

Concrete Sealing Hardener

Product Protection

During floor construction, if many on-site finished products have already been installed and the flooring work requires water and large construction equipment, we will protect the finished products by covering walls and immovable items with protective film before starting the work.

Substrate Cleaning

Clear the substrate of dust, debris, and contaminants. At this stage, we will use a rebound tester to check the hardness of the floor. If the hardness is good, begin coarse grinding; if the floor hardness is insufficient, first apply a sealing and hardening agent to increase the floor's strength.

Note: The floor must be clean and dry.

Coarse Grinding of the Floor

Select 30# or 50# metal grinding discs based on the floor hardness, and use an appropriate floor grinder for coarse grinding. After coarse grinding, use 50# resin discs to eliminate the marks left by the diamond segments.

Note: This step requires inspection of the floor.

If there are large holes or cracks, they should be repaired and dried before grinding.

If there are exposed nails or bolts, they should be cut before grinding. Wet the floor slightly with a little water, but ensure the surface is not visibly wet—just damp.

During grinding, cross-grind the machine vertically and horizontally to level the floor.

After each pass (one vertical and one horizontal pass counts as one pass), clean the dust off the floor. If any areas are not ground properly, perform localized grinding until the surface is level.

Spraying Concrete Hardener (First Application)

After eliminating the marks from the diamond segments, use 100# resin discs for grinding. Afterward, dilute the hardener with water at a ratio of 1:4 or 1:5 (based on the floor density) and spray it evenly on the floor. Keep the floor wet for at least 2-3 hours, during which time use a brush of appropriate hardness to move back and forth to help absorption. When the hardener becomes slippery and thick, spray a moderate amount of water on the floor and use a brush to move back and forth, diluting excess hardener and promoting secondary penetration.

Note:

- The first application of hardener should be sprayed evenly, with the surface appearing wet.
- Use a dust mop to move back and forth evenly, gradually layering to ensure the floor remains wet for 2-3 hours.

Fine Grinding of the Floor

After the concrete hardener has penetrated for 2-3 hours, check the floor's hardness. If the hardness is insufficient, apply another layer of hardener material. (Note: if the floor hardness is insufficient, do not use resin discs for grinding.) If the hardness is good, clean the floor to ensure it is clean and ready for the next application to absorb fully.

Note:

- The floor must be clean and dry.
- If microholes or fine cracks appear, we will start repairs in this process. Here is a brief repair plan.
- For floors with microholes or fine cracks, sprinkle the 1:4 diluted concrete hardener. Set the grinder's speed to around 800-1000 rpm. Grind to produce slurry and slowly press it into the microholes or fine cracks until the slurry dries.

Spraying Concrete Hardener (Second Application)

Dilute the sealing hardener with water at a ratio of 1:4 and spray it evenly on the floor, keeping it wet for 2 hours. Use a brush of appropriate hardness to move back and forth to help absorption.

Note:

- The second application of hardener should be sprayed evenly, with the surface appearing wet.
- Use a dust mop to move back and forth evenly, gradually layering to ensure the floor remains wet for 2 hours.

Fine Grinding of the Floor

After the hardener has penetrated for 2 hours, use 200# resin discs to cross-grind the floor 1-2 times to eliminate the marks left by the previous grit size. After completing this, clean the floor dust. At this point, the floor will start to show a slight shine. Use 400# resin discs to cross-grind the floor, eliminating the marks left by the 200# resin discs, making the floor smoother. At this point, the floor will have a certain degree of shine.