Cold Weather Concrete Guidelines

Planning & Development Services | Building Safety Division

www.lawrenceks.org/pds/building-safety

The following may be used as the basis for allowance or denial of concrete pours in cold weather. The intent of these guidelines is to closely follow the American Concrete Institutes Standard ACI 318, Standard Specifications for Cold Weather Concreting, as referenced by the International Building Code and International Residential Code.

1. The temperature must be 20°F and rising to pour footings.
2. The temperature must be 30°F and rising to pour walls and floor slabs.
3. When the air temperature is below 40°F, or forecast to fall below 40°F during the next 24 hours, weather protection must be on the jobsite in order to pass inspection. Blankets, straw, and tented plastic with heat may be considered adequate for weather protection.
4. Pouring concrete on frozen sub-grade is not allowed.
5. There shall be no ice or snow on forms, reinforcement, or ground with which concrete is to come in contact.
6. Concrete must be air entrained between 5% and 7%.
7. When pouring conventional concrete during “cold weather” conditions, the concrete shall be protected for 72 hours (3 days).
8. When pouring concrete utilizing approved accelerators, Type III Portland Cement – or where the cement ration is increased 100 lbs. per cubic yard – the concrete shall be protected for 48 hours (2 days).
9. If the inspector believes the concrete has not been properly protected as described above or per another approved method, the inspector may require the concrete be tested in order to ensure the proper strength of the concrete has developed.

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