1. **Floor Assembly** - Min 4-1/2 in. (114 mm) thick steel-reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) structural concrete. Floor may also be constructed of any min 6 in. thick (152 mm) UL Classified hollow-core **Precast Concrete Units**.*

   See **Precast Concrete Units** (CFTV) category in Fire Resistance Directory for names of manufacturers.

2. **Wall Assembly** - The 1 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

   A. **Steel Floor and Ceiling Runners** - Floor and ceiling runners of wall assembly shall consist of galv steel channels sized to accommodate steel studs (Item 2B). Length of flange to equal fully extended width of joint plus 1/4 in. (6 mm). Ceiling runner secured to concrete floor slab with steel masonry anchors spaced max 24 in. (610 mm) OC or min 1 in. (25 mm) long steel masonry or powder actuated fasteners spaced at a max of 24 in. (610 mm) OC.

   A1. **Light Gauge Framing**° - **Vertical Deflection Ceiling Runner** - As an alternate to the ceiling runner in Item 2A, vertical deflection ceiling runner to consist of galv steel channel with slotted vertical deflection clips mechanistically fastened within runner. Slotted clip provided with step bushings for permanent fastening of steel studs. Flanges sized to accommodate steel studs (Item 2B). Vertical deflection ceiling runner secured to concrete floor slab with steel masonry anchors spaced max 24 in. (610 mm) OC.

   THE STEEL NETWORK INC - VertiTrack VTD358, VTD400, VTD600 and VTD800

   A2. **Light Gauge Framing**° - **Notched Ceiling Runner** - As an alternate to the ceiling runners in Items 2A or 2A1, notched ceiling runners to consist of C-shaped galv steel channel with notched return flanges sized to accommodate steel studs (Item 2B). Notched ceiling runner secured to concrete floor slab with steel masonry anchors spaced max 24 in. (610 mm) OC.

   OLMAR SUPPLY INC - Type SCR

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### System No. HW-D-0754

<table>
<thead>
<tr>
<th>ANSI/UL2079</th>
<th>CAN/ULC S115</th>
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<tbody>
<tr>
<td>Assembly Ratings - 1 Hr</td>
<td>F Ratings - 1 Hr</td>
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<tr>
<td>Nominal Joint Width - 1/2 in.</td>
<td>FT Ratings - 1 Hr</td>
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<tr>
<td>Class II or III Movement Capabilities - 100% Compression or Extension (See Item 3)</td>
<td>FH Ratings - 1 Hr</td>
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<tr>
<td>L Rating at Ambient - Less Than 1 CFM/Lin Ft</td>
<td>FTH Ratings - 1 Hr</td>
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<tr>
<td>L Rating at 400°F - Less Than 1 CFM/Lin Ft</td>
<td>Nominal Joint Width - 13 mm</td>
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<tr>
<td>Class II or III Movement Capabilities - 100% Compression or Extension (See Item 3)</td>
<td></td>
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<tr>
<td>L Rating at Ambient - Less Than 1.55 L/s/m</td>
<td></td>
</tr>
<tr>
<td>L Rating at 204°C - Less Than 1.55 L/s/m</td>
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A3. **Light Gauge Framing** - **Slotted Ceiling Runner** - As an alternate to the ceiling runners in Items 2A through 2A2, ceiling runner to consist of galv steel channel with slotted flanges sized to accommodate steel studs (Items 2B). Ceiling runner secured to concrete floor slab with steel masonry anchors spaced max 24 in. (610 mm) OC.

**BRADY CONSTRUCTION INNOVATIONS INC, DBA SLIPTRACK SYSTEMS** - SLP-TRK

**CALIFORNIA EXPANDED METAL PRODUCTS CO** - CST

**CLARKDIETRICH BUILDING SYSTEMS** - Types SLT, SLT-H

**METAL-LITE INC** - The System

**SCAFCO STEEL STUD MANUFACTURING CO** - Slotted Track

B. **Studs** - Steel studs to be min 3-1/2 in. (89 mm) wide. Studs cut 1/2 in. (13 mm) less in length than assembly height with bottom nesting in and resting on floor runner and with top nesting in ceiling runner without attachment. When vertical deflection ceiling runner (Item 2A1) is used, steel studs secured to slotted vertical deflection clips, through bushings, with steel screws at mid-height of each slot. When slotted ceiling runner (Item 2A3) is used, steel studs secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head steel screws at mid-height of slot on each side of wall. Stud spacing not to exceed 24 in. (610 mm) OC.

C. **Resilient Channels** - Furring channels fabricated from min 25 MSG corrosion-protected steel, spaced vertically a max of 24 in. (610 mm) OC. Flange portion attached to each intersecting stud with 1/2 in. (13 mm) long Type S-12 pan-head steel screws. Gypsum board attached to resilient channels as described in Item 2F.

D. **Furring Channels** - (Alternate, not shown) - Formed of No. 25 MSG galv steel. 2-9/16 in. (65 mm) or 2-23/32 in. (69 mm) wide by 7/8 in. (22 mm) deep, spaced 24 in. (610 mm) OC perpendicular to studs. Channels secured to each intersecting stud with 1/2 in. (13 mm) long Type S-12 pan-head steel screws or as described in Item 2E. When Item 2E is used, ends of adjoining channels are overlapped 6 in. (152 mm) and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate for when Item 2E is used, ends of adjoining channels may be overlapped 6 in. (152 mm) and secured together with two self-tapping No. 6 framing screws, min 7/16 in. (11 mm) long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2F.

E. **Framing Members** - (Alternate, not shown) - Used to attach furring channels (Item 2D) to studs (Item 2B). Clips spaced 48 in. (1.22 m) OC., and secured to studs with 1-5/8 in. (41 mm) wafer or hex head Type S steel screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 (2.75) clip for use with 2-9/16 in. (65 mm) wide furring channels. Rsicc-1 clip for use with 2-23/32 in. (69 mm) wide furring channels.

**PAC INTERNATIONAL L L C** - Types RSIC-1, RSIC-1 (2.75)

F. **Gypsum Board** - Gypsum board sheets installed to a min total thickness of 5/8 in. (16 mm) on each side of wall for 1 hr fire rated assembly. Wall to be constructed as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory, except that a nom 1/2 in. (13 mm) gap shall be maintained between the top of the gypsum board and the bottom surface of the floor. In addition, the top row of screws shall be installed into the steel studs 1/2 to 5 in. (13 to 127 mm) below the bottom edge of the ceiling runner flange.

G. **Insulation** - (Not shown) - Min R13 glass fiber insulation or 4 pcf (64 kg/m3) mineral wool batts installed within each stud cavity. Glass fiber insulation to be installed with the top 6 in. (152 mm) section of insulation folded back upon itself at the steel ceiling runner to double the density at this location.

3. **Joint System** - Max separation between bottom of floor and top of wall is 1/2 in. (13 mm). The joint system is designed to accommodate a max 100 percent compression or extension from its installed width. The joint system consists of the following:

A. **Fill, Void or Cavity Material** - Factory-supplied intumescent gasket installed over the ceiling runner (Item 2A through 2A3) prior to attachment to underside of concrete floor, per the installation instructions. Gypsum board layers to be installed on both sides of the wall maintaining a minimum 5/8 in. (16 mm) overlap over the intumescent gasket at time of installation. Gasket leg to be pinned facing upwards against gypsum board (Item 2F) on side of wall with resilient or furring channels (Item 2C or 2D).

**SPECIFIED TECHNOLOGIES INC** - Speed Flex Track Top Gasket

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