

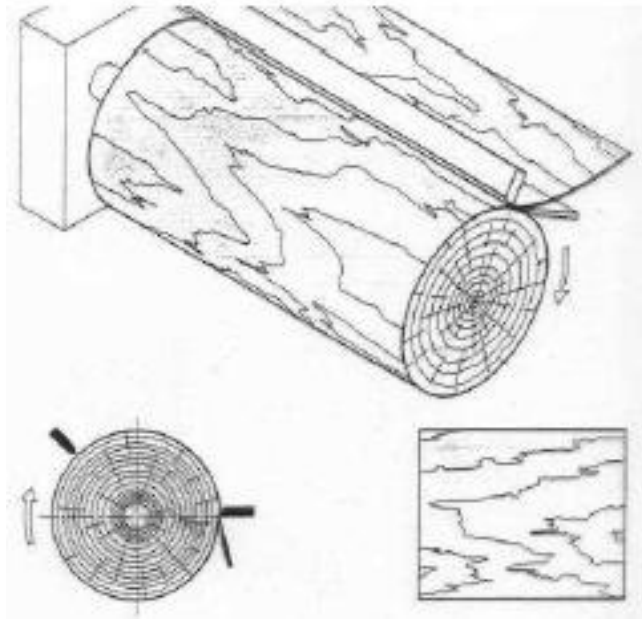
NATÜRLICH BESSER DÄMMEN • BETTER INSULATION, NATURALLY • ISOLER MIEUX, NATURELLEMENT • NATUURLIJK BETER ISOLEREN • NATÜRLICH BESSER DÄMMEN • BETTER INSULATION, NATURALLY • ISOLER MIEUX, NATURELLEMENT • NATUURLIJK BETER ISOLEREN

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Modern production line

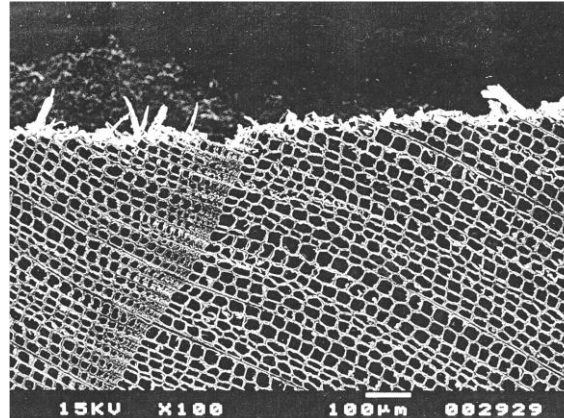
- ✔ use 75 % of raw material to produce beam
- ✔ spruce and fir veneers
- ✔ High stability, reliable quality



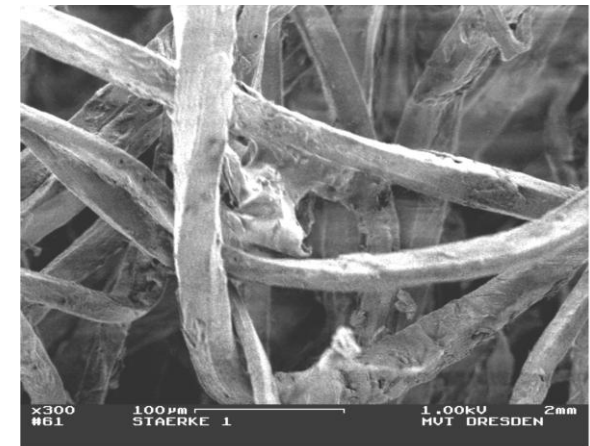
- ✔ fast log peeling



Wood – a natural insulator



- ✔ Low Thermal Conductivity
 $\lambda = 0,13 \text{ W}/(\text{m} \cdot \text{K})$
 → Wood feels warm
- ✔ High Specific Heat Capacity $c_p = 2100 \text{ J}/(\text{kg} \cdot \text{K})$
- ✔ High density Insulation (→ Heat protection)



The STEICO product range



1

STEICO flex

- flexible Wärmedämmung
- Setzungssichere Gefachdämmung für Dach, Wand und Decke
 - Einfache und schnelle Verarbeitung



2

STEICO canaflex

- flexible Wärmedämmung aus Hanf
- Flexible, setzungssichere Wärmedämmung in Dach, Wand und Decke
 - Diffusionsoffen für ein gesundes Raumklima



4

STEICO universal

- Unterdeck- und Wandauplatte
- Unterdeck- und Wandauplatte mit Nut- und Federprofil
 - Sicherer Schutz gegen Wind, Staub, Feuchtigkeit und Lärm



5

STEICO special

- Holzfaser-Dämmsystem
- Diffusionsoffene Sanierungsplatte mit 3-fach Funktion
 - Sicherheit durch Doppelprofil



3

STEICO therm

- stabile Wärmedämmung
- Druckfeste Wärmedämmung für flächige Anwendungen in Dach und Wand
 - Auch als speziell klassifizierte Trittschall-Dämmplatte



3

STEICO therm internal

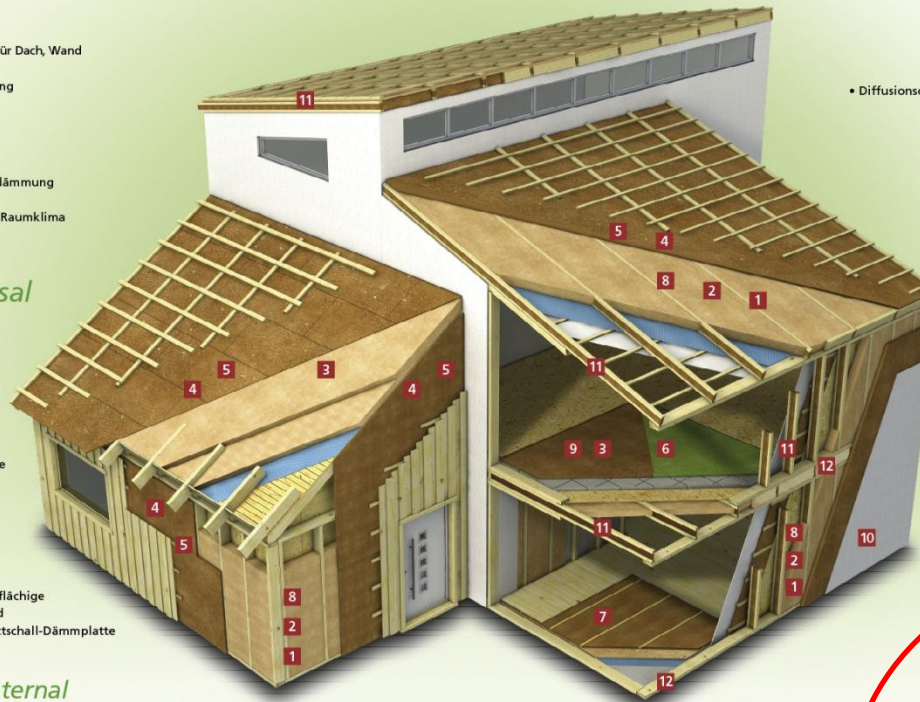
- Innendämmung aus Holzfasern
- Diffusionsoffene Innen-Dämmplatte
 - Ideal für die Sanierung von Mauerwerks- und Fachwerkwänden



6

STEICO underfloor

- Parkett- und Laminatbodenunterlage
- Tritt- und raumschaldämmende Unterlage für Fertigparkett und Laminat
 - Raumklangverbesserung und hoher Gehkomfort



STEICO
natürlich besser dämmen



7

STEICO floor

- Fußboden-Dämmsystem
- Für die trittschallbrückenfreie Verlegung von Dielenböden
 - Diffusionsoffene Wärme- und Trittschalldämmung



8

STEICO zell

- Holzfaser-Einblasdämmung
- Diffusionsoffene Hohlraumdämmung
 - Fugenfreie Dämmschicht, dauerhaft setzungssicher



9

STEICO isorel

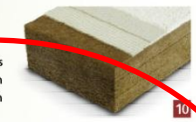
- vielseitige Holzfaserplatte
- Vielseitig einsetzbare Ausbauplatte
 - Dämmplatte für hochbelastbare Estrichkonstruktionen



10

STEICO isorel plus

- für Industrie- und Flachdächer
- Dämmplatte für Flachdächer, Wände und Böden
 - Besonders hohe Druckfestigkeit



10

STEICO protect

- Holzfaser-Dämmplatte für Wände
- Bauaufsichtlich zugelassenes Wärmedämm-Verbundsystem
 - Besonders diffusionsoffen



11

STEICO construction

- Trägersysteme für Dach, Decke & Wand
- Wirtschaftliche Konstruktionen
 - Tragende Bauteile als Ergänzung zum STEICO Dämmstoff-Sortiment



12

STEICO ultralam™

- Taleon Terra Furnierschichtholz
- Dimensionsstabil und hoch belastbar
 - Schlanke Querschnitte, geringes Gewicht

STEICOconstruction System



STEICOwall

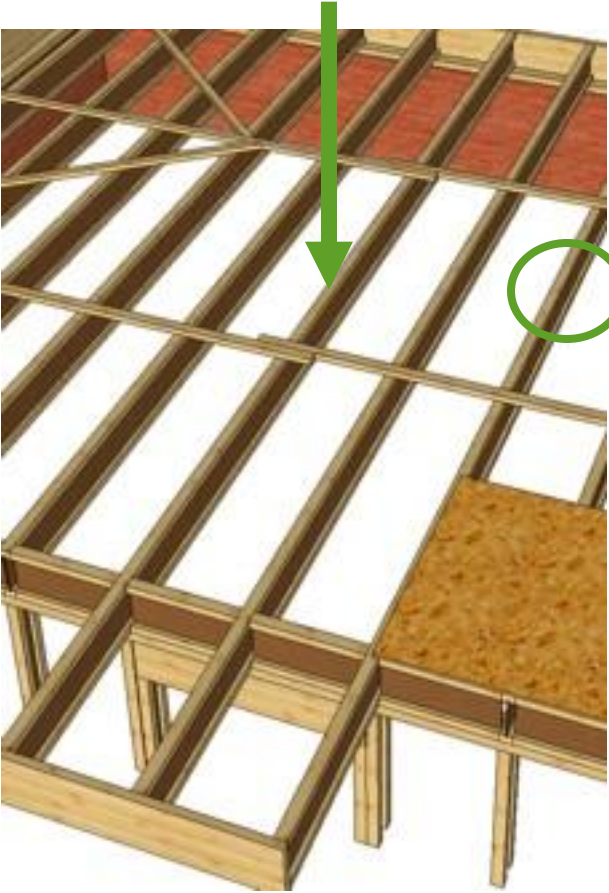


STEICOwall

System for wall studs

- Less thermal bridge because of 6 mm NFB-web
- Available with insulation in web area

STEICOjoist



STEICOjoist System for Roof and Floor

- ✔ Application as joist/beam member
- ✔ 8 mm NFB (Hartfaser) im Steg zur Aufnahme von sehr hohen Schubkräften
- ✔ Laminated Veneer Lumber flanges
- ✔ Available with web insulation



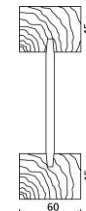
STEICOjoist - Dimensions

Type	flange b*h [mm]	hight H [mm]	length [m]
STEICOjoist SJ 45	45 * 45 / 45 * 39	200	h.
	45 * 45 / 45 * 39	240	
	45 * 45 / 45 * 39	300	
	45 * 45 / 45 * 39	360	
STEICOjoist SJ 60	60 * 45 / 60 * 39	200	Standard length 13,0
	60 * 45 / 60 * 39	240	
	60 * 45 / 60 * 39	300	
	60 * 45 / 60 * 39	360	
	60 * 45 / 60 * 39	400	
STEICOjoist SJ 90	90 * 45 / 90 * 39	200	
	90 * 45 / 90 * 39	240	
	90 * 45 / 90 * 39	300	
	90 * 45 / 90 * 39	360	
	90 * 45 / 90 * 39	400	

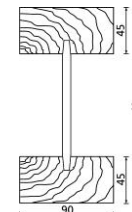
STEICOjoist
System for Floor and Roof



SJ45



SJ60



SJ90



Bauaufsichtlich zugelassen!

ETA = European technical approval

British Board of Agrément
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Authorised and notified according to Article 10 of the Council Directive (89/106/EEC) of 21 December 1988 on the approximation of laws, regulations and administrative provisions of Member States relating to construction products.



BBA APPROVAL INSPECTION TESTING CERTIFICATION
 TECHNICAL APPROVALS FOR CONSTRUCTION
 Designated by Government to issue European Technical Approvals
 Member of EOTA

European Technical Approval ETA-06/0238
*Fourth issue**

Trade name:	STEICOjoist and STEICOwall
Holder of approval:	STEICO SE Hans-Riedl-Straße 21 85622 Feldkirchen Germany Tel: + 49 (0)89 99 1551-0 Fax: + 49 (0)89 99 1551-99 e-mail: info@steico.com website: www.steico.com
Generic type and use of construction product:	Light composite wood-based beams and columns for structural use
Valid from: to:	18 January 2013 27 October 2016
This version replaces	ETA-06/0238 valid from 27 October 2011 to 27 October 2016
Manufacturing plant:	STEICO Sp. z o.o. ul. Przemysłowa 2 04-700 Czanków Poland
This European Technical Approval contains:	Fourteen pages, including four Annexes, which form an integral part of the document

 **European Organisation for Technical Approvals**



🌱 sheartest



Herstellwerk
 zertifiziert gem.
 ISO 9001:2000



Design of STEICOjoist and STEICOLVL



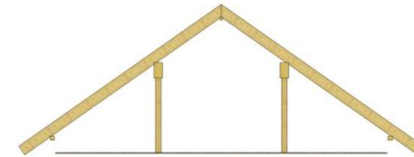
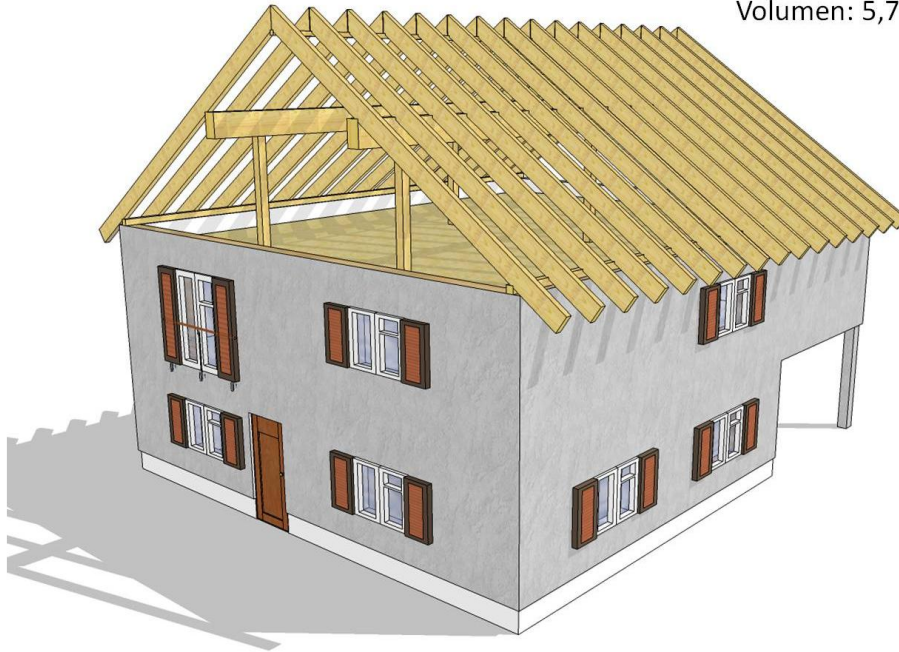
- ✔ *STEICO Design Software*
- ✔ Download under www.steico.com
- ✔ Registration required
- ✔ Free version
- ✔ Joist and Rafter design
- ✔ *STEICjoist / STEICOLVL R*



Dach: conventionell

Sparren:	Vollholz 80mm x 240mm
Firstfette:	Vollholz 80mm x 80mm
Fußfette:	Vollholz 120mm x 120mm
Stützen:	Vollholz 120mm x 120mm
Mittelfette:	Brettschichtholz 160mm x 280mm

Volumen: 5,71m³



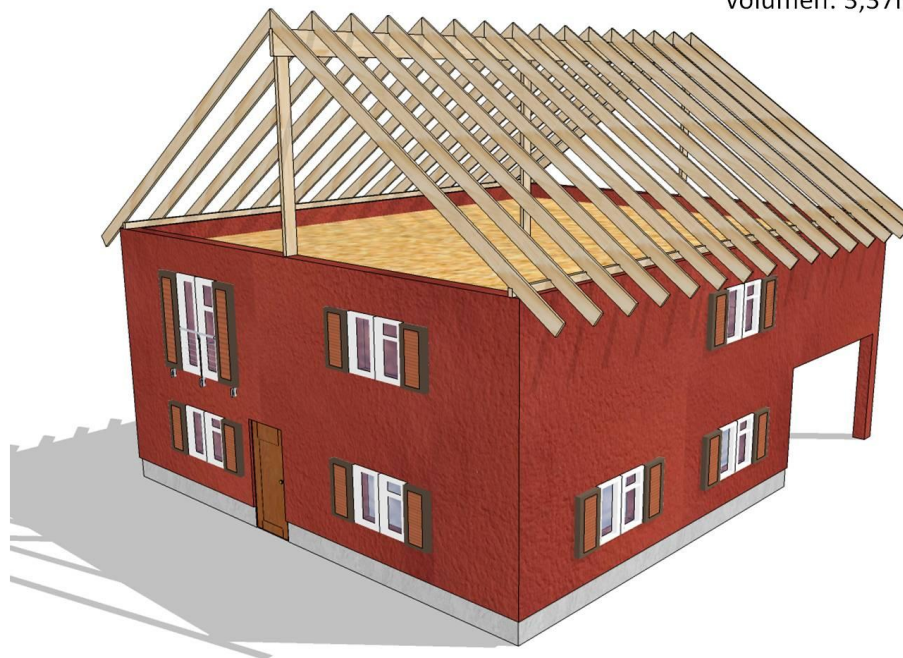
Materialverbrauch: 5,71m³ Holz



Dach: Sparren als STEICOLVL R

Sparren:	STEICOultralam R, 45mm x 240mm
Firstpfette:	STEICOultralam R, 75mm x 400mm
Fußpfette:	STEICOultralam R, 75mm x 120mm
Stütze:	STEICOultralam R, 75mm x 220mm

Volumen: 3,37m³



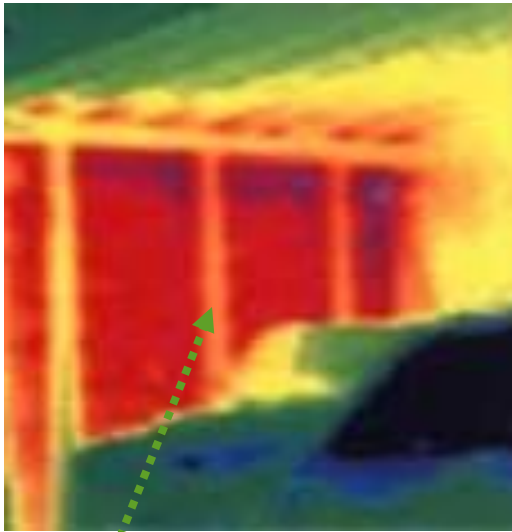
- 41%

Materialverbrauch: 3,37m³ Holz

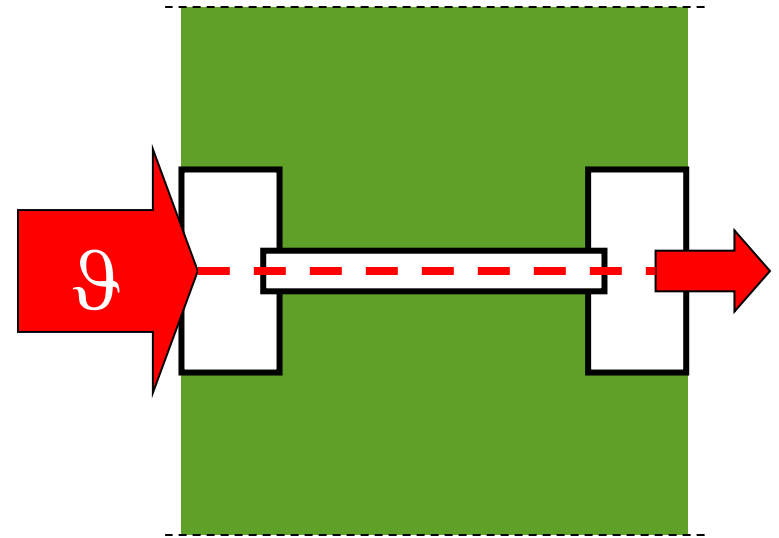
Materialersparnis



Reduce thermal bridges



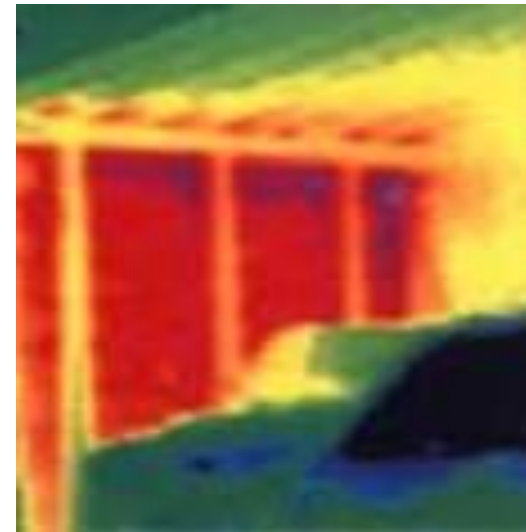
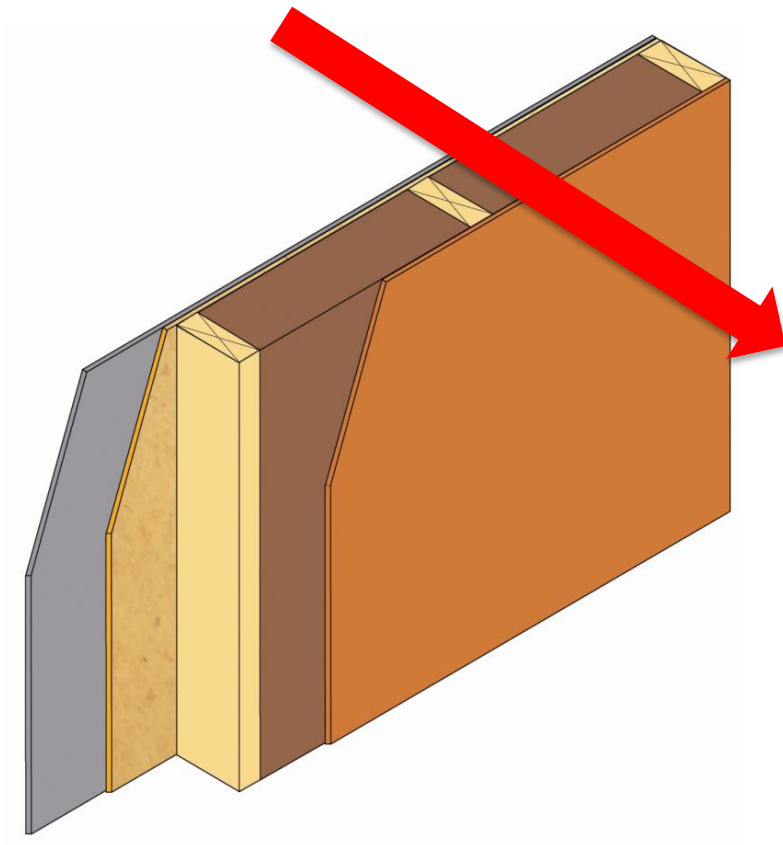
Thermal Bridge



Less timber better insulation!



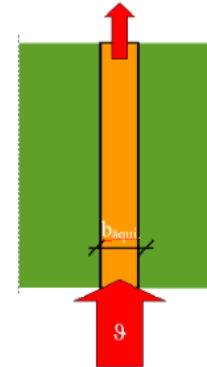
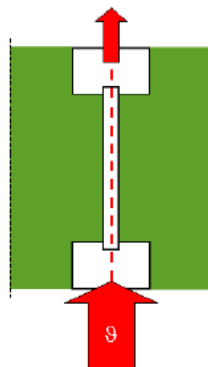
Exterieur wall without additional WF insulation board



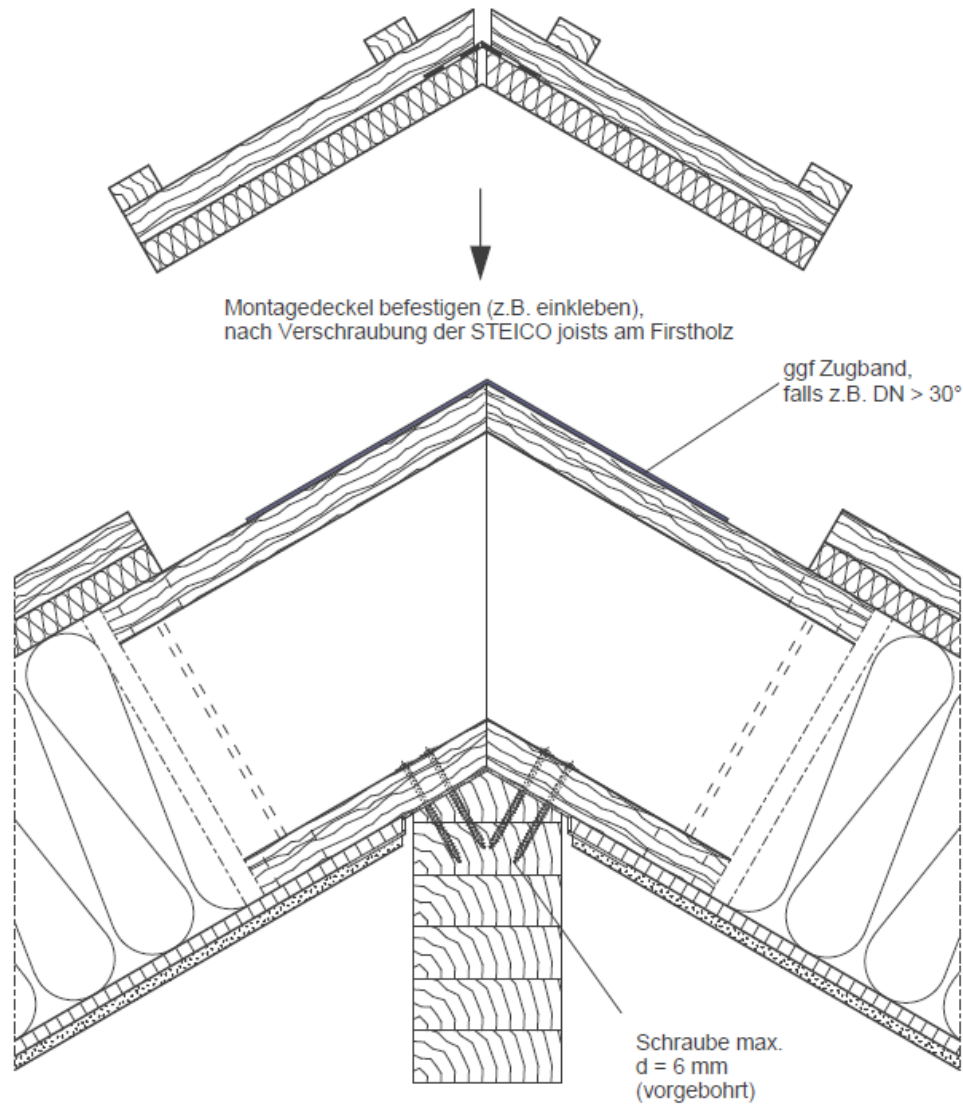
Typ	Höhe H [mm]	Äquivalente Vollholzbreiten $b_{\text{äqui}}$ in [mm]			
		Wärmeleitfähigkeit des Gefachdämmstoffes in [W/mK]			
		0,032	0,035	0,038	0,040
STEICOjoist SJ 45	200	21	21	22	22
	220	20	20	21	21
	240	19	19	20	20
	300	18	18	19	19
	360	17	17	18	18
STEICOjoist SJ 60	200	24	24	25	25
	220	23	23	24	24
	240	22	22	23	23
	300	21	21	21	22
	360	20	20	20	20
	400	19	19	19	19
STEICOjoist SJ 90	200	29	30	31	31
	220	27	28	29	29
	240	25	26	27	27
	300	23	24	25	25
	360	22	22	23	23
	400	20	21	21	22

Reale Situation

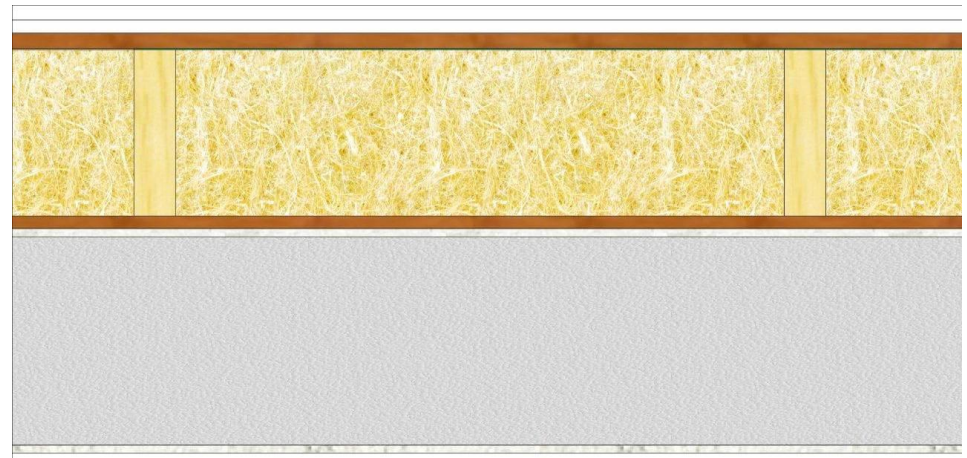
Modellierung



Roof Details certified for Passivhaus



Timberframe konventionell



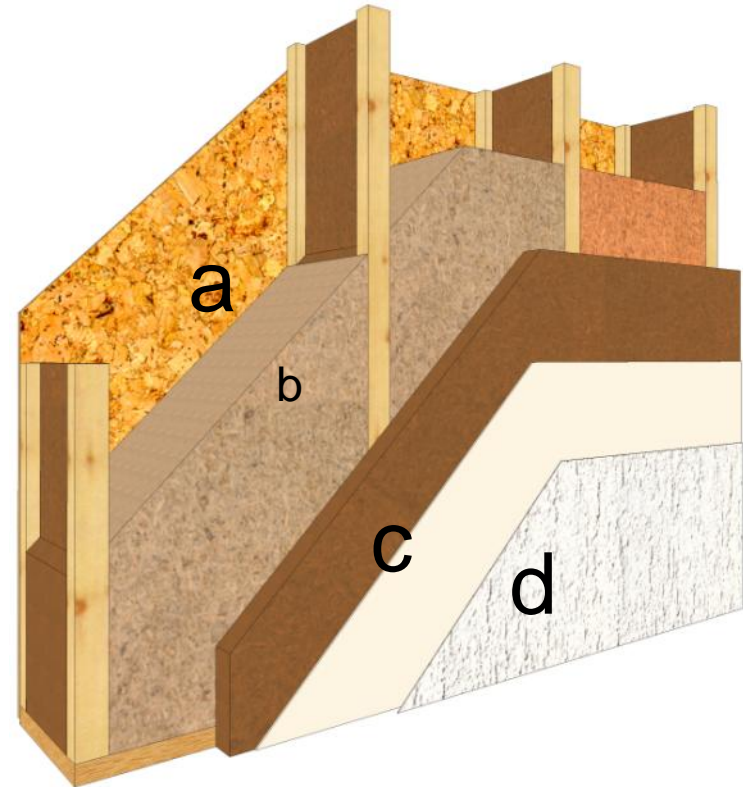
→ Including Plasterboard= 8 Layer



Optimierte Konstruktionen

STEICOconstruction

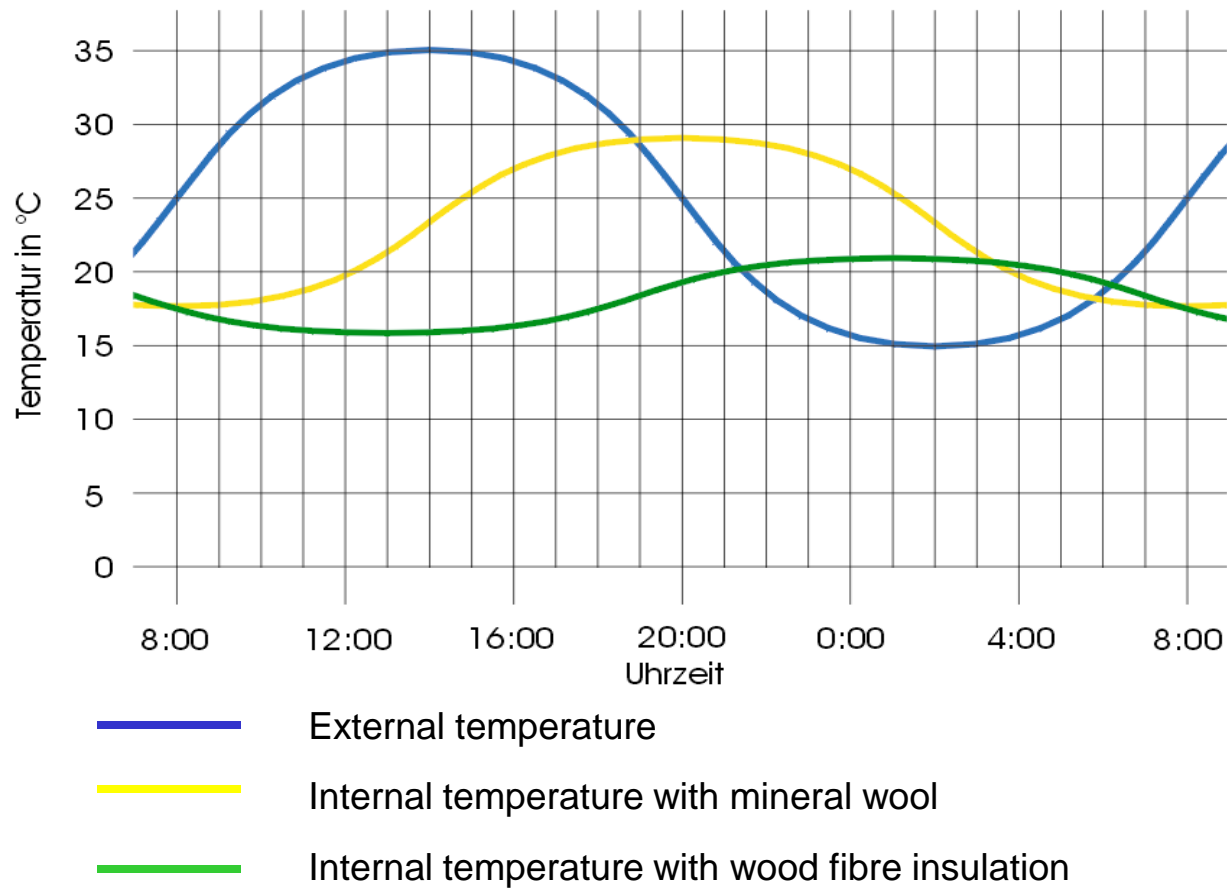
- 🌿 Ecological
- 🌿 Diffusion open
- 🌿 Less labour cost



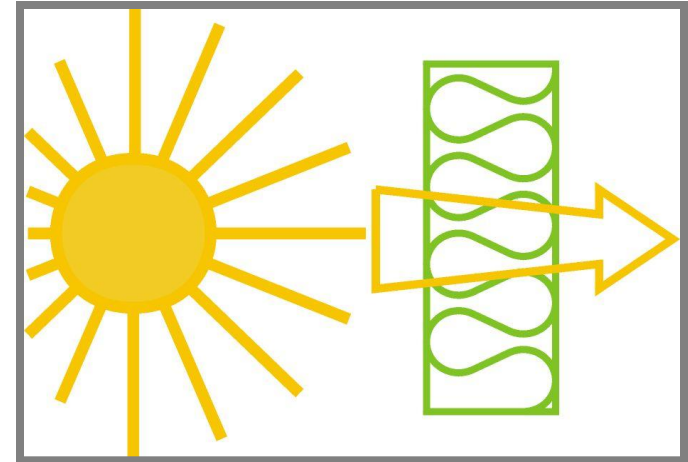
Including Plasterboard= 5 Layer



Temperature range at the roof with different insulation materials



Excellent heat protection in Summer Time



- ✔ low thermal conductivity λ
- ✔ high specific thermal capacity c_p
- ✔ high density ρ
- ✔ low thermal diffusivity a
- ✔ perfect windproofness

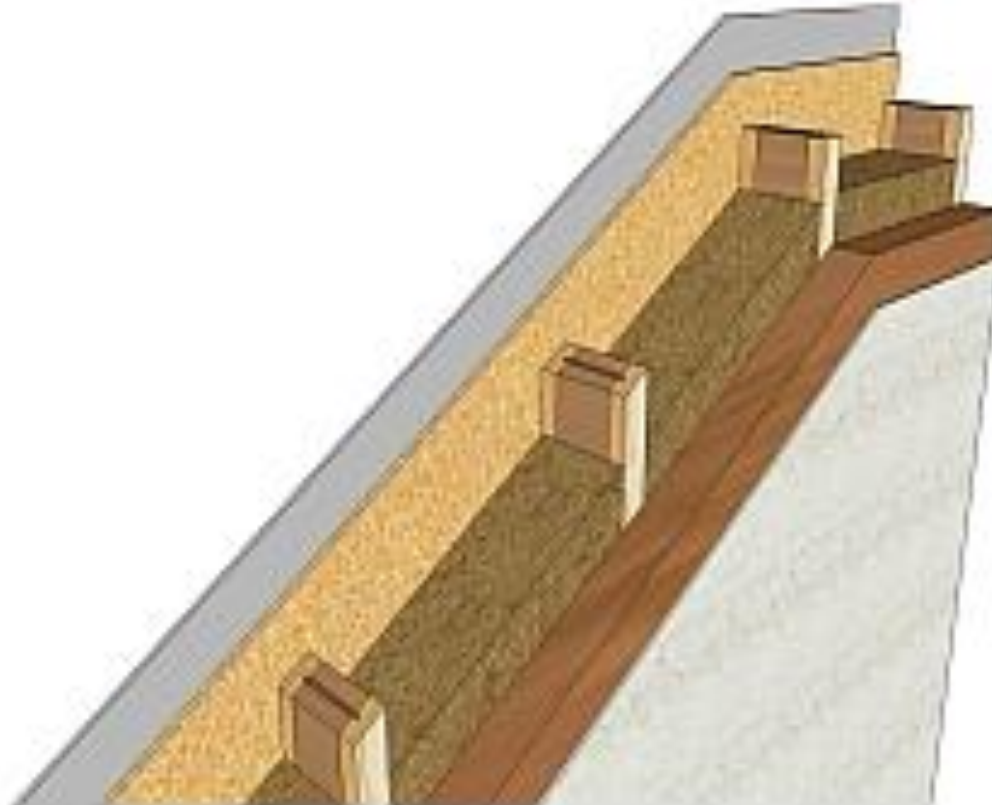


Behaviour in Fire





Fire Resistance: REI 90

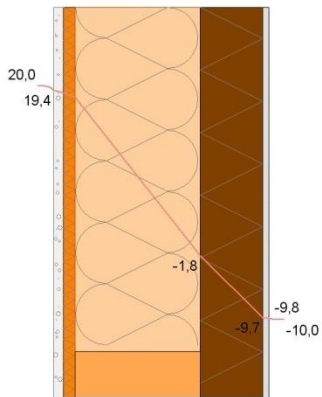


Protection from moisture



☛ Air transports **moisture** as it moves

☛ Moisture wants to equalize with a **difference in vapour pressure** particularly when there is a difference in **Temperature**



☛ Warm air can carry **significantly more** moisture than cold air



Project Villa in Munich



🌿 Prefabrication with STEICO *ultralam R* , STEICO *wall*

Prefabrication of the roof



Prefabrication of the roof



Prefabrication of the roof



BV Eckert in München Trudering



