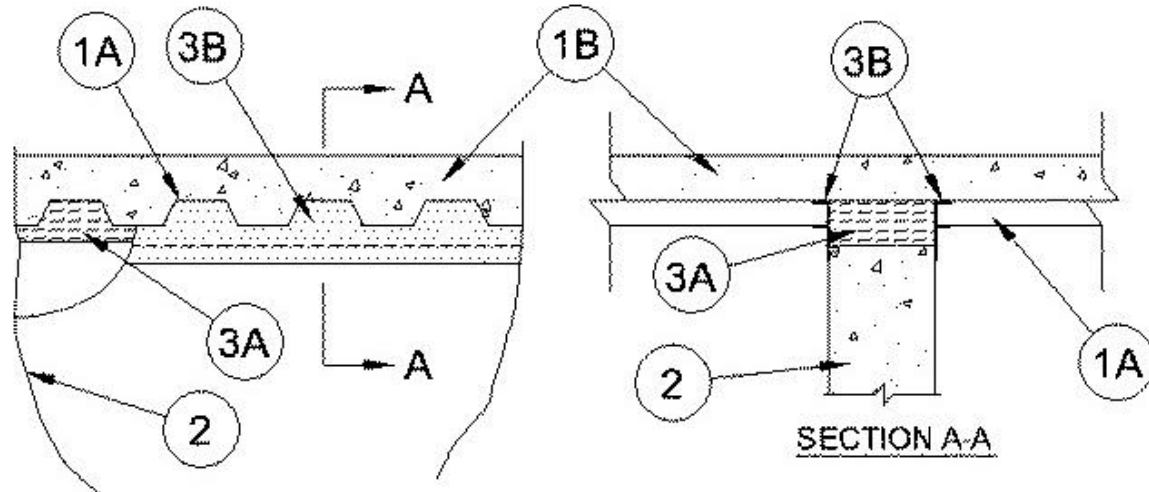


ULC System No. HW 47
F, FH, FT, and FTH Ratings — 2 Hr
Joint Width — 25 mm Maximum
Movement Capabilities — 18.75% Compression or Extension



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 ULC List of Equipment and Materials, and shall include the following construction features:

- (a) **Steel Floor and Form Units** – Maximum 51 mm deep galvanized steel fluted units.
- (b) **Concrete** – Minimum 64 mm thick reinforced concrete as measured from the top plane of the floor units.

1A. Roof Assembly — (Not Shown) - As an alternate to the floor assembly, a fire-rated fluted steel deck roof assembly may be used. The roof assembly shall be constructed of the materials and in the manner described in the individual Roof-Ceiling Design in the ULC List of Equipment and Materials. The hourly rating of the roof assembly shall be equal to or greater than the hourly rating of the wall assembly. The roof assembly shall include the following construction features:

- A. **Steel Roof Deck** - Max 76 mm deep galv steel fluted roof deck.
- B. **Roof Insulation** - Min 57 mm thick poured insulating concrete, as measured from the top plane of the roof deck.

2. Wall Assembly - Min 152 mm thick reinforced lightweight or normal weight (1600 to 2400 kg/m³) structural concrete. Wall to be constructed perpendicular to the valleys of the steel floor units or roof deck. Wall may also be constructed of minimum 200 mm thick concrete block having a minimum 2 hr fire rating.

HW47 Continued...

3. Joint System Max separation between bottom of floor and top of wall at time of installation of joint system is 25 mm. The joint system is designed to accommodate a max 18.75 percent compression or extension from its installed width. The joint system consists of a forming material and a fill material, as follows:

A. Firestop System Component – (Guide No. 40 U19.13) - Min 152 thickness of 64 kg/m³ density of A/D FireBarrier Mineral Wool cut to the shape of the fluted deck, approx 25 percent larger than the area of the flutes and compressed into the flutes of the steel floor units or roof deck between the top of the deflection channel and the steel deck. Additional min 152 mm wide sections of mineral wool batt insulation are compressed 50 percent in thickness and installed cut edge first to fill the gap between the top of the wall and bottom of the steel floor units or roof deck. The forming material shall be installed flush with both surfaces of the wall.

A/D FIRE PROTECTION SYSTEMS INC.

B. Firestop System Component – (Guide No. 40 U19.13) Min 3.2 mm wet thickness of A/D FireBarrier Seal N/S spray or brush applied on each side of the wall to completely cover mineral wool forming material and to overlap a min of 13 mm onto concrete wall and steel floor units or roof deck on both sides of the wall.

A/D FIRE PROTECTION SYSTEMS INC.