

Concrete Floors – Treatment of Joints

1.3.5

What Are Floor Joints?

Floor joints are recesses in the concrete floor that allow the floor to flex and move without causing unwanted cracks. Movement of the concrete is due to:

- **Shrinkage** of the concrete as it ages,
- Sub-floor **settling**,
- **Temperature fluctuation**; concrete (like all materials) expands as it warms up and contracts as it cools down. This occurs daily and with the seasons.



Therefore, to prevent cracks from forming randomly and destructively across the floor, “control joints” are put in to control (or limit) the cracking to straight lines.

Control joints may be placed when the concrete is still wet, or they may be saw-cut into the newly cured concrete.

If the floor joint is left **unsealed**, small stones and other contaminants may fall into the joint, restricting movement. This restriction in movement may cause the **edge** of the joint to **break off**, causing **deterioration to the joint**. Open joints can also be a **tripping hazard** to those wearing narrow heels or cleats on their shoes.

The use of a **high-performance floor joint sealant** not only prevents stones and other incompressible objects from entering the joint, but also keeps the joint **free of spills**, whilst it allows the joint to move and flex during the course of the day and across seasons.

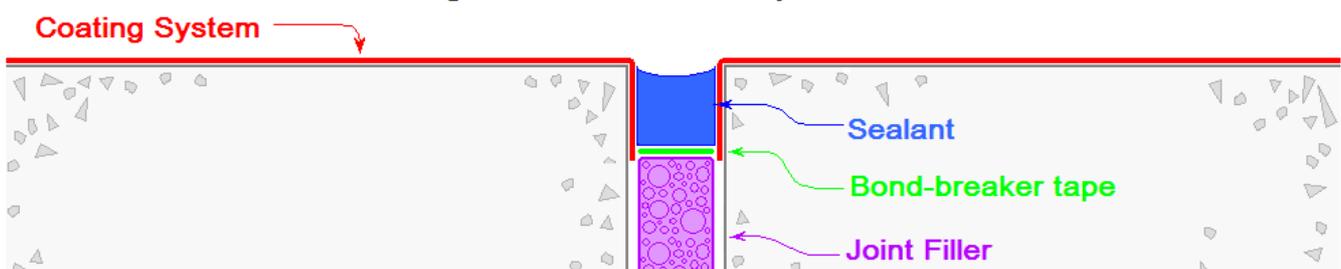
Can You Paint Over Joints?

No. Joint sealants must remain elastomeric so as to continue to perform their function. As floor coatings are much harder and far less flexible, they will crack if applied over a joint sealant.

When a floor needs repainting, check to see if the sealant has deteriorated. If so, it should be removed and replaced. Scrape out the sealant before the floor is diamond ground or shot blasted. Vacuum clean to remove abrasives, dust and debris, paying particular attention to the joints.

During floor coating application, apply the coating to the inside of the joint as per the illustration below. Once the coating system is fully cured, fill the joint with propriety joint filler (do **not** use newspaper, rags or other materials) and seal with a suitable floor joint sealant as per the Manufacturer’s instructions. For choice of sealant and application instructions, we suggest you refer to **Selleys**[®].

Diagram of a Floor Expansion Joint



For more information, please contact the Dulux Protective Coatings Technical Consultant in your state.