



COLD WEATHER CONCRETE PLACEMENT

SYRACUSE
EST. CITY 1935

Please note the new changes in the 2012 edition of the International Building Code.

1905.11 IBC regular (type I-II concrete):

Concrete (other than high early strength concrete) shall be maintained above 50° F and in a moist condition for at least the first 7 days after placement except when using approved accelerated curing in accordance with ACI 318 section 5.11.3.

High early strength concrete shall be maintained above 50° and in a moist condition for at least the first 3 days except when using approved accelerated curing methods in accordance with ACI 318, section 5.11.3.

1905.12 IBC

Cold weather requirements: Concrete that is to be placed during freezing or near freezing weather shall comply with the following:

1. Adequate equipment shall be provided for heating concrete materials and protecting concrete during freezing or near freezing weather.
2. Concrete materials and reinforcement, forms, fillers, and ground with which concrete is to come in contact shall be free from frost.
3. Frozen materials or materials containing ice shall not be used.

The 2012 International Building Code requires concrete to be kept above 50° F. The methods of required protection are no longer outlined. It is the contractor's responsibility to ensure the concrete is maintained at the proper temperatures.

In lieu of strict compliance with the Building Code requirements for maintaining 50° Syracuse City Building Department will accept the following guidelines as acceptable protection of concrete pours during cold weather.

The following guidelines are for Type-III cement. There may be different requirements if other cement types are used.

- Air temperature of 30° F to 25° F:
Provide a weather resistive membrane for a minimum of 3 days.
- Air temperature of 25° F to 20° F:
Provide insulation covered by a weather resistive membrane for a minimum of 3 days.
- Air temperature below 20° F:
Provide supplemental heat in an enclosure for a minimum of 3 days.

The required protection must be onsite and all materials that will be in contact with concrete must be free from frost at the time of inspection.

**Brian Lemmons, Building Official/Inspector (801-614-9676)
1979 W. 1900 S., Syracuse, Utah 84075**