



DURA-MIX® SP



Inland Concrete has revolutionized exterior residential concrete with DURA-MIX® Slump Plus.

DURA-MIX® SP is built around the same specifications as standard DURA-MIX®, but with enhanced characteristics and excellent durability for our extreme climate and resistance to freeze-thaw cycles.

Performance Characteristics

Durability

- 5-8% air entrainment for excellent freeze/thaw protection
- Minimum 300 kg of GU cement
- 0.45 maximum water/cement ratio

Placement

- Ease of placement due to increased slump range (160 mm ± 30 mm)
- Increased productivity

Finishing

- Reduced bleed water
- Reduced set times due to maintained water to cement ratio (no added water to reduce hydration efficiency)

Economy

- Less labour required due to easier placement
- Reduced warranty issues
- Reduced shrinkage and cracking as a result of no extra water being added

Construction Techniques To Follow:

Site Preparation

- All topsoil and vegetation removed to below grade
- Uniformly packed granular base (10-25 mm aggregate)
- Dampened base material prior to concrete placement (no standing water, mud or snow)
- Forms constructed with minimum thickness (50 mm material) and well oiled with form release
- Stakes used at maximum 1 m intervals for bracing
- Reinforcing steel is recommended but not required (Note: reinforcing steel does not prevent cracking)

Placing & Finishing

- Under no circumstances is water to be added to take the concrete above the specified slump range of 160 mm \pm 30 mm
- Water can be added by the delivery driver only to maintain the slump range
- Discharge concrete as close as possible to where it is to be placed
- Do not use a tined garden rake, use a concrete specific rake (concrete placer) or a square pointed shovel
- Screed (strike-off) with a straight edge to final elevation
- Form construction joints to a minimum of 1/4 of the thickness of the slab (e.g. a 100 mm thick driveway should have joints a minimum of 25 mm deep)
- Steel concrete tools are not to be used to form joints, edges or for troweling the surface
- Allow any and all bleed water to evaporate prior to finishing - do not sprinkle extra cement powder on the surface to soak up excess bleed water
- Do not spray water on surface to aid in finishing
- Float surface prior to texturing and jointing
- Texture to leave a non-slip surface (broom, burlap, float finish, etc.)

Curing For Strength & Durability

- Minimum air temperature of 5°C for at least 72 hours following placement, or provide external heat to a maximum of 25°C (if heating externally protect from heat-loss shock when removing heat)
- Protect from rapid moisture loss (evaporation retarders, poly, tarps, etc.) if hot or windy conditions exist

DURA-MIX® SP is designed to the highest standards and with the highest quality materials. As there is no replacement for good construction practices, CSA code must be followed for all pours.

Proper techniques must be followed and can be found in CSA A23.1-09 for normal, cold and hot weather concreting.

