

About Cracking

Concrete expands and shrinks with changes in moisture and temperature. The overall tendency is to shrink and this can cause cracking. Irregular cracks are unsightly and difficult to maintain but generally do not affect the integrity of the concrete.

Joints are simply pre-planned cracks. Joints in concrete slabs can be created by forming, tooling, sawing, or by the placement of joint formers. The National Ready Mixed Concrete Association recognizes that cracks in concrete cannot be prevented entirely, but they can be controlled and minimized by properly designed joints.

The NRMCA recommends the maximum joint spacing should be 2 1/2 ft. times the thickness of the slab. Or, a 4 inch thick slab joint spacing should be about 10 feet. It is recommended that maximum joint spacing be limited to 15 feet. Sections should be somewhat square. The length of a section should not exceed 1 1/2 times the width.

Plan exact location of all joints, including timing of contraction joint sawing before construction. Provide isolation joints between slabs and columns, walls and footings, and at junctions of driveways with walks, curbs or other obstructions.