

Concrete Expansion Joint Replacement

An expansion joint is used between sections of concrete to permit the material to expand and contract with temperature and moisture changes. It is frequently found on sidewalks, driveways and patios.

Felt or wood are commonly used as a joint separator when the concrete is poured. Both will decompose in time with environmental factors and traffic determining durability. When the joint material breaks down it tends to wash or get abraded away and soon you have a ugly gap.



The gap is a problem because it invites weeds and other plant matter and it is generally unsightly. It's also a potential hazard for scooters and skates and can trip small feet or pointy shoes. Yes, you need to mind the gap.

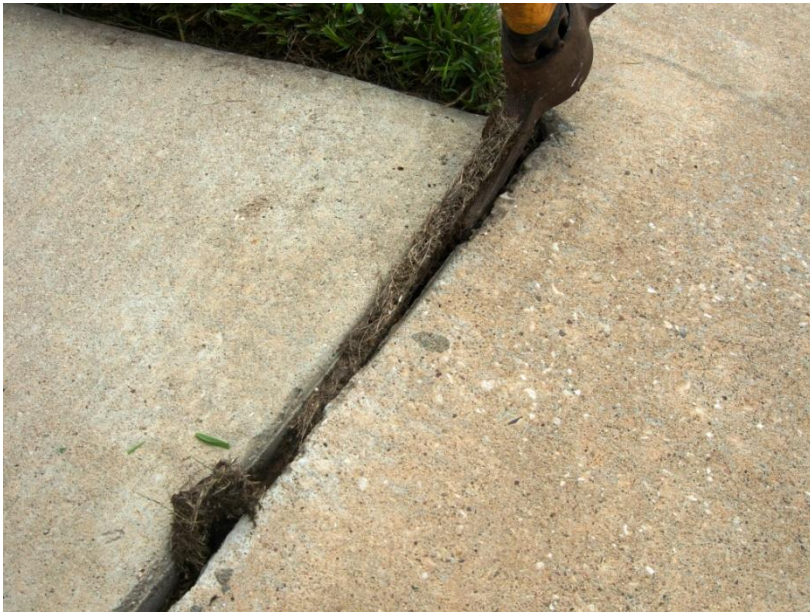
Replacing the joint material with felt or wood is possible but difficult. You are unlikely to find material of the correct thickness so you'd have to plane it to match the gap width. Then you'd have to get the depth correct; more cutting. Finally you're likely to find nails and irregularities in the concrete which make the gap have narrow spots, so now you're looking at chiseling or carving concrete to even the gap out along the length of the joint.

A better way to repair the expansion joint is to use a flexible filler. Two methods are presented here.

Concrete Expansion Joint Replacement

Liquid Caulking Method

1. Remove remaining joint separation material and as much organic debris as possible.



2. Fill gap with flexible polyurethane foam backer rod. Rod should be snug; if it is loose, twist two rods together to make a larger diameter.



Concrete Expansion Joint Replacement

Liquid Caulking Method

3. Using self-leveling concrete caulk, fill joint above backer rod along entire length level with adjacent concrete sections.



4. Barricade or mark area while caulk sets.



This method works well for small segments but can be costly for big jobs with the price of caulk and backer rod. It is somewhat durable but will break down over time and will need to be re-applied every so many years.

Concrete Expansion Joint Replacement

Vinyl Strip Method

1. Remove remaining joint separation material and as much organic debris as possible.



2. Evenly fill gap with sand to a specified depth.



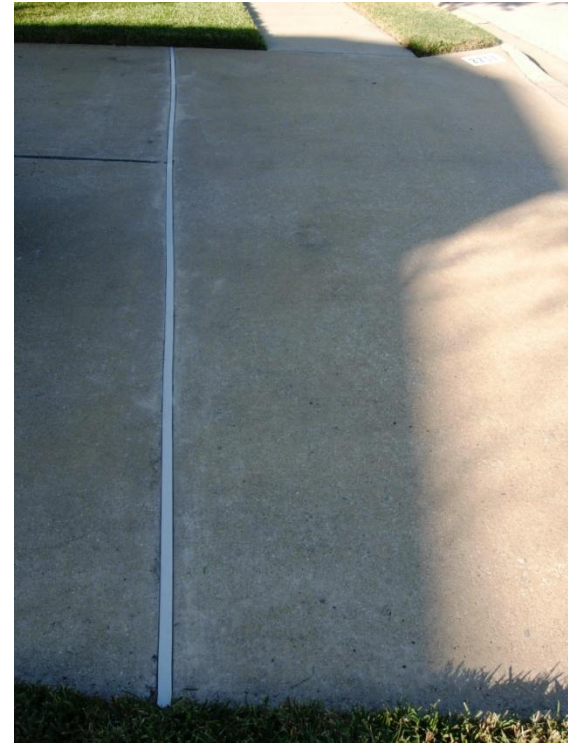
Concrete Expansion Joint Replacement

Vinyl Strip Method

3. Tap replacement strip into gap flush with adjacent concrete sections.



4. Cut replacement strip at end of concrete section to finish.



This method looks great and is very durable. It is also cost-effective vs. caulk when many linear feet need replacing.

Concrete Expansion Joint Replacement

Vinyl Strip Method

At least two sources of replacement joint vinyl strip products are available. Two known ones are Arrowjoint and SlabGasket.

More complete installation instructions are found at the websites of both suppliers:

<http://www.arrowjoint.com/install.html>

<http://www.pavepatch.com/slabgasket-expansion-joint-replacement-gray-p-46.html>