

# Technical Brochure



July 2018

**Joyce**  
FORM PRODUCTS



# Explaining this brochure

## GRADE

This is a system that identifies density and hardness for polyether foams, and density and cell count for polyester foams.

All Joyce foam grades have density and hardness assigned by the Australian Standards.

Australian Standard AS2281-1993 is a foam classification system based on applications for normal or heavy-duty foams. These classifications are a general guide only. They are used in testing foam grades to ensure they conform to the Australian Standard requirements.

## DENSITY

This refers to the weight of foam per cubic metre. This is the most important measure when looking at foam quality. The denser the foam, the more foam per cubic metre for comfort and support. The first number in the foam grade represents the density. For example, Ultimate Comfort HR36-130CM5 foam density is 36kg/m<sup>3</sup> which is a high-density foam.

## HARDNESS

This is a measure of how the foam feels, not a measure of quality. For example, Ultimate Comfort HR36-110CM5, has a nominal hardness of 110 Newtons, when tested to Australian Standard AS2282.

## COMFORT / INDENTATION FACTOR

This is the ratio of forces required to compress the foam to 65% and 25% of its original height.

Quality foam for seating applications will have an indentation or comfort factor of at least 2.0.

## RESILIENCE

This gives a measure of the bounce or spring of the foam grade. The higher the resilience percentage, the better the foam. Resilience of 40% or higher indicates good recovery. All Ultimate Comfort foams have a resilience of 45% or higher. Indulgence, Viscoform, and Gelform are low resilience grades for maintaining their unique characteristics.

## ENVIRONMENT

Joyce Foam Products has been certified under the GECA FFFv2.1i-2010 Furniture, Fittings and Foam standard and awarded the Australian Good Environmental Choice Ecolabel, Licence No. JOY-2016.

The Good Environmental Choice label is only awarded to products which have the highest level of environmental preference, quality and fitness for purpose. This represents the leading environmentally preferable options in the marketplace.

For further information on licensed products, refer to the GECA website - [www.geca.org.au](http://www.geca.org.au)

**Joyce**  
FOAM PRODUCTS



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Grade	Colour	AS2281-1993 Classification	Nominal Density kg/m <sup>3</sup>	Hardness IFD 40%N	Comfort / Indent Factor	Resilience Min. %	Typical Uses
<b>Econofoam</b> <b>Econofoam - Economy range of foams</b> Econofoam comes with a one year warranty. <div>   </div>							
E10-100	White	-	10	100 ± 15	1.75	30	Border foam - non load bearing
E16-100	White / Charcoal / Green	-	16	100 ± 15	1.75	30	Bedding, acoustic, general purpose
E17-65	White	-	17	65 ± 10	1.75	35	Bedding, general purpose
E19-130	White	-	19	130 ± 20	1.75	25	Bedding, general purpose
E23-120	Olive	-	23	120 ± 20	1.75	35	Seating, overlays
<b>Quilttec</b> <b>Quilttec - Hyper soft foam</b> Quilttec comes with a five year warranty. <div>   </div>							
L10-25	White	-	10	20 ± 10	1.75	-	Top layer for quilting
<b>Living</b> <b>Living Comfort - Light duty foam range</b> Living Comfort foams come with a one year warranty. <div>   </div>							
L16-110	White	-	16	110 ± 15	1.75	30	Quilting, general purpose
L19-130	Peach	-	19	130 ± 20	1.75	30	Overlays, quilting
L24-160	White / Blue	-	24	160 ± 20	1.75	30	Upholstery applications, overlays
L27-210	White	-	27	210 ± 20	1.75	30	Automotive uses, packaging, support
L28-280	White	-	28	280 ± 30	1.75	30	Special purpose high load bearing applications
<b>Active</b> <b>Active Comfort - Normal duty foam range</b> Active Comfort foam is a general purpose range of foams designed to stand up to today's active lifestyle. Active Comfort foams come with a five year warranty. <div>   </div>							
N20-100	White / Charcoal	N	20	100 ± 15	1.75	40	Quilting, back cushioning
N23-130	Pale grey	N	23	130 ± 20	1.75	40	General purpose cushioning, overlays
N24-115	Blue	N	24	115 ± 15	1.75	40	General purpose seat cushion
N27-160	Yellow	N	27	160 ± 20	1.75	40	Seating, automotive uses, bedding, mattress overlays
N31-190	Green	N	31	190 ± 20	1.75	35	High load bearing, thin seating, arm-rests
N31-320	Orange / White	N	31	320 ± 35	1.80	30	Special purpose high load bearing applications
<b>Premium</b> <b>Premium Comfort - Heavy duty foam range</b> Premium Comfort foam will retain its bounce and appearance for years. Premium Comfort foams come with a ten year warranty. <div>   </div>							
N30-130	Grey	N	30	130 ± 20	1.75	40	Cushioning, seat cushions, mattresses
H25-60	White	H	25	60 ± 10	1.75	40	Pillows, heavy duty super soft furniture, quilting
H28-80	Yellow	H	28	80 ± 10	1.75	40	Pillows, upholstery, overlays
H35-100	White	H	35	100 ± 15	1.75	40	Seating,
H35-130	Yellow	H	35	130 ± 20	1.75	40	Seating, mattresses
H35-165	Mauve	H	35	165 ± 20	1.75	40	Seating, mattresses
H35-200	Blue	H	35	200 ± 20	1.80	40	Seating, mattresses
H42-500	Mauve	H	42	500 ± 60	1.80	20	High load bearing, automotive uses, very firm bedding
<b>Ultimate</b> <b>Ultimate Comfort - High resilience foam range</b> Ultimate Comfort foam has been designed to give a soft initial feel, with deep down support. Ultimate Comfort foam grades come with a lifetime warranty. <div>   </div>							
HR36-80CM5	Olive	HR	36	80 ± 10	2.2	50	Overlays, head rests, soft backs
HR36-110CM5	Pink / White	HR	36	110 ± 15	2.2	50	Domestic, seat cushioning
HR36-130CM5	Grey	HR	36	130 ± 20	2.2	50	Domestic, seat cushioning
HR36-160CM5	Yellow	HR	36	160 ± 20	2.2	40	Commercial cushioning
HR38-200CM5	Orange	HR	38	200 ± 30	2.2	45	Commercial cushioning
HR50-120CM5	White	HR	50	120 ± 15	2.4	60	Latex feel cushioning and bedding
HR50-250	White	HR	50	250 ± 30	2.0	55	Latex feel cushioning and bedding
HR50-320CM5	Dark grey	HR	50	320 ± 40	2.2	40	Ultra-firm cushioning applications in commercial & public transport seating

Grade	Colour	AS2281-1993 Classification	Nominal Density kg/m <sup>3</sup>	Hardness IFD 40%N	Comfort / Indent Factor	Resilience Min. %	Typical Uses
 <b>Indulgence Comfort</b> - Low resilience foam range Indulgence Comfort foam is a high density, slow recovery foam, soft to touch with slow shape recovery. Indulgence Comfort comes with a fifteen year warranty.  							
LR40 -50	White	LR	40	50 ± 10	1.85	-	Seat cushion overlay
 <b>Hygroflex-Indulge</b> - Durable and resilient Hygroflex-Indulge offers the features of memory foam combined with the functionality of high resilience foam. Hygroflex-Indulge comes with a fifteen year warranty.  							
HG35 - 55	White	-	35	55 ± 15	2	20	Bedding products, pillows & mattresses
HG45 - 50	White	-	45	50 ± 15	2	40	Bedding products, pillows & mattresses
 <b>Indulgence Plus</b> - Revolutionary slow recovery viscoelastic foam Indulgence Plus comes with a fifteen year warranty.  							
VR45 - 25	White	LR	45	25 ± 10	2	-	Seat cushion overlay, bedding overlay
VR50 - 80	White	LR	50	80 ± 15	2	-	Seat cushion overlay, bedding overlay
VR52 - 50	White	LR	52	50 ± 15	2	-	Seat cushion overlay, bedding overlay
VR55 - 40	White	LR	55	40 ± 10	2	-	Seat cushion overlay, bedding overlay
VR60 - 50	White	LR	60	50 ± 15	2	-	Seat cushion overlay, bedding overlay
VR60 - 75	Beige	LR	60	75 ± 15	2	-	Seat cushion overlay, bedding overlay
 <b>Gelform</b> - Particle Gel (PG), Liquid Gel (LG) Gelform comes with a fifteen year warranty.  							
LR40 - 50PG	White	LR	40	50 ± 10	1.85	-	Seat cushion overlay, bedding overlay
LR40 - 50LG	White	LR	40	50 ± 10	1.85	-	Seat cushion overlay, bedding overlay
VR52 - 50PG	Blue	LR	52	50 ± 15	2	-	Seat cushion overlay, bedding overlay
VR52 - 50LG	White	LR	52	50 ± 15	2	-	Seat cushion overlay, bedding overlay
VR60 - 50PG	Blue	LR	60	50 ± 15	2	-	Seat cushion overlay, bedding overlay
 <b>Dricell</b> - Water resistant outdoor foams Dricell comes with a three year warranty.  							
N27 - 120R	White	N	27	120 ± 20	1.8	35	Outdoor furniture, marine cushioning & pillows
N31 - 200R	White	N	31	200 ± 40	1.8	30	Outdoor furniture & marine cushioning

Grade	Colour	Nominal Density kg/m <sup>3</sup>	Hardness IFD 40%N	Indentation Factor	Resilience Min. %	Typical Uses
<b>SPECIALTY FOAMS</b>						

U29 - 400	Charcoal	29	400 ± 50	1.85	20	Carpet underlay, high load bearing upholstery & packaging applications
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<b>COMBUSTION MODIFIED FOAM RANGE</b>						
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N23 - I15CM2	Beige / Charcoal	23	115 ± 15	1.75	40	Soft cushioning, thin section overlays
N28 - I80CM	Charcoal	28	180 ± 20	1.75	40	Firm cushioning, transport seating
H25 - 60CM	White	25	60 ± 10	1.75	40	Commercial bedding
H28 - 80CM	Yellow	28	80 ± 10	1.75	40	Commercial bedding
H35 - I30CM2	Pale Blue	35	130 ± 20	1.75	50	Heavy duty seating applications, mattresses & medical mattresses, Acoustical applications

<b>FLAME LAMINATING FOAM RANGE</b>						
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N27 - I40FL	Grey / White	27	140 ± 20	1.75	25	Textile lamination & automotive applications
N28 - I30FL	Charcoal / White	28	130 ± 20	1.75	25	Textile lamination & automotive applications
N32 - I70CMFL	Charcoal	32	170 ± 20	1.75	30	Textile lamination & automotive applications

Grade	Colour	Nominal Density kg/m <sup>3</sup>	Hardness IFD 40%N	Indentation Factor	Pore Count Cells / 25mm	Typical Uses
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<b>POLYESTER-URETHANE FOAM RANGE – Conventional</b>						
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S21/70	White	21	120 min	1.70	70 ± 10	General purpose, textile laminating Packaging interlining, shoulder pads, flame lamination
S30/60	Charcoal / Yellow	30	170 min	1.70	55 ± 10	General purpose, die cutting, weather strips

*Charcoal is the standard colour, other colours available subject to minimum order requirements*

<b>POLYESTER-URETHANE FOAM RANGE – Combustion Modified</b>						
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S28/70CM	Charcoal / Grey	28	140 min	1.80	70 ± 20	Acoustical applications, flame lamination
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<b>MERACELL RETICULATED POLYESTER FOAM RANGE</b>						
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S28/25R	Charcoal	28	-	-	25 ± 8	Air and liquid filtration, speaker grilles, surge mitigation
S28/60R	Charcoal / Yellow	28	-	-	55 ± 10	Resistance to petroleum products
S28/80R	Charcoal / Yellow	28	-	-	80 ± 10	Resistance to petroleum products

*Charcoal is the standard colour, other colours available subject to minimum order requirements*

<b>MERACELL RETICULATED POLYETHER FOAM RANGE</b>						
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N27/30R	White	27	-	-	30 ± 7	Filtration with improved water resistance
N27/60R	Pale Yellow	27	-	-	60 ± 15	Filtration with improved water resistance
N31/35R	White	31	-	-	35 ± 7	Air & water filtration, outdoor furniture cushioning

Joyce Foam Products manufacture a large range of foam grades for all industrial applications.  
Contact Joyce Foam Products for further information and advice. Specifications and properties are presented in good faith.  
Joyce Foam Products is unable to accept responsibility for performance in actual applications and reserves the right to alter any data without notification.  
Not all types and colours are available in all states, for variations contact your nearest Joyce office.  
**All the above grades are made to order. Contact Joyce Foam Products for further information.**