



Introducing SASK C-2: Saskatchewan's Exterior Concrete Standard.

CONCRETE USE

SASK C2 is quality standard designed to ensure that concrete that you order and receive in Saskatchewan meets all requirements of the National Building Code Standards for exterior concrete. The SASK C2 concrete mix shall be used in all residential and commercial exterior flatwork applications. Concrete identified as Sask C2 is designed in compliance with current standards to mitigate chloride attack, sulphate attack, freeze/thaw attack and Alkali Aggregate Reactivity (AAR); all durability concerns which exist throughout the province.

CONCRETE REQUIREMENTS

SASK C-2 concrete mix must meet the following minimum standards:

- Minimum compressive strength of 32 MPa at 28 days
- Minimum Portland cement content of 300 kg/m³
- Fly Ash content in the range of 20 to 25% measured by percentage of total cementing materials
- Maximum Water / Cementing Materials (W/Cm) Ratio = 0.45
- Air Entrainment in the range of 5 to 8% (for both 14 mm and 20 mm maximum coarse aggregate sizes)
- Designed slump of 150 mm +/- 30 mm – this is to be achieved using High Range Water Reducer (HRWA) also referred to as superplasticizer

All raw materials; cement, fly ash, aggregates, water and admixtures must meet the requirements noted in the CSA A23.1 document.

Curing & Protection: Minimum curing requirements must be adhered to – the concrete must be cured for a minimum of 7 days at a minimum temperature of 10 degrees Celsius and for the time necessary to attain 70% of the specified strength.

BEST PRACTICES

- Finishing driveways – SRMCA recommends a non-slip broom finish
- When floating the surface it is recommended that magnesium floats are used instead of a steel trowels (Magnesium maintains the air structure on the surface of the concrete). Practices to avoid over finishing the surface should be adopted.
- De-icing materials – are not recommended to be used on concrete surfaces; to prevent slip trips and falls, SRMCA suggests spreading sand for traction control.
- Manage snow and ice buildup – driveways should be shoveled and kept free of snow and ice during the winter
- We recommend that Sealers should be applied as per the manufacturer's recommendations on exterior flatwork concrete every two years.

