



Handi-Flow

Slow Rise expansion (SR & VSR)



Two Component Polyurethane Foam

- Withstands temperatures between -129°C to +115°C.
- Ideal for filling / insulating large (blind) cavities.
- Light weight / exceptional adherence and strength.
- Slow Rise & Very Slow Rise formulations.
- User-friendly and “Ready-to-Use” Systems.
- Most effective form of thermal insulation.
- Environmentally friendly – contains no HCFC’s and CFC’s.



HANDI-FLOW

Handi-Flow is a multilateral portable Two-Component Polyurethane Foam system specially designed for filling large cavities. **Handi-Flow** pouring insulation has a > 95 % closed cell structure and is available in a Slow Rise (SR) and a Very Slow Rise (VSR – Cavity Fill) formulation to fill / insulate large (& blind) cavities without any problem. **Handi-Flow** will be cure to a higher in-place density when filled into a cavity. **Handi-Flow** P.U. foam is resistant to moisture, insulates, deadens sound, adds structural support, provides a continuous air-barrier, fills and seals various size voids, improves flotation, keeps out dust, smoke and odour. **Handi-Flow** systems are available in various packaging sizes to meet industrial application requirements.



Optimum application temperature is 24°C (75°F) but may be sprayed onto colder or warmer substrates, with slight effects on the foam characteristics. Cured foam is resistant to heat and cold (-129°C tot +115°C), and to aging, but not to UV rays (i.e. sunlight) unless painted, covered or coated. Cured foam is also chemically inert and non-reactive in approved applications. **Handi-Flow** systems are “Ready-to-Use”, require no outside mechanical or electrical power source and can be applied onto any clean and dry surface in any direction.

Technical data:

	Handi-Flow II-13 (SR) Slow Rise	Handi-Flow II-43 (SR) Slow Rise	Handi-Flow II-14 Cavity Fill (VSR) Very Slow Rise	Handi-Flow II-44 Cavity Fill (VSR) Very Slow Rise
Expanded volume	375 - 430 Litres	1.250 - 1.430 Litres	375 - 430 Litres	1.250 - 1.430 Litres
Density (ASTM D-1622)	28 – 32 kg/m ³	28 – 32 kg/m ³	28 – 32 kg/m ³	28 – 32 kg/m ³
Expansion time	60-90 sec.	60-90 sec.	120-240 sec.	120-240 sec.
Fire Class	B2 (DIN 4102-1) & E (EN 13501-1)		B2 (DIN 4102-1) & E (EN 13501-1)	
K-Factor (28 days)	0.024 W/mK	0.024 W/mK	0.026 W/mK	0.026 W/mK
R-Value (28 days)	1.04/inch , 0.41/cm	1.04/inch , 0.41/cm	0.99/inch , 0.39/cm	0.99/inch , 0.39/cm
Tensile Strength (ASTM D-1623)				
Parallel @ 10 %	290 kPa (42 psi)	290 kPa (42psi)	90 kPa (13psi)	90 kPa (13psi)
Perpendicular @ 10 %	193 kPa (28 psi)	193 kPa (28psi)	159 kPa (23psi)	159 kPa (23psi)
Compressive Strength (ASTM D-1621)				
Parallel @ 10 %	97 kPa (14 psi)	97 kPa (14 psi)	86 kPa (12.5 psi)	86 kPa (12.5 psi)
Perpendicular @ 10 %	103 kPa (15 psi)	103 kPa (15 psi)	83 kPa (12 psi)	83 kPa (12psi)
Dimensional Stability (ASTM D-2126)				
Heat age 70°C (+158°F)	-4,5 %	-4,5 %	+0.69 %	+0.69 %
Humid age 70°C (+158°F), 100% RH	-1,0 %	+1,0 %	+2.01 %	+2.01 %
Cold age - 20°C (-4°F)	-0.3 %	-0.3 %	-1,88 %	-1,88 %

Important Note: Use only in well-ventilated areas or with certified respiratory protection. Wear impervious gloves, protective glasses and suitable work clothes when using. Read all instructions and safety information (MSDS) prior to use of any product. The product contains no formaldehyde. Cured foam is non-toxic.

Product Storage: Store in a cool and dry area in the upright position. Do not expose to an open flame or temperatures above 49°C (120°F). Excessive heat can cause premature aging of components resulting in a shorter shelf life. Containers are under pressure. Do not open with force or incinerate even after use.

Application / Use: Valves must be in the upright position. Materials are dispensed through hoses and mixed in a disposable nozzle. Once foaming has stopped, the dispensing unit must be reactivated within 30 seconds or a new nozzle must be installed. Fresh Handi-Flow may be applied in several stages to reduce overfilling or void damage to non-rigid, confined cavities. Cured foam can only be removed mechanically.