Fletcher Insulation
Building Better, Together

Technical Data Sheet

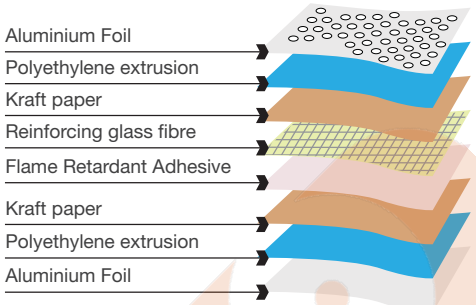
SISALATION®

HEAVY DUTY PERFORATED 450P FACING FOIL

Description

Sisalation® Facing Foil Heavy Duty Perforated (HDP) is a double sided reflective foil laminate with approx 2.5mm in diamater perforations. The facing foil product has an outer layer of aluminium foil laminated to high density kraft paper with a unique extrusion polyethylene which provides a superior bond. A second layer of kraft paper is bonded with a heavy coating of flame retardant adhesive and reinforced with continuous strands of fibreglass in two directions. Another outer layer of foil is laminated with extrusion for superior bond. The final product is perforated to provide 11% open space.

Product Composition



Applications

Sisalation® Heavy Duty Perforated Facing Foil is recommended for use as an acoustic insulation facing to maximise the acoustic absorption properties of the glasswool insulation. Recommended for lining internal ductwork for high volume air conditioning (HVAC) systems, common to large commercial buildings, to reduce sound transmission of moving air and air-borne noise from room to room.

Product Data

Roll width mm	Roll length m	m^2 per roll	Roll weight kg
1200	300	360	111.6
1350	60	81	25.1
1500	300	450	558
1500	600	900	279

Physical Properties

Property	Test Method	Result / Classification	Unit
Duty classification (prior to perforation)	AS4200.1	Heavy Duty	
Resistance to dry lamination	AS/NZS 4201.1	Pass	
Resistance to wet lamination	AS/NZS 4201.2	Pass	
Shrinkage	AS/NZS 4201.3	Pass (< 0.5%)	
Emittance of Reflective Face (prior to perforation)	AS/NZS 4201.5 (ASTM E408)	0.03 IR Reflective	
Edge Tear resistance (prior to perforation)	TAPPI T470	Machine Direction: 85 Lateral Direction: 112	N
Tensile Strength (prior to perforation)	AS1301.448	Machine Direction: 13.9 Lateral Direction: 8.6	kN/m

For more information call 1300 654 444
email info@insulation.com.au or web www.insulation.com.au

SISALATION The Original and The Best

Fire Hazard Properties

Sisalation® Heavy Duty Perforated Facing Foil exhibits the following characteristics when tested in accordance with the following standards:

		Test Results
Test Method/Standard	**Property**	**Sisalation® HD Perforated**
Ignitability, Flame Propagation, Heat Release and Smoke Release (AS/NZS 1530.3: 1999)	Ignitabiity Index Spread of Flame Index Heat Evolved Index Smoke Developed Index	0 0 0 3
UL181.11 Burning Test (AS 4254:2002)		Complies

Health and Safety

There are no known health or safety risks associated with this product for applications described in this datasheet. Sisalation® Heavy Duty Perforated contains aluminium foil and can conduct electricity. To avoid electrocution, care should be taken to ensure products do not come into contact with electrical wiring during installation or use. For additional information or to request a Material Safety Data Sheet please visit www.insulation.com.au or contact your Fletcher Insulation Representative.

Acoustic Performance

Sound Absorption

The performance of sound absorption for insulation is described by the Noise Reduction Coefficient (NRC). In sound absorption applications, the NRC is used as an acoustic performance measure. The higher the NRC, the greater the sound absorption at the representative frequencies.
The NRC is the calculated average result of four frequencies: 250 Hz, 500 Hz, 1,000 Hz and 2,000 Hz.

Sisalation® Heavy Duty Peforated Facing Foil Insulation achieves the following sound absorption coefficients when tested in accordance with AS ISO 354 – 2006:

Product FI32 Semi Rigid Faced with:	Nominal thickness mm	Sound Absorption Coefficients at frequencies (Hz) of:										
		100	125	250	500	1000	2000	3150	4000	5000	NRC	αw
Sisalation® Heavy Duty Perforated 450P (HDP) Facing Foil	25	0.05	0.06	0.22	0.63	0.87	1.00	0.92	0.88	0.83	0.70	0.55 (MH)
	38	0.08	0.16	0.57	0.89	1.08	1.02	0.98	0.99	0.94	0.90	0.85
	50	0.07	0.19	0.68	1.07	1.05	1.01	0.91	0.96	0.86	0.95	1.00
	75	0.22	0.52	1.16	1.07	0.99	1.01	0.99	0.97	0.90	1.05	1.00
	100	0.45	0.82	1.19	1.14	1.06	1.06	1.01	1.01	0.96	1.10	1.00

Recommended Air Velocities

The recommended air velocities has been determined to be 40m/s. A safety factor of 0.4 is applied in accordance with the UL181 Standard to give a recommended maximum working velocity of 16m/s. For higher velocities, duct linings should be used behind perforated sheet metal mechanically fastened to the duct wall. Maximum design velocities are valid for ductliner insulation faced by Fletcher Insulation and installed according to AS4254.2.

Technical Specifications

When specifying, state the following:
Facing material should be Sisalation® Facing Foil Heavy Duty Perforated bonded directly to FI32 semi Rigid Insulation.