

DECLARATION OF PERFORMANCE

No. **HHGNEH10**

Unique identification code of the product
type:

Strength-graded timber with rectangular cross-section

HHG.01 – Spruce	PCAB	C18
HHG.02 – Spruce	PCAB	C24
HHG.03 – Spruce	PCAB	C30
HHG.04 – Pine	PNSI	C18
HHG.05 – Pine	PNSI	C24
HHG.06 – Pine	PNSI	C30
HHG.07 – Douglas Fir	PSMN	C18
HHG.08 – Douglas Fir	PSMN	C24
HHG.09 – Douglas Fir	PSMN	C30
HHG.10 – Larch	LADC	C18
HHG.11 – Larch	LADC	C24
HHG.12 – Larch	LADC	C30
HHG.13 – Western Red Cedar	THPLC14	
HHG.14 – Western Red Cedar	THPLC18	

Intended use(s):

Buildings and bridges

Manufacturer/Producer:

Houthandel Gras BV v/h F. & G. Gras
Symon Spiersweg 10
1506 RZ Zaandam
Tel. 075-6163792
E-mail: info@grenengrasimport.com

System or systems of assessment and verification of constancy of performance:
System 2+

Harmonised standard:

EN 14081-1:2005/A1:2011

Notified body/bodies:

SKH nr.0502

Declared performance(s):

Essential characteristics	HHG.01 Spruce C18	HHG.02 Spruce C24	HHG.03 Spruce C30
Bending strength	18 N/mm ²	24 N/mm ²	30 N/mm ²
Compressive strength	18 N/mm ²	21 N/mm ²	23 N/mm ²
Tensile strength	11 N/mm ²	14 N/mm ²	18 N/mm ²
Shear strength	3.4 N/mm ²	4.0 N/mm ²	4.0 N/mm ²
Modulus of elasticity	9,000 N/mm ²	11,000 N/mm ²	12,000 N/mm ²
Durability	fungi: class 4 insects: NPD termites: NPD marine borers: NPD	fungi: class 4 insects: NPD termites: NPD marine borers: NPD	fungi: class 4 insects: NPD termites: NPD marine borers: NPD
Reaction to fire	D-s2, d0	D-s2, d0	D-s2, d0

Essential characteristics	HHG.04 Pine C18	HHG.05 Pine C24	HHG.06 Pine C30
Bending strength	18 N/mm ²	24 N/mm ²	30 N/mm ²
Compressive strength	18 N/mm ²	21 N/mm ²	23 N/mm ²
Tensile strength	11 N/mm ²	14 N/mm ²	18 N/mm ²
Shear strength	3.4 N/mm ²	4.0 N/mm ²	4.0 N/mm ²
Modulus of elasticity	9,000 N/mm ²	11,000 N/mm ²	12,000 N/mm ²
Durability	fungi: class 3-4 insects: NPD termites: NPD marine borers: NPD	fungi: class 3-4 insects: NPD termites: NPD marine borers: NPD	fungi: class 3-4 insects: NPD termites: NPD marine borers: NPD
Reaction to fire	D-s2, d0	D-s2, d0	D-s2, d0

Essential characteristics	HHG.07 Douglas fir C18	HHG.08 Douglas fir C24	HHG.09 Douglas fir C30
Bending strength	18 N/mm ²	24 N/mm ²	30 N/mm ²
Compressive strength	18 N/mm ²	21 N/mm ²	23 N/mm ²
Tensile strength	11 N/mm ²	14 N/mm ²	18 N/mm ²
Shear strength	3.4 N/mm ²	4.0 N/mm ²	4.0 N/mm ²
Modulus of elasticity	9,000 N/mm ²	11,000 N/mm ²	12,000 N/mm ²
Durability	fungi: class 3-4 insects: NPD termites: NPD marine borers: NPD	fungi: class 3-4 insects: NPD termites: NPD marine borers: NPD	fungi: class 3-4 insects: NPD termites: NPD marine borers: NPD
Reaction to fire	D-s2, d0	D-s2, d0	D-s2, d0

Essential characteristics	HHG.10 Larch C18	HHG.11 Larch C24	HHG.12 Larch C30
Bending strength	18 N/mm ²	24 N/mm ²	30 N/mm ²
Compressive strength	18 N/mm ²	21 N/mm ²	23 N/mm ²
Tensile strength	11 N/mm ²	14 N/mm ²	18 N/mm ²
Shear strength	3.4 N/mm ²	4.0 N/mm ²	4.0 N/mm ²
Modulus of elasticity	9,000 N/mm ²	11,000 N/mm ²	12,000 N/mm ²
Durability	fungi: class 3-4 insects: NPD termites: NPD marine borers: NPD	fungi: class 3-4 insects: NPD termites: NPD marine borers: NPD	fungi: class 3-4 insects: NPD termites: NPD marine borers: NPD
Reaction to fire	D-s2, d0	D-s2, d0	D-s2, d0

Essential characteristics	HHG.13 Western Red Cedar C14	HHG.14 Western Red Cedar C18
Bending strength	14 N/mm ²	18 N/mm ²
Compressive strength	16 N/mm ²	18 N/mm ²
Tensile strength	8 N/mm ²	11 N/mm ²
Shear strength	3.0 N/mm ²	3.4 N/mm ²
Modulus of elasticity	7,000 N/mm ²	9,000 N/mm ²
Durability	fungi: class 2 insects: NPD termites: S marine borers: NPD	fungi: class 2 insects: NPD termites: S marine borers: NPD
Reaction to fire	D-s2, d0	D-s2, d0

The performance of the product stated above is in conformity with the declared performance. This declaration of performance is issued in accordance with Regulation (EU) No. 305/2011 under the sole responsibility of the manufacturer/producer identified above.

Signed for and on behalf of the manufacturer/producer by:

H. A.A.J. Gras

At Zaandam on 01/11/2014

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