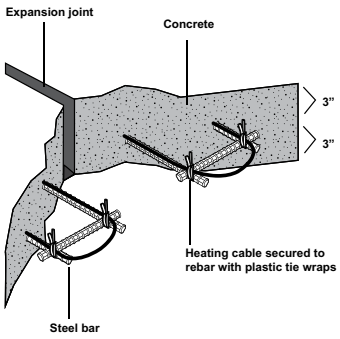
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Managing Concrete Joints: Installation Best Practices

Concrete slabs are not static; they expand, contract, and settle. To protect the integrity of your heating system and maintain warranty coverage, follow these mandatory guidelines for joint crossings.

1. The Expansion Joint (Full Separation)

An expansion joint is a full-depth break between slabs, often filled with flexible material. These move significantly and independently.



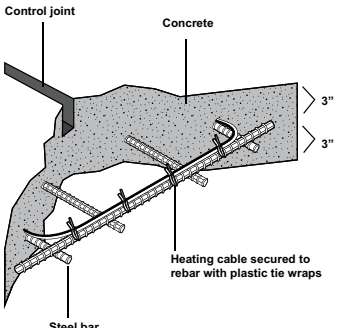
The Rule: DO NOT CROSS. Heating cables or mats must never cross a full-depth expansion joint.

The Solution: Treat each slab as a separate heating zone. Stop the cable 3" before the joint. If the heating area continues on the other side, use a separate cable or route the cold lead (not the heating cable) through a conduit under the joint to the next section.

Why: Even with a loop, the independent shifting of two slabs can pinch, stretch, or shear the heating element, leading to a non-warranty system failure.

2. The Control Joint (Surface / Saw Cut)

Control joints are "planned cracks" cut into the surface (usually 1/4 depth) to guide shrinkage.



The Bridge: If you must cross a control joint, the cable must be placed at least 1" below the bottom of the anticipated saw cut, not 1" below the surface.

Coordination: Always verify the planned depth of the saw cuts with the concrete contractor before securing your cable to the rebar.

Quick Reference Comparison

Feature	Expansion Joint	Control Joint Depth Full Depth (100%) Partial Depth (approx. 25%
Cable Action	**STOP** (Do not cross)	**BRIDGE** (Go underneath)
Movement	**High** (Independent Slabs)	**Low** (Controlled Cracking)
Pro Tip	Plan your layout to keep each cable within a single slab.	Mark crossing points on the forms so saw-cutters avoid your cables.