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www.schneider-holz.com
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Uncomplicated, fast & reliable – the team of best wood SCHNEIDER® deals with your requests.
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best wood **GLULAM – CEILING**

Scandinavian spruce, local spruce, mountain larch, visual quality and industrial quality

**Characteristics**

- **Standard**: EN 14080:2013 GL 24h, GL 28h
- **General information**: Planed on four sides, bottom side chamfered 4 mm (measured diagonally), upper side without chamfer, trimmed precisely ± 2 mm, Visual quality only on the bottom side
- **Drying**: Kiln dried, wood moisture max. 15%
- **Application classes**: Suitable for use in application classes 1 and 2 according to EN 1995-1-1
- **Bonding**: Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
- **Lamellae**: 40 mm, sorted for quality and finger-jointed
- **Tolerance**: Thickness: ± 1 mm; Width: ± 2 mm; Length: ± 2 mm Curvature at ceiling level: max. 20 mm per 18.00 m
- **Shrinkage and swelling**: Shrinkage and swelling changes per 1 % change in timber moisture:
  - Length: 0.01–0.02 %, width: 0.19 %, thickness: 0.34 %

**Delivery options**

- **Length**: 2.30-18.00 m
- **Thickness**: 100, 120, 140, 160, 180, 200, 220, 240, 260, 280
- **Width**: 500–1000 mm, invoiced profile dimensions
- **Other cross sections**: Available on request

**Installation variants**

Minimum production length per element width 5.00 m

**Product description**

The outstanding advantage of the best wood SCHNEIDER® ceiling elements is, that they can be installed simply and rapidly. The elements are immediately passable on foot after their installation. In addition they offer functions such as stability and a comfortable optic. With this organic solution, a very enjoyable room climate can be obtained. Installation, also subsequently, is possible without any problems.
### best wood GLULAM – CEILING SEPARATED

Scandinavian spruce, local spruce, mountain larch, visual quality and industrial quality

#### Characteristics

<table>
<thead>
<tr>
<th>Standard</th>
<th>EN 14080:2013 GL 24hs</th>
</tr>
</thead>
<tbody>
<tr>
<td>General information</td>
<td>Planed on four sides, bottom side chamfered 4 mm (measured diagonally), upper side without chamfer, trimmed precisely ± 2 mm, Visual quality only on the bottom side</td>
</tr>
<tr>
<td>Drying</td>
<td>Kiln dried, wood moisture max. 15%</td>
</tr>
<tr>
<td>Application classes</td>
<td>Suitable for use in application classes 1 and 2 according to EN 1995-1-1</td>
</tr>
<tr>
<td>Bonding</td>
<td>Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)</td>
</tr>
<tr>
<td>Lamellae</td>
<td>40 mm, sorted for quality and finger-jointed</td>
</tr>
<tr>
<td>Tolerance</td>
<td>Thickness: ± 1 mm; Width: ± 2 mm; Length: ± 2 mm Curvature at ceiling level: max. 20 mm per 18.00 m</td>
</tr>
<tr>
<td>Shrinkage and swelling</td>
<td>Shrinkage and swelling changes per 1 % change in timber moisture: Length: 0.01–0.02 %, width: 0.19 %, thickness: 0.34 %</td>
</tr>
</tbody>
</table>

#### Delivery options

| Length | 2.30-18.00 m |
| Thickness | 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95 |
| Width | 360–760 mm, (≥ 500 mm invoiced profile dimensions) |
| Installation variants | 0, 2, 3, 6, 7, 8 |
| Other cross sections | Available on request, calculation dimensions made on a base of 40 mm |
| Minimum production length | per element width 5.00 m |
| Minimum order quantity | Ordering in pairs, because of separation. |

#### Product description

Ripped ceiling boards are a cost-saving solution when statics allow weaker ceiling thicknesses. They are perfectly applicable for adjoining rooms, garages etc.
**best wood**  GLULAM – CEILING WITH ACOUSTIC DESIGN

Scandinavian spruce, local spruce, mountain larch, visual quality and industrial quality

**Characteristics**

<table>
<thead>
<tr>
<th>Standard</th>
<th>EN 14080:2013 GL 24h, GL 28h</th>
</tr>
</thead>
<tbody>
<tr>
<td>General information</td>
<td>Planed on four sides, bottom side chamfered 4 mm (measured diagonally), upper side without chamfer, trimmed precisely ± 2 mm, Visual quality only on the bottom side</td>
</tr>
<tr>
<td>Drying</td>
<td>Kiln dried, wood moisture max. 15%</td>
</tr>
<tr>
<td>Application classes</td>
<td>Suitable for use in application classes 1 and 2 according to EN 1995-1-1</td>
</tr>
<tr>
<td>Bonding</td>
<td>Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)</td>
</tr>
<tr>
<td>Lamellae</td>
<td>40 mm, sorted for quality and finger-jointed</td>
</tr>
<tr>
<td>Tolerance</td>
<td>Thickness: ± 1 mm; Width: ± 2 mm; Length: ± 2 mm Curvature at ceiling level: max. 20 mm per 18.00 m</td>
</tr>
<tr>
<td>Shrinkage and swelling</td>
<td>Shrinkage and swelling changes per 1 % change in timber moisture: Length: 0.01–0.02 %, width: 0.19 %, thickness: 0.34 %</td>
</tr>
</tbody>
</table>

**Delivery options**

<table>
<thead>
<tr>
<th>Length</th>
<th>2.30-14.00 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness</td>
<td>100, 120, 140, 160, 180, 200, 220, 240, 260, 280</td>
</tr>
<tr>
<td>Width</td>
<td>200–400 mm, production dimensions made on a base of 40 mm</td>
</tr>
<tr>
<td>Installation variants</td>
<td>0 2 3 5</td>
</tr>
<tr>
<td>Milling</td>
<td>5/11 mm, in the centre of the glue joints</td>
</tr>
</tbody>
</table>

**Product description**

The best wood GLULAM – CEILING with acoustic design offers an advanced acoustic absorption in connection with upgraded creative possibilities.
best wood CLT – CEILING, ROOF, WALL

Scandinavian spruce, visual quality, local spruce, industrial quality

Characteristics

- **General building approval**: Z-9.1-874
- **General information**: Planed on four sides, bottom side chamfered 4 mm (measured diagonally), trimmed precisely ± 1 mm
- **Strength class**: C24 according to EN 338
- **Application classes**: Suitable for use in application classes 1 and 2 according to EN 1995-1-1
- **Bonding**: Clear, water-proof gluing with polyurethane adhesives (free of formaldehyde)
- **Lamellae**: 20, 30 and 40 mm, sorted for quality and finger-jointed
- **Drying**: Kiln dried, wood moisture max. 12 % (+/- 2%) at delivery
- **Heat conductivity**: $\lambda_B = 0.13$ (W/m*K) according to EN ISO 10456
- **Specific heat capacity**: 1600 (J/kg*K) according to EN ISO 10456
- **Diffusion resistance**: $\mu \approx 40$ according to DIN 4108-4 for the thickness of the lamellae and an additional 13 mm of wood thickness for each glued joint
- **Reaction to fire**: D-s2, d0 according to DIN EN 13501-1
- **Emission class**: E1 according to DIN EN 717-1
- **Shape change**: At board level $\approx 0.02 \%$ per 1 % change in wood moisture perpendicular to board level $\approx 0.24 \%$ per 1 % change in wood moisture

Delivery options

- **Length**: 2.30-16.00 m
- **Thickness**: 60, 80, 90, 100, 120, 140, 160, 180, 200, 220, 240, 260, 280
- **Width**: 900-1250 mm, invoiced profile dimensions, shiplap edge ≤ 1200 mm coverage dimensions
- **Installation variants**: 0 12 13 15 16
- **Minimum production length per element width**: 8.00 m
- **Other cross sections**: Available on request

Product description

Best wood CLT is a load-bearing solid wood element, consisting of at least three layers of crossways glued solid wood boards, which is suitable for all building requirements thanks to its excellent construction characteristics. The crosswise structure of high-quality raw material in combination with high-quality of gluing of edges and sides guarantees a high degree of dimensional stability, and leads to only small deformations from swelling and shrinking in the event of moisture changes in the panel level.

A high degree of prefabrication of the best wood CLT with downstream cut-off and the simplicity of joining the best wood CLT elements ensures swift and cheap installation and guarantees dry construction. It is simple to produce building element constructions with increased fire resistance with evidence from the best wood STATICS software.
best wood CLT BOX – CEILING

Wooden box element for large spans,
best wood CLT with three glued-on GLULAM lamellae ribbed beams and a CLT cover board
Scandinavian spruce, visual quality, local spruce, industrial quality

Delivery options

<table>
<thead>
<tr>
<th>Length</th>
<th>2.30-16.00 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness</td>
<td>260, 280, 300, 320, 340, 360, 380, 400, 420, 440, 460, 480</td>
</tr>
<tr>
<td>Width</td>
<td>900-1250 mm</td>
</tr>
<tr>
<td>Number of ribs</td>
<td>3</td>
</tr>
<tr>
<td>Upper CLT board</td>
<td>in 60 mm</td>
</tr>
<tr>
<td>Lower CLT board</td>
<td>in 60 mm and 90mm for increased fireproofing requirements</td>
</tr>
</tbody>
</table>

Installation variants

| Installation variants | 32 | 35 |

Minimum production length per element width 8.00 m

Product description

best wood CLT BOX – CEILING is a statically effective and at the same time space-creating wood element, which is suitable for all construction requirements thanks to its versatile dimensions and excellent construction characteristics. A high-performance and versatile building product is created by utilising the advantages of solid timber and wood frame construction.

The combination of CLT and ribbing planks produces a high static load-bearing capacity with a comparatively low weight. The crosswise assembly from high-quality raw material in combination with high-quality gluing of edges and surfaces guarantees a high degree of dimensional stability. A high degree of prefabrication of the best wood CLT BOX with downstream cut-off and the simplicity of joining the best wood CLT BOX elements ensures swift and cheap installation and guarantees dry construction. It is simple to produce building element constructions with increased fire resistance with evidence from the best wood STATICS software.

Advantages

- high static load-bearing capacity with comparatively low weight
- large spans and therefore prop-free rooms possible
- low structure height
- high degree of prefabrication and simple joining of the ceiling elements for swift and cheap installation
- utilises advantages of solid timber and wood frame construction
- high resistance to fire
- high-quality ready visual quality on the underside with additional surface finishing possible
### best wood CLT BOX – ROOF

Open box element for passive house construction, best wood CLT with two glued-on GLULAM lamellae ribbed beams
Scandinavian spruce, visual quality, local spruce, industrial quality

#### Delivery options

<table>
<thead>
<tr>
<th>Spec</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Length</td>
<td>2.30-16.00 m</td>
</tr>
<tr>
<td>Thickness</td>
<td>220, 240, 260, 280, 300, 320, 340, 360, 380, 400, 420, 440, 460</td>
</tr>
<tr>
<td>Width</td>
<td>1100–1250 mm, invoiced profile dimensions, shiplap edge ≤1200 mm coverage dimensions</td>
</tr>
<tr>
<td>Number of ribs</td>
<td>2</td>
</tr>
<tr>
<td>Lower CLT board</td>
<td>in 60mm and 90mm for increased fireproofing requirements</td>
</tr>
</tbody>
</table>

#### Installation variants

<table>
<thead>
<tr>
<th>Variant</th>
<th>Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>![Diagram 23]</td>
</tr>
<tr>
<td>26</td>
<td>![Diagram 26]</td>
</tr>
</tbody>
</table>

Minimum production length per element width 8.00 m

For more detailed information see price list.

#### Product description

The combination of CLT and ribbing planks produces a high static load-bearing capacity with a comparatively low weight. The crosswise assembly from high-quality raw material in combination with high-quality gluing of edges and surfaces guarantees a high degree of dimensional stability.

#### Advantages

- best wood CLT with lamellae ribbed beams glued on in the factory
- high static load-bearing capacity with comparatively low weight
- large spans and therefore prop-free rooms possible
- high degree of prefabrication and simple joining of the roof elements for swift and cheap installation
- utilises advantages of solid timber and wood frame construction
- high resistance to fire
- high-quality ready visual quality on the underside with additional surface finishing possible
- outstanding insulation characteristics due to insulation of spaces for passive house construction
■■ **General information**

These assembly and installation guidelines contain recommendations and notes on the correct handling of ceiling, roof and wall elements from best wood SCHNEIDER®, and are intended exclusively for specialists who are authorised for the planning and processing that is involved in wood construction and building and have the relevant specialist knowledge.

The respective applicable standards and statutory requirements as well as the current state of technology must be adhered to in addition to following these assembly and installation guidelines.

All specifications of these guidelines must be regarded as general, and do not relate to a particular construction project. best wood SCHNEIDER® GmbH does not accept any liability or give any guarantees on the basis of this brochure.

The preliminary measurement tables in the “Wood Product Overview” or the best wood STATICS free statics programme can be used for the pre-dimensioning of best wood SCHNEIDER® ceiling systems. The best wood STATICS software compares the different ceiling systems with each other and returns the required element height for each ceiling type. Checkable static verification of the best wood ceiling, roof and wall elements can also be produced using best wood STATICS.

The regulations, standards and guidelines that have been issued for the respective material that is processed in the product also apply for the required proof of thermal insulation and moisture proofing. Notes on soundproofing and fireproofing can be found on page 15.

■■ **Receipt of goods**

Once the goods have been received at the specified delivery address, they must always be checked for quantity, contractual quality and assured characteristics, such as:

- Is the scope of delivery correct?
- Are the dimensions of the individual products correct?
- Is the wood moisture within the limit range for the product?
- Has the joinery been carried out as per the installation plan?
- Have the goods been damaged in transit?
- Are there any dirty surfaces?

Obvious defects must be reported immediately in writing after receipt of the goods.

Production-related complaints (e.g. resin pockets, open joints, surface damage...) must generally be reported no more than 5 working days after installing the elements.

Dirt on finished surfaces must be immediately declared after receipt of goods and cleaned in consultation with best wood SCHNEIDER®. Painting or repairing painted elements on your own will not provide a positive result.
Storing the delivered elements

If the best wood SCHNEIDER® elements are put into temporary storage after delivery prior to installation, they must be placed in a clean and level storage location. The elements must be protected from the effects of the weather (moisture penetration, direct sunlight, and dirt) for the entire storage period. The stretch film used for transport does not provide protection from the weather, which is why the elements must be stored under a roof or additional weather-resistant protective film.

Installation of the delivered elements

When the elements are installed, always pay attention to the installation order in the installation plan. If the elements are of visual quality, they must always be installed with clean hands or gloves, and it is essential not to walk on the visible surfaces. The edges of the elements must be protected in such a way that they are not damaged by lifting straps or the like.

The attachment systems of SIHGA Pick, Würth or other approved lifting gear can be used to attach to the elements. (see figs. 2, 3)

Installation gap with GLULAM ceilings

With GLULAM ceilings, an installation gap must be included in the planning depending on the situation at the construction site and the planned use of the building.

The best wood GLULAM – CEILING is delivered with wood moisture content of 12 % +/- 2.5 %, and adapts itself to the anticipated room climate during the usage phase:

- 9 % +/- 3 % for buildings that are closed on all sides and heated, with air humidity of approx. 50 % and 20 °C;
- 12 % +/- 3 % for buildings that are closed on all sides and not heated, with air humidity of approx. 65 to 70 % and 20 °C;
- 15 % +/- 3 % for covered, open buildings, with air humidity of approx. 75 to 80 % and 20 °C;

In order to achieve this equilibrium moisture, the wood absorbs moisture from the air or gives it off, whereby the width, height and length of the elements shrink or swell, and the cross-sectional dimensions change. The working of the wood must be taken into consideration in the planning in general for GLULAM ceilings, since irreparable damage can be caused to the building due to movements or restraints. This can be prevented by taking installation gaps into consideration.
The installation gap that is required can be determined using Table 1 and the specific shrinkage and swelling dimensions. With European coniferous wood, according to DIN 1052:2008-12 a uniform specific shrinkage dimension of 0.24 %/% (percentage of percentage wood moisture change in width and thickness) is reckoned with as an average of tangential and radial shrinkage or swelling, since the actual annual ring progress in later wood cross-sections is not usually predictable. The specific shrinkage dimension in the longitudinal direction is 0.01%.

### Table 1:

Source: R. Keylwert and information from the U.S. Forest Products Laboratory, Madison 1951

<table>
<thead>
<tr>
<th>Relative air humidity (%)</th>
<th>Values for wood equilibrium moisture (size in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>90%</td>
<td>21.1 21.0 21.0 20.8 20.0 19.8 19.3</td>
</tr>
<tr>
<td>85%</td>
<td>18.1 18.0 18.0 17.9 17.5 17.1 16.9</td>
</tr>
<tr>
<td>80%</td>
<td>16.2 16.0 16.0 15.8 15.5 15.1 14.9</td>
</tr>
<tr>
<td>75%</td>
<td>14.7 14.5 14.3 14.0 13.9 13.5 13.2</td>
</tr>
<tr>
<td>70%</td>
<td>13.2 13.1 13.0 12.8 12.4 12.1 11.8</td>
</tr>
<tr>
<td>65%</td>
<td>12.0 12.0 11.8 11.5 11.2 11.0 10.7</td>
</tr>
<tr>
<td>60%</td>
<td>11.0 10.9 10.8 10.5 10.3 10.0 9.7</td>
</tr>
<tr>
<td>55%</td>
<td>10.1 10.0 9.9 9.7 9.4 9.1 8.8</td>
</tr>
<tr>
<td>50%</td>
<td>9.4 9.2 9.0 8.9 8.6 8.4 8.0</td>
</tr>
<tr>
<td>45%</td>
<td>8.6 8.4 8.3 8.1 7.9 7.5 7.1</td>
</tr>
<tr>
<td>40%</td>
<td>7.8 7.7 7.5 7.3 7.0 6.6 6.3</td>
</tr>
<tr>
<td>35%</td>
<td>7.0 6.9 6.7 6.4 6.2 5.8 5.5</td>
</tr>
<tr>
<td>30%</td>
<td>6.2 6.1 5.9 5.6 5.3 5.0 4.7</td>
</tr>
<tr>
<td>25%</td>
<td>5.4 5.3 5.0 4.8 4.5 4.2 3.8</td>
</tr>
<tr>
<td>Temperature in °C</td>
<td>10°  15°  20°  25°  30°  35°  40°</td>
</tr>
</tbody>
</table>

**Example calculation of shrinkage and swelling:**

**Parameters:**
- Climate during usage phase: 20° C ; 80 % rel. air humidity
- Wood moisture of GLULAM element upon delivery: 12 %
- Anticipated equilibrium moisture: 16 %
- Width of GLULAM element: 1000 mm

**Calculation:**

\[
\text{Element width} \times \left(\frac{\text{wood moisture difference}}{100}\right) \times \text{specific shrinkage dimension} = \text{change in width}
\]

\[
1000 \text{ mm} \times 0.04 \times 0.24 = + 9.6 \text{ mm}
\]

**Installation gap for best wood CLT and best wood CLT BOX**

If there are no fireproofing requirements for the elements, an installation gap does not have to be taken into consideration for best wood CLT and best wood CLT BOX.
Joint insulation tape (ISO FLAME KOMBI F120) must be installed in the element joint as shown in the classification report (viewable at www.schneider-holz.com/downloads) for the best wood CLT BOX – CEILING and fireproofing requirements of F30 - F90 or REI 30 – REI 90, and an installation gap of 4 mm must be planned.

A structural installation gap must be planned at the end of the support for all ceiling systems. (see fig. 4)

The formation of the ceiling, roof and wall sections takes place via the element connection. The sheet stiffness by connecting several elements is provided using inlay boards or shiplap edges, secured with mechanical fasteners. The inlay boards must have a minimum cross-section dimension of w x h = 100 x 22 mm² and be made from solid wood in accordance with DIN EN 338, from OSB boards in accordance with DIN EN 300 or from comparable wooden materials in accordance with the general building approval or ETA.

Nails, staples or wood screws may be used as fasteners. Alternatively, cross-type screw fitting is also possible for square versions. The number of mechanical fasteners and the arrangement thereof must be chosen in accordance with the static requirements, and can be determined using the best wood STATICS statics software.

If best wood FILLINGS are used on the element or CLT BOX – CEILING in the rafters, the butt joints of square edged elements must be masked before putting in the FILLINGS.

### Protection of the elements during the construction phase

**During storage and installation:**
The elements must be protected from direct weathering from above during and after installation.

**In the installed condition:**
Wood works by means of swelling (absorption of moisture) and shrinking (drying) in the hygroscopic range. This diffusion-open characteristic of the wood provides a cozy room climate. The natural moisture fluctuations that occur should be taken into consideration in the planning.

However, if an unnatural moisture increase occurs (e.g. because of increased moisture when the wet screed dries), unplanned expansion of the wood takes place, which causes damage to the building. In the event of unnaturally fast drying (e.g. because of heating and drying devices), the tension in the wood becomes too great and cracks occur in the surface.

For these reasons, the elements must be protected from the above-mentioned influences in the installed condition.
For an ideal room climate, the relative humidity should be between 40 and 65 % with a temperature range of 10 to 25 °C. in the case of winter construction sites without the windows installed, careful air conditioning should take place after installing the windows so that the elements can adapt slowly. Observation is required during construction when doing this.

**Screed installation:**
If wet screed is installed, immediately after installation any possible open areas of the protective film on the visible side of the elements must be covered using adhesive tape (best wood CEILING TAPE or the Kip FINELINE-TAPE 3808 that is commercially available). The protective tape must not be removed before:

- Completion of the painting work or
- 6 weeks after screed installation or
- 2 weeks after screed heating

With visible elements without glazing, no protective film is required in order to prevent fiber from being torn from the surface of the wood. With these elements, as is the norm in wood construction, special attention must be paid to removing excess moisture by providing continuous ventilation. Wet screed installation is not recommended in this case, since the different moisture and temperature loads will lead to considerable crack formation in the surface of the wood more quickly.

---

**INFORMATION**
The screed installation, the screed heating and the removal of the protective film from the visible surface must be documented in writing AND in pictures and presented in the event of a complaint.

If dry screed is installed, the protective film must not be removed until painting work is complete in order to avoid soiling.

All subsequent trades and their employees on the construction project must be made aware and sensitized to the fact that a visible ceiling is a finished component which must not be soiled by subsequent work.

Masking work on the elements may only be carried out using best wood CEILING TAPE or Kip FINELINE-TAPE 3808 adhesive tape, since other adhesive tapes can leave adhesive residue on the elements.

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**Soundproofing**

If a best wood ceiling system requires soundproofing, advance sound planning is essential. The soundproofing database at www.schneider-holz.de provides the sound insulation dimensions for the individual ceiling systems. If the best wood FILLINGS are poured into the rafters when using CLT BOX — CEILING, the FILLINGS PLAN must always be followed.
Putting the best wood FILLINGS into the best wood CLT BOX – CEILING:
When the best wood FILLINGS are put in as bagged goods (25 kg/bag), they must be distributed in the element openings as specified in the FILLINGS PLAN.

“1 bag per opening” -> bag is poured directly onto the opening
“½ bag per opening” -> pour bag between two openings and distribute evenly

If the best wood FILLINGS are delivered in a BigPack, the correct pouring quantity for each element opening must be measured with the provided measuring device and poured into an element opening.

Fireproofing
For buildings with fireproofing requirements, the type of component must be planned in advance and structural proof of the fire resistance must be produced.

The following general building authority test certificates, classification reports and expert opinions for various components can found in the download area at: www.schneider-holz.com:
- abP/classification report for exposed roof beams F30/REI45
- abP/classification report for CLT BOX – CEILING F90/REI90

Vapor barrier
All best wood CLT boards with a thickness of greater than 60 mm have been tested and deemed suitable as an airtight component in the surface area. The element joints must be masked in such a way that they are airtight. Other details such as butt joints on the support/ridge must be planned in advance and carefully implemented.

Our system partner proclima would be pleased to help in the event of technical inquiries regarding the airtightness of buildings.

proclima technical hotline:
- Phone + 49 (0) 6202 27 82 - 45
- Fax + 49 (0) 6202 27 82 - 51
- E-mail technik@proclima.de

Breakthroughs, replacements and recesses
Required breakthroughs, replacements and recesses in best wood SCHNEIDER®ceiling systems must be planned and statically verified in advance by a structural engineer.

It is advisable to discuss the feasibility of the joinery with the ceiling element joinery department beforehand. Contacts can be found on page 5.
■ ■ Colour finishing for ceiling and roof systems

Building elements up to 16.00m with mineral paint applied, for internal application, delivered ready picked with a protective film to the construction site. The diffusion-open paints preserve the wood’s hygroscopic properties and impress with their mineral matt look, absolute UV resistance and durability. This natureplus-certified product is available in a sanded and rough-sawn look. More colours possible on request.

Dirt on finished surfaces must be immediately declared after receipt of goods and cleaned in consultation with best wood SCHNEIDER®. Painting or repairing lacquered elements yourself will not provide a positive result.

Supplied with
- UV protection
- Surface cosmetics
- Sanded or rough-sawn look
- Priming – intermediate sanding – final coat
- Self-adhesive protective foil (can remain on the lacquered surface for up to 6 months as protection)

Characteristics of KEIM glaze
- Mineral matt optic
- Absolutely UV-resistant and light-resistant
- Diffusion-open
- Ecological
- Without solvents and plasticisers
- Does not present any health risks (tested by the TÜV)
- For a good indoor and living climate

■ ■ Painting of unvarnished components for the interior by the customer

If untreated components are coated with mineral varnish by best wood SCHNEIDER® during prefabrication or on site, please note the following:

- Coating with Lignosil-Inco always has to be carried out twice. The final coat must be applied after the first coat has completely dried, no sooner than after 24 hours.
- Processing can take place at an air and ambient temperature of +5 °C or above, and must take place in dry conditions (wood moisture less than 18% in accordance with BFS data sheet no. 18).
- At 23°C and with 50% relative air humidity, Lignosil-Inco can usually be painted over in 24 hours. Higher relative air humidity or a lower temperature will slow down the drying process accordingly.
• EC waste code no. 08 01 12 must be adhered to during disposal. Only completely empty containers may be taken for recycling.

### INFORMATION

Before starting painting or spraying work on the material, a colour sample must be produced and compared with the supplied, varnished ceiling element.

**Processing sequence:**
- Sand posts, purlins, bearers, ceiling elements etc. with 180 grain sandpaper
- Dust or vacuum the surfaces to remove residual dust
- Apply first coat of paint
- Carry out intermediate sanding with 240 grain sandpaper
- Apply second coat of paint
- Pay attention to drying times
- See following table for application quantities and mixing ratios

If large areas are being painted we recommend applying the relevant colour with a cup gun (Air-mix, minimum nozzle size 1.8 mm). A significantly greater quantity can be applied using a cup gun. For the best result, use the mixing ratio shown in the table below.

**Paint application with brush or paint roller**

<table>
<thead>
<tr>
<th>Colour</th>
<th>Application quantity</th>
<th>Mixing ratio Basic colour/mixing concentrate</th>
<th>Basic colour</th>
<th>Mixing concentrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>soft white</td>
<td>2 coats of paint of 60 g/m²</td>
<td>30:1</td>
<td>Lignosil Inco DL</td>
<td>white</td>
</tr>
<tr>
<td>alpine white</td>
<td>1 l basic colour: approx. 1150g</td>
<td>15:1</td>
<td></td>
<td>white</td>
</tr>
<tr>
<td>light grey</td>
<td>1 l mixing concentrate: approx. 1250g</td>
<td>15:1</td>
<td></td>
<td>9546 light grey</td>
</tr>
<tr>
<td>pebble grey</td>
<td>15:1</td>
<td></td>
<td>4831 pebble grey</td>
<td></td>
</tr>
<tr>
<td>grey-blue</td>
<td>15:1</td>
<td></td>
<td>9486 grey-blue</td>
<td></td>
</tr>
<tr>
<td>mint green</td>
<td>15:1</td>
<td></td>
<td>168 mint green</td>
<td></td>
</tr>
<tr>
<td>salmon red</td>
<td>15:1</td>
<td></td>
<td>9146 salmon red</td>
<td></td>
</tr>
<tr>
<td>sand yellow</td>
<td>15:1</td>
<td></td>
<td>121 sand yellow</td>
<td></td>
</tr>
</tbody>
</table>

**Paint application with a cup gun**

<table>
<thead>
<tr>
<th>Colour</th>
<th>Application quantity</th>
<th>Mixing ratio Basic colour/mixing concentrate</th>
<th>Basic colour</th>
<th>Mixing concentrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>soft white</td>
<td>2 coats of paint of 140 g/m²</td>
<td>1:1</td>
<td>Lignosil Inco DL</td>
<td>white</td>
</tr>
<tr>
<td>alpine white</td>
<td>1 l basic colour: approx. 1150g</td>
<td>40:1</td>
<td></td>
<td>9546 light grey</td>
</tr>
<tr>
<td>light grey</td>
<td>1 l mixing concentrate: approx. 1250g</td>
<td>20:1</td>
<td></td>
<td>4831 pebble grey</td>
</tr>
<tr>
<td>pebble grey</td>
<td>20:1</td>
<td></td>
<td>9486 grey-blue</td>
<td></td>
</tr>
<tr>
<td>grey-blue</td>
<td>20:1</td>
<td></td>
<td>168 mint green</td>
<td></td>
</tr>
<tr>
<td>mint green</td>
<td>20:1</td>
<td></td>
<td>9146 salmon red</td>
<td></td>
</tr>
<tr>
<td>salmon red</td>
<td>20:1</td>
<td></td>
<td>121 sand yellow</td>
<td></td>
</tr>
<tr>
<td>sand yellow</td>
<td>20:1</td>
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