

# SUPERSET® AC1/SUPERPLASTIC® INSULATION COMPOUND AND CEMENT

## INTRODUCTION - SUPERSET® AC1 FINISHING CEMENT

SUPERSET® AC1 is a hydraulic setting Portland cement based product, suitable for application over pre-formed, plastic or sprayable insulation. It can be used indoors or outdoors wherever an exceptionally hard and durable protection is required.

Each 25kg bad of SUPERSET® AC1 should be mixed with 11 litres of water and applied over wire netting, expanded metal or wire reinforcement, in one 5mm layer and trowelled to a smooth finish. The dry SUPERSET® AC1 may be coated with PVA or water-based paints; oil based paints will need an alkali resistant primer applied to completely dry cement.

SUPERSET® AC1 finishing cement conforms with BS3958: Part 6.

Performance and properties	
Nominal applied density	1200kg/m <sup>3</sup>
Flexural strength	3000kN/m <sup>3</sup>
Temperature limits for continuous service temperature	200°C
Combustibility (BS476: Part 4)	Non-combustible
Appearance	Grey/pink
Wet covering capacity	150m <sup>2</sup> /1000kg/5mm thickness over calcium silicate
Dry state shelf life	Experience indicates that the product has an indefinite shelf life provided that material is stored in a dry area away from excessive humidity. Product up to 5 years old has been used without problems.

NOTE: All physical property values are averages based on standard production. The figures can change dependent on the test methods used. If a particular value is of prime importance for specification, please contact FM Insulation Supplies.

# INTRODUCTION - SUPERPLASTIC® INSULATION COMPOUND

SUPERPLASTIC® is an insulant powder form which is usually used for the general filling of joints between preformed insulation and for bedding in of slabs on irregular surfaces.

It is also particularly suitable for insulation of complex shapes where application of preformed or prefabricated insulation is impractical.

Performance and properties	
Maximum recommended operating temperature	800°C
Flexural strength	600N/m <sup>2</sup>
Linear shrinkage	<2% at 800°C
Thermal conductivity at mean temperature	100°C 0.053W/mK 150°C 0.057W/mK 200°C 0.061W/mK 300°C 0.072W/mK
Covering capacity	175m <sup>2</sup> /1000kg/25mm thickness if mixing instructions are followed
Appearance	White powder
Preparation	
Substrate preparation	The surfaces to be insulated should be free from dirt, grease and loose scale. For best results SUPERPLASTIC® should be applied to a surface primed with china clay slurry or well fibred hard setting cement at 80°C.
Mesh reinforcement	SUPERPLASTIC® should be reinforced with galvanised wire netting every 65mm of thickness
Application	
Mixing	It is recommended that 41 litres of water is added to each 12.5kg bag approximately four hours before SUPERPLASTIC® is required. Just prior to use, the bag should be split open and the contents thoroughly mixed, adding more water if required to achieve the desired working consistency.
Method	The first coat should be applied as thinly as possible, followed by 13mm thick coats up to the specified thickness.
Standard compliances	
<ul style="list-style-type: none"><li>• Exceeds the performance requirements of BS3958: Part 2: 1982</li><li>• Complies with the requirements of ASTM 533-85 with reference to strength and thermal properties</li><li>• MOD and Powergen/National Power approved</li></ul>	