# WOYEN FOIL



O CURROL O COLOR O COL 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.



**Housing Project** 



**Warehouse Project** 



**Poultry House Project** 



**Factory Project** 



**Hotel Resort Project** 

REFLECTIONS OF QUALITY AND REUMBILITY En Viro-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.

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.

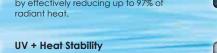
Enviro-tuff is designed for easy handling and offers superior quality at the fraction of the overall building cost.

## **Premium Quality at Competitive Prices**



#### 97% Radiant Heat Reflectivity

En Viro-tuff<sup>®</sup> radiant barrier dramatically improves energy efficiency of a building by effectively reducing up to 97% of





#### Moisture Barrier (WVTR)

 $\mathit{EnViro-tuff}^-$  is a good vapour barrier which specially designed to prevent any penetration of water and moisture-laden air, guarding against condensation, rot and



#### Tear & Puncture Resistance

 $En \underline{\forall iro-tuff}^*$  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**

 $EnMiro-nuff^*$  radiant barrier is designed to provide good insulation to improve energy performance of the building and save



#### Lightweight

*En***⊻***iro-tuff* is lightweight and strong, thus it makes installation work much efficient.



#### SIRIM Certification

 $EnMiro-tuff^*$  fire rated series are tested and certified to Sirim Products Listing.



#### **Fire Retardant**

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





## **WOYEN FOIL** (fire Retardant)



#### WF 302A (AL/AL)

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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	CLASSIFICATION	
tions	Grammage		BS EN 965	g/m²	163 ± 10	-	
Specifications	Tensile Strength	MD CD	AS/NZS 1301.448s	kN/m	≥ 9.5 ≥ 6.0	Medium	
Laminated Roll Sp	Edge Tear Resistance		TAPPI T470	N	≥ 65.0		
	Vapor Barrier		ASTM E96	μg/N.s	> 0.002 < 0.14	Medium	
	Emittance		ASTM C1371	Index	≤ 0.05	Reflective	
	Thermal Resistance		ISO 8301 / MS ISO 8302	m2K/w	≥ 1.7	-	

#### 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	CLASSIFICATION	
Specifications	Grammage		BS EN 965	g/m²	155 ± 10	-	
	Tensile Strength	MD CD	AS/NZS 1301.448s	kN/m	≥ 9.5 ≥ 6.0	Medium	
	Edge Tear Resistanc	e	TAPPI T470	N	≥ 65.0		
aminated Roll	Vapor Barrier		ASTM E96	μg/N.s	> 0.002 < 0.14	Medium	
	Emittance		ASTM C1371	Index	≤ 0.05	Reflective	
Lar	Termal Resistance		ISO 8301 / MS ISO 8302	m2K/w	≥ 1.0	-	

#### 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	2	TEST METHOD	UNIT (SI)	SPECIFICATION	CLASSIFICATION
aminated Roll Specifications	Grammage		BS EN 965	g/m²	118 ± 10	-
	Tensile Strength	MD CD	AS/NZS 1301.448s	kN/m	≥ 7.5 ≥ 4.5	Light
	Edge Tear Resistance		TAPPI T470	N	≥ 45	
	Vapor Barrier		ASTM E96	μg/N.s	> 0.002 < 0.14	Medium
	Emittance		ASTM C1371	Index	≤ 0.05	Reflective
La	Termal Resistance		ISO 8301 / MS ISO 8302	m2K/w	≥ 1.1	-

FIRE RETARDANT TEST FOR WF 301, WF 302A & WF 302B					
CHARACTERISTIC	TEST METHOD	SPECIFICATION			
Fire Propagation of Material					
Sub-Index, $i_{\scriptscriptstyle 1}$	BS 476 ; Part 6	<6			
Overall Performance Index		<12			
Surface Flame Spread Test	BS 476 ; Part 7	Class 1			
Classification of Fire Hazard		Class O			



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#### 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.