TECHNICAL DATA SHEET

ALLUVIUS CANVAS-TOP MICRO GRADE

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

Alluvius CANVAS-TOP Micro Grade

PRODUCT DESCRIPTION

Easy to use versatile multiple purpose single component off-white (when unpigmented) concrete resurfacing overlayment for both exterior and interior applications. CANVAS-TOP Micro Grade can be used as a spray-on concrete overlay or as a thin trowel or squeegee applied decorative concrete finish. CANVAS-TOP Micro Grade readily accepts and can be visually amplified by LIQUID-IRIS Concrete Stains and integral pigments such ALLUVERSAL COLOURANT as well as creating a seemingly limitless amount of textures and designs through various application techniques.

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

NOVANTAGES & LIMITATIONS

Advantages

- Ready to use "just add water" formulation. No activators or modifiers required.
- Easy application with moderate working times.
- Excellent flexibility with exceptional adhesion.
- Resurface, repair, decorate and protect existing concrete surfaces with a single formulation, multiple purpose just add water bag mixture.
- Ideal for pool decks, patios, driveways, retail outlets, residential homes, footpaths and virtually any other high traffic horizontal concrete surface.
- Rapid installation times via stand-up squeegee application.
- Can be sprayed via compressed air through a hopper gun for decorative slip-resistant bubble/splatter textures.
- Can be tightly hand trowelled as a smooth micro

topping finish.

- Seemingly endless texturing options from authentic hand trowelled old world finishes through to antique stained faux timber floor finishes.
- Can be pigmented with Alluvius ALLUVERSAL COLOURANT system or stained and accented with LIQUID-IRIS Concrete Stain.
- Tape, stencil or engrave to create decorative finishes that mimic virtually any pattern, border or design.

Limitations

- Concrete must cure for a minimum of 14 days prior to installation.
- Material can be applied to damp but not saturated surfaces with no standing water (puddles).
- In accordance with the International Concrete Repair Institute (www.ICRI.org), all surfaces must be profiled to a minimum Concrete Surface Profile (CSP) of 1 prior to application and be free of dust, dirt, oil, grease and other foreign contaminants.
- Although easy to use, application may be too overwhelming for a weekend DIY project in the hands of an inexperienced installer.
- Not suitable for high build applications. Not to be applied thicker than 4 mm.
- Installation temperature range is between 10 °C and 35 °C.

COLOUR

Off-white blend that can be optionally coloured on site with ALLUVERSAL COLOURANT liquid pigments for integral colouring. Optional topical colouring effects are available with Alluvius LIQUID-IRIS Concrete Stain. Grey cement blend available upon request (minimum order applies).

COVERAGE RATE

- Squeegee or trowel application coverage rate is from approximately 10 to 16 m² per 20 kg bag.
- Knockdown coats over scratch coat/ base coat

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coverage rate is from approximately 12 to 20 m² per 20 bag.

• Textured "spray on" application with 100% coverage from approximately 10 to 16 m² per 20 kg bag.

SITE CONDITIONS & PREPARATION

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 1-4 is recommended (See Alluvius TECHNICAL BULLETIN SP-1 for further information regarding CSP).

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. 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 CANVAS-TOP Micro 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 250 micron can be filled by the CANVAS-TOP Micro Grade and should require no further attention. Larger non-moving cracks can be filled with Alluvius patching mortars.

All functional joints such as construction, contraction, expansion, and isolation joints are not to be filled with CANVAS-TOP Micro Grade.

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 (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 7-10 m² per litre. **Do not allow AMP-1**

Primer to puddle. After AMP-1 Primer has dried tack-free (typically 20-30 minutes), application of CANVAS-TOP Micro Grade may commence. If AMP-1 is allowed to cure for longer than 4 hours a second coat of AMP-1 must be applied.

Mixing

The versatility of CANVAS-TOP Micro Grade permits significant variation in water demand at the time of mixture. Atmospheric conditions as well as substrate porosity will also dictate water demand. In the instance of a squeegee or trowel applied base and top coat, 3.8 to 4.5 litres of water per 20 kg bag is recommended. For spray-applied installations, 4 to 5.5 litres of water per 20 kg bag is recommended.

In a 20 litre bucket, add the required amount of water and optional pigment and mix until uniform (for each subsequent mixed colour batch, the identical amount of pigment and water must be used in order to maintain colour uniformity), if integral colouring is not required, skip this step.

Slowly add the 20 kg quantities of CANVAS-TOP Micro Grade into the bucket containing the required amount of water and mix at 300-400 RPM with a helical mixing blade being careful to scrap the sides of the mixing bucket so as to thoroughly mix all contents uniformly. After mixing for 2 minutes allow the CANVAS-TOP Micro Grade to sit for 1 minute and then remix again for 1 minute. Importantly, note that allowing the material to sit for 1 minute and then carrying out further 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 the polymer admixture, which may lead to product failure.

After homogeneous mixing, the material is to be applied immediately.

Base Coat / Scratch Coat

The CANVAS-TOP Micro Grade base coat may be applied by spray, squeegee (often referred to as a "magic trowel") or trowel, however it is recommended for ease of use and time management to apply the base coat via squeegee." Aim for a base coat/scratch coat coverage rate of 10-16 m² per 20 kg bag. If specific grout colours are required for stencilled or taped patterns, the base coat should be integrally coloured.

If taping or stencilling effects are desired, wait for the

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base coat to dry and apply the stencils or tape pattern prior to subsequent coatings.

CANVAS-TOP Texture Grade is often employed as the initial base coat/scratch coat as the larger particle size of this formulation assists in the filling of static surface cracks and irregularities <500 micron.

In rare instances, a second base coat/scratch coat may be required if heavy telegraphing of thin cracks or ghosting or grinning of uneven substrate colour or stains through the original base coat/scratch coat occur."

Finish Coat

After allowing the base coat to dry hard enough to walk on (typically 2-6 hours depending on the temperature, wind and humidity), spray, trowel or squeegee the finish coat over the base coat in a similar manner to the base coat. If texturing is desired, this is the step when to create such effects. Misting the previous cured coat of CANVAS-TOP Micro Grade with clean potable water will help eliminate excessive pulling of the fresh coat of CANVAS-TOP Micro Grade.

Spray textures may be adjusted by altering air pressure, changing orifice opening, lightly highlighting additional colours and/or knocking down spray applied finishes.

Trowelled finishes can be tightly burnished, textured, grooved, stippled as well as using numerous other techniques, patterns and designs. Mechanical sanding in the range +/- 36 micron (320# Grit) between coats as well as sanding of the finished coat reduces minor surface irregularities.

If tape or stencil was applied, wait until the CANVAS-TOP Micro Grade has cured hard enough to allow light foot traffic prior to removing the tape or stencil to reveal patterns and designs.

INSTALLATION METHODS

Application Via Squeegee (flexible trowel)

Pour an appropriate amount (in most cases the entire contents) of mixed CANVAS-TOP Micro Grade directly onto the primed substrate and work the material out tightly with a squeegee (often called a "Magic Trowel") fixed to a telescopic pole. A sufficient amount of pressure should be applied so as to follow the

contours of the substrate and follow the prescribed coverage rate of 10-16 m² per 20 kg bag. The installer should minimise the number of times the squeegee is lifted off the surface as this may create undesired trowel and chatter marks in the finished CANVAS-TOP Micro Grade. The squeegee technique is optimised by leaving the tool on the surface and making "S" shaped passes while pulling the material to a feather edge.

Application Via Trowel (Rigid Metal or Plastic Trowel)

Pour an appropriate amount of mixed CANVAS-TOP Micro Grade directly onto the primed substrate and trowel the material out tightly with a rigid trowel (magnesium, steel, plastic or other) while applying firm pressure on the designated tool. Long sweeping motions are commonly employed, however short random passes will impart alternative results. Lightly misting the substrate with clean potable water will help "lubricate and hydrate" the surface as well as helping to avoid pulling and clumping of the material. Often multiple coats applied in this fashion will be sanded in between the coats of CANVAS-TOP Micro Grade helping to impart and mimic a highly burnished or polished concrete surface.

Application Via Pressurised Hopper Gun ("Spray On")

Attach clean hopper gun (Marshalltown Sharpshooter or similar) to the compressed air source that can sustain 275 kPa (40 psi) in the hopper gun and select a suitable sized orifice (6 mm is most common). Larger orifice selection will deliver rougher splatter textures when the material water content is not too high while a smaller orifice selection will deliver finer and smoother texture if the water content is not too low. Spray CANVAS-TOP Micro Grade onto cardboard or other suitable surface to adjust and fine-tune the hopper setting before directly spraying on to the substrate.

Fill the hopper reservoir with an appropriate amount of CANVAS-TOP Micro Grade. Hold the hopper at approximately hip level. Spray CANVAS-TOP Micro Grade in a circular pattern down onto the substrate at the required coverage rate. Do not over-apply in a single coat but rather use multiple coats to achieve thicker applications. Highlight colours can be applied with alternative integrally coloured mixtures. Immediately after spraying, CANVAS-TOP Micro Grade

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can be knocked down with a trowel or squeegee to create additional finishing textures and effects if desired.

STAINING

CANVAS-TOP Micro Grade readily accepts stains and dyes. Alluvius LIQUID-IRIS Concrete Stain is available in a broad colour palette ranging from bright intense colours to subtle earth tones. Integrally colouring the CANVAS-TOP Micro Grade with ALLUVERSAL COLOURANTS will also impart significant advantages in achieving customised results thus further enhancing the staining effect.

SEALING

CANVAS-TOP Micro Grade may be sealed with a number of Alluvius single and multiple component sealers. It is strongly recommended that the CANVAS-TOP Micro Grade be sealed as the unsealed surface will be highly susceptible to staining and premature wear, particularly on horizontal surfaces.

The choice of sealer is dependent upon the environment in which the CANVAS-TOP Micro Grade will be 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 which are available in full gloss to matt finishes. Vapour permeability should be considered into consideration 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 CANVAS-TOP must be allowed to dry for a minimum of 24 hours and in some circumstances 48 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 CANVAS-TOP. 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 CANVAS-TOP Micro Grade is available in 20 kg bags, with 50 bags per pallet (1 tonne net weight).

SHELF LIFE

1 year from date of manufacture when kept in dry storage. After this period, the product should be tested for suitability of use. Refer to SDS for further information on best practice for handling and storage.

CLEAN UP

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

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SAFETY PRECAUTIONS

- Review, familiarise with and follow the CANVAS-TOP Micro Grade (SDS) prior to use.
- See Section 8 of SDS for individual protection measures including Personal Protective Equipment (PPF)
- 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 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 them before adapting them to their own uses. We reserve the right to change the given data without notice.



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