



Cove Base[™]

**EPOXY AND CEMENT URETHANE
COVE APPLICATION GUIDELINES**



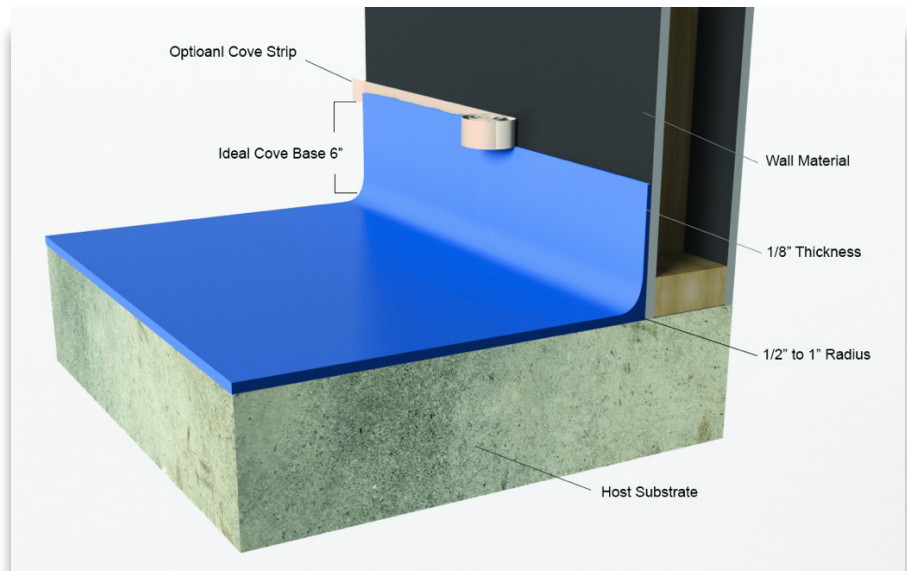
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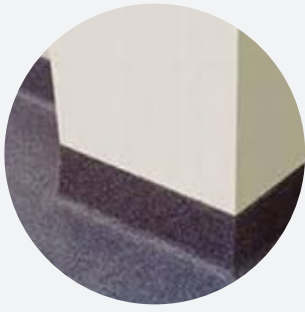
APPLICATION GUIDELINES: EPOXY AND CEMENT URETHANE COVE

Crown Polymers flooring includes a complete cove-based package to provide a seamless floor-to-wall surface that meets regulations and resists damages by any types of liquid including chemical spills. Crown Polymers' cove-based system epoxy and urethane products are a core matrix along with pigmented quartz, or plain quartz. This

vertical coating can be installed at any height from 1/16" to 1/4" thickness bathtub-like seal for your seamless floor.



Ideal Cove Base is 6", 1" Radius



STEP BY STEP COVE PROCEDURES

ADVANTAGES OF A COVE BASE

- Prevents water from going under the walls.
- In chemical containment applications it contains the chemicals to the coved area.
- Makes it easy to clean and disinfect the edges of the floor.
- Does not allow bacteria or insects to hide under the wall.
- Gives the floor an aesthetic, attractive, and professional seamless look.
- Required by government officials in many food and pharmaceutical applications.

Step 1: Surface Preparation

The substrate must be clean, solid, and porous. The substrate must be free of paint, sealers, oil, grease, or any other contaminants that will prevent the epoxy primer from soaking in. Be sure the floor and wall in the areas near the cove are clean; this will help protect the cove from dirt and other contamination and make the masking tape adhere better.

Step 2: Striking a Line

Cove is typically installed at 4 to 6 inches high. Once you know the height of the cove it must be decided if the top of the cove will follow the contour of the floor or be level to the top. Most floors look best with the top level to the cove. Strike a line with a laser level or chalk. Mask with a strong, firmly-bonding tape like duct tape. Be sure it is pressed down and securely stuck to the wall.

Step 3: Priming

Make a small batch of CrownCove, 3 part mix. Apply the primer onto the area that will receive the cove. This application is typically done with a brush or mini roller. It is important, when applying the cove, the primer must not dry completely. The cove will hang best when the primer is tacky. Time your primer application to the speed of the cove former. Give the primer enough time to tack but not dry. This will make forming the cove a lot easier. If your primer happens to dry, re-priming will be required.

Step 4: Mixing the Cove Material

Urethane Cove: Available only in a pre-measured unit. Mix as instructed. Epoxy Cove: Typical epoxy cove is 3qts of mixed liquid to 30-35lb of cove grade quartz blend. Mix as instructed.



Step 5: Troweling up the Cove

Spread the materials along the wall. Using a margin trowel, push the cove mix material up onto the wall to the tape line. Next, smooth and form the cove using a cove trowel. Clean the cove trowel with solvent periodically. This will allow forming the cove easier and to smooth it out. When the cove is completely formed, take a 3" disposable brush, lightly dip it in solvent, remove excess solvent, and brush the formed cove to eliminate trowel marks or rough spots.

Allow the cove to tack or stiffen slightly - normally 30 to 60 minutes - then remove the tape. Be sure not to wait too long or the tape will be difficult or impossible to remove. When removing the tape, be sure not to damage the cove. Once the tape is removed, use the margin trowel to smooth the top of the cove. Clean all the excess material off from the bottom edge of your cove. Allow the cove to set overnight.



Step 6: Sealing the Cove

Inspect and lightly sand out any imperfections. Apply appropriate sealers (listed to the right). When in doubt, contact Crown Polymers' Technical Support. Apply sealer over the cove by brush and/or mini roller. Keep going back and checking for runs or sagging.

Step 7: Begin Flooring Installation

Follow floor installation in accordance with Crown Polymers' recommendations.

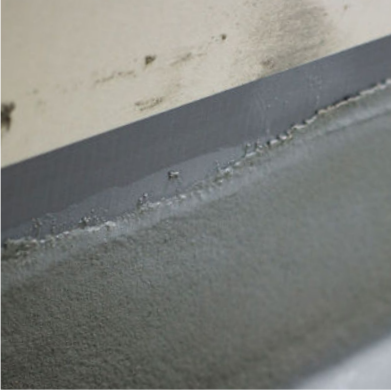
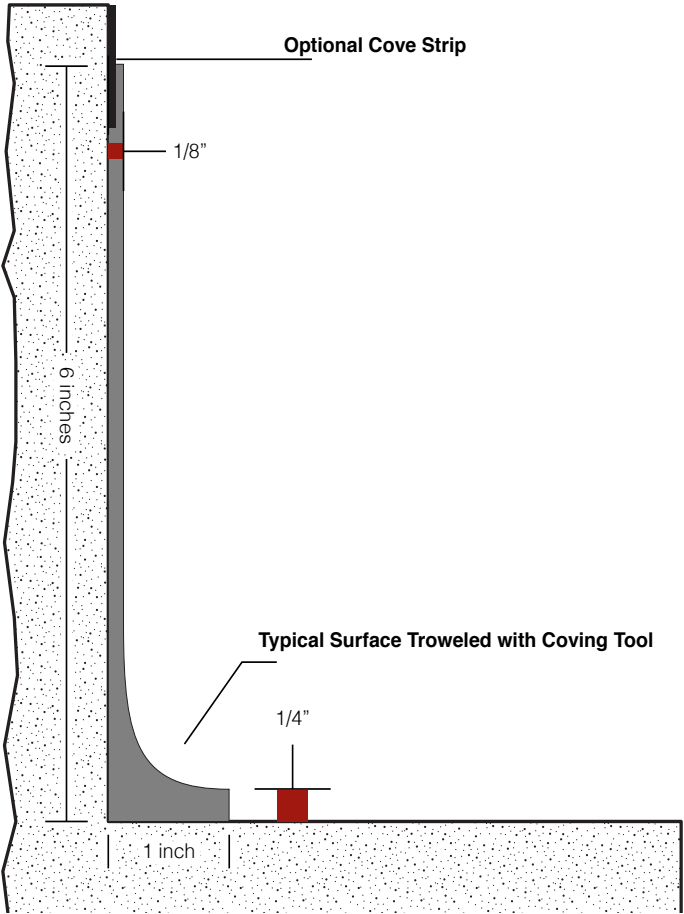
LIST OF APPROPRIATE SEALERS

1. Quartz coves are sealed by applying CrownShield 8320 series, CrownCote HB, or CrownCote PA.
2. Pigmented Epoxy Coating:
Use the same material to seal that is also used to seal the rest of the floor.
3. Urethane Polymer Concrete: Apply CrownCrete U SC product no. 810 as a seal coat.

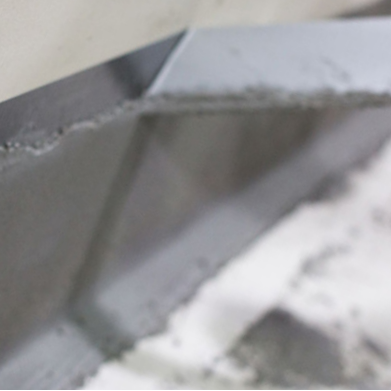
BASIC EPOXY COVE APPLICATION INSTRUCTIONS

Outlining the Cove Base

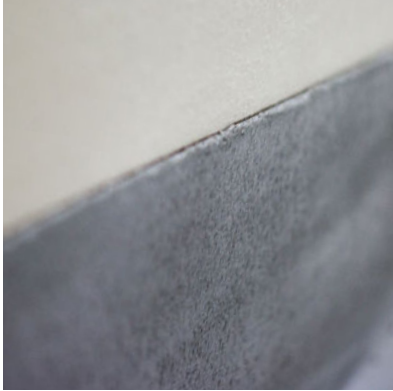
View the area where the wall meets the floor. Make sure the area is clean and clear. The top of the cove can be terminated with a cove strip or painter's tape. For a 6" cove height with 1" radius, use a 6" cove tool as a guide. Mark the walls with a pencil 1/4" below top of the cove trowel or 5 3/4" from the floor. Draw or snap a chalk line. Apply a 3 to 4 inch wide strip of tape or a cove strip at the striped line. Apply a 3 to 4 inch wide strip of tape 1" from the wall on to the floor. This tape will run parallel to the wall.



WITH TAPED STRIP



TAPE STRIP BEING REMOVED



CLEAN EDGE

Making Cove Base Solution

Measure out 1 pint CrownCove product no. 8312 part B and 2 pints CrownCove product no. 8312 part A. Make sure part A and B are properly measured. Mix the cove system using a 450 rpm power drill with a 3½" jiffler blade for 2 minutes. Using a disposable brush, brush a thin coat on the wall and 1" out on the floor. Allow the material to become tacky or wet/tacky before applying the cove matrix. If the primer has cured or is dry to touch, re-priming is necessary.

It is critical to prime the wall prior to installing the cove matrix. This will allow the cove matrix to "hang" on the vertical surface without sagging.

Cove Base Matrix Mix

Make the same cove base solution per "**Making Cove Base Solution**" above. You need to mix 3 quarts cove. Transfer the cove base solution into a 5-gallon bucket, add 35 lbs. of colored or natural quartz #30 size aggregate. Using a high-speed, low-torque drill with a 5" spiral or helix blade or use 5-gallon metal pail mixer, mix for 2 minutes until all the aggregate is completely wet out.

SPREADING THE COVE BASE MATRIX

1. Spread the cove base matrix along the wall outlined earlier while the primer is wet/tacky.



2. With a 3"x 6" flat finishing trowel, spread the entire cove base matrix along the wall. Leave enough material on the cove base area to form the cove radius. Form the 6" cove height with 1" radius cove using a cove trowel.

3. Smooth out the cove base matrix by gliding from right to left and back for a smooth finish. This may take several passes with the trowel to achieve the desired smooth finish.



4. Do not leave rough open spots on the face of the cove.

5. Lubricate and clean the trowel periodically with xylene or desired solvent blend. This will allow the trowel to glide along the cove base matrix smoothly and will tightly close the cove.



6. Once the cove is formed, dip the 3" disposable brush in solvent. Remove excessive solvent from the brush and brush the formed cove to smooth out trowel marks, and loose granular and/or surface irregularities.

Clean Up the Cove Area

Pull the blue tape off after the material has set for 30 minutes. Remove any excess cove base matrix from the floor or along the wall. Make sure the cove is clean and uniform before the material starts to set.

Allow the cove system to cure 8-10 hours before the next step.

Applying a Seal Coat/Topcoat

It is recommended to use a masonry stone to smooth the cove base before the application of the flooring system. Stone the cove-base area to smooth any rough spots or knock out any loose quartz, the material will tend to lift or curl due to shrinkage.

Clean the stoned area with solvent by dipping a rag in xylene or desired solvent blend and wiping the stoned area clean.

Following the same mix and procedure above, **“Making Cove Base Solution”**. Using a disposable brush, spread the epoxy cove base solution evenly onto the cove base. Follow with a 4 inch 3/8” non-shed nap roller to remove excess material and smooth out the seal coat. Repeat process for second topcoat if the cove matrix is too porous. Allow the seal coat to cure 8-10 hours before applying a urethane finish coat.

Adding the finishing touch (Applying a Finish Topcoat)

It is not necessary to apply a finish topcoat of the cove base system before the application of the flooring system. The finish topcoat of the cove base can be applied at the same time of the final finish top coat of the flooring system during cutting or brushing in the topcoat along the wall.

The final floor topcoat can be CrownShield 8320 series CrownCote HB, or CrownCote PA. Mix products according to manufacturer's instructions. Using a disposable brush, paint a thin coat of urethane solution onto the cove base evenly. Follow with a 4 inch 3/8" non-shed nap roller to remove excess material and smooth out the finish coat. Allow the finish coat to cure 8-10 hours before the next step if needed.

Typical Spread Rate: thickness dependent

	SPREAD RATE
4" 1" Radius Cove Base	40 Linear Feet
6" 1" Radius Cove Base	30 Linear Feet

Quartz Cove



Chips/Flakes Wall Cove

Cove Base: Cove base should be installed prior to the floor. Tape out cove with duct tape or a good-quality masking tape. Metal or plastic strips may be used as instruction in the “Basic Epoxy Cove Application Instruction.”

Primer: Prime wall with CrownCove product no. 8312. Mix per manufacturer’s instructions. Prime the outline area to be coved. Primer should not be allowed to dry. Toss chips into the cove base right away, no need to wait for primer to tack up.



Chips Cove

1. Outline area where cove will be formed.
2. Mix CrownCove product no. 8312 as instructed.
3. Apply materials with a brush or miniroller evenly inside the cove outline.
4. Throw chips under hand or sideways onto the cove primed area.
5. Allow to dry.
6. Sand with 120 mesh screen pole sander to knock off all loose chips.
7. Once the chips have been sanded, repeat application of CrownCove product no. 8312 for second toss of chips.
8. Allow to dry.
9. Apply a finish seal coat using CrownShield 8320 series or CrownCote HB or PA.
10. Allow to dry before installing the floors.

URETHANE POLYMER CONCRETE WALL COVE

Application of CrownCrete U WC product no. 811

Primer: Prime cove with CrownCrete USC product no. 810. Mix per manufacturer's instructions. Prime the outline area to be coved. Primer should not be allowed to dry. Using a 3" disposable brush, brush the area. Allow material to become slightly tacky before coving.

1. CrownCrete U WC product no. 811, wall cove, comes prepackaged as a 3-component polyurethane polymer concrete.

- a) Polyol (Part B)
- b) Isocyanate (Part A)
- c) Mix Aggregate (Part C)

2. A 5 gallon pail mixer is recommended: Other required tools: 3" x 6" trowel, margin trowel, and a 6" 1" radius cove trowel. Solvent cleaner as well.



3. Mixing CrownCrete U WC product no. 811

- a) Pour Part B into the pail.
- b) Turn mixer on. Add Part A into Part B.
- c) Mix for 30 seconds.
- d) Gradually add the mixed aggregate slowly, Part C.
- e) Mix entire content for 2 minutes until a homogeneous mix is attained.
- f) Move the blade around to assure the mixture is completely mixed, and uniform.
- g) **THOROUGH MIX IS A MUST.** The cement must be completely hydrated.

4. Do not mix partial units, the fine aggregate and pigment will separate.
5. Immediately pour mixed material out of bucket in a bead next to the wall.
6. Make sure the primer is tacky.
7. If primer is dry, re-prime as necessary.
8. Using a small mortar trowel. Do not worry about trowel marks at this time; just get all the mixed material applied up the wall.
9. Material will need to be finished within approximately 20 minutes depending on temperature.
10. Placing a halogen light next to cove base will cast shadows and assist on finishing the cove base with minimal waves and/or trowel marks.
11. Use a 6" 1" radius cove trowel.
12. Spread the material on the wall right to left at a slight pitch as not to plow the hanging material.
13. Lightly mist the cove trowel with solvent to lubricate and make finishing easier, otherwise the trowel will become quite sticky.
14. Do not use isopropyl alcohol or denatured alcohol.
15. Once the cove is finished, dip a brush into solvent. Remove excessive solvent from the brush and smooth the finish to eliminate any high point or trowel marks.
16. Carefully remove tape and finish rough edges with a brush as in step 15.
17. Allow the cove to set overnight.
18. Using a masonry stone, stone out any rough areas prior to sealing.
19. Seal the CrownCrete U WC with CrownCrete U SC.
20. Install floor once cove is hard to the touch, about 2 ½ to 3 hours.

