POLITERM BLU

CONSTRUCTION

TECHNICAL DATA SHEET

Ultra-light aggregates for the preparation of lightweight thermal

Description

Politerm Blu is the best option in construction industry to create concrete mixes with low thermal conductivity that allows creating uniform and docile mixes.

It is made by virgin EPS beads with closed cells (0 3-6 mm), which are perfectly rounded, with a controlled density, non-toxic, resistant, and stables throughout the time.

They are covered by EIA additive that gives an excellent adherence to concrete, eliminates floatation on beads that guarantees the uniform mix on concrete.

Politerm Blu production is free of chlorofluorocarbon (CFC, HCF and HFC) and does not have nutritional properties that may contribute to bacteria generation."

Advantages

- Beads perfectly mixed on concrete with water. Excellent bead distribution on concrete mixes.
- Compatible with concrete pumpers.
- Avoids floatation.
- Adds thermal properties to the mix.
- No unnecessary weight is added to the structure, when filling with light mortars.

Main Applications

- Filling slabs, rooftops, floors, mezzanines, etc.
- Perfect to use as a base to receive asphalt, and industrial flooring.
- Create prefabricated walls, blocks or bricks.
- Insulate walls, slabs, floors, etc.

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Surface set up

- Surface should be always free of dust and any other fragments of material.
- On absorbent surfaces, humidify considerably without creating puddles.
- On low absorbent surfaces, humidify, and it is recommended and make a bridge of adherence with a light cap of cement and water.
- On non-absorbent surfaces, before set the mix, place and affix electro welded mesh, separated from surface.
- It is recommended to mark the thickness of the slab to keep the same level in all surfaces.

Mix

Use only Portland cement, with good qualities and good conservation. Using different types of cement, or low quality cement may invalidate the function of EIA additive making more difficult the mix and the concrete may be out of specifications.

Mix materials order:

1. Turn on the mixer
2. Add water according to the specification
3. Add beads of Politerm Blu (Bags of 170 and 420 litters.)
4. Add the amount of cement required.
5. Add sand (if applies).
6. Mix for 10 minutes.

(Contact the FANOSA® Technical Departament).

Dosage for 1 ft³ lightweight mortar						Properties				
Density[1]	Water[2]	Cement	Sand	Politerm **BLU**		Thermal Conductivity		R-Value		Compressive Strenght
(lb/ft³)	(gal)	(lb)	(lb)	(lb)	(ft³)	(W·**m/K**)	(BTU·**in/h·ft²·°F**)	(m²K/W)	(h·ft²·°F/BTU)	(psi)
12.50	0.75	12.49	0.00	0.42	0.84	0.07	0.45	0.39	2.22	100.13
15.63	0.94	15.61	0.00	0.42	0.84	0.07	0.46	0.38	2.15	120.33
18.75	1.12	18.73	0.00	0.42	0.84	0.08	0.55	0.32	1.80	233.55
21.88	1.31	21.85	0.00	0.42	0.84	0.10	0.71	0.25	1.40	245.07
31.25	1.05[3]	18.73	9.99	0.42	0.84	0.10	0.72	0.24	1.38	324.86
50.00	1.20[3]	18.73	28.09	0.34	0.68	0.18	1.22	0.14	0.82	725.25
56.25	1.20[3]	18.73	34.34	0.32	0.64	0.18	1.28	0.14	0.78	836.90
62.50	1.23[3]	18.73	40.58	0.30	0.60					1257.49
75.00	1.42[3]	24.97	46.82	0.25	0.51	0.33	2.28	0.08	0.44	1451.78
112.50	1.46[3]	24.97	84.28	0.15	0.30					2706.42
125.00	1.50[3]	24.97	93.64	0.12	0.24					3031.28

** Water dosage has to be adapted to the type of cement that will be used.*
*** Adjust according to the humidity of sand.*

(a) Values obtained with 5 cm of Politerm Blu + 5cm of mortar.

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