

CONCRETE FLOORS - TREATMENT OF JOINTS

WHAT ARE FLOOR JOINTS?

Floor joints are recesses in the concrete floor that allow the floor to 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, carefully inspect the joints. If the sealant has deteriorated, 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. 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, please visit the [Parchem website](#) and go to the [Civil Construction Sealants](#) section.



Well maintained floor joints protect concrete edges and keep the floor level for trolley wheels

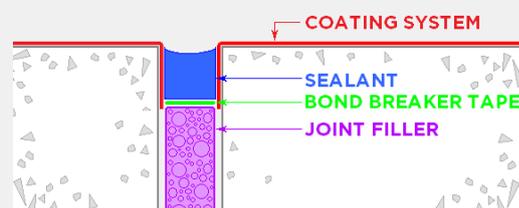


Diagram of a floor expansion joint

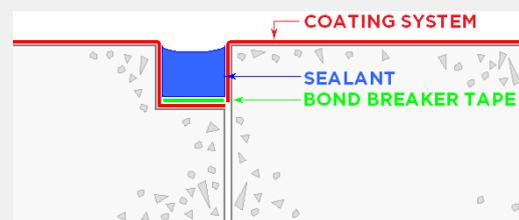


Diagram of a floor construction joint



If the expansion joints don't accommodate sufficient movement, or there are not enough of them, the building will move and create its own joints!

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

