

The EPS manufacturing process is energy efficient

The European Union has set itself the goal of reducing the amount of energy used in buildings. At the same time, insulation materials should also be produced in a way that minimises the consumption of energy. Due to the low input of raw material (98 % air, 2 % polystyrene) and the energy-efficient production process, the manufacture of EPS on the whole requires less energy than the production of the “ecological alternatives” mineral foam and wood fibre. Further information can be obtained from the current Environmental Product Declarations (EPD) developed in accordance with ISO 14025.

Insulation for ETICS	Production energy MJ ^{*)}	EPD-No.
EPS grey	39,84	ECO-EPS-00050101-1106
EPS white	47,84	ECO-EPS-00010101-1106
Mineral foam	72,32	EPD-XEL-2009212-D
Mineral wool (MW)	78,00	EPD-DRW-2008112-D
Bricks filled with MW	179,06	EPD-POR-2011311-D
Wood fibre	286,29	EPD-PTX-2010121-D

^{*)} per functional unit (= 1 m² area of equivalent insulation performance)

Source: Environmental Construction Products Organisation (ECO) and Institut Bauen und Umwelt e.V. (IBU)

- Production energy (including raw material input) includes total renewable and non-renewable (“fossil”) primary energy as well as energy from secondary sources. Once EPS has reached the end of its life, there are plenty of options for recycling it. The resulting energy credits are not included in the values provided above.
- If a house that was built in the 1970s is thermally insulated with EPS insulating boards all the energy used to produce them is recouped within 2 to 4 months. Over the life of the product up to 200 times more energy is saved than was used to produce the material. Thus each cubic metre of EPS saves the same amount of energy that a car would need to travel over 30,000 km.