

# Superfelt™ Opal Range

Blend: 90% recycled textile, 10% Polyester



products knowledge solutions  
for more detailed ecological and/or health information on this product refer to [www.ecospecifier.org](http://www.ecospecifier.org)

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

The Superfelt™ range of recycled textile underlay is suitable for heavy duty commercial applications. Superfelt™ underlay provides excellent thermal and acoustic insulation properties, helping reduce heating and cooling costs while providing improved sound absorption and quieter rooms.

## Physical Characteristics

	CS40	CS60	
<b>COMPOSITION</b>	90% recycled textile, 10% polyester	90% recycled textile, 10% polyester	
<b>PRODUCT WEIGHT</b>	1000g/m <sup>2</sup> ± 100	1500g/m <sup>2</sup> ± 150	
<b>THICKNESS</b>	9mm ± 2	12mm ± 2	
<b>ROLL LENGTH</b>	10m	10m	
<b>ROLL WIDTH</b>	1.83m	1.83m	
<b>ROLL WEIGHT</b>	18.3kg	27.5kg	
<b>ROLL AREA</b>	18.3m <sup>2</sup>	18.3m <sup>2</sup>	
<b>CLASSIFICATION</b>	Heavy Duty Commercial	Heavy Duty Commercial	

## Performance Specifications

PROPERTY	CS40 TYPICAL RESULT	CS60 TYPICAL RESULT	REQUIREMENTS PER AS4288-1999	TEST METHOD
<b>BREAKING STRENGTH</b>				
Length ( N/50mm )	70	90	40 minimum	AS2001.2.3.C
Width ( N/50mm )	53	58	40 minimum	AS2001.2.3.C
Work of Compression ( J/m <sup>2</sup> )	87	141		AS4288-1999
<b>LOSS OF THICKNESS</b>				
Static Loading ( % )	19	30	40 maximum	AS2111.14
Dynamic Loading ( % )	6	20	40 maximum	AS2111.2
Work of Compression after Dynamic Loading ( J/m <sup>2</sup> )	78	88	50 minimum 200 maximum	AS4288-1999
Retention of Work of Compression after Dynamic Loading ( % )	89	70	40 minimum	AS4288-1999 Appendix A
Deflection @ 100kpa after Dynamic Loading ( Mm )	2.8	4.2	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 )
CS40	0.037	9	0.24
CS60	0.038	12	0.31

## 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 + CS40	0.06	0.11	0.32	0.63	0.67	0.43
Carpet + CS60	0.10	0.16	0.48	0.67	0.63	0.49

## Flammability Properties

	CS40 TYPICAL RESULT	CS60 TYPICAL RESULT	REQUIREMENTS	TEST METHOD
<b>Fire Propagation ( mm )</b>	12	17	100 maximum ( AS 2404 )	AS2111.18
<b>Critical Radiant Flux ( CRF ) ( kW/m<sup>2</sup> )</b>	>2.2 <sup>1</sup>	>2.2 <sup>1</sup>	22 minimum ( BCA <sup>2</sup> )	ISO 9239
<b>Smoke Development Rate ( SDR ) ( % min )</b>	<750 <sup>1</sup>	<750 <sup>1</sup>	750 maximum ( BCA <sup>2</sup> )	ISO 9239

1. Deemed to achieve these results according to CSIRO Manufacturing & Infrastructure Technology Certificate of Assessment No. 973 when used under a wool or wool / nylon blend carpet with no more than 20% nylon and of Total Pile Mass ( TPM ) no less than 1060 g/m<sup>2</sup>. Full details of the Certificate of Assessment is available on request.
2. Valid for all Building Code of Australia building classes except for aged care accommodation and patient care areas.



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