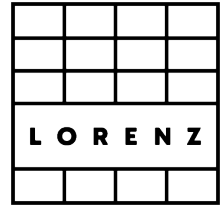
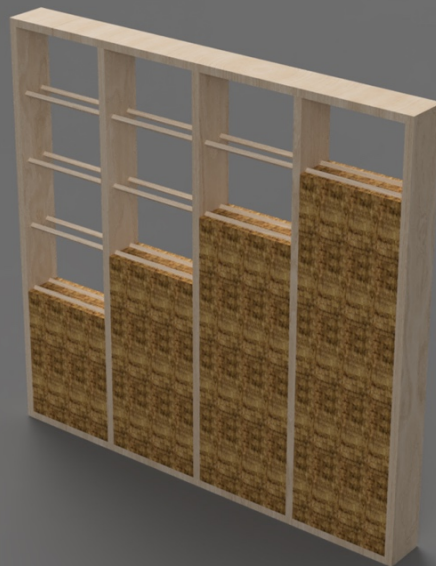


Building System Made of Wood and Straw

Prefabricated building element made of wood with straw insulation for efficient construction



DD18_45



Production

- Frames preassembled by skilled technicians
- Mechanically pressed and planed filling

Assembly

- Quick and easy to assemble
- Can be plastered and planked immediately
- Available in many sizes

Environmental aspects

- Completely removable and reusable
- Wood and straw store CO₂
- Tested free of pollutants

Information: This data sheet contains a visual representation of the product. In some cases, there may be minor discrepancies between the product shown and the actual product. Such discrepancies represent neither a defective product nor a technical limitation.

Building element DD18_45

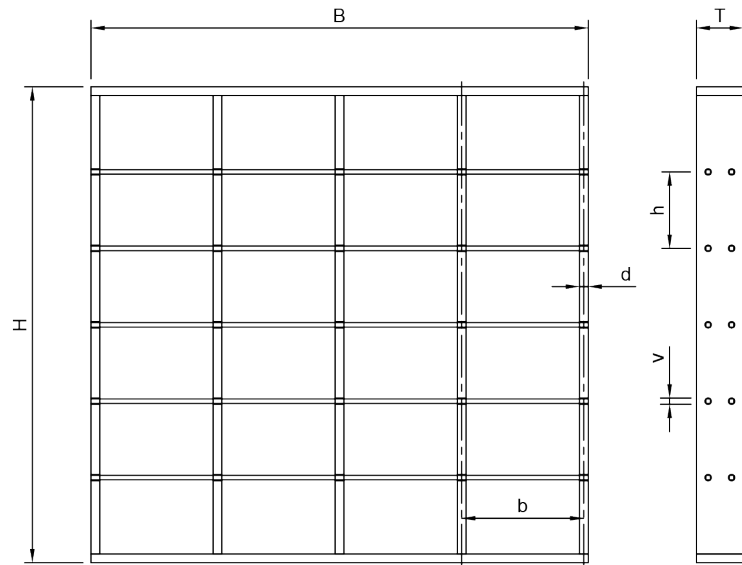
Components

Wood, straw, fastener

Not reinforced. Other sizes available on request.

Nominal dimension	mm*
H (Height)	2,430
B (Width)	2,545
T (Depth)	180
h (Height of section)	390
b (Width of section)	625
d (Width plank)	45
v (Height bar)	32

* According to DIN 68100



□ Model size 406 (4 panels wide x 6 panels high)

Technical Parameters DD18_45	Specification/Unit	
Straw quality	Certified construction grade straw, regionally sourced	I. Filling
Fire classification	E (ordinary combustibles) according to EN 13501-1	
Apparent density of straw	100 kg/m ³ ± 15 kg/m ³	
Straw moisture	< 18%	
Heat capacity of straw	2.0 kJ/(kg·K)	
Method of pressing	High-density small bales mechanically pressed into element sections	
Orientation of straw	Vertical for thermal flow	
Quality of wood	KVH® spruce-NSi, finger jointing	II. Frame
Apparent density of wood	420 kg/m ³	
Wood moisture	< 15% ± 3%	III. Joints
Fasteners	Wooden dowels, raw, 8 mm Countersunk screws, galvanized 6 x 140 mm Crossbars, spruce, presorted 24 x 24 mm	
□ Absolute weight	154 kg	
□ Specific weight (wall surface)	24.9 kg/m ²	
□ Specific surface load (floor surface)	3.3 kN/m ²	
Thermal conductivity (λ _R)	Construction grade straw 0,049 W/(m*K) Softwood 0.130 W/(m*K)	
U-value (without cladding)	0.289 W/(m ² *K)	
Application	Wall, roof, floor, ceiling or gable modules	



Lorenz GmbH
Am Steinbruch 16
04425 Taucha

Tel.: +49 34298 20 99 36
Fax: +49 34298 20 99 40
E-Mail: info@lorenzsysteme.de
Web: www.lorenzsysteme.de



Version 1.3/10/22