CROSS-LAMINATED TIMBER
AN OVERVIEW

Presentation Outline

What is CLT?
Composition
Size Availability

CLT, X-LAM, Massive Timber, BSP

Related Products
Fastened with:
- Wooden dowels (Thoma Holz, Appenzellerholz, etc.)
- Nails (MHM)

History
- Initial Development
- Optimization
  - Austria (1996)
### Manufacturing

### Current
- Countries leading in the use of CLT
  - Austria, Germany, Switzerland, Sweden, Norway, United Kingdom

#### Volume usage (m³)

#### Manufacturers

- **Kibo** 70,000 m³
- **STORAXGO** 100,000 m³
- **HMS** 28,000 m³
- **SCHISSLER HOLZ** 15,000 m³
- **NORDIC** 85,000 m³

### Steps 1 and 2

### Steps 3 and 4
Applications

As....
Advantages

Sustainable alternative solution to concrete and steel:

- Lightweight
- Strong
- Consistent
- Tolerances
- Easier for other trades

Advantages

- High strength
- Seismic Resistance
- Exceptional fire performance
- Great thermal properties
- Vapour/air barrier

Advantages

Table 1: Span and height capabilities of main structural materials in multi-storey buildings

<table>
<thead>
<tr>
<th>Material</th>
<th>Span capability</th>
<th>Height capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>500 mm</td>
<td>100 mm</td>
</tr>
<tr>
<td>Concrete</td>
<td>750 mm</td>
<td>150 mm</td>
</tr>
<tr>
<td>Masonry</td>
<td>750 mm</td>
<td>150 mm</td>
</tr>
<tr>
<td>Finished trusses</td>
<td>750 mm</td>
<td>150 mm</td>
</tr>
<tr>
<td>Panel trusses</td>
<td>750 mm</td>
<td>150 mm</td>
</tr>
</tbody>
</table>

Advantages

Figure 3: Span and height capabilities of main structural materials in multi-storey buildings
Potential

• Address code issues
• Maximize the advantages
• Benefit from versatility
THANK YOU

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