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AEROQ

Certification Body for Construction Products

CERTIFICATE OF CONFORMITY no.: AEROQ-023-CH-12

It has been stated that the construction product:

WPC (Wood Plastic Composite)

Width: 90-350mm, Thickness: 4-350mm.

Intended use: construction

placed on the market by: Nanjing Xuhua Sundi New Building Materials Co., Ltd

headquartered in: No.24 Yinchun Road, Maigaoqiao Pioneer Park, Nanjing, China

produced in the factory: Jiangsu Xuhua Sundi Building Materials Co., Ltd

headquartered in: No.17 Meiya Road, Baohua Town, Jurong City, Zhenjiang, China

is submitted by the manufacturer to the initial type-testing of the product, a factory production control and to the further testing of samples taken at the factory in accordance with a prescribed test plan.

This certificate attests that all provisions concerning the attestation of conformity and the performances described in standard:

EN 14041:2004/AC:2006

were applied and that the product fulfils all the prescribed requirements.

First Issue Date 12.04.2012 Expire Date 30.04.2013

This certificate remains valid as long as the conditions laid down in the technical specification in reference or the manufacturing conditions in the factory or the factory production control itself are not modified significantly.

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Technical construction file (TCF)

Report reference No. S120413003

Applicant: Nanjing Xuhua Sundi New Building Materials Co., Ltd

Address: No.24 Yinchun Road, Maigaoqiao Pioneer Park, Nanjing, China

Manufacture: Jiangsu Xuhua Sundi Building Materials Co., Ltd

Address: No.17 Meiya Road, Baohua Town, Jurong City, Zhenjiang, China

Product Description: WPC (Wood Plastic Composite)

Equipment Model: Width: 90-350mm, Thickness: 4-350mm

Test Type: 135mm*25mm

Test Standard: EN 14041: 2004/AC: 2006 Resilient, textile and laminate floor

coverings - Essential characteristics

Test Date: Mar. 16th, 2012 -Mar. 27th, 2012

Issuance Date: Mar 16th 2012 &

Tested By: Smish Chen- Engineer

Reviewed By: Dennis Zhang -Engineer Manager

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Part I: Introduction

Part II: The discrepancy of products

Part III: Check list

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Part I: Introduction

Company Profile

Nanjing Xuhua Sundi New Building Materials Co., Ltd is a High-tech private enterprise integrating R&D, production, marketing, design and application of WPC materials and products. The company absorbs a large number of talents of WPC industry to do in-depth research into WPC materials, and adopt the most advanced equipments and testing instruments domestically. So our WPC products are enjoying a good market both at home and abroad because of their good quality, distinctive design, perfect wood texture, excellent durability performance etc.

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We also introduce advanced foreign production models and make the most of the advantages of our industry chain resources in formula R&D, product design, raw material supply and extrusion processing, injection molding and other fields, so as to manufacture WPC materials and other assorted products with high value. Our products have SGS certification and was passed through ASTM testing. Currently we have built up the R&D and testing organization in Shanghai, Nanjing and HuaiAn extrusion production base for finished products and marketing headquarters as well as injection molding processing base in Kunshan.

Quality, cost, exploration, innovation, practice are our eternal pursuit, all our company staffs are working together to strive for the progress of environmental protection and energy saving!

Product Introduction

Sundi WPC (Wood Plastic Composite) is mainly made of natural fibers and plastic(main HDPE), added with some necessary chemical agents, such as, antioxidant, UV stabiliser, lubricants, pigments etc, and produced by professional WPC extruders under the high temperature and pressure, so it is perfectly integrated with the advantages of wood and plastic.



Part II: The discrepancy of products

Test model: 135mm*25mm

Pictures:







Part III: Check List

Note: Test case verdicts:

Pass = Pass, Fail = Fail, N.A. = Not applicable.

| the characteristics of the product, including its composition, packaging, instructions for assembly and, where applicable, for installation and maintenance; the effect on other products, where it is reasonably foreseeable that it will be used with other products; | Pass | | |
|--|---|--|--|
| | Pass | | |
| | | | |
| the presentation of the product, the labelling, any warnings and instructions for its use and disposal and any other indication or information regarding the product; | | | |
| The categories of consumers at risk when using the product, in particular children and the elderly. | | | |
| Producers shall be obliged to place only safe products on the market. | Pass | | |
| A product shall be deemed safe, as far as the aspects covered by the relevant national legislation are concerned, when, in the absence of specific Community provisions governing the safety of the product in question, it conforms to the specific rules of national law of the Member State in whose territory the product is marketed, such rules being drawn up in conformity with the Treaty, and in particular Articles 28 and 30 thereof, and laying down the health and safety requirements which the product must satisfy in order to be marketed. | Pass | | |
| A product shall be presumed safe as far as the risks and risk categories covered by relevant national standards are concerned when it conforms to voluntary national standards transposing European standards, the references of which have been published by the Commission in the Official Journal of the European Communities in accordance with Article 4. The Member States shall publish the references of such national | Pass | | |
| | use and disposal and any other indication or information regarding the product; The categories of consumers at risk when using the product, in particular children and the elderly. Producers shall be obliged to place only safe products on the market. A product shall be deemed safe, as far as the aspects covered by the relevant national legislation are concerned, when, in the absence of specific Community provisions governing the safety of the product in question, it conforms to the specific rules of national law of the Member State in whose territory the product is marketed, such rules being drawn up in conformity with the Treaty, and in particular Articles 28 and 30 thereof, and laying down the health and safety requirements which the product must satisfy in order to be marketed. A product shall be presumed safe as far as the risks and risk categories covered by relevant national standards are concerned when it conforms to voluntary national standards transposing European standards, the references of which have been published by the Commission in the Official Journal of the European Communities in accordance with Article 4. The Member States shall publish the | | |



| Clause | Requirement - test | Verdict | | |
|--------|--|---------|--|--|
| di Si | In circumstances other than those referred to in paragraph 2, the conformity of a | 1 | | |
| 8 | product to the general safety requirement shall be assessed by taking into account | | | |
| | the following elements in particular, where they exist: | | | |
| 8.1 | voluntary national standards transposing relevant European standards other than those referred to in paragraph 2; | | | |
| 8.2 | the standards drawn up in the Member State in which the product is marketed; | Pass | | |
| 8.3 | Commission recommendations setting guidelines on product safety assessment; | Pass | | |
| 8.4 | product safety codes of good practice in force in the sector concerned; | Pass | | |
| 8.5 | the state of the art and technology; | Pass | | |
| 8.6 | reasonable consumer expectations concerning safety. | | | |
| 9 | requirement, in particular the provisions mentioned in paragraphs 2 or 3, shall not bar the competent authorities of the Member States from taking appropriate measures to impose restrictions on its being placed on the market or to require its withdrawal from the market or recall where there is evidence that, despite such conformity, it is dangerous. | Pass | | |
| 10 | Within the limits of their respective activities, producers shall provide consumers with the relevant information to enable them to assess the risks inherent in a product throughout the normal or reasonably foreseeable period of its use, where such risks are not immediately obvious without adequate warnings, and to take precautions against those risks. | Pass | | |
| 11 | The presence of warnings does not exempt any person from compliance with the other requirements laid down in this Directive. | Pass | | |
| 12 | Within the limits of their respective activities, producers shall adopt measures commensurate with the characteristics of the products which they supply, enabling them to: | - | | |



| Clause | Requirement - test | Verdic | | |
|--------|---|--------|--|--|
| 12.1 | be informed of risks which these products might pose; | Pass | | |
| 12.2 | Choose to take appropriate action including, if necessary to avoid these risks, withdrawal from the market, adequately and effectively warning consumers or recall from consumers. | Pass | | |
| 13 | The measures referred to in the third subparagraph shall include, for example: | | | |
| 13.1 | an indication, by means of the product or its packaging, of the identity and details of the producer and the product reference or, where applicable, the batch of products to which it belongs, except where not to give such indication is justified and | | | |
| 13.2 | in all cases where appropriate, the carrying out of sample testing of marketed products, investigating and, if necessary, keeping a register of complaints and keeping distributors informed of such monitoring. | Pass | | |
| 14 | Action such as that referred to in (b) of the third subparagraph shall be undertaken on a voluntary basis or at the request of the competent authorities in accordance with Article 8(1)(f). Recall shall take place as a last resort, where other measures would not suffice to prevent the risks involved, in instances where the producers consider it necessary or where they are obliged to do so further to a measure taken by the competent authority. It may be effected within the framework of codes of good practice on the matter in the Member State concerned, where such codes | Pass | | |
| | exist. Distributors shall be required to get with due care to help to ensure compliance | | | |
| 15 | Distributors shall be required to act with due care to help to ensure compliance with the applicable safety requirements, in particular by not supplying products which they know or should have presumed, on the basis of the information in their possession and as professionals, do not comply with those requirements. Moreover, within the limits of their respective activities, they shall participate in | Pass | | |



| Clause | Requirement - test | Verdict |
|-----------------|---|---------|
| minary Reach | products placed on the market, especially by passing on information on product risks, keeping and providing the documentation necessary for tracing the origin of products, and cooperating in the action taken by producers and competent authorities to avoid the risks. Within the limits of their respective activities they shall take measures enabling them to cooperate efficiently. | |
| 16 | Where producers and distributors know or ought to know, on the basis of the information in their possession and as professionals, that a product that they have placed on the market poses risks to the consumer that are incompatible with the general safety requirement, they shall immediately inform the competent authorities of the Member States thereof under the conditions laid down in Annex I, giving details, in particular, of action taken to prevent risk to the consumer. | Pass |
| 17 | The Commission shall, in accordance with the procedure referred to in Article 15(3), adapt the specific requirements relating to the obligation to provide information laid down in Annex I. | Pass |
| 18 | Producers and distributors shall, within the limits of their respective activities, cooperate with the competent authorities, at the request of the latter, on action taken to avoid the risks posed by products which they supply or have supplied. The procedures for such cooperation, including procedures for dialogue with the producers and distributors concerned on issues related to product safety, shall be established by the competent authorities. | Pass |



Part IV: Test report

Summary of Tests Outcomes

4.1 Reaction to fire

Test Result:

| | WPC | (Wood Plastic Composite) | | 100 | |
|-------------|---|-------------------------------|---|---------|------|
| Test method | Parameter | Requirement Class B | Number of tests | Results | |
| EN 13823 | | FIGRA(W/S) | ≤120 | | 32.4 |
| | | LFS | <edge of="" specimen<="" td=""><td></td><td>Yes</td></edge> | | Yes |
| | THR _{600S} (MJ) | ≤ 7.5 | | 2.9 | |
| | SMOGRA(m ² /s ²) | ≤30 | 6 | 6.6 | |
| | TSP _{600s} (m ²) | ≤50 | | 7.6 | |
| | d0 | Flaming particles or droplets | | No | |

| | WPC (Wood Plastic C | Composite) | |
|----------------|------------------------------|-----------------|---------|
| Test method | Parameter | Number of tests | Results |
| EN ISO 11925-2 | Fs≤150mm within 60s | 6 | Yes |
| Exposure=30s | Ignition of the filter paper | 0 | No |

Classification and direct field of application

This classification has been carried out in accordance with EN 13501-1: 2002

| | WPC (Wo | ood Plastic Com | posite) | | |
|----------------|----------|-----------------|---------|---------|----------|
| Fire behaviour | Smoke pr | oduction | | Flaming | droplets |
| В | S | 1 | | d | 0 |

Reaction to fire classification: B-S1, D0



4.2 Content of pentachlorophenol (PCP)

Requirements:

Resilient, textile and laminate floor coverings shall not contain PCP or a derivative thereof as a component in the production process of the product or of its raw materials. In cases where verification is required, if the content is less than 5 ppm in the parts of the product affected by treatment, this requirement shall be considered to be met. For laminate floor coverings the method CEN/TR 148232, for textile floor coverings the method CEN/TS 144943 shall be used. For resilient floor coverings verification is not required.

Ref NO.: S120413003

Test Result:

The samples have no pentachlorophenol content.

4.3 Formaldehyde emission

Test Result:

| | WPC (Wood Pla | astic Composite) | |
|-------------|---|------------------|------------------------|
| Test method | Requirement | Specimens | Results |
| EN 717-1 | class E1≤0.124 mg/m³ E2>0.124 mg/m³ | 1 | 0.110mg/m ³ |

Formaldehyde class E1

4.4 Water-tightness

Test Result:

| WPC (Wood Plastic Composite) | | | | |
|------------------------------|-----------|--|--|--|
| Test method | Specimens | Results | | |
| EN 13553: 2002 Annex A | 4 | no sign of penetrating water on the indicator paper. | | |

The test specimen is considered watertight.