

CRACK REPAIR, JOINT TREATMENT & SURFACE DEFECT RESTORATION

OVERVIEW

Cracks and surface defects must be properly addressed prior to installing resinous flooring systems. Failure to repair cracks or incorrectly treating joints leads to reflective cracking, telegraphing, delamination, and coating failure. Proper repair materials and techniques depend on crack type, movement potential, and coating thickness.

Crack Types

- Static (non-moving) cracks: Shrinkage, minor settlement.
- Dynamic (moving) cracks: Structural movement.
- Random cracks: Hairline to wide.
- Map cracking: Surface shrinkage network.

Repair Products

- Epoxy gel/sand blends: Structural crack filling.
- Joint sealants: For expansion joints or dynamic crack filling.

Repair Procedures

1. Route or grind crack edges to open profile.
2. Remove dust and contamination thoroughly.
3. Inject or trowel repair materials flush with surface.
4. Grind smooth after cure.
5. Honor expansion joints—never coat solid.

Best Practices

- Fill hairline cracks with low-viscosity resins.
- Avoid brittle repairs on moving cracks.
- Never fill expansion joints with rigid epoxy.
- Re-assess repaired areas prior to priming.