



## COLD WEATHER CONCRETE INFORMATION

As temperatures plummet, please find the following information as referenced within the 2006 edition of the International Building Code (IBC) and standards set forth by the American Concrete Institute (ACI) as a reminder regarding the placement of concrete during the colder months.

### **1905.12 IBC/ACI 318:**

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

### **1905.12 IBC/ACI 318 (High Early Strength Concrete):**

High early strength concrete shall be maintained above 50°F 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/ACI 318:**

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.

Per ACI specifications, concrete is 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 code requirements for maintaining 50°F, the Building Department will accept the following guidelines as acceptable protection of concrete pours during cold weather.**

The following guidelines are for **High Early Strength Concrete** (Type-III Cement). There may be different requirements if other cement types are used.

❖ *Air temperature of 32°F to 20°F:*  
Provide 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.

Required protection must be on-site and all materials that will be in contact with concrete must be free from frost at the time of inspection. Inspections are to be scheduled no more than 48-hours of the intended pour.