

# Flexstone: System X

## Application Instructions

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# Preparing for your Flexstone Installation:

## Tools & Materials Checklist:

<input type="checkbox"/>	Flexstone Coatings products (ensure you have enough)	<input type="checkbox"/>	A minimum of 3 clean 5-gallon pails to mix base
<input type="checkbox"/>	Seam & Poly tapes for Expansion gaps & drip flashings	<input type="checkbox"/>	Variable / low speed drill & special mixing paddles
<input type="checkbox"/>	V-Notch hand or standing Trowel (3/8"-1/2" works)	<input type="checkbox"/>	SHURGRIP Slip-Resistant additive - Standard Finish
<input type="checkbox"/>	Disposable brushes for vertical or tight areas (3-4")	<input type="checkbox"/>	Xylene solvent for cleanup
<input type="checkbox"/>	Roller Cage (9.5"/18") & Roller Sleeves (10mm +18mm)	<input type="checkbox"/>	PPE: Nitrile gloves, respirators, cartridges etc.

## Personal Protective Equipment (PPE)

Flexstone's liquid components can cause respiratory issues or reactions on skin. Please review the PPE list below to ensure that you are taking all the steps necessary to install the system safely. Please note, the below PPE is recommended for all steps of the process:

**Eye/Face Protection:** Wear safety goggles

**Skin Protection:** Use solvent resistant gloves and long-sleeved clothing.

**Respiratory Protection:** If airborne concentrations exceed or are expected to exceed the TLV, use MSHA/NIOSH approved positive pressure supplied air respirator with a full-face piece during application. After application use CCR (Chemical Cartridge Respirator).

**Personal Hygiene:** Avoid rubbing eyes during handling. Wear chemical tight goggles or full-face shield. Use good personal hygiene practices to avoid incidental ingestion

**Ventilation:** Provide local exhaust or area ventilation to maintain concentration of vapors below TLV Use explosion proof ventilation equipment. Take care not to draw vapors into occupied office areas or enclosed areas with inhabitants.

**Other:** Source of clean water should be available in the work area for flushing eyes and skin. Wash thoroughly with soap and water after use and before eating, smoking and using toilet.

**IMPORTANT: Refer to MSDS Sheets before starting your project. We recommend keeping printed copies on site.**

**Safety data can be found here, scroll to heading "MSDS Sheets": <https://flexstones.ca/engineers-architects/>**

## Things to know before you start:

- Surface preparation is very important. Failure to properly prep surface could result in poor adhesion.
- Flexstone base adheres to almost any surface: wood, concrete, fiberglass & more (use #3 primer/sealer when needed).
- Standard or Select Grade plywood works well & saves money – No need for G1S and PTD has chemicals.
- If pressure-treated plywood was used, apply #3 Primer/sealer to ensure good adhesion & prevent off-gassing.
- Base Coat does not adhere well to smooth surfaces. Either prime or rough up metal flashings with coarse sandpaper (30-40grit).
- When in doubt, use our #3 primer/sealer first or test for adhesion by applying some base coat on a small area.
- Flexstone Base is a thick one-of-a-kind solvent-free odorless urethane. Use #3 primer/sealer when adhesion is a concern.
- 1 Gallon of mixed base coat (1 Gallon Base to 1 Quart Water) should coat approximately 30 square feet or 1 sheet of plywood.

## Product Overview: System X (4 components)

### System X - Components: (approx. 100 mils)

Flexstone #3 Epoxy Primer/Sealer (only if needed)  
2:1 Mix (2 Parts A / 1 Part B)

Flexstone TUFF Base Coat (white)  
4:1 Mix (4 Parts Base / 1 Part Water)

Flexstone AR Colour Coat – Seals base and hold chips  
1 Part Urethane (mix thoroughly before applying)

Flexstone Blended Colour Flakes  
Pre-mixed blends: Broadcast into wet AR colour coat

Flexstone Clear Finish Coat  
1 Part Urethane (pour & apply)

Figure 1: System X Components



## “IMPORTANT” - Surface Preparation plus when & how to use #3 primer/sealer

### Cleaning & Preparing your Surface for Flexstone Application:

- Standard or Select grade plywood is preferred – G1S is OK but costs more money & PTD needs to be primed/sealed.
- Use #3 primer/sealer on smooth or contaminated concrete as well as pressure-treated plywood & all smooth surfaces.
- Coatings do not adhere as well to smooth surfaces so rougher is better. Scuff up drip flashings for max adhesion.
- Ensure that the all surfaces are clean (free of dust, debris, oils) and imperfections have been filled with base coat.
- Plywood surfaces do not require priming coated with a smooth sealer - avoid PTD with chemicals that can gas off.
- Smooth concrete & metal flashings should be roughed up or primed. If concrete is on grade with trapped water below priming is recommended to avoid possible blisters.

### Preparing Plywood Surface (5/8"-3/4" T&G is common):

Where "Tongue & Groove" joints do not exist, leave a 1/16" expansion gap between square edges or butt joints.

Use our special 3" adhesive back seam tape over gaps pressing tape in place using a bit of base overtop pressing into and through tape with flat edge of trowel or spatula.

Do not caulk or fill expansion gaps. They need to open & close so they do not buckle. When closed you may see ridges from caulking squeezed upwards.

When plywood is glued & screwed T & G joints are tight, seam-taping is not needed. When in doubt use seam tape as expanding T & G joints can cause base to sink into gaps.

For knot-holes, large splinters, deep screw holes & recessed areas. Pre-mix a small amount of base coat and smooth over imperfections with a flat trowel or spatula.

Ensure all seams are flat and flush with the surface before moving ahead with the base coat.

Ensure that old paint-type coatings are well adhered and scrape or grind off loose or peeling areas.

### Prep smooth concrete/misc coatings: (#3 Primer use)

For smooth surfaces like concrete use **#3 Primer/Sealer** for max adhesion and to also seal the surface so nothing can wick-up causing blisters. #3 primer is a 2 part coating packaged in 1.5 Gal kits (1 gal A, 1/2 gal B). We recommend mixing half kits at a time. Pour into a bucket, stir and then apply with 10 mm roller sleeve moving fast. 2-part products heat up in mixing bucket and harden quickly.

Exterior Tiles must be clean & use **#3 Primer/Sealer** for max adhesion. Recessed Grout lines look great or you can fill them if desired.

Fiberglass clean so no debris and apply base & top coats. If some areas are not stuck well use small drywall ring nails in X pattern to flatten the area prior to application of coating..

Vinyl often shrinks at walls and curls up on lower vertical edge of flashings. Cut up walls and replace outside perimeter drip flashings with new (31 Gauge is OK to use). With thick vinyl where high seams exist, grind them down a bit to minimize their visibility. (Best not to cut them out)

When coating over old urethanes, lightly wipe the surface with 'Xylene' soaked rag. This gently slightly dissolves & softens the top layer to ensure Max adhesion of urethane.

### “IMPORTANT” - Preparing the Perimeter - Make small batches that won't thicken and become unuseable.

PREP WORK: Drip Flashings on Outside Perimeter – Just apply Base over TOP LIP of flashings (not against red poly tape)

- When water drains off the edge of the deck, install a 2" x 2" drip-edge flashing (pre-painted 31 gauge at lumber yards) +
- Secure Flashings with small flat-head ring nails (like drywall nails) keeping nails 4" – 5" apart to prevent flexing in hot sun.
- Custom colour flashings are usually 24-26 Gauge metal. Base coat is thicker than flashings when covering them. Water should drain freely over the drip edge and using a router is not needed but thicker nails may be needed.
- Coating just the inside top lip of flashings is done to smooth over the lip – no need to coat all the way to red tape.
- To prevent coatings from running over the edges. Use our special strong & easy-release Red Poly perimeter tape (2"x180'). Leave a lip of around 1" above the deck surface as a barrier.
- Rough/Scuff up the top of the drip-edge with 30-40 Grit sandpaper to ensure good adhesion of the base coat.
- Once the full system is applied you should not see any white base at exterior edge if you only coat top Lip of flashings.
- If base coat is against red tape, then use flat trowel pushed against the tape bringing it back to thin out base at the tape.

PREP WORK: Seal Vertical Surfaces (walls, posts) - (CHECK WITH ENVELOPE CONSULTANT IF ONE EXISTS)

- If inspectors are involved, they like to see evidence of fabric reinforcing tape at walls because all other urethanes are very thin.
- If no gaps push base against vertical areas. Reinforcing tape is used with Urethanes instead of metal flashings used with Vinyl.
- If metal-flashing exists rough-up or prime flashing, then apply thickened base coat. (mix base & wait for it to partially cure),
- Using a trowel or brush apply skim coat of base over self-adhered fabric tape. With non-adhesive tape apply a skin coat then push tape into it following with another skim coat to smooth.

## Preparing expansion gaps - Installing Seam Tape on plywood: (make small base mixes)

Prep step #1 is Seam taping as it allows base & tape to cure sufficiently so full base application can be done later the same day. Wood absorbs moisture and swells in damp climates and contracts when it's warm so all butt joints (sq edges) require 1/16" gaps. Do not caulk seams or allow Base into these gaps as you will see small ridges when the gaps close. Flexstone 3 "adhesive back fabric Seam sticks on top of seams then using flat edge of trowel press hard to skim coat some Base coat on top of the seams so you never see them.

If the plywood was not glued and screwed it is recommended you use also seam tape over the T&G joints. If they open the base coat may slump causing a trough. (Purely a cosmetic issue) – **AVOID USING SMOOTH TAPES AS BASE COAT WILL NOT STICK**

### Standard Plywood Seams (includes all Butt-Ends/Sq Edges of Tongue & Groove Plywood):

Non-T&G expansion gaps should be taped. Using a combination of one of our approved white fabric seam tapes in conjunction with our base coat, you can effectively bridge gaps and ensure that product will not depress. If you use our adhesive back 3"x108' fabric tape and have lots of gaps you can cut tape in half to increase your coverage but make sure you skim some base coat over the tape.

#### Adhesive Back Seam-Tape (3" x 108')

1. Flexstone adhesive back seam tape is a thin absorbent fabric material with an adhesive on one side. This tape is pressed over expansion gaps on clean dust-free plywood. (tape strength not important)
2. Once secured pour a small stream of mixed base coat over top of the tape. Use a putty knife or flat edge of the trowel to push the base on to and into the seam tape to ensure that it sticks well to the plywood.
3. \*Start prep work with seam taping to give the base coat as much time as possible to cure sufficiently before spreading your base coat over the surface and expansion gaps using your V-Notch trowel.



Figure 2: Installing Seam Tape



Figure 3: Finished Seam Tape

4. Tongue-and-Groove Joints: Tight Tongue and groove plywood joints when Glued & Screwed are designed to accommodate typical expansion and contraction on a deck surface and seam tape is normally not needed. If some joints are not tight you can skim coat some pre-mixed base coat over them with a trowel or putty knife. Allow seams to cure a couple of hours before installing base overtop.
5. Seam Taping Wall Transitions: Some projects require reinforcing fabric or scrim on transitions between deck-surfaces and exterior walls. The adhesive-back seam tape can easily be pressed into the vertical and horizontal sections you want to reinforce. Follow the same instructions to ensure that the tape is properly bonded to the plywood on both the wall and deck surface.

Reinforcing tape at walls is not always required as Flexstone Base coat is so thick & flexible but it does help to cover large gaps at walls Also, because other urethanes are so thin most engineers prefer to see reinforcing tape.

## Mixing the Base Coat (Quick-setting)

Pre-Mixing the Base Coat – (paint paddles do not work, use mortar type paddle)

New Pails of Flexstone Base coat must be mixed thoroughly (approximately 5 minutes), prior to use. This helps to blend in the resins, clays & polymers that settle at the bottom of the pail so the entire mix is the same consistency when it comes time to add the water.

\* If a little sediment is left at bottom this will not really affect the performance of the product.

Flexstone's unique solvent-free Base coat (Water Catalyzed Urethane-WCU) is much thicker than all other urethanes and requires water to make it cure. If you apply base coat without water, it will not cure and would likely have to be removed.

Catalyst Vials (optional): Use vials during colder temperatures

A Small Vial of Green catalyst is available for each pail of Base coat to help it reach a full cure quicker.



Figure 4: Base Coat Pail

### Mixing Base Coat – Precautions - “IMPORTANT”

- When mixing the water (1 part) in with the base coat (4 parts), the two components need to be mixed thoroughly at a slow - medium speed with a variable-speed drill and special mortar-style mixing paddle. Mix only a few minutes until the base has absorbed all the water then pour and spread ASAP. (Mixing too fast can create air-bubbles which may show up on surface)
- Do not increase amount of water added. Base Coat rejects excess water and it will work against you speeding up the set-up time. However you can use a bit less water (say 5 to 1) when dew or dampness exists in the plywood as the base will absorb this.
- Once the base coat has been thoroughly pre-mixed and then mixed with water (Reminder: 4 Parts Base / 1 Part Water), it is designed to set up quickly to resist damage from rain (after 4-6 hrs). Pour and spread mix immediately and fast as possible preferably with Flexstone 3/8" V-Notched trowels to ensure it self-levels at proper thickness. (see 'Spreading Base' section).
- Mix base and water into your first pail then pour as much of the mixture as possible on surface. Then, using the flat edges of the trowel to scrape remaining base coat from walls and bottom of pail then put the pail upside on the next section you will work on This way you avoid having any chunks of base from previous batch that are setting up.  
\*Do not add water to the next mix until prior mix has been spread as you want as much time as possible before it starts to set up.

### Mixing Base Coat – Important Tips: - 4 parts Base to 1 part water (Never exceed % of water)

- Have a minimum of 3 clean empty 5-gallon pails; one for holding water and at least 2 more for mixing Flexstone base. Save plastic base pails for future jobs and also to store leftover product if it doesn't have a pour spout. Cured base can be easily peeled out and used for samples. Do not stack used pails with wet base in them, they will bond together.
- **Only mix 2 gals of base at a time** as it sets up quickly. With a 5-Gal pail use Flexstone hockey measuring stick or cut notches in a thin stick to speed up measuring Base & Water. Cut one notch up 5.5" and another at 7" to yield 2-Gal's base and 2 Quarts Water.
- \*You should cover at least **30 square feet with each mixed pail of base (1 sheet of plywood)**. Initially many beginners will start with a small mix 4 to 1 mix (1 Gal base & 1 Qt water) to ensure you are getting full coverage then move to 2 gal mixes?
- Person mixing Base must not add water to a new batch until the previous batch has been completely spread.
- Hot temperatures & hot surfaces will cause the base-coat to set up quicker. Starting early in the morning helps keep base cooler giving you more time to spread while in self-level mode. Get prep work out of the way earlier so you don't waste cool weather needed to spread the mixes. In extreme hot weather you can add ice blocks to mixing water to keep base mixes cooler longer.
- One person is fine but on larger jobs it's easier with two people. One preparing and mixing batches in small quantities (max 2 gallons) and another to spread the material. Flexstone Standing trowel is available for large jobs.  
\*For large jobs you can make larger batches providing you use a squeegee or adaptor to spread the mix faster (in 10-20 mins)

## Installing the Flexstone Base Coat:

- Plan your coating strategy before you start. Choose sections according to the size of your mixture (2 Gallon mix = 60 square feet or 2 sheets of plywood). Ensure that you work your way towards an exit maintaining proper coverage & thickness.
- Start with seam-tape: Smooth out the adhesive back seam tape over all plywood seams. Ensure that there are no creases, wrinkles or air bubbles trapped under the tape.
- Mix a small amount of base coat with water (4:1 mix). Using the flat edge of your trowel or a putty-knife spread a thin layer of base coat over the seam tape. Only use as much as you need to keep the tape in place – it will absorb the base creating a permanent bond to your plywood.
- Using the same mixed base – use your trowel or putty knife to fill any knot holes, deep screw holes, splintered plywood or any other depressed sections of the deck. Remove or smooth out any excess base coat so you are not creating humps.

“1 mixed Gal covers 1 sheet of plywood”



Figure 5 - Installing Red Poly Perimeter tape



Figure 6 - Waterproofing verticals (door sill)

## Drip Flashing Tips - (no need to coat entire top of flashing)

- \*Drip Flashings thickness: Regular 31 Gauge is ok (thicker if custom colour). No need to router down outside edges as needed with Vinyl. Install using drywall ring nails spaced 4-5" apart.
- Pour a small stream of mixed base in front of top flashing and use flat edge of your trowel to push the base coat over top about half way (1"). Then use flat edge again gently pulling base coat back toward yourself about 2" past drip flashing lip and flatten or feather out base.
- Flexstone Base is thicker than flashings and the coating is thinner on Flashings than on plywood so water flows freely off outside edges.
- Drip edge flashing should be scuffed up on the top-side to ensure good adhesion. Sanding block or Sander/grinder works well.
- Install strong red 2" poly tape around the outside perimeter sticking up 1" to prevent coating from dripping over the edge. (2"x180')
- TIP – To use Base coat on vertical areas you can allow Base coat to set up & thicken for a few minutes. Then when it feels right apply the material up walls thinner than on flat areas. Use a flat trowel, brush, spatula or even a roller sleeve. Base does not have to be thick up walls.
- Rule of thumb: It's a good idea feathering all edges during application.

## Installing the Flexstone Base Coat – Floating out the Membrane:

### Quick Facts: Flexstone WCU Urethane is stronger and longer lasting than Epoxies and Vinyl coatings

- You must move quick when applying the base once water is absorbed to keep it in self level mode
- Base coat should self-level to 64 Mils (1/16") thickness (this is thicker than most Vinyl coatings)
- Flexstone's System X should total = 90 - 100mils thickness (this is twice the thickness of other seamless coatings)
- Min temperature: 5-7 degrees Celsius during application and a few hours afterwards. Base gets a skin in 4-6 hrs.

### Flexstone Base Coat Mixing & Application

- Add 1 part water to 4 parts Flexstone Base. (You get 6.25 gals of mixed base per 5 Gallon pail of Flexstone Base). Mix the base coat and water together as per instructions on page 5.
  - Start by mixing 1 Quart of water in to 1 Gallon of base to get the feel to achieve full coverage. Trowel out the batch quickly and allow it to self-level (avoid working with the base coat once it has been spread).
  - \*You should cover 30 square feet of per gal. Unless you are experienced, we do not recommend mixing more than 2 Gallons of base per batch.
- Stir the base / water mixture on medium speed for a few minutes. Once water has absorbed into the base. Pour out the entire mix in an area. Spread it quickly and as evenly as possible. Move fast to keep the base in self-level mode.

**\*Angle Trowel to ensure 1 gal covers 30 SF\***



Figure 7: Spreading Base moving fast



Figure 8: Mixing Base

- Try to maintain a wet edge for the next batch to flow into and it is always a good idea to always feather out all edges when you run out of mix. This allows you to leave & return. When overlapping new mix over old use flat edge of your trowel pushing New on to Old and then bring it back. This prevents leaving marks.
- Ground the V-Notched 3/8" x 3/8" trowel (or 1/2") and Angle it down as much as possible. Make certain you get proper coverage regardless of trowel size. As you're spreading, monitor your coverage to ensure that you are achieving approximately 30 sq/ft per gallon (one sheet of plywood per mixed gallon). Spread the base as quick as you can so it always remains in self-level mode.
- For larger areas, Flexstone offers a 'Standing trowel' adaptor which converts our custom 15" or 12" trowel blades allowing a screw-in a broom handle (see image below). The adaptor allows the installer to adjust and set the angle of the trowel, helping to ensure consistent thickness across the surface.
- While spreading do not interrupt the self-levelling process by "playing" with base after it's spread as it usually fixes itself. Minor imperfections can be fixed once the base fully cures and hardens by doing a bit of grinding or sanding.



Figure 9: Trowel Adaptor

*The custom angle adaptor is threaded to allow installers to fasten a pole to the trowel making spreading the product over large areas easier and more efficient. (only available in Canada)*

## Base Application – Helpful Tips

- The base coat can also be thickened with fine sand when going over exposed aggregate, filling low spots or up vertical surfaces.  
\*\*For prep work make up small mixes so it doesn't thicken and become unusable.
- Mixing tip - To measure the mix quickly you can use the Flexstone hockey mixing stick or a thin wooden stick. Cut notches up the stick to maintain the 4 to 1 ratio of base to water (cut upwards 5.5" for 2 gallons of base and again at 7" for 2 quarts of water).
- Even if the base coat is tacky the following day you can still apply the finish coats as long as you are not sticking to the base coat. After the finish coat(s) has (have) been applied wait until they are no longer tacky before walking on it.

## Working Time using Tuff Base Coat \*IMPORTANT\*

The working time between when the Flexstone base coat has absorbed the water and when it becomes too thick to self-level depends on temperature and how hot the surface is. **Working time can be less than 10 minutes in extremely hot weather** and when the deck surface is really hot. It's best to start early and cover exposed plywood to keep it from getting too hot. In cooler temperatures, you should have 15-20 minutes to spread each batch and maintain self-level mode.

## Extending the Working Time – Important Tips

The base coat sets up slower pace when the components and surfaces are cooler. To help buy yourself more time here are some tips.

- On real hot days, add a block of ice to your mixing water as this gives you more time to spread the base coat. You should also cover the surface to keep it cooler as hot plywood also causes coatings to cure faster.
- Pre-stir all the base-coat pails and keep in the shade prior to use to avoid wasting time during the application.
- In cold temperatures keep pails in a warm place prior to starting your project.
- \* Never add water to the next batch unless the previous batch has been applied or spread.
- Start early in hot weather and keep surface covered so it does not become scorching hot.

## Flexstone Base – Cure Time

The cure-time for the Flexstone Base coat is generally around 24 hours on a typical warm summer day before you can walk on it. This time varies depending on the temperature and humidity levels. Once the membrane has solidified, it may remain tacky for several hours however if you do not stick into it, you can apply your finish coat(s).

In cooler weather and when moisture content goes up the base may take 48 hours to cure before allowing traffic.

Colour coat and/or coloured flake installation can be done when you can walk on the deck surface even if it is still tacky. Rolling the colour top coat(s) over a sticky surface will not affect the bond on interrupt the curing of either component.

## Repairing the Flexstone Base Coat

Before rolling out your top coat and/or distributing the blended acrylic chips, take your time conducting touch-ups (if there are any) to the base coat. For minor marks the colour flakes help to hide them but may will not hide everything.



Figure 10:  
Flap disk for grinders

If there deeper visible trowel marks, lumps or high-spots in your base coat, they can be taken down using a 40-grit angle-grinder or belt-sander. The base coat should be hardened and no longer tacky before grinding. Locate high-spots and 'feather-grind' so that they level.

For low-spots where water sits and pools, or you have lower grooves from deep trowel marks, simply mix a small amount of base coat (4-parts base 1-part water) and allow it to thicken a bit to a soft-putty consistency. Using a flat-squeegee, flat trowel, or putty knife – fill the low spots so that they are flush with the deck surface.

## System X – Installing the Textured Stone Finish:

Multi coloured blends of fade and fire-resistant acrylic flakes (chips) are used in conjunction with the a 1-part AR (aromatic) urethane Colour coat and 1-part Urethane Clear top coat. The AR colour coat is used to hold the decorative flakes in place while sealing the base coat. The Clear coat allows the luxurious flakes to appear & provides a rugged maintenance free surface and cures to a glossy finish but will gradually (1-2 months) lose its sheen leaving a luxurious and incredibly durable matte finish. **Inform clients of this**

- Using a standard 10mm roller apply a thin AR (aromatic) colour coat over the base coat in front of you. Only roll as far as you can distribute the blended chips so that you are not forced to walk atop of wet colour coat. Leave a wet edge between coats make certain you do not thicken the wet edge with the next coat as chips can sink in causing area to look smoother.
- While top-coat is still wet, broadcast blended chips to rejection using a small pail with holes (1/4" bit for holes) or by dispersing evenly by hand. Coat the areas you can reach with the chips and keep coating & chipping until done.
- If you wish to chip and clear coat in same day, use our accelerators or wait 4-5 hrs and then use plastic booties over socks or soft shoes to gently walk on surface to sweep up the extra chips to save for reuse.
- Using a pole sander lightly sand with 100-150 grit sandpaper to knock down any jagged chip pieces (for the comfort of bare feet). Blow off, sweep, or vacuum up the dust and be careful not to sand too smooth as you control slip-resistance or roughness.
- Spread the Flexstone Clear Coat Using a Thick Nap Roller (18mm) not to put coating on thicker but to get more coverage before roller runs out. Move in different directions (like painting a wall) until every inch of exposed chips are covered evenly and consistently. The challenge is to get clear coat at even thickness over entire surface as where it is thicker it will be shinier. Flashing/shiny spots result with all clear coats if coating is thicker or if areas are overlapped.
- **ALTERNATIVE METHOD:** You can also install the clear coat by pouring onto the surface and using a flat-squeegee to spread it evenly over each section of deck to the desired thickness (leave some texture for slip-resistance). Then using pressure back-roll with STD 10 mm roller sleeve to create an even slip resistant finish. Be careful not to install the clear coat too thick or it could become 'milky' or wash-out the slip-resistant texture from the chips.

### System X – Helpful Tips

- With a pole sander use 100-150 grit sandpaper over the flakes to get rid of some chips sticking up so it not uncomfortable with bare feet. Sanding aggressively gives you a smoother but **be careful not to sand too much** or you lose your slip resistance.
- \*When more slip resistance is needed for Safety reasons add Flexstone's SHURGRIP to Clear coat.
- When rolling out the clear coat, ensure that the product is being applied evenly to avoid roller-marks and flashing (uneven shine). We recommend using a "W" or Cross-pattern to ensure that chips are evenly coated. **Do not allow the roller sleeve to empty to avoid thin areas.**  
\*A flat squeegee can also be used to spread clear coat prior to rolling out clear coat.
- Take your time rolling out the clear coat. Every few feet, take a step or 2 back and look at the surface from as many different angles as possible. This will highlight areas with too much or too little clear coat, allowing you to even it out.
- Avoid broadcasting chips if there is rain in the immediate forecast. The chips will clump together and require more work to remove the excess chips. May also require a second pass with top coat and chips. **You need 2 dry days to chip and clear coat.**
- The Clear Coat installation is the final step of the process; ensure that you have a plan before spreading and a point of exit so you are not forced to walk over the clear coat. Embedding dirt by walking over sticky clear coat can be tricky to repair. Using protection tape and paper is recommended to protect walls and railings from splatter.
- After 4-6 hours it has a skin and rain won't damage it. Allow the clear coat to fully cure (hard and no longer tacky) before walking on the deck or moving furniture back on to the deck. This can take 12-24 hours depending on how warm it is.
- If leaves, bugs, pine needles or other debris sticks to the clear coat before it cures, allow it to set-up completely and lightly sand the debris off the surface as it should not leave scratches. Often times you can simply dab some clear coat on those areas.
- In more extreme cases where a visible blemish is present; sand the problem-area, painter-tape around the section you are repairing. Sand the area within; roll out a thin layer of clear coat and spread/tap some chips on to the surface with a flat object (piece of a 2x4 works). When the chips match the rest of the deck surface coarseness and the clear coat beneath has hardened, roll out another thin coat, being careful not to overlap other areas.



Figure 11: Dispersing Chips

## Clean-up

- For cleaning up on the job wipe away any drips or excess product with a rag as soon as possible.
- You can also use a small amount of Xylene on your rag to help remove any product from flashing, concrete, or siding. Cleaning immediately is easiest.
- Clean tools with Xylene at the end of the job. Dispose of brushes and roller sleeves.
- Save the plastic Base pails to use on your next job. Store any leftover colour and clear coats in plastic pails as the lids with O-rings.

## Cleaning & Maintenance

- The simplest method is to simply mix a general-purpose cleaner (at full strength mix) with hot water. Using a stiff bristle brush or broom, scrub the surface with the cleaning solution. Leave it for 15 minutes, then rinse thoroughly.
- If preferred, using a pressure washer at low-moderate pressure is an efficient way to clean your surface. Hold the nozzle approximately 10" from the deck surface to clean dirt, algae and other debris off your surface.
- Moving Heavy Objects or Furniture: Moving furniture or heavy objects (i.e. planters) around your Flexstone deck should not damage the surface; however, if there are jagged or sharp feet on any heavy objects, lift before moving - sharp objects may scratch the surface causing cosmetic issues. \* Avoid the use of rubber mats – the surface needs to breathe.
- Snow and Ice Removal: Removing snow and ice off a Flexstone deck is simple. You can use a snow-shovel or snow blower to remove snow from the surface. To remove ice, road-salt or de-icer can be broadcasted on the surface. Exercise caution when removing ice from the surface. While Flexstone is inherently slip-resistant, ice formed on the surface can be a hazard. Open flame or high-powered heat guns for melting ice could damage the surface coating.

## Questions & Contact Info

Call us at (604)222-8453 or 1(866)419-8453. Our staff can walk you through any part of this process. Flexstone Coatings have a Manufacturer's Warranty against defects that protects consumers from faulty products. Failures or deficiencies as a result of improper installation, poor weather conditions, or faulty workmanship, are not covered by the warranty.