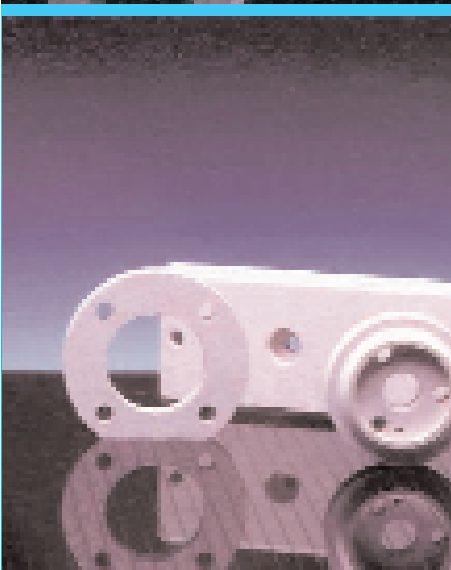
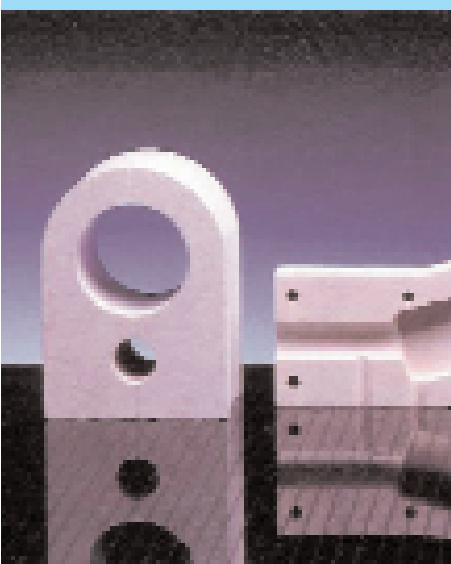


APPLICATIONS

- Platen press insulation
- Ovens and driers
- Load bearing pipe supports
- Heat shielding
- Structural thermal breaks
- Boiler baffles
- Flue gas baffles



INTRODUCTION

Promat MONOLUX® 500 and Promat MONOLUX® 800 are low thermal conductivity rigid insulation materials. Promat MONOLUX 800® has higher strength for more arduous conditions. Both materials are formulated without asbestos and mineral fibres, and are easily machined to close tolerances. With low shrinkage and high strength, the materials provide effective and stable insulation solutions for industrial problems.

Mechanical properties		Promat MONOLUX® 500	Promat MONOLUX® 800
Bulk density		750kg/m ³	920kg/m ³
Flexural strength		4.5MPa	6.5MPa
Compressive strength (compaction)	5%	11.5MPa	22.9MPa
	10%	13.4MPa	27.2MPa
Thermal properties		Promat MONOLUX® 500	Promat MONOLUX® 800
Maximum service temperature		500°C	800°C
Thermal conductivity	25°C	0.18W/mK	0.35W/mK
	200°C	0.19W/mK	0.30W/mK
	500°C	0.20W/mK	0.31W/mK
	800°C	–	0.33W/mK
Shrinkage at 500°C for 4 hours	Linear Thickness	0.29%	–
		0.68%	–
Shrinkage at 800°C for 4 hours	Linear Thickness	–	0.4%
		–	2.0%

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 a specification, please contact Promat Technical Services Department.

GRADES

Promat MONOLUX® 500

Rigid machinable insulation for thermal break use in a process plant and as single skin insulation for ovens and driers.

Standard sizes	
Thicknesses* (mm)	12.7, 19.1, 25.4, 31.8, 38.1 and 50.8
Width (mm)	1220
Length (mm)	2440

Promat MONOLUX® 800

Strong rigid thermal insulation for use in platen presses and driers.

Standard sizes	
Thicknesses* (mm)	12, 20, 25, 30 and 50
Width (mm)	1220
Length (mm)	2440

*Special sizes available upon request.



Promat MONOLUX® 500/800

Materials For Engineering Insulation

PERFORMANCE

Thermal Properties

Promat MONOLUX® 500 and Promat MONOLUX® 800 have low K values for thermal insulation and are capable of withstanding up to 800°C. The 500 grade exhibits slightly higher shrinkage. Promat MONOLUX® 800 has extremely low shrinkage at 800°C.

Mechanical Properties

With a typical flexural strength of 6.5MPa, Promat MONOLUX® 800 is a versatile engineering material for arduous use. Promat MONOLUX® 500 has excellent rigidity for single skin oven applications. Considerable strength is maintained at elevated temperatures.

Chemical Properties

Promat MONOLUX® resists common alkalis and solvents. In highly aggressive environments the surface can be treated to give increased durability.

Conditioning

All products should be adequately dried and conditioned prior to use at elevated temperatures. Please consult Promat technical services department for advice.

Fixing

Screw and bolt holes should allow sufficient clearance for thermal movement. Normal PK screws may be used, but additional screwholding strength can be achieved by the use of suitable metallic inserts.

Gluing

Thicknesses in excess of 50mm may be achieved by gluing together lesser thicknesses using good quality industrial adhesives compatible with the working temperature.

Storage

Promat MONOLUX® 500 and Promat MONOLUX® 800 should be stored horizontally in a dry building. They may, however, be stored vertically provided the edges are protected.

Decoration

Promat MONOLUX® 500 and Promat MONOLUX® 800 may be painted with a range of decorative or protective finishes. Before decoration, a suitable alkali-resistant primer should be applied, in accordance with the paint manufacturer's recommendations.

Handling

Large components should be supported by a light metal support systems; Promat MONOLUX® 500/800 boards and cut sizes can be mechanically fixed together with glue or screw fixings. Promat MONOLUX® 500/800 boards should be transported and stored under dry conditions.

HEALTH AND SAFETY

A safety data sheet is available from Promat Technical Services Department and, as with any other materials, should be read before working with the board. The board is not classified as a dangerous substance and so no special provisions are required regarding the carriage and disposal of the product to landfill. They can be placed in an on-site skip with other general building waste which should be disposed of by a registered contractor.

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