

STEICO *protect dry* external thermal insulation composite system



- Particularly robust and durable
- Excellent insulation properties in winter and summer
- Both water repellent and vapour permeable for robust constructions
- Large variety of formats and thicknesses from 40 to 240mm
- Suitable for air-injected insulation from 40mm thick
- Available in large format boards for off-site construction
- Extensive catalogue of construction details available
- Manufactured with fresh softwood - sustainable climate protection through CO² storage

Application area



- Types M & H: External insulation for timber frame construction to accept direct render
- (STEICO*Protect L dry / 037*) External insulation for full-surface mineral substrates to accept direct render'
- Windproof tongue and groove connection (if available)

Technical data

Produced and supervised according to	EN 13171, EN 14964
Board designation	Type L dry/037: WF - EN 13171 - T5 - DS(70,90)3 - CS(10Y)50 - TR10 - WS1,0 - MU3; Type M dry: WF - EN 13171 - T5 - DS(70,90)3 - CS(10Y)100 - TR20 - WS1,0 - MU3; Type H dry: WF - EN 13171 - T5 - DS(70,90)3 - CS(10Y)200 - TR30 - WS1,0 - MU3
Fire class (RTF) according to EN 13501-1	E
Permanent temperature range [°C]	≤100
Declared thermal conductivity [W/(m*K)]	Type L dry/037: 0,037; Type M dry: 0,040; Type H dry: 0,043
Density [kg/m ³]	Type L dry / 037: approx. 110; Type M dry: approx. 140; Type H dry: approx. 180
Water vapour diffusion resistance factor μ	3
Specific heat capacity [J/(kg*K)]	2,100
Compression strength [kPa]	Type L dry / 037: 50; Type M dry: 100; Type H dry: 200
Tensile strength perpendicular to face [kPa]	Type L dry / 037: 10; Type M dry: 20; Type H dry: 30
Manufacturing process	dry process / utilization polyurethane resin for panel bonding (approx. 5%)
Ingredients	wood fibre, polyurethane resin, paraffin wax
European Waste Code (EWC)	030105/170201, disposal as wood and wood-based materials, waste wood category A II
Outdoor exposure	4 weeks
Bonded carbon [kg CO ₂ equivalent./m ³]	160 (Protect L dry) / 200 (Protect M dry) / 260 (Protect H dry)

Additional technical data

Thickness [mm]	Type	Declared thermal resistance [(m ² *K)/W]	s _d value [m]
40	H dry	0.90	0.12
60	H dry	1.35	0.18
60	M dry	1.50	0.18
60	H dry	1.35	0.18
60	M dry	1.50	0.18
80	M dry	2.00	0.24
80	L dry/037	2.15	0.24
100	M dry	2.50	0.30
100	L dry/037	2.70	0.30
120	M dry	3.00	0.36
120	L dry/037	3.20	0.36
140	M dry	3.50	0.42
140	L dry/037	3.75	0.42
160	M dry	4.00	0.48
160	L dry/037	4.30	0.48
180	M dry	4.50	0.54
180	L dry/037	4.85	0.54
200	M dry	5.00	0.60
200	L dry/037	5.40	0.60
220	L dry/037	5.90	0.66
240	L dry/037	6.45	0.72

Forms of delivery

Handy formats, e.g. for use on construction sites and for pre-fabricated production

Thickness [mm]	Type	Edge profile	Length [mm]	Width [mm]	Length net [mm]	Width net [mm]	Number/pal. [pcs.]	Coverage/pal. gross [m ²]	Coverage/pal. net [m ²]
60	H dry	T+G	1325	600	1300	575	38	30.210	28.405
60	M dry	T+G	1325	600	1300	575	38	30.210	28.405
80	M dry	T+G	1325	600	1300	575	28	22.260	20.930
100	M dry	T+G	1325	600	1300	575	22	17.490	16.445
120	M dry	T+G	1325	600	1300	575	18	14.310	13.455
140	M dry	T+G	1325	600	1300	575	16	12.720	11.960
160	M dry	T+G	1325	600	1300	575	14	11.130	10.465
180	M dry	T+G	1325	600	1300	575	12	9.540	8.970
200	M dry	T+G	1325	600	1300	575	12	9.540	8.970

Large format panels for pre-fabricated production

Thickness [mm]	Type	Edge profile	Length [mm]	Width [mm]	Number/pal. [pcs.]	Coverage/pal. gross [m ²]
40	H dry	SE	2800	1250	28	98.000
60	H dry	SE	2600	1250	19	61.750
60	H dry	SE	2800	1250	19	66.500
60	H dry	SE	3000	1250	19	71.250
60	M dry	SE	2800	1250	19	66.500
80	M dry	SE	2800	1250	14	49.000
100	M dry	SE	2800	1250	11	38.500
120	M dry	SE	2800	1250	9	31.500
140	M dry	SE	2800	1250	8	28.000
160	M dry	SE	2800	1250	7	24.500

Handy formats, especially for flat and solid Substrates

Thickness [mm]	Type	Edge profile	Length [mm]	Width [mm]	Number/pal. [pcs.]	Coverage/pal. gross [m ²]
80	L dry/037	SE	600	400	56	13.400
100	L dry/037	SE	1200	400	22	10.560
120	L dry/037	SE	1200	400	18	8.640
140	L dry/037	SE	600	400	32	7.680
140	L dry/037	SE	1200	400	16	7.680
160	L dry/037	SE	600	400	28	6.720
160	L dry/037	SE	1200	400	14	6.720
180	L dry/037	SE	600	400	24	5.760
180	L dry/037	SE	1200	400	12	5.760
200	L dry/037	SE	600	400	24	5.760
200	L dry/037	SE	1200	400	12	5.760
220	L dry/037	SE	1200	400	10	4.800
240	L dry/037	SE	1200	400	10	4.800

Technical data sheet

STEICO *protect dry*
external thermal insulation composite system

Weight and packing

Handy formats, e.g. for use on construction sites and for pre-fabricated production

Thickness [mm]	Type	Edge profile	Length [mm]	Width [mm]	Weight/m ² [kg]	Weight/pcs. [kg]	pac./pal. paper/ cardboard (approx) [kg]	pac./pal. plastic (approx) [kg]	pac./pal. wood (approx) [kg]	Weight./ pal. (approx.) [kg]
60	H dry	T+G	1325	600	10.80	8.1	2.50	1.0	30.7	345
60	M dry	T+G	1325	600	8.40	6.3	4.10	1.1	30.7	275
80	M dry	T+G	1325	600	11.20	8.4	4.10	1.1	30.7	275
100	M dry	T+G	1325	600	14.00	10.5	4.10	1.1	30.7	270
120	M dry	T+G	1325	600	16.80	12.6	4.10	1.1	30.7	265
140	M dry	T+G	1325	600	19.60	14.7	4.10	1.1	30.7	275
160	M dry	T+G	1325	600	22.40	16.7	4.10	1.1	30.7	275
180	M dry	T+G	1325	600	25.20	18.8	4.10	1.1	30.7	265
200	M dry	T+G	1325	600	28.00	20.9	4.10	1.1	30.7	290

Large format panels for pre-fabricated production

Thickness [mm]	Type	Edge profile	Length [mm]	Width [mm]	Weight/m ² [kg]	Weight/pcs. [kg]	pac./pal. paper/ cardboard (approx) [kg]	pac./pal. plastic (approx) [kg]	pac./pal. wood (approx) [kg]	Weight./ pal. (approx.) [kg]
40	H dry	SE	2800	1250	7.20	25.2	0.10	1.5	59.5	770
60	H dry	SE	2600	1250	10.80	35.1	0.10	1.5	56.3	730
60	H dry	SE	2800	1250	10.80	37.8	0.10	1.5	59.5	785
60	H dry	SE	3000	1250	10.80	40.5	0.10	1.5	61.5	835
60	M dry	SE	2800	1250	8.40	29.4	0.10	1.5	58.8	625
80	M dry	SE	2800	1250	11.20	39.2	0.10	1.5	58.8	615
100	M dry	SE	2800	1250	14.00	49.0	0.10	1.5	58.8	605
120	M dry	SE	2800	1250	16.80	58.8	0.10	1.5	58.8	595
140	M dry	SE	2800	1250	19.60	68.6	0.10	1.5	58.8	615
160	M dry	SE	2800	1250	22.40	78.4	0.10	1.5	58.8	615

Handy formats, especially for flat and solid Substrates

Thickness [mm]	Type	Edge profile	Length [mm]	Width [mm]	Weight/m ² [kg]	Weight/pcs. [kg]	pac./pal. paper/ cardboard (approx) [kg]	pac./pal. plastic (approx) [kg]	pac./pal. wood (approx) [kg]	Weight./ pal. (approx.) [kg]
80	L dry/037	SE	600	400	8.80	2.1	0.10	0.7	16.2	140
100	L dry/037	SE	1200	400	11.00	5.3	0.10	0.7	16.2	135
120	L dry/037	SE	1200	400	13.20	6.3	0.10	0.7	16.2	135
140	L dry/037	SE	600	400	15.40	3.7	0.10	0.7	16.2	140
140	L dry/037	SE	1200	400	15.40	7.4	0.10	0.7	16.2	140
160	L dry/037	SE	600	400	17.60	4.2	0.10	0.7	16.2	140
160	L dry/037	SE	1200	400	17.60	8.4	0.10	0.7	16.2	140
180	L dry/037	SE	600	400	19.80	4.8	0.10	0.7	16.2	135
180	L dry/037	SE	1200	400	19.80	9.5	0.10	0.7	16.2	135
200	L dry/037	SE	600	400	22.00	5.3	0.10	0.7	16.2	150
200	L dry/037	SE	1200	400	22.00	10.6	0.10	0.7	16.2	150
220	L dry/037	SE	1200	400	24.20	11.6	0.10	0.7	16.2	135
240	L dry/037	SE	1200	400	26.40	12.7	0.10	0.7	16.2	150

☑ state 11/2024 ⓘ The current edition applies. Errors excepted ⓘ Caption see last page

Notes

Storage

- Store wood fibre boards horizontally, flat and dry
- Protect edges from damage
- Only remove the film packaging when the ambient climate is dry and keep the pallet packing label
- Maximum stacking height: (protect H dry) 4 pallets / (Protect M dry) 3 Pallets / (Protect L dry) 2 Pallets

Disposal

- Disposal of offcuts: Waste code (EWC / AVV) 170201/030105, disposal as wood and wood-based materials, waste wood category II
- Disposal after dismantling: Waste code (EWC / AVV) 170201/030105, disposal as wood and wood-based materials, waste wood category II

Cutting

- The boards can be cut to size using the STEICO *isoflex cut combi* cutting table, band saw, circular saw, jigsaw and other wood-cutting tools.

Occupational health and safety

- Comply with local regulations for the processing of wood-fibre material.
- Suitable protective measures must be taken when cutting the wood fibre insulation boards. (dust extraction, dust mask)

Building moisture

- Wood fibre insulation boards are delivered dry. On building sites a material moisture level is reached that allows immediate plaster coating.
- In the event of prolonged damp weathering with driving rain, or in periods of very high humidity, the material moisture content of the wood fibre insulation boards that have not yet been plastered increase significantly. Before plastering, a limit moisture content of the wood fibre insulation board of 13 % must be maintained.
- For renovations and new buildings made of mineral building materials a high core moisture content of the substrate must be avoided.

Installation

Installation as a plaster base board

Under <http://www.steico.com/en/technical-installation> or the enclosed QR code, you will find the processing instructions for this product under the category „processing instructions STEICO ETICS“.
(Installation instructions facade insulation)

Additional information

- STEICO *protect dry* with **T&G** has a water-repellent surface - can be used without additional weatherproof membranes behind rear-ventilated façades
- The maximum weight of the entire render system is 25kg
- Gluing clinker brick slips onto the plaster base board / plaster system is not permitted
- This document is based on the German technical data sheet and is intended for general information purposes in an international context. National regulations and building codes must be additionally observed.



Certificates and quality management



☰ Caption

other abbreviations

- pal.** Pallet
- T&G** Tongue and Groove
- pac.** Packaging
- approx.** Approximately
- SE** square edge
- Pcs.** Pieces