KOMO® product certificate

Semi-manufactured product

Stichting Keuringsbureau Hout SKH
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P.O Box 159, 6700 AD Wageningen, The Netherlands
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MODIFIED TIMBER 'FINNFOREST THERMOWOOD®'

Number: **32919/07**
Issued: **12-06-2007**
Replaces: **32919/06**

Producer	**Factory at**	**Sales office**
Metsäliito Cooperative Finnforest, Upgrading Business Group Tuulikuja 2 FIN-02100 ESPOO FINLAND Tel. +358 10 46 05 Fax +358 10 49 48 63 Website: http://www.finnforest.com	Metsäliito Cooperative Finnforest, Kaskinen in KASKINEN FINLAND	Finnforest Holland B.V. Schumanpark 9-C 7336 AM APELDOORN THE NETHERLANDS Tel. +31 55 538 66 10 Fax +31 55 538 66 20 E-mail: info@finnforest.nl Website: http://www.finnforest.nl

SKH declaration

This product certificate has been issued by SKH on the basis of BRL 0605 'Modified timber' in accordance with the SKH Regulations for Certification.

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

For SKH R. Wigboldus, director

Users of this product certificate are advised to enquire at SKH whether this document is still valid.

This product certificate consists of 3 pages.

The Dutch version shall be consulted in case of doubt

The following have been assessed:
quality system;
Periodic control.

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1 PRODUCT SPECIFICATION

1.1 Description of product

The definition of Finnforest ThermoWood® in this KOMO® product certificate is: the product of thermally modified Nordic pine, botanically derived from Pinus sylvestris L., treating class D2.
By means of the modification process the durability of the timber has been increased in relation to the natural durability of Nordic pine, whereas a number of other properties of this timber have changed.

ThermoWood® is suitable for application in the building industry and other aboveground applications.

The performances in respect of the properties laid down in BRL 0605 "Modified timber" are laid down in section 1.2 "Technical specification".

1.2 Technical specification

1.2.1 Durability

The durability of Finnforest ThermoWood® complies at least with the requirements for durability class 2 (durable), 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.

1.2.2 Timber moisture content

Finnforest ThermoWood® is supplied with a moisture content of 6 ± 2%.

1.2.3 Equilibrium moisture content

The equilibrium moisture content of Finnforest ThermoWood® at a relative humidity of 65%, 80% and 90% and a temperature of 20°C is resp. 6 ± 2%, 9 ± 2% and 11 ± 2%.

1.2.4 Water absorption

When applying Finnforest ThermoWood® in contact with (rain) water the moisture absorption is equal to that of untreated timber. The quality declaration does not express an opinion about the velocity of water absorption.

1.2.5 Dimensional stability

The swelling in radial and tangential direction of Finnforest ThermoWood® shall, when absorbing moisture, be at least 50% less, compared with untreated Nordic pine. This means that with an increase in moisture content of 6% (m/m) a swelling in radial direction of 0,35% and in tangential direction of 0.7% takes place.

1.2.6 Finish

The quality declaration does not express an opinion about the finishing of Finnforest ThermoWood®.

1.2.7 Mechanical properties

In particular the bending strength of the treated timber shall, by thermal modification, be less, compared with untreated timber.

1.2.8 Fire behaviour

In relation to its reaction to fire behaviour Finnforest ThermoWood® is classified as D-s2, d0 according to EN 13501-1:2002, which agrees with fire class 4 of NEN 6065, provided that the thickness is not less than 21 mm.

1.2.9 Emission of harmful materials

No harmful materials have been added to Finnforest ThermoWood®. Scrap timber can be processed as untreated timber.

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1.2.10 Marking

Finnforest ThermoWood® shall be marked per package with the KOMO®-mark.
The execution of this mark is as follows:

- KOMO® trademark or logo;
- no. **32919**;
- modified timber, durability class 2;
- hazard class: colour: blue and letter code L.

Location of the mark: clearly visible on each package.

2 SUGGESTIONS FOR THE USER

2.1 On delivery of the Finnforest ThermoWood® 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:

Finnforest Holland B.V.

and if desirable:

The certification-body Stichting Keuringsbureau Hout SKH
Office building 'Het Cambium',
Nieuwe Kanaal 9c, 6709 PA Wageningen
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Fax: +31 (0) 317 41 26 10 Website: http://www.skh.org

4.1 Product certificate

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

4.2 Applications and use

Transport, storage and deployment shall be effected in accordance with the processing procedures of the producer.

4.3 Period of validity

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