

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

PRODUCT NAME

STAMP-ON HORIZONTAL GRADE

PRODUCT DESCRIPTION & USE

A single-component, off-white (when unpigmented), polymer-modified, fibre-reinforced stamp-on concrete topping designed for the resurfacing of existing horizontal concrete surfaces. **STAMP-ON Horizontal Grade** is suitable for use over high traffic concrete driveways, pool decks, car parks, footpaths as well as for use as a decorative interior flooring system in residential, retail and commercial environments.

Superior adhesion, flexibility and durability are achieved through Alluvius' proprietary polymer technologies as well as user-friendly working times for ease of use in all seasons of the year.

ADVANTAGES & LIMITATIONS

Advantages

- Ready to use "just add water" formulation. No activators or modifiers required.
- Stamp and imprint patterns and textures from 5 mm to 10 mm depth.
- Repair, resurface, decorate and protect existing concrete surfaces.
- Versatile and user friendly application with moderate working times.
- Fibre reinforced formulation delivers superior physical properties.
- Excellent flexibility and exceptional adhesion
- Less labour, less coats and no waiting around for days for primer and scratch coat applications to cure in comparison to first generation "just add water" stamped concrete toppings.
- In many instances replaces the costly and timely task of removing and replacing existing concrete.
- Can be pigmented with Alluvius ALLUVERSAL COLOURANT system.
- Imprint natural stone, wood, slate and other textures

as well as intricate brick, cobblestone, tile patterns, designs and more.

Limitations

- Surface must be primed with Alluvius STAMP-ON Horizontal Grade.
- Application temperatures must be between 10 °C and 35 °C.
- Concrete slabs are recommended to cure for a minimum of 28 days prior to use.
- Requires a Concrete Surface Profile (CSP) of 2 to 5 with accordance to International Concrete Repair Institute standards (www.ICRI.org).
- Although easy to use, application may be too overwhelming for a weekend DIY project in the hands of an inexperienced installer.
- Windy installation conditions may accelerate water evaporation from the system reducing working times.

COLOUR

Consult individual product's technical data sheet for product compatibility, dosage and coverage rate information.

In general, dosage should not exceed 10% by volume of ALLUVERSAL PIGMENT to binder. Dosages above 10% will reduce the performance profile of the coating system. This includes adhesion, abrasion resistance, chemical resistance as well as physical parameters.

COVERAGE RATE

- Apply from 5 mm to 10 mm thickness.
- A 20 kg bag @ 5 mm thickness will yield approximately 2 m².
- A 20 kg bag @ 10 mm thickness will yield approximately 1 m².

SITE CONDITIONS & PREPARATIONS

The following conditions must be met prior to application:

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 or otherwise delamination will likely occur.
3. A Concrete Surface Profile (CSP) of 2-5 is recommended in accordance with International Concrete Repair Institute standards (www.ICRI.org). Surface preparation may include high pressure washing (minimum of 17,000 kPa/2500 psi), grinding, scarifying, shot blasting, or sandblasting depending on the type of contamination being removed and surface profile required (See Alluvius TECHNICAL BULLETIN SP-1). Acid etching is not recommended and should only be used as a last resort that must be followed by immediate neutralising and rinsing.

The repair of cracks does not guarantee that they will not reappear or telegraph through the STAMP-ON Horizontal Grade. Commonly after crack repairs are performed a new crack will appear, running adjacent to the previously repaired crack. Non-moving (static) cracks with a width less than 200 micron can be filled with the STAMP-ON Horizontal Grade and should require no further attention. Larger non-moving cracks can be filled with Alluvius patching mortars (patching mortars must fully cure before applying STAMP-ON). Epoxy, polyurethane and polyurea patching compounds must have graded sands sprinkled over the uncured material as the STAMP-ON and AMP-1 Primer will not adhere to these compounds.

All functional joints such as construction, contraction, expansion, and isolation joints must be respected and are not to be filled by STAMP-ON Horizontal Grade. If any of these joints are filled during installation, they MUST be reopened and made good after installation. Do not bridge STAMP-ON over any joint. Expansion joints should be placed over large surface installations.

OPERATION & INSTALLATION

Priming

After carrying out all surface preparation and repairs, the substrate is to be primed with AMP-1 Primer. AMP-1 Primer may be spray-applied (Chapin pump-up sprayer or similar) or poured directly on to the substrate using a watering container and gently worked in with a push broom at 8 m² per litre.

DO NOT ALLOW AMP-1 Primer to puddle. After AMP-1 Primer has dried tack-free, application of STAMP-ON Horizontal Grade may commence. If AMP-1 Primer is allowed to cure for longer than 4 hours a second coat of AMP-1 must be applied.

Mixing

In a 20 litre bucket, add 3.8 to 4.2 litres of water and optional ALLUVERSAL COLOURANT and mix until uniform (for each subsequent mixed coloured batch, the identical amount of colourant and water must be used in order to maintain colour uniformity). Slowly add the 20 kg bag of STAMP-ON Horizontal Grade into the bucket and mix at 300-400 RPM with a helical mixing blade being careful to scrape the sides of the mixing bucket so as to thoroughly mix all contents uniformly. After mixing for 2 minutes allow the STAMP-ON to sit for 1 minute and then remix again for 1 minute. Note that allowing the material to sit for 1 minute and then recommencing mixing is a vital step that cannot be omitted. Failing to allow the material to sit for 1 minute during the mixing procedure may result in inadequate wetting of polymer admixture, which may lead to product failure. After mixing, the material is to be poured onto the primed surface.

Application

1. Using a gauge rake that has been preset to the desired stamp impression thickness (between 5-10 mm), push or pull the freshly poured STAMP-ON Horizontal Grade until the point is reached that the material is no longer thick enough to be applied at the desired thickness.
2. Using a squeegee (magic trowel), bull float, fresno trowel or other flattening device which is typically fixed to a pole, remove the gauge rake tracking lines so as to create a smooth and uniform finish.
3. Allow the STAMP-ON to begin to dry to a firm, yet "plastic" state. The plastic state can be seen visually as the water begins to evaporate from the surface shortly after placement and a reduction of gloss can be observed. The plastic state can also be observed by touch by gently placing the palm of a hand on the surface and noting the point that the material is no longer sticky and beginning to become firm enough to allow the placement of stamp impression mats to be placed over the surface. The ideal firmness of the STAMP-ON is often equated to the same firmness of a steak cooked to medium rare.
4. When the STAMP-ON has reached the point at

which stamping can commence, spray STAMP-ON Liquid Release on the surface of the stamp impression mats as well as uniformly over the surface of the STAMP-ON that is to be immediately stamped.

5. Place stamp mats in designated pattern or sequence over the STAMP-ON topping and apply adequate pressure so as to leave imprinted textures or patterns into the STAMP-ON topping. This can be done by using force and pressure applied with feet, hands or with suitable tools such as concrete tamps.
6. After stamping the designated surface area, place and step or move onto the next stamp mat while carefully peeling the previous mat from the textured surface onto the next surface to be textured. Follow this sequence until finishing or reaching a surface area that is not yet ready for stamping.

Additional Application Notes

- Surfaces that are exposed to direct sunlight will cure and setup faster than those in shaded areas. Always keep this in mind when working under the elements as timing of the stamping process will exhibit variation from one area to another and require alert judgement.
- Be careful not to let the cams or runners of the gauge rake fall off the parameter of the concrete or traverse in a joint as this will create a feathered edge that will not be uniform to surrounding areas and will not accept a textured stamp impression.
- Seamless stamp mats should be allowed to overlap each other by 50 to 75 mm.
- Rotate seamless stamp mats by 90° after each use.
- Although STAMP-ON can be applied by a single user, it is strongly advised to have additional workers as this will greatly improve the work flow. If the STAMP-ON has reached a state that is no longer able to leave an impression, it can be a laborious task to remove the cured product.
- Use a trowel to clean up excessive materials that have travelled off the sides of the concrete or into joints or to generally clean, detail and feather blunt or asymmetrical borders, joints and edges. This can be done as soon as the STAMP-ON is hard enough to walk across (do not wear soiled footwear).
- When the STAMP-ON is hard enough to walk on, there will be a fixed period of time (typically 40-120 minutes) in which additional patterns can be carved into the curing topping. These hand carved patterns can greatly alter the finished effect and leave the impression of authentic grouting. This technique can

also be advantageous to implement existing cracks and imperfections from the substrate into the STAMP-ON and incorporate them within the final design.

- Rollers may be used to imprint borders, tile patterns and other design into the topping.
- Smaller floppy stamp mats may be used to stamp hard to reach areas that are adjacent to walls, along or up steps and other tight spaces.
- If working on a large project, it is advisable to start and stop at control or construction joints.
- Be mindful of weather conditions, STAMP-ON should be allowed to cure for a minimum of 48 hours without being exposed to rain or precipitation.
- Higher volume mixers may be utilised to expedite the mixing process and apply significantly higher volumes of material over the surfaces in the same amount of time.

COLOURING

Alluvius STAMP-ON Horizontal Grade can be integrally coloured (in the mix) with ALLUVERSAL COLOURANTS and left without further colouring or can be additionally coloured with LIQUID-IRIS Concrete Stain to create enhanced artistic appeal and authentic results. Alternatively, STAMP-ON may be left uncoloured and then topically stained with LIQUID-IRIS Concrete Stain or other suitable Alluvius staining, dying or accenting materials.

SEALING

A number of transparent Alluvius coatings are available for sealing STAMP-ON Horizontal Grade. It is strongly recommended that STAMP-ON Horizontal Grade be sealed as the unsealed surface will be susceptible to staining and premature wear.

The choice of sealer is dependent upon the environment in which the STAMP-ON is placed, anticipated volume of traffic (both foot and vehicular), slip resistance, anticipated exposure to chemicals and UV light, return to service requirements, budget, environmental conditions and restrictions as well as the general look and feel of the finished system. Exterior sealer options include Alluvius transparent waterborne acrylic and polyurethane sealers as well as solventbased acrylic sealers. All of these are available in full gloss to matt finishes. Vapour permeability should be considered when selecting the surface sealer,

particularly for exterior applications. Alluvius waterborne acrylic sealer (ATC-W) and solventbased acrylic sealers (ATC-G and ATC-M) demonstrate vapour permeability as well as a select range of Alluvius waterborne epoxies and urethanes.

Interior sealer options are more plentiful and include the above as well as waterborne and solventless transparent epoxies. It is important to note solventbased acrylics should not be used for internal applications unless adequate ventilation is available and absolutely no chance of ignition is possible.

In any case, the STAMP-ON must be allowed to dry for a minimum of 24 hours and in some circumstances 48 to 72 hours prior to overcoating. Each sealer will have specific requirements that must be followed which can be found in the manufacturer's Technical Data Sheet (visit www.alluvius.com.au).

It is important to note that solventbased sealers as well as 100% solids coatings will darken the coloured STAMP-ON surface. Never assume the colour of the surface will remain the same after sealing and drying.

MAINTENANCE

A proactive maintenance schedule will prolong the appearance and finish of any surface. Neglecting routine cleaning and maintenance will reduce the longevity of the aesthetic finish as well as making future cleaning more tedious and labour-intensive.

Final sealer selection will determine future maintenance intervals and procedures. In general, clean with a neutral pH low residue detergent and mop with a microfibre applicator for internal applications, or for external applications routinely hose or pressure-wash the surface and scrub with stiff-bristled broom.

See Alluvius Technical Bulletins at www.alluvius.com.au for detailed maintenance information and instructions.

PACKAGING

Alluvius STAMP-ON Horizontal Grade is available in 20 kg bags, with 50 bags per pallet (1 tonne net weight).

SHELF LIFE

2 years from date of manufacture.

CLEAN UP

Clean skin with warm soapy water. Remove any soiled clothing. Tools may be clean with water. Product that has been allowed to cure on tools may require scrubbing or a mechanical method for removal.

SAFETY PRECAUTIONS

- Review, familiarise with and follow the AMP-1 Primer (SDS) prior to use.
- See Section 8 of SDS for individual protection measures including Personal Protective Equipment (PPE).
- Refer to SDS for best practice for handling and storage.
- Keep out of reach of children.

DISCLAIMER

The information provided in this technical data sheet is given to the best of our knowledge based on laboratory testing and practical experience. This technical data sheet 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 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 product may be used, each user must, prior to usage, review this technical data sheet in the context of how the user intends to handle and use the product and to thoroughly test before adapting to their own uses. We reserve the right to change the given data without notice.