

# Wunderfelt™ Emerald Range

Blend: 100% Jute



United Bonded Fabrics (UBF) is Australia's foremost felt underlay manufacturer, with over 45 years of experience in manufacturing for the carpet industry.

The Wunderfelt™ range of traditional jute and premium goat / jute underlay is recommended for heavy duty commercial applications. Wunderfelt™ underlay provides excellent thermal and acoustic insulation properties, helping reduce heating and cooling costs while providing improved sound absorption and quieter rooms.

## Physical Characteristics

	AJ50	AJ60	AJ70
<b>PRODUCT WEIGHT</b>	1250g/m <sup>2</sup> ± 10%	1400g/m <sup>2</sup> ± 10%	1750g/m <sup>2</sup> ± 10%
<b>THICKNESS</b>	10mm ± 2	12mm ± 2	12mm ± 2
<b>ROLL LENGTH</b>	25m	25m	25m
<b>ROLL WIDTH</b>	1.83m	1.83m	1.83m
<b>ROLL WEIGHT</b>	57.19kg	64.05kg	80.06kg
<b>ROLL AREA</b>	45.75m <sup>2</sup>	45.75m <sup>2</sup>	45.75m <sup>2</sup>
<b>CLASSIFICATION</b>	Heavy Duty Commercial	Heavy Duty Commercial	Heavy Duty Commercial

## Performance Specifications

PROPERTY	AJ50 TYPICAL RESULT	AJ60 TYPICAL RESULT	AJ70 TYPICAL RESULT	REQUIREMENTS PER AS4288-1999	TEST METHOD
<b>BREAKING STRENGTH</b>					
Length ( N/50mm )	88.2	150	273	40 minimum	AS2001.2.3.C
Width ( N/50mm )	77.5	77	179	40 minimum	AS2001.2.3.C
Length Extension Under Force @ 40N ( % )	5.1	N/A	4.3	20 maximum	AS2001.2.3.C
Width Extension Under Force @ 40N ( % )	6.3	N/A	3.0	20 maximum	AS2001.2.3.C
Work of Compression ( J/m <sup>2</sup> )	158	133	136		AS4288-1999
<b>LOSS OF THICKNESS</b>					
Static Loading ( % )	32	24	32	40 maximum	AS2111.14
Dynamic Loading ( % )	21	22	13	40 maximum	AS2111.2
Work of Compression after Dynamic Loading ( J/m <sup>2</sup> )	113	111	92	50 minimum 200 maximum	AS4288-1999
Retention of Work of Compression after Dynamic Loading ( % )	71	84	68	40 minimum	AS4288-1999 Appendix A
Deflection @ 100kpa after Dynamic Loading ( Mm )	3.8	4.0	3.0	1.5 minimum 9 maximum	AS4288-1999 Appendix A

## Thermal Insulation Properties

The Thermal conductivities of various underfelts were tested in a calibrated heat flow meter according to AS/NZS 4859.1.

PRODUCT	THERMAL CONDUCTIVITY ( W/m <sup>2</sup> /K )	NOMINAL THICKNESS ( mm )	R-VALUE AT NOMINAL THICKNESS ( m <sup>2</sup> K/W )
AJ50	0.042	10	0.24
AJ60	0.042	12	0.29
AJ70	0.042	12	0.29

## Acoustic Insulation Properties

Carpet and UBF Underfelts. The acoustic insulation property of Sound Absorption Coefficient as a function of noise frequency was measured using an impedance tube according to AS/NZS 1935.1. The measurements were taken with the underlay underneath 26oz 9mm cut pile nylon carpet. NRC values are not rounded.

PRODUCT	SOUND ABSORPTION COEFFICIENT					NRC
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	
Carpet Only	0.04	0.06	0.10	0.12	0.34	0.16
Carpet + AJ50	0.12	0.13	0.29	0.59	0.68	0.42
Carpet + AJ60	0.12	0.14	0.31	0.61	0.66	0.43
Carpet + AJ70	0.10	0.12	0.35	0.63	0.65	0.44

## Flammability Properties

Simultaneous tests for Ignitability Index, Spread of Flame Index, Heat Evolved Index and Smoke Developed Index have been tested in an independent test laboratory according to AS1530.3. Products of the same base material generally have similar flammability properties. AJ50 and AJ70 are expected to have similar properties to AJ60.

PRODUCT	IGNITABILITY ( Range 0 - 20 )	SPREAD OF FLAME ( Range 0 - 10 )	HEAT EVOLVED ( Range 0 - 10 )	SMOKED DEVELOPED ( Range 0 - 10 )
AJ60	18	0	5	3