

Expansion Joint Primer

Why is there wood in my driveway to begin with? When the slab was poured, there were wooden forms all around it. These forms held the concrete up to its requisite four inches of depth until it cured. The driveway was also divided into smaller sections called 'slabs', using the same or similar wooden forms. Smaller areas of concrete are not only more manageable to work with while the concrete is being poured, but they are actually stronger and less likely to crack during their lifetime.

The wood between these slabs was left behind to fill the gaps and to act as an 'expansion joint'. This is important because the expansion joint allows these slabs to move ever so slightly without disturbing the neighboring slabs, and move they will. Our Texas weather is the main motivating factor. Heating and cooling causes the slab to expand and contract. Rain will swell clay soils, or can erode and remove the soil below a slab, leaving it unsupported. The expansion joint keeps out most of the water, controlling erosion, and is flexible enough to accommodate the expansion and contraction.

Problems occur when the support under the slab becomes uneven. Imagine if one edge were to swell, or if some soil was removed from underneath. The weight of vehicles on top of the slab will tend to crack the slab in the unsupported areas. If you no longer have an expansion joint or filler between the concrete slabs, erosion and uneven water saturation are real threats that can easily become an expensive problem. Replacing a cracked slab involves breaking up and removing the existing slab, forming and pouring a new one, and will easily cost thousands of dollars to replace your average driveway. Keeping your expansion joints functional is a bit of preventative maintenance that you should not overlook.