

Cracking

Concrete cracks may occur in concrete construction for a variety of reasons.

Cracking in concrete construction is almost inevitable because concrete, like most other building materials, moves with changes in its moisture content; specifically, it shrinks as it loses moisture.

Being a brittle material, it is liable to crack as it shrinks unless appropriate measures are taken to prevent this, e.g. by the provision of control joints.

Shrinkage cracking, although common, is not the only form of cracking.

Cracks may occur also due to settlement of the concrete, movement of the formwork before the concrete member is able to sustain its own weight, or due to changes in the temperature of the concrete and the resulting thermal movement.

Appropriate measures will at least minimise, if not prevent entirely, these forms of cracking. In all cases, joints at appropriate intervals will control cracking and ensure that it does not occur in a random fashion to the detriment of the appearance and long-term durability of the structure.

