

# STEICO *special dry*

Insulation boards for renovations

Environmentally friendly insulation system  
made from natural wood fibres



## RECOMMENDED APPLICATIONS

Insulating weatherboarding made from natural wood fibres.

Suitable for both sheathing and roofing applications.

Ideal for renovation and new build projects.

- Applied over the rafters or studs to improve insulation values
- 3 fold functionality; insulation, wind tightness and weatherproofing
- High 'Summer Heat' protection
- Good sound insulating properties
- Can be laid directly onto the rafters without additional support
- Both easy to handle and work with
- Water vapour open for healthy constructions
- Exposure to the elements for up to 12 weeks on new build projects and 4 weeks for renovation projects for roof pitches over 16°
- High insulation values, improving energy efficiencies
- Reduces thermal bridging

For further information visit our website [www.steico.co.uk](http://www.steico.co.uk)



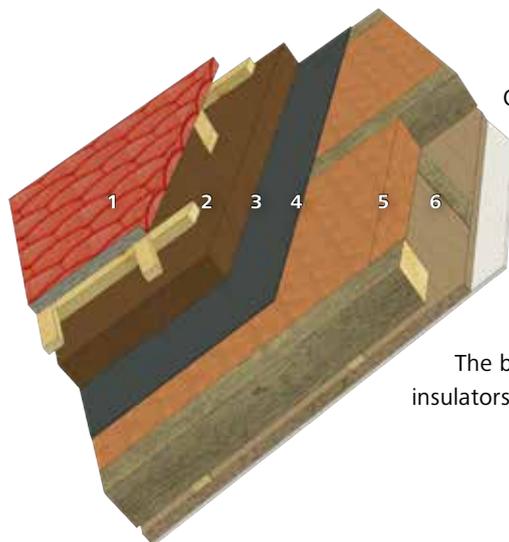
# Old roofs insulated *efficiently*

## STEICO*special dry*: Additional external insulation for roof renovations

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 renovation

- 1 Roof tiles or similar
- 2 Tile battens and counter battens
- 3 STEICO*special dry* fitted directly onto the rafters
- 4 STEICOmuli UDB Membrane
- 5 Insulation between rafters eg STEICOflex 036 or STEICOzell
- 6 Internal Finishes eg Plasterboard



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.

| IMMEDIATE PROTECTION FROM THE WEATHER – WEATHERING UP TO 12 WEEKS



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 STEICOmulti 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.

Using STEICOspecial dry in combination with either STEICOflex 036 or STEICOzell, super performance roof solutions can be achieved, offering great insulation in the winter and protection against overheating during the summer months.

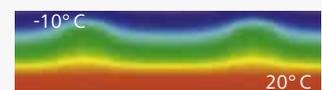
| STEICO INSULATION - THE PAY OFF

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

Non Insulated Roof



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.

A roof with 140 mm of STEICOflex 036 and 60 mm STEICOspecial 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.

| ADVANTAGES AT A GLANCE



**0.040 W/(m\*k): Very good thermal conductivity**

The improved thermal conductivity of STEICOspecial dry allows for a reduced roof thickness whilst maintaining good summer heat protection.

By utilising STEICOspecial dry over the rafters, cold thermal bridging is effectively minimised.



**Effective weather control profile**

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

The profile is compatible to that of STEICOspecial produced on the wet process line and thus can be mixed and matched if necessary.



**Easily installed, lightweight insulation boards**

With a density of circa 140 kg/m³, STEICOspecial dry boards are lightweight and easy to use.

A 60 mm board only weighs 9.1 kg, so can be installed by one person. This means that even large roof areas can be quickly, easily and most importantly, economically renovated.



## CHARACTERISTICS STEICOspecial dry

Thickness [mm]	Size [mm]	Cover. dim [mm]	Weight [kg/m <sup>2</sup> ]	Pieces/ Palett	m <sup>2</sup> / Palett	Pallet Coverage [m <sup>2</sup> ]	Pallet weight [kg]
40 <sup>a</sup>	1.880 * 600	1.855 * 575	5.60	56	63.2	59.7	ca. 420
60	1.880 * 600	1.855 * 575	8.40	38	40.6	40.5	ca. 399
80	1.880 * 600	1.855 * 575	11.20	28	31.6	29.9	ca. 382
100	1.880 * 600	1.855 * 575	14.00	22	24.8	23.5	ca. 370
120	1.880 * 600	1.855 * 575	16.80	18	20.3	19.2	ca. 360
140	1.880 * 600	1.855 * 575	19.60	16	18.0	17.1	ca. 370
160	1.880 * 600	1.855 * 575	22.40	14	15.8	14.9	ca. 370
180	1.880 * 600	1.855 * 575	25.20	12	13.5	12.8	ca. 360
200	1.880 * 600	1.855 * 575	28.00	12	13.5	12.8	ca. 390

### HANDLING

Wood fibre insulation produced in accordance with EN 13171, with quality assurance monitoring. Store laid flat in dry conditions. Protect against edge damage. Keep wrapped until ready to use. Maximum stack height of 2 pallets.

STEICO uses wood from sustainably managed forests, certified according to the strict guidelines of the FSC® (Forest Stewardship Council®).

STEICOspecial dry is particularly user friendly and will not knowingly cause skin irritation. It can be worked with traditional woodworking tools, such as hand or electric saws. When cutting and handling STEICO products please ensure the correct personal protection equipment is used.

a) Only for use in walls

## TECHNICAL DATA STEICOspecial dry

Produced and supervised in accordance with EN 13171	
Board Designation	WF – EN13171 – T5 – CS(10V)100 – TR10 – WS1.0 – MU3
Edge Profile	Special 'Tongue & Grooved' profile (compatible with STEICOspecial – 'wet' process boards)
Fire classification according to EN 13501-1	E
Thermal Conductivity $\lambda_D$ [W/(m*K)]	0.040
Declared Thermal Resistance $R_D$ [(m <sup>2</sup> *K)/W]	1(40)/1.5(60)/2(80)/2.5(100)/3(120)/3.5(140)/4(160)/4.5(180)/5(200)
Density [kg/m <sup>3</sup> ]	ca. 140
Water vapour resistance diffusion factor $\mu$	3
$s_d$ value [m]	0.12(40)/0.18(60)/0.24(80)/0.30(100)/0.36(120)/0.42(140)/0.48(160)/0.54(180)/0.60(200)
Specific Heat Capacity $c$ [J/(kg*K)]	2,100
Compressive strength at 10 % compression $\sigma_{10}$ [N/mm <sup>2</sup> ]	0.10
Compressive strength [kPa]	≥ 100
Tensile strength perpendicular to the board [kPa]	≥ 10
Length related flow resistance [(kPa*s)/m <sup>2</sup> ]	≥ 100
Ingredients	wood fibre, polyurethane resin, paraffin wax
Waste Code (EAK)	030105/170201



**STEICO**  
engineered by nature

Your STEICO Agent

www.steico.co.uk