

CONCRETE FLOORS – DIAMOND GRINDING

WHAT IS DIAMOND GRINDING?

Diamond grinding is a thorough and efficient method of preparing your concrete floor and is preferred for Dulux's range of floor coatings.

Diamond grinders use horizontally rotating discs to clean, level and abrade the concrete surface. Most diamond grinders have full vacuum extraction that will significantly reduce the level of dust produced by the grinding process.

New diamond grinders are available **Parchem**. Diamond grinders can also be hired from specialist equipment suppliers such as **Kennards Hire**.

If you have little experience with diamond grinding, engage an experienced contractor to diamond grind your floor.

WHY DIAMOND GRIND?

Diamond grinding avoids the risk of leaving residues on the surface of the concrete. Acid etching, on the other hand, has a high potential for remaining on the concrete and pooling in areas. Acid residues can interfere with floor coating adhesion or curing in the short term, and promote concrete spalling (corrosion of concrete rebars) in the long term.

Well-executed diamond grinding completely removes laitance and levels off imperfections on the concrete surface. This method produces a flat, smooth surface with a profile ideal for all coatings applied by roller or applicator.

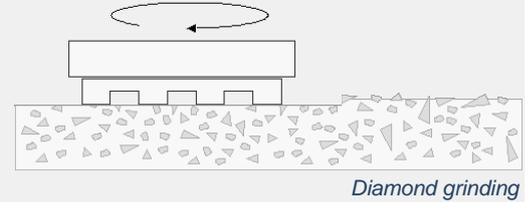
FLOOR PREPARATION PROCEDURE USING DIAMOND GRINDING

The surface must be free from oil, grease, dirt and all other contaminants.

1. Check condition of floor joints. If joint sealant is significantly degraded, it should be removed.
2. **Remove** any oily deposits using high-pressure water wash at 2,000 – 3,000 p.s.i. using **Gamlen CA No. 1** (a free-rinsing alkaline detergent). Mix and use strictly in accordance with the Manufacturer's written instructions and heed all safety warnings.
3. **Fill cracks**, blowholes or other defects in the concrete with **Dulux Luxepoxy Filler** epoxy filling mortar.
4. **Diamond grind** to remove laitance and create a **surface profile** to match to the visual standard **CSP 2-3**.
5. Use a hand-held sander to grind around the perimeter of the floor, to ensure that the profile and cleanliness of the entire floor is consistent.

For treatment of floor joints, please refer to Dulux® Protective Coatings Tech Note 1.3.5 Concrete Floors – Treatment of Floor Joints.

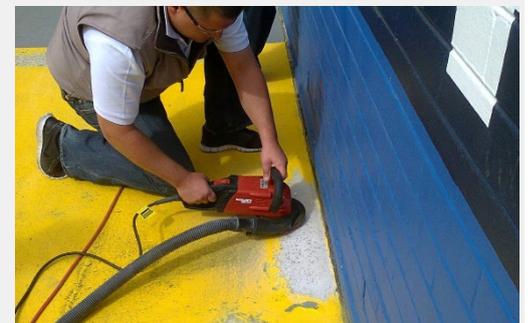
For more information, please contact the Dulux Protective Coatings Technical Consultant in your state.



Diamond grinding



Diamond grinder in action



A hand-held grinder gets into corners



Concrete Standard Profile achieved: CSP 2-3

