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4.1 Technical properties of Board BauBuche S/Q

Declared density, strength and stiffness values of Board BauBuche S/Q as specified in Declaration of Performance PM-017-2022.

Load/stress type		BauBuche S Laminated veneer lumber Beech LVL, longitudinal ply	BauBuche Q Laminated veneer lumber Beech LVL, cross ply
Nominal thickness		40, 60 mm	40, 60 mm
Strength values			
Flatwise bending			
Bending	$f_{m,0,flat,k}$	80 N/mm ²	75 N/mm ²
	$f_{m,90,flat,k}$	npd ^{c)}	21 N/mm ²
Compressive		10 N/mm ^{2 b)}	16 N/mm ^{2 b)}
Shear		8 N/mm ²	3.8 N/mm ²
Edgewise bending			
Bending ^{a)}	$f_{m,0,edge,k}$	75 N/mm ²	59 N/mm ²
	$f_{m,90,edge,k}$	npd ^{c)}	9 N/mm ²
Tensile to grain	$f_{t,0,k}$	60 N/mm ²	49 N/mm ²
Tensile ⊥ to grain	$f_{t,90,edge,k}$	1.5 N/mm ²	8 N/mm ²
Compressive to grain	$f_{c,0,k}$	57.5 N/mm ^{2 b)}	62 N/mm ^{2 b)}
Compressive ⊥ to grain	$f_{c,90,edge,k}$	14 N/mm ²	22 N/mm ^{2 b)}
Shear	$f_{v,0,edge,k}$	8 N/mm ²	7.8 N/mm ²
Stiffness values			
Modulus of elasticity	$E_{0,mean}$	16.800 N/mm ²	12.800 N/mm ²
Modulus of elasticity	$E_{0.05}$	14.900 N/mm ²	11.800 N/mm ²
Modulus of elasticity	$E_{90,mean}$	470 N/mm ²	2.000 N/mm ²
Shear modulus edgewise	$G_{v,0,edge,mean}$	760 N/mm ²	820 N/mm ²
Shear modulus flatwise	$G_{v,0,flat,mean}$	850 N/mm ²	430 N/mm ²
Density			
Mean density	ρ_{mean}	800 kg/m ³	800 kg/m ³
Characteristic density	ρ_k	730 kg/m ³	730 kg/m ³

a) Values valid for $h \leq 300$ mm. For $300 < h \leq 1000$ mm, the characteristic strength value must be multiplied with factor $k_h = (300/h)^{0.12}$, where h is the dimension of the cross-section relevant for bending stress in mm.

b) For service class 1, the compressive strength must be increased by factor 1.2.

c) npd = no performance declared



4.2 Technical properties of Beam BauBuche GL75

Declared density, strength and stiffness values of Board BauBuche S/Q as specified in Declaration of Performance PM-015-2021 and ETA 14-0354.

Key property		Class/service class/numerical value	
Bending strength	$f_{m,k}$	75 N/mm ² ¹⁾	
Modulus of elasticity			
parallel to grain	$E_{0,mean}$	16.800 N/mm ²	
in lamellas	$E_{0,05}$	15.300 N/mm ²	
perpendicular to grain	$E_{90,mean}$	470 N/mm ²	
in lamellas	$E_{90,05}$	400 N/mm ²	
Tensile strength			
parallel to grain in lamellas	$f_{t,0,k}$	60 N/mm ² ²⁾	
perpendicular to grain in lamellas	$f_{t,90,k}$	0.6 N/mm ²	
Compressive strength		Service class 1	Service class 2
parallel to grain in lamellas	$f_{c,0,k}$	59.4 N/mm ² ³⁾	49.5 N/mm ² ³⁾
perpendicular to grain in lamellas	$f_{c,90,k}$	14.8 N/mm ²	12.3 N/mm ²
Shearing strength	$f_{v,k}$	4.5 N/mm ² ⁴⁾	
Shear modulus	G_{mean}	850 N/mm ²	
	G_{05}	760 N/mm ²	
Density	ρ_{mean}	≥ 800 kg/m ³	
	ρ_k	≥ 730 kg/m ³	

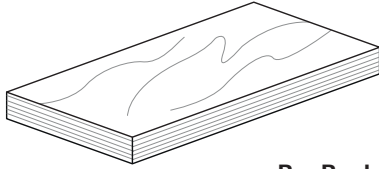
1) For flatwise bending, the characteristic strength value must be multiplied with the factor $k_{h,m} = \left(\frac{600}{h} \right)^{0.10}$, where h is the height of the beam cross-section in mm.

2) The characteristic tensile strength must be multiplied with factor $k_{h,t} = \left(\frac{600}{h} \right)^{0.1}$, where h is the larger side length of the beam cross-section perpendicular to the longitudinal axis in mm.

3) The characteristic compressive strength may be increased for $n > 3$ with $k_{c,o} = \min(0.0009 \cdot h + 0.892; 1.18)$, where h is the height of the beam cross-section in mm and n is the number of plies.

4) The characteristic shear strength must be multiplied with factor $k_{h,v} = \left(\frac{600}{h} \right)^{0.13}$, where h is the height of the beam cross-section in mm.

4.3 Dimensioning tables Board BauBuche Q



BauBuche Q

according to Declaration of Performance PM-017-2022.

EXAMPLE 1

To be calculated: required board thickness

Known: Snow load = 2.5 kN/m^2
 Roof load + self-weight of board = 1.2 kN/m^2
 $q = 2.5 + 1.2 = 3.70 \text{ kN/m}^2$
 2 single-span beams, $l = 2.00 \text{ m}$
 $w_{\max} = l/300$

Required: $h = 40 \text{ mm}$ ($q = 4.0 \text{ kN/m}^2$, $l = 2.19 \text{ m}$)

EXAMPLE 2

To be calculated: required board thickness

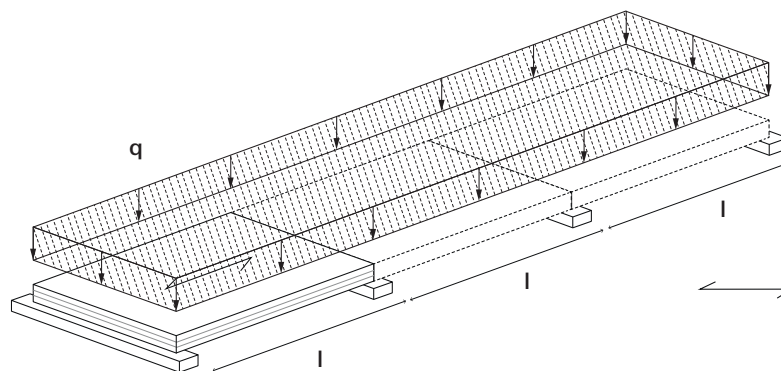
Known: Snow load = 2.5 kN/m^2
 Roof load + self-weight of board = 1.2 kN/m^2
 $q = 2.5 + 1.2 = 3.70 \text{ kN/m}^2$
 Cantilever $l = 1.00 \text{ m}$, load in bearing direction
 $w_{\max} = l/150$

Required: $h = 60 \text{ mm}$ ($q = 4.0 \text{ kN/m}^2$, $l = 1.15 \text{ m}$)

Note: At the moment the boards are only available with a thickness of 40 mm.

Single, double and triple-span beams
max. span l [m]

Load q [kN/m ²]		Single-span beams		Double-span beams		Triple-span beams	
		40	60	40	60	40	60 [mm]
1.0	$w_{\max} = l/200$	2.97	4.34	3.87	5.81	3.60	5.39
	$w_{\max} = l/300$	2.60	3.79	3.38	5.07	3.14	4.71
1.5	$w_{\max} = l/200$	2.60	3.79	3.38	5.07	3.14	4.71
	$w_{\max} = l/300$	2.27	3.31	2.96	4.43	2.74	4.12
2.0	$w_{\max} = l/200$	2.36	3.54	3.16	4.74	2.93	4.40
	$w_{\max} = l/300$	2.06	3.09	2.76	4.14	2.56	3.84
2.5	$w_{\max} = l/200$	2.19	3.28	2.93	4.40	2.72	4.08
	$w_{\max} = l/300$	1.91	2.87	2.56	3.84	2.38	3.57
3.0	$w_{\max} = l/200$	2.06	3.09	2.76	4.14	2.56	3.84
	$w_{\max} = l/300$	1.80	2.70	2.41	3.62	2.24	3.36
3.5	$w_{\max} = l/200$	1.96	2.93	2.62	3.93	2.43	3.65
	$w_{\max} = l/300$	1.71	2.56	2.29	3.43	2.13	3.19
4.0	$w_{\max} = l/200$	1.87	2.81	2.51	3.76	2.33	3.49
	$w_{\max} = l/300$	1.63	2.45	2.19	3.28	2.03	3.05
4.5	$w_{\max} = l/200$	1.80	2.70	2.41	3.62	2.24	3.36
	$w_{\max} = l/300$	1.57	2.36	2.11	3.16	1.95	2.93
5.0	$w_{\max} = l/200$	1.74	2.61	2.33	3.49	2.16	3.24
	$w_{\max} = l/300$	1.52	2.28	2.03	3.05	1.89	2.83



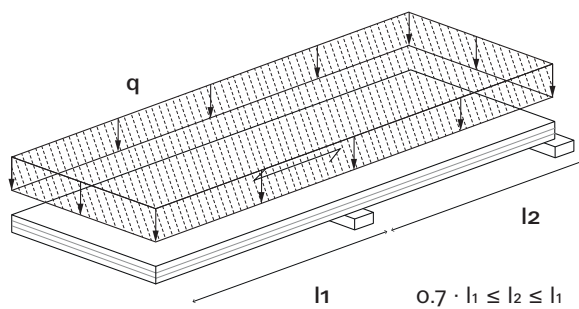
Grain direction in top layer

Note: The deformation criterion is the determining factor.

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m³). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. Deformation under full load. **The tables are intended for dimensioning purposes.**
Prior to construction, always perform exact static strength and design calculations.

Cantilever, load in bearing direction
max. span l_1 [m]

Load q [kN/m ²]		Board thickness [mm]	
		40	60
1.0	$w_{\max} = l/100$	1.40	2.10
	$w_{\max} = l/150$	1.22	1.83
1.5	$w_{\max} = l/100$	1.22	1.83
	$w_{\max} = l/150$	1.07	1.60
2.0	$w_{\max} = l/100$	1.11	1.66
	$w_{\max} = l/150$	0.97	1.45
2.5	$w_{\max} = l/100$	1.03	1.54
	$w_{\max} = l/150$	0.90	1.35
3.0	$w_{\max} = l/100$	0.97	1.45
	$w_{\max} = l/150$	0.85	1.27
3.5	$w_{\max} = l/100$	0.92	1.38
	$w_{\max} = l/150$	0.80	1.21
4.0	$w_{\max} = l/100$	0.88	1.32
	$w_{\max} = l/150$	0.77	1.15
4.5	$w_{\max} = l/100$	0.85	1.27
	$w_{\max} = l/150$	0.74	1.11
5.0	$w_{\max} = l/100$	0.82	1.23
	$w_{\max} = l/150$	0.71	1.07

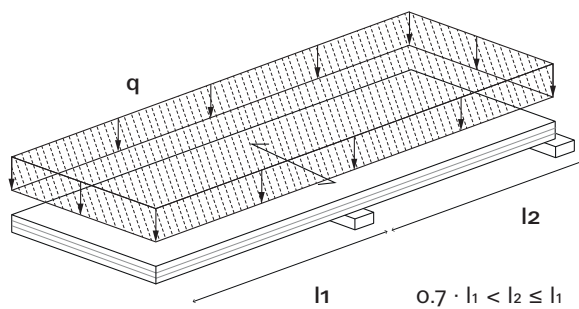


← Grain direction in top layer
Note: The deformation criterion at the cantilever end is the determining factor.

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m³). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. Deformation under full load. **The tables are intended for dimensioning purposes.**
Prior to construction, always perform exact static strength and design calculations.

Cantilever, load perpendicular to bearing direction
max. span l_1 [m]

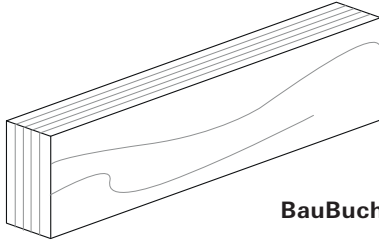
Load q [kN/m ²]		Board thickness [mm]	
		40	60
1.0	$w_{\max} = l/100$	0.75	1.13
	$w_{\max} = l/150$	0.66	0.99
1.5	$w_{\max} = l/100$	0.66	0.99
	$w_{\max} = l/150$	0.57	0.86
2.0	$w_{\max} = l/100$	0.60	0.90
	$w_{\max} = l/150$	0.52	0.78
2.5	$w_{\max} = l/100$	0.55	0.83
	$w_{\max} = l/150$	0.48	0.73
3.0	$w_{\max} = l/100$	0.52	0.78
	$w_{\max} = l/150$	0.46	0.68
3.5	$w_{\max} = l/100$	0.50	0.74
	$w_{\max} = l/150$	0.43	0.65
4.0	$w_{\max} = l/100$	0.47	0.71
	$w_{\max} = l/150$	0.41	0.62
4.5	$w_{\max} = l/100$	0.46	0.68
	$w_{\max} = l/150$	0.40	0.60
5.0	$w_{\max} = l/100$	0.44	0.66
	$w_{\max} = l/150$	0.38	0.58



← Grain direction in top layer
Note: The deformation criterion at the cantilever end is the determining factor.

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m³). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. Deformation under full load. **The tables are intended for dimensioning purposes.**
Prior to construction, always perform exact static strength and design calculations.

4.4 Dimensioning tables for Beam BauBuche S



BauBuche S

according to Declaration of Performance PM-005-2018.

EXAMPLE 1 To be calculated: required beam height

Known: Snow load = 2.5 kN/m^2
 Roof load + self-weight of beam = 1.2 kN/m^2
 Distance between beams $e = 750 \text{ mm}$
 Beam width $b = 60 \text{ mm}$
 Single-span beam, $l = 4.5 \text{ m}$
 $q = (2.5 + 1.2) \cdot 750/1000 = 2.8 \text{ kN/m}$

Required: $h = 240 \text{ mm}$ ($q = 3 \text{ kN/m}$, $l = 4.63 \text{ m}$)

EXAMPLE 2 To be calculated: required beam width

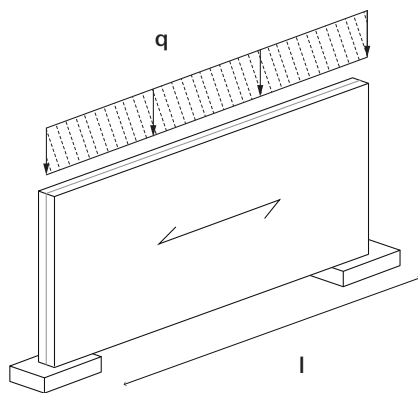
Known: Snow load = 9.5 kN/m^2
 Roof load + self-weight of beam = 3.5 kN/m^2
 Beam height $h = 400 \text{ mm}$
 Double-span beam, $l = 5.50 \text{ m}$
 $q = (9.5 + 3.5) = 13.0 \text{ kN/m}$

Required: $b = 60 \text{ mm}$ ($q = 14 \text{ kN/m}$, $l = 5.57 \text{ m}$)

Note: At the moment the boards are only available with a thickness of 40 mm and 60 mm.

Single-span – board thickness = 40 mm
max. span l [m]

Beam height	Load q [kN/m]														
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20
80	1.94	1.54	1.35	1.22	1.14	1.07	1.02	0.97	0.93	0.90	0.85	0.81	0.77	0.74	0.72
120	2.92	2.31	2.02	1.84	1.70	1.60	1.52	1.46	1.40	1.35	1.27	1.21	1.16	1.11	1.07
160	3.89	3.08	2.69	2.45	2.27	2.14	2.03	1.94	1.87	1.80	1.70	1.61	1.54	1.48	1.43
200	4.86	3.86	3.37	3.06	2.84	2.67	2.54	2.43	2.34	2.26	2.12	2.02	1.93	1.85	1.79
240	5.83	4.63	4.04	3.67	3.41	3.21	3.05	2.92	2.80	2.71	2.55	2.42	2.31	2.22	2.15
280	6.80	5.40	4.72	4.28	3.98	3.74	3.56	3.40	3.27	3.16	2.97	2.82	2.70	2.60	2.51
320	7.77	6.17	5.39	4.90	4.55	4.28	4.06	3.89	3.74	3.61	3.40	3.23	3.08	2.97	2.86
360	8.75	6.94	6.06	5.51	5.11	4.81	4.57	4.37	4.20	4.06	3.82	3.63	3.47	3.34	3.22
400	9.72	7.71	6.74	6.12	5.68	5.35	5.08	4.86	4.67	4.51	4.24	4.03	3.86	3.71	3.58
440	10.69	8.48	7.41	6.73	6.25	5.88	5.59	5.34	5.14	4.96	4.67	4.43	4.24	4.08	3.94
480	11.66	9.25	8.08	7.35	6.82	6.42	6.10	5.83	5.61	5.41	5.09	4.84	4.63	4.45	4.30
520	12.63	10.03	8.76	7.96	7.39	6.95	6.60	6.32	6.07	5.86	5.52	5.24	5.01	4.82	4.65
560	13.60	10.80	9.43	8.57	7.96	7.49	7.11	6.80	6.54	6.31	5.94	5.64	5.40	5.19	5.01
600	14.58	11.57	10.11	9.18	8.52	8.02	7.62	7.29	7.01	6.77	6.37	6.05	5.78	5.56	5.37
640	15.55	12.34	10.78	9.79	9.09	8.56	8.13	7.77	7.47	7.22	6.79	6.45	6.17	5.93	5.73
680	16.52	13.11	11.45	10.41	9.66	9.09	8.64	8.26	7.94	7.67	7.22	6.85	6.56	6.30	6.09
720	17.49	13.88	12.13	11.02	10.23	9.63	9.14	8.75	8.41	8.12	7.64	7.26	6.94	6.67	6.44
760	18.46	14.65	12.80	11.63	10.80	10.16	9.65	9.23	8.88	8.57	8.06	7.66	7.33	7.04	6.80
800	19.43 ^{a)}	15.42	13.47	12.24	11.37	10.70	10.16	9.72	9.34	9.02	8.49	8.06	7.71	7.42	7.16
840	20.41 ^{a)}	16.20	14.15	12.85	11.93	11.23	10.67	10.20	9.81	9.47	8.91	8.47	8.10	7.79	7.52
880	21.38 ^{a)}	16.97	14.82	13.47	12.50	11.76	11.18	10.69	10.28	9.92	9.34	8.87	8.48	8.16	7.88
920	22.35 ^{a)}	17.74	15.50	14.08	13.07	12.30	11.68	11.17	10.74	10.37	9.76	9.27	8.87	8.53	8.23
960	23.32 ^{a)}	18.51 ^{a)}	16.17	14.69	13.64	12.83	12.19	11.66	11.21	10.82	10.19	9.68	9.25	8.90	8.59
1000	24.29 ^{a)}	19.28 ^{a)}	16.84	15.30	14.21	13.37	12.70	12.15	11.68	11.28	10.61	10.08	9.64	9.27	8.95



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

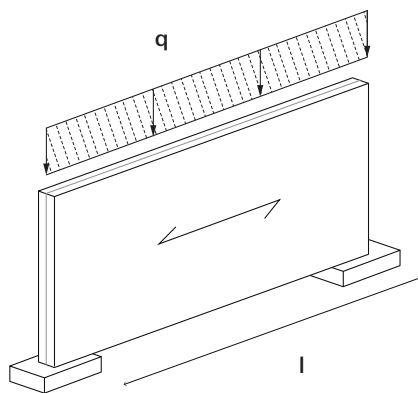
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Single-span – board thickness = 40 mm
max. span l [m]

Beam height	Load q [kN/m]														
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20
80	1.64	1.30	1.14	1.03	0.96	0.90	0.86	0.82	0.79	0.76	0.72	0.68	0.65	0.63	0.60
120	2.46	1.95	1.70	1.55	1.44	1.35	1.29	1.23	1.18	1.14	1.07	1.02	0.98	0.94	0.91
160	3.28	2.60	2.27	2.07	1.92	1.80	1.71	1.64	1.58	1.52	1.43	1.36	1.30	1.25	1.21
200	4.10	3.25	2.84	2.58	2.40	2.26	2.14	2.05	1.97	1.90	1.79	1.70	1.63	1.56	1.51
240	4.92	3.90	3.41	3.10	2.88	2.71	2.57	2.46	2.36	2.28	2.15	2.04	1.95	1.88	1.81
280	5.74	4.55	3.98	3.61	3.36	3.16	3.00	2.87	2.76	2.66	2.51	2.38	2.28	2.19	2.11
320	6.56	5.20	4.55	4.13	3.83	3.61	3.43	3.28	3.15	3.04	2.86	2.72	2.60	2.50	2.42
360	7.38	5.85	5.11	4.65	4.31	4.06	3.86	3.69	3.55	3.42	3.22	3.06	2.93	2.81	2.72
400	8.20	6.50	5.68	5.16	4.79	4.51	4.28	4.10	3.94	3.80	3.58	3.40	3.25	3.13	3.02
440	9.02	7.16	6.25	5.68	5.27	4.96	4.71	4.51	4.33	4.18	3.94	3.74	3.58	3.44	3.32
480	9.83	7.81	6.82	6.20	5.75	5.41	5.14	4.92	4.73	4.56	4.30	4.08	3.90	3.75	3.62
520	10.65	8.46	7.39	6.71	6.23	5.86	5.57	5.33	5.12	4.95	4.65	4.42	4.23	4.07	3.93
560	11.47	9.11	7.96	7.23	6.71	6.31	6.00	5.74	5.52	5.33	5.01	4.76	4.55	4.38	4.23
600	12.29	9.76	8.52	7.74	7.19	6.77	6.43	6.15	5.91	5.71	5.37	5.10	4.88	4.69	4.53
640	13.11	10.41	9.09	8.26	7.67	7.22	6.85	6.56	6.30	6.09	5.73	5.44	5.20	5.00	4.83
680	13.93	11.06	9.66	8.78	8.15	7.67	7.28	6.97	6.70	6.47	6.09	5.78	5.53	5.32	5.13
720	14.75	11.71	10.23	9.29	8.63	8.12	7.71	7.38	7.09	6.85	6.44	6.12	5.85	5.63	5.43
760	15.57	12.36	10.80	9.81	9.11	8.57	8.14	7.79	7.49	7.23	6.80	6.46	6.18	5.94	5.74
800	16.39	13.01	11.37	10.33	9.59	9.02	8.57	8.20	7.88	7.61	7.16	6.80	6.50	6.25	6.04
840	17.21	13.66	11.93	10.84	10.07	9.47	9.00	8.61	8.27	7.99	7.52	7.14	6.83	6.57	6.34
880	18.03 ^{a)}	14.31	12.50	11.36	10.54	9.92	9.43	9.02	8.67	8.37	7.88	7.48	7.16	6.88	6.64
920	18.85 ^{a)}	14.96	13.07	11.87	11.02	10.37	9.85	9.43	9.06	8.75	8.23	7.82	7.48	7.19	6.94
960	19.67 ^{a)}	15.61	13.64	12.39	11.50	10.82	10.28	9.83	9.46	9.13	8.59	8.16	7.81	7.51	7.25
1000	20.49 ^{a)}	16.26	14.21	12.91	11.98	11.28	10.71	10.24	9.85	9.51	8.95	8.50	8.13	7.82	7.55



- Determining factor: deflection ($l/500$)
- Determining factor: moment
- Determining factor: lateral force

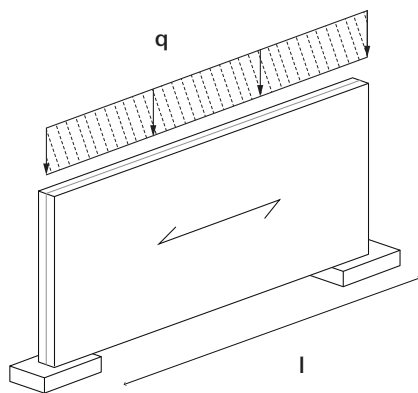
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/500$ under full load. Continuous compression area on beams. **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Single-span – board thickness = 60 mm
max. span l [m]

Beam height	Load q [kN/m]														
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20
80	2.22	1.77	1.54	1.40	1.30	1.22	1.16	1.11	1.07	1.03	0.97	0.92	0.88	0.85	0.82
120	3.34	2.65	2.31	2.10	1.95	1.84	1.74	1.67	1.60	1.55	1.46	1.38	1.32	1.27	1.23
160	4.45	3.53	3.08	2.80	2.60	2.45	2.33	2.22	2.14	2.07	1.94	1.85	1.77	1.70	1.64
200	5.56	4.41	3.86	3.50	3.25	3.06	2.91	2.78	2.67	2.58	2.43	2.31	2.21	2.12	2.05
240	6.67	5.30	4.63	4.20	3.90	3.67	3.49	3.34	3.21	3.10	2.92	2.77	2.65	2.55	2.46
280	7.79	6.18	5.40	4.91	4.55	4.28	4.07	3.89	3.74	3.61	3.40	3.23	3.09	2.97	2.87
320	8.90	7.06	6.17	5.61	5.20	4.90	4.65	4.45	4.28	4.13	3.89	3.69	3.53	3.40	3.28
360	10.01	7.95	6.94	6.31	5.85	5.51	5.23	5.01	4.81	4.65	4.37	4.15	3.97	3.82	3.69
400	11.12	8.83	7.71	7.01	6.50	6.12	5.81	5.56	5.35	5.16	4.86	4.62	4.41	4.24	4.10
440	12.24	9.71	8.48	7.71	7.16	6.73	6.40	6.12	5.88	5.68	5.34	5.08	4.86	4.67	4.51
480	13.35	10.59	9.25	8.41	7.81	7.35	6.98	6.67	6.42	6.20	5.83	5.54	5.30	5.09	4.92
520	14.46	11.48	10.03	9.11	8.46	7.96	7.56	7.23	6.95	6.71	6.32	6.00	5.74	5.52	5.33
560	15.57	12.36	10.80	9.81	9.11	8.57	8.14	7.79	7.49	7.23	6.80	6.46	6.18	5.94	5.74
600	16.68	13.24	11.57	10.51	9.76	9.18	8.72	8.34	8.02	7.74	7.29	6.92	6.62	6.37	6.15
640	17.80	14.13	12.34	11.21	10.41	9.79	9.30	8.90	8.56	8.26	7.77	7.38	7.06	6.79	6.56
680	18.91 ^{a)}	15.01	13.11	11.91	11.06	10.41	9.89	9.45	9.09	8.78	8.26	7.85	7.50	7.22	6.97
720	20.02 ^{a)}	15.89	13.88	12.61	11.71	11.02	10.47	10.01	9.63	9.29	8.75	8.31	7.95	7.64	7.38
760	21.13 ^{a)}	16.77	14.65	13.31	12.36	11.63	11.05	10.57	10.16	9.81	9.23	8.77	8.39	8.06	7.79
800	22.25 ^{a)}	17.66	15.42	14.01	13.01	12.24	11.63	11.12	10.70	10.33	9.72	9.23	8.83	8.49	8.20
840	23.36 ^{a)}	18.54 ^{a)}	16.20	14.72	13.66	12.85	12.21	11.68	11.23	10.84	10.20	9.69	9.27	8.91	8.61
880	24.47 ^{a)}	19.42 ^{a)}	16.97	15.42	14.31	13.47	12.79	12.24	11.76	11.36	10.69	10.15	9.71	9.34	9.02
920	25.58 ^{a)}	20.31 ^{a)}	17.74	16.12	14.96	14.08	13.37	12.79	12.30	11.87	11.17	10.61	10.15	9.76	9.43
960	26.70 ^{a)}	21.19 ^{a)}	18.51 ^{a)}	16.82	15.61	14.69	13.96	13.35	12.83	12.39	11.66	11.08	10.59	10.19	9.83
1000	27.81 ^{a)}	22.07 ^{a)}	19.28 ^{a)}	17.52	16.26	15.30	14.54	13.90	13.37	12.91	12.15	11.54	11.04	10.61	10.24



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

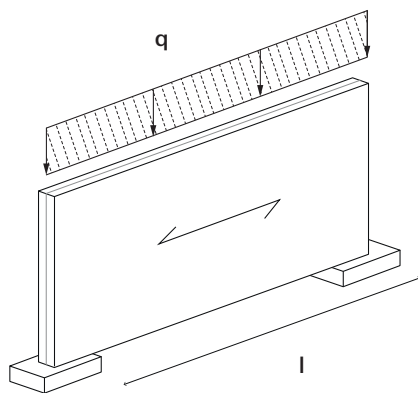
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Single-span – board thickness = 60 mm
max. span l [m]

Beam height	Load q [kN/m]														
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20
80	1.88	1.49	1.30	1.18	1.10	1.03	0.98	0.94	0.90	0.87	0.82	0.78	0.74	0.72	0.69
120	2.81	2.23	1.95	1.77	1.65	1.55	1.47	1.41	1.35	1.31	1.23	1.17	1.12	1.07	1.04
160	3.75	2.98	2.60	2.36	2.19	2.07	1.96	1.88	1.80	1.74	1.64	1.56	1.49	1.43	1.38
200	4.69	3.72	3.25	2.96	2.74	2.58	2.45	2.35	2.26	2.18	2.05	1.95	1.86	1.79	1.73
240	5.63	4.47	3.90	3.55	3.29	3.10	2.94	2.81	2.71	2.61	2.46	2.34	2.23	2.15	2.07
280	6.57	5.21	4.55	4.14	3.84	3.61	3.43	3.28	3.16	3.05	2.87	2.72	2.61	2.51	2.42
320	7.51	5.96	5.20	4.73	4.39	4.13	3.92	3.75	3.61	3.48	3.28	3.11	2.98	2.86	2.77
360	8.44	6.70	5.85	5.32	4.94	4.65	4.41	4.22	4.06	3.92	3.69	3.50	3.35	3.22	3.11
400	9.38	7.45	6.50	5.91	5.49	5.16	4.90	4.69	4.51	4.35	4.10	3.89	3.72	3.58	3.46
440	10.32	8.19	7.16	6.50	6.04	5.68	5.39	5.16	4.96	4.79	4.51	4.28	4.10	3.94	3.80
480	11.26	8.94	7.81	7.09	6.58	6.20	5.89	5.63	5.41	5.23	4.92	4.67	4.47	4.30	4.15
520	12.20	9.68	8.46	7.68	7.13	6.71	6.38	6.10	5.86	5.66	5.33	5.06	4.84	4.65	4.49
560	13.13	10.42	9.11	8.27	7.68	7.23	6.87	6.57	6.31	6.10	5.74	5.45	5.21	5.01	4.84
600	14.07	11.17	9.76	8.87	8.23	7.74	7.36	7.04	6.77	6.53	6.15	5.84	5.58	5.37	5.18
640	15.01	11.91	10.41	9.46	8.78	8.26	7.85	7.51	7.22	6.97	6.56	6.23	5.96	5.73	5.53
680	15.95	12.66	11.06	10.05	9.33	8.78	8.34	7.97	7.67	7.40	6.97	6.62	6.33	6.09	5.88
720	16.89	13.40	11.71	10.64	9.88	9.29	8.83	8.44	8.12	7.84	7.38	7.01	6.70	6.44	6.22
760	17.83	14.15	12.36	11.23	10.42	9.81	9.32	8.91	8.57	8.27	7.79	7.40	7.07	6.80	6.57
800	18.76 ^{a)}	14.89	13.01	11.82	10.97	10.33	9.81	9.38	9.02	8.71	8.20	7.79	7.45	7.16	6.91
840	19.70 ^{a)}	15.64	13.66	12.41	11.52	10.84	10.30	9.85	9.47	9.14	8.61	8.17	7.82	7.52	7.26
880	20.64 ^{a)}	16.38	14.31	13.00	12.07	11.36	10.79	10.32	9.92	9.58	9.02	8.56	8.19	7.88	7.60
920	21.58 ^{a)}	17.13	14.96	13.59	12.62	11.87	11.28	10.79	10.37	10.02	9.43	8.95	8.56	8.23	7.95
960	22.52 ^{a)}	17.87	15.61	14.18	13.17	12.39	11.77	11.26	10.82	10.45	9.83	9.34	8.94	8.59	8.30
1000	23.45 ^{a)}	18.62 ^{a)}	16.26	14.78	13.72	12.91	12.26	11.73	11.28	10.89	10.24	9.73	9.31	8.95	8.64



- Determining factor: deflection ($l/500$)
- Determining factor: moment
- Determining factor: lateral force

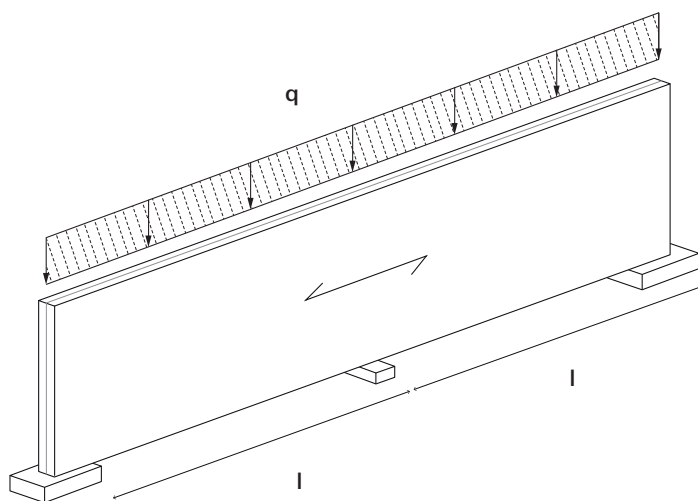
← Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/500$ under full load. Continuous compression area on beams. **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Double-span – board thickness = 40 mm
max. span l [m]

Beam height	Load q [kN/m]														
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20
80	2,60	2,07	1,81	1,64	1,52	1,41	1,31	1,22	1,15	1,10	1,00	0,86	0,75	0,67	0,60
120	3,90	3,10	2,71	2,46	2,28	2,12	1,96	1,84	1,73	1,64	1,50	1,29	1,13	1,00	0,90
160	5,21	4,13	3,61	3,28	3,04	2,83	2,62	2,45	2,31	2,19	2,00	1,71	1,50	1,33	1,20
200	6,51	5,17	4,51	4,10	3,81	3,54	3,27	3,06	2,89	2,74	2,50	2,14	1,88	1,67	1,50
240	7,81	6,20	5,42	4,92	4,57	4,24	3,93	3,67	3,46	3,29	3,00	2,57	2,25	2,00	1,80
280	9,11	7,23	6,32	5,74	5,33	4,95	4,58	4,29	4,04	3,83	3,50	3,00	2,63	2,33	2,10
320	10,41	8,26	7,22	6,56	6,09	5,64	5,22	4,88	4,60	4,37	3,99	3,43	3,00	2,67	2,40
360	11,71	9,30	8,12	7,38	6,85	6,30	5,83	5,45	5,14	4,88	4,45	3,86	3,38	3,00	2,70
400	13,02	10,33	9,03	8,20	7,61	6,95	6,44	6,02	5,68	5,38	4,92	4,29	3,75	3,33	3,00
440	14,32	11,36	9,93	9,02	8,33	7,60	7,04	6,58	6,21	5,89	5,38	4,72	4,13	3,67	3,30
480	15,62	12,40	10,83	9,84	9,04	8,25	7,64	7,15	6,74	6,39	5,83	5,14	4,50	4,00	3,60
520	16,92	13,43	11,73	10,66	9,74	8,90	8,24	7,70	7,26	6,89	6,29	5,57	4,88	4,33	3,90
560	18,22 ^{a)}	14,46	12,64	11,48	10,45	9,54	8,83	8,26	7,79	7,39	6,74	6,00	5,25	4,67	4,20
600	19,52 ^{a)}	15,50	13,54	12,30	11,15	10,18	9,42	8,81	8,31	7,88	7,20	6,43	5,63	5,00	4,50
640	20,83 ^{a)}	16,53	14,44	13,12	11,84	10,81	10,01	9,36	8,83	8,38	7,65	6,86	6,00	5,33	4,80
680	22,13 ^{a)}	17,56	15,34	13,94	12,54	11,45	10,60	9,91	9,35	8,87	8,09	7,29	6,38	5,67	5,10
720	23,43 ^{a)}	18,60 ^{a)}	16,25	14,76	13,23	12,08	11,18	10,46	9,86	9,36	8,54	7,72	6,75	6,00	5,40
760	24,73 ^{a)}	19,63 ^{a)}	17,15	15,56	13,92	12,71	11,77	11,01	10,38	9,84	8,99	8,14	7,13	6,33	5,70
800	26,03 ^{a)}	20,66 ^{a)}	18,05 ^{a)}	16,33	14,61	13,34	12,35	11,55	10,89	10,33	9,43	8,57	7,50	6,67	6,00
840	27,33 ^{a)}	21,70 ^{a)}	18,95 ^{a)}	17,10	15,29	13,96	12,93	12,09	11,40	10,81	9,87	9,00	7,88	7,00	6,30
880	28,64 ^{a)}	22,73 ^{a)}	19,86 ^{a)}	17,86	15,98	14,59	13,50	12,63	11,91	11,30	10,31	9,43	8,25	7,34	6,60
920	29,94 ^{a)}	23,76 ^{a)}	20,76 ^{a)}	18,63 ^{a)}	16,66	15,21	14,08	13,17	12,42	11,78	10,75	9,86	8,63	7,67	6,90
960	31,24 ^{a)}	24,79 ^{a)}	21,66 ^{a)}	19,39 ^{a)}	17,34	15,83	14,65	13,71	12,92	12,26	11,19	10,29	9,00	8,00	7,20
1000	32,54 ^{a)}	25,83 ^{a)}	22,56 ^{a)}	20,14 ^{a)}	18,02 ^{a)}	16,45	15,23	14,24	13,43	12,74	11,63	10,72	9,38	8,34	7,50



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

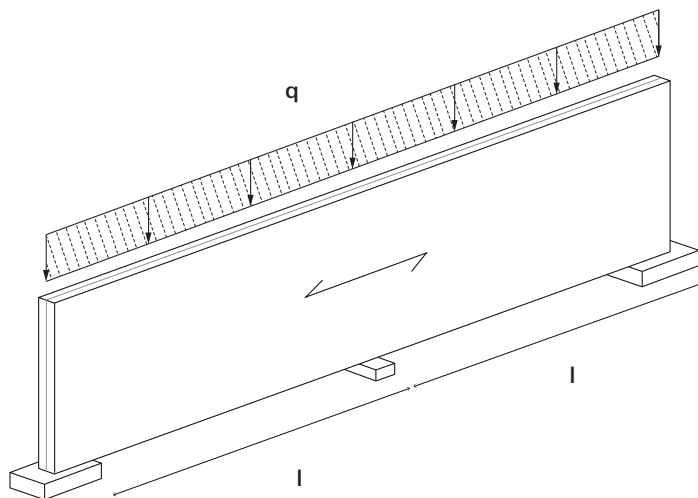
← Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0,8$; $\gamma_m = 1,3$ and $\gamma_F = 1,4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Double-span – board thickness = 60 mm
max. span l [m]

Beam height	Load q [kN/m]														
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20
80	2,98	2,37	2,07	1,88	1,74	1,64	1,56	1,49	1,41	1,34	1,22	1,13	1,06	1,00	0,90
120	4,47	3,55	3,10	2,82	2,61	2,46	2,34	2,24	2,12	2,01	1,84	1,70	1,59	1,50	1,35
160	5,96	4,73	4,13	3,75	3,49	3,28	3,12	2,98	2,83	2,68	2,45	2,27	2,12	2,00	1,80
200	7,45	5,91	5,17	4,69	4,36	4,10	3,89	3,73	3,54	3,35	3,06	2,84	2,65	2,50	2,25
240	8,94	7,10	6,20	5,63	5,23	4,92	4,67	4,47	4,24	4,03	3,67	3,40	3,18	3,00	2,70
280	10,43	8,28	7,23	6,57	6,10	5,74	5,45	5,22	4,95	4,70	4,29	3,97	3,71	3,50	3,15
320	11,92	9,46	8,26	7,51	6,97	6,56	6,23	5,96	5,64	5,35	4,88	4,52	4,23	3,99	3,60
360	13,41	10,64	9,30	8,45	7,84	7,38	7,01	6,68	6,30	5,97	5,45	5,05	4,72	4,45	4,05
400	14,90	11,83	10,33	9,39	8,71	8,20	7,79	7,37	6,95	6,59	6,02	5,57	5,21	4,92	4,50
440	16,39	13,01	11,36	10,33	9,59	9,02	8,57	8,06	7,60	7,21	6,58	6,10	5,70	5,38	4,95
480	17,88	14,19	12,40	11,26	10,46	9,84	9,35	8,75	8,25	7,83	7,15	6,61	6,19	5,83	5,40
520	19,37 ^{a)}	15,37	13,43	12,20	11,33	10,66	10,09	9,43	8,90	8,44	7,70	7,13	6,67	6,29	5,85
560	20,86 ^{a)}	16,56	14,46	13,14	12,20	11,48	10,81	10,12	9,54	9,05	8,26	7,65	7,15	6,74	6,30
600	22,35 ^{a)}	17,74	15,50	14,08	13,07	12,30	11,54	10,79	10,18	9,65	8,81	8,16	7,63	7,20	6,75
640	23,84 ^{a)}	18,92 ^{a)}	16,53	15,02	13,94	13,12	12,26	11,47	10,81	10,26	9,36	8,67	8,11	7,65	7,20
680	25,33 ^{a)}	20,10 ^{a)}	17,56	15,96	14,81	13,94	12,98	12,14	11,45	10,86	9,91	9,18	8,58	8,09	7,65
720	26,82 ^{a)}	21,29 ^{a)}	18,60 ^{a)}	16,90	15,68	14,76	13,70	12,81	12,08	11,46	10,46	9,68	9,06	8,54	8,10
760	28,31 ^{a)}	22,47 ^{a)}	19,63 ^{a)}	17,83	16,56	15,56	14,41	13,48	12,71	12,06	11,01	10,19	9,53	8,99	8,52
800	29,80 ^{a)}	23,65 ^{a)}	20,66 ^{a)}	18,77 ^{a)}	17,43	16,33	15,12	14,14	13,34	12,65	11,55	10,69	10,00	9,43	8,95
840	31,29 ^{a)}	24,84 ^{a)}	21,70 ^{a)}	19,71 ^{a)}	18,30 ^{a)}	17,10	15,83	14,81	13,96	13,24	12,09	11,19	10,47	9,87	9,37
880	32,78 ^{a)}	26,02 ^{a)}	22,73 ^{a)}	20,65 ^{a)}	19,17 ^{a)}	17,86	16,54	15,47	14,59	13,84	12,63	11,69	10,94	10,31	9,78
920	34,27 ^{a)}	27,20 ^{a)}	23,76 ^{a)}	21,59 ^{a)}	20,04 ^{a)}	18,63 ^{a)}	17,24	16,13	15,21	14,43	13,17	12,19	11,41	10,75	10,20
960	35,76 ^{a)}	28,38 ^{a)}	24,79 ^{a)}	22,53 ^{a)}	20,91 ^{a)}	19,39 ^{a)}	17,95	16,79	15,83	15,02	13,71	12,69	11,87	11,19	10,62
1000	37,25 ^{a)}	29,57 ^{a)}	25,83 ^{a)}	23,47 ^{a)}	21,78 ^{a)}	20,14 ^{a)}	18,65 ^{a)}	17,45	16,45	15,60	14,24	13,19	12,34	11,63	11,03

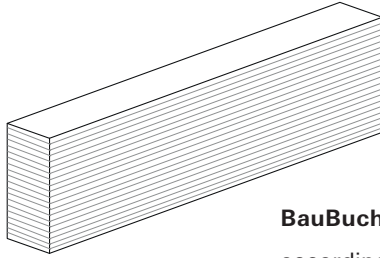


- Determining factor: deflection ($l/300$)
 - Determining factor: moment
 - Determining factor: lateral force
- ← Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0,8$; $\gamma_m = 1,3$ and $\gamma_F = 1,4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

4.5 Dimensioning tables for Beam BauBuche GL75



BauBuche GL75

according to Declaration of Performance PM-008-2018.

EXAMPLE 1

To be calculated: required beam height

Known: Snow load = 2.5 kN/m^2
 Roof load + self-weight of beam = 0.7 kN/m^2
 Distance between beams $e = 1500 \text{ mm}$
 Beam width $b = 80 \text{ mm}$
 Single-span beam, $l = 7.5 \text{ m}$
 $q = (2.5 + 0.7) \cdot 1500/1000 = 4.8 \text{ kN/m}$

Required: $h = 440 \text{ mm}$ ($q = 5 \text{ kN/m}$, $l = 7.88 \text{ m}$)

EXAMPLE 2

To be calculated: required beam width

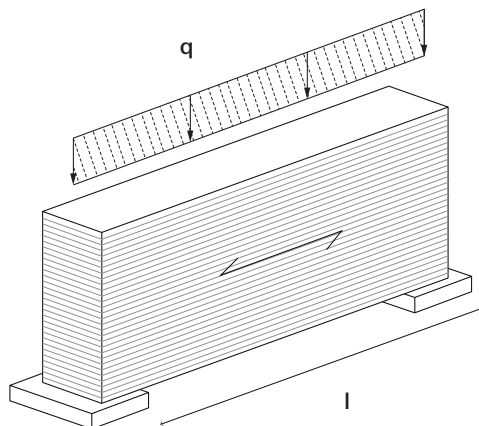
Known: Snow load = 17.0 kN/m^2
 Roof load + self-weight of beam = 7.0 kN/m^2
 Beam height $h = 400 \text{ mm}$
 Double-span beam, $l = 4.5 \text{ m}$
 $q = (17.0 + 7.0) = 24.0 \text{ kN/m}$

Required: $b = 120 \text{ mm}$ ($q = 25 \text{ kN/m}$, $l = 4.27 \text{ m}$)

Note: According to approval, widths of 50 – 300 mm are permitted.

Single-span – beam width = 80 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	2.45	1.94	1.70	1.54	1.43	1.35	1.28	1.22	1.18	1.14	1.07	1.02	0.97	0.93	0.90	0.84	0.73
120	3.67	2.92	2.55	2.31	2.15	2.02	1.92	1.84	1.77	1.70	1.60	1.52	1.46	1.40	1.35	1.25	1.04
160	4.90	3.89	3.40	3.08	2.86	2.69	2.56	2.45	2.35	2.27	2.14	2.03	1.94	1.87	1.80	1.60	1.34
200	6.12	4.86	4.24	3.86	3.58	3.37	3.20	3.06	2.94	2.84	2.67	2.54	2.43	2.34	2.26	1.95	1.62
240	7.35	5.83	5.09	4.63	4.30	4.04	3.84	3.67	3.53	3.41	3.21	3.05	2.92	2.80	2.71	2.28	1.90
280	8.57	6.80	5.94	5.40	5.01	4.72	4.48	4.28	4.12	3.98	3.74	3.56	3.40	3.27	3.16	2.61	2.17
320	9.79	7.77	6.79	6.17	5.73	5.39	5.12	4.90	4.71	4.55	4.28	4.06	3.89	3.74	3.61	2.93	2.44
360	11.02	8.75	7.64	6.94	6.44	6.06	5.76	5.51	5.30	5.11	4.81	4.57	4.37	4.20	4.06	3.25	2.71
400	12.24	9.72	8.49	7.71	7.16	6.74	6.40	6.12	5.89	5.68	5.35	5.08	4.86	4.67	4.45	3.56	2.97
440	13.47	10.69	9.34	8.48	7.88	7.41	7.04	6.73	6.47	6.25	5.88	5.59	5.34	5.14	4.83	3.87	3.22
480	14.69	11.66	10.19	9.25	8.59	8.08	7.68	7.35	7.06	6.82	6.42	6.10	5.83	5.61	5.21	4.17	3.48
520	15.92	12.63	11.04	10.03	9.31	8.76	8.32	7.96	7.65	7.39	6.95	6.60	6.32	6.07	5.59	4.47	3.73
560	17.14	13.60	11.88	10.80	10.02	9.43	8.96	8.57	8.24	7.96	7.49	7.11	6.80	6.54	5.96	4.77	3.97
600	18.36 ^{a)}	14.58	12.73	11.57	10.74	10.11	9.60	9.18	8.83	8.52	8.02	7.62	7.29	7.01	6.33	5.06	4.22
680	20.81 ^{a)}	16.52	14.43	13.11	12.17	11.45	10.88	10.41	10.01	9.66	9.09	8.64	8.26	7.84	7.06	5.65	4.71
760	23.26 ^{a)}	18.46 ^{a)}	16.13	14.65	13.60	12.80	12.16	11.63	11.18	10.80	10.16	9.65	9.23	8.64	7.77	6.22	5.18
840	25.71 ^{a)}	20.41 ^{a)}	17.83	16.20	15.04	14.15	13.44	12.85	12.36	11.93	11.23	10.67	10.20	9.42	8.48	6.79	5.65
920	28.16 ^{a)}	22.35 ^{a)}	19.52 ^{a)}	17.74	16.47	15.50	14.72	14.08	13.54	13.07	12.30	11.68	11.17	10.20	9.18	7.34	6.12
1000	30.61 ^{a)}	24.29 ^{a)}	21.22 ^{a)}	19.28 ^{a)}	17.90	16.84	16.00	15.30	14.71	14.21	13.37	12.70	12.15	10.97	9.87	7.90	6.58
1080	33.06 ^{a)}	26.24 ^{a)}	22.92 ^{a)}	20.82 ^{a)}	19.33 ^{a)}	18.19 ^{a)}	17.28	16.53	15.89	15.34	14.44	13.72	13.12	11.73	10.56	8.44	7.04
1160	35.50 ^{a)}	28.18 ^{a)}	24.62 ^{a)}	22.37 ^{a)}	20.76 ^{a)}	19.54 ^{a)}	18.56 ^{a)}	17.75	17.07	16.48	15.51	14.73	14.04	12.48	11.23	8.99	7.49
1240	37.95 ^{a)}	30.12 ^{a)}	26.31 ^{a)}	23.91 ^{a)}	22.19 ^{a)}	20.89 ^{a)}	19.84 ^{a)}	18.98 ^{a)}	18.25 ^{a)}	17.62	16.58	15.75	14.88	13.23	11.90	9.52	7.94
1320	40.40 ^{a)}	32.07 ^{a)}	28.01 ^{a)}	25.45 ^{a)}	23.63 ^{a)}	22.23 ^{a)}	21.12 ^{a)}	20.20 ^{a)}	19.42 ^{a)}	18.75 ^{a)}	17.65	16.76	15.71	13.97	12.57	10.05	8.38
1360	41.63 ^{a)}	33.04 ^{a)}	28.86 ^{a)}	26.22 ^{a)}	24.34 ^{a)}	22.91 ^{a)}	21.76 ^{a)}	20.81 ^{a)}	20.01 ^{a)}	19.32 ^{a)}	18.18 ^{a)}	17.27	16.12	14.33	12.90	10.32	8.60



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

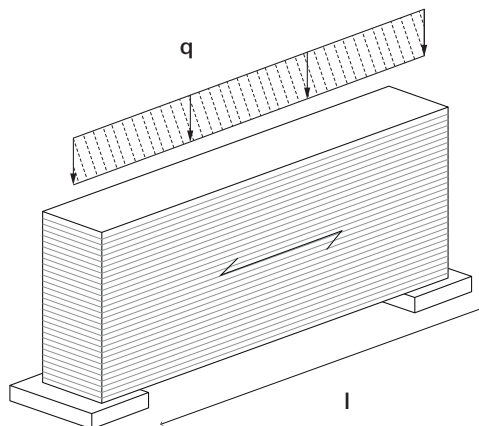
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Single-span – beam width = 120 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	2.80	2.22	1.94	1.77	1.64	1.54	1.47	1.40	1.35	1.30	1.22	1.16	1.11	1.07	1.03	0.96	0.90
120	4.20	3.34	2.92	2.65	2.46	2.31	2.20	2.10	2.02	1.95	1.84	1.74	1.67	1.60	1.55	1.44	1.35
160	5.61	4.45	3.89	3.53	3.28	3.08	2.93	2.80	2.69	2.60	2.45	2.33	2.22	2.14	2.07	1.92	1.80
200	7.01	5.56	4.86	4.41	4.10	3.86	3.66	3.50	3.37	3.25	3.06	2.91	2.78	2.67	2.58	2.40	2.26
240	8.41	6.67	5.83	5.30	4.92	4.63	4.40	4.20	4.04	3.90	3.67	3.49	3.34	3.21	3.10	2.88	2.71
280	9.81	7.79	6.80	6.18	5.74	5.40	5.13	4.91	4.72	4.55	4.28	4.07	3.89	3.74	3.61	3.36	3.16
320	11.21	8.90	7.77	7.06	6.56	6.17	5.86	5.61	5.39	5.20	4.90	4.65	4.45	4.28	4.13	3.83	3.61
360	12.61	10.01	8.75	7.95	7.38	6.94	6.59	6.31	6.06	5.85	5.51	5.23	5.01	4.81	4.65	4.31	4.06
400	14.01	11.12	9.72	8.83	8.20	7.71	7.33	7.01	6.74	6.50	6.12	5.81	5.56	5.35	5.16	4.79	4.45
440	15.42	12.24	10.69	9.71	9.02	8.48	8.06	7.71	7.41	7.16	6.73	6.40	6.12	5.88	5.68	5.27	4.83
480	16.82	13.35	11.66	10.59	9.83	9.25	8.79	8.41	8.08	7.81	7.35	6.98	6.67	6.42	6.20	5.75	5.21
520	18.22 ^{a)}	14.46	12.63	11.48	10.65	10.03	9.52	9.11	8.76	8.46	7.96	7.56	7.23	6.95	6.71	6.23	5.59
560	19.62 ^{a)}	15.57	13.60	12.36	11.47	10.80	10.26	9.81	9.43	9.11	8.57	8.14	7.79	7.49	7.23	6.71	5.96
600	21.02 ^{a)}	16.68	14.58	13.24	12.29	11.57	10.99	10.51	10.11	9.76	9.18	8.72	8.34	8.02	7.74	7.19	6.33
680	23.82 ^{a)}	18.91 ^{a)}	16.52	15.01	13.93	13.11	12.45	11.91	11.45	11.06	10.41	9.89	9.45	9.09	8.78	8.15	7.06
760	26.63 ^{a)}	21.13 ^{a)}	18.46 ^{a)}	16.77	15.57	14.65	13.92	13.31	12.80	12.36	11.63	11.05	10.57	10.16	9.81	9.11	7.77
840	29.43 ^{a)}	23.36 ^{a)}	20.41 ^{a)}	18.54 ^{a)}	17.21	16.20	15.38	14.72	14.15	13.66	12.85	12.21	11.68	11.23	10.84	10.07	8.48
920	32.23 ^{a)}	25.58 ^{a)}	22.35 ^{a)}	20.31 ^{a)}	18.85 ^{a)}	17.74	16.85	16.12	15.50	14.96	14.08	13.37	12.79	12.30	11.87	11.02	9.18
1000	35.04 ^{a)}	27.81 ^{a)}	24.29 ^{a)}	22.07 ^{a)}	20.49 ^{a)}	19.28 ^{a)}	18.32 ^{a)}	17.52	16.84	16.26	15.30	14.54	13.90	13.37	12.91	11.85	9.87
1080	37.84 ^{a)}	30.03 ^{a)}	26.24 ^{a)}	23.84 ^{a)}	22.13 ^{a)}	20.82 ^{a)}	19.78 ^{a)}	18.92 ^{a)}	18.19 ^{a)}	17.56	16.53	15.70	15.02	14.44	13.94	12.67	10.56
1160	40.64 ^{a)}	32.26 ^{a)}	28.18 ^{a)}	25.60 ^{a)}	23.77 ^{a)}	22.37 ^{a)}	21.25 ^{a)}	20.32 ^{a)}	19.54 ^{a)}	18.86 ^{a)}	17.75	16.86	16.13	15.51	14.97	13.48	11.23
1240	43.44 ^{a)}	34.48 ^{a)}	30.12 ^{a)}	27.37 ^{a)}	25.41 ^{a)}	23.91 ^{a)}	22.71 ^{a)}	21.72 ^{a)}	20.89 ^{a)}	20.17 ^{a)}	18.98 ^{a)}	18.03 ^{a)}	17.24	16.58	16.01	14.28	11.90
1320	46.25 ^{a)}	36.71 ^{a)}	32.07 ^{a)}	29.13 ^{a)}	27.05 ^{a)}	25.45 ^{a)}	24.18 ^{a)}	23.12 ^{a)}	22.23 ^{a)}	21.47 ^{a)}	20.20 ^{a)}	19.19 ^{a)}	18.35 ^{a)}	17.65	17.04	15.08	12.57
1360	47.65 ^{a)}	37.82 ^{a)}	33.04 ^{a)}	30.02 ^{a)}	27.87 ^{a)}	26.22 ^{a)}	24.91 ^{a)}	23.82 ^{a)}	22.91 ^{a)}	22.12 ^{a)}	20.81 ^{a)}	19.77 ^{a)}	18.91 ^{a)}	18.18 ^{a)}	17.55	15.48	12.90



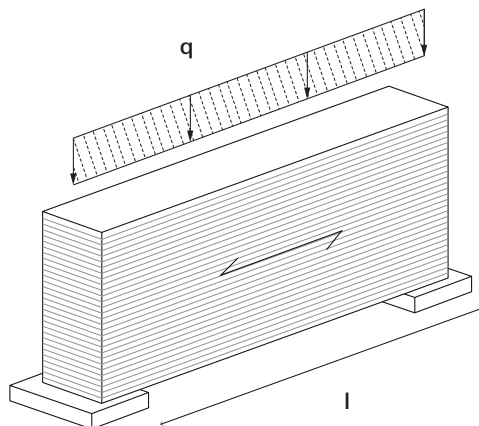
- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force
- ↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Single-span – beam width = 160 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	3.08	2.45	2.14	1.94	1.80	1.70	1.61	1.54	1.48	1.43	1.35	1.28	1.22	1.18	1.14	1.06	0.99
120	4.63	3.67	3.21	2.92	2.71	2.55	2.42	2.31	2.22	2.15	2.02	1.92	1.84	1.77	1.70	1.58	1.49
160	6.17	4.90	4.28	3.89	3.61	3.40	3.23	3.08	2.97	2.86	2.69	2.56	2.45	2.35	2.27	2.11	1.99
200	7.71	6.12	5.35	4.86	4.51	4.24	4.03	3.86	3.71	3.58	3.37	3.20	3.06	2.94	2.84	2.64	2.48
240	9.25	7.35	6.42	5.83	5.41	5.09	4.84	4.63	4.45	4.30	4.04	3.84	3.67	3.53	3.41	3.17	2.98
280	10.80	8.57	7.49	6.80	6.31	5.94	5.64	5.40	5.19	5.01	4.72	4.48	4.28	4.12	3.98	3.69	3.47
320	12.34	9.79	8.56	7.77	7.22	6.79	6.45	6.17	5.93	5.73	5.39	5.12	4.90	4.71	4.55	4.22	3.97
360	13.88	11.02	9.63	8.75	8.12	7.64	7.26	6.94	6.67	6.44	6.06	5.76	5.51	5.30	5.11	4.75	4.47
400	15.42	12.24	10.70	9.72	9.02	8.49	8.06	7.71	7.42	7.16	6.74	6.40	6.12	5.89	5.68	5.28	4.96
440	16.97	13.47	11.76	10.69	9.92	9.34	8.87	8.48	8.16	7.88	7.41	7.04	6.73	6.47	6.25	5.80	5.46
480	18.51 ^{a)}	14.69	12.83	11.66	10.82	10.19	9.68	9.25	8.90	8.59	8.08	7.68	7.35	7.06	6.82	6.33	5.96
520	20.05 ^{a)}	15.92	13.90	12.63	11.73	11.04	10.48	10.03	9.64	9.31	8.76	8.32	7.96	7.65	7.39	6.86	6.45
560	21.59 ^{a)}	17.14	14.97	13.60	12.63	11.88	11.29	10.80	10.38	10.02	9.43	8.96	8.57	8.24	7.96	7.39	6.95
600	23.14 ^{a)}	18.36 ^{a)}	16.04	14.58	13.53	12.73	12.10	11.57	11.12	10.74	10.11	9.60	9.18	8.83	8.52	7.91	7.45
680	26.22 ^{a)}	20.81 ^{a)}	18.18 ^{a)}	16.52	15.33	14.43	13.71	13.11	12.61	12.17	11.45	10.88	10.41	10.01	9.66	8.97	8.44
760	29.31 ^{a)}	23.26 ^{a)}	20.32 ^{a)}	18.46 ^{a)}	17.14	16.13	15.32	14.65	14.09	13.60	12.80	12.16	11.63	11.18	10.80	10.02	9.43
840	32.39 ^{a)}	25.71 ^{a)}	22.46 ^{a)}	20.41 ^{a)}	17.83	16.93	16.20	15.57	15.04	14.15	13.44	12.85	12.36	11.93	11.08	10.42	
920	35.48 ^{a)}	28.16 ^{a)}	24.60 ^{a)}	22.35 ^{a)}	20.75 ^{a)}	19.52 ^{a)}	18.55 ^{a)}	17.74	17.06	16.47	15.50	14.72	14.08	13.54	13.07	12.13	11.42
1000	38.56 ^{a)}	30.61 ^{a)}	26.74 ^{a)}	24.29 ^{a)}	22.55 ^{a)}	21.22 ^{a)}	20.16 ^{a)}	19.28 ^{a)}	18.54 ^{a)}	17.90	16.84	16.00	15.30	14.71	14.21	13.19	12.41
1080	41.65 ^{a)}	33.06 ^{a)}	28.88 ^{a)}	26.24 ^{a)}	24.36 ^{a)}	22.92 ^{a)}	21.77 ^{a)}	20.82 ^{a)}	20.02 ^{a)}	19.33 ^{a)}	18.19 ^{a)}	17.28	16.53	15.89	15.34	14.24	13.40
1160	44.73 ^{a)}	35.50 ^{a)}	31.02 ^{a)}	28.18 ^{a)}	26.16 ^{a)}	24.62 ^{a)}	23.38 ^{a)}	22.37 ^{a)}	21.51 ^{a)}	20.76 ^{a)}	19.54 ^{a)}	18.56 ^{a)}	17.75	17.07	16.48	15.30	14.40
1240	47.82 ^{a)}	37.95 ^{a)}	33.15 ^{a)}	30.12 ^{a)}	27.96 ^{a)}	26.31 ^{a)}	25.00 ^{a)}	23.91 ^{a)}	22.99 ^{a)}	22.19 ^{a)}	20.89 ^{a)}	19.84 ^{a)}	18.98 ^{a)}	18.25 ^{a)}	17.62	16.35	15.39
1320	50.90 ^{a)}	40.40 ^{a)}	35.29 ^{a)}	32.07 ^{a)}	29.77 ^{a)}	28.01 ^{a)}	26.61 ^{a)}	25.45 ^{a)}	24.47 ^{a)}	23.63 ^{a)}	22.23 ^{a)}	21.12 ^{a)}	20.20 ^{a)}	19.42 ^{a)}	18.75 ^{a)}	17.41	16.38
1360	52.44 ^{a)}	41.63 ^{a)}	36.36 ^{a)}	33.04 ^{a)}	30.67 ^{a)}	28.86 ^{a)}	27.42 ^{a)}	26.22 ^{a)}	25.21 ^{a)}	24.34 ^{a)}	22.91 ^{a)}	21.76 ^{a)}	20.81 ^{a)}	20.01 ^{a)}	19.32 ^{a)}	17.94	16.88



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

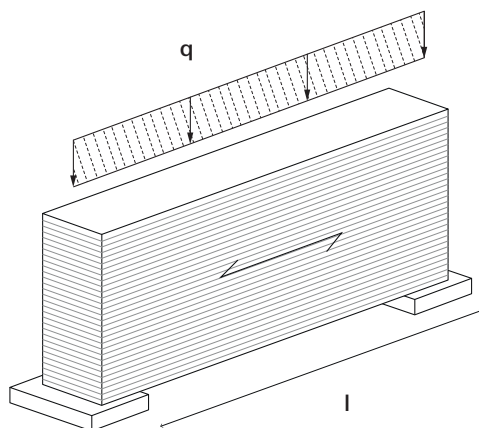
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Single-span – beam width = 200 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	3,32	2,64	2,30	2,09	1,94	1,83	1,74	1,66	1,60	1,54	1,45	1,38	1,32	1,27	1,22	1,14	1,07
120	4,98	3,96	3,46	3,14	2,92	2,74	2,61	2,49	2,40	2,31	2,18	2,07	1,98	1,90	1,84	1,70	1,60
160	6,65	5,28	4,61	4,19	3,89	3,66	3,47	3,32	3,20	3,08	2,90	2,76	2,64	2,54	2,45	2,27	2,14
200	8,31	6,59	5,76	5,23	4,86	4,57	4,34	4,15	3,99	3,86	3,63	3,45	3,30	3,17	3,06	2,84	2,67
240	9,97	7,91	6,91	6,28	5,83	5,49	5,21	4,98	4,79	4,63	4,35	4,14	3,96	3,80	3,67	3,41	3,21
280	11,63	9,23	8,06	7,33	6,80	6,40	6,08	5,82	5,59	5,40	5,08	4,83	4,62	4,44	4,28	3,98	3,74
320	13,29	10,55	9,22	8,37	7,77	7,32	6,95	6,65	6,39	6,17	5,81	5,52	5,28	5,07	4,90	4,55	4,28
360	14,95	11,87	10,37	9,42	8,75	8,23	7,82	7,48	7,19	6,94	6,53	6,20	5,93	5,71	5,51	5,11	4,81
400	16,62	13,19	11,52	10,47	9,72	9,14	8,69	8,31	7,99	7,71	7,26	6,89	6,59	6,34	6,12	5,68	5,35
440	18,28 ^{a)}	14,51	12,67	11,51	10,69	10,06	9,55	9,14	8,79	8,48	7,98	7,58	7,25	6,97	6,73	6,25	5,88
480	19,94 ^{a)}	15,83	13,83	12,56	11,66	10,97	10,42	9,97	9,59	9,25	8,71	8,27	7,91	7,61	7,35	6,82	6,42
520	21,60 ^{a)}	17,14	14,98	13,61	12,63	11,89	11,29	10,80	10,38	10,03	9,44	8,96	8,57	8,24	7,96	7,39	6,95
560	23,26 ^{a)}	18,46 ^{a)}	16,13	14,65	13,60	12,80	12,16	11,63	11,18	10,80	10,16	9,65	9,23	8,88	8,57	7,96	7,49
600	24,92 ^{a)}	19,78 ^{a)}	17,28	15,70	14,58	13,72	13,03	12,46	11,98	11,57	10,89	10,34	9,89	9,51	9,18	8,52	8,02
680	28,25 ^{a)}	22,42 ^{a)}	19,59 ^{a)}	17,79	16,52	15,55	14,77	14,12	13,58	13,11	12,34	11,72	11,21	10,78	10,41	9,66	9,09
760	31,57 ^{a)}	25,06 ^{a)}	21,89 ^{a)}	19,89 ^{a)}	18,46 ^{a)}	17,37	16,50	15,79	15,18	14,65	13,79	13,10	12,53	12,05	11,63	10,80	10,16
840	34,89 ^{a)}	27,70 ^{a)}	24,19 ^{a)}	21,98 ^{a)}	20,41 ^{a)}	19,20 ^{a)}	18,24 ^{a)}	17,45	16,78	16,20	15,24	14,48	13,85	13,31	12,85	11,93	11,23
920	38,22 ^{a)}	30,33 ^{a)}	26,50 ^{a)}	24,08 ^{a)}	22,35 ^{a)}	21,03 ^{a)}	19,98 ^{a)}	19,11 ^{a)}	18,37 ^{a)}	17,74	16,69	15,86	15,17	14,58	14,08	13,07	12,30
1000	41,54 ^{a)}	32,97 ^{a)}	28,80 ^{a)}	26,17 ^{a)}	24,29 ^{a)}	22,86 ^{a)}	21,72 ^{a)}	20,77 ^{a)}	19,97 ^{a)}	19,28 ^{a)}	18,14 ^{a)}	17,24	16,49	15,85	15,30	14,21	13,37
1080	44,86 ^{a)}	35,61 ^{a)}	31,11 ^{a)}	28,26 ^{a)}	26,24 ^{a)}	24,69 ^{a)}	23,45 ^{a)}	22,43 ^{a)}	21,57 ^{a)}	20,82 ^{a)}	19,60 ^{a)}	18,61 ^{a)}	17,80	17,12	16,53	15,34	14,44
1160	48,19 ^{a)}	38,25 ^{a)}	33,41 ^{a)}	30,36 ^{a)}	28,18 ^{a)}	26,52 ^{a)}	25,19 ^{a)}	24,09 ^{a)}	23,17 ^{a)}	22,37 ^{a)}	21,05 ^{a)}	19,99 ^{a)}	19,12 ^{a)}	18,39 ^{a)}	17,75	16,48	15,51
1240	51,51 ^{a)}	40,88 ^{a)}	35,71 ^{a)}	32,45 ^{a)}	30,12 ^{a)}	28,35 ^{a)}	26,93 ^{a)}	25,75 ^{a)}	24,76 ^{a)}	23,91 ^{a)}	22,50 ^{a)}	21,37 ^{a)}	20,44 ^{a)}	19,65 ^{a)}	18,98 ^{a)}	17,62	16,58
1320	54,83 ^{a)}	43,52 ^{a)}	38,02 ^{a)}	34,54 ^{a)}	32,07 ^{a)}	30,18 ^{a)}	28,66 ^{a)}	27,42 ^{a)}	26,36 ^{a)}	25,45 ^{a)}	23,95 ^{a)}	22,75 ^{a)}	21,76 ^{a)}	20,92 ^{a)}	20,20 ^{a)}	18,75 ^{a)}	17,65
1360	56,49 ^{a)}	44,84 ^{a)}	39,17 ^{a)}	35,59 ^{a)}	33,04 ^{a)}	31,09 ^{a)}	29,53 ^{a)}	28,25 ^{a)}	27,16 ^{a)}	26,22 ^{a)}	24,68 ^{a)}	23,44 ^{a)}	22,42 ^{a)}	21,56 ^{a)}	20,81 ^{a)}	19,32 ^{a)}	18,18 ^{a)}



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

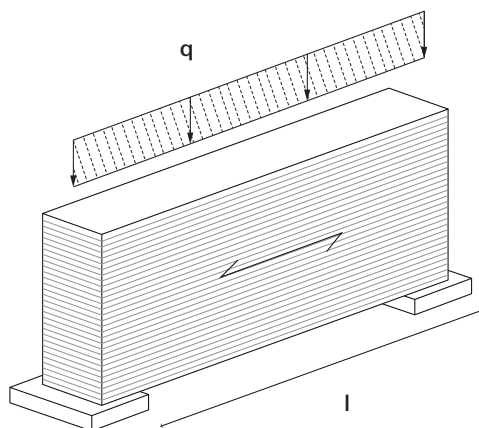
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Single-span – beam width = 240 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	3.53	2.80	2.45	2.22	2.07	1.94	1.85	1.77	1.70	1.64	1.54	1.47	1.40	1.35	1.30	1.21	1.14
120	5.30	4.20	3.67	3.34	3.10	2.92	2.77	2.65	2.55	2.46	2.31	2.20	2.10	2.02	1.95	1.81	1.70
160	7.06	5.61	4.90	4.45	4.13	3.89	3.69	3.53	3.40	3.28	3.08	2.93	2.80	2.69	2.60	2.42	2.27
200	8.83	7.01	6.12	5.56	5.16	4.86	4.62	4.41	4.24	4.10	3.86	3.66	3.50	3.37	3.25	3.02	2.84
240	10.59	8.41	7.35	6.67	6.20	5.83	5.54	5.30	5.09	4.92	4.63	4.40	4.20	4.04	3.90	3.62	3.41
280	12.36	9.81	8.57	7.79	7.23	6.80	6.46	6.18	5.94	5.74	5.40	5.13	4.91	4.72	4.55	4.23	3.98
320	14.13	11.21	9.79	8.90	8.26	7.77	7.38	7.06	6.79	6.56	6.17	5.86	5.61	5.39	5.20	4.83	4.55
360	15.89	12.61	11.02	10.01	9.29	8.75	8.31	7.95	7.64	7.38	6.94	6.59	6.31	6.06	5.85	5.43	5.11
400	17.66	14.01	12.24	11.12	10.33	9.72	9.23	8.83	8.49	8.20	7.71	7.33	7.01	6.74	6.50	6.04	5.68
440	19.42 ^{a)}	15.42	13.47	12.24	11.36	10.69	10.15	9.71	9.34	9.02	8.48	8.06	7.71	7.41	7.16	6.64	6.25
480	21.19 ^{a)}	16.82	14.69	13.35	12.39	11.66	11.08	10.59	10.19	9.83	9.25	8.79	8.41	8.08	7.81	7.25	6.82
520	22.95 ^{a)}	18.22 ^{a)}	15.92	14.46	13.42	12.63	12.00	11.48	11.04	10.65	10.03	9.52	9.11	8.76	8.46	7.85	7.39
560	24.72 ^{a)}	19.62 ^{a)}	17.14	15.57	14.46	13.60	12.92	12.36	11.88	11.47	10.80	10.26	9.81	9.43	9.11	8.45	7.96
600	26.49 ^{a)}	21.02 ^{a)}	18.36 ^{a)}	16.68	15.49	14.58	13.85	13.24	12.73	12.29	11.57	10.99	10.51	10.11	9.76	9.06	8.52
680	30.02 ^{a)}	23.82 ^{a)}	20.81 ^{a)}	18.91 ^{a)}	17.55	16.52	15.69	15.01	14.43	13.93	13.11	12.45	11.91	11.45	11.06	10.27	9.66
760	33.55 ^{a)}	26.63 ^{a)}	23.26 ^{a)}	21.13 ^{a)}	19.62 ^{a)}	18.46 ^{a)}	17.54	16.77	16.13	15.57	14.65	13.92	13.31	12.80	12.36	11.47	10.80
840	37.08 ^{a)}	29.43 ^{a)}	25.71 ^{a)}	23.36 ^{a)}	21.68 ^{a)}	20.41 ^{a)}	19.38 ^{a)}	18.54 ^{a)}	17.83	17.21	16.20	15.38	14.72	14.15	13.66	12.68	11.93
920	40.61 ^{a)}	32.23 ^{a)}	28.16 ^{a)}	25.58 ^{a)}	23.75 ^{a)}	22.35 ^{a)}	21.23 ^{a)}	20.31 ^{a)}	19.52 ^{a)}	18.85 ^{a)}	17.74	16.85	16.12	15.50	14.96	13.89	13.07
1000	44.14 ^{a)}	35.04 ^{a)}	30.61 ^{a)}	27.81 ^{a)}	25.81 ^{a)}	24.29 ^{a)}	23.08 ^{a)}	22.07 ^{a)}	21.22 ^{a)}	20.49 ^{a)}	19.28 ^{a)}	18.32 ^{a)}	17.52	16.84	16.26	15.10	14.21
1080	47.67 ^{a)}	37.84 ^{a)}	33.06 ^{a)}	30.03 ^{a)}	27.88 ^{a)}	26.24 ^{a)}	24.92 ^{a)}	23.84 ^{a)}	22.92 ^{a)}	22.13 ^{a)}	20.82 ^{a)}	19.78 ^{a)}	18.92 ^{a)}	18.19 ^{a)}	17.56	16.30	15.34
1160	51.21 ^{a)}	40.64 ^{a)}	35.50 ^{a)}	32.26 ^{a)}	29.95 ^{a)}	28.18 ^{a)}	26.77 ^{a)}	25.60 ^{a)}	24.62 ^{a)}	23.77 ^{a)}	22.37 ^{a)}	21.25 ^{a)}	20.32 ^{a)}	19.54 ^{a)}	18.86 ^{a)}	17.51	16.48
1240	54.74 ^{a)}	43.44 ^{a)}	37.95 ^{a)}	34.48 ^{a)}	32.01 ^{a)}	30.12 ^{a)}	28.61 ^{a)}	27.37 ^{a)}	26.31 ^{a)}	25.41 ^{a)}	23.91 ^{a)}	22.71 ^{a)}	21.72 ^{a)}	20.89 ^{a)}	20.17 ^{a)}	18.72 ^{a)}	17.62
1320	58.27 ^{a)}	46.25 ^{a)}	40.40 ^{a)}	36.71 ^{a)}	34.08 ^{a)}	32.07 ^{a)}	30.46 ^{a)}	29.13 ^{a)}	28.01 ^{a)}	27.05 ^{a)}	25.45 ^{a)}	24.18 ^{a)}	23.12 ^{a)}	22.23 ^{a)}	21.47 ^{a)}	19.93 ^{a)}	18.75 ^{a)}
1360	60.03 ^{a)}	47.65 ^{a)}	41.63 ^{a)}	37.82 ^{a)}	35.11 ^{a)}	33.04 ^{a)}	31.38 ^{a)}	30.02 ^{a)}	28.86 ^{a)}	27.87 ^{a)}	26.22 ^{a)}	24.91 ^{a)}	23.82 ^{a)}	22.91 ^{a)}	22.12 ^{a)}	20.53 ^{a)}	19.32 ^{a)}



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

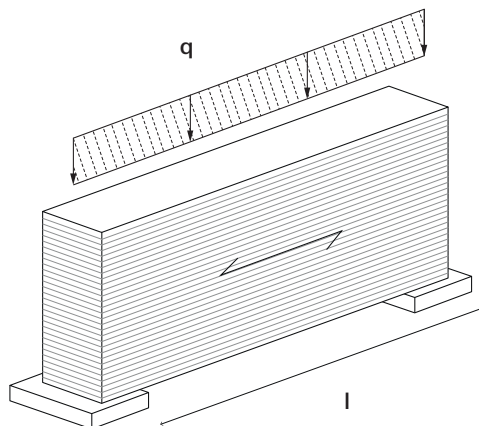
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Single-span – beam width = 280 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	3.72	2.95	2.58	2.34	2.17	2.05	1.94	1.86	1.79	1.73	1.62	1.54	1.48	1.42	1.37	1.27	1.20
120	5.58	4.43	3.87	3.51	3.26	3.07	2.92	2.79	2.68	2.59	2.44	2.31	2.21	2.13	2.05	1.91	1.79
160	7.44	5.90	5.16	4.68	4.35	4.09	3.89	3.72	3.57	3.45	3.25	3.08	2.95	2.84	2.74	2.54	2.39
200	9.29	7.38	6.44	5.85	5.44	5.11	4.86	4.65	4.47	4.31	4.06	3.86	3.69	3.55	3.42	3.18	2.99
240	11.15	8.85	7.73	7.03	6.52	6.14	5.83	5.58	5.36	5.18	4.87	4.63	4.43	4.26	4.11	3.81	3.59
280	13.01	10.33	9.02	8.20	7.61	7.16	6.80	6.51	6.26	6.04	5.68	5.40	5.16	4.96	4.79	4.45	4.19
320	14.87	11.80	10.31	9.37	8.70	8.18	7.77	7.44	7.15	6.90	6.50	6.17	5.90	5.67	5.48	5.09	4.79
360	16.73	13.28	11.60	10.54	9.78	9.21	8.75	8.36	8.04	7.77	7.31	6.94	6.64	6.38	6.16	5.72	5.38
400	18.59 ^{a)}	14.75	12.89	11.71	10.87	10.23	9.72	9.29	8.94	8.63	8.12	7.71	7.38	7.09	6.85	6.36	5.98
440	20.45 ^{a)}	16.23	14.18	12.88	11.96	11.25	10.69	10.22	9.83	9.49	8.93	8.48	8.11	7.80	7.53	6.99	6.58
480	22.31 ^{a)}	17.70	15.47	14.05	13.04	12.28	11.66	11.15	10.72	10.35	9.74	9.25	8.85	8.51	8.22	7.63	7.18
520	24.16 ^{a)}	19.18 ^{a)}	16.75	15.22	14.13	13.30	12.63	12.08	11.62	11.22	10.55	10.03	9.59	9.22	8.90	8.26	7.78
560	26.02 ^{a)}	20.65 ^{a)}	18.04 ^{a)}	16.39	15.22	14.32	13.60	13.01	12.51	12.08	11.37	10.80	10.33	9.93	9.59	8.90	8.38
600	27.88 ^{a)}	22.13 ^{a)}	19.33 ^{a)}	17.56	16.31	15.34	14.58	13.94	13.40	12.94	12.18	11.57	11.07	10.64	10.27	9.54	8.97
680	31.60 ^{a)}	25.08 ^{a)}	21.91 ^{a)}	19.91 ^{a)}	18.48 ^{a)}	17.39	16.52	15.80	15.19	14.67	13.80	13.11	12.54	12.06	11.64	10.81	10.17
760	35.32 ^{a)}	28.03 ^{a)}	24.49 ^{a)}	22.25 ^{a)}	20.65 ^{a)}	19.44 ^{a)}	18.46 ^{a)}	17.66	16.98	16.39	15.43	14.65	14.02	13.48	13.01	12.08	11.37
840	39.04 ^{a)}	30.98 ^{a)}	27.07 ^{a)}	24.59 ^{a)}	22.83 ^{a)}	21.48 ^{a)}	20.41 ^{a)}	19.52 ^{a)}	18.77 ^{a)}	18.12 ^{a)}	17.05	16.20	15.49	14.89	14.38	13.35	12.56
920	42.75 ^{a)}	33.93 ^{a)}	29.64 ^{a)}	26.93 ^{a)}	25.00 ^{a)}	23.53 ^{a)}	22.35 ^{a)}	21.38 ^{a)}	20.55 ^{a)}	19.84 ^{a)}	18.67 ^{a)}	17.74	16.97	16.31	15.75	14.62	13.76
1000	46.47 ^{a)}	36.88 ^{a)}	32.22 ^{a)}	29.27 ^{a)}	27.18 ^{a)}	25.57 ^{a)}	24.29 ^{a)}	23.24 ^{a)}	22.34 ^{a)}	21.57 ^{a)}	20.30 ^{a)}	19.28 ^{a)}	18.44 ^{a)}	17.73	17.12	15.89	14.96
1080	50.19 ^{a)}	39.83 ^{a)}	34.80 ^{a)}	31.62 ^{a)}	29.35 ^{a)}	27.62 ^{a)}	26.24 ^{a)}	25.09 ^{a)}	24.13 ^{a)}	23.30 ^{a)}	21.92 ^{a)}	20.82 ^{a)}	19.92 ^{a)}	19.15 ^{a)}	18.49 ^{a)}	17.16	16.15
1160	53.91 ^{a)}	42.78 ^{a)}	37.38 ^{a)}	33.96 ^{a)}	31.52 ^{a)}	29.67 ^{a)}	28.18 ^{a)}	26.95 ^{a)}	25.92 ^{a)}	25.02 ^{a)}	23.55 ^{a)}	22.37 ^{a)}	21.39 ^{a)}	20.57 ^{a)}	19.86 ^{a)}	18.44 ^{a)}	17.35
1240	57.62 ^{a)}	45.74 ^{a)}	39.95 ^{a)}	36.30 ^{a)}	33.70 ^{a)}	31.71 ^{a)}	30.12 ^{a)}	28.81 ^{a)}	27.70 ^{a)}	26.75 ^{a)}	25.17 ^{a)}	23.91 ^{a)}	22.87 ^{a)}	21.99 ^{a)}	21.23 ^{a)}	19.71 ^{a)}	18.54 ^{a)}
1320	61.34 ^{a)}	48.69 ^{a)}	42.53 ^{a)}	38.64 ^{a)}	35.87 ^{a)}	33.76 ^{a)}	32.07 ^{a)}	30.67 ^{a)}	29.49 ^{a)}	28.47 ^{a)}	26.79 ^{a)}	25.45 ^{a)}	24.34 ^{a)}	23.41 ^{a)}	22.60 ^{a)}	20.98 ^{a)}	19.74 ^{a)}
1360	63.20 ^{a)}	50.16 ^{a)}	43.82 ^{a)}	39.81 ^{a)}	36.96 ^{a)}	34.78 ^{a)}	33.04 ^{a)}	31.60 ^{a)}	30.38 ^{a)}	29.33 ^{a)}	27.60 ^{a)}	26.22 ^{a)}	25.08 ^{a)}	24.12 ^{a)}	23.28 ^{a)}	21.61 ^{a)}	20.34 ^{a)}



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

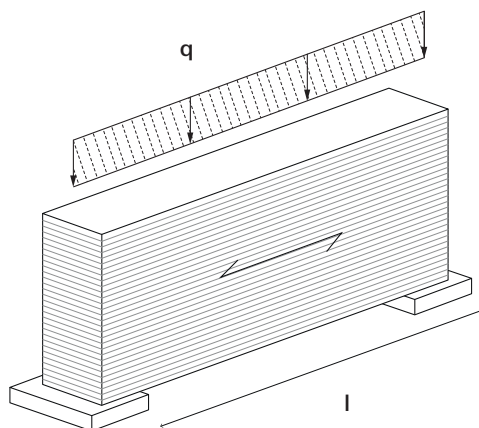
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Single-span – beam width = 300 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	3.80	3.02	2.64	2.40	2.22	2.09	1.99	1.90	1.83	1.77	1.66	1.58	1.51	1.45	1.40	1.30	1.22
120	5.71	4.53	3.96	3.59	3.34	3.14	2.98	2.85	2.74	2.65	2.49	2.37	2.26	2.18	2.10	1.95	1.84
160	7.61	6.04	5.28	4.79	4.45	4.19	3.98	3.80	3.66	3.53	3.32	3.16	3.02	2.90	2.80	2.60	2.45
200	9.51	7.55	6.59	5.99	5.56	5.23	4.97	4.76	4.57	4.41	4.15	3.95	3.77	3.63	3.50	3.25	3.06
240	11.41	9.06	7.91	7.19	6.67	6.28	5.97	5.71	5.49	5.30	4.98	4.74	4.53	4.35	4.20	3.90	3.67
280	13.31	10.57	9.23	8.39	7.79	7.33	6.96	6.66	6.40	6.18	5.82	5.52	5.28	5.08	4.91	4.55	4.28
320	15.22	12.08	10.55	9.59	8.90	8.37	7.95	7.61	7.32	7.06	6.65	6.31	6.04	5.81	5.61	5.20	4.90
360	17.12	13.59	11.87	10.78	10.01	9.42	8.95	8.56	8.23	7.95	7.48	7.10	6.79	6.53	6.31	5.85	5.51
400	19.02 ^{a)}	15.10	13.19	11.98	11.12	10.47	9.94	9.51	9.14	8.83	8.31	7.89	7.55	7.26	7.01	6.50	6.12
440	20.92 ^{a)}	16.61	14.51	13.18	12.24	11.51	10.94	10.46	10.06	9.71	9.14	8.68	8.30	7.98	7.71	7.16	6.73
480	22.82 ^{a)}	18.12 ^{a)}	15.83	14.38	13.35	12.56	11.93	11.41	10.97	10.59	9.97	9.47	9.06	8.71	8.41	7.81	7.35
520	24.73 ^{a)}	19.63 ^{a)}	17.14	15.58	14.46	13.61	12.93	12.36	11.89	11.48	10.80	10.26	9.81	9.44	9.11	8.46	7.96
560	26.63 ^{a)}	21.14 ^{a)}	18.46 ^{a)}	16.78	15.57	14.65	13.92	13.31	12.80	12.36	11.63	11.05	10.57	10.16	9.81	9.11	8.57
600	28.53 ^{a)}	22.64 ^{a)}	19.78 ^{a)}	17.97	16.68	15.70	14.91	14.27	13.72	13.24	12.46	11.84	11.32	10.89	10.51	9.76	9.18
680	32.33 ^{a)}	25.66 ^{a)}	22.42 ^{a)}	20.37 ^{a)}	18.91 ^{a)}	17.79	16.90	16.17	15.55	15.01	14.12	13.42	12.83	12.34	11.91	11.06	10.41
760	36.14 ^{a)}	28.68 ^{a)}	25.06 ^{a)}	22.77 ^{a)}	21.13 ^{a)}	19.89 ^{a)}	18.89 ^{a)}	18.07 ^{a)}	17.37	16.77	15.79	14.99	14.34	13.79	13.31	12.36	11.63
840	39.94 ^{a)}	31.70 ^{a)}	27.70 ^{a)}	25.16 ^{a)}	23.36 ^{a)}	21.98 ^{a)}	20.88 ^{a)}	19.97 ^{a)}	19.20 ^{a)}	18.54 ^{a)}	17.45	16.57	15.85	15.24	14.72	13.66	12.85
920	43.75 ^{a)}	34.72 ^{a)}	30.33 ^{a)}	27.56 ^{a)}	25.58 ^{a)}	24.08 ^{a)}	22.87 ^{a)}	21.87 ^{a)}	21.03 ^{a)}	20.31 ^{a)}	19.11 ^{a)}	18.15 ^{a)}	17.36	16.69	16.12	14.96	14.08
1000	47.55 ^{a)}	37.74 ^{a)}	32.97 ^{a)}	29.96 ^{a)}	27.81 ^{a)}	26.17 ^{a)}	24.86 ^{a)}	23.78 ^{a)}	22.86 ^{a)}	22.07 ^{a)}	20.77 ^{a)}	19.73 ^{a)}	18.87 ^{a)}	18.14 ^{a)}	17.52	16.26	15.30
1080	51.36 ^{a)}	40.76 ^{a)}	35.61 ^{a)}	32.35 ^{a)}	30.03 ^{a)}	28.26 ^{a)}	26.85 ^{a)}	25.68 ^{a)}	24.69 ^{a)}	23.84 ^{a)}	22.43 ^{a)}	21.31 ^{a)}	20.38 ^{a)}	19.60 ^{a)}	18.92 ^{a)}	17.56	16.53
1160	55.16 ^{a)}	43.78 ^{a)}	38.25 ^{a)}	34.75 ^{a)}	32.26 ^{a)}	30.36 ^{a)}	28.84 ^{a)}	27.58 ^{a)}	26.52 ^{a)}	25.60 ^{a)}	24.09 ^{a)}	22.89 ^{a)}	21.89 ^{a)}	21.05 ^{a)}	20.32 ^{a)}	18.86 ^{a)}	17.75
1240	58.96 ^{a)}	46.80 ^{a)}	40.88 ^{a)}	37.14 ^{a)}	34.48 ^{a)}	32.45 ^{a)}	30.82 ^{a)}	29.48 ^{a)}	28.35 ^{a)}	27.37 ^{a)}	25.75 ^{a)}	24.46 ^{a)}	23.40 ^{a)}	22.50 ^{a)}	21.72 ^{a)}	20.17 ^{a)}	18.98 ^{a)}
1320	62.77 ^{a)}	49.82 ^{a)}	43.52 ^{a)}	39.54 ^{a)}	36.71 ^{a)}	34.54 ^{a)}	32.81 ^{a)}	31.38 ^{a)}	30.18 ^{a)}	29.13 ^{a)}	27.42 ^{a)}	26.04 ^{a)}	24.91 ^{a)}	23.95 ^{a)}	23.12 ^{a)}	21.47 ^{a)}	20.20 ^{a)}
1360	64.67 ^{a)}	51.33 ^{a)}	44.84 ^{a)}	40.74 ^{a)}	37.82 ^{a)}	35.59 ^{a)}	33.81 ^{a)}	32.33 ^{a)}	31.09 ^{a)}	30.02 ^{a)}	28.25 ^{a)}	26.83 ^{a)}	25.66 ^{a)}	24.68 ^{a)}	23.82 ^{a)}	22.12 ^{a)}	20.81 ^{a)}



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

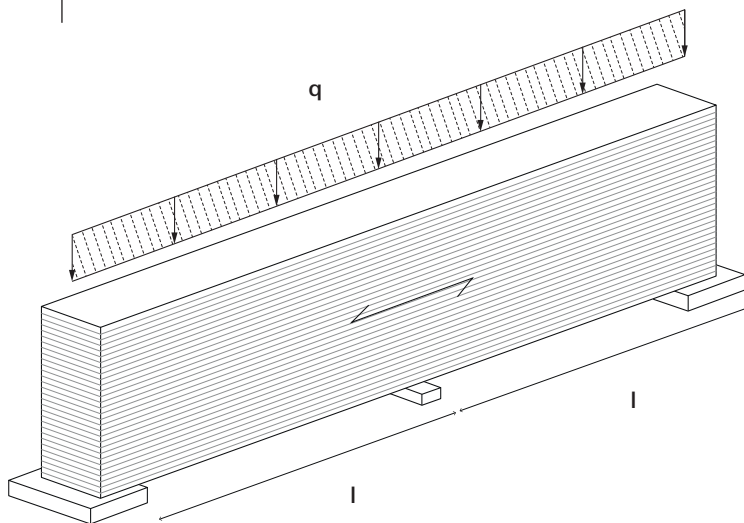
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Double-span – beam width = 80 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	3.28	2.60	2.27	2.07	1.92	1.81	1.71	1.64	1.58	1.52	1.43	1.25	1.10	0.97	0.88	0.70	0.58
120	4.92	3.90	3.41	3.10	2.88	2.71	2.57	2.46	2.37	2.28	2.08	1.78	1.56	1.39	1.25	1.00	0.83
160	6.56	5.21	4.55	4.13	3.84	3.61	3.43	3.28	3.15	3.04	2.67	2.29	2.00	1.78	1.60	1.28	1.07
200	8.20	6.51	5.69	5.17	4.80	4.51	4.29	4.10	3.94	3.81	3.25	2.78	2.43	2.16	1.95	1.56	1.30
240	9.84	7.81	6.82	6.20	5.75	5.42	5.14	4.92	4.73	4.56	3.80	3.26	2.85	2.54	2.28	1.83	1.52
280	11.48	9.11	7.96	7.23	6.71	6.32	6.00	5.74	5.52	5.22	4.35	3.73	3.26	2.90	2.61	2.09	1.74
320	13.12	10.41	9.10	8.26	7.67	7.22	6.86	6.56	6.31	5.86	4.88	4.19	3.66	3.26	2.93	2.34	1.95
360	14.76	11.71	10.23	9.30	8.63	8.12	7.72	7.38	7.10	6.49	5.41	4.64	4.06	3.61	3.25	2.60	2.16
400	16.40	13.02	11.37	10.33	9.59	9.03	8.57	8.20	7.88	7.12	5.93	5.08	4.45	3.95	3.56	2.85	2.37
440	18.04 ^{a)}	14.32	12.51	11.36	10.55	9.93	9.43	9.02	8.59	7.73	6.44	5.52	4.83	4.30	3.87	3.09	2.58
480	19.68 ^{a)}	15.62	13.65	12.40	11.51	10.83	10.29	9.84	9.27	8.34	6.95	5.96	5.21	4.63	4.17	3.34	2.78
520	21.32 ^{a)}	16.92	14.78	13.43	12.47	11.73	11.15	10.66	9.94	8.94	7.45	6.39	5.59	4.97	4.47	3.58	2.98
560	22.96 ^{a)}	18.22 ^{a)}	15.92	14.46	13.43	12.64	12.00	11.48	10.60	9.54	7.95	6.81	5.96	5.30	4.77	3.81	3.18
600	24.60 ^{a)}	19.52 ^{a)}	17.06	15.50	14.39	13.54	12.86	12.30	11.25	10.13	8.44	7.23	6.33	5.63	5.06	4.05	3.38
680	27.88 ^{a)}	22.13 ^{a)}	19.33 ^{a)}	17.56	16.30	15.34	14.57	13.94	12.55	11.29	9.41	8.07	7.06	6.27	5.65	4.52	3.76
760	31.16 ^{a)}	24.73 ^{a)}	21.60 ^{a)}	19.63 ^{a)}	18.22 ^{a)}	17.15	16.29	15.55	13.82	12.44	10.37	8.89	7.77	6.91	6.22	4.98	4.15
840	34.44 ^{a)}	27.33 ^{a)}	23.88 ^{a)}	21.70 ^{a)}	20.14 ^{a)}	18.95 ^{a)}	18.00 ^{a)}	16.96	15.08	13.57	11.31	9.69	8.48	7.54	6.79	5.43	4.52
920	37.72 ^{a)}	29.94 ^{a)}	26.15 ^{a)}	23.76 ^{a)}	22.06 ^{a)}	20.76 ^{a)}	19.72 ^{a)}	18.36 ^{a)}	16.32	14.69	12.24	10.49	9.18	8.16	7.34	5.88	4.90
1000	41.00 ^{a)}	32.54 ^{a)}	28.43 ^{a)}	25.83 ^{a)}	23.98 ^{a)}	22.56 ^{a)}	21.43 ^{a)}	19.74 ^{a)}	17.55	15.79	13.16	11.28	9.87	8.77	7.90	6.32	5.26
1080	44.28 ^{a)}	35.14 ^{a)}	30.70 ^{a)}	27.89 ^{a)}	25.89 ^{a)}	24.37 ^{a)}	23.15 ^{a)}	21.11 ^{a)}	18.76 ^{a)}	16.89	14.07	12.06	10.56	9.38	8.44	6.76	5.63
1160	47.56 ^{a)}	37.75 ^{a)}	32.98 ^{a)}	29.96 ^{a)}	27.81 ^{a)}	26.17 ^{a)}	24.86 ^{a)}	22.46 ^{a)}	19.97 ^{a)}	17.97	14.98	12.84	11.23	9.98	8.99	7.19	5.99
1240	50.84 ^{a)}	40.35 ^{a)}	35.25 ^{a)}	32.03 ^{a)}	29.73 ^{a)}	27.98 ^{a)}	26.58 ^{a)}	23.81 ^{a)}	21.16 ^{a)}	19.05 ^{a)}	15.87	13.60	11.90	10.58	9.52	7.62	6.35
1320	54.12 ^{a)}	42.95 ^{a)}	37.52 ^{a)}	34.09 ^{a)}	31.65 ^{a)}	29.78 ^{a)}	28.29 ^{a)}	25.14 ^{a)}	22.34 ^{a)}	20.11 ^{a)}	16.76	14.36	12.57	11.17	10.05	8.04	6.70
1360	55.76 ^{a)}	44.26 ^{a)}	38.66 ^{a)}	35.13 ^{a)}	32.61 ^{a)}	30.69 ^{a)}	29.15 ^{a)}	25.80 ^{a)}	22.93 ^{a)}	20.64 ^{a)}	17.20	14.74	12.90	11.47	10.32	8.26	6.88



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

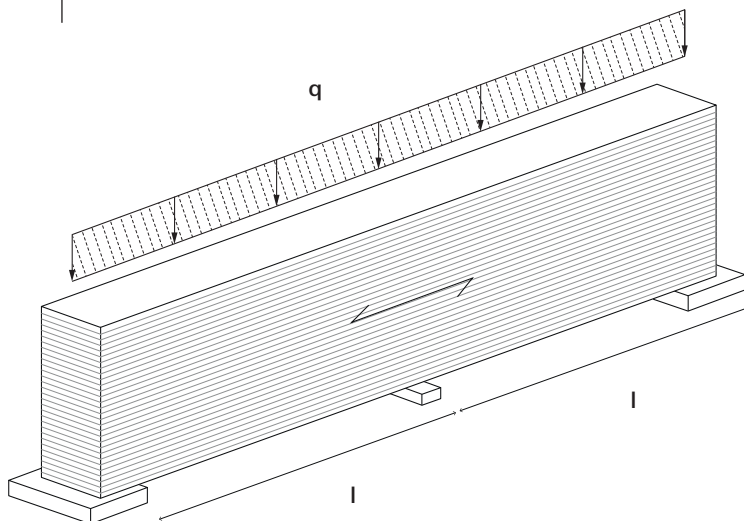
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Double-span – beam width = 120 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	3.75	2.98	2.60	2.37	2.20	2.07	1.96	1.88	1.81	1.74	1.64	1.56	1.49	1.43	1.32	1.05	0.88
120	5.63	4.47	3.90	3.55	3.29	3.10	2.94	2.82	2.71	2.61	2.46	2.34	2.24	2.08	1.87	1.50	1.25
160	7.51	5.96	5.21	4.73	4.39	4.13	3.93	3.75	3.61	3.49	3.28	3.12	2.98	2.67	2.41	1.92	1.60
200	9.39	7.45	6.51	5.91	5.49	5.17	4.91	4.69	4.51	4.36	4.10	3.89	3.65	3.25	2.92	2.34	1.95
240	11.26	8.94	7.81	7.10	6.59	6.20	5.89	5.63	5.42	5.23	4.92	4.67	4.28	3.80	3.42	2.74	2.28
280	13.14	10.43	9.11	8.28	7.69	7.23	6.87	6.57	6.32	6.10	5.74	5.45	4.89	4.35	3.91	3.13	2.61
320	15.02	11.92	10.41	9.46	8.78	8.26	7.85	7.51	7.22	6.97	6.56	6.23	5.49	4.88	4.40	3.52	2.93
360	16.90	13.41	11.71	10.64	9.88	9.30	8.83	8.45	8.12	7.84	7.38	6.96	6.09	5.41	4.87	3.90	3.25
400	18.77 ^{a)}	14.90	13.02	11.83	10.98	10.33	9.81	9.39	9.03	8.71	8.20	7.63	6.67	5.93	5.34	4.27	3.56
440	20.65 ^{a)}	16.39	14.32	13.01	12.08	11.36	10.80	10.33	9.93	9.59	9.02	8.28	7.25	6.44	5.80	4.64	3.87
480	22.53 ^{a)}	17.88	15.62	14.19	13.17	12.40	11.78	11.26	10.83	10.46	9.84	8.94	7.82	6.95	6.26	5.00	4.17
520	24.41 ^{a)}	19.37 ^{a)}	16.92	15.37	14.27	13.43	12.76	12.20	11.73	11.33	10.66	9.58	8.38	7.45	6.71	5.37	4.47
560	26.28 ^{a)}	20.86 ^{a)}	18.22 ^{a)}	16.56	15.37	14.46	13.74	13.14	12.64	12.20	11.48	10.22	8.94	7.95	7.15	5.72	4.77
600	28.16 ^{a)}	22.35 ^{a)}	19.52 ^{a)}	17.74	16.47	15.50	14.72	14.08	13.54	13.07	12.30	10.85	9.49	8.44	7.60	6.08	5.06
680	31.91 ^{a)}	25.33 ^{a)}	22.13 ^{a)}	20.10 ^{a)}	18.66 ^{a)}	17.56	16.68	15.96	15.34	14.81	13.94	12.10	10.59	9.41	8.47	6.78	5.65
760	35.67 ^{a)}	28.31 ^{a)}	24.73 ^{a)}	22.47 ^{a)}	20.86 ^{a)}	19.63 ^{a)}	18.65 ^{a)}	17.83	17.15	16.56	15.55	13.33	11.66	10.37	9.33	7.46	6.22
840	39.42 ^{a)}	31.29 ^{a)}	27.33 ^{a)}	24.84 ^{a)}	23.06 ^{a)}	21.70 ^{a)}	20.61 ^{a)}	19.71 ^{a)}	18.95 ^{a)}	18.30 ^{a)}	16.96	14.54	12.72	11.31	10.18	8.14	6.79
920	43.18 ^{a)}	34.27 ^{a)}	29.94 ^{a)}	27.20 ^{a)}	25.25 ^{a)}	23.76 ^{a)}	22.57 ^{a)}	21.59 ^{a)}	20.76 ^{a)}	20.04 ^{a)}	18.36 ^{a)}	15.74	13.77	12.24	11.02	8.81	7.34
1000	46.93 ^{a)}	37.25 ^{a)}	32.54 ^{a)}	29.57 ^{a)}	27.45 ^{a)}	25.83 ^{a)}	24.53 ^{a)}	23.47 ^{a)}	22.56 ^{a)}	21.78 ^{a)}	19.74 ^{a)}	16.92	14.81	13.16	11.85	9.48	7.90
1080	50.69 ^{a)}	40.23 ^{a)}	35.14 ^{a)}	31.93 ^{a)}	29.64 ^{a)}	27.89 ^{a)}	26.50 ^{a)}	25.34 ^{a)}	24.37 ^{a)}	23.53 ^{a)}	21.11 ^{a)}	18.09 ^{a)}	15.83	14.07	12.67	10.13	8.44
1160	54.44 ^{a)}	43.21 ^{a)}	37.75 ^{a)}	34.30 ^{a)}	31.84 ^{a)}	29.96 ^{a)}	28.46 ^{a)}	27.22 ^{a)}	26.17 ^{a)}	25.27 ^{a)}	22.46 ^{a)}	19.26 ^{a)}	16.85	14.98	13.48	10.78	8.99
1240	58.20 ^{a)}	46.19 ^{a)}	40.35 ^{a)}	36.66 ^{a)}	34.03 ^{a)}	32.03 ^{a)}	30.42 ^{a)}	29.10 ^{a)}	27.98 ^{a)}	27.01 ^{a)}	23.81 ^{a)}	20.41 ^{a)}	17.85	15.87	14.28	11.43	9.52
1320	61.95 ^{a)}	49.17 ^{a)}	42.95 ^{a)}	39.03 ^{a)}	36.23 ^{a)}	34.09 ^{a)}	32.39 ^{a)}	30.98 ^{a)}	29.78 ^{a)}	28.76 ^{a)}	25.14 ^{a)}	21.55 ^{a)}	18.85 ^{a)}	16.76	15.08	12.07	10.05
1360	63.83 ^{a)}	50.66 ^{a)}	44.26 ^{a)}	40.21 ^{a)}	37.33 ^{a)}	35.13 ^{a)}	33.37 ^{a)}	31.91 ^{a)}	30.69 ^{a)}	29.63 ^{a)}	25.80 ^{a)}	22.11 ^{a)}	19.35 ^{a)}	17.20	15.48	12.38	10.32



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

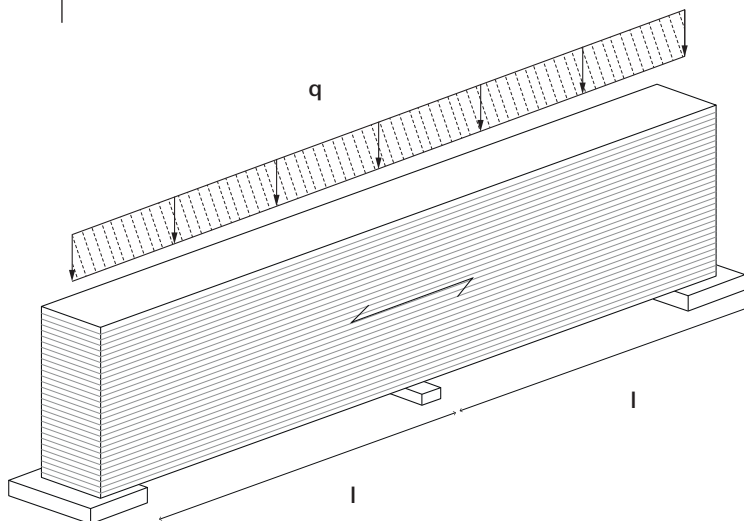
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Double-span – beam width = 160 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	4.13	3.28	2.87	2.60	2.42	2.27	2.16	2.07	1.99	1.92	1.81	1.71	1.64	1.58	1.52	1.40	1.17
120	6.20	4.92	4.30	3.90	3.63	3.41	3.24	3.10	2.98	2.88	2.71	2.57	2.46	2.37	2.28	2.00	1.66
160	8.26	6.56	5.73	5.21	4.83	4.55	4.32	4.13	3.97	3.84	3.61	3.43	3.28	3.15	3.04	2.57	2.14
200	10.33	8.20	7.16	6.51	6.04	5.69	5.40	5.17	4.97	4.80	4.51	4.29	4.10	3.94	3.81	3.12	2.60
240	12.40	9.84	8.60	7.81	7.25	6.82	6.48	6.20	5.96	5.75	5.42	5.14	4.92	4.73	4.56	3.65	3.04
280	14.46	11.48	10.03	9.11	8.46	7.96	7.56	7.23	6.95	6.71	6.32	6.00	5.74	5.52	5.22	4.17	3.48
320	16.53	13.12	11.46	10.41	9.67	9.10	8.64	8.26	7.95	7.67	7.22	6.86	6.56	6.31	5.86	4.69	3.91
360	18.60 ^{a)}	14.76	12.89	11.71	10.88	10.23	9.72	9.30	8.94	8.63	8.12	7.72	7.38	7.10	6.49	5.19	4.33
400	20.66 ^{a)}	16.40	14.33	13.02	12.08	11.37	10.80	10.33	9.93	9.59	9.03	8.57	8.20	7.88	7.12	5.69	4.74
440	22.73 ^{a)}	18.04 ^{a)}	15.76	14.32	13.29	12.51	11.88	11.36	10.93	10.55	9.93	9.43	9.02	8.59	7.73	6.19	5.15
480	24.79 ^{a)}	19.68 ^{a)}	17.19	15.62	14.50	13.65	12.96	12.40	11.92	11.51	10.83	10.29	9.84	9.27	8.34	6.67	5.56
520	26.86 ^{a)}	21.32 ^{a)}	18.62 ^{a)}	16.92	15.71	14.78	14.04	13.43	12.91	12.47	11.73	11.15	10.66	9.94	8.94	7.15	5.96
560	28.93 ^{a)}	22.96 ^{a)}	20.06 ^{a)}	18.22 ^{a)}	16.92	15.92	15.12	14.46	13.91	13.43	12.64	12.00	11.48	10.60	9.54	7.63	6.36
600	30.99 ^{a)}	24.60 ^{a)}	21.49 ^{a)}	19.52 ^{a)}	18.13 ^{a)}	17.06	16.20	15.50	14.90	14.39	13.54	12.86	12.30	11.25	10.13	8.10	6.75
680	35.13 ^{a)}	27.88 ^{a)}	24.36 ^{a)}	22.13 ^{a)}	20.54 ^{a)}	19.33 ^{a)}	18.36 ^{a)}	17.56	16.89	16.30	15.34	14.57	13.94	12.55	11.29	9.03	7.53
760	39.26 ^{a)}	31.16 ^{a)}	27.22 ^{a)}	24.73 ^{a)}	22.96 ^{a)}	21.60 ^{a)}	20.52 ^{a)}	19.63 ^{a)}	18.87 ^{a)}	18.22 ^{a)}	17.15	16.29	15.55	13.82	12.44	9.95	8.29
840	43.39 ^{a)}	34.44 ^{a)}	30.09 ^{a)}	27.33 ^{a)}	25.38 ^{a)}	23.88 ^{a)}	22.68 ^{a)}	21.70 ^{a)}	20.86 ^{a)}	20.14 ^{a)}	18.95 ^{a)}	18.00 ^{a)}	16.96	15.08	13.57	10.86	9.05
920	47.52 ^{a)}	37.72 ^{a)}	32.95 ^{a)}	29.94 ^{a)}	27.79 ^{a)}	26.15 ^{a)}	24.84 ^{a)}	23.76 ^{a)}	22.85 ^{a)}	22.06 ^{a)}	20.76 ^{a)}	19.72 ^{a)}	18.36 ^{a)}	16.32	14.69	11.75	9.79
1000	51.66 ^{a)}	41.00 ^{a)}	35.82 ^{a)}	32.54 ^{a)}	30.21 ^{a)}	28.43 ^{a)}	27.00 ^{a)}	25.83 ^{a)}	24.83 ^{a)}	23.98 ^{a)}	22.56 ^{a)}	21.43 ^{a)}	19.74 ^{a)}	17.55	15.79	12.64	10.53
1080	55.79 ^{a)}	44.28 ^{a)}	38.68 ^{a)}	35.14 ^{a)}	32.63 ^{a)}	30.70 ^{a)}	29.16 ^{a)}	27.89 ^{a)}	26.82 ^{a)}	25.89 ^{a)}	24.37 ^{a)}	23.15 ^{a)}	21.11 ^{a)}	18.76 ^{a)}	16.89	13.51	11.26
1160	59.92 ^{a)}	47.56 ^{a)}	41.55 ^{a)}	37.75 ^{a)}	35.04 ^{a)}	32.98 ^{a)}	31.32 ^{a)}	29.96 ^{a)}	28.81 ^{a)}	27.81 ^{a)}	26.17 ^{a)}	24.86 ^{a)}	22.46 ^{a)}	19.97 ^{a)}	17.97	14.38	11.98
1240	64.05 ^{a)}	50.84 ^{a)}	44.41 ^{a)}	40.35 ^{a)}	37.46 ^{a)}	35.25 ^{a)}	33.48 ^{a)}	32.03 ^{a)}	30.79 ^{a)}	29.73 ^{a)}	27.98 ^{a)}	26.58 ^{a)}	23.81 ^{a)}	21.16 ^{a)}	19.05 ^{a)}	15.24	12.70
1320	68.19 ^{a)}	54.12 ^{a)}	47.28 ^{a)}	42.95 ^{a)}	39.88 ^{a)}	37.52 ^{a)}	35.64 ^{a)}	34.09 ^{a)}	32.78 ^{a)}	31.65 ^{a)}	29.78 ^{a)}	28.29 ^{a)}	25.14 ^{a)}	22.34 ^{a)}	20.11 ^{a)}	16.09	13.41
1360	70.25 ^{a)}	55.76 ^{a)}	48.71 ^{a)}	44.26 ^{a)}	41.08 ^{a)}	38.66 ^{a)}	36.73 ^{a)}	35.13 ^{a)}	33.77 ^{a)}	32.61 ^{a)}	30.69 ^{a)}	29.15 ^{a)}	25.80 ^{a)}	22.93 ^{a)}	20.64 ^{a)}	16.51	13.76



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

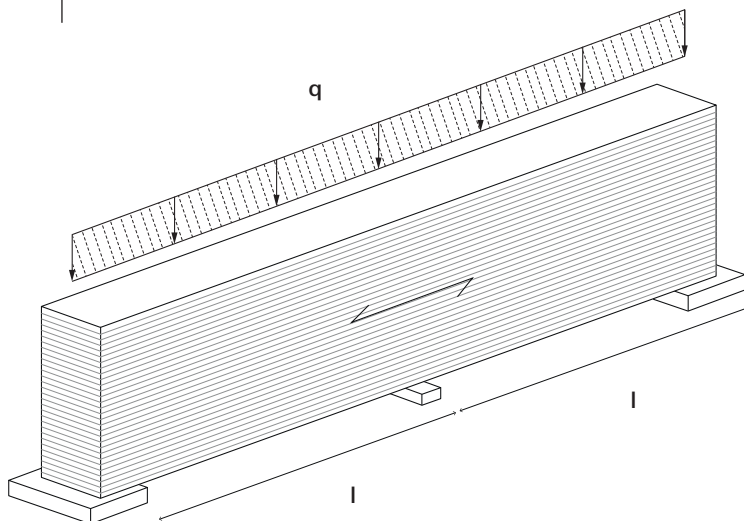
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Double-span – beam width = 200 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	4.45	3.53	3.09	2.80	2.60	2.45	2.33	2.23	2.14	2.07	1.94	1.85	1.77	1.70	1.64	1.52	1.43
120	6.68	5.30	4.63	4.21	3.90	3.67	3.49	3.34	3.21	3.10	2.92	2.77	2.65	2.55	2.46	2.28	2.08
160	8.90	7.07	6.17	5.61	5.21	4.90	4.65	4.45	4.28	4.13	3.89	3.69	3.53	3.40	3.28	3.04	2.67
200	11.13	8.83	7.72	7.01	6.51	6.12	5.82	5.56	5.35	5.17	4.86	4.62	4.42	4.25	4.10	3.81	3.25
240	13.35	10.60	9.26	8.41	7.81	7.35	6.98	6.68	6.42	6.20	5.83	5.54	5.30	5.10	4.92	4.56	3.80
280	15.58	12.37	10.80	9.82	9.11	8.57	8.14	7.79	7.49	7.23	6.81	6.46	6.18	5.95	5.74	5.22	4.35
320	17.81	14.13	12.35	11.22	10.41	9.80	9.31	8.90	8.56	8.26	7.78	7.39	7.07	6.79	6.56	5.86	4.88
360	20.03 ^{a)}	15.90	13.89	12.62	11.71	11.02	10.47	10.02	9.63	9.30	8.75	8.31	7.95	7.64	7.38	6.49	5.41
400	22.26 ^{a)}	17.67	15.43	14.02	13.02	12.25	11.64	11.13	10.70	10.33	9.72	9.24	8.83	8.49	8.20	7.12	5.93
440	24.48 ^{a)}	19.43 ^{a)}	16.98	15.42	14.32	13.47	12.80	12.24	11.77	11.36	10.69	10.16	9.72	9.34	9.02	7.73	6.44
480	26.71 ^{a)}	21.20 ^{a)}	18.52 ^{a)}	16.83	15.62	14.70	13.96	13.35	12.84	12.40	11.67	11.08	10.60	10.19	9.84	8.34	6.95
520	28.94 ^{a)}	22.97 ^{a)}	20.06 ^{a)}	18.23 ^{a)}	16.92	15.92	15.13	14.47	13.91	13.43	12.64	12.01	11.48	11.04	10.66	8.94	7.45
560	31.16 ^{a)}	24.73 ^{a)}	21.61 ^{a)}	19.63 ^{a)}	18.22 ^{a)}	17.15	16.29	15.58	14.98	14.46	13.61	12.93	12.37	11.89	11.48	9.54	7.95
600	33.39 ^{a)}	26.50 ^{a)}	23.15 ^{a)}	21.03 ^{a)}	19.52 ^{a)}	18.37 ^{a)}	17.45	16.69	16.05	15.50	14.58	13.85	13.25	12.74	12.30	10.13	8.44
680	37.84 ^{a)}	30.03 ^{a)}	26.24 ^{a)}	23.84 ^{a)}	22.13 ^{a)}	20.82 ^{a)}	19.78 ^{a)}	18.92 ^{a)}	18.19 ^{a)}	17.56	16.53	15.70	15.02	14.44	13.94	11.29	9.41
760	42.29 ^{a)}	33.57 ^{a)}	29.32 ^{a)}	26.64 ^{a)}	24.73 ^{a)}	23.27 ^{a)}	22.11 ^{a)}	21.15 ^{a)}	20.33 ^{a)}	19.63 ^{a)}	18.47 ^{a)}	17.55	16.78	16.14	15.55	12.44	10.37
840	46.74 ^{a)}	37.10 ^{a)}	32.41 ^{a)}	29.45 ^{a)}	27.33 ^{a)}	25.72 ^{a)}	24.43 ^{a)}	23.37 ^{a)}	22.47 ^{a)}	21.70 ^{a)}	20.42 ^{a)}	19.39 ^{a)}	18.55 ^{a)}	17.84	16.96	13.57	11.31
920	51.19 ^{a)}	40.63 ^{a)}	35.50 ^{a)}	32.25 ^{a)}	29.94 ^{a)}	28.17 ^{a)}	26.76 ^{a)}	25.60 ^{a)}	24.61 ^{a)}	23.76 ^{a)}	22.36 ^{a)}	21.24 ^{a)}	20.32 ^{a)}	19.53 ^{a)}	18.36 ^{a)}	14.69	12.24
1000	55.64 ^{a)}	44.17 ^{a)}	38.58 ^{a)}	35.05 ^{a)}	32.54 ^{a)}	30.62 ^{a)}	29.09 ^{a)}	27.82 ^{a)}	26.75 ^{a)}	25.83 ^{a)}	24.31 ^{a)}	23.09 ^{a)}	22.08 ^{a)}	21.23 ^{a)}	19.74 ^{a)}	15.79	13.16
1080	60.10 ^{a)}	47.70 ^{a)}	41.67 ^{a)}	37.86 ^{a)}	35.14 ^{a)}	33.07 ^{a)}	31.42 ^{a)}	30.05 ^{a)}	28.89 ^{a)}	27.89 ^{a)}	26.25 ^{a)}	24.93 ^{a)}	23.85 ^{a)}	22.93 ^{a)}	21.11 ^{a)}	16.89	14.07
1160	64.55 ^{a)}	51.23 ^{a)}	44.76 ^{a)}	40.66 ^{a)}	37.75 ^{a)}	35.52 ^{a)}	33.74 ^{a)}	32.27 ^{a)}	31.03 ^{a)}	29.96 ^{a)}	28.19 ^{a)}	26.78 ^{a)}	25.62 ^{a)}	24.63 ^{a)}	22.46 ^{a)}	17.97	14.98
1240	69.00 ^{a)}	54.77 ^{a)}	47.84 ^{a)}	43.47 ^{a)}	40.35 ^{a)}	37.97 ^{a)}	36.07 ^{a)}	34.50 ^{a)}	33.17 ^{a)}	32.03 ^{a)}	30.14 ^{a)}	28.63 ^{a)}	27.38 ^{a)}	26.33 ^{a)}	23.81 ^{a)}	19.05 ^{a)}	15.87
1320	73.45 ^{a)}	58.30 ^{a)}	50.93 ^{a)}	46.27 ^{a)}	42.95 ^{a)}	40.42 ^{a)}	38.40 ^{a)}	36.73 ^{a)}	35.31 ^{a)}	34.09 ^{a)}	32.08 ^{a)}	30.48 ^{a)}	29.15 ^{a)}	27.93 ^{a)}	25.14 ^{a)}	20.11 ^{a)}	16.76
1360	75.68 ^{a)}	60.07 ^{a)}	52.47 ^{a)}	47.67 ^{a)}	44.26 ^{a)}	41.65 ^{a)}	39.56 ^{a)}	37.84 ^{a)}	36.38 ^{a)}	35.13 ^{a)}	33.06 ^{a)}	31.40 ^{a)}	30.03 ^{a)}	28.67 ^{a)}	25.80 ^{a)}	20.64 ^{a)}	17.20



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

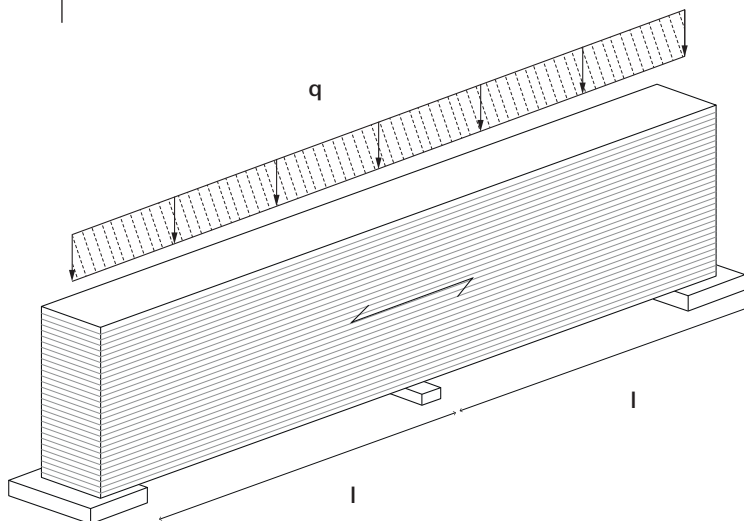
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Double-span – beam width = 240 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	4.73	3.75	3.28	2.98	2.77	2.60	2.47	2.37	2.27	2.20	2.07	1.96	1.88	1.81	1.74	1.62	1.52
120	7.10	5.63	4.92	4.47	4.15	3.90	3.71	3.55	3.41	3.29	3.10	2.94	2.82	2.71	2.61	2.43	2.28
160	9.46	7.51	6.56	5.96	5.53	5.21	4.95	4.73	4.55	4.39	4.13	3.93	3.75	3.61	3.49	3.24	3.04
200	11.83	9.39	8.20	7.45	6.92	6.51	6.18	5.91	5.69	5.49	5.17	4.91	4.69	4.51	4.36	4.04	3.81
240	14.19	11.26	9.84	8.94	8.30	7.81	7.42	7.10	6.82	6.59	6.20	5.89	5.63	5.42	5.23	4.85	4.56
280	16.56	13.14	11.48	10.43	9.68	9.11	8.66	8.28	7.96	7.69	7.23	6.87	6.57	6.32	6.10	5.66	5.22
320	18.92 ^{a)}	15.02	13.12	11.92	11.07	10.41	9.89	9.46	9.10	8.78	8.26	7.85	7.51	7.22	6.97	6.47	5.86
360	21.29 ^{a)}	16.90	14.76	13.41	12.45	11.71	11.13	10.64	10.23	9.88	9.30	8.83	8.45	8.12	7.84	7.28	6.49
400	23.65 ^{a)}	18.77 ^{a)}	16.40	14.90	13.83	13.02	12.36	11.83	11.37	10.98	10.33	9.81	9.39	9.03	8.71	8.09	7.12
440	26.02 ^{a)}	20.65 ^{a)}	18.04 ^{a)}	16.39	15.22	14.32	13.60	13.01	12.51	12.08	11.36	10.80	10.33	9.93	9.59	8.90	7.73
480	28.38 ^{a)}	22.53 ^{a)}	19.68 ^{a)}	17.88	16.60	15.62	14.84	14.19	13.65	13.17	12.40	11.78	11.26	10.83	10.46	9.71	8.34
520	30.75 ^{a)}	24.41 ^{a)}	21.32 ^{a)}	19.37 ^{a)}	17.98	16.92	16.07	15.37	14.78	14.27	13.43	12.76	12.20	11.73	11.33	10.52	8.94
560	33.11 ^{a)}	26.28 ^{a)}	22.96 ^{a)}	20.86 ^{a)}	19.37 ^{a)}	18.22 ^{a)}	17.31	16.56	15.92	15.37	14.46	13.74	13.14	12.64	12.20	11.32	9.54
600	35.48 ^{a)}	28.16 ^{a)}	24.60 ^{a)}	22.35 ^{a)}	20.75 ^{a)}	19.52 ^{a)}	18.55 ^{a)}	17.74	17.06	16.47	15.50	14.72	14.08	13.54	13.07	12.13	10.13
680	40.21 ^{a)}	31.91 ^{a)}	27.88 ^{a)}	25.33 ^{a)}	23.51 ^{a)}	22.13 ^{a)}	21.02 ^{a)}	20.10 ^{a)}	19.33 ^{a)}	18.66 ^{a)}	17.56	16.68	15.96	15.34	14.81	13.55	11.29
760	44.94 ^{a)}	35.67 ^{a)}	31.16 ^{a)}	28.31 ^{a)}	26.28 ^{a)}	24.73 ^{a)}	23.49 ^{a)}	22.47 ^{a)}	21.60 ^{a)}	20.86 ^{a)}	19.63 ^{a)}	18.65 ^{a)}	17.83	17.15	16.56	14.93	12.44
840	49.67 ^{a)}	39.42 ^{a)}	34.44 ^{a)}	31.29 ^{a)}	29.05 ^{a)}	27.33 ^{a)}	25.97 ^{a)}	24.84 ^{a)}	23.88 ^{a)}	23.06 ^{a)}	21.70 ^{a)}	20.61 ^{a)}	19.71 ^{a)}	18.95 ^{a)}	18.30 ^{a)}	16.29	13.57
920	54.40 ^{a)}	43.18 ^{a)}	37.72 ^{a)}	34.27 ^{a)}	31.81 ^{a)}	29.94 ^{a)}	28.44 ^{a)}	27.20 ^{a)}	26.15 ^{a)}	25.25 ^{a)}	23.76 ^{a)}	22.57 ^{a)}	21.59 ^{a)}	20.76 ^{a)}	20.04 ^{a)}	17.63	14.69
1000	59.13 ^{a)}	46.93 ^{a)}	41.00 ^{a)}	37.25 ^{a)}	34.58 ^{a)}	32.54 ^{a)}	30.91 ^{a)}	29.57 ^{a)}	28.43 ^{a)}	27.45 ^{a)}	25.83 ^{a)}	24.53 ^{a)}	23.47 ^{a)}	22.56 ^{a)}	21.78 ^{a)}	18.95 ^{a)}	15.79
1080	63.86 ^{a)}	50.69 ^{a)}	44.28 ^{a)}	40.23 ^{a)}	37.35 ^{a)}	35.14 ^{a)}	33.38 ^{a)}	31.93 ^{a)}	30.70 ^{a)}	29.64 ^{a)}	27.89 ^{a)}	26.50 ^{a)}	25.34 ^{a)}	24.37 ^{a)}	23.53 ^{a)}	20.27 ^{a)}	16.89
1160	68.59 ^{a)}	54.44 ^{a)}	47.56 ^{a)}	43.21 ^{a)}	40.11 ^{a)}	37.75 ^{a)}	35.86 ^{a)}	34.30 ^{a)}	32.98 ^{a)}	31.84 ^{a)}	29.96 ^{a)}	28.46 ^{a)}	27.22 ^{a)}	26.17 ^{a)}	25.27 ^{a)}	21.57 ^{a)}	17.97
1240	73.32 ^{a)}	58.20 ^{a)}	50.84 ^{a)}	46.19 ^{a)}	42.88 ^{a)}	40.35 ^{a)}	38.33 ^{a)}	36.66 ^{a)}	35.25 ^{a)}	34.03 ^{a)}	32.03 ^{a)}	30.42 ^{a)}	29.10 ^{a)}	27.98 ^{a)}	27.01 ^{a)}	22.85 ^{a)}	19.05 ^{a)}
1320	78.05 ^{a)}	61.95 ^{a)}	54.12 ^{a)}	49.17 ^{a)}	45.65 ^{a)}	42.95 ^{a)}	40.80 ^{a)}	39.03 ^{a)}	37.52 ^{a)}	36.23 ^{a)}	34.09 ^{a)}	32.39 ^{a)}	30.98 ^{a)}	29.78 ^{a)}	28.76 ^{a)}	24.13 ^{a)}	20.11 ^{a)}
1360	80.42 ^{a)}	63.83 ^{a)}	55.76 ^{a)}	50.66 ^{a)}	47.03 ^{a)}	44.26 ^{a)}	42.04 ^{a)}	40.21 ^{a)}	38.66 ^{a)}	37.33 ^{a)}	35.13 ^{a)}	33.37 ^{a)}	31.91 ^{a)}	30.69 ^{a)}	29.63 ^{a)}	24.77 ^{a)}	20.64 ^{a)}



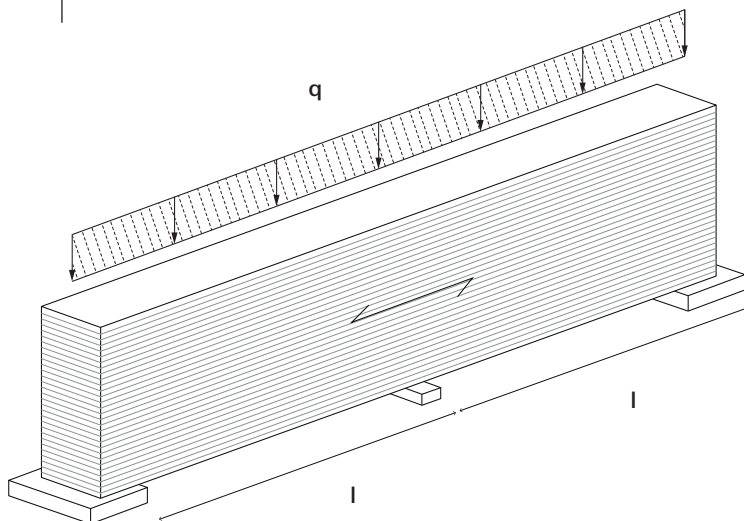
- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force
- ↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Double-span – beam width = 280 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	4.98	3.95	3.45	3.14	2.91	2.74	2.60	2.49	2.39	2.31	2.18	2.07	1.98	1.90	1.83	1.70	1.60
120	7.47	5.93	5.18	4.71	4.37	4.11	3.90	3.73	3.59	3.47	3.26	3.10	2.96	2.85	2.75	2.55	2.40
160	9.96	7.91	6.91	6.27	5.82	5.48	5.21	4.98	4.79	4.62	4.35	4.13	3.95	3.80	3.67	3.41	3.21
200	12.45	9.88	8.63	7.84	7.28	6.85	6.51	6.22	5.99	5.78	5.44	5.17	4.94	4.75	4.59	4.26	4.01
240	14.94	11.86	10.36	9.41	8.74	8.22	7.81	7.47	7.18	6.93	6.53	6.20	5.93	5.70	5.50	5.11	4.81
280	17.43	13.83	12.09	10.98	10.19	9.59	9.11	8.71	8.38	8.09	7.61	7.23	6.92	6.65	6.42	5.96	5.61
320	19.92 ^{a)}	15.81	13.81	12.55	11.65	10.96	10.41	9.96	9.58	9.25	8.70	8.26	7.91	7.60	7.34	6.81	6.41
360	22.41 ^{a)}	17.79	15.54	14.12	13.11	12.33	11.71	11.20	10.77	10.40	9.79	9.30	8.89	8.55	8.26	7.66	7.21
400	24.90 ^{a)}	19.76 ^{a)}	17.26	15.69	14.56	13.70	13.02	12.45	11.97	11.56	10.88	10.33	9.88	9.50	9.17	8.52	8.01
440	27.39 ^{a)}	21.74 ^{a)}	18.99 ^{a)}	17.25	16.02	15.07	14.32	13.69	13.17	12.71	11.96	11.36	10.87	10.45	10.09	9.37	8.81
480	29.88 ^{a)}	23.72 ^{a)}	20.72 ^{a)}	18.82 ^{a)}	17.47	16.44	15.62	14.94	14.36	13.87	13.05	12.40	11.86	11.40	11.01	10.22	9.62
520	32.37 ^{a)}	25.69 ^{a)}	22.44 ^{a)}	20.39 ^{a)}	18.93 ^{a)}	17.81	16.92	16.18	15.56	15.02	14.14	13.43	12.85	12.35	11.93	11.07	10.42
560	34.86 ^{a)}	27.67 ^{a)}	24.17 ^{a)}	21.96 ^{a)}	20.39 ^{a)}	19.18 ^{a)}	18.22 ^{a)}	17.43	16.76	16.18	15.23	14.46	13.83	13.30	12.84	11.92	11.13
600	37.35 ^{a)}	29.64 ^{a)}	25.90 ^{a)}	23.53 ^{a)}	21.84 ^{a)}	20.55 ^{a)}	19.52 ^{a)}	18.67 ^{a)}	17.96	17.34	16.31	15.50	14.82	14.25	13.76	12.77	11.82
680	42.33 ^{a)}	33.60 ^{a)}	29.35 ^{a)}	26.67 ^{a)}	24.75 ^{a)}	23.29 ^{a)}	22.13 ^{a)}	21.16 ^{a)}	20.35 ^{a)}	19.65 ^{a)}	18.49 ^{a)}	17.56	16.80	16.15	15.59	14.48	13.17
760	47.31 ^{a)}	37.55 ^{a)}	32.80 ^{a)}	29.80 ^{a)}	27.67 ^{a)}	26.04 ^{a)}	24.73 ^{a)}	23.65 ^{a)}	22.74 ^{a)}	21.96 ^{a)}	20.66 ^{a)}	19.63 ^{a)}	18.77 ^{a)}	18.05 ^{a)}	17.43	16.18	14.51
840	52.29 ^{a)}	41.50 ^{a)}	36.26 ^{a)}	32.94 ^{a)}	30.58 ^{a)}	28.78 ^{a)}	27.33 ^{a)}	26.14 ^{a)}	25.14 ^{a)}	24.27 ^{a)}	22.84 ^{a)}	21.70 ^{a)}	20.75 ^{a)}	19.95 ^{a)}	19.26 ^{a)}	17.88	15.83
920	57.27 ^{a)}	45.45 ^{a)}	39.71 ^{a)}	36.08 ^{a)}	33.49 ^{a)}	31.52 ^{a)}	29.94 ^{a)}	28.63 ^{a)}	27.53 ^{a)}	26.58 ^{a)}	25.01 ^{a)}	23.76 ^{a)}	22.73 ^{a)}	21.85 ^{a)}	21.10 ^{a)}	19.59 ^{a)}	17.14
1000	62.25 ^{a)}	49.41 ^{a)}	43.16 ^{a)}	39.21 ^{a)}	36.40 ^{a)}	34.26 ^{a)}	32.54 ^{a)}	31.12 ^{a)}	29.93 ^{a)}	28.89 ^{a)}	27.19 ^{a)}	25.83 ^{a)}	24.70 ^{a)}	23.75 ^{a)}	22.93 ^{a)}	21.29 ^{a)}	18.43 ^{a)}
1080	67.23 ^{a)}	53.36 ^{a)}	46.61 ^{a)}	42.35 ^{a)}	39.32 ^{a)}	37.00 ^{a)}	35.14 ^{a)}	33.61 ^{a)}	32.32 ^{a)}	31.21 ^{a)}	29.37 ^{a)}	27.89 ^{a)}	26.68 ^{a)}	25.65 ^{a)}	24.77 ^{a)}	22.99 ^{a)}	19.70 ^{a)}
1160	72.21 ^{a)}	57.31 ^{a)}	50.07 ^{a)}	45.49 ^{a)}	42.23 ^{a)}	39.74 ^{a)}	37.75 ^{a)}	36.10 ^{a)}	34.71 ^{a)}	33.52 ^{a)}	31.54 ^{a)}	29.96 ^{a)}	28.66 ^{a)}	27.55 ^{a)}	26.60 ^{a)}	24.70 ^{a)}	20.97 ^{a)}
1240	77.19 ^{a)}	61.27 ^{a)}	53.52 ^{a)}	48.63 ^{a)}	45.14 ^{a)}	42.48 ^{a)}	40.35 ^{a)}	38.59 ^{a)}	37.11 ^{a)}	35.83 ^{a)}	33.72 ^{a)}	32.03 ^{a)}	30.63 ^{a)}	29.45 ^{a)}	28.44 ^{a)}	26.40 ^{a)}	22.22 ^{a)}
1320	82.17 ^{a)}	65.22 ^{a)}	56.97 ^{a)}	51.76 ^{a)}	48.05 ^{a)}	45.22 ^{a)}	42.95 ^{a)}	41.08 ^{a)}	39.50 ^{a)}	38.14 ^{a)}	35.89 ^{a)}	34.09 ^{a)}	32.61 ^{a)}	31.35 ^{a)}	30.27 ^{a)}	28.10 ^{a)}	23.46 ^{a)}
1360	84.66 ^{a)}	67.19 ^{a)}	58.70 ^{a)}	53.33 ^{a)}	49.51 ^{a)}	46.59 ^{a)}	44.26 ^{a)}	42.33 ^{a)}	40.70 ^{a)}	39.30 ^{a)}	36.98 ^{a)}	35.13 ^{a)}	33.60 ^{a)}	32.30 ^{a)}	31.19 ^{a)}	28.89 ^{a)}	24.08 ^{a)}



- Determining factor: deflection ($l/300$)
- Determining factor: moment
- Determining factor: lateral force

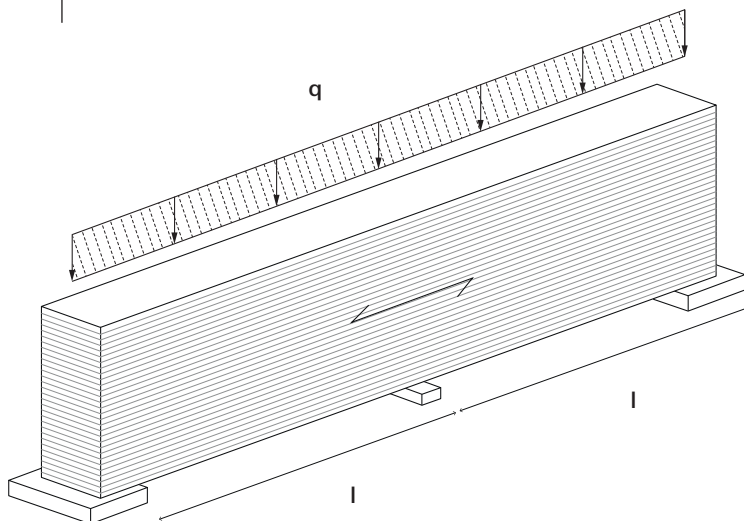
↔ Grain direction

Not taken into account: creepage in wood; vibration requirements; fire safety requirements. The self-weight of the board must be taken into account (8 kN/m^3). Uniform load distribution. Uniform spans. Individual span loading is not taken into account. Calculation by approximation with $k_{\text{mod}} = 0.8$; $\gamma_m = 1.3$ and $\gamma_F = 1.4$. $w_{\text{max}} = l/300$ under full load. Continuous compression area on beams. Horizontal lamellas (flatwise loading) **The tables are intended for dimensioning purposes. Prior to construction, always perform exact static strength and design calculations.**

^{a)} The maximum production length of the board S/Q and the BauBuche beam GL75 is 18 m.

Double-span – beam width = 300 mm
max. span l [m]

Beam height	Load q [kN/m]																
	1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	25	30
80	5.10	4.04	3.53	3.21	2.98	2.80	2.66	2.55	2.45	2.37	2.23	2.11	2.02	1.94	1.88	1.74	1.64
120	7.64	6.07	5.30	4.82	4.47	4.21	4.00	3.82	3.67	3.55	3.34	3.17	3.03	2.92	2.82	2.61	2.46
160	10.19	8.09	7.07	6.42	5.96	5.61	5.33	5.10	4.90	4.73	4.45	4.23	4.04	3.89	3.75	3.49	3.28
200	12.74	10.11	8.83	8.03	7.45	7.01	6.66	6.37	6.12	5.91	5.56	5.29	5.06	4.86	4.69	4.36	4.10
240	15.29	12.13	10.60	9.63	8.94	8.41	7.99	7.64	7.35	7.10	6.68	6.34	6.07	5.83	5.63	5.23	4.92
280	17.84	14.16	12.37	11.24	10.43	9.82	9.32	8.92	8.57	8.28	7.79	7.40	7.08	6.81	6.57	6.10	5.74
320	20.38 ^{a)}	16.18	14.13	12.84	11.92	11.22	10.66	10.19	9.80	9.46	8.90	8.46	8.09	7.78	7.51	6.97	6.56
360	22.93 ^{a)}	18.20 ^{a)}	15.90	14.45	13.41	12.62	11.99	11.47	11.02	10.64	10.02	9.51	9.10	8.75	8.45	7.84	7.38
400	25.48 ^{a)}	20.22 ^{a)}	17.67	16.05	14.90	14.02	13.32	12.74	12.25	11.83	11.13	10.57	10.11	9.72	9.39	8.71	8.20
440	28.03 ^{a)}	22.25 ^{a)}	19.43 ^{a)}	17.66	16.39	15.42	14.65	14.01	13.47	13.01	12.24	11.63	11.12	10.69	10.33	9.59	9.02
480	30.57 ^{a)}	24.27 ^{a)}	21.20 ^{a)}	19.26 ^{a)}	17.88	16.83	15.98	15.29	14.70	14.19	13.35	12.69	12.13	11.67	11.26	10.46	9.84
520	33.12 ^{a)}	26.29 ^{a)}	22.97 ^{a)}	20.87 ^{a)}	19.37 ^{a)}	18.23 ^{a)}	17.32	16.56	15.92	15.37	14.47	13.74	13.14	12.64	12.20	11.33	10.66
560	35.67 ^{a)}	28.31 ^{a)}	24.73 ^{a)}	22.47 ^{a)}	20.86 ^{a)}	19.63 ^{a)}	18.65 ^{a)}	17.84	17.15	16.56	15.58	14.80	14.16	13.61	13.14	12.20	11.48
600	38.22 ^{a)}	30.33 ^{a)}	26.50 ^{a)}	24.08 ^{a)}	22.35 ^{a)}	21.03 ^{a)}	19.98 ^{a)}	19.11 ^{a)}	18.37 ^{a)}	17.74	16.69	15.86	15.17	14.58	14.08	13.07	12.30
680	43.31 ^{a)}	34.38 ^{a)}	30.03 ^{a)}	27.29 ^{a)}	25.33 ^{a)}	23.84 ^{a)}	22.64 ^{a)}	21.66 ^{a)}	20.82 ^{a)}	20.10 ^{a)}	18.92 ^{a)}	17.97	17.19	16.53	15.96	14.81	13.94
760	48.41 ^{a)}	38.42 ^{a)}	33.57 ^{a)}	30.50 ^{a)}	28.31 ^{a)}	26.64 ^{a)}	25.31 ^{a)}	24.21 ^{a)}	23.27 ^{a)}	22.47 ^{a)}	21.15 ^{a)}	20.09 ^{a)}	19.21 ^{a)}	18.47 ^{a)}	17.83	16.56	15.55
840	53.51 ^{a)}	42.47 ^{a)}	37.10 ^{a)}	33.71 ^{a)}	31.29 ^{a)}	29.45 ^{a)}	27.97 ^{a)}	26.75 ^{a)}	25.72 ^{a)}	24.84 ^{a)}	23.37 ^{a)}	22.20 ^{a)}	21.23 ^{a)}	20.42 ^{a)}	19.71 ^{a)}	18.30 ^{a)}	16.96
920	58.60 ^{a)}	46.51 ^{a)}	40.63 ^{a)}	36.92 ^{a)}	34.27 ^{a)}	32.25 ^{a)}	30.63 ^{a)}	29.30 ^{a)}	28.17 ^{a)}	27.20 ^{a)}	25.60 ^{a)}	24.31 ^{a)}	23.26 ^{a)}	22.36 ^{a)}	21.59 ^{a)}	20.04 ^{a)}	18.36 ^{a)}
1000	63.70 ^{a)}	50.56 ^{a)}	44.17 ^{a)}	40.13 ^{a)}	37.25 ^{a)}	35.05 ^{a)}	33.30 ^{a)}	31.85 ^{a)}	30.62 ^{a)}	29.57 ^{a)}	27.82 ^{a)}	26.43 ^{a)}	25.28 ^{a)}	24.31 ^{a)}	23.47 ^{a)}	21.78 ^{a)}	19.74 ^{a)}
1080	68.79 ^{a)}	54.60 ^{a)}	47.70 ^{a)}	43.34 ^{a)}	40.23 ^{a)}	37.86 ^{a)}	35.96 ^{a)}	34.40 ^{a)}	33.07 ^{a)}	31.93 ^{a)}	30.05 ^{a)}	28.54 ^{a)}	27.30 ^{a)}	26.25 ^{a)}	25.34 ^{a)}	23.53 ^{a)}	21.11 ^{a)}
1160	73.89 ^{a)}	58.65 ^{a)}	51.23 ^{a)}	46.55 ^{a)}	43.21 ^{a)}	40.66 ^{a)}	38.63 ^{a)}	36.94 ^{a)}	35.52 ^{a)}	34.30 ^{a)}	32.27 ^{a)}	30.66 ^{a)}	29.32 ^{a)}	28.19 ^{a)}	27.22 ^{a)}	25.27 ^{a)}	22.46 ^{a)}
1240	78.99 ^{a)}	62.69 ^{a)}	54.77 ^{a)}	49.76 ^{a)}	46.19 ^{a)}	43.47 ^{a)}	41.29 ^{a)}	39.49 ^{a)}	37.97 ^{a)}	36.66 ^{a)}	34.50 ^{a)}	32.77 ^{a)}	31.35 ^{a)}	30.14 ^{a)}	29.10 ^{a)}	27.01 ^{a)}	23.81 ^{a)}
1320	84.08 ^{a)}	66.74 ^{a)}	58.30 ^{a)}	52.97 ^{a)}	49.17 ^{a)}	46.27 ^{a)}	43.95 ^{a)}	42.04 ^{a)}	40.42 ^{a)}	39.03 ^{a)}	36.73 ^{a)}	34.89 ^{a)}	33.37 ^{a)}	32.08 ^{a)}	30.98 ^{a)}	28.76 ^{a)}	25.14 ^{a)}
1360	86.63 ^{a)}	68.76 ^{a)}	60.07 ^{a)}	54.57 ^{a)}	50.66 ^{a)}	47.67 ^{a)}	45.29 ^{a)}	43.31 ^{a)}	41.65 ^{a)}	40.21 ^{a)}	37.84 ^{a)}	35.94 ^{a)}	34.38 ^{a)}	33.06 ^{a)}	31.91 ^{a)}	29.63 ^{a)}	25.80 ^{a)}



- Determining factor: deflection ($l/300$)
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