

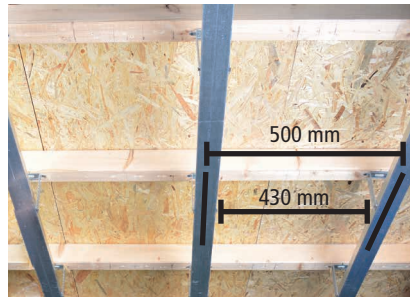


Ceiling Heating System E-ERGY CARBON DRYTEC

Installation instructions



Prepare a level, clean, load-bearing substructure.



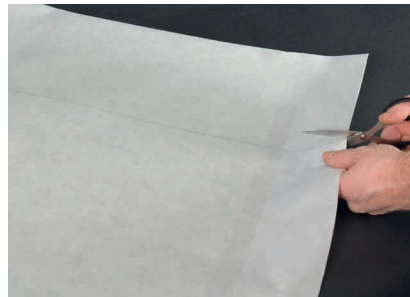
Centre distance 500 mm (min. 430 mm distance between profiles). Observe manufacturer's instructions and generally recognised rules of technology.



Apply insulation, e.g. mineral wool. Only use insulation materials without aluminium lamination.



Check the resistance according to the installation and operating instructions and document the values in the test report.



The heating foil can be individually shortened in advance. Perpendicular cut edges to the copper sheets are a prerequisite.



Re-measure resistances of cut foils and document them on the label and in the test report – refer to the assembly instructions for nominal values.



For parallel alignment of the heating foils, make markings perpendicular to the profiles.



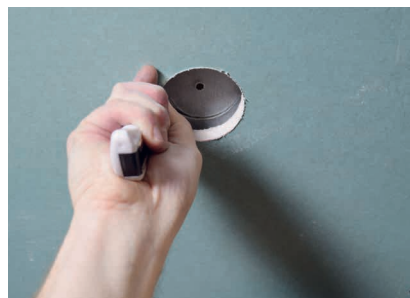
Prepare profiles with double-sided adhesive tape.



Attach the heating foil to the mounting strip without kinks and folds. The transparent PET coating faces upwards towards the profile.



The electrically active heating area (410 mm) must always be aligned with a distance of 10 mm to each side between the drywall profiles.



Subsequent installations can be made up to a \varnothing 70 mm can be retrofitted. Copper strips must not be damaged in the process.

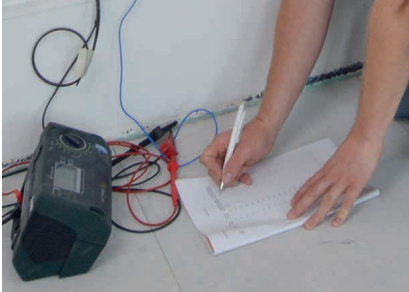


Connect the connection cable and lead it to the transformer.



Ceiling Heating System E-ERGY CARBON DRYTEC

Installation instructions

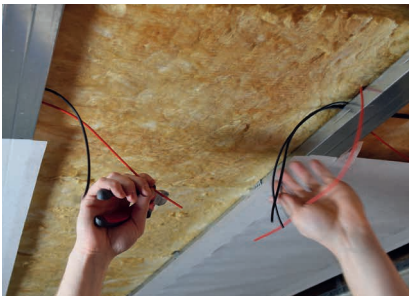


Check resistance after installation according to installation instructions & operating instructions and document values in the test report.



Install drywall board (max. thickness 12.5 mm) according to manufacturer's instructions.

Detailed information for parallel connection of several heating foils (universal connector)*



Twist the cable ends and insert them into the universal connector. Observe the cross-sections of the cables and the universal connector.



Press the universal connector in the centre with crimping pliers for crimp connectors according to DIN 46341-1, Forma A (e.g. crimping tool Klauke K25).

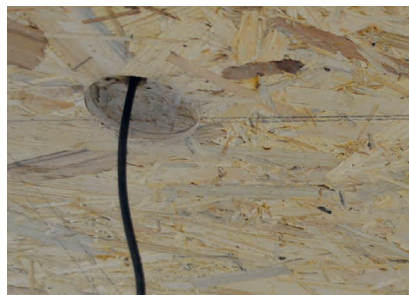


Pull the shrink tubing over the centre of the compression joint and shrink it with a hot air gun.

Note for installation with sarking plate



Mark the area of the heating foil contacts on the lower deck panel.



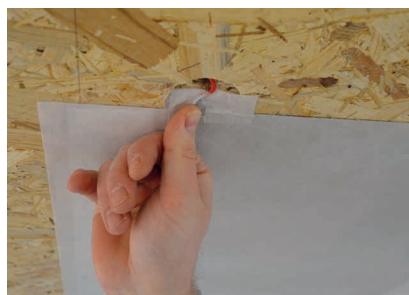
Create a recess for the foil contact and lay the supply lines.



Attach the heating foil to the mounting strip, e.g. with double-sided adhesive tape or staples to the lower deck panel.



Connect the connection cable with the supply cable. Note details of the crimp connector/universal connector.



Insert cable and connection contact flush. If necessary, seal the recess vapour-tight.



Fix drywall boards (max. 12.5 mm thick) outside the electrically active heating area (410 mm) e.g. in the mounting strip acc. to the manufacturer's instructions.



Ceiling Heating System E-ENERGY CARBON DRYTEC

Installation instructions

Only a maximum of 400 W may be connected to the individual load outputs of the power supply units of the BASIC TT and HT series. A maximum of 300 W may be connected to the BASIC EI power supply unit. The maximum lengths of the individual heating tracks are:

E-ENERGY CARBON DRYTEC – 45 W/lfm (112 W/m ²)	max. 8.8 m at 400 W and max. 6.6 m with 300 W
--	--

Depending on the version, the power supply units can be surface-mounted or flush-mounted. For this purpose, a minimum distance of 50 mm from the foil must be maintained. The maximum cable length on the secondary side of the power supply unit is allowed:

10 m with 2.5 mm ² cable
25 m with 6 mm ² cable

Resistance values as a function of length*

Länge Length	DRYTEC 45 W/lfm (112 W/m ²)	Länge Length	DRYTEC 45 W/lfm (112 W/m ²)	Länge Length	DRYTEC 45 W/lfm (112 W/m ²)
0.1 m	288.80 Ω	3.1 m	9.32 Ω	6.1 m	4.73 Ω
0.2 m	144.40 Ω	3.2 m	9.03 Ω	6.2 m	4.66 Ω
0.3 m	96.27 Ω	3.3 m	8.75 Ω	6.3 m	4.58 Ω
0.4 m	72.20 Ω	3.4 m	8.49 Ω	6.4 m	4.51 Ω
0.5 m	57.76 Ω	3.5 m	8.25 Ω	6.5 m	4.44 Ω
0.6 m	48.13 Ω	3.6 m	8.02 Ω	6.6 m	4.38 Ω
0.7 m	41.26 Ω	3.7 m	7.81 Ω	6.7 m	4.31 Ω
0.8 m	36.10 Ω	3.8 m	7.60 Ω	6.8 m	4.25 Ω
0.9 m	32.09 Ω	3.9 m	7.41 Ω	6.9 m	4.19 Ω
1.0 m	28.88 Ω	4.0 m	7.22 Ω	7.0 m	4.13 Ω
1.1 m	26.25 Ω	4.1 m	7.04 Ω	7.1 m	4.07 Ω
1.2 m	24.07 Ω	4.2 m	6.88 Ω	7.2 m	4.01 Ω
1.3 m	22.22 Ω	4.3 m	6.72 Ω	7.3 m	3.96 Ω
1.4 m	20.63 Ω	4.4 m	6.56 Ω	7.4 m	3.90 Ω
1.5 m	19.25 Ω	4.5 m	6.42 Ω	7.5 m	3.85 Ω
1.6 m	18.05 Ω	4.6 m	6.28 Ω	7.6 m	3.80 Ω
1.7 m	16.99 Ω	4.7 m	6.14 Ω	7.7 m	3.75 Ω
1.8 m	16.04 Ω	4.8 m	6.02 Ω	7.8 m	3.70 Ω
1.9 m	15.20 Ω	4.9 m	5.89 Ω	7.9 m	3.66 Ω
2.0 m	14.44 Ω	5.0 m	5.78 Ω	8.0 m	3.61 Ω
2.1 m	13.75 Ω	5.1 m	5.66 Ω	8.1 m	3.57 Ω
2.2 m	13.13 Ω	5.2 m	5.55 Ω	8.2 m	3.52 Ω
2.3 m	12.56 Ω	5.3 m	5.45 Ω	8.3 m	3.48 Ω
2.4 m	12.03 Ω	5.4 m	5.35 Ω	8.4 m	3.44 Ω
2.5 m	11.55 Ω	5.5 m	5.25 Ω	8.5 m	3.40 Ω
2.6 m	11.11 Ω	5.6 m	5.16 Ω	8.6 m	3.36 Ω
2.7 m	10.70 Ω	5.7 m	5.07 Ω	8.7 m	3.32 Ω
2.8 m	10.31 Ω	5.8 m	4.98 Ω	8.8 m	3.28 Ω
2.9 m	9.96 Ω	5.9 m	4.89 Ω		
3.0 m	9.63 Ω	6.0 m	4.81 Ω		

*If the resistance readings deviate more than 15 % from the initial value, damage to the contacts or the heating foil must be expected. In this case, do not put the heating system into operation.

If several heating foils of one foil variant are connected together to one supply line, the sum of the individual lengths must be used as the resistance value. For example, if a 1.20 m long heating foil is connected in parallel with a 1.50 m long heating foil, the total resistance must correspond to the resistance measured value of 2.70 m. When connecting several heating foils in parallel, the permissible maximum power of the load outputs of the power supply units must not be exceeded. Connecting the heating foils in series is not permitted.

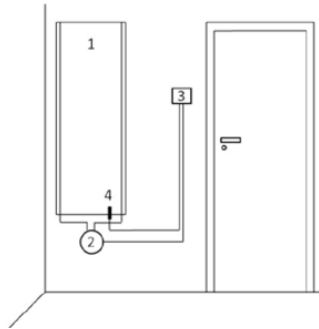


Ceiling Heating System E-ENERGY CARBON DRYTEC

Installation instructions

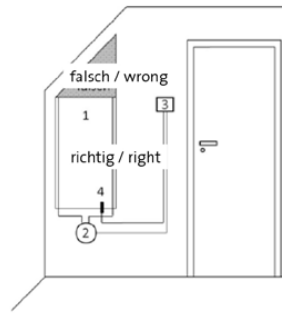
General information

Allgemeiner Wandaufbau
General wall structure



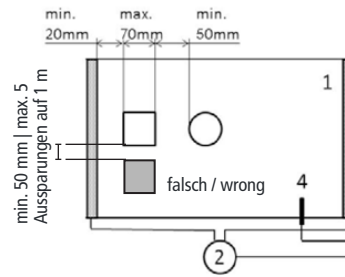
- (1) Heizungsfolie
- (2) Trafo
- (3) Regler
- (4) Fühler

Folienbeschnitt
Film cutting



- (1) Heating film
- (3) Controller

Folienaussparungen
Film cutout



- (2) Transformier
- (4) Sensor

Example of an installation situation for power supply unit HT 1,200 W AP / 2,000 W AP

