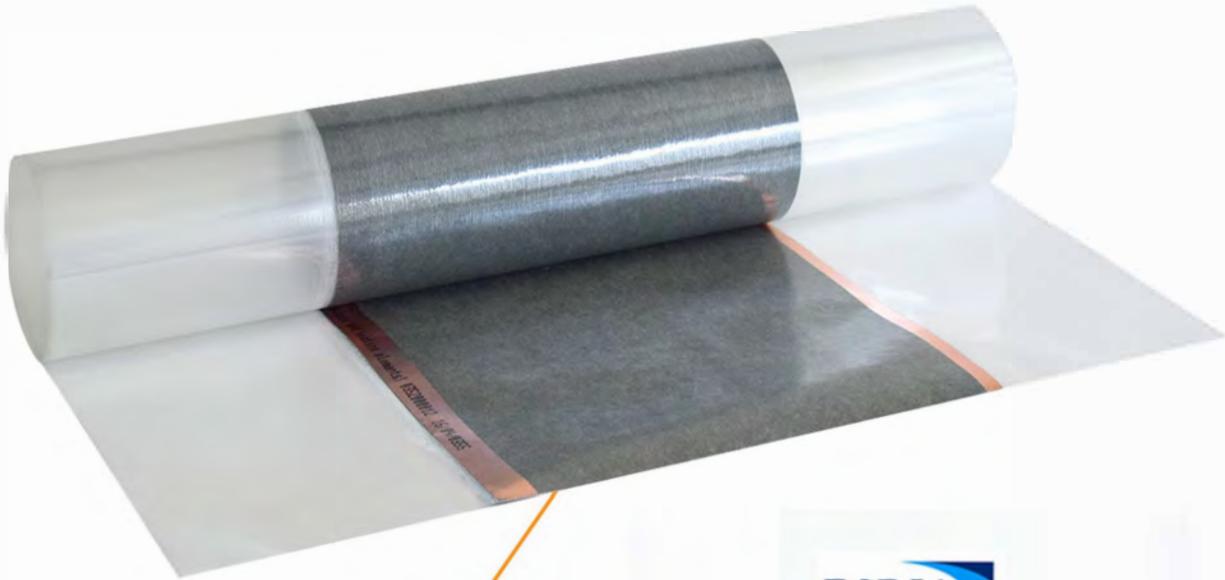


DRYTEC

Comfortable warmth at the touch of a button
Innovative heating Drytec foils for all types of
ceiling & walls



Tapes or staples neatly and quickly between the
ceiling joists behind the plasterboard



- ✓ **Tested and proven**
Fast reaction time
- ✓ **Tested and proven**
50% ceiling coverage
gives 100% heating coverage.
True MRT
- ✓ **Tested and proven**
Warms occupants,
surfaces and objects up
to 3.5m from ceiling
- ✓ **Tested and proven**
High speed 1st fix installation
by one trade/electrician
- ✓ **Tested and proven**
Safe, low surface temperature,
no damage to any other building
products





E-ENERGY CARBON DRYTEC – Innovative Heizfolie für den Trockenbau

E-ENERGY CARBON DRYTEC – Innovative heating foil for the dry construction

von by Daniel Schuschan

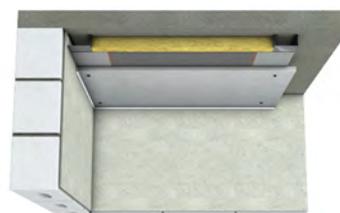
Die mfh systems erweitert mit der neuen, speziell für den Trockenbau entwickelten **E-ENERGY CARBON DRYTEC** sein Produktportfolio innerhalb des **E-ENERGY CARBON** Flächenheizungssysteme. Die Installation erfolgt unmittelbar am Ständerwerk der Wand bzw. der Unterkonstruktion an der Decke, bevor die abschließende Trockenbauplatte installiert wird.

Die **DRYTEC** besteht aus einem mittig angeordneten 410 mm breiten Heizbereich (elektrisch aktive Fläche) und zwei an den Seiten verlaufenden jeweils 95 mm breiten Montagestreifen.

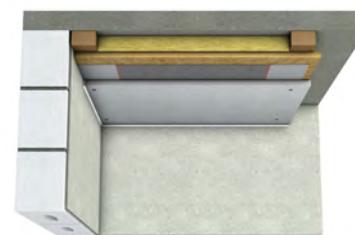
*mfh systems expands its product portfolio within the **E-ENERGY CARBON** panel heating system with the new **E-ENERGY CARBON DRYTEC**, which was specially developed for drywall construction. The installation takes place directly on the stud frame of the wall or the substructure on the ceiling before the final drywall panel is installed.*

***DRYTEC** consists of a 410 mm wide central heating zone (electrically active area) and two 95 mm wide mounting strips running along the sides.*

i Weitere Infos
Further information

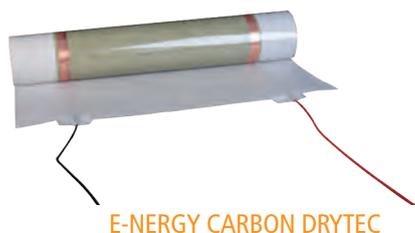


E-ENERGY CARBON DRYTEC mit Trockenbauprofilen
E-ENERGY CARBON DRYTEC with dry construction profiles



E-ENERGY CARBON DRYTEC mit Unterdeckplatte
E-ENERGY CARBON DRYTEC with sub-ceiling tile

Die Montagestreifen dienen zur Befestigung an der Unterkonstruktion und können bei der Montage der nachträglich angebrachten Trockenbauplatten problemlos mit Schrauben oder Klammern durchdrungen werden ohne die elektrisch aktive Heizzone zu berühren. Fehlströme bei metallischen Unterkonstruktionen werden somit dauerhaft vermieden.



E-ENERGY CARBON DRYTEC

Einfache und schnelle Montage

Der größte Vorteil von **E-ENERGY CARBON DRYTEC** liegt in der einfachen und schnellen Montage. In Abhängigkeit der Unterkonstruktion, können die Montagestreifen z. B. mit doppelseitigem Klebeband an metallischen Profilen verklebt oder auf Holzunterkonstruktionen mit Schrauben oder Tackernadeln befestigt werden. Nachdem die elektrische Installation und Inbetriebnahme des Systems durchgeführt worden ist, kann das folgende Gewerk die Fläche mit handelsüblichen Trockenbauplatten in einer Stärke von max. 12,5 mm (z. B. Gipskarton oder Gipsfaserplatten) schließen. Sofern die Verlegung der elektrischen Flächenheizung und die Trockenbauarbeiten von unterschiedlichen Gewerken durchgeführt wird, kann so eine saubere Trennung der Arbeiten erreicht werden. Die Einhaltung der max. zulässigen Temperaturen von gipsbasierenden Trockenbauplatten ist zudem mit der **DRYTEC** gewährleistet.

Mit der Anordnung hinter der Trockenbauplatte bietet **E-ENERGY CARBON DRYTEC** eine technische Alternative zu dem bereits etablierten **E-ENERGY CARBON FLEECE**, das aufgrund der integrierten Perforation optimal für das Einbetten in Klebstoffen und Spachtelmassen auf der Oberfläche geeignet ist. Insbesondere im Fertighausbau kann durch **DRYTEC** der Aufwand der Spachtelarbeit so auf ein Minimum reduziert werden.

E-ENERGY CARBON DRYTEC wird systembezogen mit 36 V Sicherheitskleinspannung betrieben und nach dem patentierten Herstellungsverfahren produziert, so dass wie bei allen **E-ENERGY CARBON** Heizfolien eine hohe Lebensdauer und die Möglichkeit von Aussparungen in der Heizfläche für Einbauten (z. B. Spots) garantiert sind. Das System **E-ENERGY CARBON DRYTEC** sowie alle notwendigen Unterlagen stehen ab sofort zur Verfügung und können bezogen werden.

The mounting strips are used for fastening to the substructure and can be easily penetrated with screws or staples during installation of the subsequently attached drywall panels without touching the electrically active heating zone. Fault currents in metallic substructures are thus permanently avoided.

Simple and fast installation

*The greatest advantage of **E-ENERGY CARBON DRYTEC** is its simple and fast installation. Depending on the substructure, the mounting strips can be glued to metal profiles with double-sided adhesive tape, for example, or fastened to wooden substructures with screws or staples. After the electrical installation and commissioning of the system has been carried out, the following trade can close*

*the surface with commercially available drywall panels in a thickness of max. 12.5 mm (e.g. gypsum plasterboard or gypsum fiberboard). If the installation of the electric panel heating and the drywall work is carried out by different trades, a clean separation of the work can be achieved in this way. Compliance with the max. permissible temperatures of gypsum-based drywall panels is also ensured with **DRYTEC**.*

*With its arrangement behind the drywall panel, **E-ENERGY CARBON DRYTEC** offers a technical alternative to the already established **E-ENERGY CARBON FLEECE**, which is optimally suited for embedding in adhesives and fillers on the surface due to its integrated perforation. In prefabricated house construction in particular, **DRYTEC** can thus reduce the amount of filler work to a minimum.*

***E-ENERGY CARBON DRYTEC** is operated system-related with 36 V safety extra-low voltage and produced according to the patented manufacturing process, so that, as with all **E-ENERGY CARBON** heating foils, a long service life and the possibility of recesses in the heating surface for fixtures (e.g. spots) are guaranteed. The **E-ENERGY CARBON DRYTEC** system as well as all necessary documents are available and can be ordered immediately.*

- + **Speziell für den Einsatz mit Trockenbaukonstruktionen an Decke und Wand geeignet.**
Suitable for use with drywall constructions on ceilings and walls.
- + **Saubere Trennung der Gewerke und Gewährleistungsbereiche**
Clean separation of the trades and warranty areas
- + **Betrieb normkonform (Wand) mit 36 V Sicherheitskleinspannung**
Operation conforming to standards (wall) with 36 V safety extra-low voltage

IMPRESSUM

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Verteiler Elektronisch

P 40004



System E-ENERGY CARBON DRYTEC

Product data



36V

E-ENERGY CARBON DRYTEC
Heating foil

mfh systems
modern floor heating

Special foil coated

Factory contacting

Ideal on drywall profiles

The E-ENERGY CARBON DRYTEC consists of a central 410 mm wide heating area (electrically active surface) and two 95 mm wide mounting strips running along the sides. It is designed for wall and ceiling installation behind a 12.5 mm thick drywall panel (e.g. plasterboard). The mounting strips are used for fastening to the substructure and can be easily penetrated with screws or staples when installing the subsequently attached drywall panels (max. thickness 12.5 mm). The PET film-coated top side is optimally suited for sticking to drywall profiles.

Safe connection thanks to the E-ENERGY CARBON power supply units with 36 V safety extra-low voltage (SELV).

Material	Basic material	PET film with carbon fibres and fillers
	Top layers	Top side: PET film - suitable for gluing to the drywall profile. Underside: PET fleece
Data	Mains voltage (power supply units)	230 V AC
	Stromeinspeisung (Netzteile)	1.74 A per 400 W load
	Performance E-ENERGY CARBON DRYTEC per linear metre (per m ²)	45 W/lfm (112 W/m ²)
	Secondary voltage (heating foil)	36 V safety extra-low voltage (SELV)
	Fuse (Secondary)	12 A AP / 15 A UP
	Protective measure	Residual current circuit breaker 30 mA
	Nominal limit temperature	+ 60 °C
	Minimum processing temperature	+ 5 °C
	Minimum bending radius	R10 mm
	Primary line Power supply unit (230 V)	1,5 mm ²
Secondary line Power supply unit (36 V)	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: 2.5 mm ² , max. 10 m length 6.0 mm ² , max. 25 m length	
Heating foil dimension, width	60 cm, 38 cm (net heat width)	
Maximum length E-ENERGY CARBON DRYTEC	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: 45W/running metre (112 W/m ²): max. 8.8 m with 400 W and max. 6.6 m with 300 W	

P 40004



System E-ENERGY CARBON DRYTEC

Product data

45 W/lfm (112 W/m²)



Item no.	Article
2 12 601	Heating foil 36 V – 45 W/lfm (112 W/m ²), 1.1m
2 12 603	Heating foil 36 V – 45 W/lfm (112 W/m ²), 2.2m
2 12 605	Heating foil 36 V – 45 W/lfm (112 W/m ²), 3.3m
2 12 607	Heating foil 36 V – 45 W/lfm (112 W/m ²), 4.4m

Possible applications

E-ENERGY CARBON DRYTEC 45 W/lfm (112 W/m²)

Ceiling	Top layer of max. 12.5 mm gypsum or cement-bonded drywall board
Wall	Top layer of max. 12.5 mm gypsum or cement-bonded drywall board
Floor	–

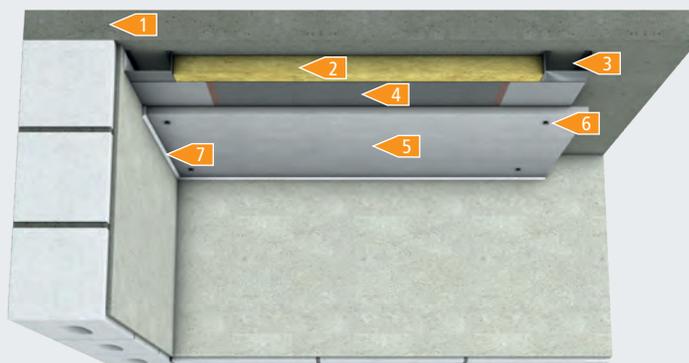


Ceiling heating in dry construction with dry construction profiles

System E-ENERGY CARBON DRYTEC

- | | | |
|----------|--|---------|
| 1 | Raw ceiling | |
| 2 | Additional insulation mineral wool 032 (25 mm) | |
| 3 | Drywall profile e.g. CD 60/27 | 27 mm |
| 4 | E-ENERGY CARBON DRYTEC | 0,4 mm |
| 5 | Drywall board | 12.5 mm |
| 6 | Fixing screw | |
| 7 | Movement joint | |

40 mm



With additional heat insulation

> 0.78 m²k/W~ 15 kg / m²

Dead weight E-ENERGY CARBON DRYTEC system including drywall profile, drywall board (12.5 mm plasterboard), and mineral wool (25 mm)



Prepare a level, clean, load-bearing substructure.



If thermal insulation is installed on a ceiling against unheated rooms (attic) or outside air temperature (roof), the dew point must be checked and, if necessary, a vapour barrier added



E-ENERGY CARBON DRYTEC is designed for substructures with a centre distance of 500 mm (min. 430 mm distance between the profiles). The fastening is done via the laterally running mounting strips, which can be easily penetrated with screws or staples when installing the subsequently attached drywall panels (max. thickness 12.5 mm). The PET film-coated top side is ideal for sticking (e.g. double-sided adhesive tape) to metal drywall profiles. On wooden substructures, the fastening can be done mechanically (e.g. with staples).



Only use insulation materials without aluminium lamination.



The technical values are indicative and may vary depending on the manufacturer and the materials used. The manufacturer's specifications and generally recognised rules of technology must always be observed.



Product data sheet: P40004

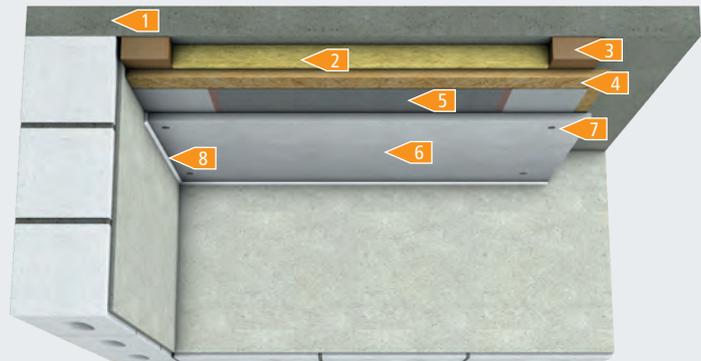


Ceiling heating in dry construction with sub-ceiling tile

System E-ENERGY CARBON DRYTEC

- | | | |
|---|--|---------|
| 1 | Raw ceiling | |
| 2 | Additional insulation mineral wool 032 (30 mm) | |
| 3 | Supporting lath | 30 mm |
| 4 | Underlay board e.g. OSB | 15 mm |
| 5 | E-ENERGY CARBON DRYTEC | 0,4 mm |
| 6 | Drywall board | 12,5 mm |
| 7 | Fixing screw | |
| 8 | Movement joint | |

58 mm



With additional heat insulation



> 0.93 m²k/W



~ 27 kg / m²

Dead weight E-ENERGY CARBON DRYTEC system including drywall profile, drywall board (12.5 mm plasterboard), and mineral wool (25 mm)



Prepare a level, clean, load-bearing substructure.



If thermal insulation is installed on a ceiling against unheated rooms (attic) or outside air temperature (roof), the dew point must be checked and, if necessary, a vapour barrier added



Fixing is done via the mounting strips running along the sides, which can be easily penetrated with screws or staples when installing the subsequently attached drywall panels (max. thickness 12.5 mm). The PET film-coated top side is ideally suited for gluing (e.g. double-sided adhesive tape). Alternatively, the fastening can be done mechanically (e.g. with staples).



The technical values are indicative and may vary depending on the manufacturer and the materials used. The manufacturer's specifications and generally recognised rules of technology must always be observed.



Product data sheet: P40004