isofloc[®] pearl



La stalling

TECHNICAL DATA:

Technical approval		German technical approval Z-23.12-1973	
Composition		EPS, blowing agent, HBCD-free fire protection agent, infrared absorber	
Application		according to German technical approval for core insulation in cavity walls, water-repelling	
Installation		dust-free, perfectly fitting and non-settling blow-in installation by Dämmstatt specialist operators	
Notified Certification Body		MFPA Leipzig	
Colour		light grey	
Form		pearls	The box fits to you with
Size		max. 6 mm diameter	isofloc [®] pearl:
Thermal conductivity λ		0,033 W/(m · K) rated value	 heat loss and CO₂ emissions
Bulk density		20–25 kg/m ³ according to DIN EN 1097-3	easy to use
Blowing density		24–26 kg/m ³ according to DIN EN 1097-3	comfort thanks to a higher
Settled measurement according to area of application "Cavity wall insulation" (German technical approval)		0 %	 wall surface temperature reduced risk of mould combines well with further
Specific heat capacity c		1000 J/(kg · K)	isofloc insulation measures
Reaction to fire	D	E according to DIN EN 13501-1-1:2010	specialist training / qualification
	СН	BKZ 3	
Dimensional stability under temperature influence		up to 69 °C	We shall happy to answer any
Water vapour diffusion resistance µ		5 according to DIN EN 12086	questions you might have.
Recycling		can be extracted and injected again	isofloc AG
Packaging	D	250 I and 500 I PE sacks	CH-9606 Bütschwil
	CH	250 I PE sacks	E-mail: info@isofloc.swiss Web: www.isofloc.swiss



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Many houses built between 1900 and 1970 have cavity walls. The outer shell, usually a brick facade or plastered masonry, provides protection against the weather. Behind this there is a 40–100 mm cavity. The internal shell is usually the load bearing wall. A lot of valuable heat energy is lost via an un-insulated external wall. Injecting isofloc pearl into the cavity is the answer.



Easy to use

In cavity-wall retrofit solutions, the EPS insulating material is injected though blow-in holes in the facing brick shell and the openings are then sealed with colour-matched plaster or grout. Huge energy savings are possible with this insulation measure. Thanks to the efficient application method, the costs of this energy-improvement measure are very small compared to other insulation solutions.

Further insulation measures

Even the strict energy-saving specifications of the EnEV and KfW are met or even bettered in Germany with the material-typical characteristic values of isofloc pearl. With additional insulation, the cavity wall itself can meet building programme requirements in Switzerland, so that you profit from subsidies. The total energy balance of the building can be further optimised by combining isofloc pearl insulation with further isofloc insulation measures.

Design requirements

Insulation layers should be at least 30 mm thick. The masonry should be checked for rising damp, structural seals, plaster quality and cracks. Openings to adjacent components (verge, eaves, shutter boxes, sockets, strap coilers, etc.) must be sealed. Direct contact with heat-generating installations, fireplaces and exhaust systems (flues) should be avoided or the required clearances maintained.

Large savings potential

The energy required for the manufacture of isofloc pearl is recouped within a few months by the insulation effect. Investment costs are recouped within a few years. The heat loss and CO₂ emissions through the exterior wall are reduced by up to 80 %.



Typical isofloc pearl injection schematic (connections to flue gas lines and chimneys must be designed with an A insulation material [D] resp. with an insulation material of fire behaviour group RF1 [CH].)



Insul. thickness cm	U-value before W/(m ² · K)	U-value after W/(m² · K)
4	2,74	0,63
6	2,74	0,45
8	2,74	0,36
10	2,74	0,30
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Legend:

2

4

- 1,5 cm lime cement plaster 17,5 cm brick Lambda 0,99 W/(m · K) Ventilated cavity (var.)
- 3aVentilated cavity (var.)3bisofloc pearl (var.)
 - 11,5 cm facing brick

Our technical hotline staff will be happy to help you with projectspecific structural engineering calculations and computations and will offer support when tendering.