FUNDAMENTALS

Prior to commencing installation, attentively study all available product(s) and system(s) information and carefully read and comprehend all applicable Safety Data Sheets (SDS). Do not commence installation until a thorough understanding of the product(s) and system(s) has been reached. Work site safety is priority, the use of Personal Protective Equipment (PPE) as outlined in the SDS must be worn and used at all times. Successful installations start from the ground up, 2therefore surface preparation is key to the longevity and performance of the final product. Do it right and do it once.

SURFACE & SITE TESTING

The following surface and work site testing should be carried out;

- **Moisture.** Concrete substrates must be tested for moisture. In-situ RH testing to the most recent revision of AS 1884-2012 or ASTM F2170 must be performed.
- **Atmospheric Conditions.** Check that atmospheric temperature and dew point are within products allowable limits. Consult Dew Point Calculator at www.alluvius.com.au or see Alluvius Dew Point Calculation Chart.
- **Surface Temperature.** Determine if surface temperature is within product limitations.
- **Tensile Bond.** Test tensile bond strength of primer as per the latest revision of AS/NZS 1580.408.5 or ASTM C1583.
- **Surface Profile.** Putty replica may be visually compared to ICRI Concrete Surface Profile Samples, in accordance with ASTM D 7682- 10 Method A. Surface profile may also be measured using a specially designed micrometer to quantitatively ascertain the actual profile range of the sample according to ASTM D 7682 Test Method B.

Consult Alluvius Technical Bulletin - Standard Test Methods for further information.

SURFACE PREPARATION

The longevity and performance of this system is directly associated with surface preparation, improperly prepared surfaces will be prone to failure. The number one cause of system failures is inadequate bond/adhesion to the host surface. A thorough inspection and evaluation of the surface to be coated must be carried out. Two vital conditions must be met for successful adhesion to the host surface:

1. Substrate must be structurally sound and clear of any notable defects or irregularities.
2. The surface must be clean and free of any contaminants, curing agents, compounds or barriers that will interfere with adhesion.

The planarity of the base should be level. Repair and patch with appropriate Alluvius polymeric materials prior to the application of the COVE-RES™ system if required.

Consult Alluvius Technical Bulletin SP#1 for further details.

MIXING STATION

Setup a mixing station as close to the site of application as possible. Protect the floor from splashes and spills. Stage materials in succession of use but in such a way as to not mistake similarly packed material. Have all required tools, accessories, documents and materials readily available. Mixing station should be organised with sufficient room for operation.

Consult Alluvius Technical Bulletin - Mixing Of Multiple Component Polymeric Materials for further details.

SYSTEM PRIMER

Measure the wall or host surface where the COVE-RES™ system will be installed. Snap a chalk line where the horizontal component of the cove will be terminated. If a cove strip is optioned or specified, apply the cove strip directly above the chalk line. After installation of the cove strip, blue painters tape should be applied directly above the cove strip. If forgoing the cove strip option, apply blue painters tape directly above the termination point of the COVE-RES™ system.

Using an Alluvius polymeric primer, coat the floor and wall or host surface where the COVE-RES™ system will be installed. A paint brush or suitable width roller can be used to apply the homogenously mixed primer onto the wall or host surface as well as out and onto the floor where the cove base will initiate.

Priming prior to the application of the COVE-RES™ mortar is a crucial step as the mortar typically does not have adequate adhesion to an unprimed surface due to the excessive dry filler in the mixture absorbing free liquid polymers.

COVE-RES™ MORTAR MIXING

Equipment: Mixing of the COVE-RES™ mortar can be accomplished with a mechanical mixing device such as a Jiffler mixing blade in a 20 litre bucket, or for larger batches, a pan style mixer (mix no more than the amount of material that can be used within the products pot life).

Mortar Mix Design: There is no exact amount of resin to sand to thickener ratio. The applicator must experiment and find a mortar mix design that is suitable to the application and to their mode of installation. Experienced applicators will be able to determine the correct mix design by feel. This can be accomplished by gradually adding the graded kiln dried sand and thickening agent until the desired mix design has been reached. The following mix designs are a starting point to help determine a suitable mix design:

Wet: By volume, 1 part mixed COVE-RES™ to 5 part graded kiln dried sand and 2 part THICK-AGENT #1.

Dry: By volume, 1 part mixed COVE-RES™ to 8 part graded kiln dried sand and 2 part THICK-AGENT #1.

Mixing: Add part "B" (curing agent) then part "A" (resin) in the specified volumetric ratio into a suitable mixing container or device and mix into a homogeneous blend. After homogenising the two components, pour the mixed polymeric material into a new container or device where it will be incorporated with the graded kiln dried sand and optional THICK-AGENT™. While mixing, steadily add 2 part THICK-AGENT #1 (optional) followed by graded kiln dried sand until the desired consistency has been met. Mix until all components have been incorporated uniformly (typically 2-3 minutes).

While wearing suitable protective gloves, take a fist full of mixed mortar and squeeze into a clump. If excess resin weeps out, this is a good indication that the mix is too resin rich and more sand or THICK-AGENT™ should be added. Contrary to a resin rich mortar, is a mortar that is too dry. If no resin is visible on your gloves after squeezing the mortar, this is a strong indication that the mortar is too dry.

APPLYING COVE-RES™ MORTAR

Using a margin trowel or other suitable tool, scoop mixed COVE-RES™ mortar out of the container and stick it to the horizontal portion of the wall or host surface while the primer is still "tacky". Allow excess mixture to slump and build up so that it can be used for building the cove radius.

Using a coving trowel with the specified radius, form the shape of the cove by applying pressure to both the horizontal and vertical surface of the cove base. The coving trowel is usually slightly flared open to stop sticking and reduce suction. The trowel should always remain lubricated with COVE-LUBE™ or denatured alcohol to avoid sticking and help expedite application. On inside and outside turns (45° to 90° angles), two coving trowels should be used to meet and create a clean junction. Use of a well-lubricated spoon in corners is a common trade secret for cleaning up and perfecting corner radius. After forming the cove, a second pass may be required shortly after initial application to build up and reshape slumping material.

Allow the COVE-RES™ system to dry. After drying, use a ceramic rub block to remove any loose material and surface irregularities.

GROUT COAT/TOP COAT

After the COVE-RES™ system has cured and all loose material and surface irregularities have been addressed, a grout coat or top coat can be applied to the surface of the cove to seal and form a non permeable finish. This grout or top coat is performed prior to the floor top coat.

If the cove is to form a uniform transition from the floor to the wall for a sparse or full coverage INFUSION-FLAKE™ system, broadcast directly into the wet film.

GROUT COAT/TOP COAT

The information provided in this installation guide is given to the best of our knowledge based on laboratory testing and practical experience. This installation guide does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. All Alluvius Pty Ltd products are manufactured to controlled specifications and we can only guarantee the quality of the product itself. Since we have no control over the conditions under which these products are transported, stored or handled and cannot anticipate or control the conditions under which the products may be used, each user must, prior to usage, review the technical data sheet and safety data sheet in the context of how the user intends to handle and use the product and to thoroughly test them before adapting them to their own uses. We reserve the right to change the given data without notice.