

WOVEN FOIL



Suitable to be used in roofing insulation as reflection or heat barrier in industrial, commercial and residential buildings, poultry houses metal roofing and house wrapping.

DESIGNED TO YOUR ADVANTAGE



foil™

EnViro-tuff®

REFLECTIONS OF QUALITY AND RELIABILITY



Housing Project

EnViro-tuff® the superior foil that is specially designed to meet global standards. It meets your needs for an effective and cost efficient protection from the ravages of harsh weather conditions.



Warehouse Project

EnViro-tuff® has high reflective properties. Rigorous tests are constantly conducted to ensure its durability & reliability. It is proven for its effectiveness, making it the ideal choice for providing optimum insulations against radiant heat & moisture vapour. Light in weight yet strong and durable.



Poultry House Project

EnViro-tuff® is designed for easy handling and offers superior quality at the fraction of the overall building cost.



Factory Project

Premium Quality at Competitive Prices



97% Radiant Heat Reflectivity

EnViro-tuff® radiant barrier dramatically improves energy efficiency of a building by effectively reducing up to 97% of radiant heat.



Moisture Barrier (WVTR)

EnViro-tuff® is a good vapour barrier which specially designed to prevent any penetration of water and moisture-laden air, guarding against condensation, rot and mildew.



UV + Heat Stability

EnViro-tuff® has the ability to maintain its physical size and properties under extreme temperature changes.



Tear & Puncture Resistance

EnViro-tuff® is strong and has high tear resistant feature due to its superior reinforcement.



No Wire Netting

EnViro-tuff® being strong and durable is design without additional supporting material for installation.



Energy Saving

EnViro-tuff® radiant barrier is designed to provide good insulation to improve energy performance of the building and save energy.



Hotel Resort Project



Lightweight

EnViro-tuff® is lightweight and strong, thus it makes installation work much efficient.



Fire Retardant

EnViro-tuff® fire rated series tested and complied with international standards such as BS 476 part 6 & 7, ASTM E84 and AS 1530.

SIRIM Certification

EnViro-tuff® fire rated series are tested and certified to Sirim Products Listing.



SIRIM
Certified To:
ISO 9001 : 2008
Certification No: AR 0385



SIRIM
Certified To:
BS 476 : PART 6 : 1989 &
BS 476 : PART 7 : 1997
Certification No: LS096501

WF 302A (AL/AL)

WF 302A (AL/AL)



5 layers laminate made up of a double sided reflective Aluminium Foil bonded to reinforce high density polyethylene woven fabric by special fire retardant material.

CHARACTERISTIC		TEST METHOD	UNIT (SI)	SPECIFICATION
Laminated Roll Specifications	Emissivity	ASTM E 408	Index	≤ 0.05 (97 ± 2%)
	Grammage	BS EN 965	g/m ²	163 ± 10
	Thickness	In-house	μ	137 ± 20
	Tensile Strength	MD CD	In-house	N/50mm ≥ 500 ≥ 500
	Elongation	MD CD	In-house	% ≥ 15 ≥ 15
	Water Vapour Transmission Rate	ASTM F 1249	g/m ² /day	≤ 0.5
	Initial Tear Resistance	MD CD	ASTM D 1004	N ≥ 30 ≥ 30
	Tear Propagation	MD CD	DIN 53363	N/mm ≥ 800 ≥ 600

WF 302B (AL/MPET)

WF 302B (AL/MPET)



5 layers laminate made up of a double sided reflective material (Aluminium & Metalized) bonded to reinforce high density polyethylene woven fabric by special fire retardant material.

CHARACTERISTIC		TEST METHOD	UNIT (SI)	SPECIFICATION
Laminated Roll Specifications	Emissivity	Aluminium MPET	ASTM E 408	Index ≤ 0.05 (97 ± 2%) ≤ 0.50 (55 ± 5%)
	Grammage	BS EN 965	g/m ²	155 ± 10
	Thickness	In-house	μ	138 ± 20
	Tensile Strength	MD CD	In-house	N/50mm ≥ 600 ≥ 550
	Elongation	MD CD	In-house	% ≥ 20 ≥ 15
	Water Vapour Transmission Rate	ASTM F 1249-01	g/m ² /day	≤ 0.10
	Initial Tear Resistance	MD CD	ASTM D 1004	N ≥ 40 ≥ 40
	Tear Propagation	MD CD	DIN 53363	N/mm ≥ 400 ≥ 400

WF 301 (AL)

WF 301 (AL)



3 layers laminate made up of a single sided reflective Aluminium foil bonded to reinforce high density polyethylene woven fabric by special fire retardant material.

CHARACTERISTIC		TEST METHOD	UNIT (SI)	SPECIFICATION
Laminated Roll Specifications	Emissivity	ASTM E 408	Index	≤ 0.05 (97 ± 2%)
	Grammage	BS EN 965	g/m ²	118 ± 10
	Thickness	In-house	μ	99 ± 20
	Tensile Strength	MD CD	In-house	N/50mm ≥ 450 ≥ 400
	Elongation	MD CD	In-house	% ≥ 15 ≥ 15
	Water Vapour Transmission Rate	ASTM F 1249	g/m ² /day	≤ 1.00
	Initial Tear Resistance	MD CD	ASTM D 1004	N ≥ 20 ≥ 25
	Tear Propagation	MD CD	DIN 53363	N/mm ≥ 800 ≥ 900

FIRE RETARDANT TEST FOR WF 301, WF 302A & WF 302B

CHARACTERISTIC	TEST METHOD	SPECIFICATION
Fire Propagation of Material Sub-Index, i_1	BS 476 ; Part 6	<6
Overall Performance Index		<12
Surface Flame Spread Test	BS 476 ; Part 7	Class 1
Classification of Fire Hazard		Class 0

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www.smywoven.com

Sample of Specification

V-Foil Enviro-tuff (WF301, WF302A & WF302B)
Fire Retardant Woven Foil With Aluminium Foil And
(Aluminium / Metalized) Foil Bonded To High Density
Polyethylene Woven Fabric.

Details in accordance with manufacturer's instructions.

