

**STATE OF OREGON
BUILDING CODES DIVISION**

**STATEWIDE INTERPRETATION
No. 1209.2
OREGON MECHANICAL SPECIALTY CODE**

SUBJECT: **Testing of Hydronic Piping Systems**

CODE SECTION: Oregon Mechanical Specialty Code, Section 1209.2

CODE EDITION: 2002 Edition of the *Oregon Mechanical Specialty Code*.

DATE: April 1, 2004

QUESTION: Section 1209.2 requires hydronic piping, which will be embedded in concrete, to be tested prior to pouring. What is the testing criteria for these embedded systems? Does this test need to be a hydrostatic test or can it be a pneumatic air test? How long does the test need to be on the system?

ANSWER: Section 1209.2 makes a generic statement that a test is required prior to pouring, Section 1208.1 specifies the testing criteria for all hydronic piping systems, whether embedded or not, with the exception of ground-source heat pump loop systems. The code requires a **hydrostatic** test of 1½ times the maximum system design pressure, but not less than 100 psi. Although the current code does not specify a test duration, the 2004 *Oregon Mechanical Specialty Code* which goes into effect October 1, will specify 15 minutes as the duration for the test. Furthermore, Section 1209.2 requires; “During pouring, the pipe shall be maintained at the proposed operating pressure.”

Note:

The current *Oregon Dwelling Specialty Code*, Section M2103.3 has the same prescriptive requirements found in Section 1208.1 for testing of embedded hydronic systems with one exception, the test duration is 30 minutes instead of the 15 minutes found in the 2004 *Oregon Mechanical Specialty Code*.