



City of Aurora

Division of Building and Permits • 65 Water Street • Aurora, Illinois 60505-3305 • (630) 256-3130
 FAX (630) 256-3139

October 2014

Cold Weather Concrete Work

Aurora Utilizes the American Concrete Institute Standard ACI 306R

COLD WEATHER CONCRETE				
OUTSIDE AIR TEMP	MINIMUM DIMENSION OF CONCRETE			
	< 12"	12"-36"	36"-72"	> 72"
	MIN. TEMPERATURE OF CONCRETE AS MIXED			
> 30 °	60 °	55 °	50 °	45 °
0 – 30 °	65 °	60 °	55 °	50 °
< 0 °	70 °	65 °	60 °	55 °
MIN. CONCRETE TEMPERATURE AS PLACED AND MAINTAINED				
	55 °	50 °	45 °	40 °
MAX. ALLOWED GRADUAL TEMPERATURE DROP WITHIN FIRST 24 HOURS AFTER PROTECTION PERIOD HAS ELAPSED. (INSUL. SHOULD BE GRADUALLY REMOVED)				
	50 °	40 °	30 °	20 °

PROTECTION PERIOD		
CATEGORY	CONCRETE TYPE	DAYS
NO LOAD NOT EXPOSED (Not subject to early load prior to curing and below grade)	I OR II	2
	III	1
NO LOAD EXPOSED (Surfaces exposed to freezing and wind and weather but no early load requirements)	I OR II	3
	III	2
PARTIAL LOAD EXPOSED (Exposed to the weather and partial early loading)	I OR II	6
	III	4

CEMENT CHARACTERISTICS	
TYPE I	GENERAL USE
TYPE II	GENERAL USE; MODERATE HEAT OF HYDRATION AND MODERATE SULFATE RESISTANCE
TYPE III	HIGH-EARLY-STRENGTH

*****GRADE IN CONTACT WITH CONCRETE**

Requires Soil Temp of 35 ° +/- (above freezing) snow, ice, frost must be removed

INSULATION MATERIALS ALLOWED

1. POLYSTYRENE FOAM SHEETS
2. URETHANE FOAM WITH WEATHER RESISTANT ENAMEL
3. FOAMED VINYL BLANKETS
4. MINERAL WOOL OR CELLULOSE FIBERS
5. STRAW WITH PROTECTIVE COVER
6. BLANKET OR BATT INSULATION WITH MOISTURE PROOF COVER