



Airflow Direction Inc.

Toll Free Tel: (800) 334-4545 ⇔ Toll Free Fax: (800) 257-3555
www.airflowdirection.com

ADI TECHNICAL BULLETIN – CMU & POURED CONCRETE WALLS **(18" WALL MAXIMUM)**

SUBJECT: Wall Hole Size Requirements for CMU and Poured Concrete Walls.

DATE: June 6, 2013

ISSUE: How do you prepare a hole in the wall for the install of ADI'S BALL-IN-THE-WALL® within: hollow CMU "block" walls; CMU walls backfilled with mortar; and poured concrete walls?

DISCUSSION:

IMPORTANT: AFTER READING BELOW AND DETERMINING HOW THE HOLE SHOULD BE MADE, INCLUDING ANY VERTICAL OFFSETS, BE SURE EACH 6" ESCUTCHEON PLATE ON EACH SIDE OF THE WALL WILL CLEAR DOOR HEADERS AND CEILINGS. PRIOR TO DRILLING, CHECK FOR STRUCTURAL, MECHANICAL & ELECTRICAL ITEMS IN THE WALL AS SERIOUS BODILY INJURY OR DEATH COULD RESULT FROM DRILLING INTO A WALL CONTAINING STRUCTURAL, MECHANICAL OR ELECTRICAL SERVICES.

1. For hollow **CMU walls** that will remain hollow, use a carbide-tipped hole saw straight and horizontally level between both sides of the wall using a 3-1/2" O.D. hole saw for 4" & 6" Nominal CMU and use a 4" O.D. hole saw for 8", 10" & 12" Nominal CMU.
2. For hollow **CMU walls** that will be backfilled with mortar or cement, BUT not yet poured, use a 4"O.D. carbide-tipped hole saw straight and horizontally level between both sides of the wall. Then use a 3-1/2" NOMINAL EMT Sleeve (electrical metallic tubing with 4"O.D.) installed horizontally level and flush with the wall surfaces.
3. For formed, **poured concrete walls** that have not yet been poured, ADI recommends using a 3-1/2" NOMINAL EMT Sleeve (electrical metallic tubing with 4"O.D.) installed horizontally level and flush with the wall surfaces.
4. For **solid CMU, backfilled CMU walls and formed walls already poured**, use a 4"O.D. core drill straight and horizontally level between both sides of the wall and please note:
 - a. For walls less than 6-1/2" overall, the two 6" escutcheon plates (one on each side of the wall) are mounted centered about the 4" core hole. The escutcheon is mounted with two anchors that must be installed on the horizontal.
 - b. For walls 7" to 18" overall, the two 6" escutcheon plates (one on each side of the wall) are mounted with a vertical offset, 1/2" in opposite directions. For example, for a positive pressure room, the inside 6" escutcheon is vertically lowered by 1/2" and the outside 6" escutcheon is vertically raised by 1/2" to yield a total of 1" vertical offset. The 6" escutcheon is mounted with two anchors that must be installed on the horizontal. The 4"O.D. plates that hold the tube have adjustments to obtain the required final pitch. - END