

# EXPANDING FOAMS

## Expanding Foams

Flints stocks four types of expanding foam to suit most purposes. Some foams purchased from builder's merchants are open cell foams which absorb water like a sponge. Our rigid foams are either closed cell or predominately closed cell with very low moisture absorption. The Single Component Foam is designed as a gap filler is flame retardant. It can be used to glue large blocks of polystyrene where gap filling is needed. The Two-Part Pouring Foam can be poured into moulds or used for filling buoyancy tanks. Froth-Pak has the advantage of being spray applied so it can be used to thicken up tree armatures, insulate steel containers or hulls, or provide stiffness to vacuum-formed panels. The Flex Foam remains soft and can be used for costume props. With all the foams read the instructions carefully and pay particular attention to the temperature of the material which may take time to warm through.

## SINGLE-COMPONENT POLYURETHANE FOAM



**Acoustic Fire Rated Straw Foam** A one-component moisture curing polyurethane foam which seals, fills, fixes, bonds and insulates most construction materials. Once cured it becomes a semi-rigid water-resistant rotproof foam which can be sawn, cut, moulded, painted or plastered over. It can be used to bond and fill blocks of polystyrene but it is not suitable on thin sheets. It is tack-free in 9 minutes and cuttable after one hour. Full foam setting time is 12 hours. Yields approximately 38 litres free expanded. The foam has been tested to flame retardment using the general principles of BS 476:1987 Part 20 on specimens of floor and wall mounted linear gap sealing systems. A flame retardment of 300 minutes was achieved for some gap dimensions with incorporation of a mineral fibre core. Completely water resistant. Pink colour. Acoustic rated to W=db59.

Acoustic FR Straw Foam	code	750 ml
Straw assembly	ADH057	£10.48

## TWO-COMPONENT POLYURETHANE FOAM



**Two-Part Polyurethane Foam Flame Retardant Formula [BS 4735:1974]** Flints supplies the latest HCFC-free system. The mix ratio is 1:1 by volume but the ISO component should be added to the RES component. The best way to mix is with a Paint Mixer on a drill [page

72] for 20 sec. The foam will start to rise after 30 - 40 seconds and should be poured immediately. Foam thicknesses should be limited to 150 mm for each pour. If being used in a mould, use a soft wax Release Agent [page 106] and ensure adequate vents to allow excess air or material to escape. Failure to do this could be dangerous. Rise time: 180 sec. The system is slightly more temperature sensitive than the old foams and they will cure best in temperatures up to 30° but temperatures below 18° could lead to a poor cure. We recommend that the liquids are stored in a warm area for several hours prior to use to warm right through.

**Therefore for best results: warm through, accurately measure and mechanically mix. 1 kg expands to approximately 1 cubic foot.**

Two-Part Polyurethane Foam	code	1 kg	code	5 kg	code	Tradeline
Part A	PAT840	£14.48	PAT842	£53.57	PAT842	£176.68
Part B	PAT841	£14.48	PAT843	£53.57	PAT843	£176.68

**You might need Calibrated Mixing Beakers [page 107] and Mixing Tools for power drills [page 72].**

## SPRAY POLYURETHANE FOAM



**Froth-Pak™** A two-part spray-applied polyurethane foam system. Being spray applied, the foam can be used where pouring foam would be uncontrollable. Flints is a distributor of this excellent product and offer it at very competitive prices. Froth-Pak™ is perfect as a sculpting medium for carving. Use it to quickly create rock faces or spray it onto tree armatures. Froth Pak™ will add structural strength to your constructions. It can be used as

an insulation material to cut condensation, reduce sound and hold heat. Ideal for insulation of steel hulls and cooling boxes.

**SPECIFICATION:** Density: 30 kg/m<sup>3</sup>. Rise time: 30 seconds. Weight: FP180 Kit/11.88 kg, FP600 Tank A /20.5 kg, FP600 Tank B /19.9 kg.

- ✓ No harmful HCFCs
- ✓ New B2 flame retardment rating
- ✓ Full instructions and everything you need is in the kit including spare nozzles

**Tip:** Spray a small test amount into the empty box first. It should be tack-free within 60 seconds. Note the colour. If, when you're spraying, it lightens or darkens it could indicate a blockage in one of the tubes or nozzles.

**NB:** Ruthlessly ensure temperature conditions are met. The tank contents must be at least 24°C. A temperature indicator is fitted to one tank [180 kits only]. Ambient temperatures can be lower but the contents must be warm.

Froth-Pak™	expanded size		code	Tradeline
	imperial	metric		
FP180 Complete kit	17 ft <sup>3</sup>	0.40 m <sup>3</sup>	PROFP180K	£326.51
FP600 Complete kit	50 ft <sup>3</sup>	1.40 m <sup>3</sup>	PROFP600K	£591.87
FP600 Tank A [Red] only			PRO158102	£261.72
FP600 Tank B [Blue] only			PRO158104	£261.72
HA15 Gun hose assembly only for FP600			PRO158457	£131.69
FP180 without gun			PRO6001122	£242.61
GHA9 Gun hose assembly only for FP180			PRO6000102	£115.19
Spare standard nozzles [each]			PRO158382	£1.98
Caulking nozzle yellow			PRO158385	£1.98
Fan spray nozzle blue			PRO158387	£1.98
Pouring nozzle black			PRO158390	£1.98

For large quantities [12 kits +] please phone for a special quote.

## TWO-COMPONENT SOFT FOAM



**FlexFoam-IT! X** A two-part soft foam with a very fine cell structure ideally suited for soft costume props. Simply mix part A and part B in equal quantities by volume and pour into the lowest point in your mould. The mould should have been treated with a non-silicone Release Agent [page 106]. It will expand to approximately 6 times the original volume and is tack-free in 30 minutes. Demould in 2 hours. Pot life is 50 seconds. Supplied complete with full instructions.

FlexFoam IT! X	size	code	Tradeline
	880 g	PRO800	£19.32
	7.08 kg	PRO801	£115.16
	35.38 kg	PRO802	£509.50