

# Environmentally friendly building products from renewable resources

Innovation for timber constructions

Ecological building



  
**STEICO**  
engineered by nature

# STEICO *engineered by nature* – environmentally friendly construction products for every project



*As a sustainable building material, wood is known for its excellent qualities, both thermal and ecological.*

Decades of experience and innovative engineering processes have been combined to take advantage of the natural insulation properties of wood as a raw material. The STEICO construction system combines the advantages of natural wood with those of technically refined high-tech materials.

STEICO products are especially economical and environmentally-friendly as they are produced from sustainable resources. The raw materials originate from forests close to the factories as to avoid long transportation routes. Whether for engineered timber elements or insulation materials, roofing boards or wall panels, STEICO offers a suitable product for each building application!

## Innovative structures

The slim STEICO I-Joists are particularly lightweight components capable of bearing a load. They are used for particularly energy-efficient designs. The innovative timber product STEICO *LVL* (Laminated Veneer Lumber) is optimally adapted to the I-joists and used wherever maximum loads need to be transferred.



The design of STEICO I-Joists and STEICO *LVL* was inspired by nature, and they combine load-bearing capacity and stability with the highest level of efficiency. Their low net weight, high load-bearing capacity and slim design allows for the development of future-oriented wood constructions characterised by diversity in design and the highest level of safety.



## Building and living inspired

STEICO – a piece of nature in your home. STEICO all-rounders in the roof, the wall and the floor ensure comfort, healthy living and safety. STEICO products have proven success for decades in hundreds of thousands of buildings all over Europe. The wood used for all STEICO products is sourced from reliable forestry in accordance with the strict certifications of the environmental organisation PEFC.





# More than *insulation* – protection for generations



The advantages of buildings with wood-fibre or cellulose insulation are that they ensure the highest levels of energy efficiency and comfortable warmth.

Due to climate change, we are experiencing significantly hotter summers, and need increasing amounts of energy to keep buildings cool. In light of this, it is sensible to measure the

efficiency of insulation not only in terms of its capability to prevent energy loss during winter, but also in terms of its capability to prevent heat input during summer. STEICO insulating materials offer a very high heat storage capacity combined with low thermal conductivity.



## ed *by nature*

STEICO is a member of the Institut Bauen und Umwelt e.V. (IBU). Also the official seal of the Institut für Baubiologie Rosenheim (Institute for Biologically Sound Construction, IBR) attests that STEICO wood-fibre insulating materials are biologically sound and protect the environment at the same time. The STEICO construction system has also received the recognised Passive House certification.



This special property makes for pleasantly cool interior rooms during summer. STEICO products are vapour-permeable construction products and therefore support reliable moisture management. They provide the structure with effective protection against damage caused by moisture. With these positive properties, the all-rounders ensure a biologically sound indoor climate. The products also reduce noise, thus ensuring a quiet and stress-free living environment. STEICO wood-fibre insulating materials are extremely durable and hard-wearing.



## Sheathing boards and wall panels

### STEICO *universal*

Sarking and sheathing boards

- Roof and wall insulation with a tongue and groove profile
- Also available as STEICO*universal dry*

### STEICO *universal black*

Bitumen impregnated sheathing board

- for curtain walls with joints
- Special black surface

### STEICO *special dry*

Insulation boards for renovations

- Water vapour open insulation board for the renovation of walls and roof
- Also available as STEICO*special dry*

### STEICO *safe*

Sarking and sheathing boards for roofs > 5°

- For roofs > 5°
- Sheathing board with tongue and groove profile with integrated sarking membrane

## STEICO *duo* – multi purpose board

### STEICO *duo dry*

Combined insulated sheathing and render board

- Wood fibre board for render application on external walls
- Sheathing board for both pitched roof and wall constructions
- Insulated wall panel for use behind a rain screen

## External Wall Insulation System

### STEICO *protect*

External thermal insulation composite system

- Ecological renderboard
- Also available as STEICO*protect dry*

## STEICO *secure* render system

### STEICO *secure*

Render system for STEICO wood fibre boards

- Ecological render system
- Choice of two water vapour open render systems

## STEICO *multi* sealing system

### STEICO *multi*

Building shell sealing systems

- Sealing materials for the building shell

## Air injected insulation

### STEICO *zell*

Air injected insulation

- Joint free insulation
- Made from natural wood fibres

### STEICO *floc*

Cellulose air injected insulation

- Joint free insulation
- Made from recycled paper



## Construction products

### STEICO *joist*

I-Joist Building System for floors & roofs

- Lightweight and high load bearing I-joists



## Flexible insulation from wood

### STEICO *flex 036*

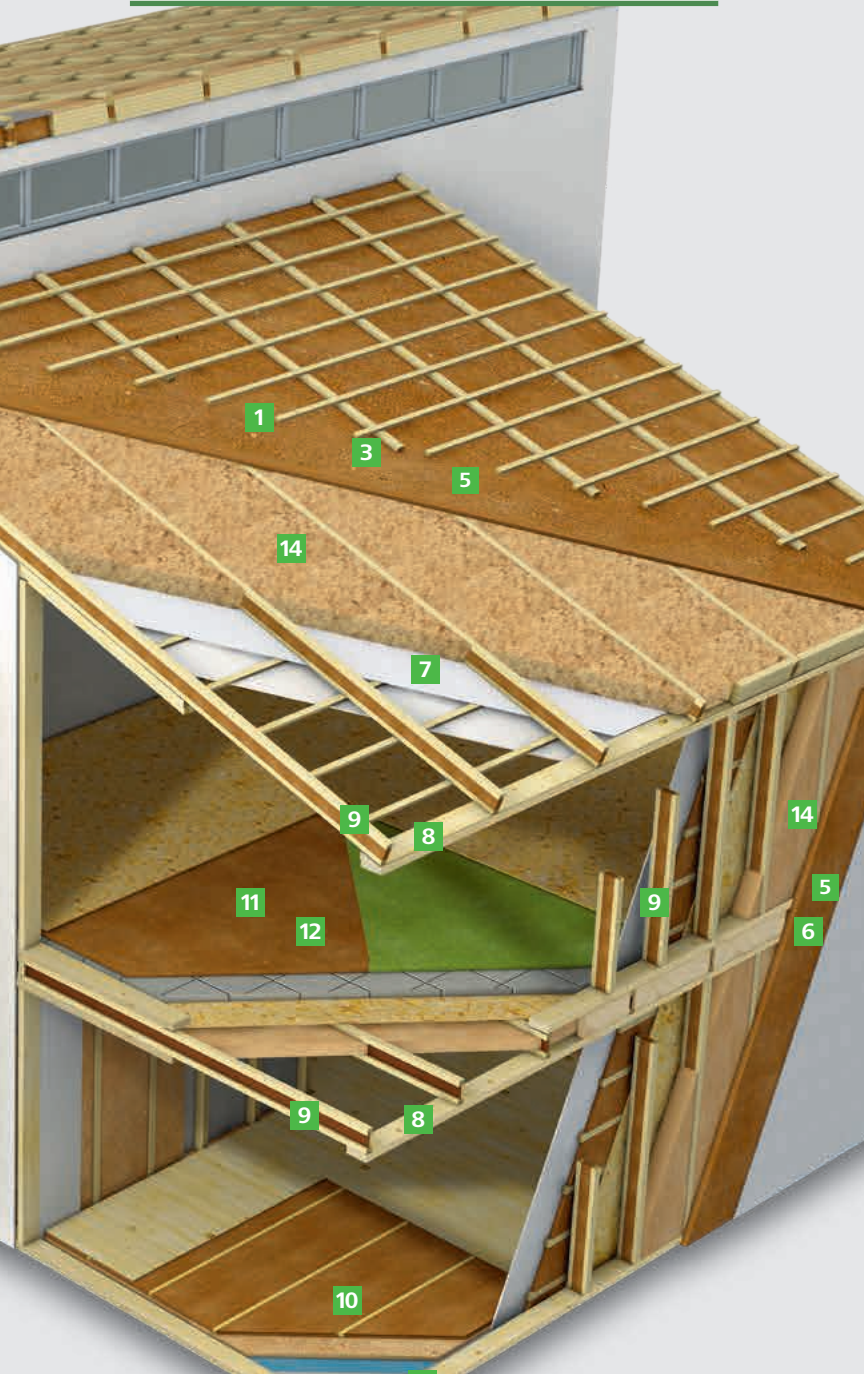
Flexible thermal insulation from wood

- Flexible cavity insulation in roof, dry wall and floor constructions with the lowest thermal conductivity

### STEICO *flex 038*

flexible thermal insulation from wood

- For cavity insulation in roofs, walls and floors



### STEICO *LVL*

Laminated Veneer Lumber

- High strength to weight ratio, dimensional stability

## Rigid insulation from wood

### STEICO *therm*

Rigid insulation

- Rigid insulation for applications on walls and roof
- Also available as STEICO *therm dry*

### STEICO *install*

Insulation for service voids

- Ideal for the installation of service voids in timber constructions

### STEICO *internal*

Internal insulation board

- Water vapour open internal insulation board
- For masonry wall renovation

### STEICO *isorel*

Multi purpose rigid insulation board

- Multi purpose insulation board from natural wood fibre for roof, wall and floor applications

### STEICO *roof dry*

Insulation for flat roofs

- Insulation for flat roof construction
- High compression strength, even with concentrated loads

### STEICO *top*

Insulation for attic floors

- Fit for light footfall without secondary boarding
- Special high resistant surface finish

### STEICO *floor*

floor insulation system

- Floor insulation for solid wooden floors to avoid acoustic bridging

### STEICO *EcoSilent*

underlay for laminate and parquet flooring

- Sound protection and improvement of the acoustics on parquet and laminate floorings

### STEICO *base*

robust insulation for floors and walls

- Ideal solutions for high load bearing wet and dry screed systems

# STEICO PRODUCT OVERVIEW

Sizes<sup>1</sup>

Characteristics<sup>2</sup>

## INSULATION

	Thickness [mm]	Length [mm]	Width [mm]	Surface per board [m <sup>2</sup> ]	Thermal conductivity $\lambda_b$ [W/(m·K)]	Density approx. [kg/m <sup>3</sup> ] Ca	Compression strength [kPa]
<b>Sheathing boards and wall panels</b>							
STEICO <i>universal</i>	22-60	2.230/2.800	600/1.250	1,34/3,50	0,048	270	200
STEICO <i>universal dry</i>	35-100	1.880/2.230	600	1,13/1,34	0,045/0,043	210/180	180
STEICO <i>universal black</i>	22/35	2.230	600	1,34	0,050	260	150
STEICO <i>special dry</i>	60-200	1.880/2.230	600	1,13/1,34	0,040	140	100
STEICO <i>safe</i>	40-160	1.880/2.800	600/1.250	1,13/3,50	0,037-0,043	110-180	50-200
<b>Flexible insulation from wood</b>							
STEICO <i>flex 036</i>	30-240	1.220	450/575	0,55/0,70	0,036	60	
STEICO <i>flex 038</i>	40-240	1.220	575/625/(670) <sup>3</sup>	0,70/0,81	0,038	50	
<b>Air injected insulation materials</b>							
STEICO <i>zell</i>	variable	variable	variable	variable	0,038	40	
STEICO <i>floc</i>	variable	variable	variable	variable	0,038	40-60	
<b>Rigid insulation from wood</b>							
STEICO <i>therm</i>	20-200	1.350-1.880	600	0,81-1,13	0,038	160	50
STEICO <i>therm dry</i>	40-300	1.350-1.880	600	0,81-1,13	0,037	110	50
STEICO <i>install</i>	50/60	2.600/2.650	600-1.250	1,56-3,31	0,040	140	100
STEICO <i>internal</i>	40-80	1.200	380	0,45	0,038	160	40
STEICO <i>isorel</i>	8-19	1.200/1.350/2.500	1.000/600/1.200	1,20/0,81/3,00	0,050	230	100
STEICO <i>roof dry</i>	60-200	800	800	0,64	0,040	140	100
STEICO <i>top</i>	80-100	1.200	400	0,48	0,040	140	100
STEICO <i>floor</i>	40-60	1.200	380	0,43	0,038	160	40
STEICO <i>EcoSilent</i>	3-7	790	590	0,47	0,050 <sup>4</sup>	250	150
STEICO <i>base</i>	20-100	1.350/2.700	600/1.200	0,81/3,24	0,048	250	150
<b>Renderboards for ETICS</b>							
STEICO <i>protect</i>	20-100	1.325/2.800	600-1.250	0,75/3,50	0,046-0,048	230-265	100-180
STEICO <i>protect dry</i>	40-240	1.200-2.800	400-1.250	0,48-3,50	0,037-0,043	110-180	50-200
<b>Combined insulated sheathing and render board</b>							
STEICO <i>duo dry*</i>	40/60	2.230/6.000	600-2.500	1,34-15,0	0,043	180	200

\* XXL formats available up to 6.000 x 2.500 mm

## CONSTRUCTION

<b>Construction products</b>					
STEICO <i>LVL R</i>	39/45/57/75	up to 13.000	up to 600		Laminated veneer lumber with longitudinally glued veneers
STEICO <i>LVL X</i>	30/57	up to 13.000	220/240/300		Laminated veneer lumber with crosswise glued veneers
STEICO <i>G LVL</i>	up to 400	up to 18.000	up to 960		Glue bonded sections of STEICO <i>LVL R</i> or STEICO <i>LVL X</i>

	Flange [mm]	Length [mm]	Joist height [mm]									
			160	200	220	240	280	300	360	400	450	500
STEICO <i>joist</i> I-joist for floor and roof	45	up to 16.000	•	•	•	•	•	•	•	•	•	•
	60		•	•	•	•	•	•	•	•	•	•
	90		•	•	•	•	•	•	•	•	•	•

	$s_d$ value [m]	Weight [g/m <sup>2</sup> ]	Roll weight [kg]	Application
<b>STEICO<i>multi</i> sealing system</b>				
STEICO <i>multi membra 5</i>	5,0	130	10	Vapour barrier sheet for roof, wall and ceiling constructions
STEICO <i>multi renova</i>	0,4-35	110	9	Moisture-variable vapour barrier sheet for roof, wall and ceiling constructions
STEICO <i>multi cover 5</i>	5,0	150	11	Safe-to-walk-on, rainproof vapour barrier sheet
STEICO <i>multi UDB</i>	0,02	170	13	Highly vapour-permeable airtight membrane, sarking membrane and roof lining membrane

<sup>1</sup> Additional formats and thicknesses available on request – minimum order of 60 m<sup>3</sup> required

<sup>2</sup> Application recommendations and certifications are available in our datasheets

<sup>3</sup> Also available with angle cut – see datasheet

<sup>4</sup> In accordance with EN 13986, Tab 11

<sup>5</sup> In accordance with EN 10456, Tab 3

Declared level of airflow resistance [kPa*s/m²]			Fire class according to EN13501-1		General Applications							
					Roof, external insulation, under covering	Roof, external insulation, under felt	Roof, cavity insulation	Roof, interior insulation, inside	Wall, exterior insulation, underneath lining	Wall, timber construction	Wall, interior insulation	Wall, partition wall insulation
	100	E	✗	✗		✗	✗	✗			✗	
	100	E	✗	✗		✗	✗	✗			✗	
		E					✗					
	100	E	✗	✗		✗	✗	✗			✗	
	100	E	✗	✗			✗					
	5	E			✗	✗	✗	✗	✗	✗	✗	
	5	E			✗	✗	✗	✗	✗	✗	✗	
	>5	E			✗	✗	✗	✗	✗	✗	✗	
	>5	E			✗	✗	✗	✗	✗	✗	✗	
	100	E	✗				✗	✗	✗	✗	✗	
		E	✗				✗	✗	✗	✗	✗	
	100	E						✗	✗			
	100	E						✗	✗	✗		
	100	E						✗	✗	✗	✗	
	100	E	✗	✗			✗	✗			✗	
	100	E									✗	
	100	E									✗	
	100	E						✗	✗		✗	
		E									✗	
	100	E				✗		✗	✗	✗	✗	
	100	E				✗	✗	✗		✗		
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	100	E	✗	✗		✗	✗	✗		✗		

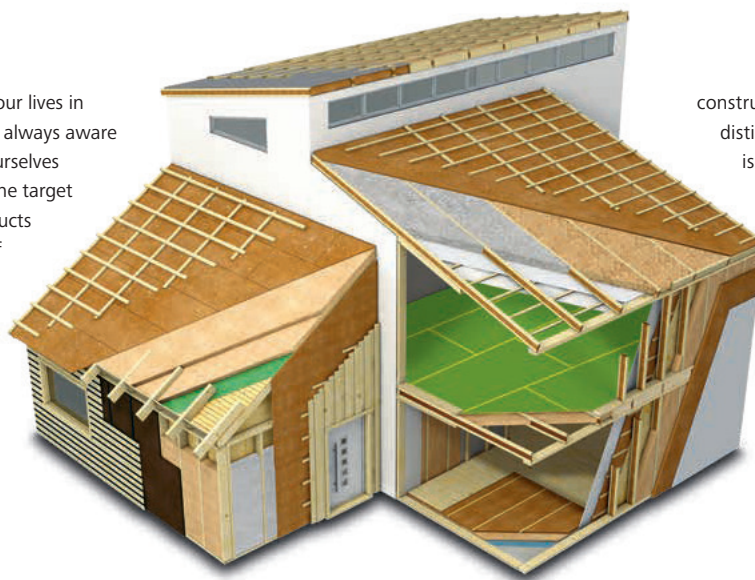
		High load bearing rectangular section for masonry and timber construction and special industrial applications
		Structural beams like girder and lintels, sole and top plate applications, solid floor elements

	Option	Application
	Available fully insulated	Load bearing building component for roofs, floors and walls

ENGINEERED BY NATURE



We spend approx. 80 % of our lives in enclosed rooms. But are we always aware what we are surrounding ourselves with? STEICO has set itself the target of developing building products which consider the needs of both man and nature. Our products are therefore produced using sustainable natural materials. They help reduce energy use and add considerably to a natural healthy internal climate. STEICO insulation and



construction materials, carry a number of distinguished 'seals of approval' which is a sign of high quality, healthy and functional building products.

The raw materials used in STEICO products are certified by PEFC (Programme for the Endorsement of Forest Certification), ensuring a traceable and fully sustainable usage of the raw materials. STEICO, the number 1 choice for your sustainable building solutions.

## Natural insulation and construction systems for new builds and renovations – roof, ceiling, wall and floor



Renewable raw materials without harmful additives



Excellent cold protection in winter



Excellent summer heat protection



Energy saving and increased property worth



Weather tight and breathable



Excellent fire protection



Excellent sound protection



Environmentally friendly and recyclable



Light and easy to handle



Insulation for healthy living



Strong quality control



Compatible insulation and structural building systems



Contact Lemahieu Group:  
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