

VILLAGE OF VERNON HILLS COLD WEATHER CONCRETE POLICY

1. Inspection must be scheduled for the same day as concrete is to be poured.
2. Sub grade and/or gravel base shall not be frozen. Forms must be free of snow and ice.
3. Footings, foundations and flat work.

Conditions	Requirements	Concrete Mix
Ambient temperatures above 40° F.	Normal construction practice	Normal concrete mix
Ambient temperatures between 40° F and 25° F for 72 consecutive hours.	<ol style="list-style-type: none"> 1. Soil adjacent to the footing or slab shall be covered with straw or insulation blankets for 72 consecutive hours after pouring concrete. 2. Forms shall remain in place for 72 consecutive hours after pouring concrete. 	<ol style="list-style-type: none"> 1. Winter mix (concrete between 50°- 80°). 2. Non chloride-accelerating admixture in concrete. 3. Do not add any water to concrete on job site. 4. Calcium chloride shall not be used in the concrete.
Ambient temperature between 25° F and 15°F for 72 consecutive hours.	<ol style="list-style-type: none"> 1. Adjacent soil and concrete shall be completely covered (top and sides) with straw or insulation blankets to maintain 50° F for 72 consecutive hours after pouring concrete. 2. Forms shall remain in place for 72 consecutive hours after pouring concrete. 	<ol style="list-style-type: none"> 1. Winter mix (concrete between 50°- 80°). 2. Non chloride-accelerating admixture in concrete. 3. Do not add any water to concrete on job site. 4. Calcium chloride shall not be used in concrete.

No flat work shall be poured when the ambient temperature is predicted to be below 25° F within 72 consecutive hours unless the work area is completely enclosed with heat provided to maintain a temperature of 50° F for 72 consecutive hours.

4. Protection

Footings and soil adjacent to footing must be protected from freezing at all times. Protective covering on the exterior side of the footing shall remain in place until just prior to backfilling of foundation. Protective covering on the interior side of the footing shall remain in place until heat is provided in the basement. Foundation walls shall be covered with insulation blankets, on both sides, from the top of the wall to the footing. All concrete protective coverings shall be tight fitting and well secured so as to prevent air infiltration from compromising the integrity of the insulation system. Straw or insulation blankets shall be on job site at time of inspection. **Forms, straw and insulation blankets shall remain securely in place until the end of the minimum protection period.**

5. Verification

In order to document that the proper additives have been blended in the concrete mix, load tickets shall be provided to the Community Development Dept. within 24 hours of pouring concrete. Forecasted temperatures shall be based on "The Weather Channel" (weather.com).

This policy is general in nature and may not be all-inclusive. This does not waive any other requirement for proper construction as set by the specifications or good engineering practices i.e. ACI 306R-88. Failures to adhere to this policy will result in a requirement for additional engineering, and testing of the concrete to determine its strength and integrity. Concrete that does not meet minimum standards shall be removed and replaced.