



Declaration of Performance

Unambiguous ID code of the product type: **Glulam**

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: **Nr. 0672**

Performance declared:

| Essential characteristics | Performance |
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| Mechanical properties as | |
| modulus of elasticity | Mechanical properties of strength classes for <i>Glulam</i> GL 24h <i>Glulam</i> GL 24cs <i>Glulam</i> GL 28cs <i>Glulam</i> GL 30c The allocation of the construction products supplied to the individual strength classes can be taken from the accompanying documents. |
| bending strength | |
| compressive strength | |
| tensile strength | |
| shear strength | |
| Geometric data | for all product types widths ranging between 38 mm and 240 mm heights ranging between 100 mm and 2.000 mm lengths of up to 48 m The relevant product dimensions can be taken from the accompanying documents. |
| Bonding strength as | |
| bending strength of finger joints glue line integrity | for all product types as specified pursuant to EN 14080, Tables 2 & 3 delamination test pursuant to EN 14080, Annex C, Method B |

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| Durability of bonding strength as | |
| species, | <i>Glulam:</i> Spruce (<i>picea abies</i>) |
| adhesive | 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 |
| 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 | for all product types: see „Geometric data“ |
| charring rate as | for all product types: characteristic raw density of the relevant strength class |
| <ul style="list-style-type: none"> • characteristic density • species | 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)

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|  0672 | |
| Lilleheden A/S Hovedvejen 114 9850 Hirtshals Denmark 15 | |
| EN 14080:2013 Glued laminated timber to be used in buildings and bridges Glulam | |
| Mechanical properties and fire resistance as | |
| – strength class and characteristic raw density | GL 24h |
| – species | Spruce (<i>Picea abies</i>) |
| Bonding strength as | |
| – bending strength of finger joints | pursuant to EN 14080:2013 |
| – glue line integrity | B |
| 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 |
| Durability of other properties as | |
| – natural durability against wood destroying fungi | 4 |

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| Lilleheden A/S Hovedvejen 114 9850 Hirtshals Denmark 15 | |
| EN 14080:2013 Glued laminated timber to be used in buildings and bridges Glulam | |
| Mechanical properties and fire resistance as | |
| – strength class and characteristic raw density | GL 24cs |
| – species | Spruce (<i>Picea abies</i>) |
| Bonding strength as | |
| – bending strength of finger joints | pursuant to EN 14080:2013 |
| – glue line integrity | B |
| 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 |
| Durability of other properties as | |
| – natural durability against wood destroying fungi | 4 |

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| EN 14080:2013 Glued laminated timber to be used in buildings and bridges Glulam | |
| Mechanical properties and fire resistance as | |
| – strength class and characteristic raw density | GL 28cs |
| – species | Spruce (<i>Picea abies</i>) |
| Bonding strength as | |
| – bending strength of finger joints | pursuant to EN 14080:2013 |
| – glue line integrity | B |
| 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 |
| Durability of other properties as | |
| – natural durability against wood destroying fungi | 4 |

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| Lilleheden A/S Hovedvejen 114 9850 Hirtshals Denmark 15 | |
| EN 14080:2013 Glued laminated timber to be used in buildings and bridges Glulam | |
| Mechanical properties and fire resistance as | |
| – strength class and characteristic raw density | GL 30c |
| – species | Spruce (<i>Picea abies</i>) |
| Bonding strength as | |
| – bending strength of finger joints | pursuant to EN 14080:2013 |
| – glue line integrity | B |
| 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 |
| Durability of other properties as | |
| – natural durability against wood destroying fungi | 4 |