

Type of wood

- Spruce

Surface quality

- Visual quality (Si)
- Industrial quality (NSi)

Dimensions

- Thicknesses: from 8 to 20 cm
- Widths: to 70 cm
- Lengths: from 4 to 15 m

Product standard

- EN 14080, DIN 1052
- DIN 1052:2008

Strength class

- GL 24h



Areas of application

- Residential houses and apartment buildings
- Hotel and restaurant buildings
- Commercial buildings, warehouses
- Schools, nurseries, sports halls
- Agricultural buildings, barns, stables
- Office buildings
- Bridges
- Renovation

Properties

- Exact fit and inherently stable
- Simple and quick to assemble
- Dry construction, ready to use
- Lower dead load than concrete ceilings
- Lower ceiling height than I-joint or beam ceilings
- Suitable for shear diaphragm construction
- Joint-free and snug, no nails or dowels
- Easy to machine with carpentry tools
- Excellent thermal insulation values
- CO₂ reservoir, environmentally friendly
- Pleasant ambient living environment



EC Certificate of
Conformity

EN 14080



Chain of Custody



Example: Calculation of a load

- Loading on a field by field basis is not taken into account
- Allowance must be made for the dead load of the deck
- Uniform loading
- Creep deformations are not taken into account
- The deflection criteria must be selected according to requirements: either 1/300 or 1/400.
- Tables can be used for:
GL 24h = DIN 1052:2004, SIA 265
BS 11 = DIN 1052:1988, ÖNORM B 4100-2

Requirements

Vertical working load acc. to DIN 1055	=	2.00 KN/m ²
Lightweight partition walls	=	0.75 KN/m ²
1 cm tiling	=	0.20 KN/m ²
Flooring material: 6 cm floor finish	=	1.50 KN/m ²
Dead weight, Deck 12 cm	=	0.55 KN/m ²
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Load q	=	5.00 KN/m ²

Single span beam

Load q [kN/m ²]	Deflection f = 1/300 Element thickness [mm]								Deflection f = 1/400 Element thickness [mm]							
	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240
2.5	4.54	5.45	6.36	7.27	8.18	9.08	9.99	10.90	4.12	4.95	5.78	6.60	7.43	8.25	9.08	9.90
3	4.27	5.13	5.98	6.84	7.69	8.55	9.40	10.26	3.88	4.66	5.43	6.21	6.99	7.77	8.54	9.32
3.5	4.06	4.87	5.68	6.50	7.31	8.12	8.93	9.75	3.69	4.42	5.16	5.90	6.46	7.38	8.12	8.85
4	3.88	4.66	5.43	6.21	6.99	7.77	8.54	9.32	3.53	4.23	4.94	5.64	6.35	7.06	7.76	8.47
4.5	3.73	4.48	5.23	5.97	6.72	7.47	8.21	8.96	3.39	4.07	4.75	5.43	6.11	6.78	7.46	8.14
5	3.60	4.32	5.05	5.77	6.49	7.21	7.93	8.65	3.27	3.93	4.58	5.24	5.89	6.55	7.21	7.86
5.5	3.49	4.19	4.89	5.59	6.28	6.98	7.68	8.38	3.17	3.80	4.44	5.07	5.71	6.34	6.98	7.61
6	3.39	4.07	4.75	5.43	6.11	6.78	7.46	8.14	3.08	3.70	4.31	4.93	5.55	6.16	6.78	7.40

Double span beam and triple span beam (equal spans)

Load q [kN/m ²]	Deflection f = 1/300 Element thickness [mm]								Deflection f = 1/400 Element thickness [mm]							
	100	120	140	160	180	200	220	240	100	120	140	160	180	200	220	240
2.5	5.64	6.77	7.90	9.02	10.15	11.28	12.41	13.54	5.12	6.15	7.17	8.20	9.22	10.25	11.28	12.30
3	5.31	6.37	7.43	8.49	9.55	10.62	11.68	12.74	4.82	5.79	6.75	7.72	8.68	9.65	10.61	11.58
3.5	5.04	6.05	7.06	8.07	9.08	10.08	11.09	12.10	4.58	5.50	6.41	7.33	8.25	9.16	10.08	11.00
4	4.82	5.79	6.75	7.72	8.68	9.65	10.61	11.58	4.38	5.26	6.13	7.01	7.69	8.76	9.64	10.52
4.5	4.63	5.56	6.49	7.42	8.35	9.27	10.20	11.13	4.21	5.05	5.90	6.74	7.58	8.43	9.27	10.11
5	4.47	5.37	6.27	7.16	8.06	8.95	9.85	10.75	4.06	4.88	5.69	6.51	7.32	8.13	8.95	9.76
5.5	4.33	5.20	6.07	6.94	7.81	8.67	9.54	10.41	3.94	4.73	5.51	6.30	7.09	7.88	8.67	9.46
6	4.21	5.05	5.90	6.74	7.58	8.43	9.27	10.11	3.82	4.59	5.36	6.12	6.89	7.65	8.42	9.19

This table is used for pre-dimensioning. A precise structural analysis must be made prior to implementation.