Building System Made of Wood and Straw

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



DD24_60



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 DD24_60

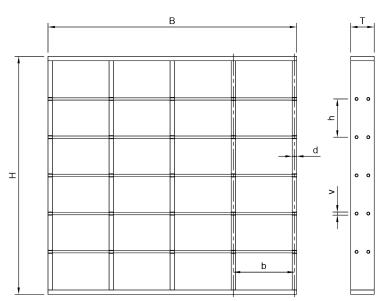
Components

Wood, straw, fastener

Not reinforced. Other sizes available on request.

Nominal dimension	mm*
H (Height)	2,460
B (Width)	2,560
T (Depth)	240
h (Height of section)	390
b (Width of section)	625
d (Width plank)	60
v (Height bar)	32

^{*} According to DIN 68100



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

Technical Parameters DD24_60	Specification/Unit	
Straw quality	Certified construction grade straw, regionally sourced	
Fire classification	E (ordinary combustibles) according to EN 13501-1	
Apparent density of straw	100 kg/m³ ± 15 kg/m³	
Straw moisture	< 18%	- Filling
Heat capacity of straw	2.0 kJ/(kg·K)	Ē
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	
Apparent density of wood	420 kg/m³	Frame
Wood moisture	< 15% ± 3%	
Fasteners	Wooden dowels, raw, 8 mm Countersunk screws, galvanized 6 x 160 mm Crossbars, spruce, presorted 24 x 24 mm	III. Joints
□ Absolute weight	222 kg	
□ Specific weight (wall surface)	35.2 kg/m ²	
☐ Specific surface load (floor surface)	3.5 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)	0.227 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

