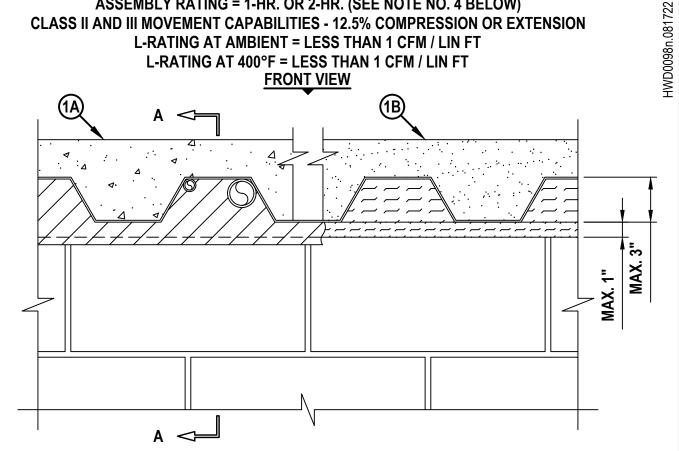
UL/cUL SYSTEM NO. HW-D-0098

TOP OF WALL JOINT: CONCRETE WALL OR BLOCK WALL ASSEMBLY

ASSEMBLY RATING = 1-HR. OR 2-HR. (SEE NOTE NO. 4 BELOW) CLASS II AND III MOVEMENT CAPABILITIES - 12.5% COMPRESSION OR EXTENSION L-RATING AT AMBIENT = LESS THAN 1 CFM / LIN FT L-RATING AT 400°F = LESS THAN 1 CFM / LIN FT



SECTION A-A 6 (3)



HILTI, Inc. Plano, Texas USA (800) 879-8000

| Sheet | 1 of 2 |
|-------|---------------|
| Scale | 5/32" = 1" |
| Date | Aug. 17, 2022 |

Drawing No. **HWD** 0098n

Saving Lives through Innovation and Education

UL/cUL SYSTEM NO. HW-D-0098

TOP OF WALL JOINT: CONCRETE WALL OR BLOCK WALL ASSEMBLY

ASSEMBLY RATING = 1-HR. OR 2-HR. (SEE NOTE NO. 4 BELOW)

CLASS II AND III MOVEMENT CAPABILITIES - 12.5% COMPRESSION OR EXTENSION

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

L-RATING AT 400°F = LESS THAN 1 CFM / LIN FT

HWD0098n.081722

- 1. FLOOR OR ROOF ASSEMBLY (1-HR. OR 2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK) OVER METAL DECKING (UL/cul classified D700 or D900 Series).
 - B. INSULATING CONCRETE (MIN. 2-1/4" THICK) OVER METAL DECKING (UL/cUL CLASSIFIED P900 SERIES).
 - C. [NOT SHOWN] FLUTED STEEL ROOF DECK WITH SPRAY-APPLIED FIREPROOFING (UL/cUL CLASSIFIED P700 SERIES).
- 2. CONCRETE WALL ASSEMBLY (1-HR. OR 2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 6" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
- 3. ANY COMBINATION OF THE FOLLOWING PENETRATING ITEMS MAY BE INSTALLED PARALLEL WITH AND WITHIN THE FLUTES OF THE STEEL FLOOR OR ROOF DECK (MAX. QTY. = 2) (SEE NOTE NO. 4 BELOW) :
 - A. MAXIMUM 1-1/2" NOMINAL DIAMETER PVC PLASTIC PIPE OR CONDUIT (RNC) (SCH 40) (SOLID CORE) (CLOSED PIPING SYSTEM) (SEE NOTE NO. 7 BELOW).
 - B. MAXIMUM 1/2" NOMINAL DIAMETER STEEL CONDUIT OR EMT.
- 4. MINERAL WOOL (MIN. 4 PCF DENSITY) COMPRESSED 33% AND INSERTED INTO JOINT, FLUSH WITH BOTH SIDES OF WALL.
- 5. HILTI CP 777 SPEED PLUGS FRICTION FITTED TO COMPLETELY FILL FLUTE, FLUSH WITH BOTH SIDES OF WALL (SEE NOTE NO. 3 BELOW).
- 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 CONCRETE WALL OR CONCRETE BLOCK WALL, PENETRATING ITEMS, AND METAL DECK ON BOTH SIDES OF WALL ASSEMBLY.
 - NOTES: 1. STEEL FLOOR UNITS MAY BE SPRAYED WITH A MINIMUM 5/16" THICKNESS TO MAXIMUM 1-3/4"
 THICKNESS OF UL CLASSIFIED MONOKOTE TYPE MK-6/HY FIREPROOFING (MANUFACTURED
 BY W.R. GRACE) OR TYPE 300 FIREPROOFING (MANUFACTURED BY ISOLATEK, INT.).
 - 2. WHEN THE STEEL DECK IS COATED WITH FIREPROOFING, HILTI FIRESTOP SPRAY SHALL OVERLAP THE WALL MINIMUM 1/2" AND OVERLAP THE FIREPROOFING MINIMUM 2" ON BOTH SIDES OF THE WALL.
 - 3. AS AN ALTERNATE TO HILTI CP 777 SPEED PLUGS, MINERAL WOOL (MIN. 4 PCF DENSITY) COMPRESSED 33% MAY BE USED.
 - 4. WHEN THROUGH PENETRANT(S) ARE INSTALLED IN FLUTES OF STEEL DECK, THE HOURLY RATING OF THE JOINT SYSTEM IS 1-HR., AND L-RATINGS DO NOT APPLY.
 - 5. ANNULAR SPACE BETWEEN PENETRANTS AND STEEL DECK OR SPRAY APPLIED FIRE RESISTIVE MATERIAL SHALL BE MINIMUM 0".
 - 6. ANNULAR SPACE BETWEEN PENETRANTS WITHIN FLUTE = MINIMUM 2".
 - 7. USE OF PVC PLASTIC PIPE OR RNC CONDUIT (ITEM 3A) IS NOT APPLICABLE IN CANADA.



HILTI, Inc. Plano, Texas USA (800) 879-8000 Sheet 2 of 2

Scale
Date Aug. 17, 2022

HWD 0098n