



Installing Warmboard Over an Existing Concrete Slab

Benefits

Installing Warmboard over an existing concrete slab can retrofit a basement or home remodel with a state of the art radiant floor heating system. Finish floor options include the broad range available with a Warmboard system such as hardwood, tile, carpet, and linoleum.

Concrete Slab Requirements

The existing slab must be level. A newly poured slab needs to be well cured which requires a minimum of 28 days. A moisture test should be conducted prior to installation to ensure the slab is properly cured. The slab must have sufficient drainage from rain and snow on a year round basis. If Warmboard panels are exposed to any standing water or any moisture problems, the wood will rot. Do not use Warmboard if these environmental conditions are possible.

When Warmboard is being installed over an existing slab, it is crucial for the panels never to be exposed to weather. If the Warmboard panels are exposed to rain or snow, the moisture will be trapped in the panel and wood rot will take place.

Testing For Moisture

There are several possible methods by which to test the moisture content of a newly poured slab, the simplest being "The Plastic Sheet Method" (ASTM D 4263-83). For this method, seal an 18-inch x 18-inch square of clear plastic sheet to the slab with tape on all 4 sides. If, after 16 hours, any condensation is found on the underside of the plastic or if the surface of the concrete is darkened, the concrete is considered too wet for coating application. Do not allow the sheet to come in contact with direct sunlight or excessive heat.

It is possible for this particular method to yield a false result, giving the impression that the slab is fully cured, when in fact it still contains moisture. For example, in cooler conditions, the concrete may retain its moisture and fail to condense on the plastic. However, an obvious appearance of moisture in this method almost always indicates excessive moisture.

With the Plastic Sheet Method, the best way to ensure a reliable result is to make sure that the surface temperatures and ambient conditions during the test are very similar to those present after the Warmboard is installed.

If no moisture test is conducted, we recommend giving a newly poured slab 90 days to cure fully.

Installation Method #1

Install a vapor retarder directly to the slab. We recommend either a 6-mil or a 10-mil polyethylene overlapped two feet (2') at the seams. Continue with Warmboard panel installation with the use of Tap Con concrete fasteners. We recommend a minimum of 21 fasteners for each panel.

Installation Method #2

Install a vapor retarder directly to the slab. We recommend either a 6-mil or a 10-mil polyethylene overlapped two feet (2') at the seams. Continue by installing 2" x 4" pressure treated sleepers attached to the slab (flat framed) on 24" centers with Tap Con fasteners. Insulate the cavity between the sleepers with rigid foam insulation. To complete the procedure, install Warmboard panels and fasten them to the sleepers with screws or ring shank nails and construction adhesive.

An excellent resource for a combination vapor retarder and rigid foam insulation can be found at: www.thebarrierinsulation.com.

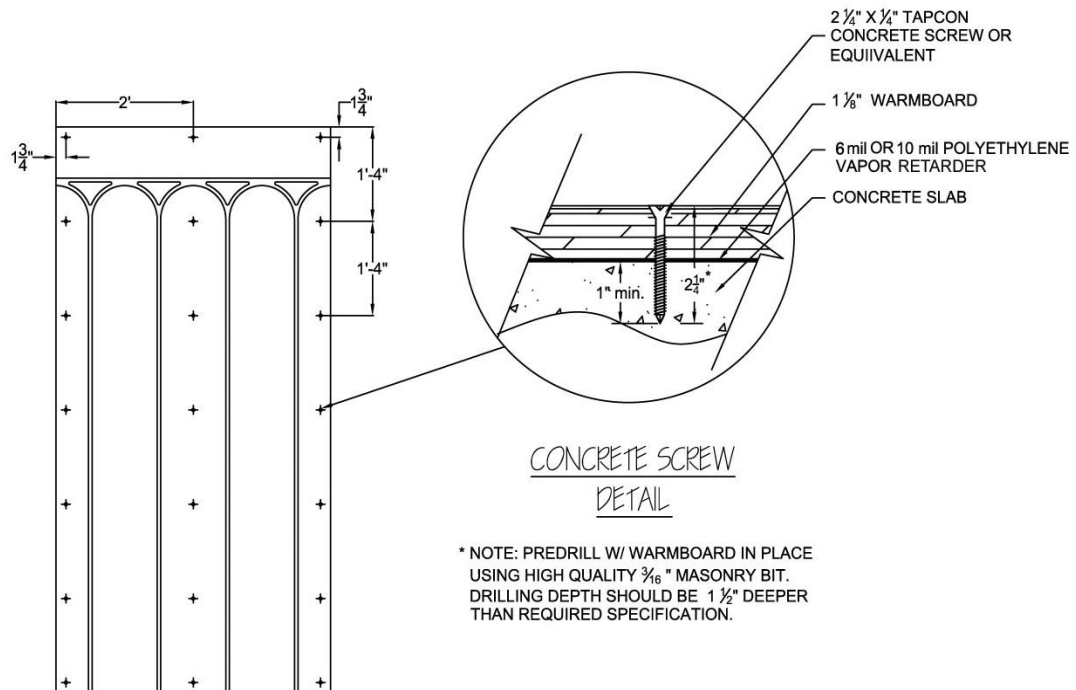
Installation Tip

Before installation of a Tap Con fastener, drill a pilot hole 1.5" deeper than the Tap Con will reach. Draw the bit in and out of the pilot hole repeatedly to loosen excess material. Then remove the excess using a shop vacuum.



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Warmboard Over Concrete Fastening Detail



Warmboard Over Sleepers

