

## **FOAMGLAS® - PC 500**

### **1. DESCRIPTION AND USE:**

PC500 is a bituminous one component adhesive with the following properties:

- Manufactured with a high percentage of extenders and limited solvents
- Formulation does not change, PC500 remains flexible in the long term
- Water tight with a high resistance to water vapour
- Thixotropic
- Application temperature from +5C to +40°C
- Protect from frost prior to use.
- Water resistant
- Application, storage and transport: without risk
- Ecological, manufactured natural oils

PC500 can be used for the following applications:

- 1.1 To adhere FOAMGLAS® slabs, FOAMGLAS® READYBLOCK and FOAMGLAS® BOARD on a continuous support;
- 1.2 To fully adhere the first waterproofing membrane (sanded bituminous membrane) on the FOAMGLAS® slabs used in flat roofs.
- 1.3 As coating on the external surface of the FOAMGLAS® slabs used in underground walls.

It can be used inside and outside, on vertical, horizontal or sloping surfaces.

### **2. AVAILABILITY AND STORAGE:**

#### **2.1 Availability:**

Metal pails of 25 kg net.

#### **2.2 Storage:**

PC500 does not freeze. Before use, we recommend that it is stored in a room with a temperature > 10°C to guarantee a better viscosity for the application.

Storage time: maximum 1 Year.

### **3. APPLICATION:**

#### **3.1. Surface preparation**

The surface must be flat, dry and free from oils, dust, moisture, particles, etc. If the surface remains dusty, a bitumen emulsion should be applied by spray, brush or roller.

#### **3.2. Product preparation**

PC500 is a one component thixotropic adhesive ready for use. Stir the material with a stick before use (do not mix the adhesive).

#### **3.3. Application method**

##### **3.3.1. To adhere FOAMGLAS® slabs, FOAMGLAS® READYBLOCK on flat or tapered roofs.**

On a continuous support, the adhesive will be applied on the whole surface with a specially adapted notched trowel (teeth of  $\pm 10$  mm, each 15mm). The adjacent edges of each slab are dipped into the cold adhesive that has already been applied on the support. Lay each slab at a distance of  $\pm 3$  cm from the slabs that are already adhered and slide it diagonally in place by pushing slowly with one hand. A bituminous waterproofing membrane can be applied directly on the FOAMGLAS® READYBLOCK by torching. In the case of FOAMGLAS® slabs, this first bituminous membrane (sanded bituminous membrane) can be sealed with the same adhesive applied with a notched trowel (teeth of 6mm). Then the membrane has to be unrolled in the adhesive. To prevent the slipping of the insulation material, a permanent basis coating should always be foreseen in case of tapered roofs. Dependent on the roof slope, where necessary a metal flashing or timber block should be fixed to ensure the insulation material does not move in its curing.

##### **3.3.2 To adhere FOAMGLAS® slabs, FOAMGLAS® READYBLOCK and FOAMGLAS® READYBOARD used in underground walls.**

To adhere the slabs used in underground walls, the adhesive can be applied on the whole surface with a notched trowel (size of the teeth  $\pm 8$ mm), or by blobs. (5 blobs/slab for FOAMGLAS® and FOAMGLAS® READYBLOCK, 8 blobs/board FOAMGLAS® READYBOARD). The joints between the panels will be filled with the same adhesive.

##### **3.3.3. Surface protection on FOAMGLAS® slabs used in underground walls.**

If used as a coating on FOAMGLAS® it can either be applied by trowel or sprayed with airless equipment.

##### **3.3.4. To adhere FOAMGLAS® slabs, FOAMGLAS® READYBLOCK and FOAMGLAS® WALLBOARD used in façades.**

The adhesive will be applied by blobs or with a notched trowel as described in 3.3.2. To prevent the slipping of the insulation, a metal flashing or timber block should be used at the base of the wall. With façades and a high building height or when application by blobs is made, mechanical fixings may be necessary. The number will be defined as per the individual specification, dependent on the climate part of the building and with the joints being filled, or unfilled, with the same adhesive.

#### **3.4. Cleaning of the tools**

The tools should be cleaned with bitumen solvents such as spirit or petrol.

#### **3.5. Limitations**

The application of the adhesive is made more difficult if stored at low temperature. In this case it should be warmed up slowly without direct contact of naked flame.

#### **3.6. Cautions**

Adequate ventilation should be provided in closed spaces. PC500 pails should be covered when not in use and kept away from heat and naked flame. PC500 should not be used in atmospheres where it may be exposed to solvents, organic gases, acids or other concentrated chemicals.

#### **4. PROPERTIES**

Type:	Bitumen, oils and extenders. Does not contain water.
Solvents:	<6%
Service temperature :	from -30 °C to +80 °C
Application temperature :	from +5 °C to +40 °C
Working time at 25 °C:	several days after opening of the pail if this one is tightly closed after each utilisation.
Drying time:	to touch: several hours, high drying due to the thixotropy of the adhesive, complete drying: several months
Density:	1.5 kg/dm <sup>3</sup>
Colour:	black
Water vapour diffusion resistance factor:	$\mu = \text{ca. } 20,000$
Flash point:	minimum 100 °C
Resistance to alkaline and salt solutions:	good
Resistance to acid solutions:	good (except nitric acid solutions)
Resistance to oils, greases, solvents and Bituminous compounds:	poor
Fire resistance:	combustible (Flash point >100 °C)

The physical properties given above are average values measured on products before leaving factory. These values may be affected by the quality of the support, the thickness of the layer and the atmospheric conditions during the application and after it, such as temperature, relative humidity. The setting times are especially susceptible to these conditions.

#### **Coverage**

To adhere the insulation slabs on flat and tapered roofs:	+/- 6kg/m <sup>2</sup>
To fully adhere the membrane:	+/- 2kg/m <sup>2</sup>
To adhere vertically by blobs:	+/-3kg/m <sup>2</sup>
To fully adhere vertically:	+/- 4.5kg/m <sup>2</sup>
Surface protection without reinforcing (filling of the surface cells):	+/- 2kg/m <sup>2</sup>

We guarantee the physical properties of FOAMGLAS® cellular glass. Whilst great care is taken in formulating specifications, we cannot be held responsible for them due to imponderables on each specific jobsite. Please contact our services to define the application methods for special cases. FOAMGLAS® and PC® are trademarks.