

PLUMBING AND MECHANICAL
INTERPRETATION MANUAL



CODE: 2003 IRC, IMC

DATE:

CODE REF: IMC Section 305.5 or IRC M1308.2

6/20/2006

SUBJECT: Protection against physical damage

Question: Does section 305.5 apply to duct systems.

Answer: IMC Section 305.5 of the 2003 IMC and M1308.2 of the IRC states:

305.5 & M1308.2 Protection against physical damage.

In concealed locations where ***pip*****ing**, other than cast-iron or steel, is installed through holes or notches in studs, joists, rafters or similar members less than 1.5 inches (38 mm) from the nearest edge of the member, the pipe shall be protected by shield plates. Protective shield plates shall be a minimum of 0.062-inch-thick (1.6 mm) steel, shall cover the area of the pipe where the member is notched or bored, and shall extend a minimum of 2 inches (51 mm) above sole plates and below top plates.

You will note that the key word is "***pip*****ing**". The definition of piping in the IMC and IRC is defined as:

PIPING. Where used in this code, "piping" refers to either pipe or tubing, or both.

Pipe. A rigid conduit of iron, steel, copper, brass or plastic.

Tubing. Semirigid conduit of copper, aluminum, plastic or steel.

Section 305.5 and 1308.2 requires that piping be protected by shield plates as described in the code. Therefore, duct is not considered as piping (see definition below) and is not required to be shielded and is not covered by this section. Duct work passing through holes, notches in studs, joists, rafters or similar members do not require protection. This may be a good practice to protect the duct but is not required by code.

DUCT. A tube or conduit utilized for conveying air. The air passages of self-contained systems are not to be construed as air ducts.

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