



TEST REPORT



Report No	UNICO20260622G45043-2
Applicant:	Guangdong Kangwang Nano New Materials Technology Co., Ltd.
Address:	No. 388, South Guo Road, Xingtan Community, Xingtan Town, Shunde District, Foshan City, Guangdong Province
Manufacturer:	Guangdong Kangwang Nano New Materials Technology Co., Ltd.
Address:	No. 388, South Guo Road, Xingtan Community, Xingtan Town, Shunde District, Foshan City, Guangdong Province
Product:	Two-component epoxy coating
Model:	H0238 H0237 H0236 H0235 H0234 H0233 H0232 H0231 H0230
Test standard:	EN 1504-2:2004
Conclusion:	The products meet the above standards.
Brand	
Edit Date:	2026-06-22
Issue date:	2026-06-22
Testing Laboratory	Name : RENOWS CERTIFICATION TESTING CO., LTD Address: CHASE BUSINESS CENTRE 39-41 CHASE SIDE LONDON UNITED KINGDOM N14 5BP E-Mail: info@renows.net

Signature of Authorized Person: Jacqueline Marti



ASSESSMENT REPORT	
TCF	
Reference No. : No:	UNICO20260622G45043-2
Tested by(+ signature).....: Project Engineer/Downey Xue	APPROVE   Unico Certification Testing Co., LTD 7 COPPERFIELD ROAD, COVENTRY, WEST MIDLANDS, UNITED CV24AQ
Reviewed by(+ signature).....: Manager/Vincent Yan	
Date of issue : 2026-06-22	
Applicant	
Name	Guangdong Kangwang Nano New Materials Technology Co., Ltd.
Address	No. 388, South Guo Road, Xingtian Community, Xingtian
Town, Shunde District, Foshan City, Guangdong Province	
Test specification	
Standard	EN 1504-2:2004
Test procedure	CE
Non-standard test method	N.A.
Test item description :	
Manufacturer..... :	Guangdong Kangwang Nano New Materials Technology Co., Ltd.
Factory..... :	Guangdong Kangwang Nano New Materials Technology Co., Ltd.
Trademark	Refer to the nameplate.
Model/Type reference	Refer to the page 1
Rating(s)	Refer to the nameplate.
General product information:	

Clause	Requirement - Test	Result - Remark	Verdict
EN 1504-2:2004			
1	Scope This document specifies requirements for the identification, performance (including durability aspects), safety and evaluation of conformity of products and systems to be used for surface protection of concrete, to increase the durability of concrete and reinforced concrete structures, as well as for new concrete and for maintenance and repair work. The surface protective methods covered by this document are the following: - hydrophobic impregnation; - impregnation; - coating. Flooring systems in buildings which are not intended to protect or reinstate the integrity of a concrete structure are standardised in EN 13813. When products and systems complying with this standard are used in flooring applications that involve substantial mechanical loading, they should also satisfy the requirements of EN 13813.		P
2	Normative references The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. EN 206-1, Concrete — Part 1: Specification, performance, production and conformity. EN 1015-3, Methods of test for mortar for masonry — Part 3: Determination of consistence of fresh mortar (by flow table). EN 1015-6, Methods of test for mortar for masonry — Part 6: Determination of bulk density of fresh mortar. EN 1015-7, Methods of test for mortar for masonry — Part 7: Determination of air content of fresh mortar. EN 1062-3, Paints and varnishes — Coating materials and coating systems for exterior masonry and concrete — Part 3: Determination and classification of liquid-water transmission rate (permeability). EN 1062-6, Paints and varnishes — Coating materials and coating systems for exterior masonry and concrete — Part 6: Determination of carbon dioxide permeability.		P

EN 1062-7, Paints and varnishes — Coating materials and coating systems for exterior masonry and concrete — Part 7: Determination of crack bridging properties. EN 1062-11:2002, Paints and varnishes — Coating materials and coating systems for exterior masonry and concrete — Part 11: Methods of conditioning before testing. EN 1081, Resilient floor coverings — Determination of the electrical resistance. EN 1240, Adhesives — Determination of hydroxyl value and/or hydroxyl content. EN 1242, Adhesives — Determination of isocyanate content. EN 1504-1:1998, Products and systems for the protection and repair of concrete structures — Definitions, requirements, quality control and evaluation of conformity — Part 1: Definitions. EN 1504-8:2004, Products and systems for the protection and repair of concrete structures - Definitions, requirements, quality control and evaluation of conformity - Part 8: Quality control and evaluation of conformity ENV 1504-9:1997, Products and systems for the protection and repair of concrete structures — Definitions, requirements, quality control and evaluation of conformity — Part 9: General principles for the use of products and systems. EN 1542, Products and systems for the protection and repair of concrete structures — Test methods — Measurement of bond strength by pull-off. EN 1766, Products and systems for the protection and repair of concrete structures — Test methods — Reference concretes for testing. EN 1767, Products and systems for the protection and repair of concrete structures — Test methods — Infrared analysis. EN 1770, Products and systems for the protection and repair of concrete structures — Test methods — Determination of the coefficient of thermal expansion. EN 1877-1, Products and systems for the protection and repair of concrete structures — Test methods — Reactive functions related to epoxy resins — Part 1: Determination of epoxy equivalent. EN 1877-2, Products and systems for the protection and repair of concrete structures — Test methods — Reactive functions related to epoxy resins — Part 2: Determination of amine functions using the total basicity number.		
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EN 12190, Products and systems for the protection and repair of concrete structures — Test methods — Determination of compressive strength of repair mortar. EN 12192-1, Products and systems for the protection and repair of concrete structures —Granulometry analysis — Part 1: Test method for dry components of premixed mortar. EN 12617-1, Products and systems for the protection and repair of concrete structures — Test methods — Part 1: Determination of linear shrinkage for polymers and surface protection systems (SPS). EN 13036-4, Road and airfield surface characteristics — Test methods — Part 4: Method for measurement of slip/skid resistance of a surface — The pendulum test. EN 13294, Products and systems for the protection and repair of concrete structures — Test methods — Determination of stiffening time. EN 13395-2, Products and systems for the protection and repair of concrete structures — Test methods — Determination of workability — Part 2: Test for flow of grout or mortar. EN 13501-1, Fire classification of construction products and building elements — Part 1: Classification using test data from reaction to fire tests. EN 13529, Products and systems for the protection and repair of concrete structures — Test methods — Resistance to severe chemical attack. EN 13578, Products and systems for the protection and repair of concrete structures — Test method — Compatibility on wet concrete. EN 13579, Products and systems for the protection and repair of concrete structures — Test methods — Drying test for hydrophobic impregnation. EN 13580, Products and systems for the protection and repair of concrete structures — Test methods — Water absorption and resistance to alkali for hydrophobic impregnation. EN 13581, Products and systems for the protection and repair of concrete structures — Test methods — Determination of loss of mass of hydrophobic impregnated concrete after freeze-thaw salt stress. EN 13687-1, Products and systems for the protection and repair of concrete structures — Test methods — Determination of thermal compatibility — Part 1: Freeze-thaw cycling with de-icing salt immersion. EN 13687-2, Products and systems for the protection and repair of concrete structures — Test methods — Determination of thermal compatibility — Part 2: Thunder-shower cycling (thermal shock).		
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EN 13687-3, Products and systems for the protection and repair of concrete structures — Test methods — Determination of thermal compatibility — Part 3: Thermal cycling without de-icing salt impact. EN 13687-5, Products and systems for the protection and repair of concrete structures — Test methods — Determination of thermal compatibility — Part 5: Resistance to temperature shock. prEN 14630, Products and systems for the protection and repair of concrete structures — Test methods — Determination of carbonation depth in hardened concrete by the phenolphthalein method. EN ISO 868, Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness) (ISO 868:2003). EN ISO 1517, Paints and varnishes — Surface-drying test — Ballotini method (ISO 1517:1973). EN ISO 2409, Paints and varnishes — Cross-cut test (ISO 2409:1992). EN ISO 2431, Paints and varnishes — Determination of flow time by use of flow cups (ISO 2431:1993, including Technical Corrigendum 1:1994). EN ISO 2808:1999, Paints and varnishes — Determination of film thickness (ISO 2808:1997). EN ISO 2811-1, Paints and varnishes — Determination of density — Part 1: Pyknometer method (ISO 2811-1:1997). EN ISO 2811-2, Paints and varnishes — Determination of density — Part 2: Immersed body (plummet) method (ISO 2811-2:1997). EN ISO 2812-1, Paints and varnishes — Determination of resistance to liquids — Part 1: General methods (ISO 2812-1:1993). EN ISO 2815, Paints and varnishes — Buchholz indentation test (ISO 2815:2003). EN ISO 3219, Plastics — Polymers/resins in the liquid state or as emulsions or dispersions — Determination of viscosity using a rotational viscometer with defined shear rate (ISO 3219:1993). EN ISO 3251, Paints, varnishes and plastics — Determination of non-volatile-matter content (ISO 3251:2003). EN ISO 3451-1, Plastics — Determination of ash — Part 1: General methods (ISO 3451-1:1997). EN ISO 4628-2, Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 2: Assessment of degree of blistering (ISO 4628-2:2003). EN ISO 4628-4, Paints and varnishes — Evaluation of		
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	degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 4: Assessment of degree of cracking (ISO 4628-4:2003). EN ISO 4628-5, Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 5: Assessment of degree of flaking (ISO 4628-5:2003). EN ISO 5470-1, Rubber- or plastics-coated fabrics — Determination of abrasion resistance — Part 1: Taber abrader (ISO 5470-1:1999). EN ISO 6272-1, Paints and varnishes - Rapid-deformation (impact resistance) tests - Part 1: Falling-weight test, large-area indenter (ISO 6272-1:2002). EN ISO 7783-1, Paints and varnishes — Determination of water-vapour transmission rate — Part 1: Dish method for free films (ISO 7783-1:1996, including Technical Corrigendum 1:1998). EN ISO 7783-2, Paints and varnishes — Coating materials and coating systems for exterior masonry and concrete — Part 2: Determination and classification of water-vapour transmission rate (permeability) (ISO 7783-2:1999). EN ISO 9514, Paints and varnishes — Determination of the pot-life of liquid systems — Preparation and conditioning of samples and guidelines for testing (ISO 9514:1992). EN ISO 11358, Plastics — Thermogravimetry (TG) of polymers — General principles (ISO 11358:1997).		
3	Terms and definitions For the purposes of this document, the following terms and definitions given in EN 1504-1:1998, EN 1504-8:2004, ENV 1504-9:1997 and the following apply.		P
	3.1 hydrophobic impregnation treatment of concrete to produce a water-repellent surface. The pores and capillaries are internally coated, but They are not filled. There is no film on the surface of the concrete and there is little or no change in its appearance NOTE Active compounds may be, for example, silanes or siloxanes.		P
	3.2 impregnation treatment of concrete to reduce the surface porosity and to strengthen the surface. The pores and capillaries are partially or totally filled		P

	NOTE 1 This treatment usually leads to a discontinuous, thin film on the concrete surface. NOTE 2 Binders may be, for example, organic polymers.		
	3.3 coating treatment to produce a continuous protective layer on the surface of concrete NOTE 1 Thickness is typically of 0,1 mm to 5,0 mm. Particular applications may require a thickness greater than 5 mm. NOTE 2 Binders may be, for example, organic polymers, organic polymers with cement as a filler or hydraulic cement modified with polymer dispersion.		P
	3.4 layer thickness dry film thickness defined in EN ISO 2808:1999, Clause 4. It should be determined according to EN ISO 2808. For the purposes of this standard: the mean dry film thickness is defined in EN ISO 2808:1999, 4.8; the minimum dry film thickness (d min) is to be taken as the lower 5 % fractile of the gaussian distribution of The thickness measurements; the absolute minimum dry film thickness that may be achieved on application is at least 0,7 d min		P
4	Performance characteristics for intended uses		P
	4.1 General Table 1 lists the performance characteristics of surface protection products and systems which are required for “all intended uses” or “certain intended uses” according to the “principles” and “methods” defined in ENV 1504-9. Performance characteristics which are required for “all intended uses” are marked with ?. All other performance characteristics which are marked with ? may be required for “certain intended uses”. Performance characteristics and requirements for each method are given in 5.2.		P
	4.2 Selection of appropriate products or systems The surface protection system shall be selected based on an assessment of the actual or potential causes of deterioration and consideration of the appropriate principles and methods for protection and repair specified in ENV 1504-9. The process leading to the choice of products and systems can be described briefly as follows: a) Assessment of stresses, defects and damages, their classification and determination of their causes. b) On the basis of the assessment the “principle(s)” for protection and repair of the concrete structure should		P

	be chosen. c) When the “ principle(s) ” is(are) defined the appropriate “ method ” (Hydrophobic impregnation, impregnation and coating) to fulfil one or several principle(s) has to be chosen. The corresponding squares ? represent In every case basic compulsory characteristics (see Table 1). d) Based on the diagnosis further characteristics for the products and systems to be used may be selected, if they are necessary for certain intended use. The “requirements” for the set of characteristics of the products and systems for the intended use are given in 5.2 (see Tables 3, 4 and 5).		
5	Requirements		P
	5.1 Identification requirements The manufacturer shall undertake selected representative initial identification tests for the product or system as specified in Table 2 and Annex A. These tests may be used to confirm the composition of the product at any time. Acceptable tolerances are given in Table 2. The manufacturer shall hold the test records.		P
	5.2 Performance requirements The performance requirements of surface protection systems are summarized in Tables 3 to 5. The manufacturer shall undertake initial performance tests on surface protection products and systems in accordance with Tables 3 to 5 and the product shall comply with the requirements. All abbreviations, units and symbols used in these Tables under the heading “Requirements “ are described in the relevant test methods. Test samples shall be prepared according to the manufacturers instructions and in a horizontal or vertical orientation that is similar to that in which they are intended to be used.		P
	5.3 Release of dangerous substances Hardened surface protection systems shall not release substances dangerous to health, hygiene and the environment. See Annex C (informative).		P
	5.4 Reaction to fire For surface protection systems to be used in elements subject to fire the manufacturer shall declare the reaction to fire classification of the hardened surface protection system. Hardened surface protection systems containing 1 % or less by mass or volume (whichever is the most onerous) of homogeneously distributed organic materials, the declaration may be fire Class A1 without the need to test.		P

	Hardened surface protection products containing more than 1 % by mass or volume (whichever is the most onerous) of homogeneously distributed organic materials, shall be classified in accordance with EN 13501-1 and the appropriate reaction to fire class declared.		
6	Sampling General requirements for sampling procedures are set out in EN 1504-8.		P
7	Evaluation of conformity		P
	7.1 General General requirements for procedures for evaluation of conformity are set out in EN 1504-8.		P
	7.2 Initial type testing General requirements for initial type testing are set out in EN 1504-8.		P
	7.3 Factory production control The manufacturer shall operate a factory production control (fpc) system to ensure that production continues to meet the identification and performance requirements set out in 5.1 and 5.2 of this document. For fpc the manufacturer can select representative identification or performance tests or may select other test methods. Such other fpc test methods shall be correlated to the initial identification and performance test methods to ensure conformity of the product to the requirements of this standard. Such correlation shall be clearly documented in the fpc system. The fpc shall be undertaken in accordance with EN 1504-8. Guidance on the frequency of identification and performance tests for fpc is given in Annex A (informative). Frequencies may need to be increased during initial production or following an incident of non-conformity. Any deviation from this guidance shall be justified by documented evidence which demonstrates equivalence.		P
	7.4 Assessment, surveillance and certification of factory production control Provisions for assessment, surveillance and certification of fpc are given in EN 1504-8:2004, Annex A (informative).		P
8	Marking and labelling Requirements for marking and labelling are set out in Clause 6 of EN 1504-8:2004. NOTE For CE marking and labelling Clause ZA.3 applies.		P