

## GUIDELINES FOR AN ARCHITECTURAL SPECIFICATION FOR CONCRETE USING NAWTONE-K MINERAL STAINS

### 1. General

The specification should cover the materials, preparation and services needed for the application of a concrete colouring emulsion on above ground, vertical and exterior exposed surfaces of new and existing unsealed concrete surfaces. The information below is to assist in the preparation of a project specification.

#### Variations:

- NawTone-K (Product code MSS)
- NawTone-KG (Product code MSS-G)

#### 1.1. Documents referred to:

- Nawkaw SDS for NawTone-K and NawTone-KG
- Nawkaw SDS for Concrete Surface Cleaner (CSC)
- Nawkaw 25 Year Limited Guarantee
- Nawkaw Operations & Maintenance Manual

Documents listed above and cited in the clauses that follow are part of this specification. However, this specification takes precedence in the event of it being at variance with the cited document. Copies of the above literature are available from:

#### **Nawkaw Australia**

**Email:** info@nawkaw.com.au

**Telephone:** 1300 629 529

**Website:** www.nawkaw.com.au

#### **Nawkaw New Zealand**

**Email:** solutions@nawkaw.co.nz

**Telephone:** 03 366 8989

**Website:** www.nawkaw.co.nz

#### 1.2. No Substitutions

Substitutions are not permitted to any specified manufacturer's system, or associated components and products

#### 1.3. Qualifications

Nawkaw Australasia has more than 20 years' experience in Australia and New Zealand in the supervision and application of the products specified in this section. Only approved applicators trained in the application of the stains and with the proper well-maintained equipment are to be used to ensure the 25-year limited guarantee.

### 2. Materials

NawTone-K and NawTone-KG are the brand name for the Mineral Silicate Sol based stain manufactured by Nawkaw. NawTone-KG is a semi-gloss version of NawTone-K for sharp colours and metallic finishes.

NawTone-K and NawTone-KG are extremely durable aqueous mineral silicate-sol based stains for concrete and masonry surfaces. These penetrate and bond to dense materials. The thin base keeps natural surfaces from being covered up, whilst providing the desired colour. Nawkaw colour technicians and accredited applicators custom blend light fast colorants and incorporate these in the formulation to achieve the natural colour finish required.

We customise the application and the degree of translucency to meet the aesthetic requirements whilst always maintaining the natural look. This product can be applied in colour densities from a wash of faint colour through to full opacity.

NawTone-K and NawTone-KG are very effective at blending away colour variations that naturally occur in the manufacture of concrete. This includes blending away unsightly or mismatching patch repairs and skim coat finishes.

Nawkaw Mineral Silicate Sol based stain (NawTone-K, NawTone-KG) is Low VOC with a VOC of <1g/litre. This is well under the threshold of 50g/litre in the Green Star Building Council Green Star Rating System, enabling one Green Star Credit Point for use of this product. It is non-hazardous and non-dangerous according to criteria of NOHSC & the ADG code.

### 3. Surface Preparation

Concrete surfaces must be clean and dry. Patch repairs should be finished flush to the surface and finished to the same texture. Where possible a patch should be the same shade or a slightly lighter shade in colour than the surrounding concrete surface.

The surface shall be tested by water misting over the surface to assess evenness of surface absorption and degree of water absorption. Where unevenness or incomplete absorption of the surface to moisture is confirmed then cleaning of the surface with Nawkaw CSC is necessary. Apply Nawkaw CSC to the concrete surface and rinse completely off before the surface dries. This eliminates the possibility of loosened material re-absorbing onto the surface. To maximise penetration of the stain it is recommended that the concrete surface is washed prior to emulsion colouring to remove any surface lime efflorescence and mould release residues.

Concrete surfaces should be a minimum of 7 days old. Precast element surfaces should not be exposed to driving rain for at least 4 hours after the application of the Nawkaw Colouring Process.

The surface cleaning agent (Nawkaw CSC) is a water-based, non-hazardous, concrete surface cleaner and is recommended to be used for all concrete surfaces that have surface presence of calcium efflorescence preventing even water absorption of the concrete surfaces.

### 4. Application

Nawkaw Mineral Silicate Sol based stain (NawTone-K, NawTone-KG) colour blended to a reference standard will be produced as recommended by the manufacturer.

The NawTone-K, NawTone-KG is applied by the chosen technique that best suits the method of construction whilst meeting the designed colour finish specification. Examples of techniques used to apply the NawTone-K, NawTone-KG are hand applications such as roller, pad, brush, as well as, machine applications such as misting, spraying and spattering.

### 5. Environmental Requirements

Substrate temperature must be above 5°C or below 40°C. Application cannot proceed if the substrate is wet, contains frozen water, or if rain is likely within 4 hours.

### 6. Protection

Protect all surrounds, metal, wood trim, glass, asphalt and other building hardware during application from over spray/roller splatter if applicable.

Do not permit mist (if spraying) or liquid to drift onto surrounding properties. Any surfaces inadvertently affected by colour should be cleaned with water immediately. Do not allow to dry. Protect adjacent surfaces against overspray or roller splatter where required.

## 7. Clean Up

At completion of staining, all excess materials, debris and waste must be removed from the jobsite. Return all unused stain to the warehouse for recycling or disposal to landfill after solidifying.

## 8. Submittals

### 8.1. Product Data

Submit manufacturers' technical literature, specifications and application instructions for Nawkaw Mineral Silicate Sol based stain (NawTone K, NawTone-KG) as manufactured by NAWKAW.

### 8.2. Environmental Regulations

The concrete colour finish material to be applied is in compliance with environmental Volatile Organic Compounds (VOC) regulations and is classed as non-hazardous, non-dangerous according to criteria of NOHSC & the ADG code. Nawkaw Mineral Silicate Sol based stain (NawTone-K, NawTone-KG) with a VOC of <1g/litre.

### 8.3. Control Panel

The submission of a control panel will become the reference standard of quality. Application of the concrete colouring emulsion to the control panel is to be as per the manufacturer's instructions and to achieve the desired effects as directed by the architect. After the sample treatment has cured in accordance with manufacturer's recommendations, verify the substrate is coated with sufficient colouring emulsion to produce the desired appearance and colour (One coat application of Nawkaw stain is as durable as multi coating).

Obtain the approval of the architect and/or project owner for the coverage, appearance and colour of the control panel prior to full scale application to application to concrete surface.

## 9. Product Delivery and Storage

Deliver all materials to the job site in original sealed containers that is clearly marked with the manufacturer's name, brand name and type of material and colour, or colour formula. Verify the product matches that of the original sample applied on the control panel.

Store and handle according to manufacturer's written instructions provided. Store all materials inside if possible, away from sparks or open flame in a secure area to avoid tampering and contamination. Water-based materials must be kept from freezing.

## 10. Maintenance

### 10.1. Balconies and Balustrades

Balconies are normally exterior surfaces so generally are exposed to weathering. Balconies are also living areas, so may be exposed to more severe impact and abrasion than interior walls due to their use as relaxation and entertaining areas combined with movement of outdoor furniture, barbeques, and pot plants.

The surfaces exposed to human traffic are likely to suffer impact and abrasion. Such impact and abrasion marks may not wash off, and repair by reapplication may be necessary. Nawkaw products can be top coated with impact and abrasion resistant clear coatings, to retain more superior resistance to impact and abrasion.

### 10.2. General Maintenance

The Nawkaw colour treated products require virtually no maintenance as it will inherently repel dirt and grime. An occasional hosing down with water will remove any dust accumulated over time. Harsh

treatments that are aggressive or abrasive are to be avoided.

Periodic cleaning will involve the use of a suitable biodegradable detergent and cold water. In cases where the soiling is not stubborn, a wash down with water alone may suffice.

Pressure washers above 1000 psi should never be used on the wall. It is recommended the tip of the spray nozzle is kept at least 500mm from the wall at all times during cleaning with a fan angle of minimum 15°C be maintained during cleaning.

- Do not use turbo head attachments when pressure cleaning
- Cleaning using high pressure hot water or steam cleaning is not recommended
- Strong acids such as HCl, abrasive cleaning methods and the application of adhesives and adhesives tapes should all be avoided

For cleaning of stains other than atmospheric grime please contact Nawkaw Australia 1300 629 529 info@nawkaw.com.au or Nawkaw New Zealand 03 366 8989 Solutions@nawkaw.co.nz for advice. Please refer to Nawkaw Operations & Maintenance Manual for more information.

## 11. Guarantee

Nawkaw shall guarantee its' concrete colour emulsion material against failure in material and 25 years from the date of application. When Nawkaw are contracted to supply, and apply, the guarantee covers supply and replace of any faulty materials and/or workmanship.

## 12. Selections

### 12.1. Nawkaw Colour Stain

**Choose option**

- Standard Nawkaw Colour
- Custom Colour to Match
- Custom Colour as per Individual Requirements specific to this Project

**Brand:**

Colour Code:

Name:

Application:

### 12.2. Anti-Graffiti Coating/Sealer

Brand:

Material:

Manufacturer:

Water based anti-graffiti coatings should be used to further protect NawTone-K, NawTone-KG. Graffiti removal is by solvent wipe method as approved or supplied by anti-graffiti manufacturer.

We recommend the NawTone-K or NawTone-KG finish with anti-graffiti applied be assessed and accepted for appearance prior to application.