

E-ENERGY CARBON

Electric ceiling heating as a modern new building concept in a low-energy house



» FULL HEATING

Comfortable warmth at the push of a button with E-ENERGY CARBON - the perfect heating system. There are no maintenance costs for this heating systems.

E-ENERGY CARBON makes heating with electricity a sensible alternative - ecological and economical! Plus With E-ENERGY CARBON you don't need a boiler room and you gain additional living space.

» QUALITY



» PLANT CONCEPT ACCORDING TO EnEV

» FACTS

Together with the TU Dresden, the plant concept was developed according to EnEV specs– **E-ENERGY CARBON** is 100% compliant with the standard.



	VARIANT A	VARIANT B
Plant engineering	Surface heating E-ENERGY CARBON + instantaneous water heater + Controlled ventilation of living space + PV system	Surface heating E-ENERGY CARBON + Domestic hot water heat pump + Controlled ventilation of living space + PV system
	EnEV energy saving regulation	EnEV energy saving regulation
KfW Efficiency House 55	●	●
KfW Efficiency House 40	●	●
KfW Efficiency House 40 plus	●	●

- ✓ 15 years application experience
- ✓ Comprehensive system warranty
- ✓ Future-proof, maintenance-free technology
- ✓ Boiler room becomes living space
- ✓ Patented production process
- ✓ 50+ Years Design Life

Further information:
www.energy-heating.com



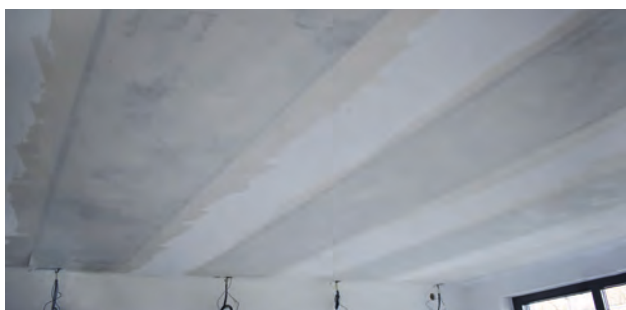
» HEATING FOIL E-ENERGY CARBON –Monthly energy costs under £35 in a single family house

"You don't heat with electricity" and "you don't heat on the ceiling". This was before the heat demand of the buildings was reduced and electricity could be produced regeneratively. In 2017 this was put to the test. The electrical heating foil **E-ENERGY CARBON** was installed invisibly as ceiling heating in a KfW 55 house. Heat generation, heat transfer, heat control, all in one product.

In the new building with 140 m² living space the 0.4 mm thin 36 Volt carbon heating foil was installed. Thanks to the patented production process, **E-ENERGY CARBON** is insensitive to damage. Holes can be drilled, spots and sockets inserted or screws fastened, even retrospectively. A flat perforation and an adhesion-optimising fleece lamination ensure a secure connection to the substrate on the ceiling, as the filler can press through the perforation during installation. The same principle is used for installation on walls, floors or roof slopes on the upper floor.

The ceiling heating system had an occupancy rate of 50% (70 m² active heating surface for 140 m² living space) and this is sufficient to generate a comfortable radiant heat that also pleasantly warms the floor. The installation close to the surface ensures rapid heating and efficient operation. The complete installation in the project has an output of 4.53 kW. The EnEV-compliant system technology was supplemented by a photovoltaic system and a central ventilation system with heat recovery. Electric instantaneous water heaters were installed for hot water preparation.

The annual energy costs of the 4 person household are impressive. Less than £35 / month (UK equiv) for heating, hot water and auxiliary energy. **E-ENERGY CARBON** provides an innovative and cost-effective heating solution for the 21st century. Low operating costs, low investment costs and no ongoing follow-up costs due to the maintenance-free system technology. Modern buildings need modern technology.



» CONSTRUCTION STRUCTURE CEILING

- | | |
|----------------------------|--------|
| 1 Ceiling covering | |
| 2 Plaster system min. 2 mm | 2 mm |
| 3 E-ENERGY CARBON FLEECE | 0.4 mm |
| 4 Plaster | 2 mm |
| 5 Paint | |
- 5 mm

