



KOMO[®] product certificate

Semi-manufactured product

SKH

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MODIFIED TIMBER STELLACWOOD[®] AND THERMOWOOD[®]

Number: 32878/14
Issued: 17-04-2014
Replaces: 32878/09

Producer

Oy SWM-Wood Ltd
Pursialankatu 32
50100 MIKKELI
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Website: http://www.swm-wood.com

Declaration of SKH

This product certificate is based upon BRL 0605 'Modified timber' dd. 31-01-2013, issued by SKH, in conformity with the SKH Regulations for Certification.

SKH declares that:

- there is a legitimate confidence that modified timber manufactured by the producer continuously complies with the technical specifications laid down in this product certificate, provided that the modified timber have been marked with the KOMO[®] mark in a way as indicated in this product certificate.

For SKH

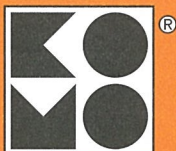
drs. H.J.O. van Doorn, director

The certificate is also included in the overview on the website of the KOMO foundation: www.komo.nl.

Users of this product certificate are advised to verify whether this certificate is still valid; consult the SKH-website: www.skh.org.

This product certificate consists of 3 pages.

The Dutch version shall be consulted in case of doubt.



The following has
been assessed:
quality system
product
Periodic control

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1 PRODUCT SPECIFICATION

1.1 Description of product

The definition of StellacWood[®] and ThermoWood[®] in this KOMO[®] product certificate is: the product of thermally modified vuren, grenen en radiata pine botanically derived from resp. Picea abies, Pinus sylvestris en Pinus radiata D., treating class D2. By means of the modification process the durability of the timber has been increased in relation to the natural durability of vuren, grenen en radiata pine, whereas a number of other properties of this timber have changed.

The performances in respect of the properties laid down in BRL 0605 "Modified timber" are laid down in section 2 "Technical specification".

2 TECHNICAL SPECIFICATION

2.1 Durability

The durability of StellacWood[®] and ThermoWood[®] complies at least with the requirements for durability class 1 or 2, tested in accordance with EN 350-1. Timber of durability class 1 or 2 are considered to be suitable for exterior applications without the need to treat the timber any further.

2.2 Timber moisture content

StellacWood[®] and ThermoWood[®] is supplied with a moisture content of $6 \pm 2\%$.

2.3 Equilibrium moisture content

The equilibrium moisture content of StellacWood[®] and ThermoWood[®] at a relative humidity of 65%, 80% and 90% and a temperature of 20°C is resp. $6 \pm 2\%$, $9 \pm 2\%$ and $11 \pm 2\%$. At 98% relative humidity the equilibrium moisture content is below 16%.

2.4 Water absorption

When applying StellacWood[®] and ThermoWood[®] in contact with (rain) water the moisture absorption is equal to that of untreated timber.

2.5 Hardness

The average Janka hardness is less than 29 MPa, the average Brinell hardness is 15 ± 2 MPa.

2.6 Dimensional stability

The swelling in radial and tangential direction of StellacWood[®] and ThermoWood[®] shall, when absorbing moisture, be at least 50% less, compared with untreated timber.

2.7 Glue ability

The quality declaration does not express an opinion about the glue ability.

2.8 Finish

StellacWood[®] and ThermoWood[®] can be finished with good result with film forming non-transparent and film forming semi-transparent products.

2.9 Mechanical properties

In particular the bending strength of the treated timber shall, by thermal modification, be less, compared with untreated timber. Departing from a strength class of untreated timber of C30 in accordance with EN 338, the timber can, after treatment, be classified in strength class C16 in accordance with EN 338.

2.10 Fire behaviour

In relation to its reaction to fire behaviour StellacWood[®] and ThermoWood[®] is classified as D-s2, d0 according to EN 13501-1:2002 provided that the thickness is not less than 21 mm.

2.11 Emission of harmful materials

No harmful materials have been added to StellacWood[®] and ThermoWood[®]. Scrap timber can be processed as untreated timber.

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2.12 Marking

StellacWood[®] and ThermoWood[®] shall be marked per package with the KOMO[®]-mark.

The execution of this mark is as follows:

- KOMO[®] trademark or logo;
- no. **32878**;
- modified timber, durability class 2;
- hazard class: colour: blue and letter code L.



Location of the mark: clearly visible on each package.

3 SUGGESTIONS FOR THE USER

3.1 On delivery of the modified timber inspect whether:

- the products comply with the contract of sale;
- the mark and the manner of marking are correct;
- the products do not show any visible defects due to transport or similar causes.

If the products are rejected on the basis of the above, the user should contact:

Oy SWM-Wood Ltd

and if desirable:

The certification-body SKH
Office building 'Het Cambium',
Nieuwe Kanaal 9c, 6709 PA Wageningen, the Netherlands
P.O. Box 159, 6700 AD Wageningen, the Netherlands
Telephone: +31 (0) 317 45 34 25 E-mail: mail@skh.org
Fax: +31 (0) 317 41 26 10 Website: <http://www.skh.org>

3.2 Product certificate

It is the duty of the producer to make sure that the buyer receives a copy of the complete product certificate.

3.3 Applications and use

Transport, storage and deployment shall be effected in accordance with the working instructions included in this product certificate.

3.4 Period of validity

Consult the SKH website <http://www.skh.org> to verify whether the product certificate is still valid.