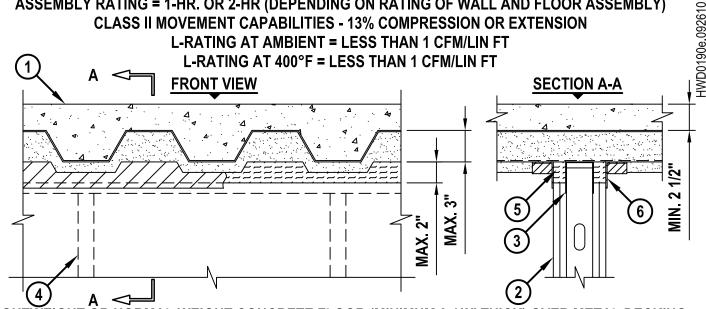
UL/cUL SYSTEM NO. HW-D-0190

TOP OF WALL JOINT: GYPSUM WALL ASSEMBLY

ASSEMBLY RATING = 1-HR. OR 2-HR (DEPENDING ON RATING OF WALL AND FLOOR ASSEMBLY) **CLASS II MOVEMENT CAPABILITIES - 13% COMPRESSION OR EXTENSION**

L-RATING AT AMBIENT = LESS THAN 1 CFM/LIN FT



- 1. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK) OVER METAL DECKING (UL/cUL CLASSIFIED D700 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (SEE NOTE NO. 1 BELOW).
- 2. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U400 OR V400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
- 3. CEILING RUNNER (MIN. 25 GA., FLANGE HEIGHT OF CEILING RUNNER SHALL BE MINIMUM 1/4" GREATER THAN MAXIMUM EXTENDED JOINT WIDTH) FASTENED TO UNDERSIDE OF DECK WITH MASONRY ANCHORS, STEEL FASTENERS, OR WELDS (SPACED MAX. 24" O.C.), PRIOR TO APPLYING FIREPROOFING (SEE NOTE NO. 2 BELOW).
- 4. STEEL STUDS (MINIMUM 2-1/2" WIDE), CUT 1/2" TO 3/4" LESS IN LENGTH THAN ASSEMBLY HEIGHT, **NESTING IN CEILING RUNNER WITHOUT ATTACHMENT.**
- 5. MINERAL WOOL (MIN. 4 PCF DENSITY) COMPRESSED 50% AND INSERTED INTO JOINT, FLUSH WITH WALL SURFACES.
- 6. MINIMUM 1/8" (WET) THICKNESS HILTI CFS-SP WB FIRESTOP JOINT SPRAY OR HILTI CP 672 SPEED SPRAY TO COMPLETELY COVER MINERAL WOOL AND TO OVERLAP MINIMUM 1/2" ONTO GYPSUM WALL. AND MINIMUM 2" ONTO FIREPROOFING, ON BOTH SIDES OF WALL ASSEMBLY.
 - NOTES: 1. STEEL FLOOR UNITS TO BE SPRAYED WITH 1-1/2" THICKNESS OF UL CLASSIFIED MONOKOTE TYPE MK-6/HY FIREPROOFING (MANUFACTURED BY W.R. GRACE) OR TYPE 300 FIREPROOFING (MANUFACTURED BY ISOLATEK, INT.). FIREPROOFING TO COMPLETELY FILL FLUTES, EXTENDING 5/8" OR 1-1/4" ON BOTH SIDES OF CEILING CHANNEL, FIREPROOFING IS TO BE EXCLUDED FROM THE VALLEYS OF THE METAL DECK DIRECTLY ABOVE THE GYPSUM BOARD.
 - 2. AS AN ALTERNATE TO CEILING RUNNER IN ITEM NO. 3, CEILING RUNNERS MANUFACTURED BY DBA SLIPTRACK SYSTEMS, BRADY CONSTRUCTION INNOVATIONS, INC., THE STEEL NETWORK, INC., CEMCO, CLARKWESTERN BUILDING SYSTEM, INC., SCAFCO, TELLING INDUSTRIES LLC, OR OLMAR SUPPLY, INC. MAY BE USED. WHEN ALTERNATE CEILING TRACKS ARE USED. CONSULT THE UL FIRE RESISTANCE DIRECTORY FOR INSTALLATION INSTRUCTIONS.



HILTI, Inc. Tulsa, Oklahoma USA (800) 879-8000

Sheet	1 of 1
Scale	7/64" = 1"
Date	June 29, 2010

Drawing No. 0190e