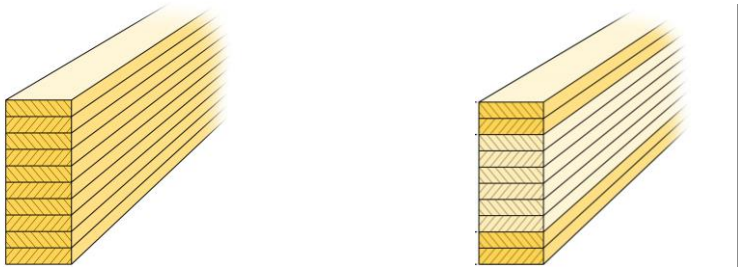
RUBNER holzbau

Glulam Technical Data

Wood Species	• Spruce (Picea Abies, PCAB) • European Larch (Larix Decidua, LADC)
Strength Classes	GL22 to GL32 homogeneous and combine as per EN 14080:2013. Maximum production dimensions (single beam, block-glued glulam is possible): • b=24 cm x h=225 cm x L=44 m (single beam)
Beam lay-up	The timber beam can be of *homogeneous glulam*, i.e. a beam with a cross section composed by laminations of the same strength class, or of *combined glulam*, i.e. a beam with a cross section comprising inner and outer laminations of different strength class. *GLxxh = homogeneous* *GLxxc = combined* 
Adhesives	AkzoNobel GipPro-Plus Melamine Glue
Laminations	In accordance with EN 14080:2013, Spruce laminations thickness can be of: • 40 mm for Service Class 1 and 2, • 33 mm for Service Class 3 In accordance with EN 14080:2013, Larch laminations thickness can be of: • 33 mm for Service Class 1, 2 & 3 For special applications, laminations thickness can be reduced up to 20mm
Moisture Content	10 ± 2%
Density	• **Spruce:** 5,0 kN/m³ according to EN 1991-1-1 for structural calculation; 470kg/m³ for transportation • **Larch:** 5,0 kN/m³ according to EN 1991-1-1 for structural calculation; 600kg/m³ for transportation
Thermal conductivity	• λ = 0,13 W / (mK) parallel to the gluing lines • λ = 0,15 W / (mK) perpendicular to the gluing lines

Water vapor resistance factor	• μ = 20 - 40
Formaldehyde emissions	According to REGULATION (EC) No 1272/2008, classified as non-dangerous product: • formaldehyde emission 0.006 mg/m^3
Fire Behavior	According to 2005/610/EC & EN 13501: • Structural timber Elements: class D-s2, d0; • Floor Elements: class Dfl-s 1
Charring Rate	According to EN1995-1-2 • β_0 = 0,70mm/min
Shrinkage and Swelling	• Perpendicular to the grain: 0,24% every 1% change in timber moisture content • Parallel to the grain: 0,01% every 1% change in timber moisture content
Deviation in Sizes	The deviation in sizes comply with EN 14080:2013 requirements