



CONCRETE BASICS

Know Them
and Use Them

COLD WEATHER CONCRETING TIPS No. 4

1. Cold weather practices should start when temperatures are consistently below 40 degrees Fahrenheit.
2. Use air entrained concrete-it's less likely to be harmed by freezing.
3. Don't place concrete on a frozen subgrade.
4. If frost is only a few inches deep, cover the grade with insulating blankets, or straw, for 2 or 3 days before concreting.
5. Take advantage of an accelerator in the mix-calcium chloride usually is the cheapest, but be sure the spec allows it.
6. A noncorrosive accelerator may be required; high early strength cement, non-chloride admixtures, or additional cement (about 100 pounds per cu. yd.)
7. Concrete must not freeze for 2 to 3 days, or before it reaches a strength of 500 psi.
8. Curing should be at a temperature of 50 degrees Fahrenheit, or more, for continued strength gain.
9. Outdoor flatwork in freezing temperatures is risky, even when covered with blankets or straw.
10. Humidity is low in heated enclosures. Apply immediate curing to prevent surface drying when concreting in heated enclosures.
11. Vent heaters to the outside of heated enclosures. Carbon dioxide on fresh concrete causes dusting.