

Connecting cold joints



Summary of Content

Cold joints can be effectively connected by proper surface preparation, application of bonding agents, and careful placement of fresh concrete against the existing hardened layer.

Understanding Cold Joints

A cold joint occurs when fresh concrete is poured against a partially hardened or cured layer, creating a weak interface that can compromise structural integrity, increase permeability, and potentially lead to cracking . Common causes include delays in pouring, equipment issues, or scheduling interruptions.

Steps to Connect Cold Joints

1. Surface Preparation

- Clean the existing concrete thoroughly to remove debris, dust, loose particles, and laitance.
- Roughen the surface using a bush hammer, scarifier, or wire brush to create a profile that improves mechanical bonding .
- For next-day pours, mechanical scarifying ensures the new concrete can adhere properly .

2. Use of Bonding Agents

- Apply a concrete bonding adhesive or polymer-modified mortar to the prepared surface.

- Bonding agents enhance adhesion between the old and new concrete layers, especially if the delay between pours exceeds 24 hours .

3. Placement of New Concrete

Article Content

How to Repair a Cold Joint in Concrete

Don't just seal concrete cold joints—diagnose their cause and structural risk. Get expert methods for both cosmetic

How to Prevent Cold Joints in Concrete | Cold Joint in Slab

If you encounter a cold joint in a concrete structure, it's essential to address it promptly to prevent further deterioration and structural

Mastering Cold Joints: A Step-By-Step Guide To Concrete Repair

Learn how to repair concrete cold joints effectively with our step-by-step guide. Master techniques for seamless,

Concrete Cold Joint Repair: How to Prep and Bond a

Learn how to prep and bond a next-day concrete pour to repair a cold joint. This guide walks through

Concrete Cold Joint Repair: How to Prep and Bond a “next Day” Pour

Learn how to prep and bond a next-day concrete pour to repair a cold joint. This guide walks through practical surface prep, bonding

Cold Joints [Prevention & Definition] | FMP Construction

When cold joints are unavoidable, applying a bonding agent to the initial layer can help create a strong link with the

How to Repair a Cold Joint in Concrete? (Effectively!)

In this article, we will explore these options further, understand the rationale behind each approach, pros and cons, detail measures to

Correct execution of cold joints during concreting

Learn how to create cold joints during concrete pouring to ensure strong and durable results. Discover techniques, tips, and best

Cold Joints | Concrete Society

Generally, cold joints are not a problem structurally if the joint is in compression. However, the location of the joint within the

What is a Cold Joint in Concrete? (And How to Fix them!)

What is a Cold Joint in Concrete? Cold joints occur when a fresh concrete batch is poured against a partially hardened existing layer.

Cold Joint in Concrete: Causes & Prevention

Cold joints in concrete explained - causes, structural risks, identification methods, and practical prevention techniques.

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://benniedesignstudio.co.za>

Email: sales@benniedesignstudio.co.za

Phone: +27 82 391 4765

Address: The Towers, 1 St Georges Mall, Cape Town, 8001, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

