

**FOAMSPRAY TECHNOLOGY FOAM SPRAY SYSTEM
SPRAY FOAM SYSTEM – DURATHERM OS**

PRODUCT DESCRIPTION

Duratherm OS is an HCFC and CFC FREE two component, 1;1 ratio, rigid spray foam system which when processed through suitable spray machinery (Gusmer, Glas-Craft/Probler etc) will produce a rigid foam of approximate density 35kg/m³ with exceptionally good compressive strength. Service temp range -15°C to 70°C. When tested to BS476 Part 7 the foam achieved a Class 1 surface spread of flame.

USES

Duratherm OS is used to insulation in:

- New Build
- Loft Conversions
- Commercial buildings
- Ocean going yachts/canal barges

Duratherm OS can be used to upgrade the thermal performance of roofs, floors or walls of any property to meet current building regulations.

EQUIPMENT

Duratherm OS can be processed through all the standard foam spray machines. The machine should be capable of maintaining the mix ratio at ±2% accuracy and controlling the component temperatures at 40-50°C (variable).

Recommended Machine Settings

Block Temperature	Minimum, operating	100-120°F / 50-50°C
House Temperature	Minimum, operating	100°F / 40°C
Chemical Pressing	Minimum, operating	500 psi, Not greater than 200 psi Difference iso/res

SPRAY TECHNIQUES

The guidelines set out in Isothane Limited's standard specification should be followed but the general requirements are as follows:

- The substrate should be clean, dry and free of dirt, grease, oil and loose particles.
- In certain cases primer may be necessary to maximise adhesion.
- Climatic conditions must be suitable for spraying with regard to humidity and wind velocities.
- The foam should be build up in passes of not less than 15mm and not more than 10 minutes should elapse between passes.
- The requirements of any level Agrément Certificates or British standards should be followed.

PHYSICAL PROPERTIES

Duratherm OS is a two component, modified polyurethane rigid foam which sprayed through suitable foam machinery, gives a product nominal density of 35kg/m³

Laboratory test results (typical)

Cream time	3-5 seconds
Tack free time	10-16 seconds
Rise time	20-30 seconds
Free rise density	26-39kg/m

STORAGE HANDLING AND PERSONAL PROTECTION

Shelf life 6 months. The recommendations in our Safety Data Sheet for this product must be followed at all times.

Typical Properties of Duratherm OS

	Foam Core	Value	Test Method
Core Density		35-40 kg/m ³	BS4370
Compressive strength	Parallel to rise	220 kpa	BS4370
Closed Cell Content		88%min.	ASTM D2856
Thermal Conductivity	10.5°C Mean	0.0221 w/mK	BS EN 12 667
Water Vapour			
Permeability	80-100mm, 38°C, 88%RH	7.16ng/Pa.sm	BS4370
Dimensions Stability	1 day @ -15°C	-0.53 % vol.	BS4370
	1 day @ 80°C	+0.75 % vol.	BS4370
	1 day @ 100°C	+0.93 % vol.	BS4370

OZONE DEPLETION POTENTIAL

ZERO