

# BOOTH PRECAST PRODUCTS LTD.

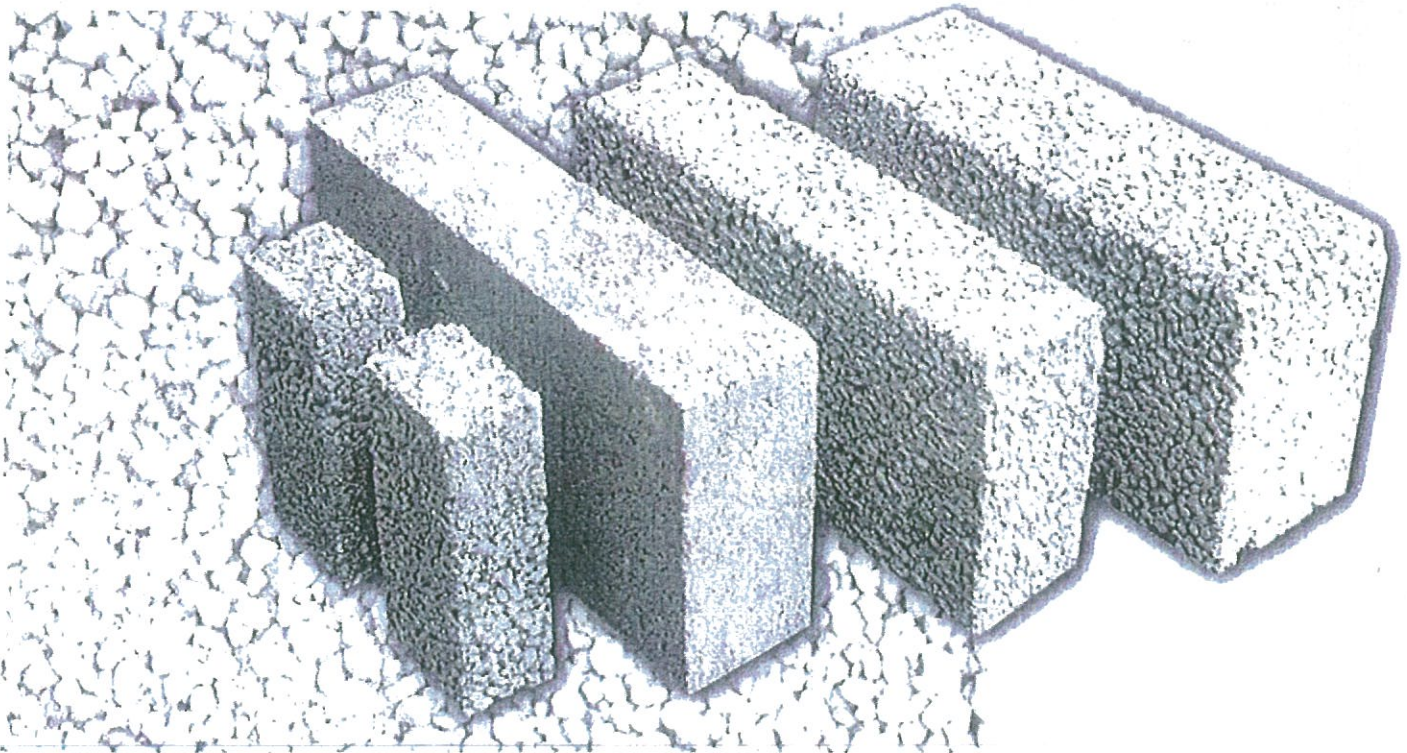
## PRECAST FLOORING AND CHIMNEYS PRODUCTS

Office: BALLYMULLEN, ABBEYLEIX. LAOIS. TEL: 057-8731840. FAX: 057-8731875

### Lightweight Aggregates

#### HEAVY DUTY reasons to choose Greek pumice :

- Improved load bearing strengths of blocks -  $7\text{N/mm}^2$  -  $10.5\text{N/mm}^2$  and greater.
- Cost effective – improved insulation, energy saving.
- Environmentally friendly – it is a natural waste product ; it is a chemically and physically stable material.
- Durability – one of the oldest building materials known to mankind; its Pozzolanic properties continue to harden year after year without any degradation.



#### BLOCK FEATURES

- Load bearing strengths of  $7\text{N/mm}^2$  and greater.
- Workability pumice blocks 100mm, 10 kgs per block.
- Low thermal conductivity of  $0.32\text{ W/M}^\circ\text{C}$ .
- Improves sound insulation.
- Fire resistance - pumice 100mm gives a minimum of 2 hour fire rating for load bearing walls. Non load bearing walls - 4 hours.
- Strong blocks for fixing – can be drilled and plugged with ease, no special fixings are required.
- Can be used below D.P.C. to reduce cold barrier with 7N Pumice blocks and greater.
- Excellent plaster key – no need for bonding agents.
- Fewer breakages – design strength ensures heavy handed treatment will keep physical and financial damage to a minimum.
- Economy – efficiency of transport and of handling a lightweight pumice block.

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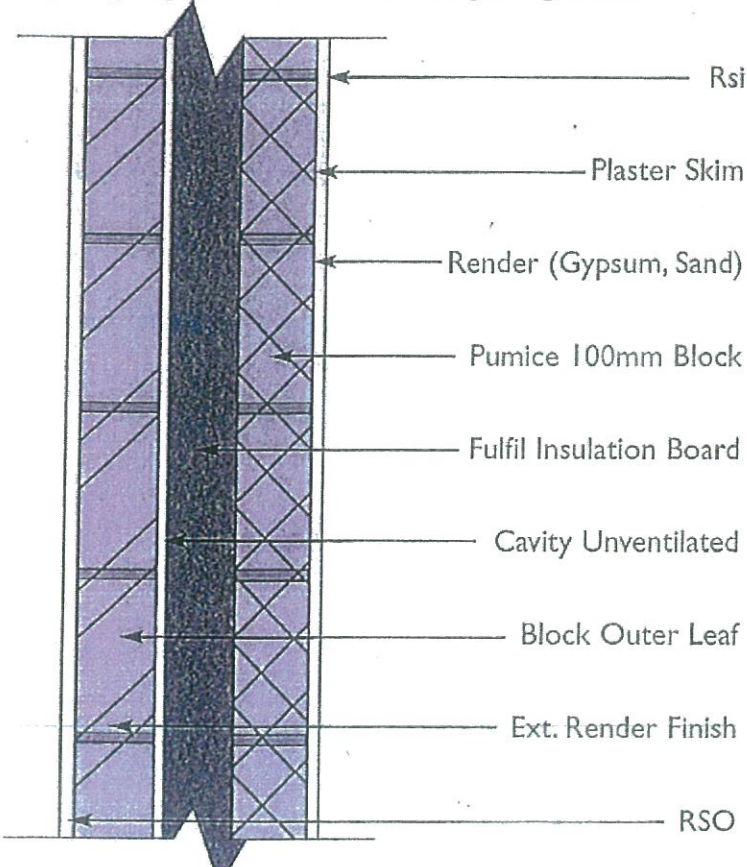
### Lightweight Aggregates

7N/mm<sup>2</sup> 100mm Block Comparison for Weight and Thermal Resistance

	Normal Density	Medium Density	Light Density Pumice
<b>Weight</b>	2000 Kg/m <sup>3</sup>	1500 Kg/m <sup>3</sup>	<b>1010 Kg/m<sup>3</sup></b>
<b>Thermal Resistance</b>	1.13 W/m <sup>2</sup> C	0.585 W/m <sup>2</sup> C	<b>0.320 W/m<sup>2</sup> C</b>
<b>Strength</b>	7 N/mm <sup>2</sup>	7 N/mm <sup>2</sup>	<b>7 N/mm<sup>2</sup></b>

Moisture content conditioned + 3%

Achieving Target U-Value with Pumice Lightweight Block.



	d(mm)	$\lambda$ Layer	R Layer
Rsi	-	-	0.130
Plaster Skim	3	0.180	0.017
Render (Gypsum, Sand)	13	0.570	0.023
Pumice 100mm Block	100	0.320	0.313
Fulfil Insulation Board	95	0.031	3.065
Cavity Unventilated	10	R-Value	0.150
Block Outer Leaf	100	1.13	0.089
Ext. Render Finish	19	0.500	0.038
RSO	-	-	0.040
<b>340mm (Total Wall Thickness)</b>			<b>3.865</b>
			<b>U-Value = 0.26W<sup>2</sup>/K</b>

### Where to Apply its Strength

- **Industrial-** Pumice blocks are ideal for factory or industrial plant walling where weight saving, high strength and low material costs are of prime importance.
- **Commercial-** Structural soundness, simplicity of compliance with thermal regulations for offices, institutional buildings and shops can be met by pumice blocks.
- **Domestic-** Pumice blocks have strength to carry floor slabs and can offer thermal efficiency. Pumice concrete for floor screed to hold thermal insulation. Pumice aggregate for chimney lining as loose fill, non-combustible light weight mineral aggregate with excellent insulation properties.
- **Agricultural-** Pig and poultry units, walling. Pumice blocks can offer thermal efficiency and reduce condensation.
- Pumice concrete for pig unit flooring to hold thermal insulation and strength.