

# Technical Bulletin

## Sidewalk Contraction Joints



The Concrete Floor Contractors Association of Ontario was founded in 1971 to represent the concrete finishing industry.

Technical Bulletins are designed to provide state of the art information to owners, specifiers and contractors to both improve quality and reduce problems.

We hope that this information will assist you in this goal.

If you have any questions, or comments, please feel free to contact us at 905-582-9825 or by e-mail at [info@concretefloors.ca](mailto:info@concretefloors.ca)

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### Background

Concrete shrinks as it dries. Contraction joints are installed in new concrete to induce cracks in a straight line at pre-determined locations. The typical method of installing contraction joints in sidewalks is through hand tooling/grooving.

### Concern:

Hand tooled joints create bumpy surfaces that inhibit the use of the concrete pavements for most purposes other than walking. In some cases, these joints can also be tripping hazards as well (eg: un-even or narrow heels).



*Bumpy Sidewalk surface with  
Tooled Contraction Joint*



*Smooth Sidewalk surface with  
Sawcut Contraction Joint*

### Recommendation:

Instead of hand tooling, sawcut contraction joints should be employed to preserving a smooth walking/riding surface that is ideal for walking, running, bicycles, skate boarding, etc.

Sawcut contraction joints MUST be:

1. Installed within 12-24 hours of concrete placement (depending upon ambient temperatures).
2. Sawcut no less than 1/4 the slab thickness (minimum 1.5").
3. Can be installed before or after the curing membrane application.

### Further References:

- CSA A23.1 Concrete Materials and Methods of Concrete Construction.

