

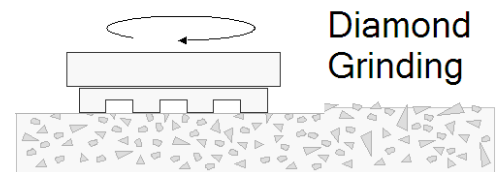
Concrete Floors – Diamond Grinding

1.3.3

What is Diamond Grinding?

Diamond grinding is an appropriate method of preparation for Dulux's range of low film thickness Concrete Coatings.

Diamond grinders use horizontally rotating discs to clean, level and smooth the concrete surface. The discs are encrusted with industrial diamonds (hence the name), which abrade the surface. Most diamond grinders have full vacuum extraction that will significantly reduce the level of dust produced by the grinding process.



Well-executed **diamond grinding** completely removes laitance¹ 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.

It is recommended that experienced contractors be engaged to diamond grind your floor. Diamond grinders can also be hired from specialist equipment suppliers. Visit www.concretecare.com.au for more information.

Floor Preparation Procedure Using Diamond Grinding

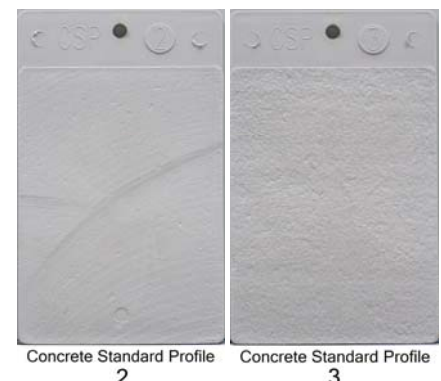
All surfaces must be free from oil, grease, dirt or any other existing contaminants.

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 a free-rinsing alkaline detergent such as Gibson F310B at 1:150 contact dilution (or Gamlen CA No. 1) -mix and use the products to the Manufacturers written instructions.
3. Create a **surface profile** by using **propriety diamond grinding equipment** on all surfaces to remove laitance and create a sound, profiled substrate to match visual standard **CSP 2-3**.
4. Fill cracks, blowholes or other defects in the concrete with a suitable epoxy filling mortar.

All surfaces must be clean and dry before application of the specified floor coating system.

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

Profile achieved: CSP 2-3



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

¹ **Laitance** is the weak, milky layer of cement dust, lime and sand fines that rise to the surface with over-wet concrete, poor curing or over-trowelling. **Why Remove Laitance?** The life of a coating is dependant on adhesion to **sound** concrete. If a coating is applied to laitance, impact from trolleys, forklifts, etc. will cause the laitance layer to delaminate, along with the coating. By removing the laitance layer, coatings can firmly adhere to sound concrete giving much longer service life.