

SKH

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# MODIFIED TIMBER Platowood Fraké

Producer

Plato Wood B.V. Westervoortsedijk 73 6827 AV ARHEM Tel. (088) 60 50 060 E-mail: info@platowood.nl Website: http://www.platowood.nl

### **Declaration of SKH**

This product certificate is based upon AD 0605 'Modified timber' dd. 20-06-2018, 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 KOMQ<sup>®</sup> mark in a way as indicated in this product certificate.

For SKH

- How - Oor

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

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

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

This product certificate consists of 5 pages.

The Dutch version shall be consulted in case of doubt.



Semi-manufactured product

Number: 21077/21 Issued: 01-04-2021 Replaces: 21077/20

> The following has been assessed: • quality system • product Periodic check

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# **MODIFIED TIMBER Platowood Fraké**

## 1 PRODUCT SPECIFICATION

### 1.1 Description of product

The definition of Platowood Fraké in this KOMO<sup>®</sup> product certificate is: the product of thermo-modified Fraké, botanically derived from Terminalia superba Engl. Et Diels, by the PLATO-process. By means of the modification process the durability of the timber has been increased in relation to the natural durability of Fraké, whereas a number of other properties of this timber have changed.

The performances in respect of the properties laid down in AD 0605 'Modified timber' are laid down in the 'Technical specification'.

### 2 TECHNICAL SPECIFICATION

### 2.1 Durability

The durability of Platowood Fraké complies at least with the requirements for durability class 1-2 tested in accordance with NEN-EN 350 for Use Classes 1, 2 and 3 according to EN 335.

### 2.2 Timber moisture content

Platowood Fraké is supplied with a moisture content of  $5.2 \pm 2\%$ .

### 2.2.1 Equilibrium moisture content

The equilibrium moisture content of Platowood Fraké at a relative humidity of 65%, 80% and 90% and a temperature of 20°C is respectively  $5.2 \pm 2$  %,  $7.4 \pm 2$  % and  $12.5 \pm 2$  %.

### 2.2.2 Water absorption

When applying Platowood Fraké in contact with (rain) water the moisture absorption is higher to that of untreated Fraké.

This product certificate does not express an opinion about the speed of water uptake.

### 2.3 Dimensional stability

The swelling in radial and tangential direction of Platowood Fraké shall, when absorbing moisture, be at least 35% less, compared with untreated Fraké.

### 2.4 Glue ability

Platowood Fraké used in window frames of which the joint is glued with Frencken Kozijnlijm 0819 SLS applies to Class C as mentioned in AD 0819 (SHR-Report 17.0463-7).

Optimized Platowood Fraké in accordance with AD 2902 is applicable in burglary resistant façade elements (AD 0801; resistance class 2 NEN 5096) according SKH publication 98-08. Screw lengths shall be the same as those for softwoods as described in this publication.

Optimized Platowood Fraké is applicable in external façade elements (windows) in accordance with AD 2339, if the joints can be glued with Frencken Constructielijm C30.

(Frencken Constructielijm C30 is suitable for joint connections, but does not express an opinion of performance in a door as an end-product. The manufacturer of the door will have to demonstrate that the end-product is in accordance with AD 0803).

## 2.5 Finishing

Platowood Fraké can be finished with an opaque coating, depending on type of coating system. During application special attention it requested for filling pores and possible pin-holes adequately. This in order to comply with SKH Publication 06-02 regarding a closed film layer.

### 2.6 Color value

This product certificate does not express an opinion on color value of Platowood Fraké.

### 2.7 Density

The density of Platowood Fraké at 20 °C and 65% RH is 420-570 kg/m<sup>3</sup>.

### 2.8 Mechanical properties

In particular the bending strength of Platowood Fraké shall, by thermal modification, be less, compared with untreated timber. (reduction of 37% compared to characteristic values).

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When Platowood Fraké is used in window frames the span of the intermediate posts and sills shall be determined with a maximum strength grade of C20 (NEN-EN-338): MoE of 9,5 kN/mm2 and MoR of 20 N/mm2.. In deviation with the KVT the maximum window dimensions will be 3000 mm width x 2750 mm height.

### 2.9 Fire behaviour

In relation to the reaction to fire Platowood Fraké with a minimum density of 350 kg/m3 and a minimum thickness of 22 mm is classified as D-s2, d0 according to NEN-EN 13501-1:2007 + A1:2009 conform CWFT publicatie 2003/593/EG van de Europese Commissie..

Platowood Fraké with a minimum thickness of 15 mm, treated with Magma Firestop<sup>®</sup> SBP 1 (minimum of 0,2 kg/m2) is classified as B-s2,d0 conform EN 13501-1 (Efectis report 2009-Efectis-R0927 [rev]).

## 3 ADDITIONAL TECHNICAL SPECIFICATION IN THE CONTEXT OF APPLICATION IN FAÇADE ELEMENTS

### 3.1 Burglary Resistance

Optimized Platowood Fraké in accordance with AD 2902 is applicable in burglary resistant façade elements (AD 0801; resistance class 2 NEN 5096) according SKH publication 98-08. Screw lengths shall be the same as those for softwoods as described in this publication.

## 3.2 Thermal Conductivity

The  $\lambda$ -value of Platowood Fraké in the context of the determination of the thermal conductivity of wooden window frames is 0.115 W/(m\*K).

### 4 Marking

Platowood fraké shall be marked per package with the KOMO®-mark.

- The execution of this mark is as follows:
- KOMO<sup>®</sup> trademark or logo;

- no. **21077**;

- modified timber, durability class 1-2;
- use class: 1, 2 and 3 (possibly supplemented with corresponding colour and letter code).
- Location of the mark: clearly visible on each package.

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## 5 SUGGESTIONS FOR THE USER

### 5.1 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, contact shall be made with: Finti B.V. and if desirable: The certification-body SKH.

### 5.2 Product certificate

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

### 5.3 Applications and use

Transport, storage and deployment shall be in accordance with the working instructions provided by the website of the producer.

### 5.4 Period of validity

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

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# **MODIFIED TIMBER Platowood Fraké**

## 6 DOCUMENTS

AD 0605: 2018 AD 0801:2011+WB:2016 AD 0803:2013+WB:2016 AD 0819:2010	Modified Timber; Wooden façade elements; Wooden exterior doors; Jointing techniques in wooden façade elements;
AD 2339:2012	Adhesives for non-load bearing applications;
AD 2902:2019	Optimized timber for non-load bearing application (incl. Modification sheet dated 29-10-2019)
NEN 5096:2012/A12015	Burglary resistance - Façade elements with doors, windows, shutters and fixed infillings - Requirements, classification and test methods;
NEN-EN 335:2013	Durability of wood and wood-based products - Use classes: definitions, application to solid wood and wood-based products;
NEN-EN 338:2016	Structural timber - Strength classes;
NEN-EN 350:2016	Durability of wood and wood-based products - Testing and classification of the durability to biological agents of wood and wood-based materials;
NEN-EN 13501-1:2007+A1:2009	Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests;
NEN 5096:2012/A12015	Burglary resistance - Façade elements with doors, windows, shutters and fixed infillings - Requirements, classification and test methods;
SKH Publication 98-08: 2015 SKH-Publication 06-02:2011	Burglary resistant wooden façade elements; Assessment of the closedness of a paint film on timber.