

Technical Bulletin

Crazing



The Concrete Floor Contractors Association of Canada represents 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

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Background

Crazing is common to most interior steel trowel finished concrete floors to some degree. As freshly placed concrete begins to set, excess mix water is displaced upwards through the surface of the concrete known as bleeding. The evaporation of this surface water creates some plastic shrinkage of the cement paste at the surface of the floor. This plastic shrinkage is invisible at the time of slab finishing and becomes exposed to view through surface wear.



Concerns:

Crazing is a non-structural aesthetic concern and has no affect on the performance of a concrete floor.

Plastic shrinkage of the surface paste can be exaggerated when mixes with high water contents are used, in ambient conditions which increase evaporation rates or in slow setting concrete mixes.

Floors which do not incorporate a dry shake aggregate surface hardener exhibit crazing from wear much more quickly than floors which incorporate a dry shake aggregate surface hardener.

Recommendations:

There is typically no need to repair surfaces which exhibit crazing.

Concrete mixes should be designed to optimize the water content and incorporate a plasticizing admixture to reinstate any lost workability.

The application of a dry shake aggregate surface hardener is recommended for all interior floors subject to vehicular traffic.

Further References:

- ACI 302 Guide for Concrete Floor and Slab Construction



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