

KOMO[®] attest-with-product certificate

Installed in a
building

SKH

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PLYWOOD FOR USE IN CONSTRUCTION (STRUCTURAL AND NON-STRUCTURAL) AND OTHER APPLICATIONS

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Producer

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Declaration of SKH

This attest-with-product certificate has been issued on the basis of AD 1705 'Plywood' dd. 09-12-2016, in accordance with the SKH Regulations for Certification.

The quality system and product characteristics associated with the plywood for use in construction (structural and non-structural) and other applications are assessed periodically.

Based on this, SKH declares that:

- There is legitimate confidence that the plywood produced by the producer upon delivery meets:
 - the technical specification established in this attest-with-product certificate;
 - the product requirements stated in the AD.

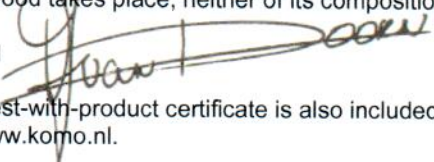
Provided that the plywood features the KOMO[®] mark in a manner as indicated in this attest-with-product certificate.

- The building elements assembled from this plywood provide the performance as included in this attest-with-product certificate and these building elements meet the Building Act requirements included in this attest-with-product certificate, providing:
 - the technical specification and applications conditions defined in this attest-with-product certificate are met;
 - the production of the building elements occurs in accordance with the conditions and/or processing methods stipulated in this attest-with-product certificate.

The essential characteristics, as stipulated in the applicable European standard, form no part of this attest-with-product certificate.

In the context of this attest-with-product certificate, no inspection of the manufacture of the building elements assembled from this plywood takes place, neither of its composition nor of the assembly into building elements.

For SKH



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

This attest-with-product certificate is also included in the overview on the website of the KOMO foundation:
<http://www.komo.nl>.

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

This attest-with-product certificate consists of 8 pages.

Consult the Dutch version in case of doubt.



Building Act

The following has been assessed:

- Quality system
- Product
- One-off performance in the application
- Periodic check

BUILDING ELEMENTS ASSEMBLED FROM PLYWOOD FOR STRUCTURAL AND NON-STRUCTURAL APPLICATIONS

1 TECHNICAL SPECIFICATION

This attest-with-product certificate concerns the product certification of plywood for use in construction (structural and non-structural) and other applications.

2 MARKING

Each sheet of plywood shall be marked with the KOMO[®]-mark
 The execution of this mark is as follows:

- word mark KOMO[®] or logo;
- attest-with-product certificate number **32621**;
- nominal thickness in mm;
- class according to AD 1705;
- if the plywood has been coated by the plywood producer, the letter 'P' shall be added to the indication of product class (see section 4.4 of the AD 1705 plywood);
- if an overlay has been applied to the plywood by the plywood producer, the letter 'O' shall be added to the indication of product class (see section 4.5 of the AD 1705 plywood).



Location of the mark: clearly visible on each sheet of plywood supplied.

3 PERFORMANCE BASED ON THE BUILDING ACT

BUILDING ACT ENTRY (ONLY FOR BUILDING PURPOSES)

No.	Section	Limiting value/ method of determination	Performance according to quality declaration
2.1	General strength of the building construction	Ultimate threshold building construction, calculation according NEN-EN 1995-1-1 (including national annex), NEN-EN 1990 (including national annex) and NEN-EN 1991-1-1/3/4/5 (including national annex)	No performance mentioned
2.9	Restriction of development of fire and smoke	Indoor surface	at least fire class D and at least smoke class s2
		Outdoor surface	At least fire class D
		Walkable surface	At least fire class D _{fl} and at least smoke class s1 _{fl}
		Part of construction	No performance mentioned
3.9	Restriction of the presence of harmful substances and ionising radiation	According to Ministerial regulation	No performance mentioned

* = optional

3.1 PERFORMANCE FROM A SAFETY VIEWPOINT

GENERAL STRENGTH OF THE BUILDING STRUCTURE; BA Section 2.1
 (Only for structural applications)

3.1.1 Strength of the building structure; BA Articles 2.2, 2.3 and 2.4

The ultimate limiting condition of the building structure must be calculated in accordance with NEN-EN 1995-1-1 (incl. national appendix) in combination with the loads and load combinations described in NEN-EN 1990 (incl. national appendix) and NEN-EN 1991-1-1/3/4/5 (incl. national appendix). In this, for the determination of the performance of the plywood, use is made of the characteristic values of the mechanical properties of the Plywood mentioned in the declaration of performance.

BUILDING ELEMENTS ASSEMBLED FROM PLYWOOD FOR STRUCTURAL AND NON-STRUCTURAL APPLICATIONS

LIMITING THE DEVELOPMENT OF FIRE AND SMOKE; BA Section 2.9

3.1.2 Indoor surface; BA Article 2.67

In application bordering on the indoor air in structural elements (such as walls and ceilings), BA Article 2.67 distinguishes among 'extra-protected escape route', 'protected escape route' and 'other':

Extra-protected escape route

Plywood may not be used bordering on the indoor air in structural elements (such as walls and ceilings).

Protected escape route

Plywood of 9 mm and thicker may be used bordering on the indoor air in structural elements (such as walls and ceilings) in the following usage functions:

- Other residential function
- Other meeting function
- Other healthcare function
- Other industrial function
- Office function
- Educational function
- Sports function
- Retail function
- Other usage function

Other

Plywood of 9 mm and thicker may be used bordering on the indoor air in structural elements (such as walls and ceilings) in the following usage functions:

- Residential function
- Meeting function
- Healthcare function
- Other industrial function
- Office function
- Accommodation function
- Educational function
- Sports function
- Retail function
- Other usage function

Application conditions

Plywood thinner than 9 mm may not be used bordering on the indoor air in structural elements (such as walls and ceilings).

BUILDING ELEMENTS ASSEMBLED FROM PLYWOOD FOR STRUCTURAL AND NON-STRUCTURAL APPLICATIONS

3.1.3

Outdoor surface; BA Article 2.68

In application bordering on the outdoor air in structural elements (such as walls), BA Article 2.68 distinguishes among 'extra-protected escape route', 'protected escape route' and 'other':

Extra-protected escape route

Plywood may not be used bordering on the outdoor air in structural elements (such as walls).

Protected escape route

Plywood of 9 mm and thicker may be used bordering on the outdoor air in that part of structural elements (such as walls) that is not situated higher than 13 m in the following usage function:

- Other residential function

Plywood of 9 mm and thicker may be used bordering on the outdoor air in that part of structural elements (such as walls) that is not situated higher than 13 m, with the exception of the part from the adjacent site to a height of at least 2.5 m of a structure of which a floor intended for people lies at least 5 m above the measurement level, in the following usage functions:

- Other meeting function
- Other healthcare function
- Industrial function
- Office function
- Educational function
- Sports function
- Retail function
- Other usage function

Other

Plywood of 9 mm and thicker may be used bordering on the outdoor air in that part of structural elements (such as walls) that is not situated higher than 13 m in the following usage function:

- Other residential function

Plywood of 9 mm and thicker may be used bordering on the outdoor air in that part of structural elements (such as walls) that is not situated higher than 13 m, with the exception of the part from the adjacent site to a height of at least 2.5 m of a structure of which a floor intended for people lies at least 5 m above the measurement level, in the following usage functions:

- Residential function in a residential building
- Residential function for care with a UA greater than 500 m²
- Meeting function
- Cell function
- Healthcare function
- Industrial function
- Office function
- Accommodation function
- Educational function
- Sports function
- Retail function
- Other usage function

Application conditions

Plywood thinner than 9 mm may not be used bordering on the outside air in structural elements (such as walls).

BUILDING ELEMENTS ASSEMBLED FROM PLYWOOD FOR STRUCTURAL AND NON-STRUCTURAL APPLICATIONS

3.1.4 Walkable surface; BA Article 2.69

In application for the upper surface of a floor, a stair or an access ramp, BA Article 2.69 distinguishes among 'extra-protected escape route', 'protected escape route' and 'other':

Extra-protected escape route

Plywood may not be used for the upper surface of a floor, a stair or an access ramp.

Protected escape route

Plywood of 9 mm and thicker may be used for the upper surface of a floor, a stair or an access ramp in the following usage functions:

- Other residential function
- Meeting function
- Healthcare function
- Industrial function
- Office function
- Accommodation function
- Educational function
- Sports function
- Retail function
- Other usage function

Other

Plywood of 9 mm and thicker may be used for the upper surface of a floor, a stair or an access ramp in the following usage functions:

- Residential function
- Meeting function
- Healthcare function
- Industrial function
- Office function
- Accommodation function
- Educational function
- Sports function
- Retail function
- Other usage function

Application conditions

Plywood thinner than 9 mm may not be used for the upper surface of a floor, a stair or an access ramp.

3.2 PERFORMANCE FROM A HEALTH VIEWPOINT

REDUCING THE PRESENCE OF HARMFUL SUBSTANCES AND IONISING RADIATION;
BA Section 3.9

3.2.1 Ministerial regulations; BA Article 3.63

The Plywood shall at least meet class E1.

BUILDING ELEMENTS ASSEMBLED FROM PLYWOOD FOR STRUCTURAL AND NON-STRUCTURAL APPLICATIONS

4 PRODUCT PROPERTIES

The plywood meets the product requirements stipulated in AD 1705 'Plywood'. The statements in the attest part for building elements assembled from Plywood for structural and non-structural applications are valid providing the Plywood meets the conditions below:

Property	Determination method	AD requirement
Characteristic values of the mechanical properties*	NEN-EN 310	No requirement
Limiting the development of fire and smoke	NEN-EN 13501-1 or derived from Table 8 in NEN-EN 13986	Inside surface fire class at least D and smoke class at least s2. Outside surface fire class at least D. Walkable surface fire class at least D _{fl} and smoke class at least s1 _{fl} .
Restriction on the use of harmful materials	NEN-EN 13986 Annex B	At least E1

* = optional

4.1 Further specifics and properties

Table 1 Standard characteristics of various types of plywood

Type	Thickness (mm)	KOMO class	Glue type	Timber species
Joubert Aludoor II/II	40/54	2	PF	Okoumé
Joubert Aludoor Paint	40/54	2	PF	Okoumé
Joubert Aludoor Primed*	6-40	3	PF	Okoumé
Joubert Garant II/II	4-5	2	PF	Okoumé
Joubert Garant II/II	6-45	2	PF	Okoumé
Joubert Paint Garant	8-40	2	PF	Okoumé
Ecopaint	8-40	3	PF	Okoumé
Joubert primed*	6-40	3	PF	Okoumé
Okouplex II/III	4-6	3	PF	Okoumé
Okouplex II/III	7-45	3	PF	Okoumé
Joubert Poply	9-40	4	PF	Poplar
Sapelli Marine II/II	4-40	2	PF	Sapelli faces, Okoumé core

* coated panels that are placed on the market by the producer, of which the plywood base panel is KOMO certified but the applied coating is not.

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Table 2 Special characteristics of various types of plywood

Type	Overlaid *	Primer * (AD 0814)	Pre-varnish * (AD 0817)	Composite plywood	Composite material
Joubert Aludoor II/II	No	No	No	Yes	Aluminium, 2 layers
Joubert Aludoor Paint	Yes	No	No	Yes	Aluminium, 2 layers
Joubert Aludoor Primed*	No	No	No	No	No
Joubert Garant II/II	No	No	No	No	No
Joubert Garant II/II	No	No	No	No	No
Joubert Paint Garant	Yes	No	No	No	No
Ecopaint	Yes	No	No	No	No
Joubert primed*	No	No	No	No	No
Okouplex II/III	No	No	No	No	No
Okouplex II/III	No	No	No	No	No
Joubert Poply	No	No	No	No	No
Sapelli Marine II/II	No	No	No	No	No

* overlays and coatings on plywood are only a part of this KOMO certificate if the plywood panels are marked accordingly section 2 and if the product is mentioned as such in the table above.

Table 3 Composition of the plywood

Type of sheet	Thickness in mm	Number of layers (minimum)
All types	4 - 5	3
	6	4
	6	5 (for Joubert garant)
	7 - 10	5
	12 - 15	7
	16 - 22	9
	24 - 28	11
	27 - 30	13
	35 - 40	17

5 PROCESSING INSTRUCTIONS

5.1 Transport and storage

Dry storage without direct floor contact.

BUILDING ELEMENTS ASSEMBLED FROM PLYWOOD FOR STRUCTURAL AND NON-STRUCTURAL APPLICATIONS

6 SUGGESTIONS FOR THE USER

6.1 General

- in the context of this attest-with-product certificate, no check takes place on the correctness of the performance of the essential properties;
- the statements in this attest-with-product certificate may not be used as replacement for the CE marking and/or the associated mandatory Performance Declaration.

6.2 On delivery of the Plywood inspect whether:

- the Plywood meets the specification and application conditions included in this attest-with-product certificate;
- what has been delivered corresponds with what has been agreed;
- the products do not show any visible defects as a result of transport, etc.;
- processing and/or maintenance instructions are available.

If the products are rejected on the basis of the above, contact shall be made with:
Joubert Les Eliots S.A.S. and if desirable: The certification-body SKH.

6.2 Attest-with-product certificate

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

6.3 Application and use

Transport, storage and processing are to be carried out in accordance with the conditions included in this attest-with-product certificate.

6.4 Period of validity

Consult the website: <http://www.skh.nl> to verify whether the attest-with-product certificate is still valid.