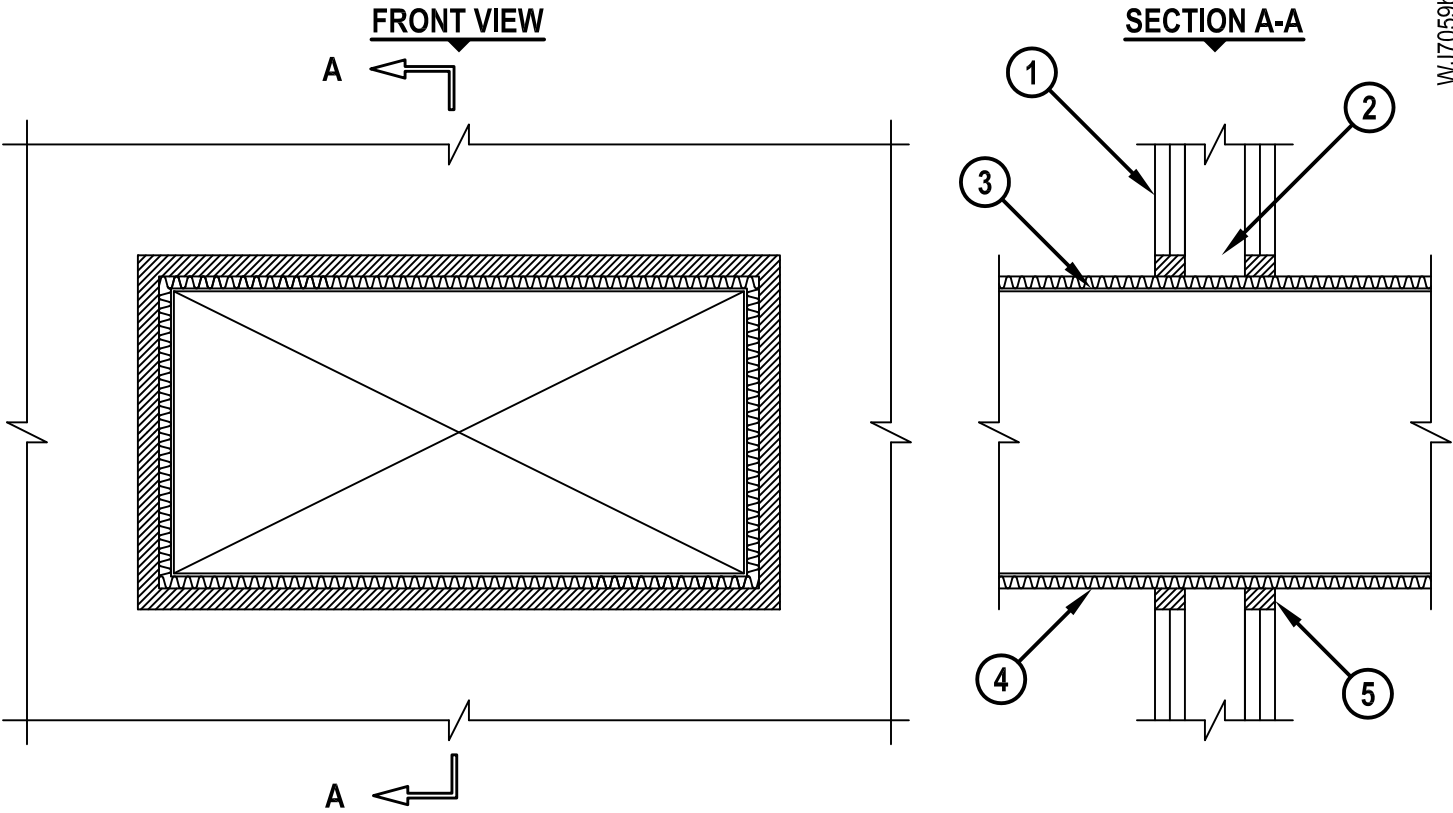


**INSULATED METAL DUCT (WITHOUT DAMPER) THROUGH GYPSUM WALL ASSEMBLY**

F-RATING = 1-HR. OR 2-HR.  
T-RATING = 1/2-HR. OR 3/4-HR.

WJ7059b.011415



1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR. SHOWN).
2. [NOT SHOWN] STEEL STUDS TO BE MINIMUM 2-1/2" WIDE. OPENING TO BE "FRAMED OUT" ON ALL SIDES OF OPENING WITH LIGHTGAGE METAL STUD MATERIAL.
3. MAXIMUM 24" x 12" RECTANGULAR SHEET METAL DUCT (MINIMUM 24 GA.).  
(NOTE : NOT FOR USE IN DUCT SYSTEMS CONTAINING A FIRE DAMPER)
4. MAXIMUM 1-1/2" THICKNESS GLASS FIBER DUCT INSULATION (MIN. 3/4 PCF DENSITY) WITH FOIL-SCRIM-KRAFT FACING. (SEE NOTE NO. 2 BELOW).
5. HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT :  
A. MINIMUM 5/8" DEPTH OF SEALANT FOR A 1-HR. FIRE-RATING.  
B. MINIMUM 1-1/4" DEPTH OF SEALANT FOR A 2-HR. FIRE-RATING.

NOTES : 1. MAX. AREA OF OPENING = 395 SQ. IN. WITH A MAX. DIM. OF 26-3/4".  
2. INSULATION SHOULD BE COMPRESSED 50% SUCH THAT THE ANNULAR SPACE = MIN. 1/4", MAX. 1".



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

Sheet	1 of 1
Scale	3/32" = 1"
Date	Jan. 14, 2015

Drawing No.  
**WL  
7059b**