



KOMO[®] product certificate

NI/SfB

(31) u2

Stichting Keuringsbureau Hout SKH

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MODIFIED TIMBER

Number: 32941/04

Published: 2004-11-01

Replaces:

Producer

Oy Lunawood Ltd.

Asemantie 52

74170 Soinlahti

Finland

Tel. (00) 358 17 77 00 200

Fax (00) 358 17 77 00 230

Website: <http://www.lunawood.fi>

Factory at

Importer

SKH DECLARATION

This product certificate, issued by SKH and based on BRL 0605 "Modified timber", is in accordance with the SKH Regulations for Certification.

SKH declares that there is a legitimate confidence that the modified timber produced by Oy Lunawood Ltd. complies with the technical specification laid down in this product certificate, provided that the modified timber has been marked with the KOMO[®]-mark depicted hereunder and as indicated in this product certificate.

Please refer to the "Overzicht van kwaliteitsverklaringen in de bouw" (Overview of quality declarations in the building industry) as published by the Stichting Bouwkwaliiteit SBK (Foundation for Building Quality) in Rijswijk, the Netherlands, for the relationship between statements of this product certificate and the Bouwbesluit (Building Act) regulations.

For SKH:

R. Wigboldus, director

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

Configuration of the KOMO[®] mark.



[®] is a collective mark of Stichting Bouwkwaliiteit (SBK)

This product certificate consists of 3 pages.

The Dutch version shall be consulted in case of doubt
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[®]Convriecht Stichting Bouwkwaliiteit (SBK)

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1 PRODUCT SPECIFICATION

1.1 Description of product

The definition of Luna Thermo-D in this KOMO[®] product certificate is: the product of thermally modified European spruce, European pine and Radiata pine, botanically derived from resp. *Picea abies* (L.) Karst., *Pinus sylvestris* L. and *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, whereas a number of other properties of the timber have changed.

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 of Luna Thermo-D

1.2.1 Durability

The durability of Luna Thermo-D complies at least with the requirements for durability class 2 (durable), tested in accordance with EN 350-01. 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

Luna Thermo-D is supplied with a moisture content of $6 \pm 2\%$.

1.2.3 Equilibrium moisture content

The equilibrium moisture content of Luna Thermo-D at a relative humidity of 65% and a temperature of 20°C is $6 \pm 2\%$. At 98% relative humidity the equilibrium moisture content is below 16%.

1.2.4 Water absorption

When applying Luna Thermo-D in contact with (rain) water the moisture absorption is equal to that of untreated timber.

The quality declaration does not pronounce an opinion about the speed of water absorption.

1.2.5 Hardness

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

1.2.6 Dimensional stability

The swelling in radial and tangential direction of Luna Thermo-D shall, when absorbing moisture, be at least 50% less, compared with untreated timber.

1.2.7 Glue ability

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

1.2.8 Mechanical properties

In particular the bending strength of the treated timber shall, by thermal modification, be less, compared with untreated timber. The quality declaration does not express an opinion about the decrease in mechanical properties.

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1.2.9 Fire behaviour

Luna Thermo-D can be classified in Euro class D.
Smoke production: class S1.
Falling burning droplets: class d0.

1.2.10 Emission of harmful materials

No harmful materials have been added to Luna Thermo-D.

1.2.11 Marking

Luna Thermo-D shall be marked per package with the KOMO[®]-mark.
The execution of this mark is as follows:

- Brand name KOMO[®] or logo



- no. 32941
- modified timber
- hazard class: colour: blue or letter code L

Location of the mark: clearly visible on each package.

2 SUGGESTIONS FOR THE USER

2.1 On delivery inspect whether:

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

2.2 If the products are rejected on the basis of the clauses laid down in 2.1, the user should contact:

Oy Lunawood Ltd.

and if necessary

Stichting Keuringsbureau Hout SKH
'Het Cambium',
Nieuwe Kanaal 9c, 6709 PA Wageningen, The Netherlands
P.O. Box 159, 6700 AD Wageningen, The Netherlands

Telephone: +31 317 45 34 25 E-mail: mail@skh.org
Fax: +31 317 41 26 10 Website: <http://www.skh.org>

2.3 It is the duty of the producer/importer to make sure that the user receives a copy of the complete product certificate.

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