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Validity

Users of any Agrément certificate should check its status: all currently valid certificates are listed on the website. In addition, check whether the certificate is [Active](#) or [Inactive](#).

The certificate holder is in possession of a confirmation certificate attesting to his status.

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Potable water: The water should be clean and preferably drinkable. Water that may be made potable by boiling may be used in its natural state

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Subject:
Africote Cement Naturals RPR Coating System

Certificate holder:
**International Natural Stone (Pty) Ltd
Trading as Africote**

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Description and use

The Africote Cement Naturals RPR (rainwater penetration resistant) Coating System consists of a base coat *Fillercote-C* and a finishing coat *Africote Cement Naturals*, for use on sound, properly prepared external and internal non-combustible wall surfaces as follows:

- concrete
- concrete masonry units
- sand cement plaster
- sand cement bagged finishes

in all regions of South Africa.

Fillercote-C (concentrate) is supplied as a powder in 25 kg and 40 kg polypropylene bags. This is mixed on site with plaster sand, Portland cement and potable water in accordance with the instructions set out in the certificate

holder's data sheets. The resultant thixotropic mixture is applied to the prepared wall surface as a brush-on coating or as a skimcoat plaster.

Africote Cement Naturals is a pigmented, textured cement based wall coating containing polymer ingredients. It is supplied as a powder in 25 kg and 40 kg polypropylene bags. It is mixed on site with potable water in accordance with the instructions set out in the certificate holder's data sheets. The resultant mix is applied on top of the base coat using a block brush.

This certificate and Agrément South Africa's assessment apply only to the Africote Cement Naturals RPR Coating System manufactured, mixed and applied by trained applicators to suitably prepared surfaces as described and illustrated in this certificate, and where the terms and conditions of certification are adhered to.

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PREAMBLE

This certificate is issued by Agrément South Africa in terms of the powers granted to it by the Minister of Public Works.

This certificate:

- has been granted after a technical appraisal of the performance of the Africote Cement Naturals RPR Coating System for the [uses](#) covered by the certificate,
- is independent of any patent rights that may or may not subsist in the subject of the certificate,
- does not relieve the certificate holder from the obligation to obtain the prior approval of the building authority concerned for the use of the subject.

Agrément South Africa considers that the quality and performance of the Africote Cement Naturals RPR Coating System will be satisfactory provided that the requirements stipulated in this certificate are adhered to. However, Agrément South Africa does not on behalf of itself, or the State, or any of its employees or agents, guarantee such quality or performance.

Responsibility for compliance with the requirements of this certificate and the quality system resides with the certificate holder.

No action for damages, or any other claim whatsoever lies against Agrément South Africa, its members, the State or any of its employees should the said components and materials fail to comply with the standard set out in this certificate.

Building authorities or users who are in any doubt about any detail or variation should contact [Agrément South Africa](#).

Notices affecting the validity of this certificate will be published in the *Government Gazette*.

PART 1: CONDITIONS OF CERTIFICATION

This certificate covers only the Africote Cement Naturals RPR Coating System manufactured by the certificate holder where the base coat and the top coat are mixed and applied:

- by applicators who are trained and approved by the certificate holder
- to properly prepared internal and external non-combustible wall surfaces as follows:
 - concrete
 - concrete masonry units
 - sand cement plaster
 - sand cement bagged finishes

Any change to the production process or the material formulation or the method of application could result in various aspects of the performance of this product no longer complying with Agrément criteria. Any change not authorised by Agrément South Africa prior to its implementation would invalidate this certificate and the certificate could then not be used to demonstrate compliance with the National Building Regulations.

Republic of South Africa National Building Regulations and Building Standards Act 103, 1997 Government notice No R 2378, Government Gazette No.12780, Pretoria, South Africa, 12 October 1990

General conditions

The polypropylene bags used to package the products must be suitably marked with Agrément South Africa's identification symbol illustrated below and a note to the effect that only coatings applied by approved applicators can be claimed to be in accordance with this certificate

The validity of this certificate is subject to the continued participation of the certificate holder in Agrément South Africa's post-certification quality assurance scheme.



Reappraisal

- must be requested by the certificate holder before making changes to the products or to the method of application
- will be required by Agrément South Africa if there are changes to the National Building Regulations, to Agrément criteria or to South African standards.

This certificate may be withdrawn if the certificate holder fails to comply with these requirements.

On behalf of the Board of Agrément South Africa



Chairman
May 2003

PART 2: ASSESSMENT

Scope of assessment

This assessment is based on:

- site visits conducted in Durban, Gauteng, Cape Town and Mooirivier
- factory visits and subsequent examination of wall surfaces finished with the same coating system as part of Agrément's post-certification quality assurance scheme during the validity of Certificate 99/271
- inspection of the manufacturing process in the new factory
- known behaviour of the materials used in the system
- documentation provided by the applicant
- tests conducted on conventional concrete brick walls and on dry stack block walls coated as described in this certificate
- tests conducted on currently manufactured coatings.

Assessment

In the opinion of Agrément South Africa, the Africote Cement Naturals RPR Coating System is suitable for the uses specified on page 1, in all regions of South Africa.

Agrément South Africa's detailed comments on the various aspects of performance of the coatings are set out in Tables 1 and 2 below. Each aspect of performance was assessed by experts in that field.

Where applicable the performance of the wall coatings relates to the National Building Regulations as set out in Table 1. Any regulation not specifically referred to is considered to be outside the scope of this certificate and must be applied by the local authority in the normal manner.

Table 1

Aspects of performance	Opinion of Agrément South Africa	Compliance with the National Building Regulations
Materials	The quality and suitability of the materials are satisfactory.	The materials used in the Africote Cement Naturals Coating System are deemed to satisfy the requirements of regulation A 13(1) (a) , Part A: Administration.
Behaviour in fire	<p>The coatings in the Africote Cement Naturals RPR Coating System are combustible. However, when applied in accordance with the manufacturer's instructions to the substrates listed, they can be regarded as non-combustible.</p> <div style="border: 1px solid green; padding: 5px; margin: 10px 0;"> <p>SANS 10400 <i>The application of the National Building Regulations</i></p> </div>	<p>The Africote Cement Naturals RPR Coating System is deemed to satisfy requirements of regulation T1(d), Part T : Fire protection, as regards spread of fire and generation of smoke.</p> <p>Deemed-to-satisfy rule TT5.2 (c), SANS 10400 <i>The application of the National Building Regulations</i>, has been met.</p>
Resistance to rainwater penetration	Satisfactory	Deemed-to-satisfy rule KK17 , Part K: Walls, has been met.

Table 2

Aspect of performance	Opinion of Agrément South Africa	Explanatory notes
<i>Bond</i>	The coating bonds well to correctly prepared substrates as listed on Page 1.	Surface preparation, application and curing are important and must be carried out in accordance with Part 3 of this certificate.
<i>Colour stability</i>	Satisfactory.	<p>Agrément's opinion is based on site inspections of coated wall surfaces and knowledge of the materials used.</p> <p>Africote Cement Naturals' colour stability will be adequate but the coatings can be discoloured by water runs and fading can be expected to occur if lime in the substrate leaches out.</p> <p>There may be a slight discolouration when wetted by rain but the colours will return to their original shade when the coating dries out.</p>
<i>Durability</i>	<p>Satisfactory.</p> <p>Where the coating system is applied to properly prepared wall surfaces of the type specified on Page 1 and particular attention is given to curing both coats, the system should perform satisfactorily for 4 to 6 years before requiring recoating.</p>	<p>The Africote top coat is a cement-based paint, with low flexibility. With minor movement of the substrate, hairline cracks can occur.</p> <p>Where such cracks do occur, recoating with the top coat Africote Cement Naturals will improve the weather resistance of the coated wall.</p> <p>The coating can withstand frequent washing with water without deterioration, provided that a soft brush or broom is used.</p> <p>Where water-based coatings such as these are applied to concrete masonry units that contain soluble salts, efflorescence may occur.</p> <p>If the concrete brick or block has a significant ash content, this could result in blow holes pitting the surface of concrete masonry units. This can lead to damage of any surface coating with possible water penetration of the wall.</p>
<i>Resistance to abrasion</i>	Satisfactory	Agrément's assessment is based on the inspection over several years, of walls coated with this system and on the experience gained with tests conducted on specimen panels coated with this coating system and others coated with products of similar formulation.
<i>Water-vapour permeability</i>	Satisfactory	The coating system is assessed to be sufficiently water-vapour permeable not to cause interstitial condensation.

Quality management	Satisfactory. The quality system complies with Agrément South Africa's requirements that are based on SANS 9001 Quality management systems – Requirements	When properly applied, the system will ensure that acceptable standards are maintained in the manufacture and application of the coatings.
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PART 3: TECHNICAL DESCRIPTION

General description

The Africote Cement Naturals RPR (rainwater penetration resistant) Coating System consists of a base coat, Fillercote-C and a finishing coat, Africote Cement Naturals.

Fillercote-C (concentrate) is supplied as a powder in 25 kg and 40 kg polypropylene bags.

The concentrate is mixed on site with:

- plaster sand
- portland cement
- potable water

in accordance with the instructions set out in the certificate holder's data sheets. The resultant thixotropic mixture is suitable for application to the prepared wall surfaces as a brush-on coating or as a skim-coat plaster.

Africote Cement Naturals is a pigmented, textured cement-based wall coating containing selected ingredients, including polymers. It is supplied as a powder in 25 kg and 40 kg polypropylene bags. It is mixed on site with potable water in accordance with the instructions set out in the certificate holder's data sheets. The resultant mix is suitable for application to the base coat using a block brush.

Manufacture

The manufacture of Fillercote-C is a batch process involving the mixing of the ingredients in a pan mixer.

Fillers are first introduced, followed by selected ingredients to provide the required properties. The product is bagged after weighing.

Africote Cement Naturals pigments and silica sand aggregates are pre-ground to ensure uniform pigmentation in a vortex mixer. The pigments are added to a pan mixer together with the cement and selected ingredients to provide the required properties.

Plaster sand must comply with the requirements of SANS 1090 *Aggregates from natural sources – Fine aggregates for plaster and mortar*

Plaster sand must not contain more than 7% silt and clay when tested in accordance with the certificate holder's data sheets.

Portland cement must comply with the requirements of SANS 50197-1 *Cement Part 1: Composition, specifications and conformity criteria for common cements*

Application of coatings

General

The certificate holder makes available demonstration teams on each site, prior to commencement of a project. These teams train personnel as appliers of the coating system. Once a demonstration team leader is satisfied with a trainee's work and understanding of the process the certificate holder issues a certificate to the individual stating that he/she is an approved Africote Cement Naturals RPR Coating System applier.

The team also conducts initial tests on the plaster sand that will be mixed with Fillercote-C, to ensure that it complies with the certificate holder's requirements for clay and silt content.

During the course of the project, team members carry out regular visits to sites to:

- ensure that correct application and curing procedures are adhered to
- check that the plaster sand is tested at such intervals as will ensure that the specified properties are consistently maintained.

Surface preparation

New unrendered surfaces to which the coatings are to be applied are checked to ensure that the horizontal and vertical mortar joints are properly filled with mortar. Any deficiencies are remedied using mortar or thick Fillercote- C.

Where shutter oil has been used, the surface of the concrete is treated with a proprietary degreaser and prepared in accordance with the manufacturer's instructions.

Existing surfaces on which the coatings are to be applied must be free of dust, dirt, oil, lichen and loose material. They are wire-brushed and washed down where necessary. Any organic growth should be removed and spores killed by scrubbing with a biocide. Dead growth is removed and the surface rinsed well with clean water. Surfaces previously treated with lime wash or where the paint is loose and flaky should be scraped to a sound base and wire-brushed.

Application

Fillercote-C is mixed on site in accordance with instructions set out in the certificate holder's data sheets. The coating must be applied within one hour of mixing.

All material not applied within one hour of mixing must be discarded.

The surface to be coated is wetted thoroughly and Fillercote-C is applied immediately, using a block brush, brushing in all directions to ensure that all cavities and holes are filled.

Fillercote-C is thoroughly wetted on at least three occasions at regular intervals throughout the day following application. The surface is tested prior to over-coating with Africote Cement Naturals, to ensure that the surface is hard and sound.

When Fillercote-C is applied as a skim coat plaster, it is applied to the required thickness (1 mm to 5 mm) with a block brush, ensuring that all cavities and holes are filled. The brushed surface is smoothed with a steel trowel. The surface is allowed to stiffen, then lightly wetted and floated with a feather-edged plastic float and cured by wetting as described above.

Africote Cement Naturals is mixed with potable water according to the certificate holder's instructions. It must be used within one hour of mixing. Any coating not applied within the stipulated time must be discarded. When the mix has achieved a creamy lump-free consistency, it is allowed to stand for approximately five minutes, thoroughly stirred and applied to the surface of the Fillercote-C with a block brush. It is applied liberally vertically and horizontally. A stipple or textured finish can be applied with a sponge or block brush.

It is recommended that to achieve a durable finish, especially in hot dry conditions, the painted surface should be thoroughly wetted on at least three occasions at regular intervals throughout the day following application.

Storage and shelf life

The packaged products must be protected from becoming damp during storage in the factory, in transit and on site (stored off the floor on wood slats) and the packaging must be kept intact until the product is to be applied.

The shelf life of the packaged Fillercote–C and the Africote Cement Naturals is six months. Each bag must be marked with the shelf life of the product.

