City of RAMSEY
7550 Sunwood Drive NW | Ramsey, MN 55303
Building 763-433-9850
Planning 763-433-9824
www.cityoframseymn.gov/permits
permits@cityoframseymn.gov

Cold Weather Concrete & Masonry Construction Requirements



This handout is a compilation of some of the standard requirements of the 2020 Minnesota Residential Code and City Zoning Code for projects of this type. This handout does not contain all of the specific code requirements for construction and should only be used as a guide. The permit holder is responsible to meet all code requirements applicable to each project.

Cold Weather Concrete & Masonry

The following Standards will be enforced for cold-weather masonry and concrete construction in one- and two-family dwellings in the City of Ramsey, per MSBC 1300.0110 Subpart 13. These standards are from ACI 318, which is adopted by reference. Failure to comply with these standards will result in a stop-work order for this type of work.

Concrete: Footings and/or Poured Walls

- No work is to commence, and no inspections will be done unless at 6:00 am, in Ramsey, the ambient air temperature is 0 degrees Fahrenheit or higher and expected to rise, and there is no significant wind.
- All concrete must be heated to a minimum temperature of 50 degrees Fahrenheit (measured on site) for placement.
- After forming, adequate insulation blankets must be used to prevent frost from penetrating soils.
- Immediately after concrete placement, insulation blankets must be placed over the heated concrete.
- On poured walls, insulating blankets must be draped over the top of all new work.
- All reinforcement and formwork must be free of snow, ice and debris.
- No concrete shall be placed on frozen soils.
- For finished flatwork, an enclosure capable of sustaining air temperature conditions of not less than 40 degrees Fahrenheit is required.
- No forms may be removed, nor shall any masonry work be constructed on freshly poured concrete footings within 6 hours of placement.
- In general, chloride admixtures in concrete shall not exceed 2%. Admixture use shall be in accordance with ACI 318-05.

Masonry Construction and Grouting

- No work is to commence unless, at 6:00 a.m., in Ramsey, the ambient air temperature is 0 degrees Fahrenheit or higher and expected to rise, and there is no significant wind.
- If wind conditions are 15 MPH or greater, wind breaks are required and must be maintained for all areas under construction.
- At temperatures of 40 degrees or less, all materials must be heated to produce mortar and grout between 40 and 120 degrees Fahrenheit.
- All masonry products, including rebar and foundation anchors, must be free of ice, snow, or debris. Keep all cement blocks covered and dry until use. Frozen products shall not be used.
- At the end of each working period or day, when temperatures are 25 degrees or lower, all work shall be covered on both sides from the top of the wall to the footing.