

Environmentally friendly insulation system made from natural wood fibres



Areas of application

Insulating weatherboarding for roof pitches over ≥16°

Suitable for both sheathing and roofing applications.



Sheathing board in dry process with board thickness up to 180 mm

- · Low thermal conductivity, excellent cold protection
- High 'Summer Heat' protection
- Reduces thermal bridging
- Water vapour open for healthy constructions
- 3 fold functionality; insulation, wind tightness and weatherproofing
- Sustainable and recyclable like natural wood

To achieve sufficient insulation levels, STEICO*flex 036* is fitted between the rafters with STEICO*special dry* laid over them. STEICO*multi UDB* membrane should be installed over the rafters to achieve an air tight structure.



STEICOspecial dry

Roof renovation from the outside

As much as 25 % of all household heat losses occur through the roof. In dwellings where an attic roof has been converted to a habitable space, it is not always possible to insulate the roof from the inside in order to meet new energy efficiency regulations.

Example of roof renovation

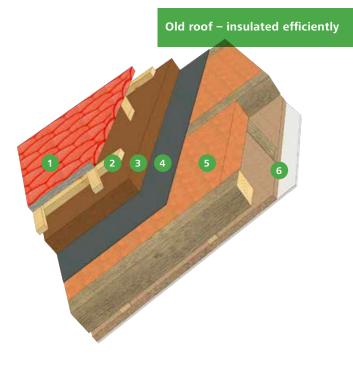
Often rafters are not deep enough in their own right to accept the desired depth of insulation.

STEICO*special dry* has been designed to be laid on top of the rafters, offering the desired insulation values with the least disruption to the inside.

The boards are rigid, stable and most of all good insulators.

Example of renovation

- 1 Roof tiles or similar
- 2 Tile battens and counter battens
- 3 STEICOspecial dry fitted directly onto the rafters
- 4 STEICO*multi UDB* membrane
- 5 Insulation between rafters eg STEICO*flex 036* or STEICO*zell*
- 6 Internal Finishes eg plasterboard



Roof renovation from the outside

Immediate weather protection

When tackling roof renovations with traditional materials, it is usually necessary to offer immediate temporary protection in order to preserve the rooms below from the elements. STEICOspecial dry with its Tongue & Grooved profile can offer immediate wind and rain protection for roofs of pitches over 16° without additional materials, (this can be achieved for roofs with shallower pitches with some additional measures). STEICOspecial dry gives immediate protection against the elements, with up to 4 weeks protection on renovation projects and exposure of up to 12 weeks on new build projects permissible.



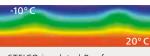
Safe designs

When using a suitable internal finish, it is possible that the requirement for a vapour barrier to be fitted tight on the room side can be negated. This process can be tricky in practice and easily avoided by installing STEICO*multi UDB*. This multi functional layer can be easily laid over the rafters and under the STEICO*special dry* board, offering a simple yet effective solution.

STEICO insulation - the pay off

A non insulated roof in an old building is not only a 'cash guzzler', but also results in cold internal surfaces. This in turn can lead to an uncomfortable air movement in the room. A roof with 140 mm of STEICO*flex 036* and 60 mm STEICO*special dry* will have up to 90 % less energy demand when compared to that of a non insulated roof. A warm ceiling also give a feel good factor.

-10°C 3,7°C



STEICO insulated Roof

Thermal imaging through a cross section of a roof shows the heat loss through the non insulated roof and the pleasant warm room under a Steico insulated roof.

Using STEICOspecial dry in combination with either STEI-

COflex 036 or STEICOzell, super performance roof solutions

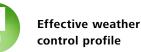
can be achieved, offering great insulation in the winter and

protection against overheating during the summer months...

Advantages at a glance

Very good thermal conductivity

The improved thermal conductivity of STEICO*special dry* allows for a reduced roof thickness whilst maintaining good summer heat protection. By utilising STEICO*special dry* over the rafters, cold thermal bridging is effectively minimised.



The unique Tongue & Grooved profile of STEICOspecial dry has been developed for ease of installation and lasting weather security.



Easily installed, lightweight insulation boards

With a density of circa 140 kg/m³, STEICOspecial dry boards are lightweight and easy to use a 120 mm thick boards only weighs less than 17 kg/m² so can easily be installed by one person. This means that even large roof areas can be quickly, easily and most importantly, economically renovated.



Packaging STEICOspecial dry

Size [mm]	Cover. dim [mm]	Edge profile	Thickness [mm]	Pieces/ palett	m²/ palett	Pallet / cover. [m ²]	Weight [kg/m²]	Pallet weight [kg]		
Handy formats, e.g. for construction site assembly										
2,230 * 600 a)	2,205 * 575	T&G	60	36	48.2	45.6	8.40	approx. 430		
2,230 * 600 ^{a)}	2,205 * 575	T&G	80	28	37.5	35.5	11.20	approx. 445		
2,230 * 600 a)	2,205 * 575	T&G	100	22	29.4	27.9	14.00	approx. 440		
1,880 * 600 b)	1,855 * 575	T&G	120	18	20.3	19.2	16.80	approx. 360		
1,880 * 600 b)	1,855 * 575	T&G	140	16	18.0	17.1	19.60	approx. 370		
1,880 * 600 ^{b)}	1,855 * 575	T&G	160	14	15.8	14.9	22.40	approx. 370		
1,880 * 600 b)	1,855 * 575	T&G	180	12	13.5	12.8	25.20	approx. 360		

Characteristic values STEICOspecial dry

Produced and supervised in accordance with	EN 13171 and EN 14964	
Board Designation	WF-EN 13171-T5-DS(70/-)2-CS(10\Y) 100-TR10-WS1,0-MU3	r
5	EN-14964-IL	p p
Edge Profile	Tongue & Grooved	V
Fire classification according to EN 13501-1	E	S
Thermal Conductivity λ_D [W/(m*K)	0,040	
Declared Thermal Resistance $R_D [(m^2 \star K)/W]$	1,5(60)/2(80)/2,5(100)/3(120)/ 3,5(140)/4(160)/4,5(180)	F
Density [kg/m³]	approx. 140	а
Water vapour resistance diffusion factor $\boldsymbol{\mu}$	3	
s _d value [m]	0,18(60)/0,24(80)/0,30(100)/ 0,36(120)/0,42(140)/0,48(160)/0,54(180)	
Specific Heat Capacity c [J/(kg*K)]	2.100	
Compressive strength at 10 % compression σ_{10} [N/mm ²]	0,1	
Compressive strength [kPa]	≥ 100	
Tensile strength perpendicular to the board [kPa]	≥ 10	
Length related flow resistance $\perp [(kPa*s)/m^2]$	≥ 100	
Raw material	wood fibre, polyurethane resin, paraffin wax	
Waste Code (EAK)	030105/170201, disposal like timber and timber products	

Notes: Store laid flat in dry conditions; protect against edge damage; keep wrapped until ready to use; Maximum stack height of 3 pallets

Planning and installation documents are available at <u>www.steico.com</u>.

a) Size of pallet: approx. 2.25*1.20*1.22m; 24 pallets/truck b) Size of pallet: approx. 1.89*1.22*1.22m; 28 pallets/truck





Quality Management ISO 9001:2015

Environmental Management ISO 14001:2015

www.steico.com

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