



KOMO[®] attest-with-productcertificate

Semi-
Manufacture

SKH

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JOINING TECHNIQUES IN WOODEN FAÇADE ELEMENTSDRYWOOD OPTI-JOINT XPAND DRYWOOD OPTI-JOINT XP II

Nummer: 20935/13
Uitgegeven: 01-11-2013
Vervangt: 20935/12

Producer

Drywood Coatings B.V.

H. ter Kuilestraat 181

7547 SK ENSCHEDE

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E-mail: info@drywood.nl

Website: http://www.drywood.nl

Verklaring van SKH

This attest-with-product certificate has been issued on the basis of BRL 0819 'Joining techniques in wooden façade elements', dd. 12 October 2010, in accordance with the SKH Regulations for Certification.

SKH declares that:

- there is legitimate confidence that the joining techniques manufactured by the producer continuously comply with the technical specifications laid down in this attest-with-product certificate, provided that the joining techniques are marked with the KOMO[®] logo as indicated in this attest-with-product certificate.
- the joining techniques, which have been composed of certified products, perform as described in this attest-with-product certificate, provided that:
 - the manufacture of the joining techniques was done in compliance with the processing methods laid down in this attest-with-product certificate;
 - the application requirements described in this attest-with-product certificate are met.

SKH declares that for this attest-with-product certificate no inspection will take place of the production of the other components of the building unit, nor on the manufacturing of the building units.

For SKH

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

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

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

This attest-with-product certificate consists of 4 pages.

The Dutch version shall be consulted in case of doubt.



The following has
been assessed:
Qualitysystem;
Periodic control

JOINING TECHNIQUES IN WOODEN FAÇADE ELEMENTS DRYWOOD OPTI-JOINT XP AND DRYWOOD OPTI-JOINT XP II

1 PRODUCT SPECIFICATION

1.1 Subject

The joining techniques in wooden façade elements, manufactured by the producer, comply with the performance requirements of the BRL 0819 'Joining techniques in wooden façade elements' and comprise a joining product with accompanying processing instructions. This means that all joints referred to between (intermediate) posts and (intermediate) sills of frames are tested and/or classified according to:

NEN 3665 Façade filling with wooden frames, windows, doors, window infill panels and other fillings - Requirements and test methods; paragraph 8.1.3. 'Resistance against mechanical fatigue as a result of pulsating load parallel to the plane of the façade element or frame, as the case may be.'

NEN-EN-335-1 Durability of wood and wood-based products – Definition of classifications of use – Part 1: General.

NEN-EN-335-2 Durability of wood and wood-based products – Definition of classifications of use – Part 2: Solid timber.

1.2 Description of joining technique

Timber Species ¹	Joining Class and Type of Joint ²								
	Opti-joint XP		Opti-joint XP II						
	Double mortise and tenon joint	Double dowel	Double mortise and tenon joint	Double dowel ⁴	Single mortise and tenon joint and dowel ⁴	Single mortise and tenon joint	Buva Quick-Connect 14-6	Buva Quick-Connect 14-6 and dowel	DTS fixing plug
Oregon pine	B	B and C	B	B and C ⁵	B				
Pine	B ³	B ³ and C ³	B	B and C ⁵	B and C	B and C	B and C	B and C ⁵	B and C
Iroko	B	B and C							
Meranti, red	B ³	B ³ and C ³	B	B and C	B		B and C	B and C	B and C
Sapeli	B	B	B	B and C	B				
Sapupira	B ³	B ³ and C ³	B		B				
Accoya [®]	B	B	B	B and C ⁵	B		B and C	B and C ⁵	B and C

¹ Timber species permitted for façade joinery. Refer to SKH Publication 99-05.

² Timber species and types of joints for which no joining class as described in BRL 0819 has been listed, are not included in this SKH-KOMO[®] attest-with-product certificate.

³ For these timber species, another fitting (width of the joint) is permitted in the rebate of the joint up to 1.5 mm (fitting of the breast of the joint is between 0.3 and 1.5 mm) (also refer to processing instructions of the producer of the joining product).

⁴ Dowel has 2 deep grooves.

⁵ For the timber species Oregon pine, pine and Accoya, use PVAc glue to glue the dowels into the dowel holes.

Joining techniques marked with joining class 'B' comply with the test programme of BRL 0819, Appendix 1, application classes 3.1 and 3.2; exterior, protected.

Joining techniques marked with joining class 'C' comply with the test programme of BRL 0819, Appendix 1, application class 3.3; exterior, extreme exposure.

1.3 Marking

The joining products and/or the packaging and the processing instructions are to be provided with: textual marking (KOMO[®]) or the icon symbol;

- attest-with-product certificate number **20935**;
- the name: DrywoodOpti-joint XP or Drywood XP II;
- a batch number;
- the final processing date.



JOINING TECHNIQUES IN WOODEN FAÇADE ELEMENTSDRYWOOD OPTI-JOINT XP AND DRYWOOD OPTI-JOINT XP II

1.4 Specification of components joining technique
 The joining technique comprises the following components:
 - name of the joining product;
 - processing instructions of this joining product;
 - type of joining technique (mortise and tenon joint, dowel joint, and/or other).
 The fully certified processing instructions for DrywoodOpti-joint XP or Drywood XP II joining technique are found on the SKHwebsite: <http://www.skh.org>.

2 PROCESSING INSTRUCTIONS

2.1 Transport, storage and processing

Transport, storage and processing are to be executed according to the producer's processing instructions. The most important process parameters for using the joining technique in order to achieve the performances as referred to in BRL 0819 are as follows:

Opti-joint XP

Procesparameters	
Fitting of the joint (maximum width of the joint) 0.5 mm	0 tot 0,7 mm ¹
Yield (one-sided or two-sided) one-sided	One-sided ²
Maximum open time	15 min.
Minimum pressing time	0 min.
Minimum and maximum pressure	20-25 bar

¹ In case of pine, meranti and sapupira, another fitting (width of the joint) is permitted in the rebate of the joint – between 0 and 1.5 mm (fitting of the breast of the joint is between 0.3 and 1.5 mm) (also refer to processing instructions of the producer of the joining product).

² In case of a wider fitting (width of joint) of 1.5 mm two-sided (also refer to the processing instructions of the producer of the joining product).

Opti-joint XP II

Process parameters	Double mortise and tenon joint	Double dowel	Single mortise and tenon joint and dowel	Single mortise and tenon joint	Mechanical joining product ³
Fitting of the joint (maximum width of the joint)	0 to 0.3 mm ¹	0 to 0.3 mm ¹	0 to 0.3 mm ¹	0 to 0.3 mm ¹	0 to 0.3 mm ¹
Yield (one-sided or two-sided)	One-sided	One-sided	One-sided	One-sided	One-sided
Maximum open time	15 min	15 min	15 min	15 min	15 min
Minimum pressing time	Time required to secure the joint	5 sec	Time required to secure the joint	Time required to secure the joint	0 sec
Minimum and maximum pressure	10-20 bar	10-40 bar	10-20 bar	10 bar	10 bar

¹ Fitting of the breast of the joint is 0.3 mm (also refer to processing instructions of the producer of the joining product).

² Fitting of the breast of the joint is 1.0 mm (also refer to processing instructions of the producer of the joining product).

³ Buva QuickConnect 14-6, Buva QuickConnect 14-6 and dowel, DTS fixing plug.

2.2 Joining product

The performance of the joining product, as referred to in this SKH-KOMO[®] attest-with-product certificate, can only be achieved if the processing instructions of the producer of the joining product, dated 12 October 2012, are observed. For the certified processing instructions, please consult the SKH website: <http://www.skh.org>.

JOINING TECHNIQUES IN WOODEN FAÇADE ELEMENTS DRYWOOD OPTI-JOINT XP AND DRYWOOD OPTI-JOINT XP II

3 SUGGESTIONS FOR THE USER

3.1 Upon delivery of the joining techniques, make sure to inspect that:

- what has been delivered corresponds with what has been agreed;
- the marks and method of marking are correct;
- the products do not show any visible defects as a result of transport, etc.

If the products are rejected on the grounds of any of the above, please contact:

Drywood Coatings B.V.

and if necessary:

the certification body SKH
Office building 'Het Cambium',
NieuweKanaal 9c, 6709 PA Wageningen, the Netherlands
P.O. Box 159, 6700 AD Wageningen, the Netherlands

Telephone: +31 (0)317 45 34 25
Fax: +31 (0)317 41 26 10

E-mail: mail@skh.org
Website: <http://www.skh.org>

3.2 Product certificate

The producer is required to ensure that the purchaser has a copy of the complete attest-with-product certificate and the processing instructions at his disposal at the workplace.

3.3 Application and use

Transport, storage and processing are to be carried out in accordance with the producer's processing instructions, as laid down in this SKH-KOMO[®] attest-with-product certificate.

3.4 Validity check

Make sure to check whether the SKH-KOMO[®] attest-with-product certificate is still valid; to do so, consult the SKH website: <http://www.skh>.