

EPOXY COVE BASE

INSTALLATION GUIDE

Materials, details and installation considerations for commercial and industrial resinous flooring systems

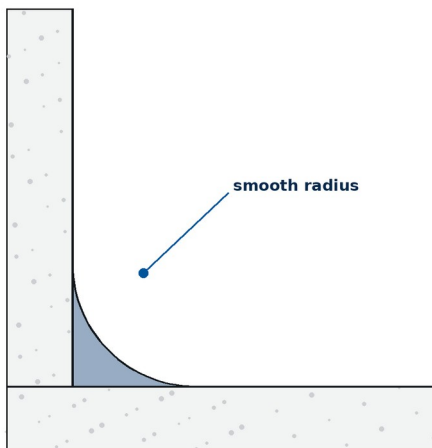
WHAT THIS GUIDE COVERS

Radius and utility cove profiles, compatible wall surfaces, preparation, priming, silica broadcast, installation sequence, aggregate loading and Thermal-Chem 726-CV Cove Kit coverage.

Common Types of Epoxy Cove Base

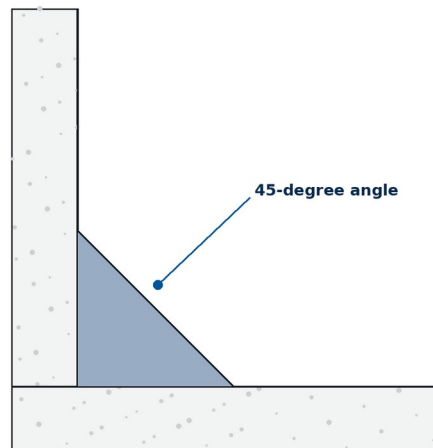
Radius / Sanitary Cove

Rounded transition for cleanability



Utility / Cant / Chamfer Cove

Angled transition for protection or control



Two common epoxy cove profiles: radius/sanitary cove and utility/cant/chamfer cove.

1. Purpose and Applications

Integral monolithic epoxy cove bases improve sanitation, cleanability, wall surface protection and moisture resistance at the floor-to-wall transition. A properly installed cove helps the flooring system perform more consistently at the wall line.

Common applications include commercial kitchens, dishwashing areas, food and beverage processing facilities, laboratories, hospitals, pharmaceutical spaces, cleanrooms, restrooms, washdown rooms and industrial production areas.

WHY THE WALL LINE MATTERS

The floor-to-wall transition may be exposed to water, cleaning chemicals, sanitation procedures, food residue, equipment movement, impact and routine maintenance. Treat the cove as part of the complete flooring system, not as a separate decorative detail.

2. Select the Cove Profile

The appropriate profile depends on sanitation needs, cleaning methods, wall conditions, exposure and the resinous flooring system being installed.

RADIUS / SANITARY COVE	UTILITY / CANT / CHAMFER COVE
Smooth, rounded transition from floor to wall.	Angled transition at the floor-to-wall joint.
Typically 1/8 in. to 3/8 in. thick and installed 4 in. to 6 in. up the wall. Common where sanitation and cleanability are priorities.	Typically installed at a 45-degree angle, from approximately 3/4 in. x 3/4 in. up to 6 in. wide x 6 in. high, depending on the application.

3. Compatible Wall Surfaces

Epoxy cove base can be installed over most solid wall surfaces when the substrate is stable, properly prepared and structurally sound. Potential surfaces include concrete, drywall, CMU, plywood, ceramic tile and other sound wall materials.

The condition of the surface matters more than the material name. Remove loose, weak, contaminated or poorly bonded material before installation. Clean and abrade stable surfaces to improve adhesion.

4. Surface Preparation

Evaluate both the floor and wall for structural soundness, loose material, existing coatings or sealers, grease, oil, dust, moisture concerns and compatibility with the selected primer and cove material.

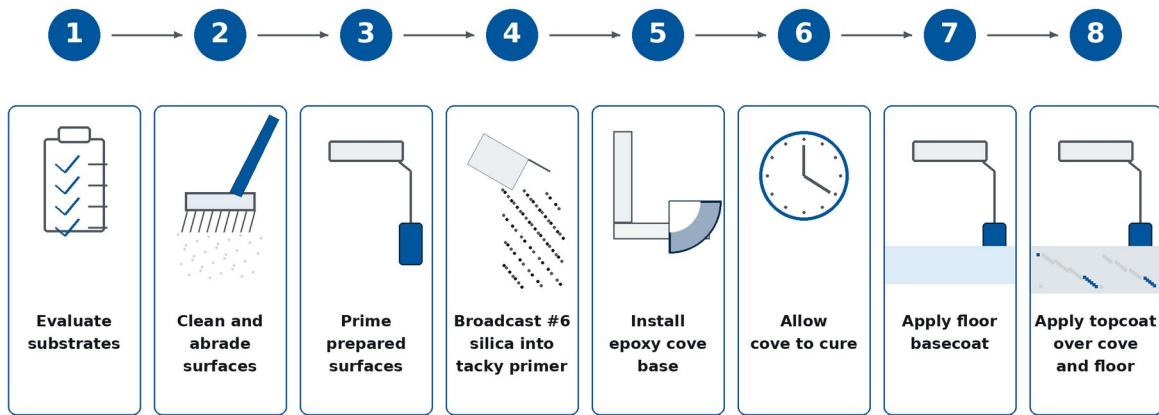
- Concrete floors may require shot blasting, scarifying or diamond grinding.
- Wall surfaces may require abrasion with appropriate sanding or grinding tools.
- Porous substrates may require additional primer or fill coats.
- Moisture or vapor transmission concerns should be addressed before installation.

5. Typical Installation Sequence

Install the cove base before the floor coating system unless the project-specific system requires otherwise. This allows the topcoat to continue over both the cove and floor basecoat, helping create an integrated resinous flooring system.

Typical Epoxy Cove Base Installation Sequence

General sequence for resinous flooring systems; confirm system-specific requirements before installation.



Typical sequence shown for planning purposes. Confirm product-specific requirements and recoat windows before installation.

6. Priming and Silica Broadcast

Priming is typically recommended at approximately 150 to 160 square feet per gallon, depending on substrate texture, porosity, material temperature and jobsite conditions.

While the primer is still tacky, lightly broadcast Thermal-Chem #6 Broadcast Silica. The broadcast helps create tooth for the trowelable cove mix and helps the material build and hold on the vertical surface.

Important: Confirm primer compatibility and the recommended recoat window. Additional preparation may be required when primer cures beyond that window.

7. Cove Height, Thickness and Termination

To maintain consistent height and thickness for radius cove, installers may use a terrazzo strip or Thermal-Chem L-shaped adhesive-backed DecoStrips. DecoStrips measure 3/8 in. x 1/2 in. x 6 ft. and help create a clean termination point and consistent cove profile.

8. Aggregate Loading and 726-CV Cove Kit Coverage

Aggregate loading for radius cove is typically approximately 7.5:1 sand-to-resin by weight. The mix should be stiff enough to hold its shape on the vertical surface while remaining workable enough to tool and finish.

Thermal-Chem 726-CV Cove Kits are premeasured for vertical cove base applications. Each kit contains 72 oz. of mixed resin and one 33 lb. bag of Thermal-Chem #5 Trowel Silica.

TYPICAL PROFILE	APPROXIMATE COVERAGE PER KIT
4 in. cove	23 linear feet
6 in. cove	15 linear feet
1 in. cant/cove	30 linear feet

Coverage is approximate and may vary based on cove height, thickness, substrate conditions, waste and installation technique.

9. Before Installation Checklist

- | | |
|---|---|
| ☐ Floor and wall surfaces are structurally sound. | ☐ Loose or failing material has been removed. |
| ☐ Surfaces are clean and properly abraded. | ☐ Moisture and contamination concerns have been addressed. |
| ☐ Cove profile, height and thickness are confirmed. | ☐ Primer and silica broadcast requirements are confirmed. |
| ☐ Aggregate loading and mixing method are confirmed. | ☐ Cove material is compatible with the floor system. |
| ☐ Topcoat compatibility and installation sequence are confirmed. | ☐ Thermal-Chem has been consulted for unusual conditions. |

10. Common Installation Issues to Avoid

- Installing over weak, loose, contaminated or poorly prepared surfaces.
- Skipping proper abrasion or cleaning at the wall line.
- Ignoring moisture or vapor transmission concerns.
- Using an incompatible primer or missing the recommended primer window.
- Using improper aggregate loading, resulting in sagging or poor workability.
- Installing the floor coating before the cove when the system calls for cove first.
- Using standard epoxy cove where urethane cement may be more appropriate.
- Treating the cove as a separate finishing detail rather than part of the complete flooring system.

11. When to Contact Thermal-Chem

Contact Thermal-Chem before installation when the facility has wet or washdown conditions, food-processing or sanitation requirements, chemical exposure, hot water, steam cleaning, thermal shock, unusual substrates, moisture concerns, urethane cement systems or unclear cove height/profile requirements.

TECHNICAL SUPPORT

Project conditions vary. Thermal-Chem can help confirm system selection, substrate preparation, product compatibility, coverage and installation sequence before work begins.

Related Resources

- [726-CV Cove Kit](#)
- [Food and Beverage Processing Facility Floor Coating Solutions](#)
- [Thermal-Crete Urethane Cement Systems](#)
- [Best Practices for Applying Epoxy Coatings](#)

Technical Note

This guide is a planning aid. Always refer to current Thermal-Chem product data sheets, safety data sheets, installation guides and project-specific recommendations before installation. Coverage rates are approximate and jobsite-dependent.

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