

TABLE 19.3
SUMMARY OF COLD WEATHER PRECAUTIONS

1. Plan ahead. Provide heaters, enclosures and protective materials before they are needed.
2. Arrange for extra cement, Type III cement or accelerating admixture.
3. Handle concrete with a minimum of delay.
4. Heat the water and aggregates.
5. Use admixtures carefully, as directed.
6. Use air-entrained concrete.
7. Remove snow, ice and frost from subgrade and all surfaces to be in contact with the concrete.
8. Provide insulation or heated enclosures as necessary.
9. Heat enclosures with steam or blowers rather than stoves or salamanders.
10. Protect concrete from drying out until the expiration of curing period.
11. If salamanders are used, vent them outside the enclosure and raise them above the surface of the concrete.
12. Leave forms in place as long as possible.
13. Maintain concrete temperature at 55°F, 50°F or 45°F for thin, moderate or heavy sections for three days; two days for Type III cement or accelerator.
14. Maintain concrete temperature at 40°F for four additional days, permitting the concrete to dry somewhat before exposing it to freezing temperature.
15. Avoid overheating the concrete.