

Inquiry Number: 2015-02

Subject: Minimum Specified Compressive Strength of Concrete Footings

Code: 2015 Minnesota Residential Code

Table R402.2 - Minimum Specified Compressive Strength of Concrete Footings

Approved By: Scott McLellan, State Building Official

Issue Date: May 6, 2015

Question:

Amended table R402.2 of the 2015 Minnesota Residential Code specifies 5,000 psi concrete or 2500 psi concrete with approved admixtures for footings. Does this requirement apply to all types of residential footings?

Answer:

The purpose of the requirement is to prevent ground moisture from entering the house by passing through footings and concrete or masonry block foundation walls that enclose basements or crawl spaces.

The requirement is not intended to apply to post footings for decks or porches, wood foundations, slab-on-grade foundation walls and footings or floating slabs.

Background:

Minnesota Statute 326B.118 requires that a model energy code not be adopted without "research and analysis" that addresses at a minimum, air quality, building durability and moisture. To view 326B.118, go to https://www.revisor.mn.gov/statutes/?id=326B.118.

Research and analysis was conducted that investigated "the occurrence of significant condensation on the interior surface of any interior condensation plane." The interior surface of foundation walls was the focus of the research. To view the research, go to http://www.dli.mn.gov/CCLD/PDF/foundation_report.pdf