

DRIVEWAYS, WALKS and PATIOS DO'S and DON'TS FOR OUTSIDE CONCRETE SLABS

1. Remove topsoil, vegetation, wood, large rocks etc. Level and compact a minimum of 4" of suitable gravel fill. Moisten sub-grade and forms before pouring concrete.
2. Ensure that the slab slopes away from buildings (minimum 1%) for proper drainage. Be aware that when a slab is next to a heated building, frost heave will tend to tilt the slab towards the building.
3. When ordering concrete, be sure to allow approximately 10% for spillage and irregular sub-grade. Order a minimum of 32 mpa strength, air-entrained concrete. The tiny air bubbles provide resistance to spalling caused by freezing and thawing cycles.
4. Pouring concrete in extreme high or low temperatures requires special care:
 - a. Cold Weather Precautions:
 - i. Never pour on frozen ground – thaw and warm ground above concrete temperature.
 - ii. Postpone pour if freezing temperatures are expected before concrete is set or use protective covers to prevent freezing.
 - b. Hot Weather Precautions (We live in some of the hottest and driest parts of Canada!):
 - i. Moisten and cool sub-grade, forms and rebar before pouring.
 - ii. Use a retarder or stabilizer if a slow pour is anticipated.
 - iii. Protect a slab from wind and direct sun, by using blinds or spray-on curing compound.
5. Reduce surface cracking by the proper use of control joints.
6. Reduce the chances of peeling or spalling by controlling the concrete slump and over troweling or premature troweling.
7. A concrete thickness of 4" is adequate for a sidewalk. Panels can be up to double as long as they are wide. A concrete thickness of 5" is adequate for driveways for light vehicles. Panels can be up to 100 sq. ft. with the length up to 1 1/2 times the width. Thicker driveways can have somewhat larger panels.