

Joyce

TECHNICAL BROCHURE



A BETTER CHOICE
FOR THE ENVIRONMENT



INNOVATION
IS OUR DRIVE



KEEPING YOU
COMPETITIVE



CREATING
HEALTHIER HOMES

MARCH 2024

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GRADE

This is a system that identifies density and hardness for polyether foams and density and cell count for polyester 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. 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/m³, 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.

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.

OUR PARTNERSHIPS & CERTIFICATIONS



Global GreenTag is one of the world's most robust, trusted and widely recognised eco-labels. GGT independently assures that every product is fitness tested and certified under their leading certification program that uses the Global GreenTag International Standard and its robust methodology that provides evidence of environmentally preferable products.

Global GreenTag have earned the reputation and trust of thousands of buyers, hundreds of companies and numerous green building councils, certification bodies and governments worldwide.

100% of the Joyce Foam range is Global GreenTag certified GreenRate: Level A.



**STANDARD
100**

Joyce foams have been independently certified as free of harmful substances according to the strict global criteria of STANDARD 100 by OEKO-TEX®.

OEKO-TEX® test criteria consider regulations, scientific data on maintaining good health and non-government organisational requirements for safety.

100% of Joyce Comfort foams are OEKO-TEX® STANDARD 100 certified.



**Blue Tick
Product
Certification**

Joyce Ultimate Comfort foams have been independently tested by Furntech-AFRDI and are prequalified for use in commercial seating as specified under AS/NZS 4438:1997.

AFRDI is an independent technical organisation providing quality certification for furniture and furniture components.

All Joyce Ultimate Comfort foams are AFRDI Blue Tick Certified.



CompriShield is a sustainable, bio-based microbial control solution that is derived from coconut oil. It provides persistent antibacterial odour protection as well as mould and mildew resistance.

CompriShield is one of the most comprehensive treatments on the market today.

All Joyce Comfort foams are infused with CompriShield during the manufacturing process.

Quiltec™



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR		TYPICAL USES
L10-25	White	10	25 ± 10	1.75	-	Top Layer For Quilting

Hygroflex™



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE MIN. %	TYPICAL USES
HG35-55	White	35	55 ± 15	2.00	20	Mattresses, Pillows & Pressure Management
HG45-50	White	45	50 ± 15	2.00	30	Mattresses, Pillows & Pressure Management

Coolflow™



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE %	TYPICAL USES
NG30-50PCM	White	30	50 ± 10	1.50	10 MAX	Mattresses & Quilting

Dricell™



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE MIN. %	TYPICAL USES
N27-120R	White	27	120 ± 20	1.80	35	Outdoor Furniture & Marine Cushioning
N31-200R	White	31	200 ± 40	1.80	30	Outdoor Furniture & Marine Cushioning

COMFORT FOAMS



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE %	TYPICAL USES
LR40-50	White	40	50 ± 10	1.85	20 MIN	Seat Cushion Overlay
VR45-25	White	45	25 ± 10	2.00	20 MAX	Pillows, Seat Cushion Overlay & Bedding Overlay
VR50-80	White	50	80 ± 15	2.00	10 MAX	Pillows, Seat Cushion Overlay & Bedding Overlay
VR52-50	White	52	50 ± 15	2.00	10 MAX	Pillows, Seat Cushion Overlay & Bedding Overlay
VR55-40	White	55	40 ± 10	2.00	10 MAX	Pillows, Seat Cushion Overlay & Bedding Overlay
VR60-50	White	60	50 ± 15	2.00	10 MAX	Pillows, Seat Cushion Overlay & Bedding Overlay
VR60-75	Beige	60	75 ± 15	2.00	8 MAX	Pillows, Seat Cushion Overlay & Bedding Overlay
VR80-50	White	80	50 ± 10	2.00	10 MAX	Pillows, Seat Cushion Overlay & Bedding Overlay
VR80-80	White	80	80 ± 15	2.00	10 MAX	Pillows, Seat Cushion Overlay & Bedding Overlay



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE %	TYPICAL USES
NG30-50LG	White	30	50 ± 10	1.50	10 MAX	Seat Cushion Overlay & Bedding Overlay
LR40-50LG	White	40	50 ± 10	1.85	20 MIN	Seat Cushion Overlay & Bedding Overlay
VR52-50PG	Blue	52	50 ± 10	2.00	20 MAX	Seat Cushion Overlay & Bedding Overlay
VR52-50LG	White	52	50 ± 15	2.00	20 MAX	Seat Cushion Overlay & Bedding Overlay
VR55-40PG	Pale Blue	55	40 ± 10	2.00	20 MAX	Seat Cushion Overlay & Bedding Overlay
VR60-50PG	Blue	60	50 ± 15	2.00	10 MAX	Seat Cushion Overlay & Bedding Overlay

COMFORT FOAMS

Premium
COMFORT



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE MIN. %	TYPICAL USES
N30-130	Grey	30	130 ± 20	1.75	40	Cushioning, Seat Cushions & Mattresses
N30-130LG	Blue	30	130 ± 20	1.75	40	Seat Cushion Overlay & Bedding Overlay
H25-60	White	25	60 ± 10	1.75	40	Pillows, Heavy Duty Super Soft Furniture & Quilting
H28-80	Yellow	28	80 ± 10	1.75	40	Pillows, Heavy Duty Super Soft Furniture & Quilting
H35-100	White	35	100 ± 15	1.75	40	Seating & Mattresses
H35-130	Yellow	35	130 ± 20	1.75	40	Seating & Mattresses
H35-165	Mauve	35	165 ± 20	1.75	40	Seating & Mattresses
H35-200	Blue	35	200 ± 20	1.80	40	Seating & Mattresses
H42-500	Mauve	42	500 ± 60	1.80	20	High Load Bearing, Automotive Uses & Very Firm Bedding

Active
COMFORT



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE MIN. %	TYPICAL USES
N20-100	White Charcoal	20	100 ± 15	1.75	40	Quilting & Back Cushioning
N23-130	Pale Grey	23	130 ± 20	1.75	40	General Purpose Cushioning & Overlays
N24-115	Blue	24	115 ± 15	1.75	40	General Purpose Seat Cushion
N27-160	Yellow	27	160 ± 20	1.75	40	Seating, Automotive Uses, Bedding & Mattress Overlay
N31-190	Green	31	190 ± 20	1.75	35	High Load Bearing, Thin Seating & Arm Rests
N31-320	Orange White	31	320 ± 35	1.80	30	Special Purpose High Load Bearing Applications



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE MIN. %	TYPICAL USES
L16-110	White	16	110 ± 15	1.75	30	Quilting & General Purpose
L19-130	Peach	19	130 ± 20	1.75	30	Overlays & Quilting
L27-210	White	27	210 ± 20	1.75	30	Automotive, Packaging & Support
L28-280	White	28	280 ± 30	1.75	30	Special Purpose High Load Bearing Application



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE MIN. %	TYPICAL USES
E10-100	White	10	100 ± 15	1.75	30	Border Foam & Non-Load Bearing
E16-100	White	16	100 ± 15	1.75	30	Bedding, Acoustics & 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	Bedding & General Purpose

INDUSTRIAL, COMMERCIAL AND TECHNICAL FOAMS



Blue Tick Product Certification



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE MIN. %	TYPICAL USES
HR36-80CM5	Olive	36	80 ± 10	2.20	50	Overlays, Head Rests & Soft Backs
HR36-110CM5	White	36	110 ± 15	2.20	50	Commercial Cushioning
HR36-130CM5	Grey	36	130 ± 20	2.20	50	Commercial Cushioning
HR36-160CM5	Yellow	36	160 ± 20	2.20	40	Commercial Cushioning
HR38-200CM5	Orange	38	200 ± 30	2.20	45	Commercial Cushioning
HR50-120CM5	White	50	120 ± 15	2.40	60	Latex Feel Cushioning & Bedding
HR50-250CM5	Beige	50	250 ± 30	2.00	50	Latex Feel Cushioning & Bedding
HR50-320CM5	Dark Grey	50	320 ± 40	2.20	40	Ultra-Firm Cushioning Applications In Commercial & Public Transport Seating

Specialty Foams

GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE MIN. %	TYPICAL USES
U29-400	Charcoal	29	400 ± 50	1.85	20	Carpet Underlay, High Load Bearing Upholstery & Packaging

Combustion Modified Foams

GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE MIN. %	TYPICAL USES
N23-115CM2	White	23	115 ± 15	1.75	40	Soft Cushioning & Thin Section Overlay (*Subject to MOQ)
N28-180CM	Charcoal	28	180 ± 20	1.75	40	Acoustical Applications

Flame Laminating Foams

GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	COMFORT / INDENT FACTOR	RESILIENCE MIN. %	TYPICAL USES
N27-140FL	Grey White	27	140 ± 20	1.75	25	Textile Lamination & Automotive Applications



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	INDENTATION FACTOR	PORE COUNT CELLS / 25MM	TYPICAL USES
CONVENTIONAL						
S30 / 60	Charcoal	30	170 MIN	1.70	50 ± 10	General Purpose, Die Cutting, & Weather Strips
COMBUSTION MODIFIED						
S28 / 70CM	Charcoal	28	110 MIN	1.80	70 ± 10	Acoustical Applications & Flame Lamination



GRADE	COLOUR	NOMINAL DENSITY KG/M ³	HARDNESS IFD 40%N	INDENTATION FACTOR	PORE COUNT CELLS / 25MM	TYPICAL USES
POLYESTER FOAM RANGE						
S28 / 25R	Charcoal	28	-	-	25 ± 8	Air & Liquid Filtration, Speaker Grilles & Surge Mitigation
S28 / 60R	Charcoal	28	-	-	55 ± 10	Filtration With Resistance To Petroleum Products
S28 / 80R	Charcoal	28	-	-	70 ± 10	Filtration With Resistance To Petroleum Products
POLYETHER FOAM RANGE						
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	Filtration With Improved Water Resistance

Moulded Foam

Moulded foam comes in a wide range of density and hardness. By customising our formulations, we can achieve the perfect look and feel to suit every customer's individual needs.

Our automated moulding line uses robotic technology, which provides a level of consistency and quality that cannot be achieved manually. Joyce moulded foams have high porosity and low skin densification, offering superior quality and breathability.

Moulded Foam Brands

Hygroflex™

MOULDED

- Offers the same excellent pressure relief properties as traditional Hygroflex
- Ideal for pillows and medical aids
- Open cell structure, high porosity
- Minimal skin densification
- Protected by CompriShield

Viscoform™

MOULDED

- Offers the same shape-conforming, slow-recovery properties as traditional Viscoform
- Ideal for pillows
- Open-cell structure, high porosity
- Protected by CompriShield

Component Impregnation

Joyce moulded foam production allows for special components to be moulded into the foam:

- Frames and composite fibres for reinforcement
- Wires and clips for specialised upholstery
- Sensors and motors for sophisticated functionality
- Various other components

Ultimate™

MOULDED

- High resilience, super-durable foam range
- Wide range of hardness and densities available
- Typical applications: automotive, heavy commercial vehicles, rail and office seating
- Standard and combustion-modified (CM5) options available

Ultimate™

MOULDED PLUS

- High resilience, super-durable foam range
- Typical applications: commercial furniture and task seating
- AFRDI Blue Tick Certified: complies with AS/NZS 4088.1 and AS 2282.3
- Protected by CompriShield



Blue Tick
Product
Certification

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 please contact your nearest Joyce office.

Joyce



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