

Cold Weather Concrete Pour/Protection

Procedure Requirements



Date of Review:		Project Subcontractor:	Projected Temp Range:
			Projected Pour Date:
			Day 1:
			Day 2:
Project:	#		Day 3:

Cold Weather Concrete Pour/Protection Procedure Requirements

Special precautions are required when placing, finishing, curing, and protecting concrete against the effects of the cold weather. Weather conditions can change rapidly in winter, good concrete practices and proper planning are essential for a high quality product.

\checkmark	N/A	When temperature falls below 40°F three (3) consecutive days.	
\checkmark	N/A	Attach the Subcontractors procedures for cold weather concrete.	
\checkmark	N/A	List the approved cold weather additives:	
\checkmark	N/A	The relative percentage of fly ash may be reduced, increasing the amount of Portland cement, which will increase the rate of set & strength. However, durability will likely be compromised ALWAYS SEEK A/E APPROVAL FIRST.	
\checkmark	N/A	<u>Concrete should be placed at the lowest practical</u> <u>slump, as this reduces bleeding and setting time</u> . We should NOT be adding water <i>Adding 1-2</i> gallons of water/cy will delay the set time by 1-2 hours which will increase the setting & strength gain .ALWAYS SEEK A/E APPROVAL FIRST.	
\checkmark	N/A	Design Slump: Target Slump:	
\checkmark	N/A	Concrete Less than 12" Thickness: (Target Temp = 55°)	12" - 36"36" - 72"(Target Temp = 50°)(Target Temp = 45°)

\checkmark	N/A	Requested temperature from the plant:	
\checkmark	N/A	Snow, Ice, & Frost must be removed prior to pour.	
\checkmark	N/A	We must protect concrete from freezing until the concrete reaches about 500psi, which is typically <u>2 full days at 50°F</u> . (concrete temp) This will be longer if the concrete temperature is lower.	
\checkmark	N/A	Have all insulating materials ready and convenient. Do not store in a deicer location.	







\checkmark	N/A	Will Ground Warming / Protection be Required? If yes, type of warming / protection:	
\checkmark	N/A	Rebar needs to be above 32°F prior to pour, which will require insulating rebar prior to pour.	
\checkmark	N/A	Will Rebar Warming / Protection be Required? If yes, type of warming / protection:	
\checkmark	N/A	Where will the protection be located prior to the pour?	
\checkmark	N/A	Concrete Protection Type of warming / protection:	
\checkmark	N/A	We need to "gradually" remove the insulation from the surface to avoid thermal shock.	
\checkmark	N/A	Corners and edges are most susceptible to heat loss and will need special attention.	
\checkmark	N/A	How long will the protection be in place after finishing:	
\checkmark	N/A	If fossil fuel is being used to heat the space, the space must be vented in order to prevent carbonization of the slab, which will cause dusting.	
\checkmark	N/A	Do not use a "jitterbug" or vibrating screed as this will produce a weak layer of paste on surface.	

Additional Comments:				
Sign & Date:				

