

### READY-TO-ASSEMBLE GLT SYSTEM FOR ROOF AND CEILING

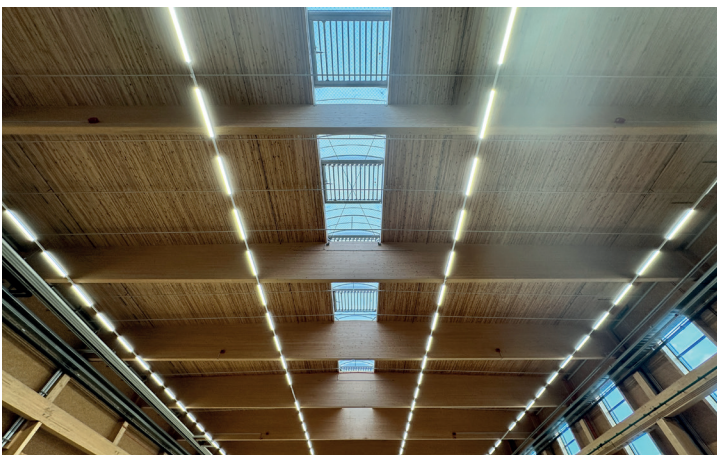
<b>TYPE OF WOOD:</b>	spruce , fir (larch, Douglas fir, pine available on request)
<b>LENGTH:</b>	Minimum length: 4.0 m (to max. 24.0 m)
<b>WIDTH:</b>	Standard width: 600 and 800 mm Special widths between 240 and 1200 mm available on request with rabbet (max. 1100 mm with tongue-and-groove profile)
<b>STRENGTH:</b>	GL24 h, GL20 h available on request
<b>SURFACE FINISH:</b>	Industrial, natural, visible; see GLT fact sheet
<b>FIRE PROTECTION:</b>	Burning rate as per EN 1995-1-2 Tested fire protection fittings: From 80 mm thickness EI 30 From 140 mm thickness EI 90 R (load-bearing in the event of fire) depends on structural analysis
<b>SWELLING VALUES AND SHRINKAGE COEFFICIENTS:</b>	Swelling values and shrinkage coefficients as per ÖNORM B3020 In width and thickness: 0.24 per 1% change in timber moisture
<b>SERVICE CLASS:</b>	Service class 1, 2
<b>TIMBER MOISTURE AT PRODUCTION:</b>	11 ± 2,5 %

### SWIFT – SAFE – STRONG

- ✓ High degree of prefabrication
- ✓ Quick installation
- ✓ No building moisture, in contrast to concrete
- ✓ Immediately load-bearing
- ✓ Controlled fire resistance
- ✓ Static pane design
- ✓ Low dead weight (approx. 20% compared to concrete roof)
- ✓ Pleasant indoor climate
- ✓ Longer spans than BSP

### OUR SERVICE FOR TIMBER ENGINEERING PARTNERS

- ✓ Planning service
- ✓ Structural analysis and all certifications
- ✓ Customized CNC factory assembly options
- ✓ Paint finish or protective treatment



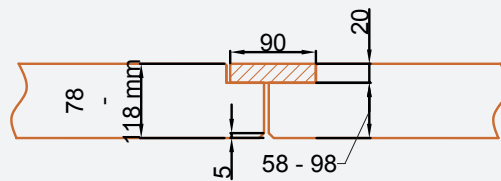
Profidec with joint strip, spruce,  
600 mm covering width / 5 mm laying clearance

### AVAILABLE PANEL THICKNESSES IN GL24H

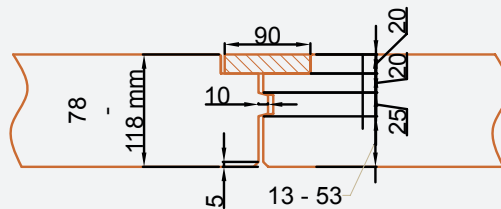
78 mm	} planed soffit rough sawn top side	140 mm	240 mm
88 mm		160 mm	260 mm
98 mm		180 mm	
108 mm		200 mm	other sizes block-bonded
118 mm		220 mm	

### EXAMPLE PROFILES

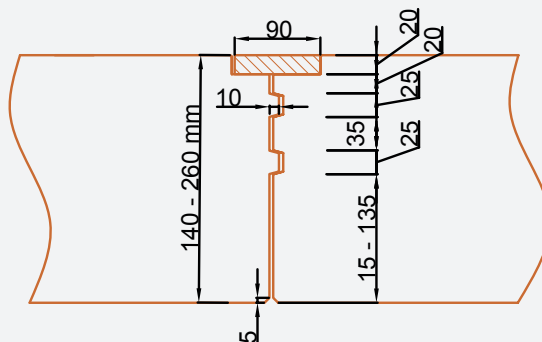
- 1) Panel butt joint, without milled tongue and groove, rabbet on topside for joint strip  
✓ Use in roof area (78 – 118 mm)



- 2) Panel butt joint with single milled tongue and groove, rabbet on topside for joint strip  
✓ For ceilings with small spans (78 – 118 mm)

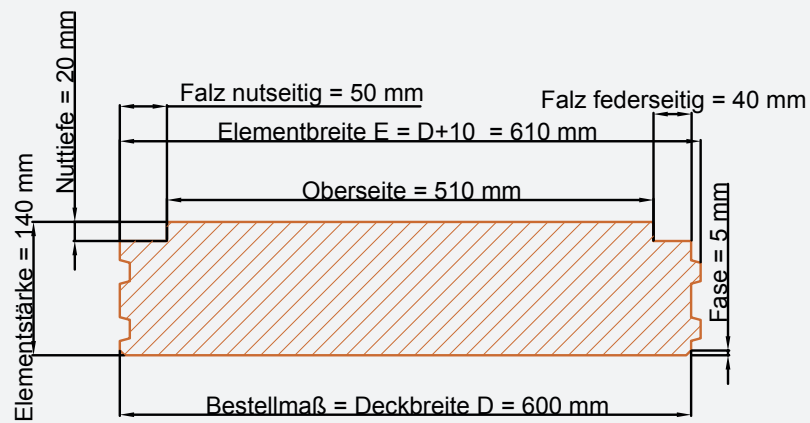


- 3) Panel butt joint with double milled tongue and groove, rabbet on topside for joint strip  
✓ For ceilings with larger spans and/or stricter fire protection requirements (140 – 260 mm)  
✓ up to 240 mm possible without butt joint



### PANEL WIDTH PROFILE SKETCH

Standard panel widths: 600 mm, 800 mm  
Other panel widths: From 240 mm to 1200 mm available on request



### IMPORTANT LAYING INFORMATION

To enable compensation for moisture, provision must always be made for a laying clearance. We recommend:

<b>5 mm</b>	<b>with 600 mm width</b>
<b>7 mm</b>	<b>with 800 mm width</b>
<b>10 mm</b>	<b>with 1000 mm width</b>

The connecting strips are supplied loose and fastened alternately (with screws or clips). This enables trouble-free swelling and shrinking.

Profidec panels must be protected against moisture ingress throughout the construction period and, of course, during their period of use.

Necessary fasteners and threaded joints must be designed based on the structural specifications.

## PROFIDEC INITIAL SIZING TABLE FOR GL24H

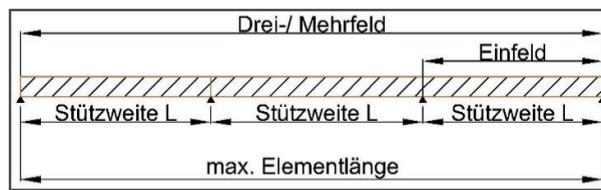
### GENERAL CONDITIONS

- ✓ Service class 1 as per EN 1995-1-1
- ✓ Dead weight of the Profidec already included in calculation
- ✓ Evenly distributed loads, no point loads
- ✓ Creep deformation not considered
- ✓ Without vibrational calculation
- ✓ Bearing distance = room clear width + support width
- ✓ Max. deflection =  $L/300$
- ✓ Tables are intended only for initial sizing

### SAMPLE APPLICATION

Payload =  $3,0 \text{ kN/m}^2$   
 Floor construction =  $1,3 \text{ kN/m}^2$   
 Floor covering =  $0,1 \text{ kN/m}^2$   
 Total load q =  $4,4 \text{ kN/m}^2$

Two-span span 6 m G 160 mm thickness



### EINFELDTRÄGER

Belastung $q=g+p$	Stützweite L in m pro Feld											
	3,00 m	3,50 m	4,00 m	4,50 m	5,00 m	5,50 m	6,00 m	6,50 m	7,00 m	7,50 m	8,00 m	
2,00 kN/m <sup>2</sup>	78 mm	88 mm	108 mm	118 mm	140 mm	140 mm	160 mm	160 mm	180 mm	200 mm	220 mm	220 mm
2,50 kN/m <sup>2</sup>	78 mm	98 mm	108 mm	140 mm	140 mm	160 mm	180 mm	200 mm	200 mm	220 mm	240 mm	240 mm
3,00 kN/m <sup>2</sup>	88 mm	98 mm	118 mm	140 mm	160 mm	160 mm	180 mm	200 mm	220 mm	240 mm	240 mm	240 mm
3,50 kN/m <sup>2</sup>	88 mm	108 mm	118 mm	140 mm	160 mm	180 mm	200 mm	200 mm	220 mm	240 mm	260 mm	260 mm
4,00 kN/m <sup>2</sup>	98 mm	108 mm	140 mm	140 mm	160 mm	180 mm	200 mm	220 mm	240 mm	240 mm	260 mm	260 mm
4,50 kN/m <sup>2</sup>	98 mm	118 mm	140 mm	160 mm	180 mm	180 mm	200 mm	220 mm	240 mm	240 mm	260 mm	280 mm
5,00 kN/m <sup>2</sup>	98 mm	108 mm	140 mm	160 mm	180 mm	200 mm	220 mm	240 mm	240 mm	260 mm	280 mm	280 mm
5,50 kN/m <sup>2</sup>	108 mm	118 mm	140 mm	160 mm	180 mm	200 mm	220 mm	240 mm	260 mm	280 mm	300 mm	300 mm
6,00 kN/m <sup>2</sup>	108 mm	140 mm	160 mm	160 mm	180 mm	200 mm	220 mm	240 mm	260 mm	280 mm	300 mm	300 mm
6,50 kN/m <sup>2</sup>	108 mm	140 mm	160 mm	180 mm	200 mm	220 mm	240 mm	240 mm	260 mm	280 mm	300 mm	320 mm
7,00 kN/m <sup>2</sup>	108 mm	140 mm	160 mm	180 mm	200 mm	220 mm	240 mm	260 mm	280 mm	300 mm	320 mm	320 mm
7,50 kN/m <sup>2</sup>	108 mm	140 mm	160 mm	180 mm	200 mm	220 mm	240 mm	260 mm	280 mm	300 mm	320 mm	320 mm
8,00 kN/m <sup>2</sup>	108 mm	140 mm	160 mm	180 mm	200 mm	220 mm	240 mm	260 mm	280 mm	320 mm	320 mm	320 mm

### ZWEIFELDTRÄGER

Belastung $q=g+p$	Stützweite L in m pro Feld											
	3,00 m	3,50 m	4,00 m	4,50 m	5,00 m	5,50 m	6,00 m	6,50 m	7,00 m	7,50 m	8,00 m	
2,0 kN/m <sup>2</sup>	78 mm	78 mm	78 mm	88 mm	108 mm	118 mm	140 mm	140 mm	160 mm	160 mm	180 mm	180 mm
2,5 kN/m <sup>2</sup>	78 mm	78 mm	78 mm	88 mm	108 mm	118 mm	140 mm	140 mm	160 mm	160 mm	180 mm	180 mm
3,0 kN/m <sup>2</sup>	78 mm	78 mm	88 mm	98 mm	108 mm	118 mm	140 mm	140 mm	160 mm	160 mm	180 mm	180 mm
3,5 kN/m <sup>2</sup>	78 mm	78 mm	88 mm	98 mm	108 mm	118 mm	140 mm	140 mm	160 mm	160 mm	180 mm	200 mm
4,0 kN/m <sup>2</sup>	78 mm	78 mm	98 mm	108 mm	118 mm	140 mm	160 mm	160 mm	170 mm	200 mm	200 mm	200 mm
4,5 kN/m <sup>2</sup>	78 mm	88 mm	98 mm	108 mm	118 mm	140 mm	160 mm	160 mm	180 mm	200 mm	200 mm	200 mm
5,0 kN/m <sup>2</sup>	78 mm	88 mm	98 mm	118 mm	140 mm	140 mm	160 mm	180 mm	180 mm	200 mm	220 mm	220 mm
5,5 kN/m <sup>2</sup>	78 mm	88 mm	108 mm	118 mm	140 mm	160 mm	160 mm	180 mm	200 mm	200 mm	220 mm	220 mm
6,0 kN/m <sup>2</sup>	78 mm	98 mm	108 mm	118 mm	140 mm	160 mm	160 mm	180 mm	200 mm	200 mm	220 mm	220 mm
6,5 kN/m <sup>2</sup>	78 mm	98 mm	108 mm	140 mm	140 mm	160 mm	180 mm	180 mm	200 mm	220 mm	220 mm	220 mm
7,0 kN/m <sup>2</sup>	88 mm	98 mm	108 mm	140 mm	140 mm	160 mm	180 mm	200 mm	200 mm	220 mm	240 mm	240 mm
7,5 kN/m <sup>2</sup>	88 mm	98 mm	108 mm	140 mm	160 mm	160 mm	180 mm	200 mm	200 mm	220 mm	240 mm	240 mm
8,0 kN/m <sup>2</sup>	88 mm	98 mm	118 mm	140 mm	160 mm	160 mm	180 mm	200 mm	220 mm	220 mm	240 mm	240 mm

### Mehrfeldträger

Belastung $q=g+p$	Stützweite L in m pro Feld											
	3,00 m	3,50 m	4,00 m	4,50 m	5,00 m	5,50 m	6,00 m	6,50 m	7,00 m	7,50 m	8,00 m	
2,0 kN/m <sup>2</sup>	78 mm	78 mm	88 mm	98 mm	108 mm	108 mm	140 mm	140 mm	160 mm	160 mm	180 mm	180 mm
2,5 kN/m <sup>2</sup>	78 mm	78 mm	88 mm	98 mm	108 mm	140 mm	140 mm	160 mm	160 mm	180 mm	200 mm	200 mm
3,0 kN/m <sup>2</sup>	78 mm	78 mm	98 mm	108 mm	118 mm	140 mm	140 mm	160 mm	180 mm	180 mm	200 mm	200 mm
3,5 kN/m <sup>2</sup>	78 mm	88 mm	98 mm	108 mm	140 mm	140 mm	160 mm	160 mm	180 mm	200 mm	200 mm	200 mm
4,0 kN/m <sup>2</sup>	78 mm	88 mm	98 mm	118 mm	140 mm	140 mm	160 mm	180 mm	180 mm	200 mm	220 mm	220 mm
4,5 kN/m <sup>2</sup>	78 mm	88 mm	108 mm	118 mm	140 mm	160 mm	160 mm	180 mm	200 mm	200 mm	220 mm	220 mm
5,0 kN/m <sup>2</sup>	78 mm	98 mm	108 mm	140 mm	140 mm	160 mm	180 mm	180 mm	200 mm	220 mm	220 mm	220 mm
5,5 kN/m <sup>2</sup>	88 mm	98 mm	108 mm	140 mm	140 mm	160 mm	180 mm	200 mm	200 mm	220 mm	240 mm	240 mm
6,0 kN/m <sup>2</sup>	88 mm	98 mm	118 mm	140 mm	160 mm	160 mm	180 mm	200 mm	220 mm	220 mm	240 mm	240 mm
6,5 kN/m <sup>2</sup>	78 mm	108 mm	118 mm	140 mm	160 mm	180 mm	180 mm	200 mm	220 mm	240 mm	240 mm	240 mm
7,0 kN/m <sup>2</sup>	88 mm	108 mm	118 mm	140 mm	160 mm	180 mm	180 mm	200 mm	220 mm	240 mm	260 mm	260 mm
7,5 kN/m <sup>2</sup>	98 mm	108 mm	140 mm	140 mm	160 mm	180 mm	200 mm	200 mm	220 mm	240 mm	260 mm	260 mm
8,0 kN/m <sup>2</sup>	98 mm	108 mm	140 mm	140 mm	160 mm	180 mm	200 mm	220 mm	220 mm	240 mm	260 mm	260 mm

Die Tabellen dienen nur zur Vordimensionierung und ersetzen keinen statischen Nachweis!

\*\* > 260 mm blockverleimt