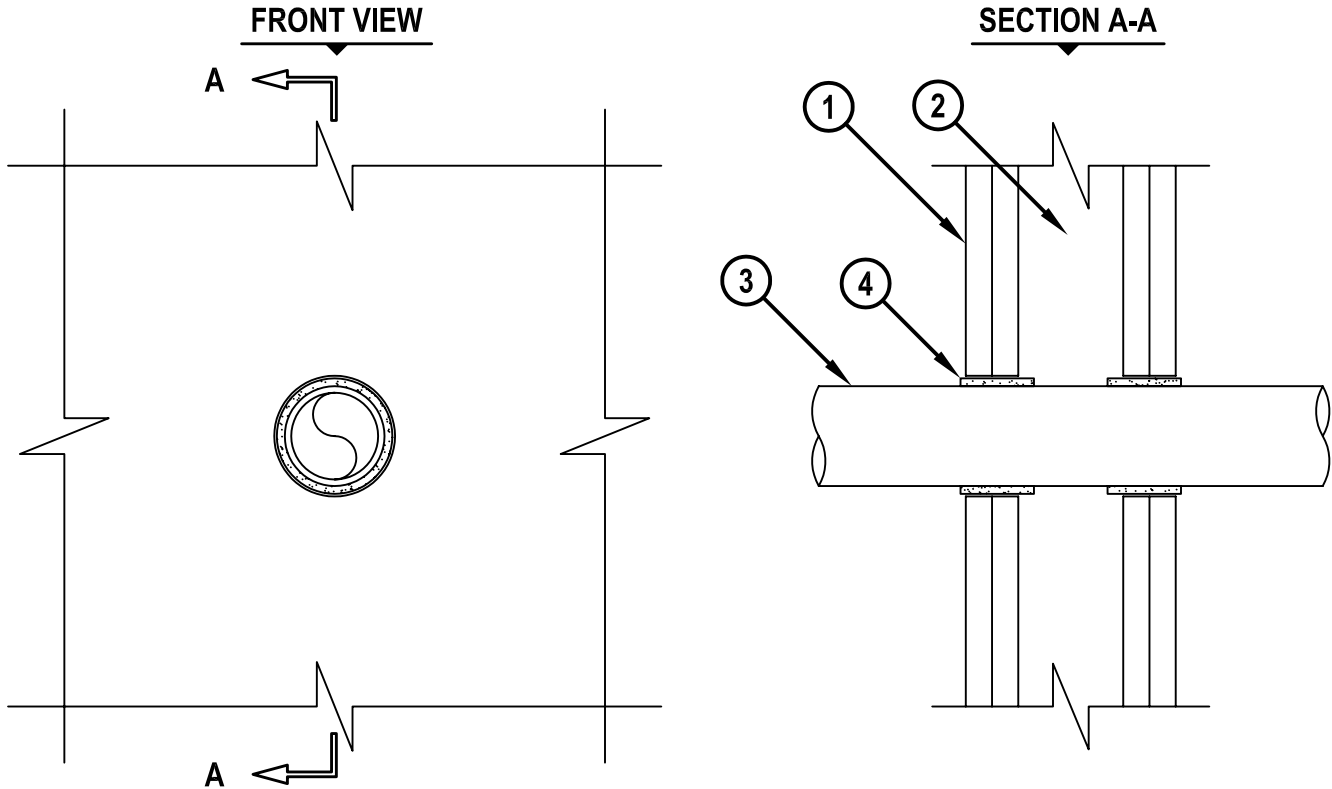


**PLASTIC PIPE THROUGH 2-HR. GYPSUM WALL ASSEMBLY**

F AND FH-RATING = 2-HR.  
 FT AND FTH-RATING = 1-HR.

NOTE : TESTED WITH A 50 Pa PRESSURE DIFFERENTIAL

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1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U300 OR U400 SERIES) (2-HR. FIRE-RATING).
2. [NOT SHOWN] WOOD STUDS TO CONSIST OF NOMINAL 2" x 4" LUMBER. STEEL STUDS TO BE MINIMUM 2-1/2" WIDE.
3. MAXIMUM 2" NOMINAL DIAMETER PVC PLASTIC PIPE (SOLID CORE).
4. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND THE OUTER CIRCUMFERENCE OF THE PIPE, COVERING ONE TIME, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE. WRAP STRIP TO BE SLID INTO ANNULAR SPACE, SUCH THAT 1/8" OF THE WRAP STRIP PROTRUDES FROM THE WALL SURFACE. WRAP STRIPS REQUIRED ON BOTH SIDES OF THE WALL.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 3-5/8".  
 2. AS AN ALTERNATE TO ITEM NO. 4 ABOVE, TWO LAYERS OF HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1" WIDE) MAY BE INSTALLED.  
 3. ANNULAR SPACE = NOMINAL 1/4" FOR ONE WRAP, NOMINAL 1/2" FOR TWO WRAPS  
 4. VENTED PIPING SYSTEM (PVC = SCHEDULE 40).



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Sheet	1 of 1
Scale	7/32" = 1"
Date	MAY 27, 2005

Drawing No.  
**cUL**  
**WL2020b**