



CONSTRUCTION IDEAS AT WORK

# Stamped Overlay Installation Guide

The concrete you are going to overlay must be structurally sound, clean and free of any coatings, cures, or sealing compounds. In many cases, there is a sealer or coating currently on the repair area that needs to be removed before installing the stamp overlay. The slab should have a good profile so that the stamp overlay material will bond well. The best method to obtain a mechanical bond is by bead blasting the surface.

## Preparation – Clean & Degrease

1. Degrease the concrete surface with **Emerge**. Scrub and then rinse thoroughly. Repeat the process until there is no sign of water beading on the surface.
2. If bead blasting is not feasible, etch the concrete surface with 1 part muriatic acid to 5 parts water. Scrub the solution vigorously on the slab with a stiff broom and rinse thoroughly. Repeat until the surface has a sandpaper like texture.
3. Protect all adjoining areas with plastic or other barrier material. DO NOT use masking or duct tape on chalked aluminum siding as it will damage the finish.

**Apply Prep n' Seal** – *Reduces vapor transmission rate and makes the concrete more freeze thaw resistant. This is a good insurance policy which helps prevent the overlay from delaminating.*

1. Spray **Prep n' Seal** onto the dry slab in two applications. **Do not allow the material to puddle!** The first application should be sprayed East-West, with an immediate second application that is sprayed North-South.
2. Allow to dry for 24 hours. If there is efflorescence on the surface use a scrub brush or broom and water to clean the surface. Wait another 24 hours, if there is more efflorescence, repeat the process.

## Apply Stamp Overlay Primer-

1. Mix each bag of **A-750 Primer** with approximately 5-6 quarts of water or as needed to achieve the desired consistency. Always pour about 85% of the water into the mixing pail before you add the material from the bag. Mix the material and add the remaining water to the pail to get the material completely mixed. A **CS Unitec Mixer** is ideal for mixing cement based overlays. Be sure to mix the material completely, taking care not to whip air into the material.
2. Saturate the slab with water to achieve a **SSD (Saturated Surface Damp)** condition before applying the primer. This means that the slab is soaked with water but there are no water puddles on the surface.
3. Dump out the primer and broom it out over the damp surface at a rate of **250 square feet per bag**. Do not allow the surface or the primer to dry out. The primer functions as both a bonding agent and also reduces out-gassing of the concrete slab.

## Apply Stamp Overlay –

1. Mix each bag of **A-700 Stamp Overlay** with approximately 4-5 quarts of water or as needed to achieve the desired consistency. Mix the material the same way you mixed the primer, except the consistency should be thicker, similar to pancake batter.
2. Integral color can be added to **A-700 Stamp Overlay**.
3. Use a **Midwest Rake Cam Gauge Rake** set at **1/4"** to spread the wet **A-700 Stamp Overlay** over the wet primer at a rate of **25 square feet per bag**. Use your trowel next to edges or in areas that are too small for the gauge rake.
4. Use a **Midwest Rake Flexible Smoother** to smooth out the marks left in the material from the gauge rake cams. Do not overwork the surface.
5. Wait until the material sets up enough to stamp. The surface sheen will disappear. Another test is to place your finger into the material. It should not stick to your finger when the material is ready to stamp.



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## Release Agent – Liquid Release (*this is usually the preferred product with overlays*)

1. It is important to use **A-1800 Liquid Release** with this stamp overlay system. Do not use another brand of liquid release that is packaged in a metal pail.
2. Apply **A-1800 Liquid Release** with a pump sprayer. **DO NOT** pour on the surface.
3. Apply a thin mist on your stamps and the immediate area you are going to stamp.
4. Do not apply too much release as this can cause the surface to become too slippery and cause the stamps to slide out of alignment. **A-1800 Liquid Release** can be tinted with powder release as an optional highlighting method – no more than 1 cup of powder release per 3 gallons of liquid release.

## Release Agent – Powder Release

1. Apply a thin coat of powdered release agent to the surface. Release powder should only be thick enough to cover the base color. **One pail of release agent should cover approximately 800- 1000 square feet total.**
2. Broadcast powder release 1 to 2 rows ahead of stamping to minimize waste and blowing powder. This also allows you to touch up areas if necessary, once the release is down you cannot float or trowel over it.
3. Rub some powder release on your stamps to help keep them from sticking to the stamp overlay.
4. **NEVER TROWEL OR FLOAT RELEASE AGENT!**

## Stamping–

1. Use the appropriate texture skin and apply texture around the edges. This will get texture up to the edges of walls, etc.
2. Set out stamps on the ground **BEFORE** stamping to get proper alignment. Get familiar with your stamps before you pour.
3. You should have enough stamps to bridge (cover) the entire row plus one more to start the next row.
4. Set the stamps on the surface and walk on them until full texture is achieved, use a tamper when necessary.
5. Use an S-Tool and the appropriate touch up wheel to tap down material that “squeezes” up between mats and also to continue the grout lines up to the edges.
7. NOTE: Large squeeze joints should be left and cleaned up during cleaning and detailing.

*The following steps are performed the next day*

## Cleaning–

1. Clean the release off the surface. This is even more important if you use powder release. In which case, mix dish soap with water and use a scrub brush or broom to remove approximately 75% of the excess powder release agent.
2. **USE OF A PRESSURE WASHER IS NOT ADVISED**

## Detailing–

1. Touch up any grout lines that were missed with the S-tool or touch up wheel. Use a rubbing stone or an angle grinder. The best time to detail an overlayment is 6-18 hours after stamping, at this time the material is strong enough to support your weight but still easy to s-tool out any imperfections.
2. Honor the existing control joints. If you try to cover over existing control joints, it is very likely to crack through. A good method is to put twine into the control joints and then pull it up after applying the overlay, but while it is still wet. Another method is to mark the location of joints before applying the material, and then saw cut through it the next day after it has hardened.
3. *Optional- After the surface is thoroughly dry, use a small paintbrush to rub release into the joints. Then blow off the excess release with an electric leaf blower. This technique will make the grout lines stand out when sealed.*



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## Staining –

1. **A-700 Stamp Overlay** can be stained with any of the following products- **Americrete Water Base Stain, Rembrandt Polymer Stain, Brickform or Kemiko Acid Stain, or Brickform Dye n' Seal** if the overlay is an indoor application.
2. If you use acid stain, remember to completely rinse off the residue from the surface. You should be able to rub a white rag over the surface and not pick up any color. If the rag is clean then you have removed all the residue. Also, keep in mind that acid stain will react differently on an overlay than it will on concrete. Consider diluting your acid stain with water and then slowly increasing the concentration as needed to achieve the color you want.
3. **Americrete Water Base Stain or Rembrandt Polymer Stain** can be applied by a cellulose sponge, brush, or sprayer. These stains are more user-friendly and are non-reactive, unlike acid stains. This means the color is more predictable and a wider spectrum of colors are available. Another benefit of using these stains is that you do not have to rinse or neutralize before sealing.

## Sealing – Water Base

1. Apply two thin even coats using a good roller or an airless sprayer. Many water base sealers should not be applied with a pump sprayer. Some water base sealers can be applied with a micro-fiber applicator. Always refer to the manufacturers application guidelines. **Americrete Water Base Sealers A-1300 and A-1325** are both designed for **A-700 Stamp Overlay**.
2. The sealer must be completely dry before applying the second coat. This is more important with water base sealers than solvent base sealers. Water base sealers in general are often more problematic than solvent base. However, they are sometimes necessary when you are applying in an occupied area. Water base sealers do not smell as strong as the solvent base sealers. Also, water base sealers tend to offer a lower gloss.

## Sealing – Solvent Base

1. Apply an even coat of **JS Crystal Clear Cure & Seal** without leaving puddles. A common practice is to thin down the initial coat of sealer with approximately 30% xylene. This allows the first coat of sealer to really anchor into the slab. This also helps prevent the sealer from being applied too thickly which can create cloudy or milky spots once the sealer has dried.
2. **JS Crystal Clear Cure & Seal** should be applied with a good solvent resistant roller, or the combination of spraying with a pump up Chapin sprayer and then back-rolling out the puddles.
3. Apply a second coat of sealer when the first coat is dry and tack free. Be sure to apply a thin coat.

## Wax –

1. If the stamp overlay is indoors, apply a finish coat of wax over the sealer and reapply as needed. The wax becomes a sacrificial top coat. If you do not maintain your interior floors with wax, the sealer will show scuff marks.