

Declaration of Performance

Unambiguous ID code of the product type: **Glulam with large finger-joints**

Intended use: structural work and bridges

Manufacturer: **Lilleheden A/S
Hovedvejen 114
9850 Hirtshals
Denmark**

Authorized representative: **no external authorized representative**

System for assessing and verifying the constancy of performance: **System 1**

Harmonized standard: **EN 14080:2013**

Notified body: **No. 0672**

Performance declared:

Essential characteristics	Performance
Mechanical properties as	
modulus of elasticity bending strength compressive strength tensile strength shear strength bending strength of universal finger jointed connections geometric data	mechanical properties of strength classes for <i>Glulam with large finger-joints</i> GL 30C The allocation of the construction products supplied to the individual strength classes can be taken from the accompanying documents. Glulam with large finger-joints: $f_{m,lfj,dc,k} = 21,3 \text{ N/mm}^2$ for all product types: widths ranging between 75 mm and 185 mm heights ranging up to 1500 mm lengths of up to 25 m The relevant product dimensions can be taken from the accompanying documents.
Bonding strength as	
bending strength of finger-joints glue line integrity bending strength of universal finger jointed connections	for all product types: as specified pursuant to EN 14080, Tables 2 & 3 delamination test pursuant to EN 14080, Annex C, Method B Glulam with large finger-joints: $f_{m,lfj,dc,k} = 21,3 \text{ N/mm}^2$

Durability of bonding strength as	
species, adhesive	Glulam with large finger-joints: spruce (picea abies) Growth area; NNE Europe (Northern and North Eastern Europe) for all product types: adhesive for finger-joints: MUF, EN301-I-90-FJ-0,1-S adhesive for surface bonding: MUF, EN301-I-90-GP-0,3-S adhesive for universal finger-joints: PRF, EN301-I-90-GF-1,5-M
Durability against biological attack as	
natural durability class against wood destroying fungi EN 350-2	for all product types: 4
Fire resistance as	
geometric data charring rate as characteristic density species	for all product types: see „Geometric data“ for all product types: characteristic raw density of the relevant strength class for all product types: see “Durability of bonding strength”
Reaction to fire as	
Reaction to fire class	for all product types: D-s2, d0 pursuant to EN 14080, Table 11
Emission of formaldehyde as	
formaldehyde emission class	for all product types: E 1
Release of other dangerous substances	
release of other dangerous substances	for all product types: not relevant

The characteristics of the above product conform to the performance declared. The above named manufacturer is exclusively responsible for preparing the Declaration of Performance in accordance with Regulation EU/305/2011.

Signed on behalf of the manufacturer and in his name by:

Klaus Thomsen – Project Manager

.....
(Name and function)

Hirtshals 02/06-2016

.....
(Place & date of issue)



.....
(Signature)



0672

Lilleheden A/S
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EN 14080:2013

Glued laminated timber with universal finger-joints to be used in buildings and bridges
 Glulam with large finger-joints

Mechanical properties and fire resistance as

– strength class and characteristic raw density	GL 30c
– bending strength of the universal finger-jointed connection	$f_{m,lfj,k} = 21,3 \text{ N/mm}^2$
– species	spruce (<i>picea abies</i>)

Bonding strength as

– bending strength of finger joints	pursuant to EN 14080:2013
– glue line integrity	B
– bending strength of the universal finger-joints	$f_{m,lfj,k} = 21,3 \text{ N/mm}^2$

Reaction to fire D-s2, d0

Emission of formaldehyde E1

Durability of bonding strength as

– species	spruce (<i>picea abies</i>)
– adhesive for the surface bonding between the lamellas	MUF, EN301-I-90-GP-0,3-S
– adhesive for finger-joints	MUF, EN301-I-90-FJ-0,1-S
– adhesive for the universal finger-joints	PRF, EN301-I-90-GF-1,5-M

Durability of other properties as

– natural durability against wood destroying fungi	4
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