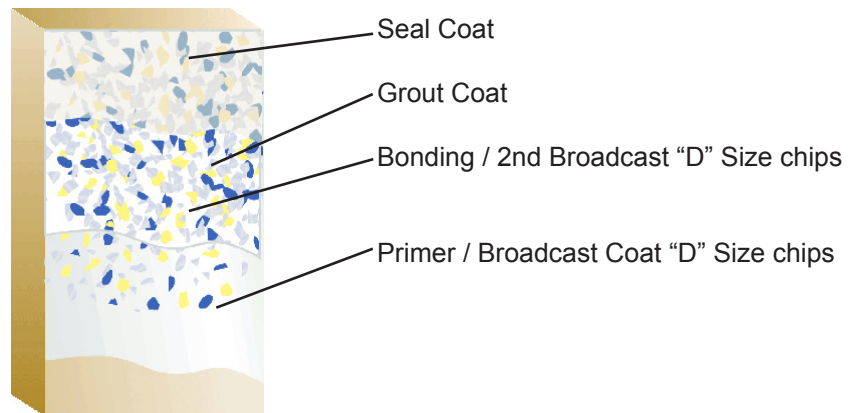




BioFlake

Wall System

General Polymers BIOFLAKE Wall System is a unique wall system consisting of water based epoxy resins and small multi-color color flakes to enhance design options while maintaining ease of cleaning and chemical resistance properties. This system is ideal for new construction but can be used to beautify existing walls that need refreshed. BioFlake Wall can be applied to drywall, block, ceramic tile or over existing painted surfaces, the slight texture provided from the small flakes disguises imperfections found in distressed wall surfaces.



Advantages

- Seamless
- Easy to apply using brush, roller, or spray
- Highly washable surface
- Aesthetically pleasing appearance
- Color stable
- Chemical Resistant
- Acceptable for use in USDA inspected facilities

Uses

- Commercial kitchens and service corridors
- Pharmaceutical facilities and laboratories
- Healthcare and clean rooms
- Animal care and animal holding facilities
- Food and beverage facilities
- Locker rooms and restrooms
- Cage and skid wash areas

Typical Physical Properties

Hardness, Shore D ASTM D 2240	70
Tensile Strength ASTM D 412	3,000 psi
Adhesion ACI 503R	300 psi Substrate failure
Flammability	Self-Extinguishing over concrete
Resistance to Elevated Temperatures MIL-D-3134J	No slip or flow at required temperature of 158°F
Fungus & Bacteria Resistance MIL-D-3134F Sec. 4.4.2.11	Will not support growth of fungus or bacteria per test specified TT-P-34

ASTM D = Resin only

Installation

General Polymers materials shall only be installed by approved contractors. The following information is to be used as a guideline for the installation of the [BioFlake Wall System](#). Contact the Technical Service Department for assistance prior to application.

Surface Preparation — General

General Polymers systems can be applied to a variety of substrates, if the substrate is properly prepared. Preparation of surfaces other than concrete will depend on the type of substrate, such as wood, concrete block, tile, cement board, drywall and masonry. Should there be any questions regarding a specific substrate or condition, please contact the Technical Service Department prior to starting the project. Refer to Surface Preparation (Form G-1).

Surface Preparation — Concrete

Consult the Surface Preparation (Form G-1) for surface preparation for gypsum board, concrete block, plywood, or concrete masonry unit (CMU).

CMU WALLS: For dense block 3462 can be used as a block filler. Add one part of fumed silica (GP9001) to a kit (3:1 part fumed silica). Adjust as needed for proper hang. Do not apply in bug holes or grout joints over ¼ inch in depth. For block with rougher texture, more voids and deeper joints contact Technical Service Department for additional information.

Temperature

Throughout the application process, substrate temperature should be 50°F – 90°F. Substrate temperature must be at least 5°F above the dew point. Applications on concrete substrate should occur while temperature is falling to lessen offgassing. The material should not be applied in direct sunlight, if possible. Protect material from freezing prior to installation. **DO NOT ALLOW MATERIAL TO FREEZE.**

Application Information

VOC MIXED		MATERIAL	MIX RATIO	THEORETICAL COVERAGE PER COAT CONCRETE	PACKAGING
**	Optional for Ceramic Tile	5531	Single Component	300 sq. ft./gal	Quart
<50 g/L	Primer Broadcast	3462 6750D or 6755D	3:1 To Excess	250-400 sq. ft./gal	4 or 20 gals
<50 g/L	Bonding Coat Second Broadcast	3461 6750D or 6755D	1:2 To Excess	250-400 sq. ft./gal	3 or 15 gals
<50 g/L	Grout Coat	3461	1:2	250-400 sq. ft./gal	3 or 15 gals
<50 g/L	Seal Coat	3461	1:2	400-500 sq. ft./gal	3 or 15 gals

** Contact Technical Service for tile substrates

Optional for Ceramic Tile

Mixing and Application

1. The vitreous substrate must be structurally sound. Greasy, oily surface should be cleaned with hot soapy solution like Spic & Span. Followed by xylene solvent wipe.
2. Lightly sand all surfaces paying particular attention to grout joints. A steel brush will help. Vacuum dust.
3. Premix 5531 using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to introduce air into the material.
4. Brush or roll a liberal amount making sure all surfaces are uniformly covered. The 5531 contains isopropyl alcohol (take proper precautions).
5. As soon as isopropyl alcohol has flashed off of the 5531 (typically 30-60 minutes) check for spots you might have missed. Typically, they are shiny spots along grout lines or divots. Touch up by rubbing 5531 into these spots with a clean rag.

Primer / Broadcast

Mixing and Application

1. Premix 3462A (resin) and 3462B (hardener) separately, using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to entrain air into the materials.
2. Add 3 parts 3462A (resin) to 1 part 3462B (hardener), mix with low speed drill and Jiffy blade for three minutes and until uniform. Up to 5% potable water can be added to lower viscosity. Apply material via airless spray or a 3/8" short nap roller at a spread rate of 250-400 sq. ft. per gallon to yield 4-6 mils WFT.
3. Broadcast 6750 Mosaic Broadcast to saturation (about 100# per 1000 square feet). Broadcast using a small compressor and hopper gun to create a "speckled" appearance.
4. Allow to cure.

Bonding Coat / Second Broadcast

Mixing and Application

1. Scrape or "pole sand" loose chips before applying second coat.
2. Premix 3461A(resin) and 3461B (hardener) separately, using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to entrain air into the material.
3. Add 1 part 3461A (resin) to 2 parts 3461B (hardener) by volume. Mix with low speed drill and Jiffy blade until uniform (typically 90 seconds), material will thicken as you mix. To insure proper cure and performance, strictly follow the mix ratio. Material may be reduced by 5%-10% potable water as a grout or topcoat. **DO NOT REDUCE PRODUCT UNTIL BOTH COMPONENTS HAVE BEEN MIXED TOGETHER FOR 90 SECONDS.**

4. Apply 3461 using a 3/8" roller at a spread rate 80-100 sq. ft. per gallon, immediately Broadcast 6750 Mosaic Broadcast to saturation (about 100# per 1000 square feet). Broadcast using a small compressor and hopper gun to create a "speckled" appearance.

5. Allow to cure overnight.

6. Prior to grout coat application, Scrape or "pole sand" loose chips before applying grout coat.

Grout Coat

Mixing and Application

1. Premix 3461A (resin) using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to introduce air into the material.
2. Add 1 part 3461A (resin) to 2 parts 3461B (hardener) by volume. Mix with low speed drill and Jiffy blade until uniform (typically 90 seconds), material will thicken as you mix. To insure proper cure and performance, strictly follow the mix ratio. Material may be reduced by 5%-10% potable water. **DO NOT REDUCE PRODUCT UNTIL BOTH COMPONENTS HAVE BEEN MIXED TOGETHER FOR 90 SECONDS.**
3. 3461 may be applied via spray, roller or brush. Apply using a 3/8" nap non-shedding, urethane enamel roller at a spread rate of 160 sq. ft. per gallon evenly with no runs.

4. Allow to cure overnight. Allow to cure 48 hours before water exposure and 7 days for full chemical resistance. In cool and/or high humidity conditions, a surface film may form which can be washed with soap and water.

5. Prior to seal coat application, pole sand surface with 80-100 grit screens to smooth texture.

Seal Coat

Mixing and Application

1. Premix 3461A (resin) using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to introduce air into the material.
2. Add 1 part 3461A (resin) to 2 parts 3461B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.
3. 3461 may be applied via spray, roller or brush. Apply using a 1/4" nap non-shedding, urethane enamel roller at a spread rate of 400-500 sq. ft. per gallon evenly with no runs. Note: Roller application will leave a stipple finish. A final roll with a sponge roller will reduce but not eliminate stipple.

4. Allow to cure overnight. Allow to cure 48 hours before water exposure and 7 days for full chemical resistance. In cool and/or high humidity conditions, a surface film may form which can be washed with soap and water.

Cleanup

Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fire and health precautions when handling or storing solvents.

Safety

Refer to the MSDS sheet before use. federal, state, local and particular plant safety guidelines must be followed during the handling and installation and cure of these materials.

Safe and proper disposal of excess materials shall be done in accordance with applicable federal, state, and local codes.

Material Storage

Store materials in a temperature controlled environment (50°F – 90°F) and out of direct sunlight.

Keep resins, hardeners, and solvents separated from each other and away from sources of ignition.

Maintenance

Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact the Technical Service Department.

Shipping

- Destinations East of the Rocky Mountains are shipped F.O.B. Cincinnati, Ohio.
- Destinations West of the Rocky Mountains are shipped F.O.B. Victorville, California.

For specific information relating to international shipments, contact your local sales representative.

Disclaimer

The information and recommendations set forth in this document are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product(s) offered at the time of publication. Published technical data and instructions are subject to change without notice.

Consult www.generalpolymers.com to obtain the most recent Product Data information and Application instructions.

Warranty

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams, NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



To learn more, visit us at

www.sherwin-williams.com/protective

or call 1-800-524-5979

to have a representative contact you.