**Martin Concrete Construction** **– Cold Weather Pour as of 2/25/2022**  Note: This information is found from using American Concrete Institute Standards.

Items regarding the placement of concrete in cold weather. Please follow these rules when prepping to pour, during pour, and after pour of concrete:

* Verify contract on who is responsible for paying for cold weather pours – Hot Water, Accelerators, Blankets, etc.
* Verify that concrete blankets are on site and that there are enough blankets to cover what is planned to be excavated/poured.
* Verify there is enough material to put on top of blankets to weight it down due to windy conditions.
* Verify Non-Chloride accelerators need to be used when using reinforcing steel.
* Verify with batch plant that they can deliver adequate temperature of concrete due to volume of needed materials.

 **Footings:**

1. Do not pour concrete on frozen grade (Use Temperature Gun To Verify) (Per ACI)
2. Subgrade must be protected from frost after excavation (Blankets). (Per ACI)
3. Do not excavate footings if there is not sufficient time to make a timely pour due to the forecasted weather, as this can cause costly overages of concrete due to cave in of the surrounding walls.
4. Forms and Reinforcing steel are to be protected (Blankets) from frost prior to placement of concrete. (Per ACI)
5. Wood forms should be kept in place for 48 hours prior to stripping. (Per ACI)
6. Minimum outside temperature of 32 degrees and rising. (Per ACI)
7. Subgrade must be free of ground water and loose clay (Muck) prior to placement of concrete. (Per ACI)
8. Concrete must be protected (Blankets) to maintain a concrete temperature of 55 degrees minimum. (Per ACI)
9. Protection (Blankets) must be in place until concrete has reached a minimum of 500 P.S.I., 5 days. (Per ACI)

 **Flatwork:**

1. Do not pour on frozen grade (Use Temperature Gun To Verify) (Per ACI)
2. Minimum outside air temperature of 32 degrees and rising. (Per ACI)
3. Subgrade/Stone is to be protected (Blankets) from freezing and free of any frost prior to placement. (Per ACI)
4. Protection (Blankets) of concrete is required to maintain a concrete temperature of 55 degrees. (Per ACI)
5. Protection (Blankets) of concrete is to be in place for a minimum of 5 days after concrete is poured. (Per ACI)

**Note:**

Cold Weather is technically defined as a period when, for more than 3 consecutive days, the average daily air temperature is less than 40 degrees F, and the air temperature is not greater than 50 degrees F for more than half of any 24 hour period.