

Planning a Flooring Installation Around Operations

How preparation, phasing and cure affect downtime

By **Henry Hunt**, Partner, Topcoat Services USA · For owners, facility managers, contractors and specifiers



Urethane cement with integral cove base in a cold storage walk-in.

For a lot of our clients the floor isn't the hard part. Shutting down the space is. A kitchen that can't cook, a production line that can't run, a store aisle taped off during business hours. Much of that downtime gets decided in planning, long before anyone shows up with a grinder.

1 Where the time actually goes

Every install has three parts: preparing the slab, putting the system down and letting it cure. People tend to plan around the middle one. The first and last often decide the schedule.

Prep depends on what's on the slab now. Clean concrete grinds quickly. Old coatings, thinset or mastic can take much longer.

Install depends on how many layers the system has and how long each one needs before the next goes on.

Cure depends on the chemistry and the temperature. In a cold New England building, an overnight cure can stretch into days.

"Back in service" means different things

Pedestrian traffic, carts, forklifts and heavy equipment, chemical exposure, and hot washdown are separate milestones. Each comes from the product data sheet at the expected slab temperature. Planning around the earliest one is how floors get damaged in week one.

Return-to-service milestone	What it allows	Where the number comes from
Pedestrian access	Careful foot traffic, then normal walking	Data sheet light-traffic time at slab temperature
Carts and light equipment	Rolling loads, pallet jacks	Data sheet; often later than foot traffic
Forklifts and heavy loads	Full mechanical service	Data sheet full-cure or heavy-traffic time
Chemical exposure	Process spills, cleaning chemicals	Data sheet chemical-cure time and resistance chart
Washdown and hot water	Sanitation program, thermal cycling	Data sheet temperature limits and cure requirements

Phase	What happens	What drives the time
Mobilize and set up	Equipment staging, dust control, containment, power	Access, containment needs, available power
Surface prep	Grinding, shot blasting, coating removal	Existing conditions and square footage
Repairs and details	Cracks, joints, cove base, drains	How much detail work the room has
Install	Primer, body coats, broadcast, topcoat	Number of layers and recoat windows
Cure and return	The milestones above	Chemistry and slab temperature

2 Temperature and fast-cure options

Resinous products have minimum and maximum slab temperatures, and the slab typically needs to stay at least 5°F above the dew point so moisture doesn't condense during install. That figure appears in many manufacturer specifications, but the data sheet for your product is the authority. In winter, a building without heat can stall a job.

When the window is tight, chemistry can help, within the limits each manufacturer sets. MMA systems are known for fast cure at low temperatures. Sherwin-Williams lists Crylaflor T-301 (formerly Cryl-A-Top T-301) as reaching full strength in under an hour and usable below freezing, with catalyst and temperature requirements on the data sheet. MMA has a strong odor during install. Polyaspartic topcoats and some fast-cure urethane cement topcoats can also shorten schedules. Faster products generally cost more, so it comes down to what a day of downtime costs you.

3 One shutdown or several

If you can close the space once, that's usually the better option. A single continuous install avoids the phase joints that come with splitting the work, though slab joints, transitions and terminations still need to be detailed.

Phasing makes sense when the business can't close: a plant that can only lose one line at a time, or a store that has to stay open. Each phase adds a mobilization and a joint where new meets old. Those joints need to be detailed so they don't become a weak point.

Weekend installs are one scenario that can work for retail and kitchens. For example, a crew might grind Friday night, install Saturday and return the room for light use Monday. Whether that's realistic depends on the system, slab temperature, scope and which return-to-service milestone Monday actually requires.

4 Working in an occupied building

Dust. Grinding and blasting concrete fall under OSHA's respirable crystalline silica standard for construction (29 CFR 1926.1153). Required controls depend on the task, the equipment and the compliance method. For walk-behind floor grinders, Table 1 lists either wet methods or a vacuum dust collection system with a 99%-or-better filter and a filter-cleaning mechanism, plus HEPA vacuuming between passes when working indoors. Equipment or tasks not covered by Table 1 require the employer to assess and limit exposure under the standard's other provisions. On our jobs, our grinders run with dust collection, and we add negative-air containment in sensitive spaces like healthcare and food.

Odor and air. Some products, especially MMA, smell strong while curing. Plan ventilation and containment for the specific project with facility staff, using each product's SDS and data sheet. That plan might involve after-hours work, temporary exhaust, isolating zones or HVAC changes, decided by the people who run the building.

Noise and access. Grinders are loud. Keep egress routes open and coordinate with whoever runs the building.



High-build epoxy in an aviation hangar.

5 What the owner or GC needs to line up

1. **Empty space.** Equipment, racking, shelving and inventory out, or a clear plan for what stays and gets protected.
2. **Utilities.** Confirm available power and voltage, water for washdown floors, and whether temporary power is needed.
3. **Ventilation and heat.** Who controls the HVAC, how odor and dust will be managed, and how to keep the slab at temperature.
4. **Moisture testing done early.** Bad results a week before install wreck schedules.
5. **Colors and samples approved** before mobilization, not during.
6. **Other trades out of the area** for the full install and cure.
7. **Access hours** in writing, including nights and weekends.

Proposed example: 9,000 SF seafood processing floor

This is a proposed sequence from a submittal, not a completed project or a guaranteed duration. A 2026 urethane cement proposal laid the work out over five to six days: prep with multiple grinders in parallel plus moisture testing (days 1–3), cove base (days 3–4), body coat with sand broadcast (days 4–5), and grout coat, topcoat, walk-through and demobilization (days 5–6). The proposal assigned plant shutdown and ventilation coordination to the owner and containment support to the contractor.

6 What blows up schedules

Moisture results that come back high. Old coatings or thinset found under carpet or tile. A cold building in January. Equipment that was supposed to be moved and wasn't. Another trade working in the room. Build a day or two of float into any fixed opening date, and settle the unknowns before the crew arrives.

Cure and return-to-service times vary by product, thickness and temperature. Confirm against the manufacturer's technical data sheet and SDS for each project.

About the author. Henry Hunt is a partner at Topcoat Services USA, a family-owned, veteran-owned commercial flooring contractor in Hyannis, Massachusetts, working across Cape Cod and New England. Topcoat self-performs resinous epoxy, urethane cement and polished concrete with its own crews and equipment. If you're working around a shutdown window, bring us in early. We'll build the schedule with you.

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