What is Cold Joint in Concrete

A cold joint is a joint that is formed between two pours of concrete when the second concrete pour is placed after starting the setting of the first pour.

After the initial setting time of the concrete, concrete starts setting. When new concrete is poured after that there will be a separation in the layers.
Cold Joint and Construction Joint

<table>
<thead>
<tr>
<th>Cold Joint Concrete</th>
<th>Construction Joint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form due to a construction error</td>
<td>Construction joints are created intentionally where required.</td>
</tr>
<tr>
<td>Inadequate bonding could be observed</td>
<td>Unless poor construction practices, but there are no such issues.</td>
</tr>
<tr>
<td>There could be strength issues</td>
<td>There will not be such issues.</td>
</tr>
<tr>
<td>Could be avoided with best construction practices</td>
<td>Place as required by construction.</td>
</tr>
</tbody>
</table>

Key Facts about Cold Joints

- Lack of Bonding
- Reduce the strength and durability of the structure
- Water leaks
- Deterioration of concrete
- Tensile failures
- Aesthetic appearance
How to Prevent Cold Joints

Concrete pouring sequence
Setting time

How to test Cold Joints

Ultrasonic Pulse Velocity Test.
Impact Eco
Rebound Hammer Test
Thank you

Structural Guide
Civil & Structural Engineering Knowledge Base