

CONCRETE COLD WEATHER REQUIREMENTS

ALL CONCRETE

- 1. Any additive shall not diminish any of the concrete properties, strength, shrinkage, etc.
- 2. No accelerators to be added unless approved by engineer.
- 3. Where supplementary heat is provided, use approved concrete heaters with exhaust vented away from the surface of the concrete.
- 4. For temperatures below -10°C, check with engineer.

FORCASTED AIR TEMPERATURE NOT BELOW 2°C

- 1. If concrete temperature drops below 5°C at point of pouring, the mixing water shall be heated to maintain a minimum temperature of 10°C.
- 2. Concrete shall not be placed on or against any surface which is at a temperature of less than 5°C.
- 3. Contractor shall be prepared to cover foundation or slab on grade if unexpected drop in air temperature should occur.
- 4. Concrete temperature shall be maintained at or above 10°C for at least 3 days or until the concrete reaches 7 MPa strength. Confirm with site cured test cylinders.

FORECASTED AIR TEMPERATURE BELOW 2°C BUT NOT BELOW -4°C

- 1. Mixing water shall be heated to maintain a minimum concrete temperature of 10°C.
- 2. Concrete shall not be placed on or against any surface which is at a temperature of less than 5°C. DO NOT POUR ON FROZEN GROUND.
- 3. Forms and steel shall be free from ice and snow.
- 4. Temperatures below freezing; foundations to be covered with insulation blankets for the first 24 hours after pour. Slab on grade to be covered with insulation blankets for the first 36 hours after pour. Keep blankets off the concrete with 2x4 sleepers.
- 5. Concrete temperature shall be maintained at or above 10°C for at least 3 days or until the concrete reaches 7 MPa strength. Confirm with site cured test cylinders.

FORECASTED AIR TEMPERATURE BELOW -4°C BUT NOT BELOW -10°C

- 1. Mixing water shall be heated to maintain minimum concrete temperature of 10°C.
- 2. Concrete shall not be placed on or against any surface which is at a temperature of less than 5°C. DO NOT POUR ON FROZEN GROUND.
- 3. Forms and steel shall be free from ice and snow.
- 4. Temperatures below freezing; foundations to be covered with insulation blankets for the first 24 hours after pour. Keep blankets off the concrete with 2x4 sleepers.
- 5. Temperature of the concrete at all surfaces shall be kept at a minimum of 20°C for 3 days or 10°C for 7 days. Concrete shall be maintained above freezing temperatures until it reaches 7 MPa strength. Confirm with site cured test cylinders.
- 6. Any enclosures must be constructed to permit air circulation around the concrete.