ULLRICH ALUMINIUM TURNING IDEAS INTO SHAPES

NDUSTRIAL PRODUCTS CATALOGUE



Ullrich Aluminium **Extrusion & Rolled** Products

We manufacture and distribute a wide range of Aluminium extrusions to suit a variety of applications in residential, commercial and industrial projects.

From simple geometric shapes to high end structural aluminum sections using high purity aluminium, Ullrich Aluminium has an extrusion that gives you quality. Consistent Reliable



Whatever your extrusion needs, Ullrich Aluminium is your trusted expert.

The Ullrich Aluminium Team is on hand to advise, guide and support you in whatever residential, commercial, or industrial project you are undertaking.

Tried and trusted for over 60 years.

4	Part Number Matrix
6	Smart Extrusions - Smarter Solutions
30	Angles
34	Channels
37	Flat Bar
41	Round Rod
42	Square Rod
43	Half Rounds
44	Rectangular Hollow Sections
47	Square Hollow Sections
50	Zed Sections
51	Tee Sections
52	Hollow Tubes
56	Top Hat Section
57	I-Sections
58	Rolled Products
66	5-Bar Tread Plate
82	Louvre Frame
98	Fence & Gate
108	Ulltra Batten
110	Coolroom
114	Wall Boards
115	Moulds and Trims
117	Glazing & Partitions
119	Stairs & Stair Nosing
121	MDF Board Joiners
122	Marine
126	Ute Tray
129	Truck Deck
136	Signage & Annex Track
139	Modular System
141	Ulltra Sign Composite Panel
143	Ladders, Trestles & Planks
148	Seating & Setting
152	Stanchions
157	Walkway Grating
162	Wardrobe & Vee Glide
164	Balustrade Series 40 & 50
169	Ulltra Light
171	Expanded Grille
173	Extrusion Process

Contents

More Information

View more of our extensive range on our website www.ullrich.com.au



PART NUMBER MATRIX

Use the part number matrix below as a tool to design your Ullrich Aluminium Extrusion, some products may not require all elements of the part number matrix.

E | LMNOP | X | Y | Z

Example: A25251.6CL6.5L

Angle | 25mm | 25mm | 1.6mm Thickness | Clear Anodised | 6.5 Metres in Length

How to use this guide.

Ullrich Aluminium provides access to an extensive range of specialist aluminium extrusion and rolled products as well our own team of experienced design engineers.

If you can't find what you're looking for in this guide, give us a call and we'll source or custom manufacture a solution to suit your specific extrusion application requirements.



Ullrich Aluminium Design

E = Profile T	уре	
А	=	Angles
С	=	Channel
F	=	Flat Bar
FR	=	Flat Bar Radius
RH	=	Rectangular Hollow Sections
RR	=	Rectangular Hollow Radius Corners Sections
SH	=	Square Hollow Sections
SR	=	Square Hollow Radius Corners Sections
Ζ	=	Zed Sections
Т	=	Tee Sections
RT	=	Aluminium Tube
SQR	=	Square Rod
RDR	=	Round Rod

L = Construc	tion Va	ariation
А	=	1st Dimension
В	=	2nd Dimension
С	=	3rd Dimension
D	=	4th Dimension

M = Construct	ion Va	ariation
T1	=	1st Thickness
T2	=	2nd Thickness

N = Constructio	o∩ V	ariation
R1	=	1st Radius
R2	=	2nd Radius

0 = Construction Variation

L = Length

P = Construction Variation W = Width

X = Finish		
MI	=	Mill
BCL	=	AN 5-7um Bright Dip Clear
CL	=	AN 10um Matt Clear
PPSE	=	PC Primrose
PPWH	=	PC Pearl White
PSBK	=	PC Satin Black
PSTB	=	PC Stone Beige
PWBI	=	PC White Birch
TLB	=	AN 10um 2 Step Light Bronze
PPUS	=	PC Ultra Silver
PMAG	=	PC Magnolia
PMOT	=	PC Monument Grey Matte
PMRD	=	PC Manor Red
POGY	=	PC Oyster Grey
PPJR	=	PC Jasper (Dulux)
PSGY	=	PC Slate Grey
PSM	=	PC Surfmist (Dulux)
PWDG	=	PC Woodland Grey (Slate Grey)
PWRC	=	PC Ever Grain Western Red Cedar
PPSP	=	PC Precious Silver Pearl
PABZ	=	PC Anodic Bronze
PADG	=	PC Anotec Dark Grey
PANM	=	PC Anotec Natural Matt
PCCM	=	PC Classic Cream
PBMP	=	PC Bronze Metropolis Pearl
PBOW	=	PC Bond Off White
PBRW	=	PC Bright White
PDNE	=	PC Dune
PSHW	=	PC Shoji White (Interpon)
PDON	=	Deep Ocean (Mountain Blue)
Finishe	es are availab	le in all colour ranges from Interpon and I

with 10,15,20 year warranties

Y = Profile Ler	ngth	
Y	=	Standard Extrusion Length
Z = Alloy & Ter	nper	
6060T5	=	Standard Geometrics
6061T6	=	Structural Angles, Structural Channel
5005-H34	=	Aluminium Sheet/Coil
3003-H16	=	Aluminium Sheet/Coil
5052-H32	=	Aluminium Sheet/Coil
5083-H321	=	Heavy Gauge Aluminium Sheet/Coil
5083-H116	=	Heavy Gauge Aluminium Sheet/Coil
5083-H112	=	Aluminium Plate
5052-0	=	5-Bar Aluminium Treadplate
3003-H224	=	Pattern Aluminium Treadplate

Our engineering specialists are on hand to help so you can trust that an extrusion from Ullrich Aluminium will work the way you need it to. We are ready to support your project with quality products, smart service and trusted integrity.

Note: Aluminium extrusions are available in the range of alloys, tempers and finishes we offer.

Not all aluminium extrusions are available ex-stock, check with your local branch for advice or availability.

Contact us on 1300 650 075

or email sales@ullrich.com.au

d Dulux

HOW ALUMINIUM IS MADE

Bauxite is mined by various process. Once mined it is finely crushed for refining recovery of alumina, the base from which aluminium is made. The separation of the alumina from bauxite is a complicated process. This involves the use of a caustic soda solution heated under pressure to dissolve the alumina. Impurities are filtered out of the solution in the form of a mud-like material. The filtered solution is cooled and alumina is recovered by precipitation in a hydrate form. The resulting fine crystals are heated in long, revolving kilns to drive off the water of crystallization.

The product is alumina in a white powder form. Aluminium metal is produced in large steel shells lined with carbon. These shells are known in the industry as **pots** and are arranged in long rows called **pot lines**.

Alumina is mixed with cryolite in the pots and large quantities of electricity are introduced to reduce the alumina into aluminium and oxygen. The process is continuous and molten metal is siphoned from the pots at regular intervals.





Bauxite

Alumina

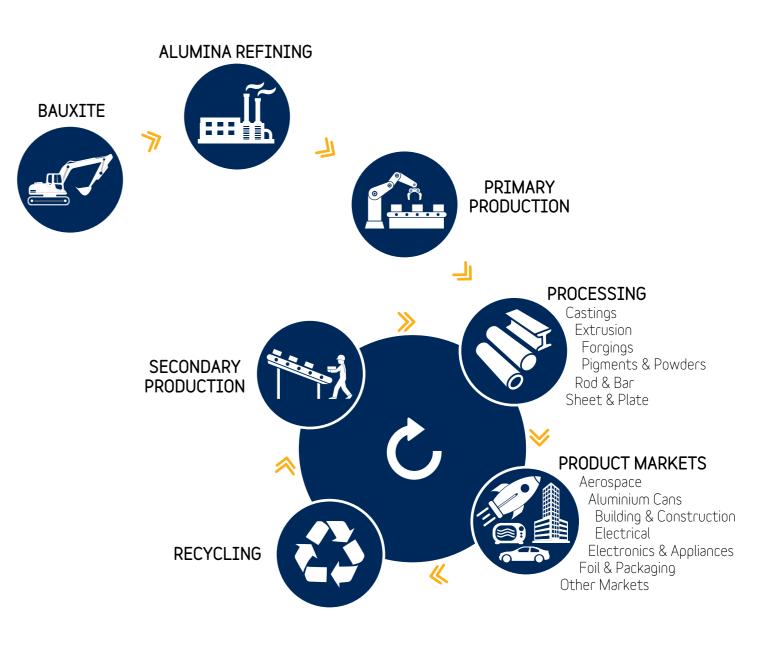
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HOW ALUMINIUM IS TURNED INTO PRODUCTS

Once aluminium is produced it can be made into forms ready for manufacturers to convert into finished products. Industries requiring aluminium may specify from a range of alloys and their metal can be supplied in the form of ingots, extruded shapes, rod, tube, bar, sheet, plate and foil.

Aluminium extrusions have been used commercially for many years. The process involves a heated billet being pushed under extreme pressure through a die, the metal taking the shape of the holes in the die. Extrusions are mostly used to reduce the weight or number of parts in an assembly, or to achieve shapes that cannot be produced satisfactorily any other way.





Aluminium has a unique combination of properties that can be amplified and utilized through alloying. For example - substituting steel components in a motor vehicle with aluminium components can contribute to a lighter more fuel efficient vehicle, however pure aluminium is very malleable; by alloying aluminium with magnesium, manufacturers are able to create a metal that is as strong as steel at only one third of the weight.

Some of the characteristics of aluminium include:



Strong

When mixed with small amount of other metals (particularly magnesium) to create alloys, aluminium is as strong as steel



Impermeable

Aluminium has excellent barrier function which keeps out air, light and microorganisms



Light-weight

Aluminium can weigh only one third of a piece of steel that is the same size and shape



Corrosion Resistant

Aluminium forms a natural film on its surface upon exposure to oxygen. This film is called aluminium oxide, and it protects the surface of the aluminium. If this film is scratched or damaged, it will instantly reform. It is only under certain conditions and exposure to certain elements that aluminium will corrode



Durable

Aluminium's unique combination of strength and corrosion resistance makes it a particularly durable material



100% Recyclable

Recycling aluminium does not compromise any of its unique properties and uses only 5% of the energy used to create the original product. Aluminium can be reused endlessly - approximately two-thirds of all aluminium ever produced is still in use today - representing a growing "energy and resource bank"



Non-Magnetic and Non-Sparking

Thermal Barrier and Conductor

Aluminium is non-magnetic and non-sparking. These properties make it a suitable material for applications where explosive vapour mixtures are present



Electrical Conductivity

Aluminium is one of two common metals with electrical conductivity high enough to permit its use as an electrical conductor - copper being the other. While aluminium's conductivity is 62% of that of copper, its light-weight is aluminium's main benefit - an aluminium conductor of equal current-carrying capacity is half the weight of a copper conductor



Aluminium in its different applications can act as both a good barrier against and conductor of heat

SUSTAINABILITY

The Australian aluminium industry employs a life-cycle approach to address the challenges of climate change, focusing not only on the energy required to produce aluminium products but also on the energy savings to be made through their use and reuse. It is in the use phase that the majority of energy is used and/or saved (e.g. during the useful life of cars, buildings, aircraft, etc).

Aluminium's contribution to sustainable transportation

The high strength-to-weight ratio of aluminium plays a crucial role in producing lighter vehicles and other forms of transport, reducing fuel consumption without compromising performance and safety. The use of lightweight aluminium components in a vehicle can save six to twelve times the energy taken to produce the primary aluminium used in its construction. Up to eight per cent fuel savings can be realized for every 10% reduction in weight. One kilogram of aluminium, used to replace heavier materials in a car or light truck, has the potential to eliminate 20kg of CO2 over the lifetime of the vehicle. For other vehicles, such as trains, ferries and aircraft, the potential savings are even greater.

Aluminium's contribution to sustainable building and construction

Aluminium is increasingly becoming the material of choice in modern sustainable buildings due to its corrosion resistance and recyclability.

The energy used for primary production is embodied, to a large extent, in the metal and, consequently, in the building too. Today's buildings and their contents therefore present large "urban mines" of around 400 million tonnes of aluminium metal that can be extracted and recycled by future generations through the use of only 5% of the originally used energy, not just once but repeatedly.

Aluminium is extensively employed in buildings, but it does not remain permanently in place. Buildings are remodeled periodically, and even deconstructed, thereby freeing the aluminium for recycling. Therefore, it is not inaccurate to regard this aluminium as "urban ore" and cities as "urban mines".

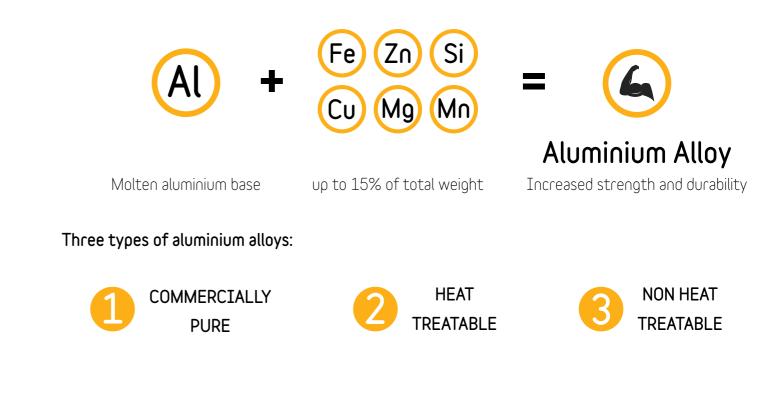
The aluminium is embodied in such items as exterior surfaces, counters, appliances, and electronics. In highly-developed countries, aluminium in buildings of all types amounts to between 120 and 200 kg per person. Globally, it is estimated that buildings and their contents contain some 400 million tonnes of aluminium, which can be extracted and reused by future generations time after time, requiring only about 5% of the energy originally used to extract and process aluminium from more traditional geologic sources.

Aluminium recycling thus not only represents good urban housekeeping, it provides major energy benefits today and tomorrow.



WHAT IS AN ALUMINUM ALLOY

An aluminum alloy is a chemical composition where other elements are added to pure aluminum in order to enhance its properties, primarily to increase its strength. These other elements include iron, silicon, copper, magnesium, manganese and zinc at levels that combined may make up as much as 15 percent of the alloy by weight. Alloys are assigned a four-digit number, in which the first digit identifies a general class, or series, characterized by its main alloying elements.



COMMERCIALLY PURE ALUMINIUM

1xxx Series

The 1xxx series alloys are comprised of aluminum 99 percent or higher purity. This series has excellent corrosion resistance, excellent workability, as well as high thermal and electrical conductivity. This is why the 1xxx series is commonly used for transmission, or power grid lines that connect the national grids across Australia. Common alloy designations in this series are 1350 for electrical applications, and 1100 for food packaging trays.



food packaging trays



1350 electrical applications

HEAT-TREATABLE ALLOYS

Some alloys are strengthened by solution heat-treating and then quenching, or rapid cooling. Heat treating takes the solid, alloyed metal and heats it to a specific point. The alloy elements, called solute, are homogeneously distributed with the aluminum putting them in a solid solution. The metal is subsequently quenched, or rapidly cooled, which freezes the solute atoms in place. The solute atoms consequently combine into a finely distributed precipitate. This occurs at room temperature which is called natural aging or in a low temperature furnace operation which is called artificial aging.

2xxx Series

In the 2xxx series, copper is used as the principle alloying element and can be strengthened significantly through solution heat-treating. These alloys possess a good combination of high strength and toughness, but do not have the levels of atmospheric corrosion resistance as many other aluminum alloys. Alloy 2011 perhaps the most widely known for its machinability features.



6xxx Series

The 6xxx series are versatile, heat treatable, highly formable, weldable and have moderately high strength coupled with excellent corrosion resistance. Alloys in this series contain silicon and magnesium in order to form magnesium silicide within the alloy. Extrusion products from the 6xxx series are the first choice for architectural and structural applications. Alloy 6061 is the most widely used alloy in this series and is often used in truck and marine frames. Additionally, the iPhone 6 extrusion was made from 6xxx series alloy.



6XXX architectural and structural applications

7xxx Series

Zinc is the primary alloying agent for this series, and when magnesium is added in a smaller amount, the result is a heat-treatable, very high strength alloy. Other elements such as copper and chromium may also be added in small quantities. The most commonly known alloys are 7050 and 7075, which are widely used in the aircraft industry. Apple®'s aluminum Watch, released in 2015, was made from a custom 7xxx series alloy.

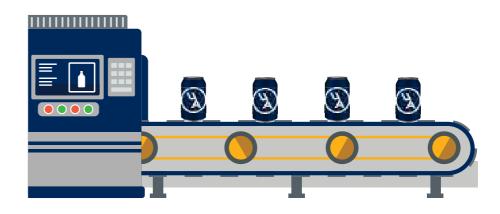


NON-HEAT TREATABLE ALLOYS

Non-heat treated alloys are strengthened through cold-working. Cold working occurs during rolling or forging methods and is the action of "working" the metal to make it stronger. For example, when rolling aluminum down to thinner gauges, it gets stronger. This is because cold working builds up dislocations and vacancies in the structure, which then inhibits the movement of atoms relative to each other. This increases the strength of the metal. Alloying elements like magnesium intensify this effect, resulting in even higher strength.

3xxx Series

Manganese is the major alloying element in this series, often with smaller amounts of magnesium added. However, only a limited percentage of manganese can be effectively added to aluminum. 3003 is a popular alloy for general purpose because it has moderate strength and good workability and may be used in applications such as heat exchangers, pressure vessels and chemical equipment.. Alloy 3004 and its modifications are used in the bodies of aluminum beverage cans.



3003 processing equipment

3004 aluminium beverage cans

4xxx Series

4xxx series alloys are combined with silicon, which can be added in sufficient quantities to lower the melting point of aluminum, without producing brittleness. Because of this, the 4xxx series produces excellent welding wire and brazing alloys where a lower melting point is required. Alloy 4043 is one of the most widely used filler alloys for welding 6xxx series alloys for structural and automotive applications.



5xxx Series

Magnesium is the primary alloying agent in the 5xxx series and is one of the most effective and widely used alloying elements for aluminum. Alloys in this series possess moderate to high strength characteristics, as well as good weldablility and resistance to corrosion in the marine environment. Because of this, aluminum-magnesium alloys are widely used in building and construction, storage tanks, pressure vessels and marine applications. Examples of common alloy applications include: 5052 in electronics, 5083 in marine applications, anodized 5005 sheet for architectural applications and 5182 makes the aluminum beverage can lid. Some of Australia's military vehicles are made with 5083 and the 7xxx series aluminum.



5XXX marine applications



Aluminium Alloy Designation System

This system is a four-digit numerical system in which the first digit indicates the alloy group as follows.

The first digit XXXX indicates the principal alloying element, which has been added to the aluminum alloy and is often used to describe the aluminum alloy series i.e. 1000 series, 2000 series, 3000 series, up to 8000 series.

In the 1XXX group, the last two of the four-digits indicate the minimum aluminium percentage. These digits are the same as the two digits to the right of the decimal comma in the minimum aluminium percentage when it is expressed to the nearest 0.01 percent.

The second digit indicates modifications in impurity limits or alloying elements. If the second digit is zero, it indicates unalloyed aluminium having natural impurity limits;

Integers 1 - 9 indicate special control of one or more individual impurities or alloying elements.

In the 2XXX to 8XXX groups, the last two digits have no special significance other then to identify different aluminium alloys in the group. The second digit indicates alloy modifications. If the second digit is zero it indicates the original alloy;

Integers 1 - 9 indicate consecutive alloy modifications.

DEFINITION OF	-
Wrought Alloy Designations	
1000 Series	
2000 Series	
3000 Series	
4000 Series	
5000 Series	
6000 Series	
7000 Series	

TEMPER DESIGNATIONS

ALLOY GROUP

Principal Alloying Elements 99.000% Minimum Aluminium Copper Manganese Silicon Magnesium Magnesium & Silicon Zinc

() ULLRICH ALUMINIUM

Temper Designation System

This system defines the sequence of basic treatments used to achieve the various tempers. The temper designation follows four-digit Aluminium Alloy Designation, the two being separated by a hyphen.

The basic temper designation consists of a letter. Sub-divisions of the basic temper are indicated by one or more digits following the letter.

	THE BASIC TEMPER DESIGNATIONS
Letter	Meaning
F	As Fabricated - Applies to product of a forming process in which no special control over thermal or strain hardening conditions are employed.
0	Annealed - Applies to products which have been heated to produce the lowest strength condition to improve ductility and dimensional stability.
Н	Strain Hardened - Applies to products which are strengthened through cold-working. The strain hardening may be followed by supplementary thermal treatment, which produces some reduction in strength. The "H" is always followed by two or more digits.
W	Solution Heat-Treated - An unstable temper applicable only to alloys which age spontaneously at room temperature after solution heat treatment.

The first digit after the H indicates a basic operation:

- H1 Strain Hardened Only.
- H2 Strain Hardened and Partially Annealed.
- H3 Strain Hardened and Stabilized.
- H4 Strain Hardened and Lacquered or Painted.

The second digit after the H indicates the degree of strain hardening:

HX2 - Quarter Hard HX8 – Full Hard

HX4 - Half Hard HX9 - Extra Hard HX6 - Three-Quarters Hard

Subdivisions of T Temper - Thermally Treated:

T1 - Naturally aged after cooling from an elevated temperature shaping process, such as extruding.

- T2 Cold worked after cooling from an elevated temperature shaping process and then naturally aged.
- T3 Solution heat treated, cold worked and naturally aged.
- T4 Solution heat treated and naturally aged.
- T5 Artificially aged after cooling from an elevated temperature shaping process.
- T6 Solution heat treated and artificially aged.
- T7 Solution heat treated and stabilized (over-aged).
- T8 Solution heat treated, cold worked and artificially aged.
- T9 Solution heat treated, artificially aged and cold worked.
- T10 Cold worked after cooling from an elevated temperature shaping process.

Aluminium Sheet Specifications

5005H34

Aluminium alloy 5005 is a medium strength alloy with very good resistance to atmospheric corrosion and very good weldability that is highly suitable for decorative anodising.

PLEASE NOTE: that whilst alloy 5005 is suitable for anodising, streaks can occur - if the finish you are seeking is critical, please specify 'special anodising quality' at time of order.

Alloy 5005 is typically used in:

- Buildings Roofing, Cladding, Corrugated Sheet
- Signage, Road Signs & Name Plates
- Food & Chemical Equipment
- Furniture
- Anodised Parts
- HVAC Equipment
- Packaging
- Pipe and Tube
- Can Bodies



Generic Physical Properties	
Physical Property	Value
Density	2.70 g/cm ³
Melting Point	655°C
Thermal Expansion	23.5 x 10-6 /K
Modulus of Elasticity	69.5 GPa
Thermal Conductivity	201 W/m.K
Electrical Resistivity	52% IACS
Electrical Resistivity	0.033 x10-6 Ω .m

Mechanical Properties	
Aluminium Sheet - 0.2mm to 12.5mm	BS EN 485-2:2008
Mechanical Property	Value
Proof Stress	110 Min MPa
Tensile Strength	145 - 185 MPa
Hardness Brinell	47 HB

5052H32

Aluminium alloy 5052 in H32 temper has very good corrosion resistance to seawater and marine and industrial atmosphere. It also has very good weldability and good cold formability. It is a medium to high strength alloy with a strength slightly higher than 5251 and a medium to high fatigue strength.

Alloy 5052-H32 has a range of useful properties:

- Decorative Finish
- Hard Wearing
- Non-Slip
- Corrosion Resistant

Alloy 5052 is typically used in:

- Treadplate
- Boiler making
- Containers
- Nameplates
- Road Signs
- Architectural Paneling

- Low Maintenance
- Anti-Static
- Light-weight
- Applications
- Welded Tubes
- Chemical Industry
- Irrigation
- Desalination units
- Pressure Vessels
- Rivets

TEMPER TYPES

The most common tempers for 5052 aluminium is: H32 - Work hardened by rolling then stabilised by low-temperature heat treatment to quarter hard.

Generic Physical Properties
Physical Property
Density
Melting Point
Thermal Expansion
Modulus of Elasticity
Thermal Conductivity
Electrical Resistivity

Mechanical Properties

Sheet & Treadplate - 0.2mm to 6.00mm	BS EN 485-2:2008
Mechanical Property	Value
Proof Stress	130 Min MPa
Tensile Strength	210 - 260 MPa
Hardness Brinell	61 HB
	•••••••

The properties above are for material in the H32 condition.

WELDABILITY

Weldability - Gas: Good Weldability - Arc: Very Good Weldability - Resistance: Very Good Brazability: Acceptable Solderability: Not recommended

FABRICATION

Workability - Cold: Good Machinability: Acceptable

STANDARD PRODUCT GUIDE

Value	
2.68 g/	cm³
605 °C	
23.7 x1	.0-6 /K
70 GPa)
138 W/	′m.K
0.0495	x10-6 Ω .m
	••••••



5083H321/116

Aluminium 5083 is known for exceptional performance in extreme environments. 5083 is highly resistant to attack by both seawater and industrial chemical environments.

Alloy 5083 also retains exceptional strength after welding. It has the highest strength of the non-heat treatable alloys but is not recommended for use in temperatures in excess of 65°C.

Alloy 5083 is typically used in:

- Shipbuilding
- Rail cars
- Vehicle bodies
- Tip truck bodies
- Mine skips and cages
- Pressure vessels

Mechanical Properties shown are for O/H111 temper.

TEMPER TYPES

The most common tempers for 5083 aluminium are:

- 0 Soft
- H111 Some work hardening imparted by shaping processes but less than required for H11 temper
- H32 Work hardened by rolling then stabilised by low-temperature heat treatment to quarter hard

Generic Physical Properties	
Physical Property	Value
Density	2.65 g/cm ³
Melting Point	570 °C
Thermal Expansion	25 x 10-6 /K
Modulus of Elasticity	72 GPa
Thermal Conductivity	121 W/m.K
Electrical Resistivity	0.058 x10-6 Ω .m

Mechanical Properties
Sheet - 0.2mm to 6.30mm
Mechanical Property
Proof Stress
Tensile Strength
Hardness Brinell

Mechanical Properties

Plate - 6.3mm to 80mm Mechanical Property

Proof Stress Tensile Strength Hardness Brinell

Machanical Departie

wechanical Propercies	
Sheet & Treadplate - 0.2mm to 6.00mm	BS EN 485-2:2008
Mechanical Property	Value
Proof Stress	110 Min MPa
Tensile Strength	260 Min MPa
Hardness Brinell	70 HB
Elongation A	12 Min %
	••••••

The properties above are for material in the Soft O/H111 condition.

WELDABILITY

When welding 5083 to itself or another alloy from the same sub-group, the recommended filler metal is 5183. Other suitable fillers are 5356 and 5556.

Weldability - Gas: Average

Weldability - Arc: Excellent Weldability - Resistance: Excellent Brazability: **Poor** Solderability: Poor

BS EN 485-2:2008
Value
125 Min MPa
275 - 350 MPa
75 HB
 ••••••

	BS EN 485-2:2008
	Value
	115 Min MPa
	270 - 345 MPa
	75 HB
•	

FABRICATION

Workability - Cold: Average Machinability: **Poor**



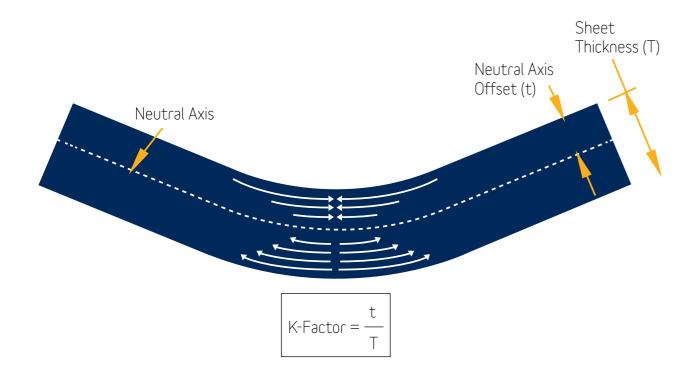
SHEET METAL K-FACTOR

When you bend a piece of sheet metal, one portion of its section undergoes compression and the other one undergoes tension. Compression occurs in the part of the section which besides the inside radius and the tension occurs in the part which besides outside radius. There is a line in the section where neither compression nor tension takes place. This line is called the neutral axis. The transition from compression to tension takes place from this neutral axis.

The neutral axis is exactly in the middle of the section when the sheet is flat or unbent. But when you bend it, the neutral axis moves towards the inside bend. Hence this relocation of the neutral axis causes a change in its distance from the inside bend. But the length of the neutral axis remains the same even after the bend.

WHAT IS THE K-FACTOR IN SHEET METAL?

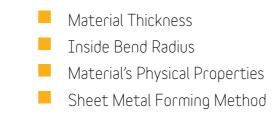
K-Factor is actually the ratio of the offset (t) of the neutral axis from the inside bend and the thickness of the sheet (T) when a piece of sheet metal is bent. As I have shown in the images below.



SHEET METAL K-FACTOR

It is a very important term used in sheet metal design. It is used to calculate Bend Allowance and Bend Deduction which are further used to calculate the flat pattern. Hence all of the sheet metal designing software use K-Factor, in order to provide an accurate design of the flat pattern of the sheet metal component.

The location of the neutral axis is not the same in all cases. Hence, the K-Factor is different for different cases. And it depends on some factors like:



Hence the value of the K-Factor is different for the different material, inside bend radius, method of forming and different thickness. It ranges from 0 to 0.5. But practically, it is found to be between 0.3 and 0.5 in usual cases.

K-FACTOR CALCULATOR

You can use a K Factor Chart to collect the value of K-Factor for the given case. But if you want to calculate it by yourself, you can make a trial on some sample pieces. You can try on 3-5 samples. Follow the following steps as your K Factor Calculator:

- Prepare 5 sample blanks of the same size (same width and length)
- forming of the final pieces.
- pieces. Take an average dimension out of them.
- bend radius precisely.]

Bend the sample pieces by using the tooling which you are going to use in the actual

Now, accurately measure the flange lengths of all of the samples of the sheet metal

Also, take accurate measurements of the inside bend radii of all of the bend components. [Note: You should use some devices like an **optical comparator** to measure the inside

- As you have got the measurement of the flange lengths and the inside bend radii of the bend samples now, you can calculate the leg length easily. To calculate the leg lengths, you just have to deduct or subtract the inside bend radius and the material thickness from the flange lengths, if the bend angle is 90 degree.
- Now it's time to calculate the Bend Allowance. To calculate it, you just have to subtract your leg lengths from the length of the flat pattern.
- At last, when you have got the value for the Bend Allowance, you can use a formula to calculate the K-Factor. The formula, I have shared below.

K-FACTOR CALCULATOR FORMULA

You can use the following K Factor Formula to calculate the K-Factor for your available material, tooling, etc:

$$\mathsf{K} = \frac{180 * \mathsf{BA}}{\pi * \mathsf{B} * \mathsf{T}} - \frac{\mathsf{R}}{\mathsf{T}}$$

Here in this formula, BA = Bend Allowance

B = Bend Angle in degree

T = Material Thickness

R = Inside Bend Radius

WHY DO I NEED TO RESTRAIN MY LOAD?

To be safe

Loads that aren't restrained properly can injure or kill and can cause significant property damage.

- by causing other drivers to swerve to avoid it
- corners.

It's good for business

Your corporate reputation and your financial position can suffer if you're involved in a load restraint incident due to:

- Adverse publicity Loss of contracts due to damaged goods
- Insurance excess payments
- Increase in insurance premiums

Unrestrained loads may move

- Forces from changes in speed, direction or slope may cause a load to shift
- cornering, road surfaces and air flow
- The weight of a load is not enough to hold it in place
- A heavy load is just as likely to fall off as a light load because the heavier the load, the higher the forces it experiences

LOAD RESTRAINT

You are legally responsible for restraining your load so that:

If the load falls off it endangers the lives of other road users through a direct collision or

If the load moves forwards it can pierce the cabin and injure or kill the driver or passenger.

If the load makes the vehicle unstable it can cause an incident, especially when taking

These forces result from normal driving conditions including braking, accelerating,

It does not come of your vehicle under normal driving conditions, including heavy braking and minor collisions. If it comes off, this is evidence you have breached the law

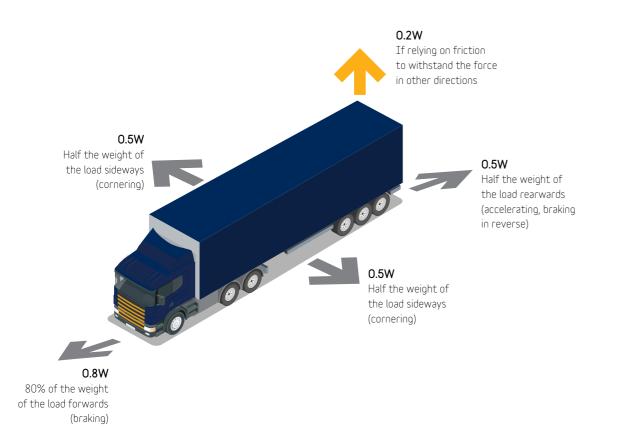
🛞 ULLRICH ALUMINIUM 📐

- - **It does not negatively affect the stability of the vehicle,** which can cause the vehicle to roll over or swerve uncontrollably, and cause an accident
 - **It does not stick out of the vehicle** in a way that could injure people, damage property or obstruct others' paths

You must pick up any fallen load if it is safe to do so, or arrange for someone to retrieve it.

PERFORMANCE STANDARDS FOR LOAD RESTRAINT

The Performance Standards set out the minimum amount of force a restraint system must be able to withstand in each direction. For every vehicles, these forces are:



If a load is restrained to meet the Performance Standards it will not fall off or affect stability of the vehicle under expected driving conditions. This includes emergency braking and minor collisions.

Refer to the "Load Restraint Guide", National Transport Commission (www.ntc.gov.au).

CARE + MAINTENANCE

Aluminium is a proven construction material for buildings, vehicles, appliances and products, both as a framing and cladding material. In the building industry, it is by far the most common material used for window and door joinery, curtain walls and shop fronts. It is widely used in every aspect of the transport, leisure, boating and household appliance industries. Its selection is based on many criteria one being its ease of fabrication to provide visual appeal and easy maintenance.

Aluminium has natural beauty and luster of its own, yet its surface can be treated in various ways to protect and enhance its appearance, which can be maintained with regular, low maintenance attention.

The surface of fabricated aluminium, whether untreated, anodised or coated, can be spoiled by improper care. Here, we briefly summarize the methods of maintaining good appearance of aluminium surfaces after installation. Usually this care is no more than periodic cleaning, as in e.g.: window glass. Anodising treatment will substantially enhance appearance, render the surface more resistant to various forms of attack and facilitate cleaning and maintenance.

Grime which causes deterioration cannot be prevented from settling on exposed surfaces. If cleaned reasonably frequently then the mildest methods of washing will produce satisfactory results. There are many ways to clean aluminium, from using plain water to harsh abrasives. The type of cleaning that should be used is governed by the finish, degree of soiling, and the size, shape and location of the surface to be cleaned. The mildest method possible should be used, particularly for aluminium which has been anodised

With anodised aluminium, surface deterioration occurs as a result of grime deposition and contaminated moisture attack. In coastal environments it is caused by airborne chlorides, in industrial or urban environments by sulfur compounds. Grime deposits absorb contaminated moisture like a sponge, assisting attack on the film, which cannot be restored without removal. Cleaning frequency depends on accessibility and environmental severity. In rural areas, cleaning may be needed only every six months. In industrial and marine environments, cleaning is recommended at least every three months, preferably monthly.



The following cleaning materials and procedures are listed in order from mild to harsh. The mildest treatment should be tried on a small area and if not satisfactory only then should the next be examined:

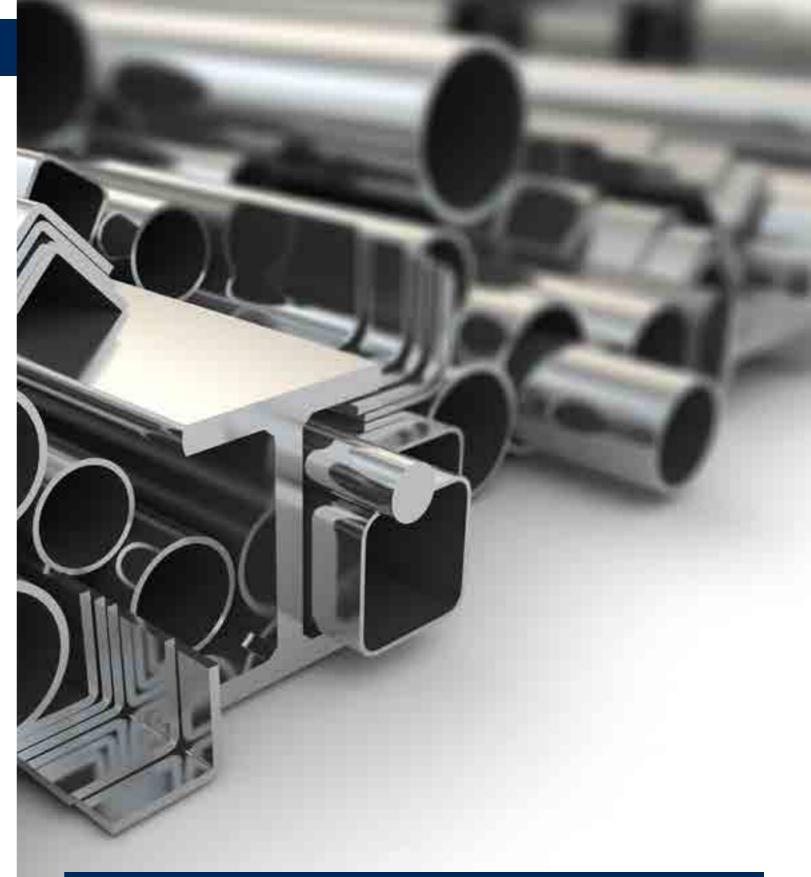
- Plain water
- Water with mild soap or detergent
- Solvents, e.g. kerosene, turpentine, white spirit
- Non-etching chemical cleaner
- Wax-based polish
- Abrasive wax
- Abrasives

After applying cleaning agents, the surface should be washed down thoroughly and dried with a clean cloth to prevent streaking. There should be no concentration of cleaning agents at the bottom edges of the aluminium. If using proprietary cleaning solutions, manufacturers' recommendations should be obtained and followed carefully.

If abrasives are used, the appearance of the aluminium finish may be altered. If there is a grain in the finish, cleaning action should always be with the grain. If the condition of the surface indicates the use of abrasive or etching materials, it is advisable to consult a cleaning specialist. If all other methods fail it may be necessary to resort to heavy-duty cleaning. This involves cleaning methods using strong etching chemicals or coarser abrasives.

MAINTENANCE/ ENVIRONMENT ENVIRONMENT DEFINITION CLEANING Extreme 2-4 Weeks Up to 1km from salt water/heavy industrial Severe 1 Month Between 1km-5km from salt water/heavy industrial Moderate 3 Months Between 5km-10km from salt water/heavy industrial 4 Months Mild Between 10km-50km from salt water/heavy industrial Low 6 Months Over 50km from salt water/heavy industrial

ALUMINIUM MAINTENANCE/CLEANING CHART



DISCLAIMER

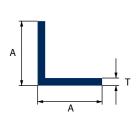
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Please Note:

Standard geometric listed in the following tables highlighted with a grey box [100] are mill runs only [minimum 250kg]. If items are not located in your location marked without the [], contact your local Ullrich Aluminium Branch for availability.

EQUAL ANGLES STANDARD GEOMETRICS

ANGLES HAVE LEGS OF EQUAL LENGTH AND OF EQUAL THICKNESS.





CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

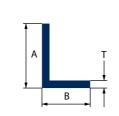
IN STOCK

Angles - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	T mm	L mm	Alloy/Temper	Nominal Mass/Piece	όrd	NSW	VIC	SA	TAS	WA	NT
A12121.6MI6.5L	12.0	1.6	6500	6060T5	0.630							
A12123MI6.5L	12.0	3.0	6500	6060T5	1.111							
A16161.6MI6.5L	16.0	1.6	6500	6060T5	0.858			•				•
A16163MI6.5L	16.0	3.0	6500	6060T5	1.527	•	•	•	•			
A20201.6MI6.5L	20.0	1.6	6500	6060T5	1.079		•	•			•	•
A20203MI6.5L	20.0	3.0	6500	6060T5	1.956							•
A25251.6MI6.5L	25.0	1.6	6500	6060T5	1.365							•
A25253MI6.5L	25.0	3.0	6500	6060T5	2.483							•
A25256MI6.5L	25.0	6.0	6500	6060T5	4.647							
A32321.6MI6.5L	32.0	1.6	6500	6060T5	1.748							
A32323MI6.5L	32.0	3.0	6500	6060T5	3.211							
A38384.75MI5.5NL	38.1	4.75	5500	6061T6	5.060							
A40401.6MI6.5L	40.0	1.6	6500	6060T5	2.210							•
A40403MI6.5L	40.0	3.0	6500	6060T5	4.069							•
A40404MI6.5L	40.0	4.0	6500	6060T5	5.356							•
A40406MI6.5L	40.0	6.0	6500	6060T5	7.819							•
A50501.6MI6.5L	50.0	1.6	6500	6060T5	2.769							•
A50503MI6.5L	50.0	3.0	6500	6060T5	5.128							•
A50504MI6.5L	50.0	4.0	6500	6060T5	6.740							
A50506MI6.5L	50.0	6.0	6500	6060T5	9.899		•					•
A60603MI6.5L	60.0	3.0	6500	6060T5	6.155		•					
A60606MI6.5L	60.0	6.0	6500	6060T5	12.051							
A64646.35MI5.5IL	63.5	6.35	5500	6082T6	11.418							
A75753MI6.5L	75.0	3.0	6500	6060T5	7.767							•
A76766.35MI5.5NL	76.2	6.35	5500	6061T6	13.953							
A76769.5MI5.5NL	76.2	9.52	5500	6061T6	20.273							
A80804MI6.5L	80.0	4.0	6500	6060T5	10.952							
A80806MI6.5L	80.0	6.0	6500	6060T5	16.276			•			•	
A1001006MI6.5L	100.0	6.0	6500	6060T5	20.429							
A10010010MI6.5L	100.0	10.0	6500	6060T5	33.442			•				
A1501506MI6.5L	150.0	6.0	6500	6060T5	31.089			•				

UNEQUAL ANGLES STANDARD GEOMETRICS

ANGLES HAVE LEGS OF UNEQUAL LENGTH BUT OF EQUAL THICKNESS.





Angles - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	T mm	L mm	Alloy/ Temper	Nominal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	NT
A20121.6MI6.5L	20.0	12.0	1.6	6500	6060T5	0.851							
A25121.6MI6.5L	25.0	12.0	1.6	6500	6060T5	1.001							
A25123MI6.5L	25.0	12.0	3.0	6500	6060T5	1.794							
A25201.6MI6.5L	25.0	20.0	1.6	6500	6060T5	1.215							
A25203MI6.5L	25.0	20.0	3.0	6500	6060T5	2.223							
A32201.6MI6.5L	32.0	20.0	1.6	6500	6060T5	1.417							
A32203MI6.5L	32.0	20.0	3.0	6500	6060T5	2.580							
A32253MI6.5L	32.0	25.0	3.0	6500	6060T5	2.840							
A40121.6MI6.5L	40.0	12.0	1.6	6500	6060T5	1.417							
A40123MI6L	40.0	12.0	3.0	6000	6060T5	2.382							
A40201.6MI6.5L	40.0	20.0	1.6	6500	6060T5	1.644							
A40203MI6.5L	40.0	20.0	3.0	6500	6060T5	3.009							
A40251.6MI6.5L	40.0	25.0	1.6	6500	6060T5	1.787							
A40253MI6.5L	40.0	25.0	3.0	6500	6060T5	3.276							
A50123MI6.5L	50.0	12.0	3.0	6500	6060T5	3.107							
A50201.6MI6.5L	50.0	20.0	1.6	6500	6060T5	1.930							
A50203MI6.5L	50.0	20.0	3.0	6500	6060T5	3.542							
A50251.6MI6.5L	50.0	25.0	1.6	6500	6060T5	2.067							
A50253MI6.5L	50.0	25.0	3.0	6500	6060T5	3.802							
A50403MI6.5L	50.0	40.0	3.0	6500	6060T5	4.582							
A60253MI6.5L	60.0	25.0	3.0	6500	6060T5	4.316							
A60404MI6.5L	60.0	40.0	4.0	6500	6060T5	6.714							
A70201.6MI6.5L	70.0	20.0	1.6	6500	6060T5	2.489							
A70251.6MI6.5L	70.0	25.0	1.6	6500	6060T5	2.613							
A70401.6MI6.5L	70.0	40.0	1.6	6500	6060T5	3.042							
A75253MI6.5L	75.0	25.0	3.0	6500	6060T5	5.128							
A76506.3MI5.5NL	76.2	50.8	6.35	5500	6061T6	11.522							
A76555MI6.5L	76.0	55.0	5.0	6500	6060T5	11.056							
A80203MI6.5L	80.0	20.0	3.0	6500	6060T5	5.102							
A80406MI6.5L	80.0	40.0	6.0	6500	6060T5	12.005							

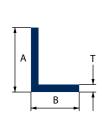
CUSTOM LENGTHS AVAILABLE UPON REQUEST



MILL RUN ONLY IN STOCK

UNEQUAL ANGLES STANDARD GEOMETRICS

ANGLES HAVE LEGS OF UNEQUAL LENGTH BUT OF EQUAL THICKNESS.





CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

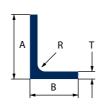
IN STOCK

Angles - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	T mm	L mm	Alloy/ Temper	Nominal Mass/Piece	ÓLD	NSN	VIC	SA	TAS	WA	Ĭ
A80502.5MI6.5L	80.0	50.0	2.5	6500	6060T5	5.596							
A90401.6MI6.5L	90.0	40.0	1.6	6500	6060T5	3.614							
A100503MI6.5L	100.0	50.0	3.0	6500	6060T5	7.767							
A100504MI6.5L	100.0	50.0	4.0	6500	6060T5	10.250							
A100506MI6.5L	100.0	50.0	6.0	6500	6060T5	15.216							
A1008010MI6.5L	100.0	80.0	10.0	6500	6060T5	29.945							
A125503MI6.5L	125.0	50.0	3.0	6500	6060T5	9.054				•	•		
A150756MI6.5L	150.0	75.0	6.0	6500	6060T5	23.146				•	•		
A1508010MI6.5L	150.0	80.0	10.0	6500	6060T5	38.590							

STRUCTURAL ANGLES STANDARD GEOMETRICS

ANGLES HAVE LEGS OF EQUAL LENGTH AND OF EQUAL THICKNESS. THE INSIDE CORNER RADIUS IS GREATER THAN 5mm.



Structural Angles - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	T mm	R mm	L mm	Alloy/ Temper	Normal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	μŢ
SA51516.4MI5.5NL	50.8	50.8	6.35	6.10	5500	6061T6	9.097							
A76766.35MI5.5NL	76.2	76.2	6.35	7.62	5500	6061T6	13.953							
A76769.5MI5.5NL	76.2	76.2	9.52	7.60	5500	6061T6	20.273							
A76506.3MI5.5NL	76.2	50.8	6.35	6.86	5500	6061T6	11.522		•		•			

** NOTE: RADIUS ABBREVIATED WITH [-] CONTACT YOUR LOCAL BRANCH FOR SPECIFICATIONS

CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY





CHANNELS STANDARD GEOMETRICS

CHANNELS ARE SOMETIME REFERRED TO AS 'C-CHANNELS' HAVE THE WEB AND FLANGES OF UNIFORM THICKNESS.



CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

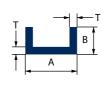
IN STOCK

Channels - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	T mm	L mm	Alloy/ Temper	Nominal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	ħ
C10101.6MI6.5L	10.0	10.0	1.6	6500	6060T5	0.754						•	
C12101.6MI6.5L	12.0	10.0	1.6	6500	6060T5	0.806							
C12121.6MI6.5L	12.0	12.0	1.6	6500	6060T5	0.923	•			•	•	•	•
C16121.6MI6.5L	16.0	12.0	1.6	6500	6060T5	1.033							
C16161.6MI6.5L	16.0	16.0	1.6	6500	6060T5	1.274	•			•	•	•	
C16163MI6.5L	16.0	16.0	3.0	6500	6060T5	2.210							
C20161.6MI6.5L	20.0	16.0	1.6	6500	6060T5	1.378	•						
C20201.6MI6.5L	20.0	20.0	1.6	6500	6060T5	1.592	•	•		•	•	•	•
C20203MI6.5L	20.0	20.0	3.0	6500	6060T5	2.853	•			•	•	•	•
C22223MI5L	22.0	22.0	3.0	5000	6060T5	2.440	•						
C25123MI6.5L	25.0	12.0	3.0	6500	6060T5	2.262	•						
C25201.6MI6.5L	25.0	20.0	1.6	6500	6060T5	1.742	•	•		•	•		
C25202.5MI6.5L	25.0	20.0	2.5	6500	6060T5	2.632							
C25251.6MI6.5L	25.0	25.0	1.6	6500	6060T5	2.021	•			•	•	•	•
C25253MI6.5L	25.0	25.0	3.0	6500	6060T5	3.646	•						
C25403MI6.5L	25.0	40.0	3.0	6500	6060T5	5.232	•				•	•	
C32161.6MI6.5L	32.0	16.0	1.6	6500	6060T5	1.703	•	•				<u>.</u>	
C32253MI6.5L	32.0	25.0	3.0	6500	6060T5	3.997				•	•	•	•
C40203MI6.5L	40.0	20.0	3.0	6500	6060T5	3.913		•			•		
C40253MI6.5L	40.0	25.0	3.0	6500	6060T5	4.439	•			•	•	•	•
C40403MI6.5L	40.0	40.0	3.0	6500	6060T5	6.025	•			•	•	•	
C40506MI6.5L	40.0	50.0	6.0	6500	6060T5	13.481	•					<u>.</u>	
C50253MI6.5L	50.0	25.0	3.0	6500	6060T5	4.966	•			•		•	
C50503MI6.5L	50.0	50.0	3.0	6500	6060T5	7.579	•			•	•		
C53251.6MI6.5L	53.0	25.0	1.6	6500	6060T5	2.626							

CHANNELS STANDARD GEOMETRICS

CHANNELS ARE SOMETIME REFERRED TO AS 'C-CHANNELS' HAVE THE WEB AND FLANGES OF UNIFORM THICKNESS.



Channels - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	T mm	L mm	Alloy/Temper	Nominal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	NT
C60323MI6.5L	60.0	32.0	3.0	6500	6060T5	6.233		•					
C70302.5MI6.5L	70.0	30.0	2.5	6500	6060T5	5.512							
C80253MI6.5L	80.0	25.0	3.0	6500	6060T5	6.552							
C80403MI6.5L	80.0	40.0	3.0	6500	6060T5	8.105							
C80404MI6.5L	80.0	40.0	4.0	6500/6	6060T5/6106T6	10.712							
C100253MI6.5L	100.0	25.0	3.0	6500	6060T5	7.611							
C100503MI6.5L	100.0	50.0	3.0	6500	6060T5	10.250	•	•	•	•		•	

CUSTOM LENGTHS AVAILABLE UPON REQUEST

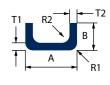
MILL RUN ONLY





STRUCTURAL CHANNELS STANDARD GEOMETRICS

STRUCTURAL CHANNELS ARE SOMETIME REFERRED TO AS 'C-CHANNELS' HAVE THE WEB AND FLANGES OF DIFFERENT THICKNESSES WITH TWO INTERNAL AND EXTERNAL RADIUS CORNERS.





CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

IN STOCK

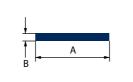
Structural Channel - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	T1 mm	T2 mm	R1 mm	R2 mm	L mm	Alloy/ Temper	Normal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	Ĕ
C56.531.84.5MI6.1DGL	56.5	31.8	4.5	4.5	-	-	6100	6005T5	8.491							
C76387.9MI5.5NL	76.2	38.1	6.35	7.92	0.4	7.62	5500	6061T6	15.020		•	•	•	•	•	
C80406MI6.5QL	80.0	40.0	6.0	6.0	0.4	4.0	6500	6106T6	15.704	•	•	•	•		•	
C100505MI6.5L	100.0	50.0	5.0	5.0	0.4	5.0	6500	6060T5	16.854					•		•
C102516.3MI5.5NL	101.6	50.8	6.35	7.90	0.5	9.0	5500	6061T6	20.520							•
C1276396MI5.5NL	127.0	63.5	6.35	9.53	0.4	10.67	5500	6061T6	28.875	•	•	•	•			
C152648MI5.5IL	152.4	63.5	6.35	7.90	0.4	10.67	5500	6082T6	28.704							
C152648MI6.5IL	152.4	63.5	6.35	7.90	0.4	10.67	6500	6082T6	33.923							
C1787611MI5.5QL	177.8	76.2	11.1	11.1	-	6.4	5500	6106T6	40.738							
C20090108MI8QL	200.0	90.0	8.0	10.0	10.0	4.0	8000	6082/6061	69.2							
C20090108MI6.5NL	200.0	90.0	8.0	10.0	10.0	4.0	6500	6082/6061	56.225	•					•	
C30090108MI6.5QL	300.0	90.0	8.0	10.0	15.0	12.0	6500	6106T6	70.538							

****** NOTE: RADIUS ABBREVIATED WITH [-] CONTACT YOUR LOCAL BRANCH FOR SPECIFICATIONS

FLAT BAR STANDARD GEOMETRICS

FLAT BARS HAVE UNIFORM THICKNESS WITHOUT CORNER RADII.





Flat Bar - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	L mm	Alloy/Temper	Nominal Mass/ Piece	ÓLD	NSW	VIC	SA	TAS	WA	μ
F103MI4L	10.0	3.0	4000	6060T5	0.324							
F121.6MI4L	12.0	1.6	4000	6060T5	0.208							•
F123MI4L	12.0	3.0	4000	6060T5	0.392							
F126MI4L	12.0	6.0	4000	6060T5	0.780							
F163MI4L	16.0	3.0	4000	6060T5	0.520							
F201.6MI4L	20.0	1.6	4000	6060T5	0.348							
F203MI4L	20.0	3.0	4000	6060T5	0.652							
F204MI4L	20.0	4.0	4000	6060T5	0.868							
F206MI4L	20.0	6.0	4000	6060T5	1.300							
F2010MI4L	20.0	10	4000	6060T5	2.160							
F2012MI4L	20.0	12	4000	6060T5	2.592							
F251.6MI4L	25.0	1.6	4000	6060T5	0.432						•	
F253MI4L	25.0	3.0	4000	6060T5	0.812							
F254MI4L	25.0	4.0	4000	6060T5	1.080							
F256MI4L	25.0	6.0	4000	6060T5	1.628							
F2510MI4L	25.0	10.0	4000	6060T5	2.712							
F2512MI4L	25.0	12.0	4000	6060T5	3.252							
F2520MI4L	25.0	20.0	4000	6060T5	5.400							
F323MI4L	32.0	3.0	4000	6060T5	1.072							•
F326MI4L	32.0	6.0	4000	6060T5	2.080						•	•
F3210MI4L	32.0	10.0	4000	6060T5	3.456							
F403MI4L	40.0	3.0	4000	6060T5	1.300							
F404MI4L	40.0	4.0	4000	6060T5	1.724						•	
F405MI5.85IL	40.0	5.0	5850	6082T6	3.170							
F406MI4L	40.0	6.0	4000	6060T5	2.600						•	
F4010MI4L	40.0	10.0	4000	6060T5	4.336	•			•		•	
F4012MI4L	40.0	12.0	4000	6060T5	5.204							
F4016MI4L	40.0	16.0	4000	6060T5	6.912	•	•			•		
F4025MI4L	40.0	25.0	4000	6060T5	10.84		•					

CUSTOM LENGTHS AVAILABLE UPON REQUEST





FLAT BAR STANDARD GEOMETRICS

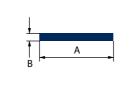
FLAT BARS HAVE UNIFORM THICKNESS WITHOUT CORNER RADII.

CUSTOM LENGTHS AVAILABLE UPON REQUEST MILL RUN ONLY

IN STOCK

FLAT BAR STANDARD GEOMETRICS

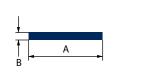
FLAT BARS HAVE UNIFORM THICKNESS WITHOUT CORNER RADII.





Flat Bar - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	L mm	Alloy/Temper	Nominal Mass/ Piece	ÓLD	NSW	VIC	SA	TAS	WA	μŢ
F15010MI2.85DCL	150.0	10.0	2850	6005AT5	11.542							
F1606MI4L	160.0	6.0	4000	6060T5	10.408							
F16010MI4L	160.0	10.0	4000	6060T5	17.276							
F16012MI4L	160.0	12.0	4000	6060T5	20.812							
F16025MI4L	160.0	25.0	4000	6060T5	43.200							
F2006MI4L	200.0	6.0	4000	6060T5	12.956							
F20010MI4L	200.0	10.0	4000	6060T5	21.596					•	•	





Flat Bar - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	L mm	Alloy/Temper	Nominal Mass/ Piece	όrd	NSW	VIC	SA	TAS	MA	Т
F503MI4L	50.0	3.0	4000	6060T5	1.624							
F504MI4L	50.0	4.0	4000	6060T5	2.168							
F505MI6L	50.0	5.0	6000	6060T5	4.068							
F506MI4L	50.0	6.0	4000	6060T5	3.252							
F5010MI4L	50.0	10.0	4000	6060T5	5.420							
F5012MI4L	50.0	12.0	4000	6060T5	6.504							
F5020MI4L	50.0	20.0	4000	6060T5	10.800							
F5025MI4L	50.0	25.0	4000	6060T5	13.552							
F603MI4L	60.0	3.0	4000	6060T5	1.944							
F606MI4L	60.0	6.0	4000	6060T5	3.884							
F6010MI4L	60.0	10.0	4000	6060T5	6.504							
F6012MI4L	60.0	12.0	4000	6060T5	7.804							
F801.6MI3.6L	80.0	1.6	3600	6060T5	1.249							
F803MI4L	80.0	3.0	4000	6060T5	2.600							
F806MI4L	80.0	6.0	4000	6060T5	5.204							
F808MI6IL	80.0	8.0	6000	6082T6	10.368							
F8010MI4L	80.0	10.0	4000	6060T5	8.636							
F8012MI4L	80.0	12.0	4000	6060T5	10.368							
F8016MI4L	80.0	16.0	4000	6060T5	13.824							
F8025MI4L	80.0	25.0	4000	6060T5	21.600							
F1001.5MI3.75L	100.0	1.5	3750	6060T5	1.526							
F1003MI4L	100.0	3.0	4000	6060T5	3.252							
F1006MI4L	100.0	6.0	4000	6060T5	6.504							
F1008MI6TL	100.0	8.0	6000	6082T5	13.008							
F10010MI4L	100.0	10.0	4000	6060T5	10.840							
F10012MI4L	100.0	12.0	4000	6060T5	13.008							
F10020MI4L	100.0	20.0	4000	6060T5	21.600							
F10025MI4L	100.0	25.0	4000	6060T5	27.100							
F12010MI4L	120.0	10.0	4000	6060T5	12.960							







FLAT BAR WITH RADIUS CORNERS STANDARD GEOMETRICS

FLAT BARS HAVE UNIFORM THICKNESS WITH CORNER RADII. OF MORE THAN 1mm.



CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

IN STOCK

Flat Bar with Rounded Corners - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	R mm	L mm	Alloy/ Temper	Normal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	μ
FR2510MI400L	25.0	10.0	5.0	4000	6063T5	2.476	•						
FR444MI4L	44.45	3.96	1.0	4000	6060T5	1.868		•					
FR506MI4L	50.0	6.0	1.0	4000	6060T5	3.252	•						
FR506MI5.85L	50.0	6.0	1.0	5850	6060T5	4.756							
FR606MI4L	60.0	6.0	4.0	4000	6060T5	3.804							
FR806MI4L	80.0	6.0	1.0	4000	6060T5	5.204							
FR1008MI6TL	100.0	8.0	1.0	6000	6082T5	12.942							
FR1508MI8.4NL	150.0	8.0	1.0	8400	6061T6	27.199							

** NOTE: RADIUS ABBREVIATED WITH [-] CONTACT YOUR LOCAL BRANCH FOR SPECIFICATIONS

ROUND ROD STANDARD GEOMETRICS

AN EXTRUDED ROD, OR ROUND BAR, IS A SOLID WHICH IS CIRCULAR IN SHAPE.





Round Rod - Available in Mill Finish, Anodised and Powder Coated

Part Number	Diameter mm	L mm	Alloy/Temper	Normal Mass/ Piece	όrd	NSW	VIC	SA	TAS	WA	NT
RDR4.76MI3.6L	4.76	3600	6060T5	0.172							
RDR6.35MI5L	6.35	5000	6060T5	0.430							
RDR7.94MI5L	7.94	5000	6060T5	0.670					•		
RDR10.00MI4L	10.00	4000	6060T5	0.852					•		•
RDR12.00MI4L	12.00	4000	6060T5	1.220					•		•
RDR15.88MI4NL	15.88	4000	6061T6	2.148							
RDR16.00MI4L	16.00	4000	6060T5	2.180					•		•
RDR20.00MI4L	20.00	4000	6060T5	3.408					•		•
RDR25.00MI4L	25.00	4000	6060T5	5.30					•		
RDR25.40MI4L	25.40	4000	6060T5	5.496							
RDR30.00MI4NL	30.00	4000	6061T6	7.840							
RDR33.00MI4NL	33.00	4000	6061T6	9.236							
RDR39.00MI4L	39.00	4000	6060T5	12.960							
RDR50.00MI4L	50.00	4000	6061T6	21.204							
RDR50.80MI4NL	50.80	4000	6061T6	21.988							
RDR60.33MI4NL	60.33	4000	6061T6	31.012							
RDR75.00MI3.6DL	75.00	3600	2011T6	44.848							
RDR76.20MI2NL	76.20	2000	6061T6	24.736							
RDR90.00MI0.25DL	90.00	250	2011T6	4.485							
RDR101.6MI2NL	101.60	2000	6061T6	43.942							
RDR127.00MI3NL	127.00	3000	6061T6	103.065							
RDR150.00MI1NL	150.00	1000	6061T6	47.925							

CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY



SQUARE ROD STANDARD GEOMETRICS

A SQUARE BAR IS A SOLID WITH ALL FOUR SIDES EQUAL IN LENGTH. IT IS IDENTIFIED BY THE SIZE MEASUREMENT ACROSS THE FLATS.



Square Rod - Available in Mill Finish, Anodised and Powder Coated

Part Number	Diameter mm	L mm	Alloy/Temper	Normal Mass/ Piece	ÓLD	NSN	VIC	SA	TAS	WA	NT
SQR6.00MI4L	6.0	4000	6060T5	0.388							
SQR10.00MI4L	10.0	4000	6060T5	1.08							
SQR12.00MI4L	12.0	4000	6060T5	1.556							
SQR16.00MI4L	16.0	4000	6060T5	2.776							
SQR20.00MI4L	20.0	4000	6060T5	4.320							
SQR25.00MI4L	25.0	4000	6060T5	6.752							
SQR40.00MI4L	40.0	4000	6060T5	17.024							
SQR50.00MI4IL	50.0	4000	6082T6	28.100							
SQR50.00MI4NL	50.0	4000	6061T6	28.100							
SQR65.00MI2.0NL	65.0	2000	6061T6	22.816							

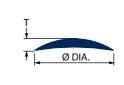
CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

IN STOCK

HALF ROUND STANDARD GEOMETRICS

A HALF ROUND IS A SOLID WHICH IS CIRCULAR IN THE SHAPE. OF A SEMI CIRCLE.





Half Rod - Available in Mill Finish, Anodised and Powder Coated

Part number	Diameter mm	T mm	L mm	Alloy/Temper	Normal Mass/ Piece	δΓD	NSW	VIC	SA	TAS	WA	NT
HR12.54.54.1MI4L	12.5	4.5	4000	6060T5	0.416							
HR164.53.7MI4EL	16.0	4.5	4000	6060T1	0.480							
HR194.52.9MI4L	19.0	4.5	4000	6060T5	0.452							
HR25.54.52.9MI4L	25.5	4.5	4000	6060T5	0.596						•	
HR3864.4MI4L	38.0	6.0	4000	6060T5	1.300							
HR516MI4ZL	51.0	6.0	4000	6060T4	2.312							

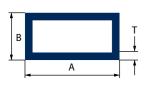
CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY IN STOCK



RECTANGULAR HOLLOW SECTION STANDARD GEOMETRICS

A RECTANGULAR HOLLOW IS A HOLLOW OF UNIFORM THICKNESS IN THE SHAPE OF A RECTANGLE.





CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

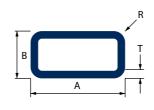
IN STOCK

Rectangular Hollow Section - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	T mm	L mm	Alloy/ Temper	Nominal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	ЧТ
RH38252MI6.5L	38.0	25.0	2.0	6500	6060T5	4.160			•				
RH38252.5MI6L	38.1	25.4	2.54	6000	6060T5	4.806							
RH40201.6MI6.5L	40.0	20.0	1.6	6500	6060T5	3.204							
RH40203MI6.5L	40.0	20.0	3.0	6500	6060T5	5.687						•	
RH40252.5MI6.5L	40.0	25.0	2.5	6500	6060T5	5.265							
RH50252.5MI6.5L	50.0	25.0	2.5	6500	6060T5	6.168							
RH50253MI6.5L	50.0	25.0	3.0	6500	6060T5	7.293						•	
RH50403MI6.5L	50.0	40.0	3.0	6500	6060T5	8.879							
RH60403MI6.5L	60.0	40.0	3.0	6500	6060T5	9.932							
RH75251.6MI6.6L	75.0	25.0	1.6	6600	6060T5	5.517							
RH75503MI6.5L	75.0	50.0	3.0	6500	6060T5	12.577							
RH76252.4MI6.5L	76.2	25.4	2.4	6500	6060T5	8.157						•	
RH80253MI6.5L	80.0	25.0	3.0	6500	6060T5	10.426							
RH80403MI6.5L	80.0	40.0	3.0	6500	6060T5	12.005							
RH80503MI6.5L	80.0	50.0	3.0	6500	6060T5	13.058							
RH100251.6MI6.5L	100.0	25.0	1.6	6500	6060T5	6.851							
RH100252.5MI6.5L	100.0	25.0	2.5	6500	6060T5	10.530						•	
RH100403MI6.5L	100.0	40.0	3.0	6500	6060T5	14.111							
RH100501.6MI6.5L	100.0	50.0	1.6	6500	6060T5	8.242	•					•	
RH100502MI6.5L	100.0	50.0	2.0	6500	6060T5	10.250							
RH100503MI6.5L	100.0	50.0	3.0	6500	6060T5	15.164						•	
RH125403MI6.5L	125.0	40.0	3.0	6500	6060T5	16.744							
RH125503MI6.5L	125.0	50.0	3.0	6500	6060T5	17.862	•					•	
RH150503MI6.5L	150.0	50.0	3.0	6500	6060T5	20.429							
RH200503MI6.5L	200.0	50.0	3.0	6500	6060T5	25.688				•			
RH250503MI6.5L	250.0	50.0	3.0	6500	6060T5	30.959							

RECTANGULAR HOLLOW SECTION WITH RADIUS CORNERS STANDARD GEOMETRICS

A RECTANGULAR HOLLOW IS A HOLLOW OF UNIFORM THICKNESS IN THE SHAPE OF A RECTANGLE. WITH FOUR INTERNAL AND EXTERNAL RADIUS CORNERS.





Rectangular Hollow Section with Round Corners - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	T mm	R mm	L mm	Alloy/ Temper	Normal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	NT
RR38161.2MI6.5L	38.0	16.0	1.2	1.8	6500	6060T5	2.093							
RR38251.5MI6L	38.0	25.0	1.5	3.0	6000	6060T5	2.820							
RR38252.5MI6.5L	38.0	25.0	2.5	3.0	6500	6060T5	5.005		•					
RR40202MI6.5L	40.0	20.0	2.0	2.0	6500	6060T5	3.880							
RR40253MI6.5L	40.0	25.0	3.0	3.0	6500	6060T5	6.090							
RR50101.3MI6L	50.0	10.0	1.3	2.0	6000	6060T5	2.442							
RR50251.6MI6.5L	50.0	25.0	1.6	1.6	6500	6060T5	3.991							
RR50252MI6.5L	50.0	25.0	2.0	3.0	6500	6060T5	4.881							
RR50252.5MI6L	50.0	25.0	2.5	3.0	6000	6060T5	5.550							
RR50253MI6.5L	50.0	25.0	3.0	4.0	6500	6060T5	7.039					•		•
RR60402.1MI6.5L	60.0	40.0	2.1	3.0	6500	6060T5	6.935							
RR65161.2MI6.50L	65.0	16.0	1.2	3.0	6500	6063T6	3.224							
RR65161.4MI6.50L	65.0	16.0	1.4	3.0	6500	6063T6	3.744					•		•
RR70302MI6.500L	70.0	30.0	2.0	3.0	6500	6063T5	6.643	•						
RR70303MI6.5L	70.0	30.0	3.0	1.4	6500	6060T5	9.873	•				•		
RR75503MI6.5L	75.0	50.0	3.0	4.45	6500	6060T5	12.831	•	•	•	•	•	•	•
RR75506MI6.5NL	75.0	50.0	6.0	4.0	6500	6061T6	23.887		•	•		•		
RR80404MI6.5IL	80.0	40.0	4.0	6.0	6500	6082T6	15.515	•						
RR100503MI6.5L	100.0	50.0	3.0	4.6	6500	6060T5	14.885	•	•	•	•	•	•	•
RR100506MI6.5L	100.0	50.0	6.0	4.6	6500	6060T5	28.743				•	•		•
RR102762MI6.5L	101.6	76.2	2.3	2.3	6500	6060T5	14.033							
RR1501005MI6.5IL	150.0	100.0	5.0	1.0	6500	6082T6	41.613							
RR1501005MI6L	150.0	100.0	5.0	1.0	6000	6060T5	38.412							
RR152766.4MI6.5NL	152.0	76.0	6.4	6.0	6500	6061T6	47.996							
RR1601066MI6NL	160.0	106.0	6.0	6.4	6000	6061T6	48.81							

** NOTE: RADIUS ABBREVIATED WITH [-] CONTACT YOUR LOCAL BRANCH FOR SPECIFICATIONS

CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

A RECTANGULAR HOLLOW IS A HOLLOW OF UNIFORM THICKNESS IN THE SHAPE OF A RECTANGLE. WITH FOUR INTERNAL AND EXTERNAL RADIUS CORNERS.



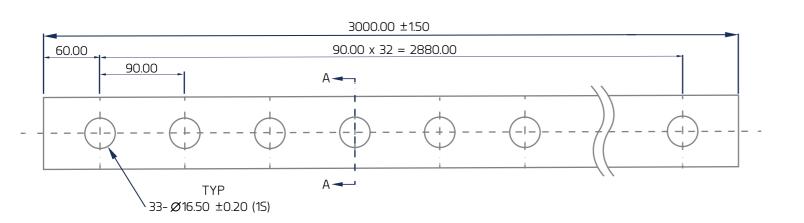
CUSTOM LENGTHS AVAILABLE UPON REQUEST

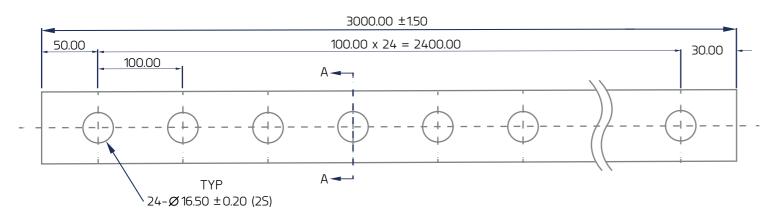
MILL RUN ONLY

IN STOCK

Rectangular Hollow Section with Round Corners - Available in Mill Finish, Anodised and Powder Coated

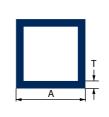
Part Number	Description	ÓLD	NSW	VIC	SA	TAS	WA	NT
RR38251.5MI2.48QLD	REC HOLLOW 38X25X1.5MM RAD CN MILL FINISH 16.5DIA 2S 50+100CTR							
RR38251.5MI2.48QLP	REC HOLLOW 38X25X1.5MM RAD CN MILL FINISH 16.5DIA 1S 50+100CTR							
RR38251.5MI2.48QLW	REC HOLLOW 38X25X1.5MM RAD CN MILL FINISH 16.5DIA 1S 60+90CTR	•						•
RR38251.5MI2.48QLX	REC HOLLOW 38X25X1.5MM RAD CN MILL FINISH 16.5DIA 2S 60+90CTR	•						•
RR38251.5MI3QLD	REC HOLLOW 38X25X1.5MM RAD CN MILL FINISH 16.5DIA 2S 50+100CTR	•						
RR38251.5MI3QLP	REC HOLLOW 38X25X1.5MM RAD CN MILL FINISH 16.5DIA 1S 50+100CTR							
RR38251.5MI3QLW	REC HOLLOW 38X25X1.5MM RAD CN MILL FINISH 16.5DIA 1S 60+90CTR	•						
RR38251.5MI3QLX	REC HOLLOW 38X25X1.5MM RAD CN MILL FINISH 16.5DIA 2S 60+90CTR	•						





SQUARE HOLLOW SECTION STANDARD GEOMETRICS

A SQUARE HOLLOW IS A HOLLOW OF UNIFORM THICKNESS IN THE SHAPE OF A SQUARE.





Square Hollow Section - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	T mm	L mm	Alloy/Temper	Nominal Mass/ Piece	δΓD	NSW	VIC	SA	TAS	MA	M
SH121.6MI6.5L	12.0	1.6	6500	6060T5	1.17							
SH191.2MI6.5L	19.05	1.2	6500	6060T5	1.508							
SH201.6MI6.5L	20.0	1.6	6500	6060T5	2.060							•
SH203MI6.5L	20.0	3.0	6500	6060T5	3.575							
SH251.6MI6.5L	25.0	1.6	6500	6060T5	2.613							
SH252MI6.5L	25.0	2.0	6500	6060T5	3.224							
SH253MI6.5L	25.0	3.0	6500	6060T5	4.634							•
SH322MI6.5L	32.0	2.0	6500	6060T5	4.225							
SH323MI6.5L	32.0	3.0	6500	6060T5	6.129							•
SH382MI7.20L	38.0	2.0	7200	6063T6	5.594							
SH401.6MI6.5L	40.0	1.6	6500	6060T5	4.309							•
SH402MI6.5L	40.0	2.0	6500	6060T5	5.336							
SH403MI6.5L	40.0	3.0	6500	6060T5	7.793							
SH501.6MI6.5L	50.0	1.6	6500	6060T5	5.434							
SH502MI6.5L	50.0	2.0	6500	6060T5	6.766							
SH503MI6.5L	50.0	3.0	6500	6060T5	9.899							
SH652.5MI6.5L	65.0	2.5	6500	6060T5	11.011							
SH65.51.6MI6L	65.5	1.6	6000	6060T5	6.612							
SH753MI6.5L	75.0	3.0	6500	6060T5	15.216							
SH1003MI6.5L	100.0	3.0	6500	6060T5	20.429	•	•	•	•	•	•	

CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

SQUARE HOLLOW SECTION WITH RADIUS CORNERS STANDARD GEOMETRICS

A SQUARE HOLLOW IS A HOLLOW OF UNIFORM THICKNESS IN THE SHAPE OF A SOUARE. WITH FOUR INTERNAL AND EXTERNAL RADIUS CORNERS.



CUSTOM LENGTHS AVAILABLE UPON REQUEST MILL RUN ONLY

IN STOCK

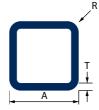
Square Hollow with Round Corners - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	T mm	R mm	L mm	Alloy/ Temper	Normal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	NT
SR161.5MI6.5L	16.0	1.5	2.0	6500	6060T5	1.469							
SR191.5MI6.5L	19.0	1.5	2.0	6500	6060T5	1.787			•				
SR203MI6.5L	20.0	3.0	3.0	6500	6060T5	3.581							
SR252MI6.5L	25.0	2.0	1.6	6500	6060T5	3.230	•	•					
SR253MI6.5L	25.0	3.0	3.0	6500	6060T5	4.634	•	•	•				•
SR25.41.2MI6.5L	25.4	1.2	2.8	6500	6060T5	1.956							
SR323MI6.5L	32.0	3.0	3.0	6500	6060T5	5.973	•	•	•				
SR37.352.5MI6.5L	37.35	2.5	3.0	6500	6060T5	5.999	•						
SR382MI7L	38.0	2.0	2.8	7000	6060T5	5.327							
SR402MI6.5L	40.0	2.0	2.4	6500	6060T5	5.245	•	•	•				
SR403MI6.5L	40.0	3.0	3.0	6500	6060T5	7.657		•					
SR405MI6.2L	40.0	5.0	2.5	6200	6060T5	11.631	•	•					
SR501.6MI6.6QL	50.0	1.6	6.3	6600	6106T6	5.253		•					
SR502MI6.5L	50.0	2.0	6.0	6500	6060T5	6.435	•	•	•				
SR503MI6.5L	50.0	3.0	3.0	6500	6060T5	9.899	•	•	•				
SR504MI5.8GL	50.0	4.0	6.0	5800	6351T6	11.095							
SR505MI6.5QL	50.0	5.0	3.0	6500	6106T6	15.665	•	•	•				
SR50.83.2MI6.5L	50.8	3.2	3.0	6500	6060T5	10.692							
SR511.9MI1.8QL	50.8	1.85	6.3	1800	6106T6	1.677	•						
SR511.9MI6.5L	50.8	1.85	6.3	6500	6060T5	6.058	•	•					

****** NOTE: RADIUS ABBREVIATED WITH [-] CONTACT YOUR LOCAL BRANCH FOR SPECIFICATIONS

SQUARE HOLLOW SECTION WITH RADIUS CORNERS STANDARD GEOMETRICS

A SQUARE HOLLOW IS A HOLLOW OF UNIFORM THICKNESS IN THE SHAPE OF A SOUARE. WITH FOUR INTERNAL AND EXTERNAL RADIUS CORNERS.

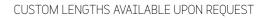




Square Hollow with Round Corners - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	T mm	R mm	L mm	Alloy/ Temper	Normal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	NT
SR625MI6.8DCL	62.0	5.0	2.0	6800	6005AT5	20.427							
SR653MI6.5L	65.0	3.0	5.0	6500	6060T5	13.058							
SR753MI6.5L	75.0	3.0	4.45	6500	6060T5	15.463					•		
SR76.26.35MI6.5QL	76.2	6.35	15.9	6500	6106T6	28.704							
SR1003MI6.5L	100.0	3.0	1.4	6500	6060T5	20.397							
SR1003.2MI6.6L	100.0	3.2	6.35	6600	6060T5	21.694	•						
SR1006MI6L	100.0	6.0	12.0	6000/6500	6060T5	35.046							
SR101.66.35MI6.5L	101.6	6.35	12.7	6500	6060T5	40.638							
SR1789MI7.2TL	178.0	9.0	8.0	7200	6082T5	117.619							

** NOTE: RADIUS ABBREVIATED WITH [-] CONTACT YOUR LOCAL BRANCH FOR SPECIFICATIONS



MILL RUN ONLY

ZED SECTION STANDARD GEOMETRICS

Z-SECTIONS ARE PROFILES IN THE SHAPE OF A "Z" WITH A UNIFORM THICKNESS THROUGHOUT.



CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

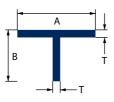
IN STOCK

ZED Sections - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	C mm	T mm	L mm	Alloy/ Temper	Normal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	NT
Z2020253MI5L	20.0	20.0	25.0	3.0	5000	6060T5	2.39							
Z4125201.6MI6.5L	20.0	41.6	25.5	1.6	6500	6060T5	2.346		—					

TEE SECTION STANDARD GEOMETRICS

TEE SECTIONS ARE PROFILES IN THE SHAPE OF A "T" TEE WITH A UNIFORM THICKNESS THROUGHOUT. THE HEAD AND BODY OF THE TEE MAY NOT BE EQUAL IN LENGTH.





TEE Sections - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	T mm	L mm	Alloy/ Temper	Normal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	NT
T20201.6MI5L	20.0	20.0	1.6	5000	6060T5	0.835							
T20203MI4L	20.0	20.0	3.0	4000	6060T5	1.204							
T25251.6MI6.5L	25.0	25.0	1.6	6500	6060T5	1.365							
T25253MI6.5L	25.0	25.0	3.0	6500	6060T5	2.483							
T36361.2MI5L	36.0	36.0	1.2	5000	6060T5	1.26							
T40201.6MI6.5L	40.0	20.0	1.6	6500	6060T5	1.534			•				
T40401.6MI6.5L	40.0	40.0	1.6	6500	6060T5	2.21							
T40403MI6.5L	40.0	40.0	3.0	6500	6060T5	4.069	•		•				
T50251.6MI6.5L	50.0	25.0	1.6	6500	6060T5	2.060							
T50503MI6.5L	50.0	50.0	3.0	6500	6060T5	5.109							
T50506MI6.5L	50.0	50.0	6.0	6500	6060T5	9.932							
T100506MI5.50L	100.0	50.0	6.0	5500	6063T6	12.826							
T180100106MI2.4L	100.0	180.0	10.0/6.0	2400	6060T5	13.365							
UA10326MI6L	70.0	22.0	2.0	6000	6060T5	2.892							

CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY





HOLLOW TUBE SECTION STANDARD GEOMETRICS

AN EXTRUDED TUBE IS A HOLLOW OF UNIFORM THICKNESS IN THE SHAPE OF A CIRCLE.



CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

IN STOCK

Aluminium Tube - Available in Mill Finish, Anodised and Powder Coated

Part Number	Diameter mm	T mm	L mm	Alloy/ Temper	Nominal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	MT
RT6.351.42MI5L	6.35	1.42	5000	6060T5	0.300	•	•	•	•	•		
RT9.531.43MI5L	9.53	1.43	5000	6060T5	0.495							
RT101.2MI6.5L	10.0	1.2	6500	6060T5/6063	0.585							
RT101.6MI6.5L	10.0	1.6	6500	6060T5	0.734	•						
RT121.6MI6L	12.0	1.6	6000	6060T5	0.846	•				•		
RT15.881.2MI6.1QL	15.88	1.2	6100	6106T6	0.915	•						
RT161.2MI6.1QL	16.0	1.2	6100	6106T6	0.921	•						
RT161.6MI6L	16.0	1.6	6000	6060T5	1.176	•				•	•	•
RT191.2MI6.1L	19.0	1.2	6100	6060T5	1.110					•		•
RT191.6MI6.5L	19.0	1.6	6500	6060T5	1.540					•		
RT201.6MI6.5L	20.0	1.6	6500	6060T5	1.631	•				•	•	•
RT203MI6.5L	20.0	3.0	6500	6060T5	2.814					•	•	•
RT221.5MI6L	22.0	1.5	6000	6060T5	1.566					•	•	
RT22.25.99MI6NL	22.20	5.99	6000	6061T6	4.968					•		
RT25.41.2MI5L	25.40	1.2	5000	6060T5	1.235							
RT251.6MI6.5L	25.0	1.6	6500	6060T5	2.073	•				•	•	•
RT253MI6.5L	25.0	3.0	6500	6060T5	3.653						•	
RT28.581.42MI5L	28.58	1.42	5000	6060T5	1.64							
RT321.6MI6L	32.0	1.6	6000	6060T5	2.484							
RT323MI6.5L	32.0	3.0	6500	6060T5	4.816							
RT33.43MI5.20L	33.4	3.0	5200	6063T6	4.024							

HOLLOW TUBE SECTION STANDARD GEOMETRICS

AN EXTRUDED TUBE IS A HOLLOW OF UNIFORM THICKNESS IN THE SHAPE OF A CIRCLE.





Aluminium Tube - Available in Mill Finish, Anodised and Powder Coated

Part Number	Diameter mm	T mm	L mm	Alloy/ Temper	Nominal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	NT
RT34.931.42MI5L	34.93	1.42	5000	6060T5	2.025							
RT38.12MI6L	38.1	2.0	6000	6060T5	3.672							
RT38.13MI6ZL	38.1	3.0	6000	6060T4	5.376							
RT38.13.25MI6.5L	38.1	3.25	6500	6060T5	6.266							•
RT401.6MI6L	40.0	1.6	6000	6060T5	3.126							
RT403MI6.5L	40.0	3.0	6500	6060T5	6.142							
RT44.451.42MI5L	44.45	1.42	5000	6060T5	2.600							
RT44.453.25MI6.4PL	44.45	3.25	6400	6060T591	7.296							
RT463.5MI6.5L	46.0	3.5	6500	6060T1	7.566							
RT463.5MI6.5L	46.0	3.5	6500	6060T5	8.229							
RT48.44.47MI6.5NL	48.40	4.47	6500	6061T6	10.868							•
RT501.6MI6.5L	50.0	1.6	6500	6060T5	4.283							
RT502MI6.5L	50.0	2.0	6500	6060T5	5.310							
RT503MI6.5L	50.0	3.0	6500	6060T5	7.800							•
RT504MI6.5QL	50.0	4.0	6500	6106T6	10.179							•
RT504MI6PL	50.0	4.0	6000	6060T591	9.396							
RT505MI6ZL	50.0	5.0	6000	6060T4	11.454							
RT506MI6L	50.0	6.0	6000	6060T5	13.434							
RT50.81.4MI5L	50.8	1.42	5000	6060T5	2.985							
RT50.81.63MI6.5L	50.8	1.63	6500	6060T5	4.42							
RT602MI6L	60.0	2.0	6000	6060T5	5.922							•
RT603MI6.5L	60.0	3.0	6500	6060T5	9.464							•••••
RT604MI6PL	60.0	4.0	6000	6060T591	11.442							
RT605MI6PL	60.0	5.0	6000	6060T591	13.998							
RT606MI6.5EL	60.0	6.0	6500	6060T1	17.862							

CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY



HOLLOW TUBE SECTION STANDARD GEOMETRICS

AN EXTRUDED TUBE IS A HOLLOW OF UNIFORM THICKNESS IN THE SHAPE OF A CIRCLE.



CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

IN STOCK

Aluminium Tube - Available in Mill Finish, Anodised and Powder Coated

Part Number	Diameter mm	T mm	L mm	Alloy/ Temper	Nominal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	MA	NT
RT60.34.5MI6NL	60.3	4.5	6000	6061/6063	12.708							
RT63.53.25MI6.4EL	63.5	3.25	6400	6060T1	10.630							
RT63.53.96MI5L	63.5	3.96	5000	6060T5	9.975					•		
RT63.56.35MI6L	63.5	6.35	6000	6060T5	18.468							
RT754.5MI5L	75.0	4.5	5000	6060T5	13.505							
RT766MI6.5EL	76.0	6.0	6500	6060T1	23.237							
RT76.23.25MI6.4EL	76.2	3.25	6400	6060T1	12.870							
RT76.23.8MI6.0XL	76.2	3.8	6000	6063T52	14.052							
RT76.24.75MI6.8VAL	76.2	4.75	6800	6063T4	19.577							
RT802MI6L	80.0	2.0	6000	6060T5	7.968					•		
RT803MI6L	80.0	3.0	6000	6060T5	11.754							
RT903MI5L	90.0	3.0	5000	6060T5	11.11							
RT1001.6MI6L	100.0	1.6	6000	6060T5	8.04							
RT1002MI6.5L	100.0	2.0	6500	6060T5	10.842							
RT1003MI6L	100.0	3.0	6000	6060T5	14.862	•		•	•	•	•	

HOLLOW TUBE SECTION STANDARD GEOMETRICS

AN EXTRUDED TUBE IS A HOLLOW OF UNIFORM THICKNESS IN THE SHAPE OF A CIRCLE.





Aluminium Tube - Available in Mill Finish, Anodised and Powder Coated

Part Number	Diameter mm	T mm	L mm	Alloy/ Temper	Nominal Mass/Piece	ÓLD	NSN	VIC	SA	TAS	WA	NT
RT101.61.8MI6L	101.6	1.8	6000	6060T5	9.144							
RT101.66.35MI6.4EL	101.6	6.35	6400	6060T1	32.832							
RT1503MI6L	150.0	3.0	6000	6060T5	22.446							
RT152.43.25MI6L	152.4	3.25	6000	6060T5	24.672							
RT16010MI6IL	160.0	10.0	6000	6082T6	76.338							
RT203.23MI4.8L	203.2	3.0	4800	6060T5	24.451							

CUSTOM LENGTHS AVAILABLE UPON REQUEST

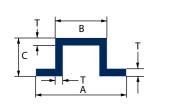
MILL RUN ONLY





TOP HAT SECTION STANDARD GEOMETRICS

CHANNELS ARE SOMETIMES REFERRED TO AS "TOP HATS". THE WEB AND FLANGES ARE OF UNIFORM THICKNESS THROUGHOUT.





CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

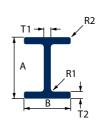
IN STOCK

Top Hat Sections - Available in Mill Finish, Anodised and Powder Coated

Part Numb	er	A mm	B mm	C mm	T mm	Alloy/ Temper	Normal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	Ν
TH5025161.51	MI5L	50.0	25.0	16.0	1.5	6060T5	1.600							
TH5724282.31	MI6L	57.0	24.0	28.0	2.3	6060T5	4.050							
TH63.531.753M	4.86PL	63.5	31.75	31.75	3.0	6063T591	4.811							
TH6331.752.8N	1I5PL	63.5	31.75	31.75	2.8	6060T591	4.740							
TH11066283M	I2.5IL	110.0	66.0	28.0	3.0	6082T6	3.250							

I SECTION STANDARD GEOMETRICS

I - SECTIONS MAY HAVE WEB AND FLANGES OF DIFFERENT THICKNESSES.



I Sections - Available in Mill Finish, Anodised and Powder Coated

Part Number	A mm	B mm	T1 mm	T2 mm	R1 mm	R2 mm	L mm	Alloy/ Temper	Normal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	NT
I4034.21.6MI5.8L	40.0	34.2	1.6	-	-	-	5800	6060T5	2.789							
I40403MI5L	40.0	40.0	3.0	-	0.3	0.3	5000	6060T5	4.635							
I100756.44.8MI6.5NL	100.0	75.0	6.4	-	-	-	6500	6061T6	23.978							
I101.676.24.75MI6NL	101.6	76.2	4.7	-	-	-	6000	6061T6	23.748							
CEM2060MI8IL	101.6	76.2	6.3	-	-	-	8000	6082T6	31.664	•						
UA10016MI6.5QL	117.9	80.0	6.0	8.0	-	-	6500	6106T6	33.260							
I1308056MI6.5IL	130.0	80.0	4.7	6.3	-	-	6500	6082T6	27.547							
I140908MI5.5TL	140.0	90.0	8.0	-	-	-	5500	6082T5	36.019							
I150100610MI10IL	150.0	100.0	6.0	10.0	-	-	10000	6082T6	76.18							
I1501009.5MI6IL	150.0	100.0	7.1	9.5	11.1	0.5	6000	6082T6	47.556							
I1501009.5MI6.5IL	150.0	100.0	7.1	9.5	11.1	0.5	6500	6082T6	51.519							
I1521017.99.5MI8IL	152.4	101.6	7.9	9.5	3.2	0.8	8000	6082T6	64.624							
I1768085MI4.5DCL	176.0	80.0	8.0	-	5.0	-	4500	6005AT5	25.510							
I1768085MI5DCL	176.0	800	8.0	-	5.0	-	5000	6005AT5	28.345							
I1768085MI6IL	176.0	80.0	8.0	-	5.0	-	6000	6082T6	34.014							
I1768085MI6.5DCL	176.0	80.0	8.0	-	5.0	-	6500	6005AT5	36.848							
I17815313MI12IL	178.0	153.0	13.0	-	5.0	-	12000	6082T6	178.812							
I19111169MI8.53L	190.5	111.1	5.8	8.9	-	-	8530	6060T5	69.212							
UN01287MI6IL	216.0	80.0	5.0	-	8.0	-	6000	6082T6	38.196							
UN01287MI8IL	216.0	80.0	5.0	-	8.0	-	8000	6082T6	50.928	•						
I22010010MI6IL	220.0	100.0	5.0	-	10.0	-	6000	6082T6	48.822							
I22010010MI6.5IL	220.0	100.0	5.0	-	10.0	-	6500	6082T6	52.890							
I27010066MI6IL	270.0	100.0	6.0	-	-	-	6000	6082T6	57.018							
I27010066MI7IL	270.0	100.0	6.0	-	-	-	7000	6082T6	66.521							

** NOTE: RADIUS ABBREVIATED WITH [-] CONTACT YOUR LOCAL BRANCH FOR SPECIFICATIONS

CUSTOM LENGTHS AVAILABLE UPON REQUEST



MILL RUN ONLY IN STOCK

ALUMINIUM COILS ROLLED PRODUCTS

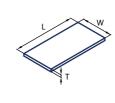
ALUMINIUM COIL AND SHEET PRODUCTS ARE MANUFACTURED TO SUIT THE REQUIREMENTS OF DISTRIBUTORS, STOCKISTS, AND SELECTED END USERS.

CUSTOM LENGTHS AVAILABLE UPON REQUEST PURCHASE ORDER

IN STOCK

ALUMINIUM SHEET **ROLLED PRODUCTS**

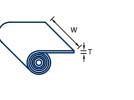
ALUMINIUM COIL AND SHEET PRODUCTS ARE MANUFACTURED TO SUIT THE REQUIREMENTS OF DISTRIBUTORS, STOCKISTS, AND SELECTED END USERS.





Aluminium Sheet 5005 - Mill Finish

Part Number	T mm	W mm	L mm	Alloy/ Temper	Finish	Nominal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	NT
S0.612002400MI2FD	0.6	1200	2400	5005-H34	Mill Finish	4.682							
S0.812002400MI2FD	0.8	1200	2400	5005-H34	Mill Finish	6.243							
S1.012002400MI2FD	1.0	1200	2400	5005-H34	Mill Finish	7.804				•			
S1.012003000MI2FD	1.0	1200	3000	5005-H34	Mill Finish	9.756							
S1.212002400MI2FD	1.2	1200	2400	5005-H34	Mill Finish	9.365							
S1.212003000MI2FD	1.2	1200	3000	5005-H34	Mill Finish	11.707							
S1.212003600MI2FD	1.2	1200	3600	5005-H34	Mill Finish	14.048							•
S1.215003000MI2FD	1.2	1500	3000	5005-H34	Mill Finish	14.634							
S1.612002400MI2FD	1.6	1200	2400	5005-H34	Mill Finish	12.487							•
S1.612003000MI2FD	1.6	1200	3000	5005-H34	Mill Finish	15.609							
S1.612003600MI2FD	1.6	1200	3600	5005-H34	Mill Finish	18.731							
S1.615003000MI2FD	1.6	1500	3000	5005-H34	Mill Finish	19.512							
S1.615003600MI2FD	1.6	1500	3600	5005-H34	Mill Finish	23.414							
S2.012002400MI2FD	2.0	1200	2400	5005-H34	Mill Finish	15.609							
S2.012003000MI2FD	2.0	1200	3000	5005-H34	Mill Finish	19.512							
S2.012003600MI2FD	2.0	1200	3600	5005-H34	Mill Finish	23.414							
S2.015003000MI2FD	2.0	1500	3000	5005-H34	Mill Finish	24.39							•
S2.015003600MI2FD	2.0	1500	3600	5005-H34	Mill Finish	29.268							•
S2.512002400MI2FD	2.5	1200	2400	5005-H34	Mill Finish	19.512							
S2.512003000MI2FD	2.5	1200	3000	5005-H34	Mill Finish	24.39							
S2.512003600MI2FD	2.5	1200	3600	5005-H34	Mill Finish	29.268							
S2.515003000MI2FD	2.5	1500	3000	5005-H34	Mill Finish	30.487				•			
S3.012002400MI2FD	3.0	1200	2400	5005-H34	Mill Finish	23.414				•	•		
S3.012003000MI2FD	3.0	1200	3000	5005-H34	Mill Finish	29.268	•	•	•	•		•	



Coils - Available in Mill Finish

Part Number	T mm	W mm	Alloy/Temper	Nominal Mass/ Piece	ÓLD	NSW	VIC	SA	TAS	WA	NT
C0.551220MI2TJ	0.55	1220	3105-H26	1.818							
C0.61200EM2FD	0.60	1200	5005-H34	1.951							
C0.61200MI2FD	0.60	1200	5005-H34	1.951							
C0.71200MI2FD	0.70	1200	5005-H34	2.276							
C0.81200MI2FD	0.80	1200	5005-H34	2.602							
C0.82515MI2TA	0.80	2515	3003-H16	5.453							
CO.82515MI2TAM	0.80	2515	3003-H16	5.453							
CO.91200MI2FA	0.90	1200	5005-H16	2.927							
C1.01200MI2FD	1.0	1200	5005-H34	3.252							
C1.01200MI2FI	1.0	1200	5052-H32	3.252							
C1.21200AG2FD	1.20	1200	5005-H34	3.902							
C1.21200MI2FI	1.20	1200	5052-H32	3.902							
C1.21200MI2FI	1.20	1200	5052-H32	3.902							
C1.61200MI2FD	1.60	1200	5005-H34	5.203							
C1.61200MI2FI	1.60	1200	5052-H32	5.203							
C2.01200MI2FD	2.0	1200	5005-H34	6.504							
C2.01200MI2FI	2.0	1200	5052-H32	6.504							
C3.01200MI2FI	3.0	1200	5052-H32	9.756	•						
C3.01200PV1FD	3.0	1200	5005-H34	9.756							
C3.01500PV1FD	3.0	1500	5005-H34	9.756			•				·····-



ALUMINIUM SHEET ROLLED PRODUCTS

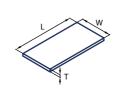
ALUMINIUM COIL AND SHEET PRODUCTS ARE MANUFACTURED TO SUIT THE REQUIREMENTS OF DISTRIBUTORS, STOCKISTS, AND SELECTED END USERS.

CUSTOM LENGTHS AVAILABLE UPON REQUEST MILL RUN ONLY

IN STOCK

ALUMINIUM SHEET ROLLED PRODUCTS

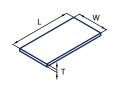
ALUMINIUM COIL AND SHEET PRODUCTS ARE MANUFACTURED TO SUIT THE REQUIREMENTS OF DISTRIBUTORS, STOCKISTS, AND SELECTED END USERS.





Aluminium Sheet 5005 - PVC Coated

Part Number	T mm	W mm	L mm	Alloy/Temper	Finish	Nominal Mass/Piece	ÓLD	NSN	VIC	SA	TAS	WA	NT
S0.612002400EM2FD	0.6	1200	2400	5005-H34	EM2FD	4.682							
S0.812202490VP1FD	0.8	1220	2490	5005-H34	VP1FD	6.586							
S0.812202490VR1FD	0.8	1220	2490	5005-H34	VR1FD	6.586							
S1.012002400CQ1FD	1.0	1200	2400	5005-H34	CQ1FD	7.804							
S1.012002400CS1FD	1.0	1200	2400	5005-H34	CS1FD	7.804							
S1.012002400EM2FD	1.0	1200	2400	5005-H34	EM2FD	7.804							
\$1.012002400MR1FD	1.0	1200	2400	5005-H34	MR1FD	7.804							
S1.012002400PV1FD	1.0	1200	2400	5005-H34	PV1FD	7.804							
S1.012002400PZ1FD	1.0	1200	2400	5005-H34	PZ1FD	7.804							
S1.012003600CQ1FD	1.0	1200	3600	5005-H34	CQ1FD	11.707							
S1.012003600PV1FD	1.0	1200	3600	5005-H34	PV1FD	11.707							
S1.212002400CP1FD	1.2	1200	2400	5005-H34	CP1FD	9.365							
S1.212002400CQ1FD	1.2	1200	2400	5005-H34	CQ1FD	9.365							
S1.212002400PV1FD	1.2	1200	2400	5005-H34	PV1FD	9.365					•		
S1.612002400CL1FD	1.6	1200	2400	5005-H34	CL1FD	12.487							
S1.612002400CP1FD	1.6	1200	2400	5005-H34	CP1FD	12.487							
S1.612002400CQ1FD	1.6	1200	2400	5005-H34	CQ1FD	12.487							
S1.612002400EM2FD	1.6	1200	2400	5005-H34	EM2FD	12.487							
S1.612002400PV1FD	1.6	1200	2400	5005-H34	PV1FD	12.487							
S1.612002400PZ1FD	1.6	1200	2400	5005-H34	PZ1FD	12.487							
S1.612003000CP1FD	1.6	1200	3000	5005-H34	CP1FD	15.609							
S1.612003600PV1FD	1.6	1200	3600	5005-H34	PV1FD	18.731							
S2.012002400CQ1FD	2.0	1200	2400	5005-H34	CQ1FD	15.609							
S2.012002400CP1FD	2.0	1200	2400	5005-H34	CP1FD	15.609							
S2.012002400PV1FD	2.0	1200	2400	5005-H34	PV1FD	15.609							
S2.012002400PZ1FD	2.0	1200	2400	5005-H34	PZ1FD	15.609							
S2.012003000PV1FD	2.0	1200	3000	5005-H34	PV1FD	19.512							
S2.015003000PV1FD	2.0	1500	3000	5005-H34	PV1FD	24.39							
S2.512001800PV1FD	2.5	1200	1800	5005-H34	PV1FD	14.634							
S2.512002400PV1FD	2.5	1200	2400	5005-H34	PV1FD	19.512					•		
S2.512002400PZ1FD	2.5	1200	2400	5005-H34	PZ1FD	19.512							
S2.515002400PV1FD	2.5	1500	2400	5005-H34	PV1FD	24.39							
S3.012002400CL1FD	3.0	1200	2400	5005-H34	CL1FD	23.414	_						





Aluminium Sheet 5005 - Mill Finish

Part Number	T mm	W mm	L mm	Alloy/ Temper	Finish	Nominal Mass/Piece	ÓLD	NSN	VIC	SA	TAS	WA	Ч
S3.012003600MI2FD	3.0	1200	3600	5005-H34	Mill Finish	35.121							
S3.015003000MI2FD	3.0	1500	3000	5005-H34	Mill Finish	36.585							
S3.015003600MI2FD	3.0	1500	3600	5005-H34	Mill Finish	43.902							
S4.012002400MI2FD	4.0	1200	2400	5005-H34	Mill Finish	31.219					•		•
S4.015003000MI2FD	4.0	1500	3000	5005-H34	Mill Finish	48.78							
S4.012002400MI2FD	4.0	1200	2400	5005-H34	Mill Finish	31.219					•		
S5.012002400MI2FD	5.0	1200	2400	5005-H34	Mill Finish	38.304							•
S5.015003000MI2FD	5.0	1500	3000	5005-H34	Mill Finish	59.85							
P6.012002400MI2FD	6.0	1200	2400	5005-H34	Mill Finish	45.964							•
P6.015003000MI2FD	6.0	1500	3000	5005-H34	Mill Finish	71.82							
P8.012002400MI2FD	8.0	1200	2400	5005-H34	Mill Finish	61.286							





ALUMINIUM SHEET **ROLLED PRODUCTS**

ALUMINIUM HEAVY GAUGE SHEET PRODUCTS ARE MANUFACTURED TO SUIT THE REQUIREMENTS OF DISTRIBUTORS, STOCKISTS, AND SELECTED END USERS.



CUSTOM LENGTHS AVAILABLE UPON REQUEST MILL RUN ONLY

IN STOCK

ALUMINIUM SHEET **ROLLED PRODUCTS**

ALUMINIUM HEAVY GAUGE SHEET PRODUCTS ARE MANUFACTURED TO SUIT THE REQUIREMENTS OF DISTRIBUTORS, STOCKISTS, AND SELECTED END USERS.





Aluminium Sheet & PVC Coated 5052 - Mill Finish

Part Number	T mm	W mm	L mm	Alloy/ Temper	Finish	Nominal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	NT
S1.012002400MI2FI	1.0	1200	2400	5052-H32	Mill	7.804							
S1.612002400MI2FI	1.6	1200	2400	5052-H32	Mill	12.487				•			
S1.612002400PV1FI	1.6	1200	2400	5052-H32	PV1	12.487							
S1.612002400PZ1FI	1.6	1200	2400	5052-H32	PZ1	12.487							
S2.012002400MI2FI	2.0	1200	2400	5052-H32	Mill	15.609							
S2.012002400PV1FI	2.0	1200	2400	5052-H32	PV1	15.609							
S2.012002400PZ1FI	2.0	1200	2400	5052-H32	PZ1	15.609							
S2.512002400MI2FI	2.5	1200	2400	5052-H32	Mill	19.512							
S2.512002400PV1FI	2.5	1200	2400	5052-H32	PV1	19.512							
S2.512002400PX1FI	2.5	1200	2400	5052-H32	PX1	19.512							
S2.512006000PZ1FI	2.5	1200	6000	5052-H32	PZ1	48.78							
S2.512206000MI2FI	2.5	1220	6000	5052-H32	Mill	49.593							
S2.515003000MI2FI	2.5	1500	3000	5052-H32	Mill	30.487							
S2.515003000PX1FI	2.5	1500	3000	5052-H32	PX1	30.487				•			
S3.012002400MI2FI	3.0	1200	2400	5052-H32	Mill	23.414				•			
S3.012002400PV1FI	3.0	1200	2400	5052-H32	PV1	23.414							
S3.012002400PX1FI	3.0	1200	2400	5052-H32	PX1	23.414							
S3.012002400PZ1FI	3.0	1200	2400	5052-H32	PZ1	23.414							
S3.012003000MI2FI	3.0	1200	3000	5052-H32	Mill	29.268							
S3.012004700MI2FI	3.0	1200	4700	5052-H32	Mill	45.853							
S3.015003000MI2FI	3.0	1500	3000	5052-H32	Mill	36.585							
S3.015253000MI2FI	3.0	1525	3000	5052-H32	Mill	37.194							
S3.018502400PX1FI	3.0	1850	2400	5052-H32	PX1	36.097							
S4.012002400MI2FI	4.0	1200	2400	5052-H32	Mill	31.219				•			

PV1 - 40/50 Micron Blue or Clear

PX1 - 80 Micron - Black 1 side, White the other

PZ1 - 100 Micron Laser Film - Black 1 side, White the other

Aluminium Sheet 5005 - PVC Coated

Part Number	T mm	W mm	L mm	Alloy/Temper	Finish	Nominal Mass/Piece	ÓLD	NSN	VIC	SA	TAS	WA	NT
S3.012002400CP1FD	3.0	1200	2400	5005-H34	CP1FD	23.414							
S3.012002400PV1FD	3.0	1200	2400	5005-H34	PV1FD	23.414							
S3.012002400PX1FD	3.0	1200	2400	5005-H34	PX1FD	23.414							
S3.012002400PZ1FD	3.0	1200	2400	5005-H34	PZ1FD	23.414							
S3.012003000PV1FD	3.0	1200	3000	5005-H34	PV1FD	29.268							
S3.015003000PV1FD	3.0	1500	3000	5005-H34	PV1FD	36.585							
S3.015003000PZ1FD	3.0	1500	3000	5005-H34	PZ1FD	36.585							
S5.015003000PZ1FD	5.0	1500	3000	5005-H34	PZ1FD	59.85							

EM2FD - Stucco Mill Finish

VP1FD - Vilotone White + PVC

CQ1FD - Clear Anodised 15UM

CS1FD - Clear Anodised 20UM

MR1FD - RIB'D Mill Finish



ALUMINIUM SHEET ROLLED PRODUCTS

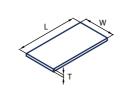
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CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY IN STOCK

ALUMINIUM SHEET **ROLLED PRODUCTS**

ALUMINIUM HEAVY GAUGE SHEET PRODUCTS ARE MANUFACTURED TO SUIT THE REQUIREMENTS OF DISTRIBUTORS, STOCKISTS, AND SELECTED END USERS.





Aluminium Plate 6061 - Mill Finish

Part Number	T mm	W mm	L mm	Alloy/Temper	Finish	Nominal Mass/Piece	ÓLD	NSN	VIC	SA	TAS	WA	NT
P6.012502450MI2M	6.0	1250	2450	6061T651	Mill	48.877							
P8.012502450MI2M	8.0	1250	2450	6061T651	Mill	65.17							
P10.012502450MI2M	10.0	1250	2450	6061T651	Mill	81.462							
P12.712502450MI2M	12.7	1250	2450	6061T651	Mill	103.457							



Marine Plate 5083 - Mill Finish

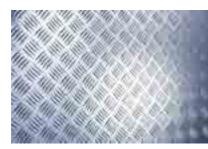
Part Number	T mm	W mm	L mm	Alloy/Temper	Finish	Nominal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	μ
S3.012002400MI2FQ	3.0	1200	2400	5083H321/116	Mill Finish	23.414				•		•	
S3.012006100MI2FQ	3.0	1200	6100	5083H321/116	Mill Finish	59.511							
S3.015256100MI2FQ	3.0	1525	6100	5083H321/116	Mill Finish	75.629							
S3.018306100MI2FQ	3.0	1830	6100	5083H321/116	Mill Finish	90.755							
S4.012002400MI2FQ	4.0	1200	2400	5083H321/116	Mill Finish	31.219							
S4.012006100MI2FQ	4.0	1200	6100	5083H321/116	Mill Finish	79.348							
S4.015256100MI2FQ	4.0	1525	6100	5083H321/116	Mill Finish	100.839							
S4.018306100MI2FQ	4.0	1830	6100	5083H321/116	Mill Finish	121.006							
S5.012002400MI2FQ	5.0	1200	2400	5083H321/116	Mill Finish	38.304			•		•	•	
S5.015256100MI2FQ	5.0	1525	6100	5083H321/116	Mill Finish	123.723			•		•	•	
S5.018306100MI2FQ	5.0	1830	6100	5083H321/116	Mill Finish	148.467							
P6.012002400MI2FQ	6.0	1200	2400	5083H321/116	Mill Finish	45.964		•	•	•	•	•	
P6.015256100MI2FQ	6.0	1525	6100	5083H321/116	Mill Finish	148.467							
P6.018306100MI2FQ	6.0	1830	6100	5083H321/116	Mill Finish	178.161							
P6.019806100MI2FQ	6.0	1980	6100	5083H321/116	Mill Finish	192.764							
P6.022009000MI2FQ	6.0	2200	9000	5083H321/116	Mill Finish	316.008							
P8.012002400MI2FQ	8.0	1200	2400	5083H321/116	Mill Finish	61.286		•	•	•	•	•	•
P8.018306100MI2FQ	8.0	1830	6100	5083H321/116	Mill Finish	237.548							
P8.019806100MI2FQ	8.0	1980	6100	5083H321/116	Mill Finish	257.019		•					
P10.012002400MI2FQ	10.0	1200	2400	5083H321/116	Mill Finish	76.608	•	•	•	•	•	•	
P10.012006100MI2FQ	10.0	1200	6100	5083H321/116	Mill Finish	194.712							
P10.018306100MI2FQ	10.0	1830	6100	5083H321/116	Mill Finish	296.935							
P12.012002400MI2FQ	12.0	1200	2400	5083H321/116	Mill Finish	91.929		•	•		•		
P16.012002400MI2FQ	16.0	1200	2400	5083H321/116	Mill Finish	122.572							
P20.012002400MI2FQ	20.0	1200	2400	5083H321/116	Mill Finish	153.216		•					
P25.012002400MI2FQ	25.0	1200	2400	5083H321/116	Mill Finish	191.52							
P32.012002400MI2FQ	32.0	1200	2400	5083H321/116	Mill Finish	245.145		•					
P40.012002400MI2FQ	40.0	1200	2400	5083H321/116	Mill Finish	306.432							





TREADPLATE ALUMINIUM TREADPLATE

ALUMINIUM TREAD PLATE PRODUCTS ARE MANUFACTURED TO SUIT THE REQUIREMENTS OF DISTRIBUTORS, STOCKISTS, AND SELECTED END USERS.

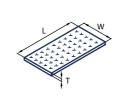


5-Bar Treadplate - Mill Finish

Part Number	T mm	W mm	L mm	Alloy/Temper	Finish	Nominal Mass/Piece	ÓLD	NSW	VIC	SA	TAS	WA	F
TP0.912002400FB1FW	0.9	1200	2400	1100-H114	Mill Finish	7.776							
TP1.412002400FB1FU	1.4	1200	2400	5052-0	Mill Finish	12.620							
TP1.412002400PCBKFU	1.4	1200	2400	5052-0	PCBK	12.620							
TP1.612002400FB1FU	1.6	1200	2400	5052-0	Mill Finish	14.423						•	•
TP1.615003600FB1FU	1.6	1500	3600	5052-0	Mill Finish	27.043							•
TP2.012002400FB1FU	2.0	1200	2400	5052-0	Mill Finish	17.28							•
TP2.015002400FB1FU	2.0	1500	2400	5052-0	Mill Finish	21.6							
TP2.015003000FB1FU	2.0	1500	3000	5052-0	Mill Finish	27.0							
TP2.512002400FB1FU	2.5	1200	2400	5052-0	Mill Finish	21.6							•
TP2.515002400FB1FU	2.5	1500	2400	5052-0	Mill Finish	27.0							
TP2.515003000FB1FU	2.5	1500	3000	5052-0	Mill Finish	33.75							
TP3.012002400FB1FU	3.0	1200	2400	5052-0	Mill Finish	25.660							
TP3.012003000FB1FU	3.0	1200	3000	5052-0	Mill Finish	32.076		•					
TP3.012003600FB1FU	3.0	1200	3600	5052-0	Mill Finish	38.491		•					•
TP3.015002400FB1FU	3.0	1500	2400	5052-0	Mill Finish	32.076							
TP3.015003000FB1FU	3.0	1500	3000	5052-0	Mill Finish	40.095							•
TP3.015003600FB1FU	3.0	1500	3600	5052-0	Mill Finish	48.114							
TP4.012002400FB1FU	4.0	1200	2400	5052-0	Mill Finish	34.905							
TP4.018503000FB1FU	4.0	1850	3000	5052-0	Mill Finish	67.266							
TP5.012002400FB1FU	5.0	1200	2400	5052-0	Mill Finish	42.624							•
TP5.018502400FB1FU	5.0	1850	2400	5052-0	Mill Finish	65.712							
TP5.018503000FB1FU	5.0	1850	3000	5052-0	Mill Finish	82.14							
TP6.012002400FB1FU	6.0	1200	2400	5052-0	Mill Finish	51.84							
TP6.015003000FB1FU	6.0	1500	3000	5052-0	Mill Finish	81.0	•	•	•	•		•	

TREADPLATE ALUMINIUM TREADPLATE

ALUMINIUM TREAD PLATE PRODUCTS ARE MANUFACTURED TO SUIT THE REQUIREMENTS OF DISTRIBUTORS, STOCKISTS, AND SELECTED END USERS.





Propeller Pattern Treadplate - Bright Polish Finish

Part Number	T mm	W mm	L mm	Alloy/Temper	Finish	Nominal Mass/Piece	ÓLD	NSN	VIC	SA	TAS	WA	NT
TP1.612002400PP2TI	1.6	1200	2400	3003-H224	Mill Finish	14.423							
TP1.612003000PP2TI	1.6	1200	3000	3003-H224	Mill Finish	18.028							
TP1.612003600PP2TI	1.6	1200	3600	3003-H224	Mill Finish	21.634							
TP2.012002400PP2TI	2.0	1200	2400	3003-H224	Mill Finish	17.28							•
TP3.012002400PP2TI	3.0	1200	2400	3003-H224	Mill Finish	25.660							
TP5.09003600PP2TI	5.0	900	3600	3003-H224	Mill Finish	47.952							
TP5.012002400PP2TI	5.0	1200	2400	3003-H224	Mill Finish	42.624	•	•	•		•		

CUSTOM LENGTHS AVAILABLE UPON REQUEST

MILL RUN ONLY

IN STOCK







wintecsystems

Wintec Systems windows and doors are an all Australian designed and manufactured product, with modern designs and quality finish at the forefront of the Wintec Systems philosophy.

We have products to suit all areas in Australia - consisting of: Sliding windows, Sliding doors, Awning and Casement windows, Double Hung windows, Louvres, Sliding Multi Track doors, Hinged doors and Bi-folding doors.

Centre Glazed Framing Profiles are easy to manufacture and have a flexible range of uses. Our 101.6mm framing integrates with our other Wintec architectural systems and our Sub-frame options ensure suitability for various applications both commercial and residential.

Options for both single and double glazing pockets allow for a wide range of glazing from 5mm to 28mm thickness and our 6063 T6 alloy improves the fabrication processes and overall product strength.

Wintecsystems



COMMERCIAL **GLAZING SYSTEMS**

ASPEN HINGED DOOR

The Wintec Systems Aspen Hinge Door – The perfect alternative to a traditional timber entry door, the 145mm architectural style entry door combines great style with all the durability of aluminium. Ideal for use as a front door for your residential or commercial application, Frame widths available in 145mm Strong hollow rails, stiles and mid rails give this hinged door the edge in strength and serviceability. Unique "Z" seals and Q'Ion seals used for the head, sill and stiles provide excellent sealing from the weather and guarantee air tightness, noise & energy efficiency.

Looking for a sliding aluminium door to complement your home and alfresco area? The Wintec Systems Hamilton 170mm architectural sliding door is for you! With its clean lines, strength and bold styling, the sophisticated Hamilton stacking sliding door never fails to make a statement. The Hamilton 170mm sliding door provides exceptional meeting stile strength using the WASD066 to cover coastal wind load areas. The meeting stile in this sliding door has been designed to withstand high wind loads, and equally important the lock stile has enough body strength to carry the lock and not flex excessively while opening and closing the sliding door.



US wintecsystems



HAMILTON SLIDING DOOR



SEATING & SETTING

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ULLRICH ALUMINIUM

Our Australian design and manufactured seating are suitable for a range of activities from parks to schools and beach fronts. All standard seating and setting systems will handle heavy use on any playground. They are also curved for comfort and engineered for strength. Available in Natural Aluminium, Anodised, Powder Coated or Wood Grain Finishes. The setting can be free standing or be fixed in position. It requires no maintenance and will not rust or corrode.

Ullrich Aluminium distributes the Architectural .75 balustrade systems throughout Australia through a network of local fabricators and balustrade companies. The 'safety of the end-user' is Ullrich Aluminium's #1 priority. Engineering plays an integral part of balustrade design, as the product must be able to withstand the loads stipulated in the Australian Building Code. Our products are not only designed with experienced engineering expertise, it is also physically tested. Ullrich Aluminium has in-house facilities set up especially for testing balustrade products.





ULLTRA VIEWS BALUSTRADE

DECOR SHADE & PANEL

We offer a range of quality panels that can be used in any application including fencing, shading, gates and as a garden feature. Lighting can also be added for amazing night time ambiance. We also product matching street number plaques to dress up your letterbox or entranceway. Available in over 30 designs at any size and at a price to fit your budget. Made from quality materials as the panels, our plaques are sure to look good for years to come.

Ideal for creating professional looking, spot free linear lighting effects. Profiles can be mounted in various ways to create amazing 3D effects for reception areas, breakout rooms or meeting spaces. We supply both the aluminium extrusions and diffusers. All aluminium extrusions can be mill, satin anodised or white powder coat finish. Ullrich Aluminium supplies LED profiles for under-bench lighting, corridor lighting, office and reception lighting. Extrusions are available for recessed, linear and corner mounted lights to suit virtually any lighting applications.

100







ULLTRA LIGHT LED

wintecsystems

ULLTRACLAD ALUMINIUM WEATHERBOARDS

A powder coated Aluminium interlocking exterior cladding system that can be applied both horizontally and vertically. It is suited to both residential & commercial building applications and is available in a wide range of colours in modern or classic designs. Weatherboards are produced in a rusticated weatherboard profile, with either a smooth, corrugated or grooved face (Tee Board), a bevel back weatherboard profile (Traditional), or a flat face with negative joint detail (Shadoline). Ulltrasafe Security window and door screens are manufactured using stainless steel woven mesh, high grade innovatively designed Aluminium framing and high security hardware. When all these elements are combined they exceed all Australian standards.

Wintec Systems Ulltrasafe security products are designed and tested to withstand the harshest of Australian conditions including cyclonic debris requirements allowing you to secure your home without losing the luxury of openness.

SECURITY SCREENS

wintecsystems



ULLTRASAFE



LATITUDE SHOWER SYSTEMS

A fully integrated shower screen suite with Australian influenced design, styling and functionality. The slim clean lines coupled with Australian styled hardware will enhance and compliment your bathroom decor. This low-maintenance design adds not only style but functionality as well. Latitude Shower Screens are a truly innovative design offering a choice of assembly methods, a small compact range of Australian custom designed extrusions and hardware components used across multiple design options.

The Vee-Glide wardrobe door suite have been designed with style and simplicity in mind. With a wide range of custom sizes available the Vee Glide offers an affordable and practical wardrobe door solution.

Let your imagination run free and choose from a wide range of colours, finishes, board/insert options, sizes and configurations.

US wintecsystems



WARDROBE VEE-GLIDE





ALYCLAD® TECHNICAL DATA SHEET

PROPERTIES

Alloy

Temper

Standard thickness

Raw density

Tensile strength 0.2% Proof stress

Indicative minimum radius



Linear thermal expansion

Elongation

Hardness



Melting range Modulus of elasticity - Tension Modulus of elasticity - Torsion Modulus of elasticity - Compression



Electrical resistivity Electrical conductivity - Equal volume Electrical conductivity - Equal weight



Sound absorbtion factor Sound reflection

FIRE PERFORMANCE

Test Standard AS1530.1

- - >> NON-COMBUSTIBLE
 - >> 15 YEAR WARRANTY
 - >> HIGH QUALITY MARINE GRADE
 - **SUSTAINABLE**
 - >> 100% RECYCLABLE

- >> OUTSTANDING DURABILITY
- **ABRASIVE RESISTANT**
- >> NO VISIBLE EXTERNAL JOINTS
- >>> WEATHER PROOF
- AS1530.1 CERTIFIED

UNITS	VALUES		
	5052		
	H32		
ΠΠ	3		
kg/m³	2680		
mm	4.5		
MPa	216		
MPa	169		
%	13		
	2.38mm at 100º temperature difference		
Brinell	60		
٥C	607-650		
GPa	69.3 @ 20ºc		
GPa	25.9 @ 20°c		
GPa	70.7 @ 20ºc		
micro-ohm.m	70.7 @ 20°c		
MS/m	20 @ 20ºc		
MS/m	67 @ 20ºc		
Noise Reduction Co-efficient	0.05		
%	95		

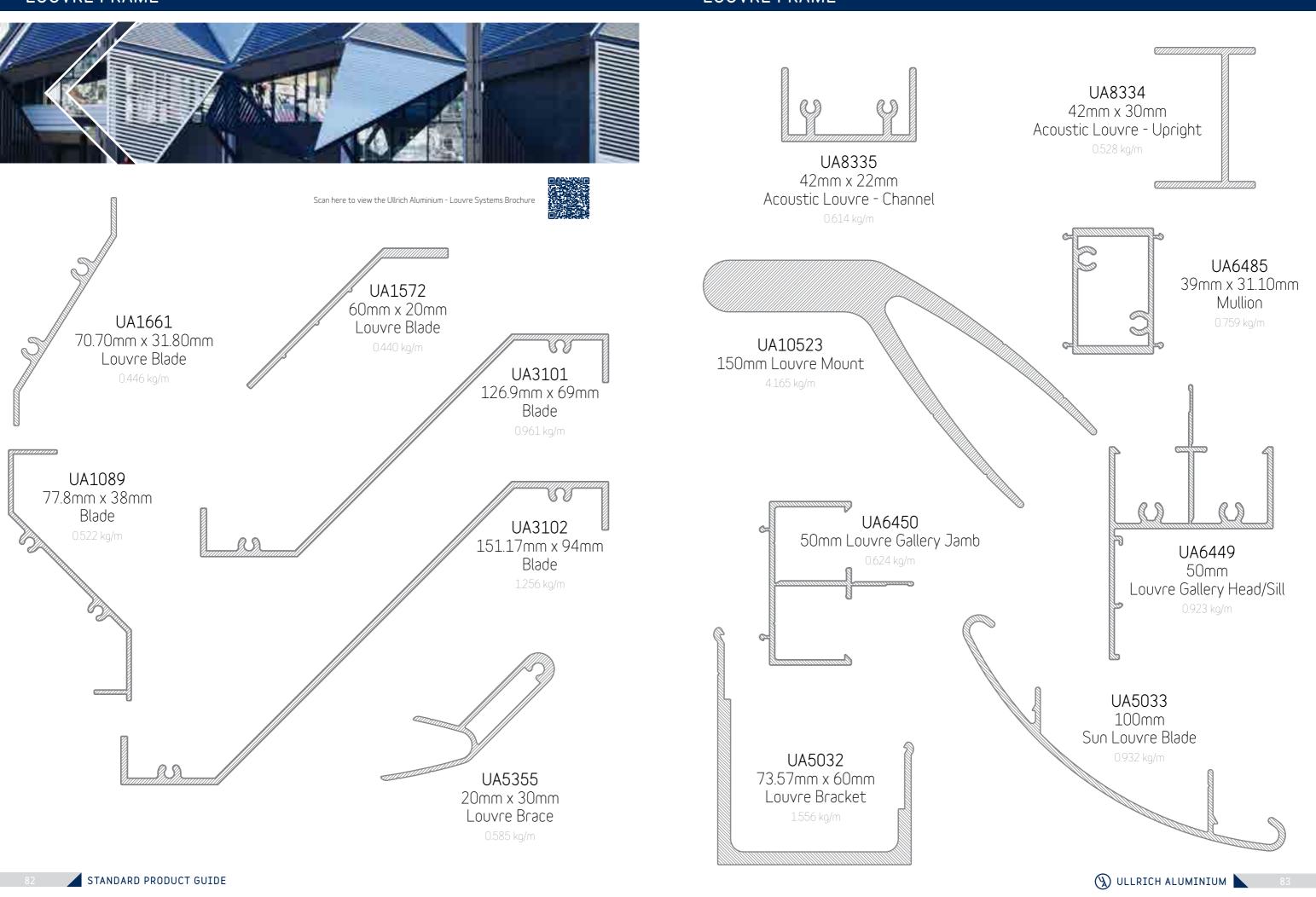
Result

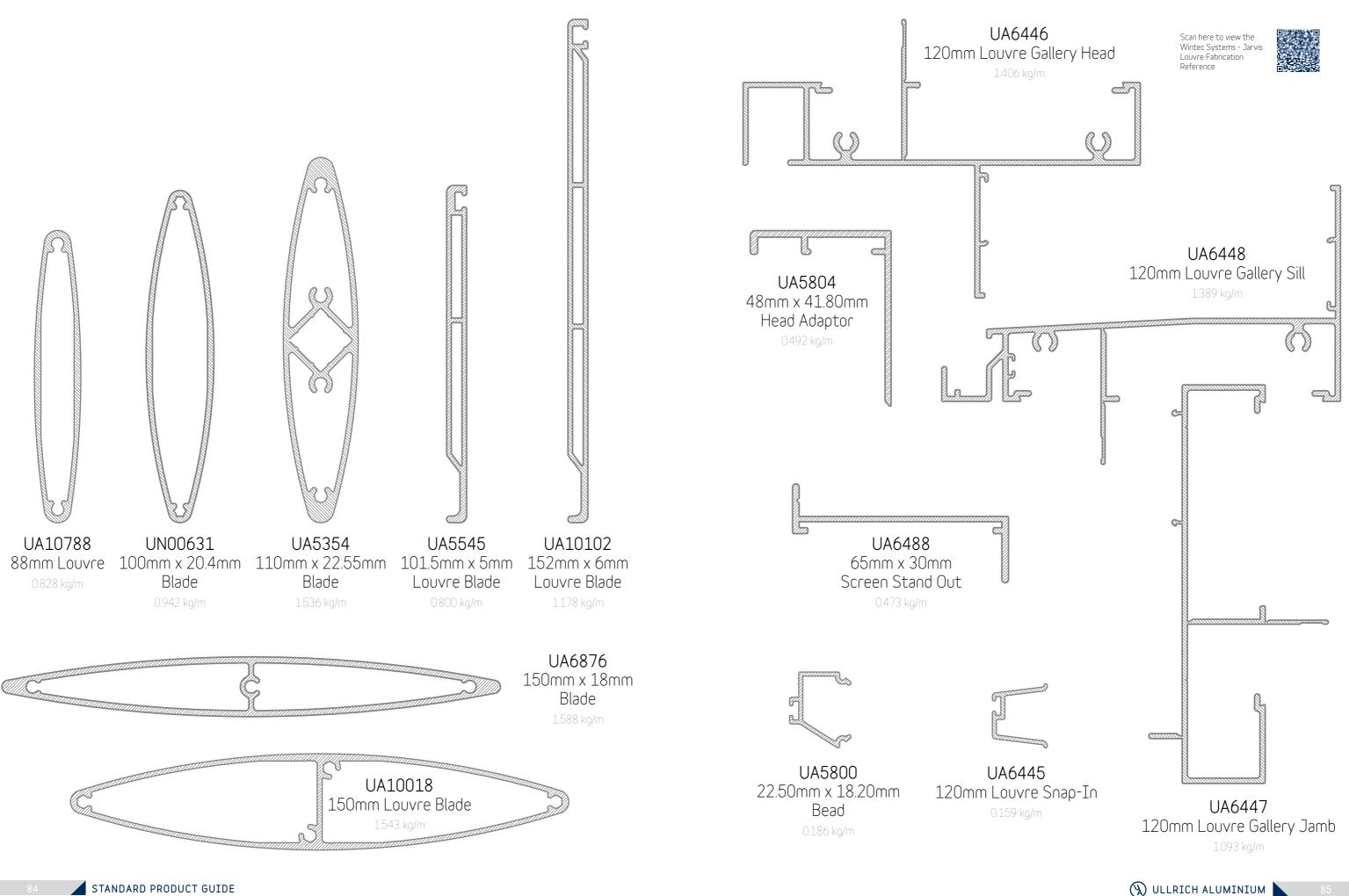
Non-combustible



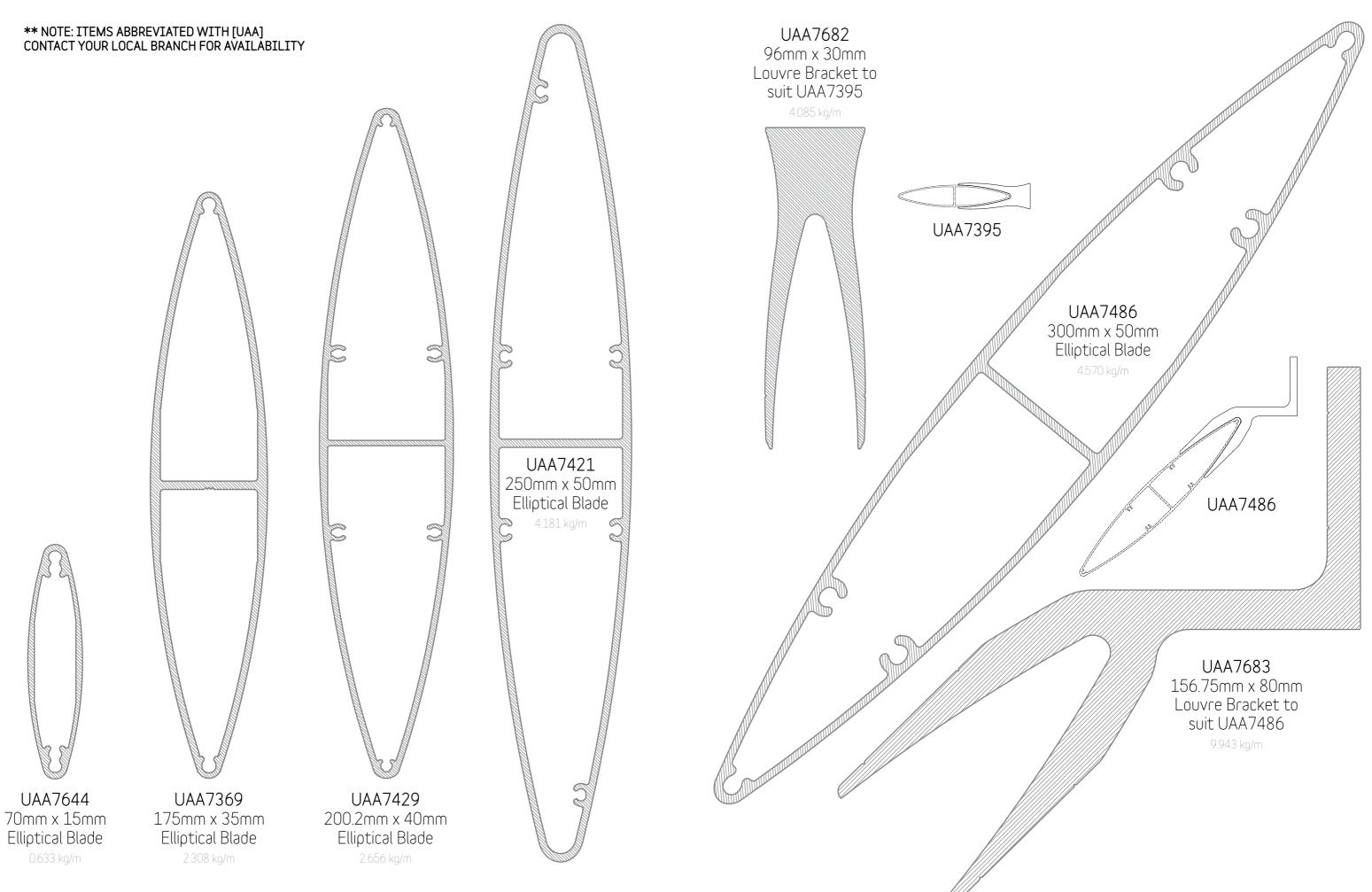
LOUVRE FRAME







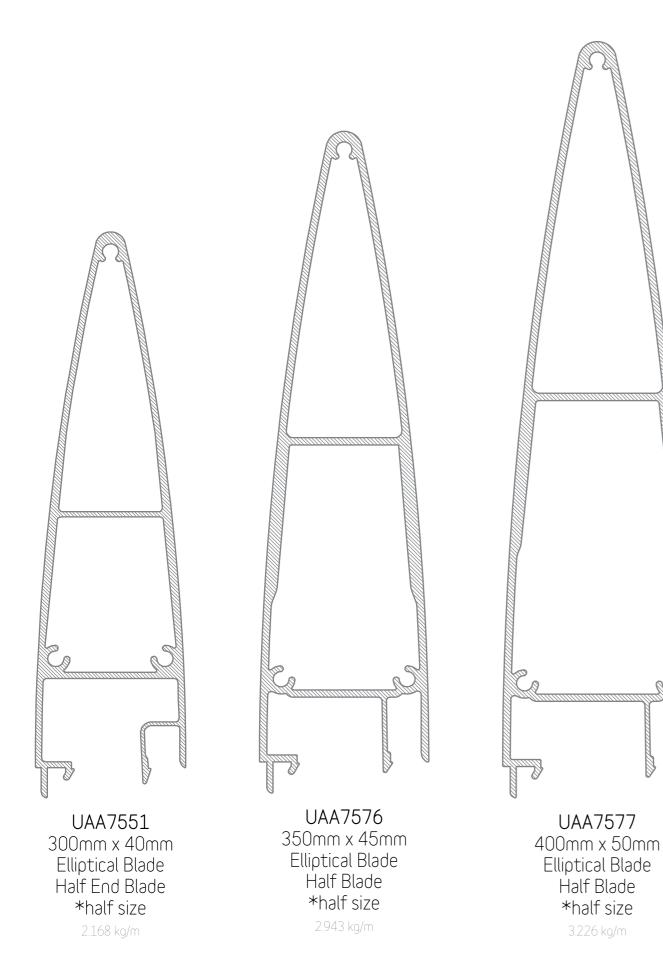
LOUVRE FRAME

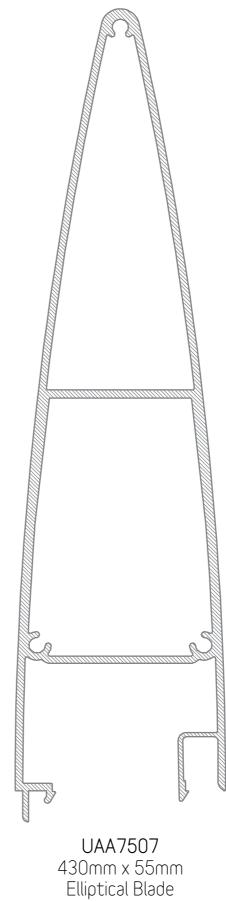


86



87

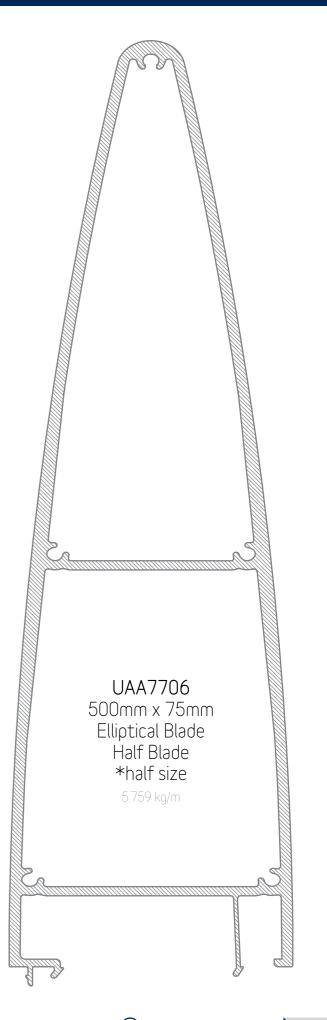


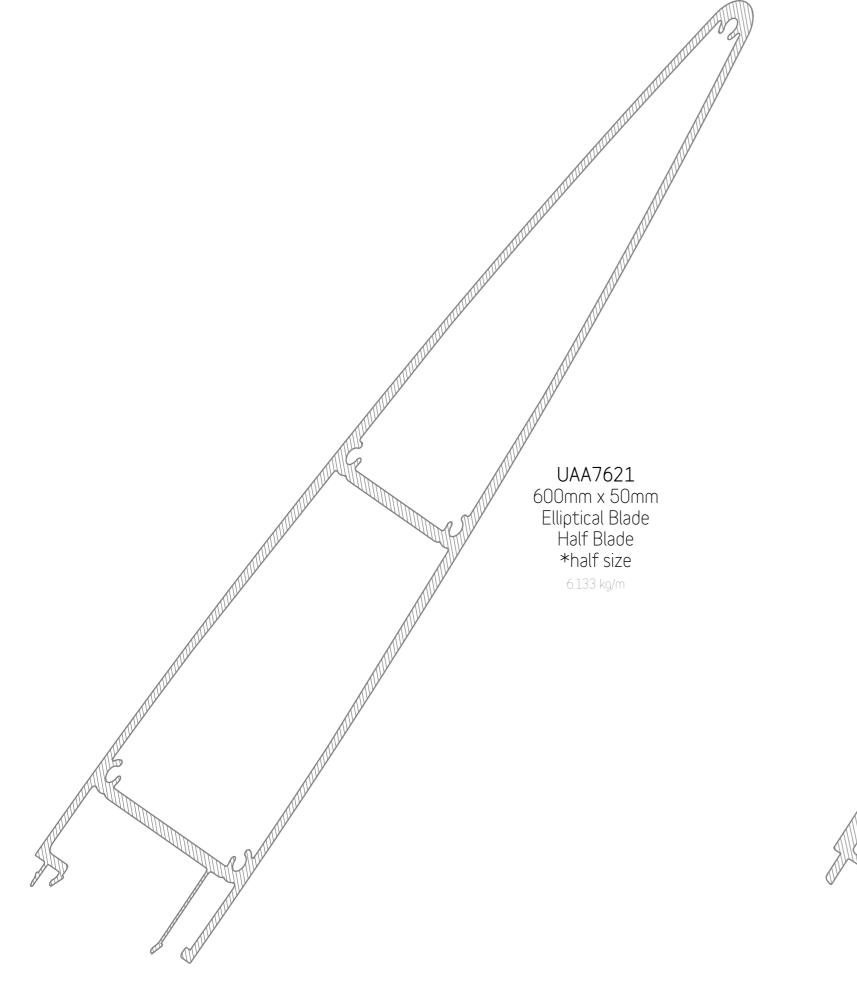


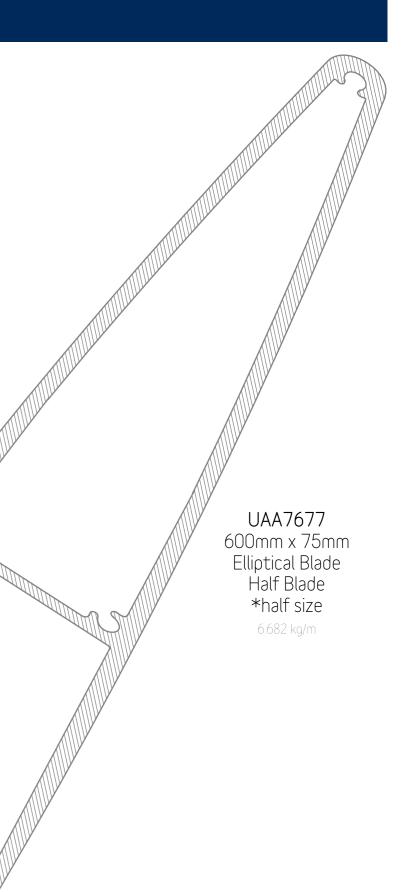
9

Q

. Half Blade *half size



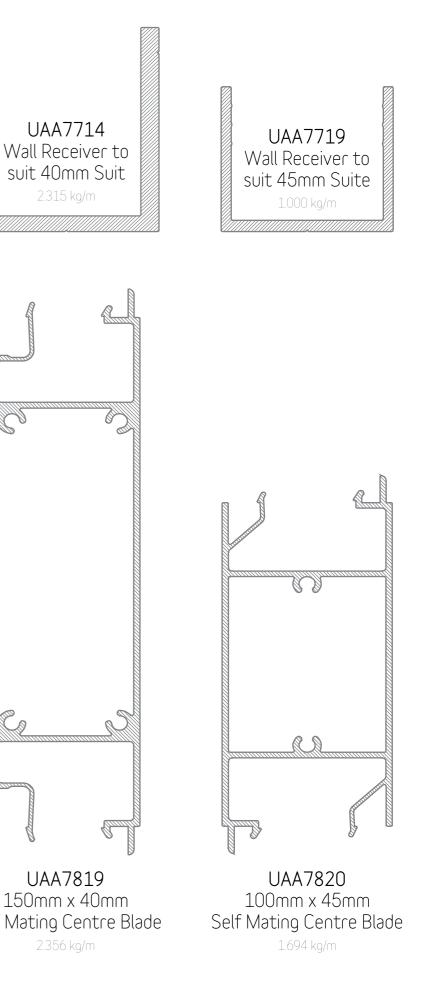


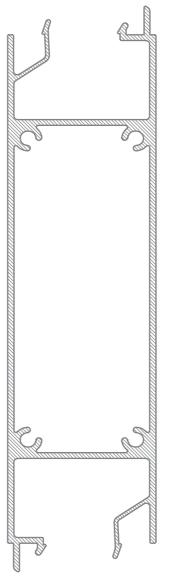


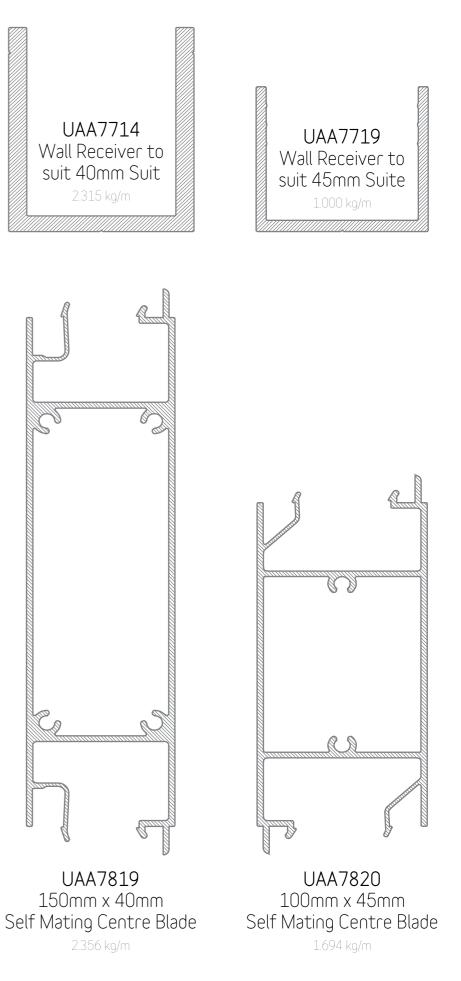
LOUVRE FRAME

** NOTE: ITEMS ABBREVIATED WITH [UAA] CONTACT YOUR LOCAL BRANCH FOR AVAILABILITY

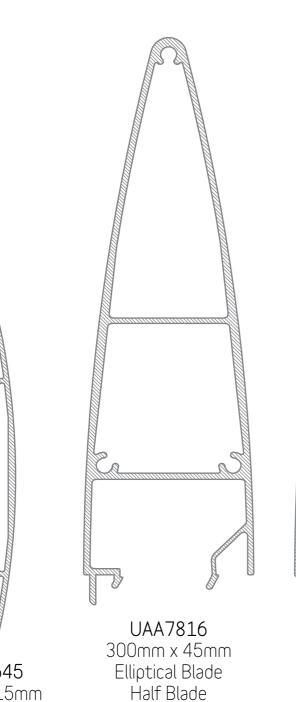


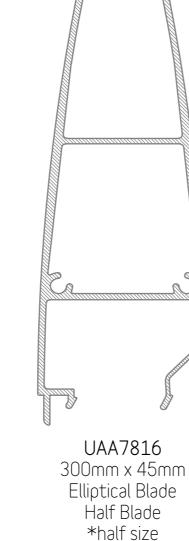




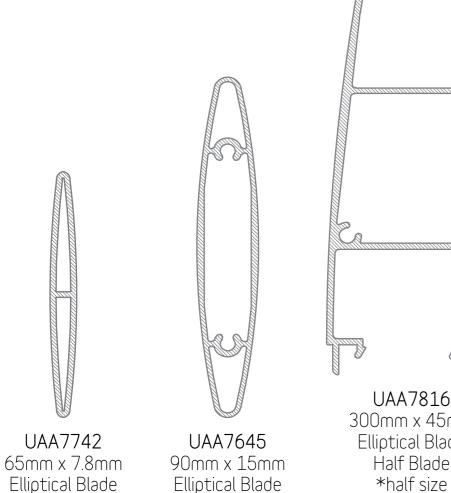




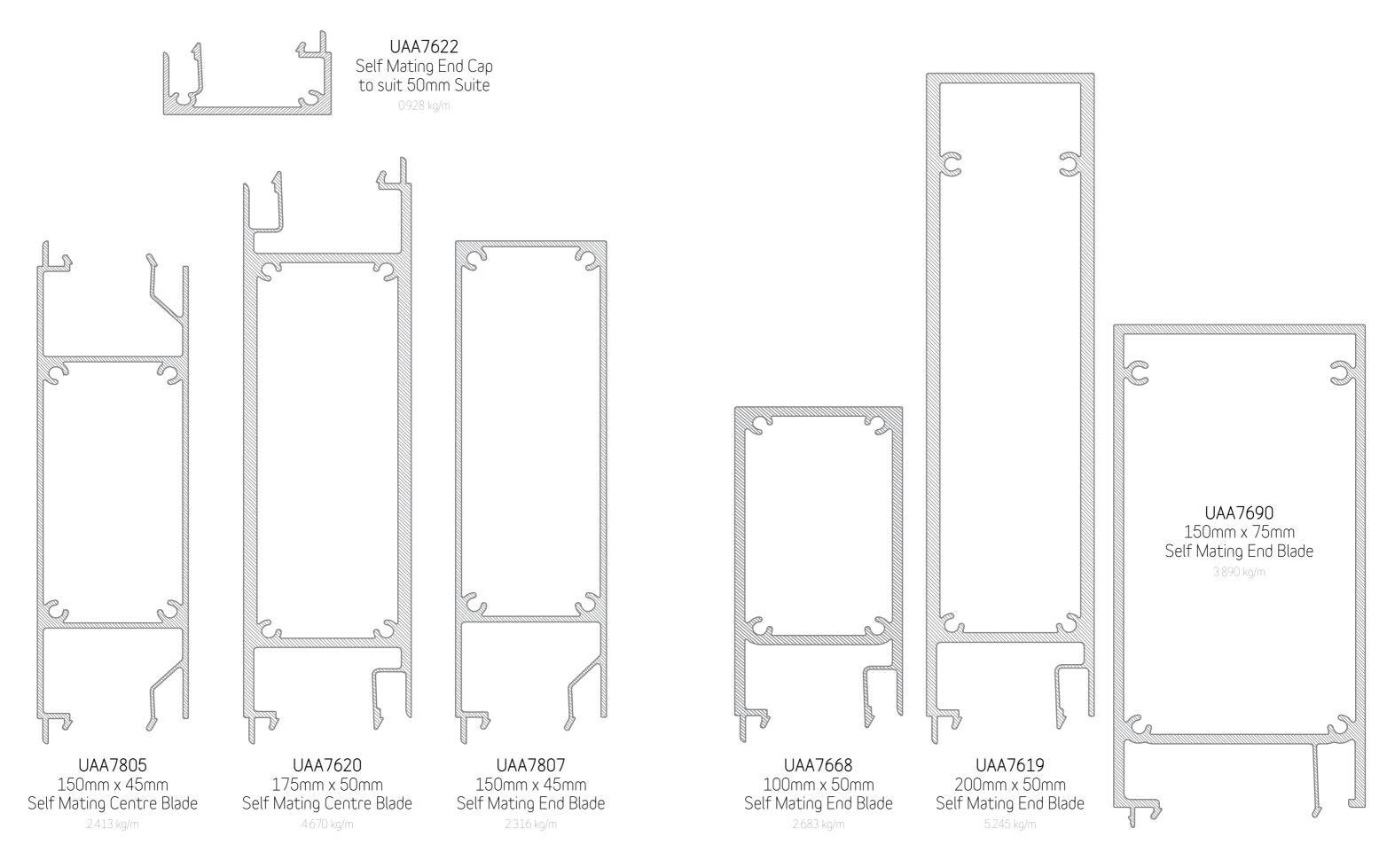


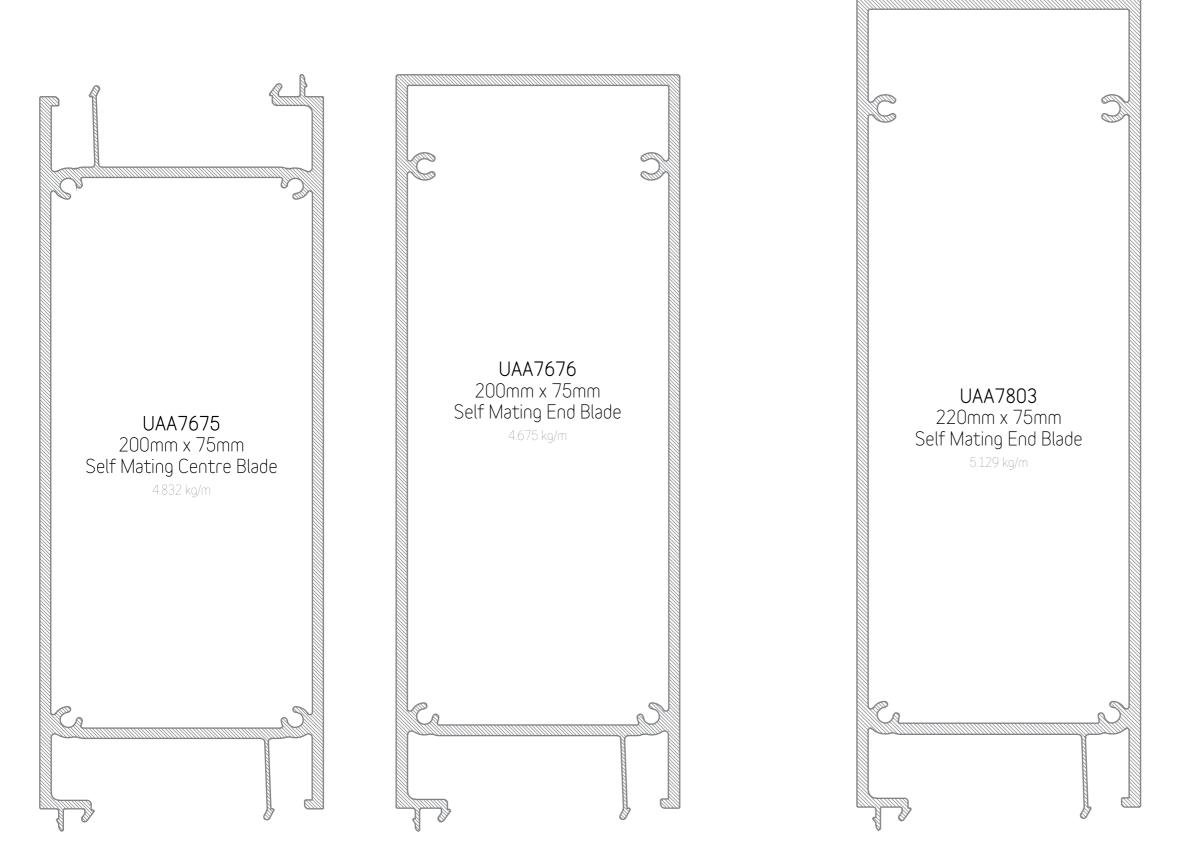


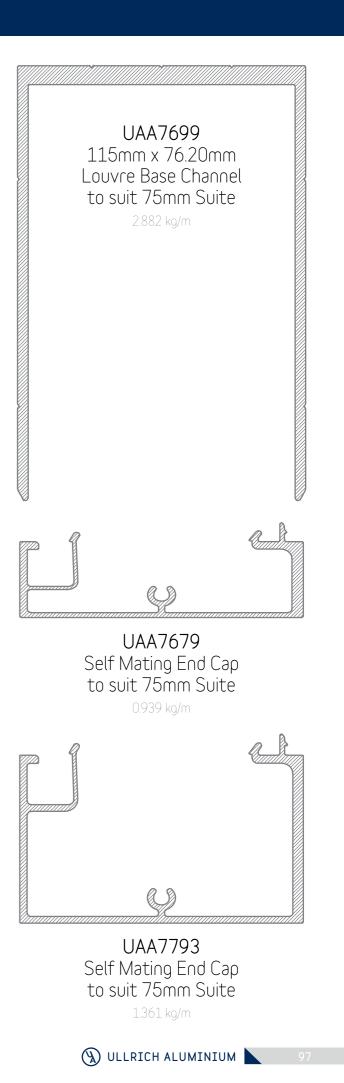
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[🛞] ULLRICH ALUMINIUM

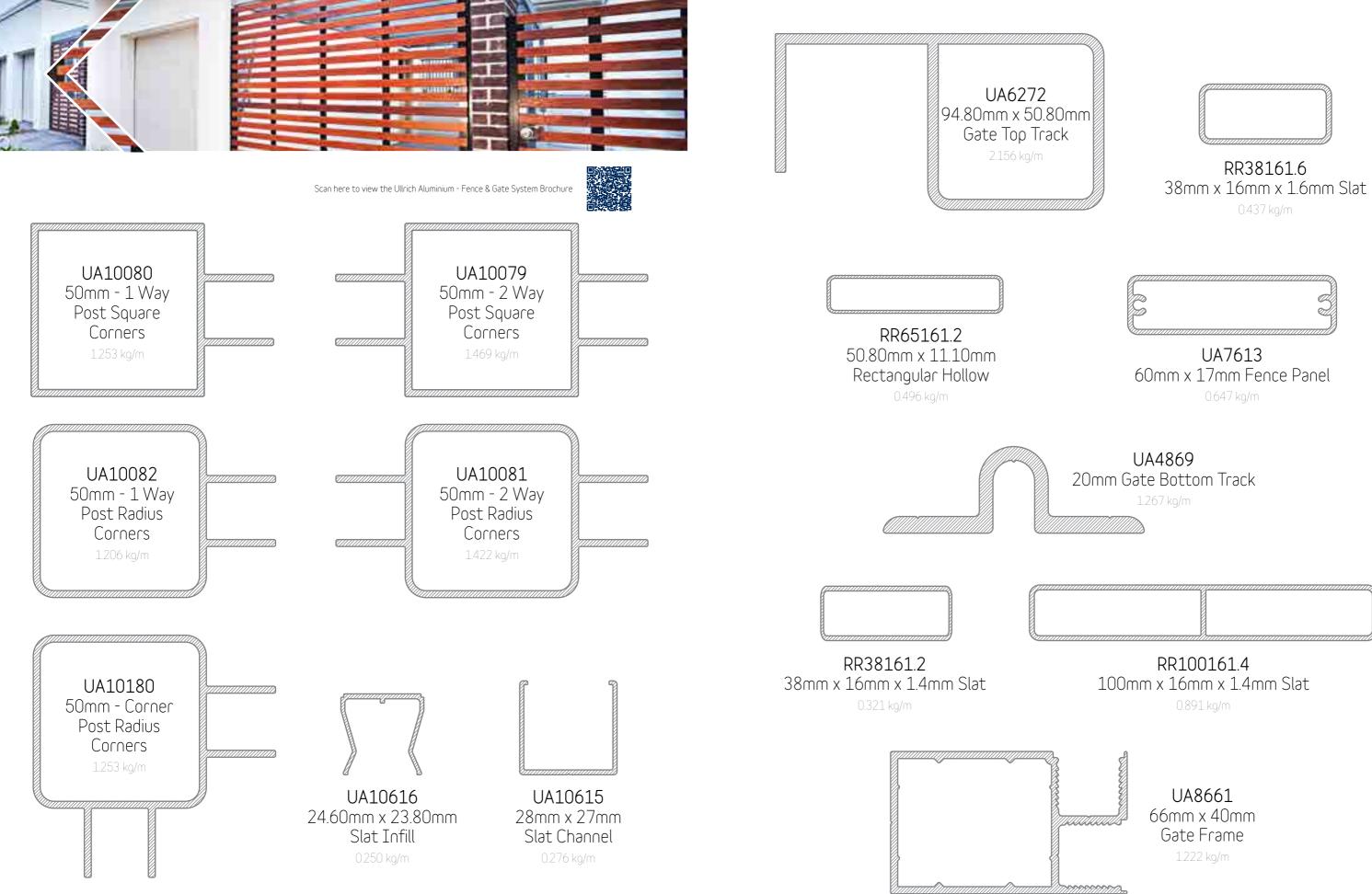






FENCE & GATE

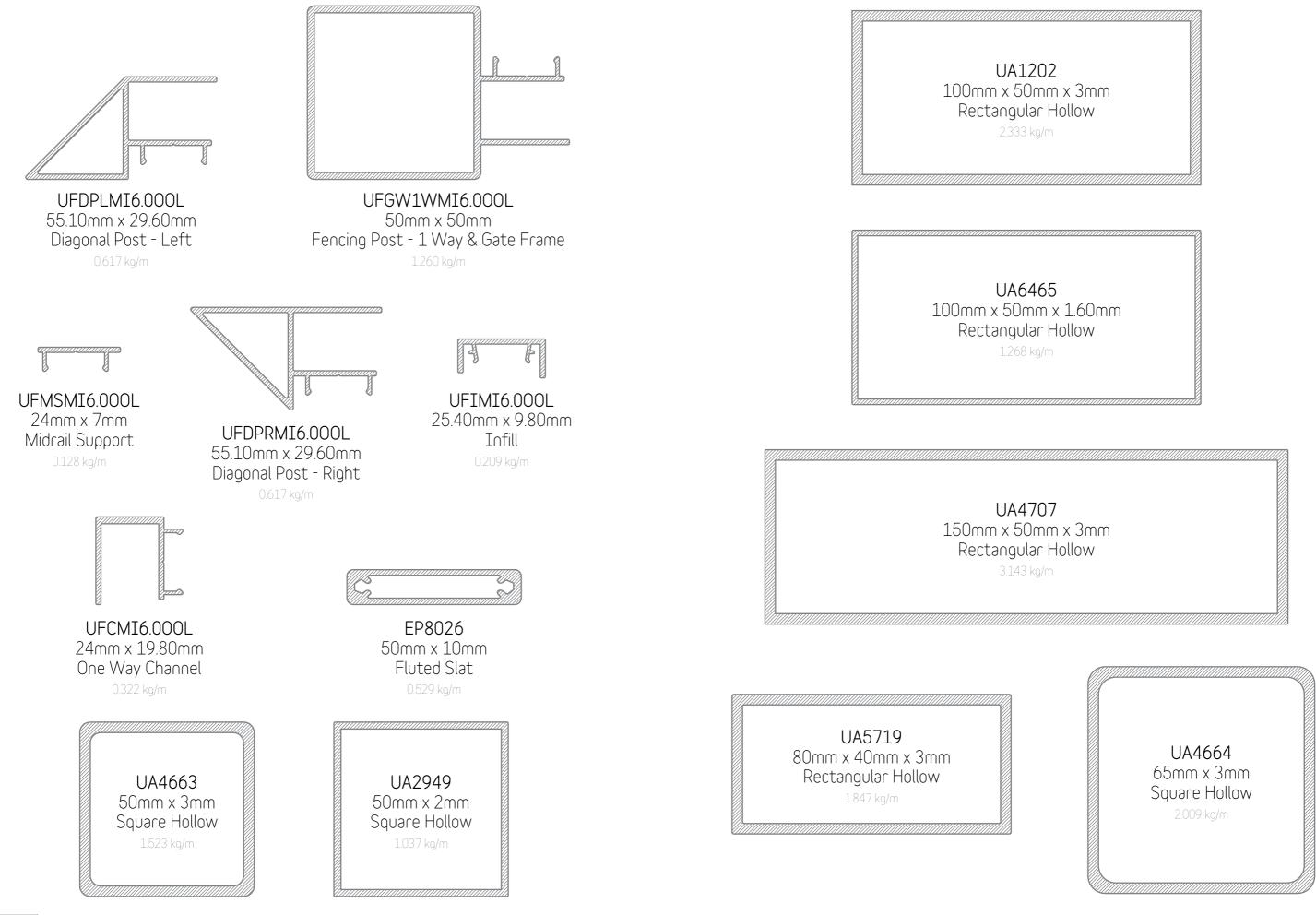
FENCE & GATE





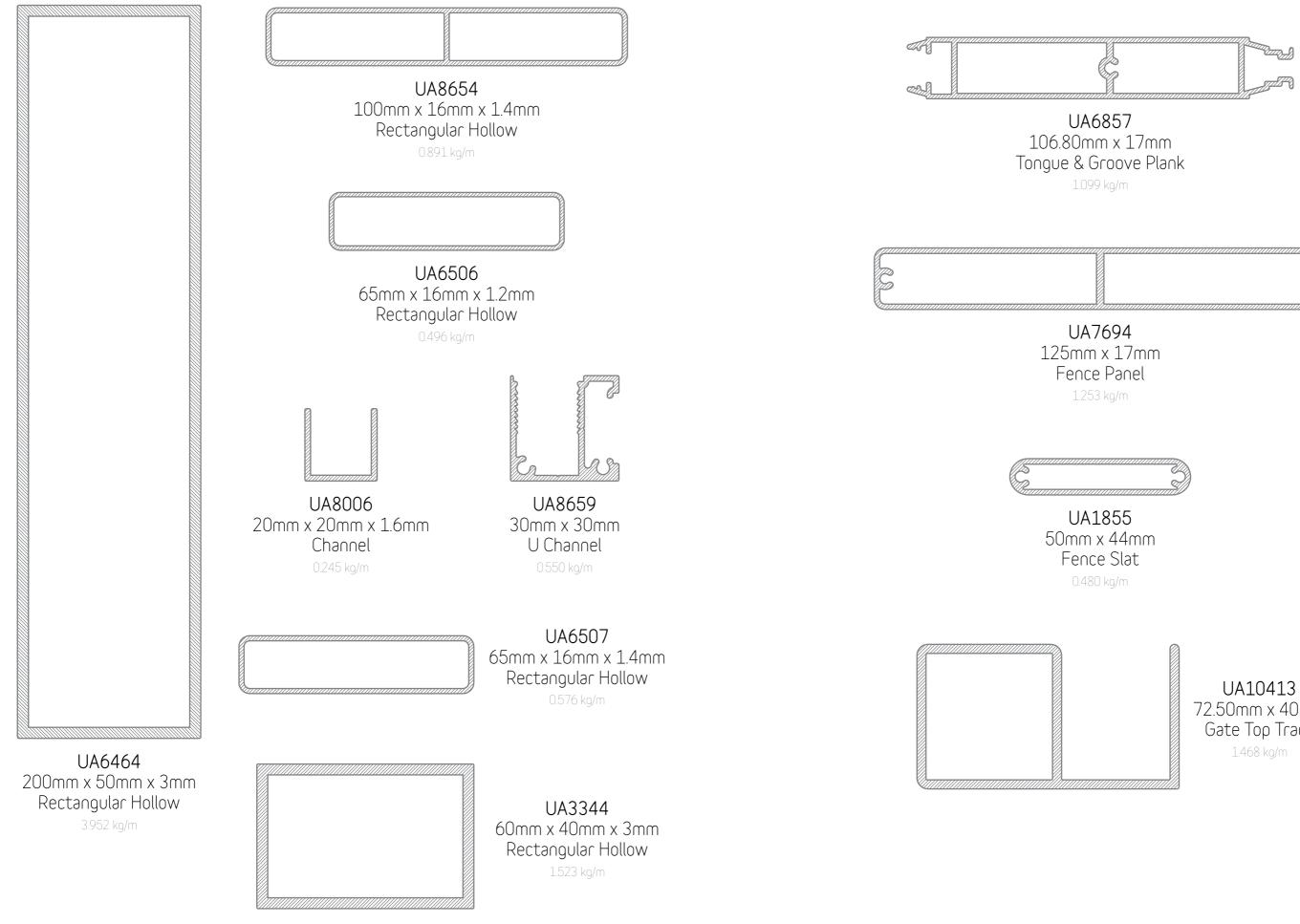
FENCE & GATE

FENCE & GATE



FENCE & GATE

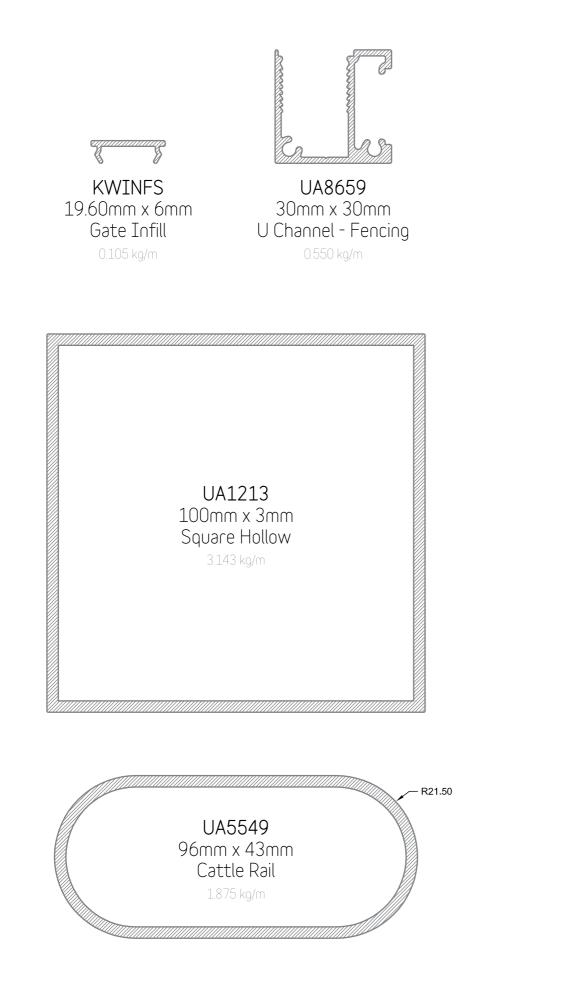
FENCE & GATE

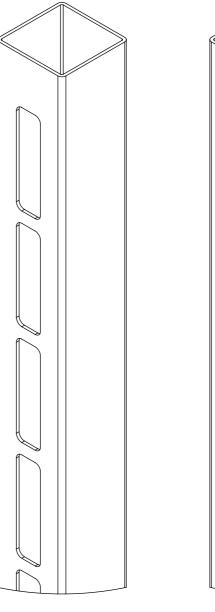


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72.50mm x 40mm Gate Top Track





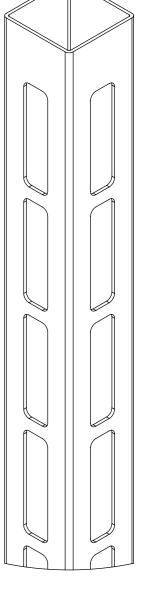


PSP508GSS One Side to Suit 65mm x 16mm Slat

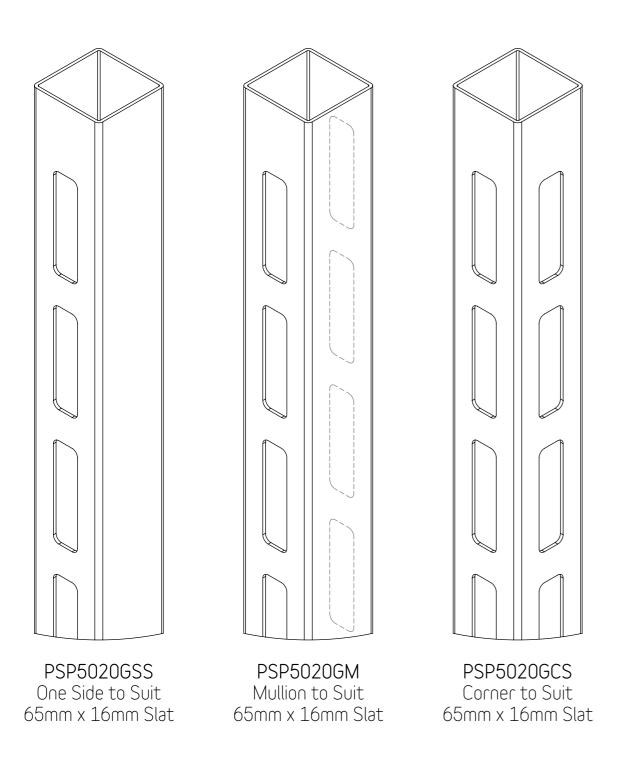
PSP508GM Mullion to Suit 65mm x 16mm Slat

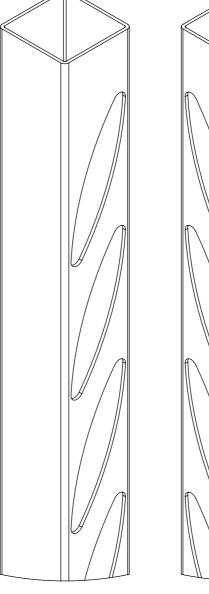
** NOTE: Post Dimension 50 x 50 x 1.6mm (UA6462)





PSP508GCS Corner to Suit 65mm x 16mm Slat

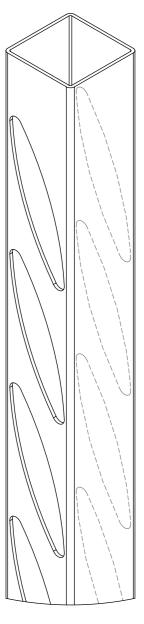




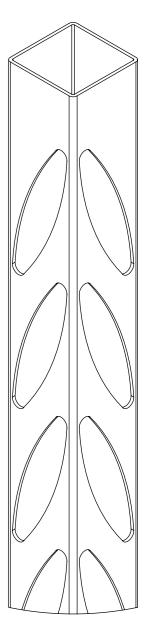
PSP50100AEL Left hand to Suit 100mm x 20mm Elliptical Blade PSP50100AER Right hand to Suit 100mm x 20mm Elliptical Blade

****** NOTE: Post Dimension 50 x 50 x 1.6mm (UA6462)

** NOTE: Post Dimension 50 x 50 x 1.6mm (UA6462)



PSP50100AEM Mullion to Suit 100mm x 20mm Elliptical Blade



PSP50100CNR Corner External to Suit 100mm x 20mm Elliptical Blade

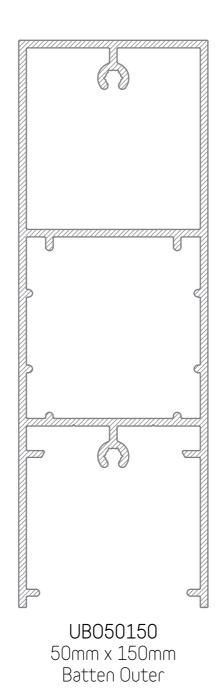
ULLTRA BATTEN

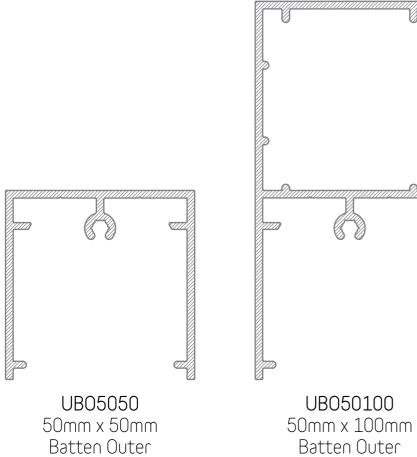
ULLTRA BATTEN



Scan here to view the Wintec Systems - Ulltra Batten Brochure



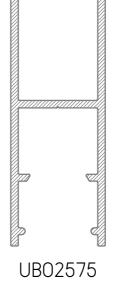




UBI2550 25mm x 50mm Batten Inner

UBI5050 50mm x 50mm

Batten Inner



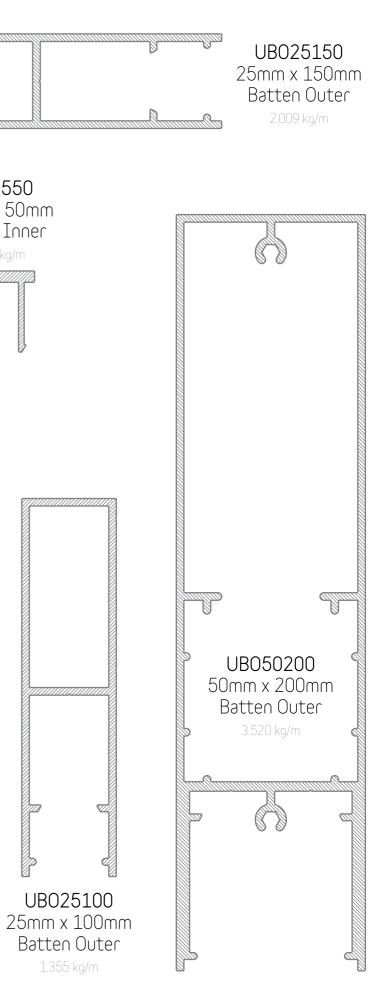
UBU2575 25mm x 75mm Batten Outer

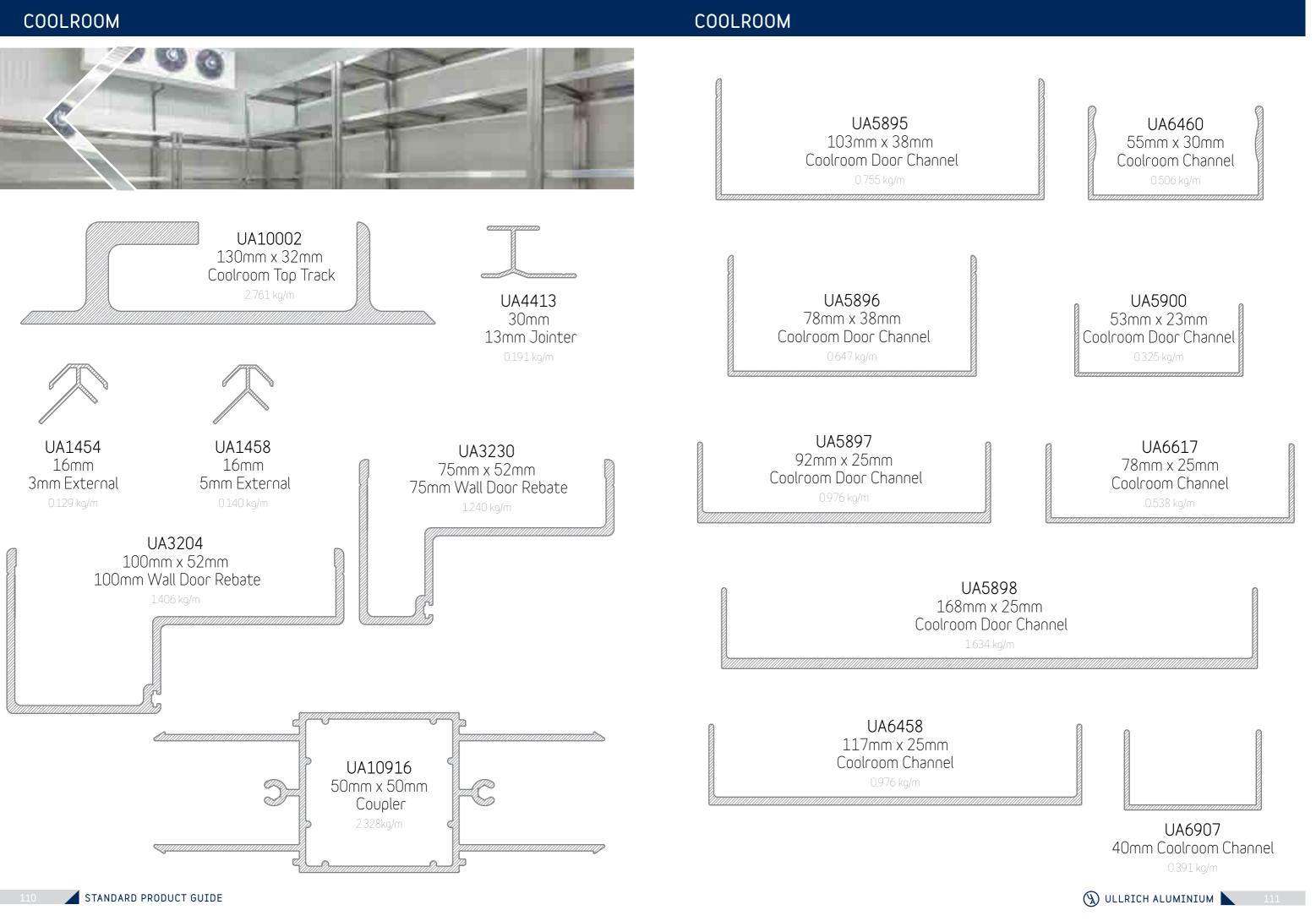
UB02550

25mm x 50mm

Batten Outer

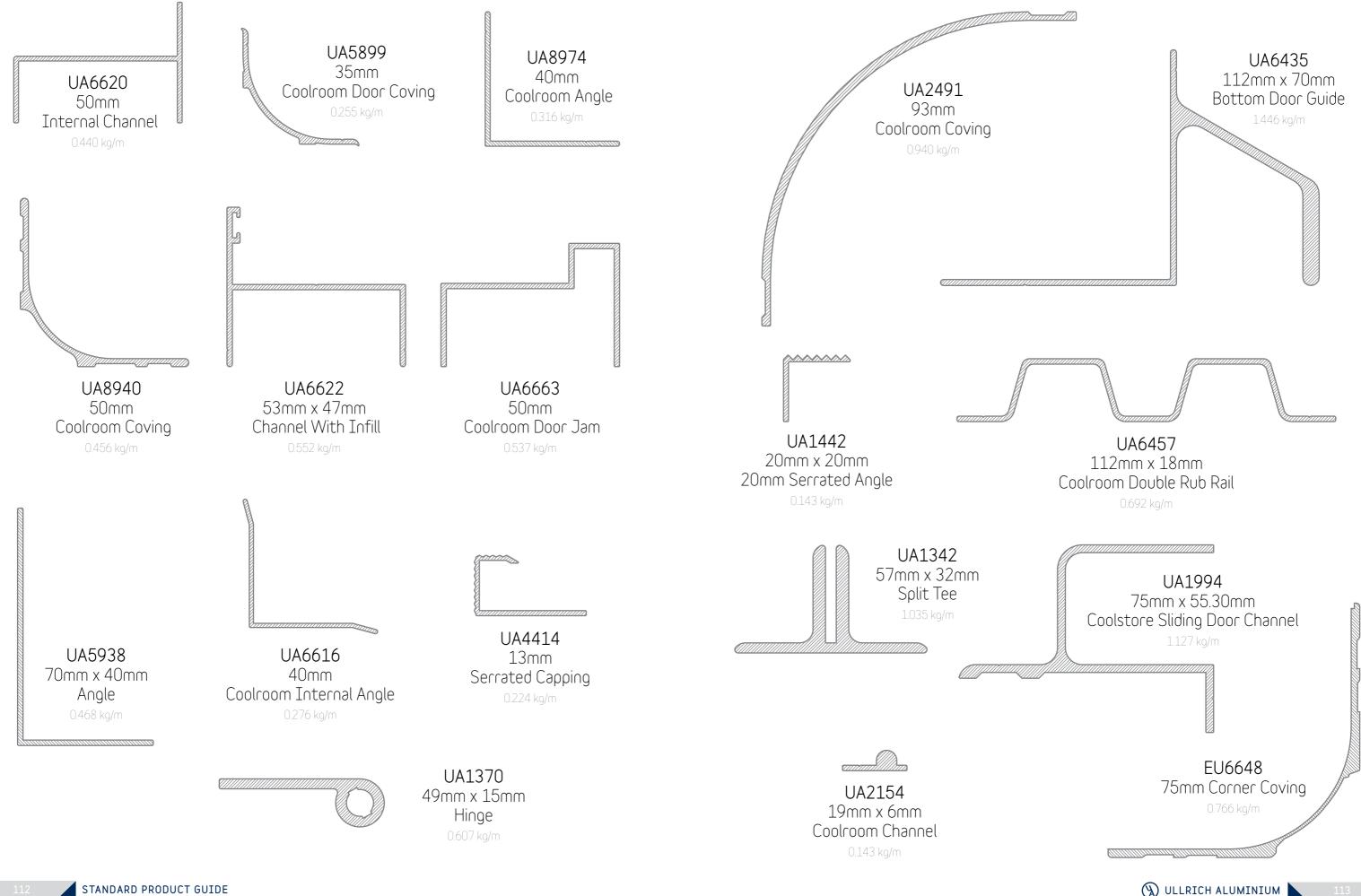






COOLROOM

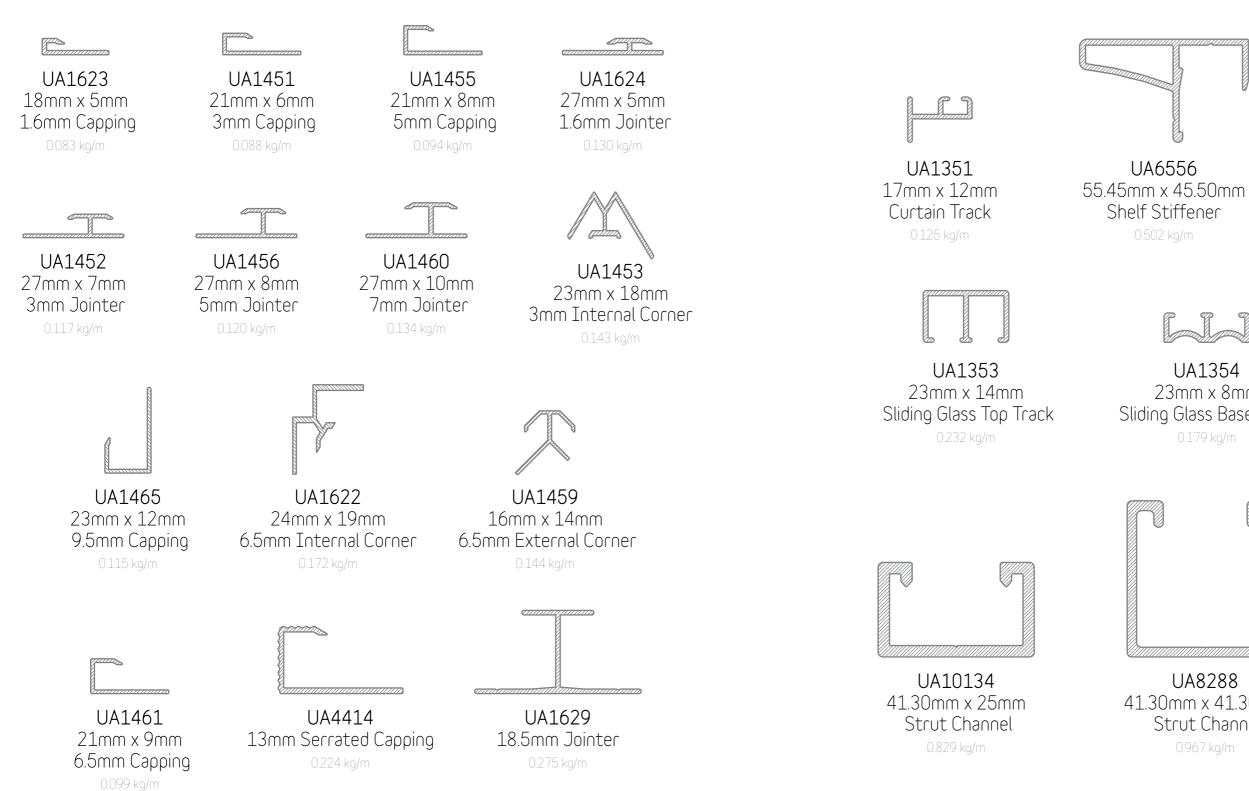
COOLROOM



WALL BOARDS

MOULDS & TRIMS





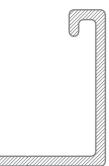
STANDARD PRODUCT GUIDE







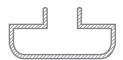
UA1354 23mm x 8mm Sliding Glass Base Track



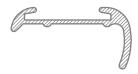
UA8288 41.30mm x 41.30mm Strut Channel



UA1350 15mm x 12mm Top Fix Curtain Track



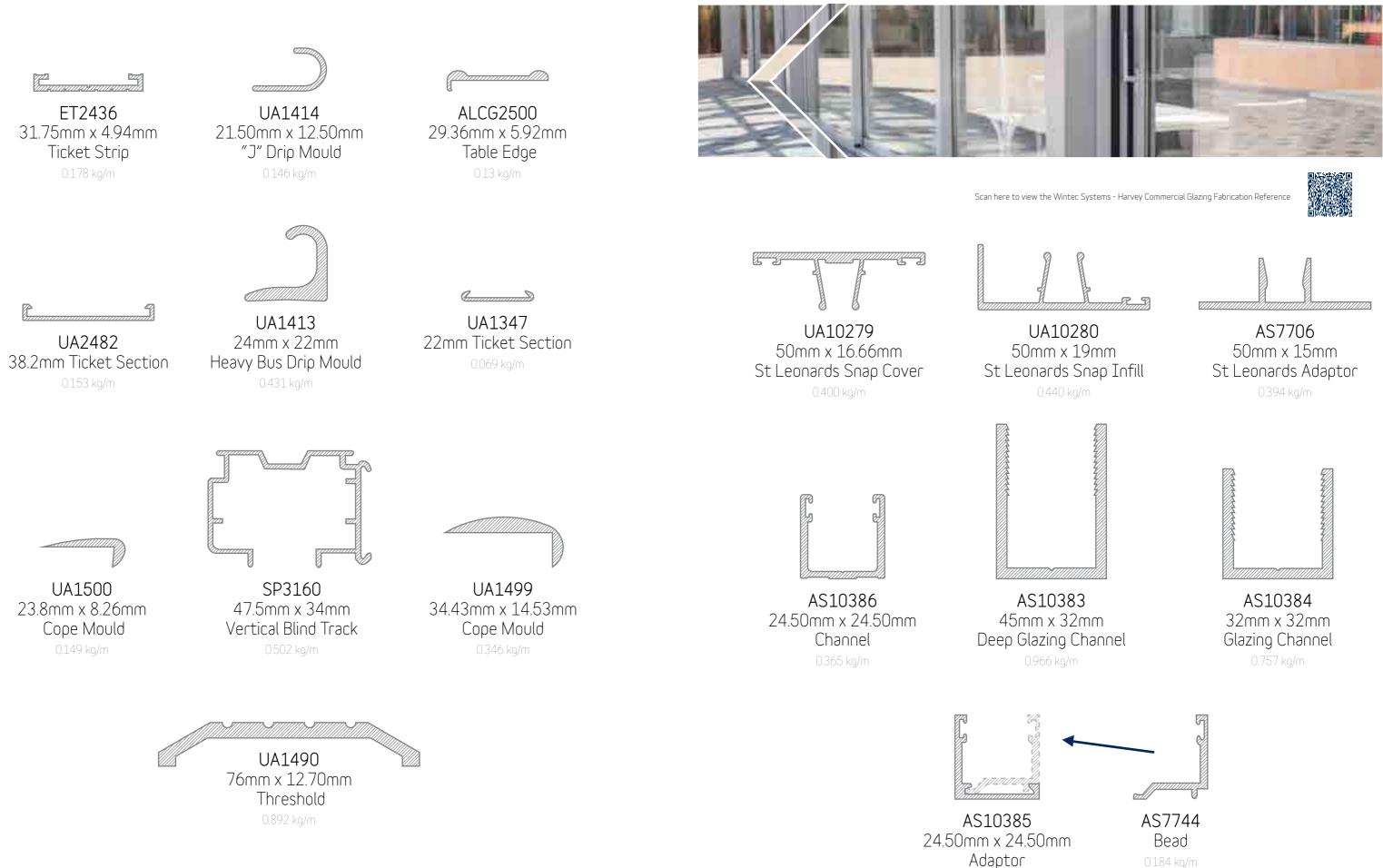
UN00320 28mm x 13.5mm Slatwall



UA10622 31.75mm x 16.25mm Caravan J Mould

MOULDS & TRIMS

GLAZING & PARTITIONS

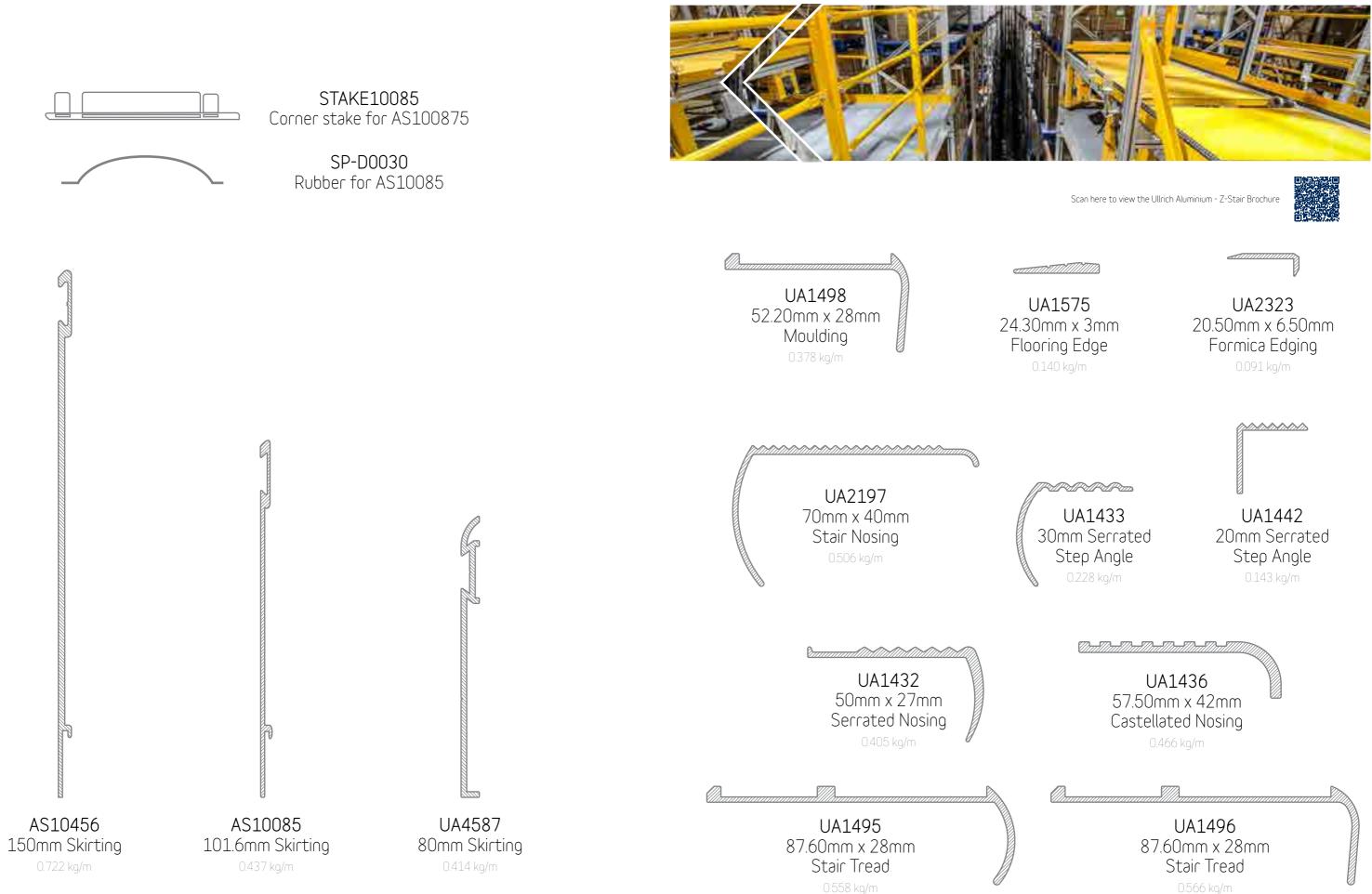


0.25 kg/m



GLAZING & PARTITIONS

STAIRS & STAIR NOSING

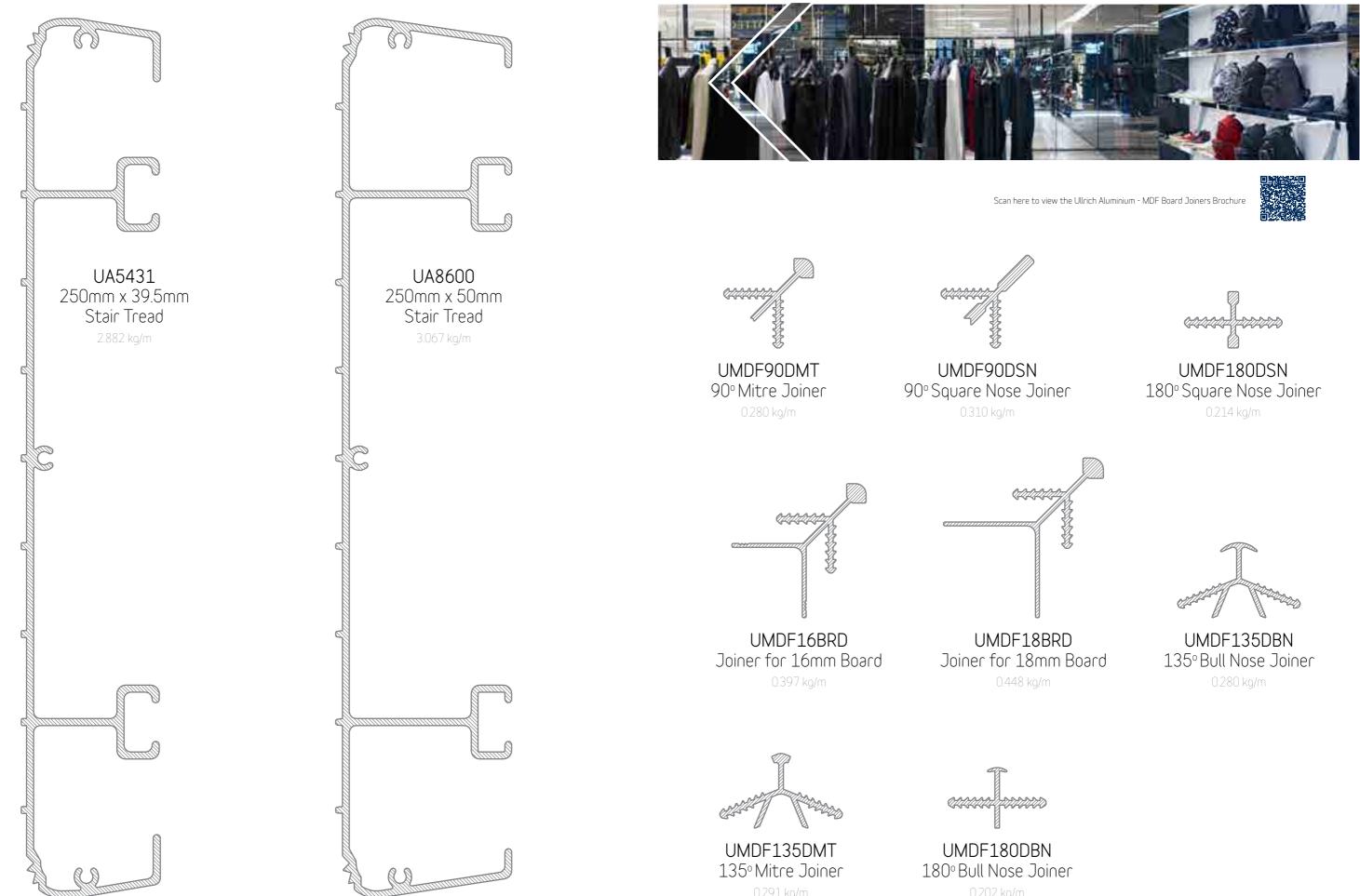


0.566 kg/m

[🛞] ULLRICH ALUMINIUM

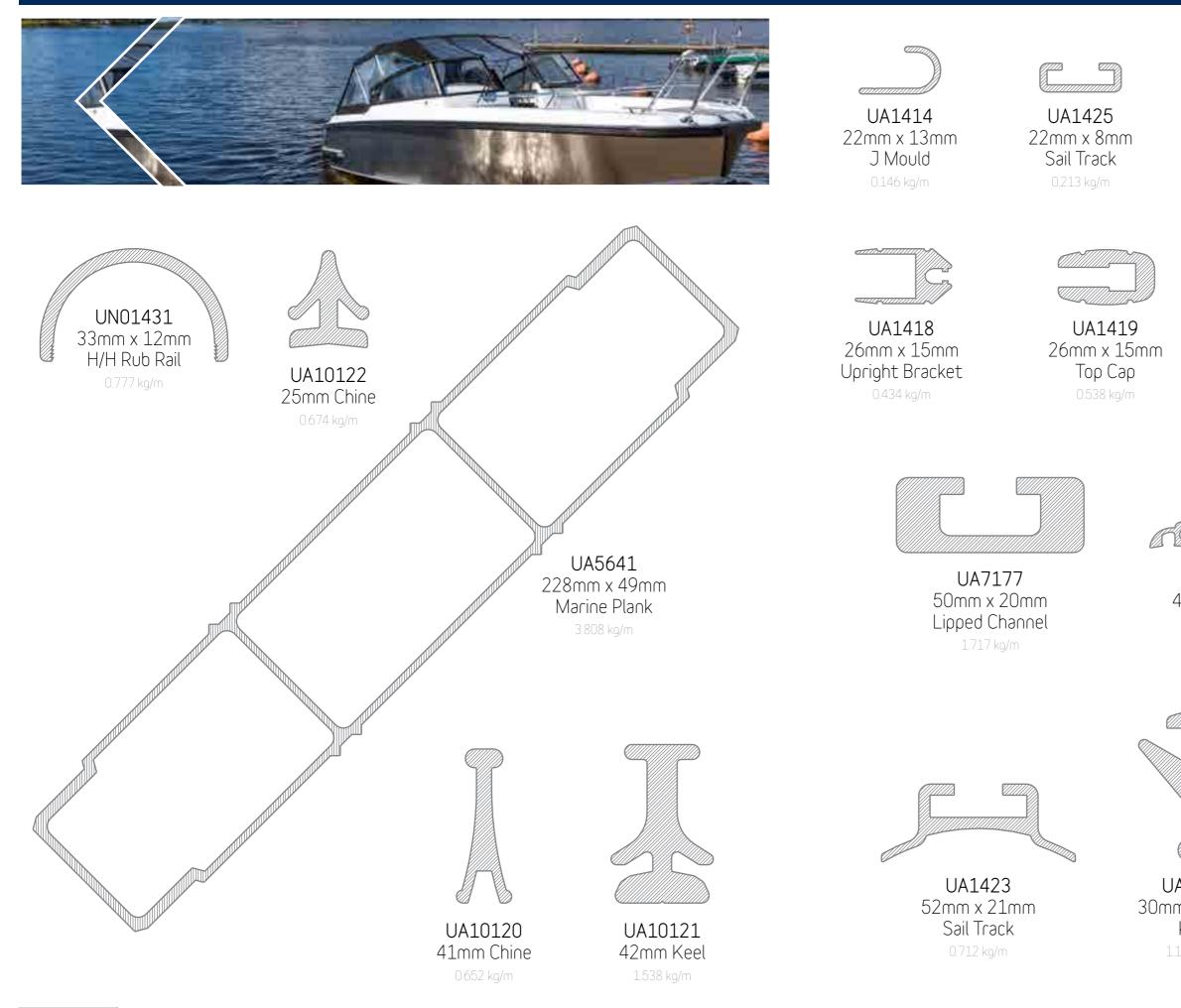
STAIRS & STAIR NOSING

MDF BOARD JOINERS



MARINE

MARINE





UA1424 32mm x 12mm Sail Track



UA1417 33mm x 12mm H/H Rub Rail 0.271 kg/m

UA1416 17mm x 6mm H/H Joiner 0.119 kg/m

Connents

UA1605 13mm x 5mm Marine Bracket 0.077 kg/m

UA1431 40mm x 9mm Herzim 0.291 kg/m

- View

UA1430 30mm x 4mm Herzim 0.120 kg/m



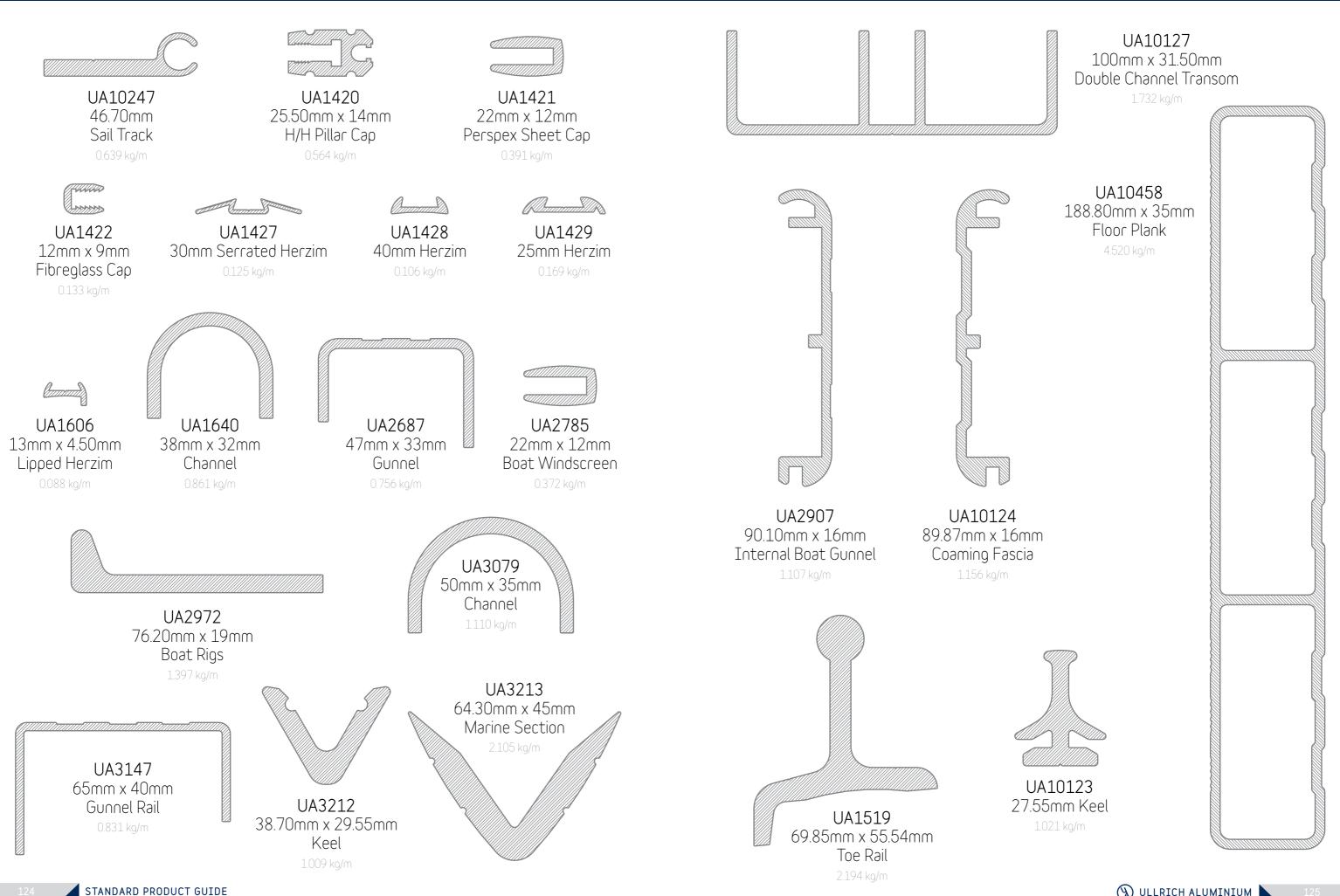
UA3811 30mm x 40mm Keel 1169 ko/m



UA5237 12.70mm x 9.40mm Perspec Cap 0.175 kg/m

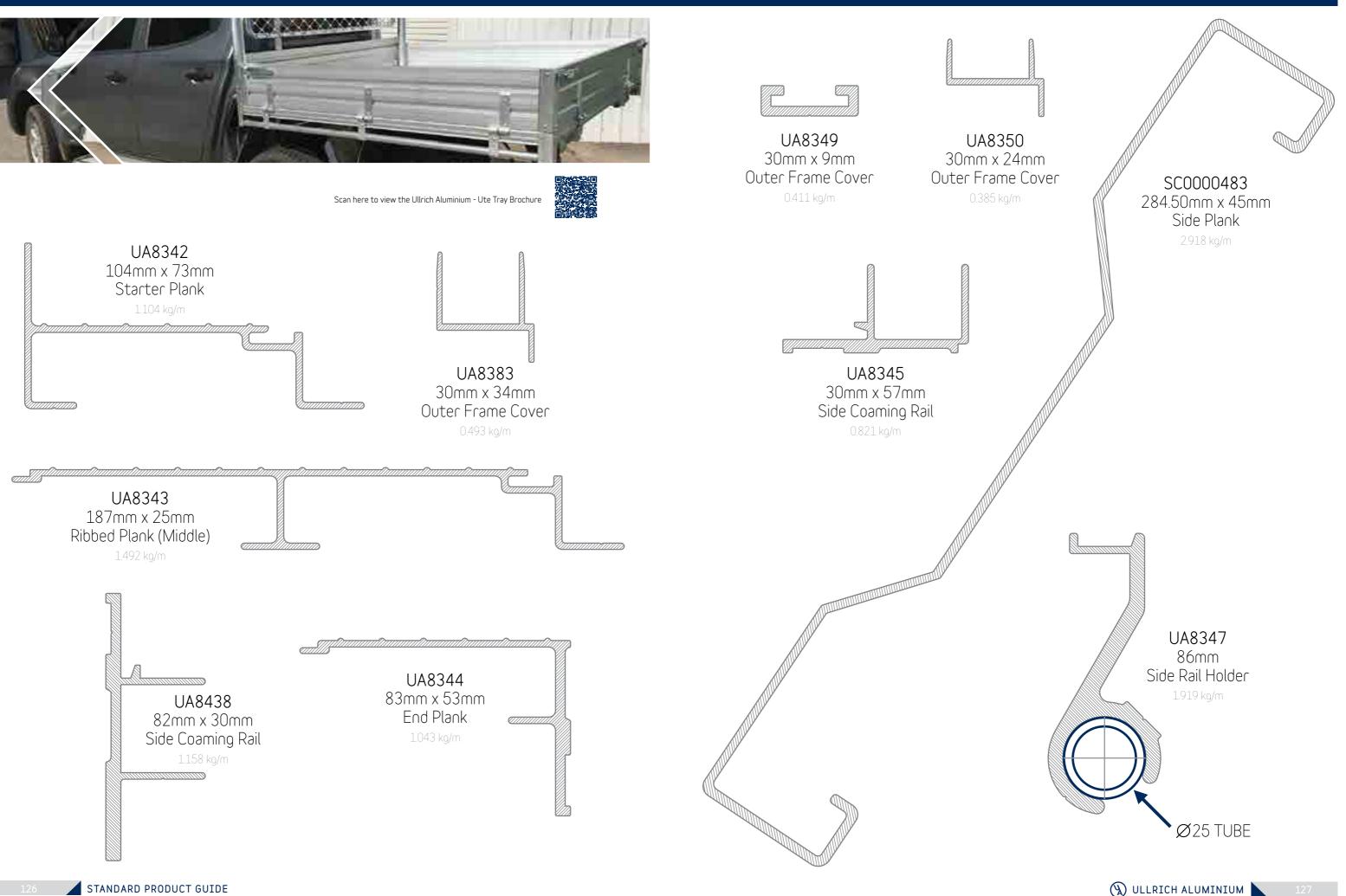
MARINE

MARINE



UTE TRAY

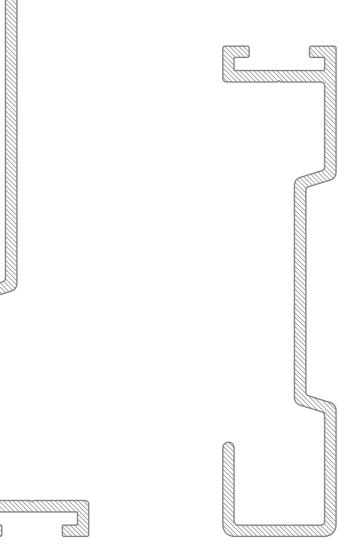
UTE TRAY



UTE TRAY

TRUCK DECK



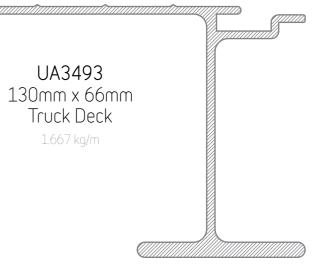


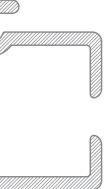
UA8346 225mm x 30mm Outer Frame

UA8348 130mm Outer Frame



STANDARD PRODUCT GUIDE



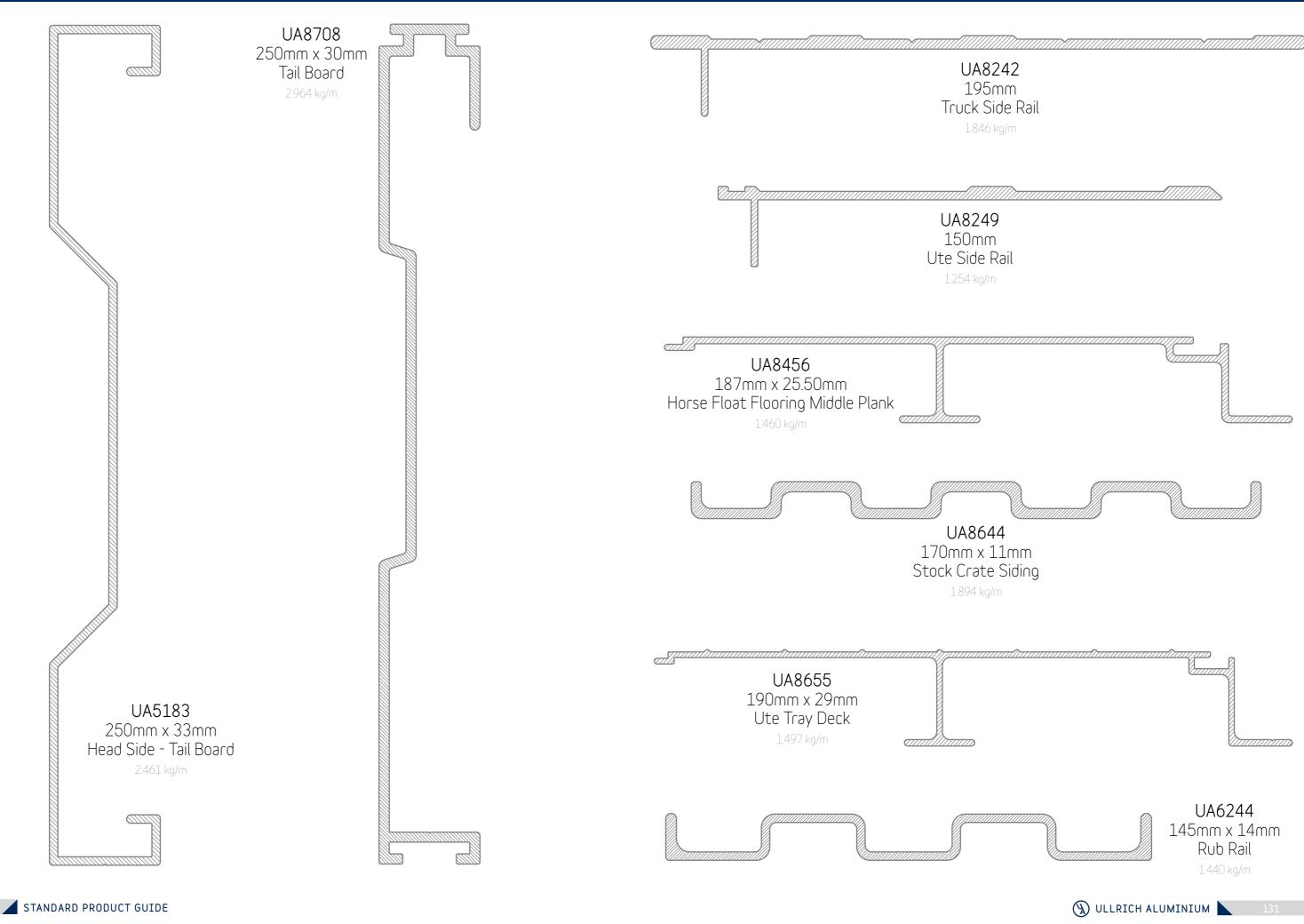


UA5250 75mm x 50mm Truck Boby Flap Runner 2.066 kg/m



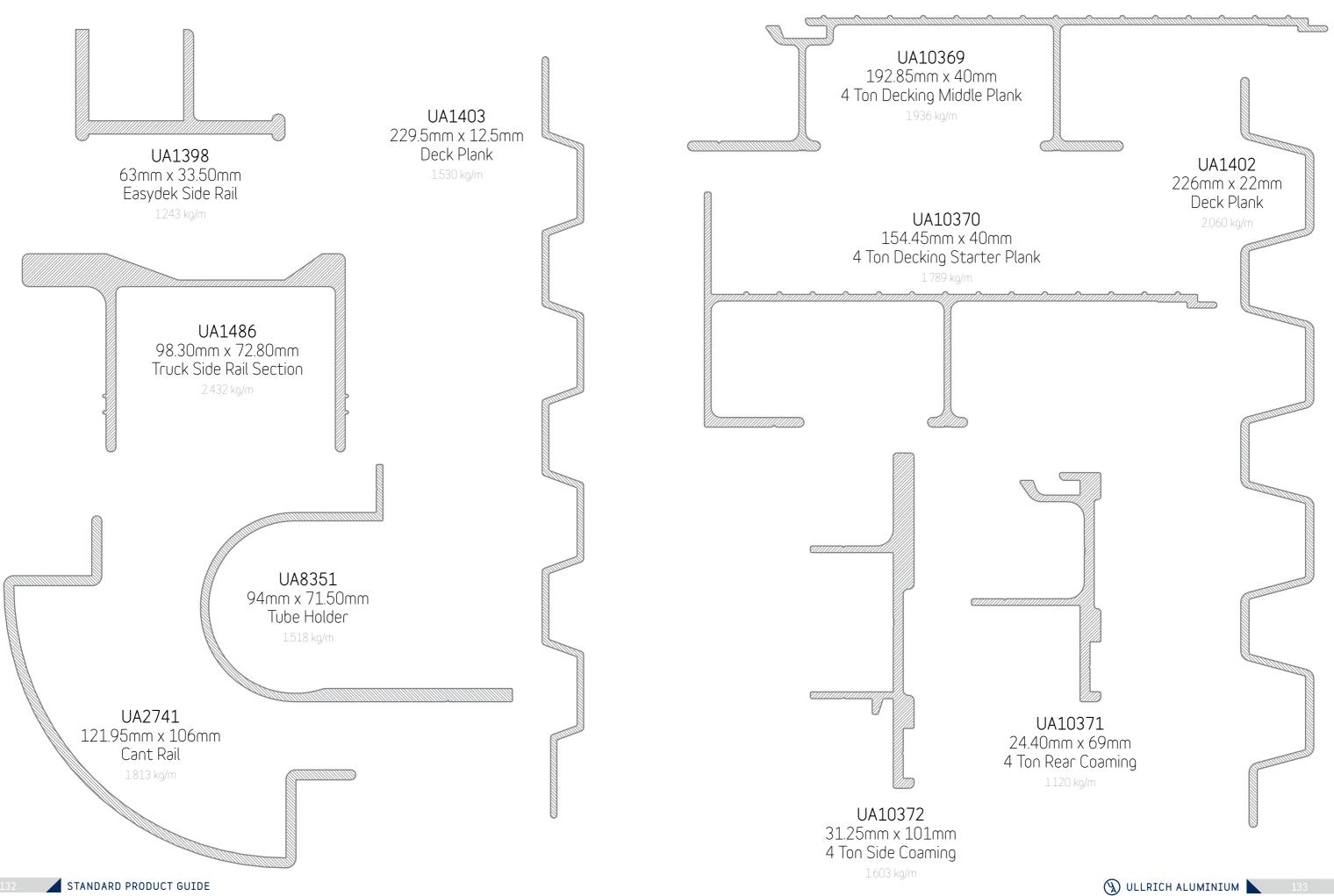
TRUCK DECK

TRUCK DECK

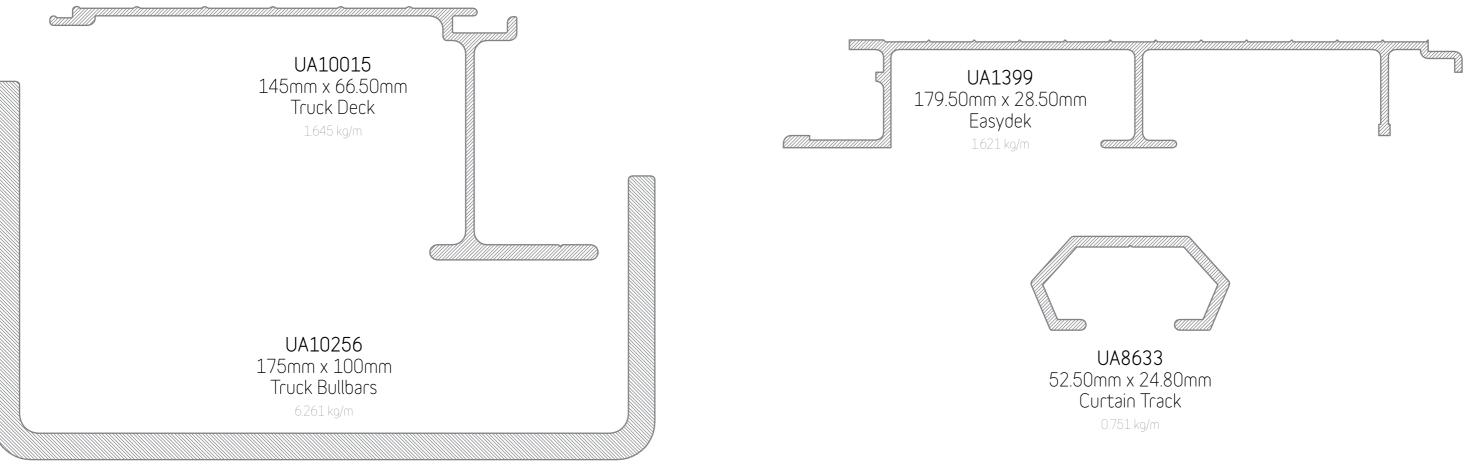


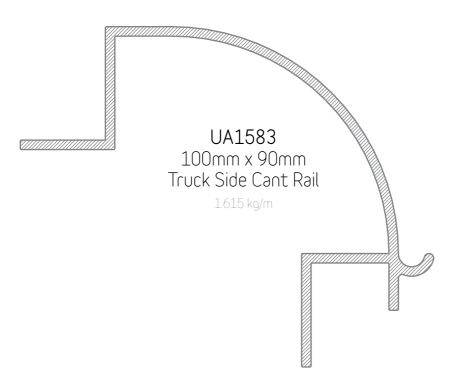
TRUCK DECK

TRUCK DECK



TRUCK DECK

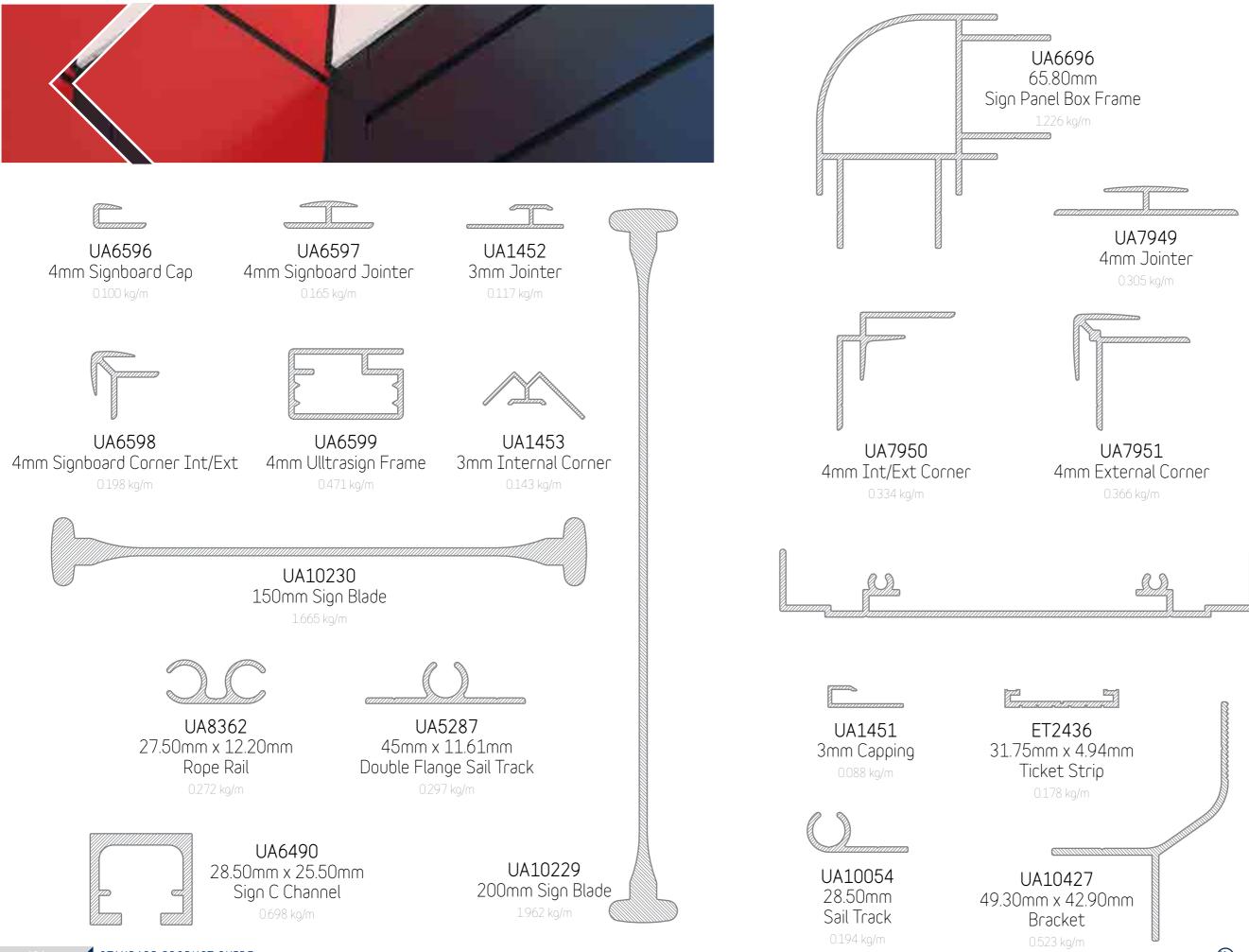






SIGNAGE AND ANNEX TRACK

SIGNAGE AND ANNEX TRACK





UA7948 4mm Capping

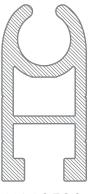


UA1608 28mm x 12.80mm Awning Mould



UA1406 30mm Awning Rail

UA8864 133.20mm x 19mm Sign Box Frame

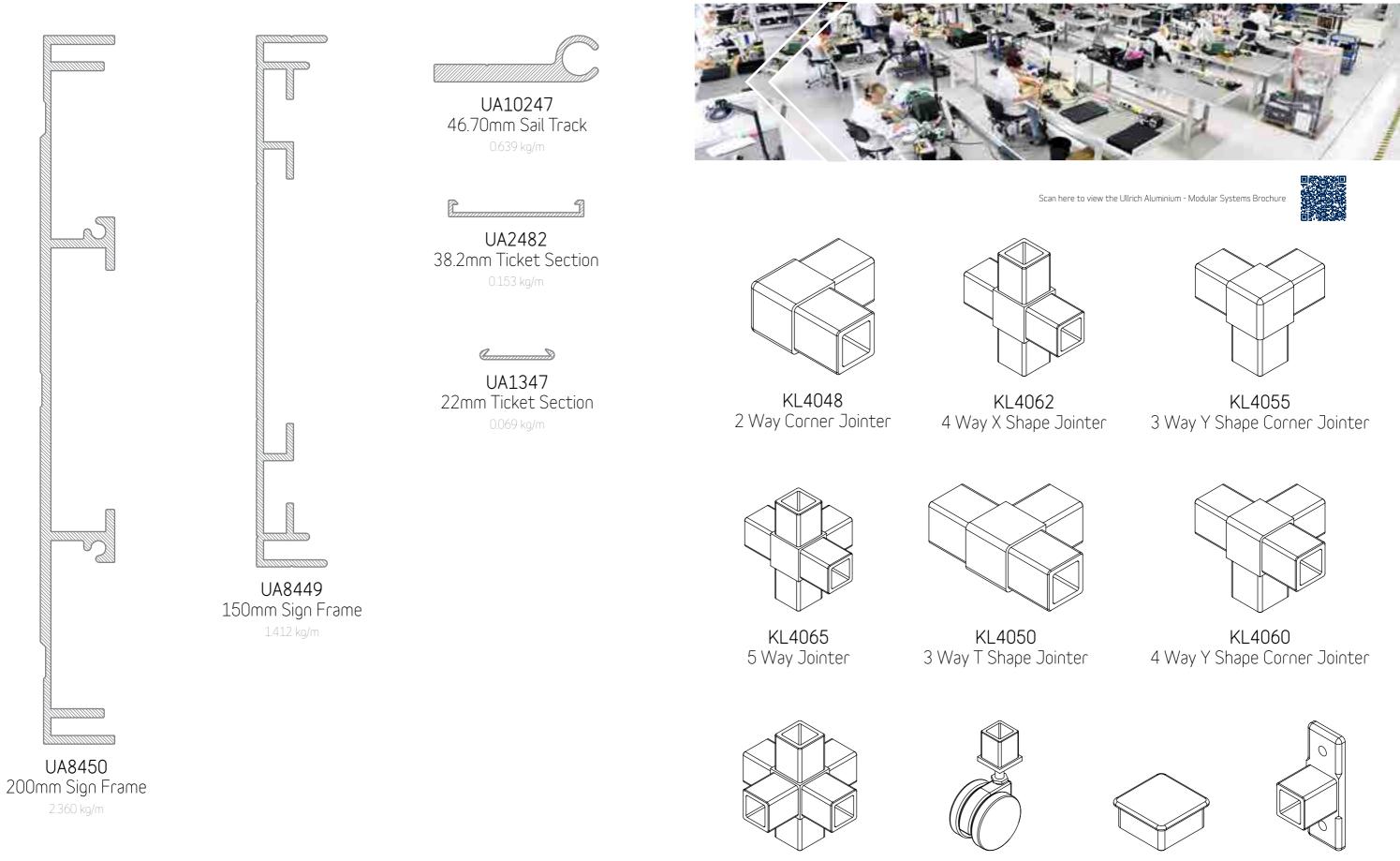


UA10592 46.95mm x 22.50mm Heavy Duty Sail Track

🛞 ULLRICH ALUMINIUM 📐

SIGNAGE AND ANNEX TRACK

MODULAR SYSTEM



KL4070

6 Way Jointer

KL4075 End Cap

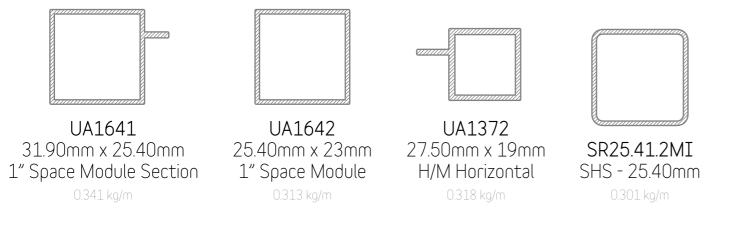
HMENDBRK25BL Mounting Bracket



KL4080

MODULAR SYSTEM

ULLTRA SIGN COMPOSITE PANEL



The Modular Furniture systems employs an adaptable aluminium tube and polymer jointer for modular construction.

Design and create your own furniture, shelving, storage and display units for domestic or office use.

The Modular Furnitures strength and light weight gives you unlimited design options.

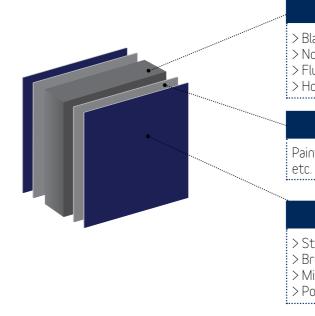
Available in a range of colours and with a variety of accessories, the only limit is your imagination!



Ulltra Panel sign grade is a sandwiched panel consisting of low-density polyethylene core bonded to two thin coil-coated aluminium sheets. The core is typically black.

Ulltra Panel Fire Retardant is composed of non-combustible mineral core with a small amount of low-density polyethylene sandwiched between two aluminium sheets. The core is white or grey.

Topside of ACM is coated with different kinds of paint such as polyester, PVDF, Nano-PVDF, etc.



Part Number	Part Description	Panel Thickness	Panel Width	Panel Length	Finish Colour
ACP3.012202440	ALUMINIUM COMPOSITE PANEL ULLTRASIGN	3mm	1220mm	2400mm	
ACP3.012203000		3mm	1220mm	3000mm	
ACP3.012203600		3mm	1220mm	3600mm	
ACP4.012202400		4mm	1220mm	2400mm	
ACP4.012203000		4mm	1220mm	3000mm	Contact your local Ullrich
ACP4.012203600		4mm	1220mm	3600mm	Aluminium
ACP4.015002400		4mm	1500mm	2400mm	Branch for Colour Options
ACP4.015003000		4mm	1500mm	3000mm	
ACP4.015003600		4mm	1500mm	3600mm	
ACP4.015004000		4mm	1500mm	4000mm	
ACP4.020004000		4mm	2000mm	4000mm	

Core Material

- > Black Polyethylene
- > Non-combustible mineral
- > Fluted PP
- > Honeycomb & Spherical aluminium

Surface Treatment Options

Paint types - Polyester, PVDF, Nano-PVDF, Wood Grain,

Available Surface Finishes

> Standard aluminium > Brush (Anodised) > Mirror (Anodised) > Powder coated (Gloss or Matte)



ULLTRA SIGN COMPOSITE PANEL

SAWING



CUTTING



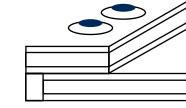
BENDING

LADDERS, TRESTLES & PLANKS



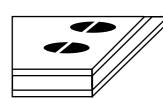






FOLDING

RIVETING



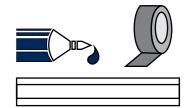
DRILLING

SCREWING



PUNCHING

WELDING



GLUEING



DIGITAL PRINTING



DECORATIVE WORK

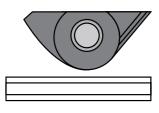
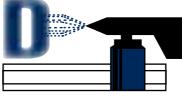


PHOTO MOUNTING



SCREEN PRINTING



SPRAYING



Scan here to view the Ullrich Aluminium - Trestles, Ladders & Planks Brochure



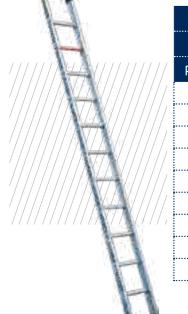
Aluminium Plank							
ID Code	Weight	Size	Rating				
TP2.4	10.0Kg	2.4m	210Kg				
TP3.0	12.4Kg	3.0m	210Kg				
TP3.6	14.8Kg	3.6m	210Kg				
TP4.0	16.4Kg	4.0m	210Kg				
TP5.0	20.4Kg	5.0m	210Kg				
TP6.0	24.4Kg	6.0m	210Kg				

LADDERS, TRESTLES & PLANKS

LADDERS, TRESTLES & PLANKS



Aluminium Trestle Handrail System		
ID Code	Component	
LS101	Intermediate Post	
LS102	Corner Post	
LS103	Handrail 2.7m	
LS104	End Barrier	



SL Series - Single Aluminium Ladders			
SLS2 double screwed rungs			
Part Number	Imperial	Metric	
SLS2/03	3ft	0.9m	
SLS2/06	6ft	1.8m	
SLS2/08	8ft	2.4m	
SLS2/10	10ft	3.0m	
SLS2/12	12ft	3.6m	
SLS2/14	14ft	4.2m	
SLS2/16	16ft	4.8m	
SLS2/18	18ft	5.4m	
SLS2/20	20ft	6.0m	
		-	



Doubled Sided Step Ladder		
Part Number	Imperial	Metric
DST02	2ft	0.6m
DST03	3ft	0.9m
DST04	4ft	1.2m
DST05	5ft	1.5m
DST06	6ft	1.8m
DST07	7ft	2.1m
DST08	8ft	2.4m
 DST09	9ft	2.7m
DST10	10ft	3.0m











ble Extension Ladder		
Imperial	Metric	
8ft-14ft	2.4m-4.2m	
10ft-18ft	3.0m-5.4m	
12ft-20ft	3.6m-6.0m	
14ft-24ft	4.2m-7.3m	
16ft-28ft	4.8m-8.5m	

Heavy Duty Double Sided Step Ladder		
Part Number	Imperial	Metric
HDD03	3ft	0.9m
HDD04	4ft	1.2m
HDD06	6ft	1.8m
HDD07	7ft	2.1m
HDD08	8ft	2.4m
HDD10	10ft	3.0m
HDD12	12ft	3.6m
HDD14	14ft	4.2m
HDD16	16ft	4.8m

Doubled Sided Step Ladder			
Part Number	Imperial	Metric	
DST2800	2ft	0.6m x 800mm	
DST3800	3ft	0.9m x 800mm	

Matria
Mataia
Metric
1.5m
2.1m
2.4m
3.0m
3.3m
3.6m
3.9m
4.2m
4.5m
4.8m
5.4m
6.0m



LADDERS, TRESTLES & PLANKS

LADDERS, TRESTLES & PLANKS



Hinged Platform Ladder			
Part Number	Imperial	Metric	
PFS1/03	3ft	0.9m	
PFS1/04	4ft	1.2m	
PFS1/05	5ft	1.5m	
PFS1/06	6ft	1.8m	
PFS1/07	7ft	2.1m	
PFS1/08	8ft	2.4m	
PFS1/09	9ft	2.7m	

/	Double Extension Ladder			
/	Part Number	Imperial	Metric	
/	DES2/1010	10ft-18ft	3.0m-5.4m	
/	DES2/1212	12ft-20ft	3.6m-6.0m	
/	DES2/1414	14ft-24ft	4.2m-7.3m	



STANDARD PRODUCT GUIDE

Saw Horse Foldable		
Part Number	Imperial	Metric
SH1.6	5ft	1.5m
SH2.0	7ft	2.1m
SH2.4	8ft	2.4m
SH2.7	9ft	2.7m
SH3.0	10ft	3.0m

Saw Horse Fixed			
Part Number	Imperial	Metric	
SHF1.6	5ft	1.5m	
SHF2.0	7ft	2.1m	
SHF2.4	8ft	2.4m	





Combination Ladder			
ımber	Imperial	Metric	
)4	4ft	1.2m	
)5	5ft	1.5m	
16	6ft	1.8m	
)7	7ft	2.1m	
)8	8ft	2.4m	
19	9ft	2.7m	
.0	10ft	3.0m	

Fixed Platform Ladder			
rt Number	Imperial	Metric	
MP1.2	4ft	1.2m	
MP1.5	5ft	1.5m	
MP1.8	6ft	1.8m	
MP2.1	7ft	2.1m	
MP2.4	8ft	2.4m	
MP3.0	10ft	3.0m	



SEATING & SETTING



Scan here to view the Ullrich Aluminium - Seating & Setting Brochure

SETTING WITH BACK SUPPORT



BENCH SEAT WITH BACK REST



STACKABLE BENCH SEATS



SEATING & SETTING

SURFACE MOUNT SETTING



PEDESTAL SETTING



SURFACE MOUNTED **BENCH SEAT**



FREE STANDING SETTING



GRANDSTAND SEATING

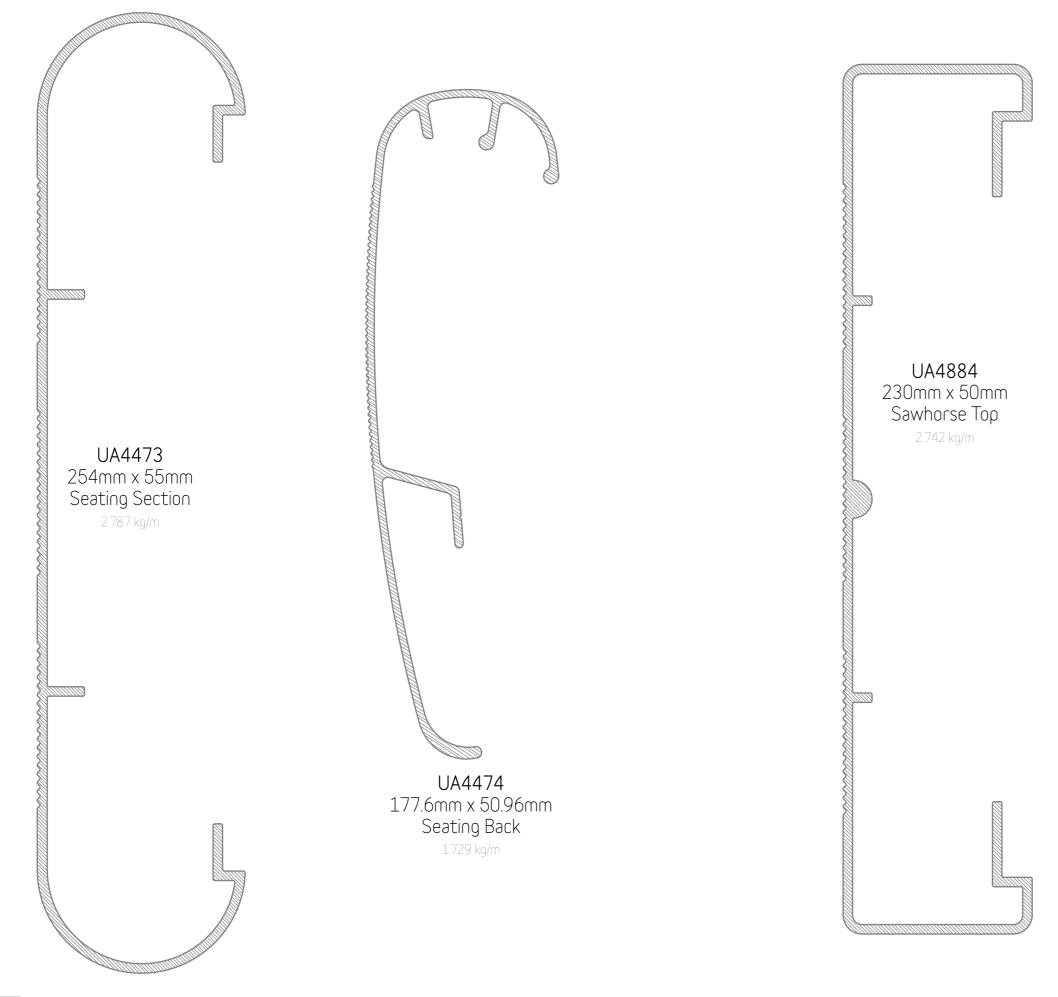


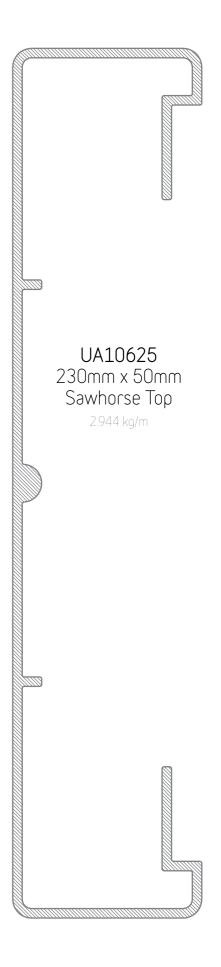




SEATING & SETTING

SEATING & SETTING







STANCHIONS



Scan here to view the Ullrich Aluminium - Stanchions Brochure



AVAILABLE SURFACES

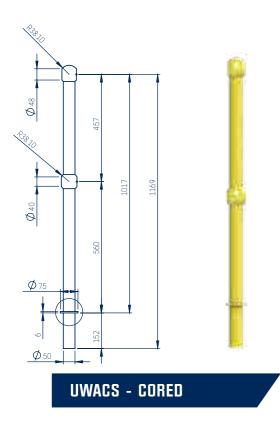
ALUMINIUM MILL FINISH

POWDER COATED FINISH

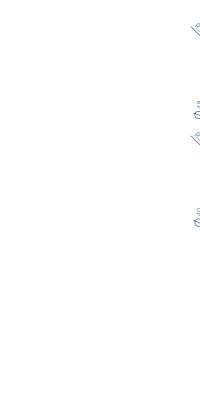
PART NUMBER	STANCHION TYPE	
UWAC2S	CORED THROUGH	
UWACS	S DRILLED ONE SIDE	
UWAPS	WAPS PLATFORM	
UWAPC	PLATFORM CORNER	
UWASS TYPE SIDE 38.1 MID		
UWASC SIDE CONVEYOR		
UWASOS SIDE OFFSET		
UWAWS WELDED		

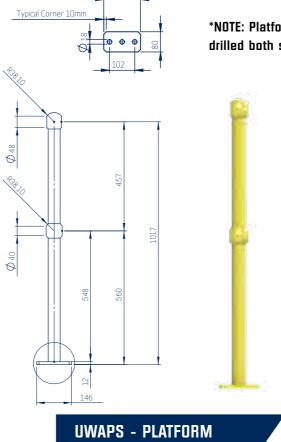
Ø 40 0 6

UWASS - SIDE

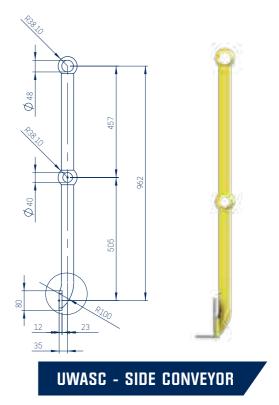


*NOTE: Platform drilled one side only Ø 48 P30 Ø 40 UWAPDOSO - DRILLED





STANCHIONS



*NOTE: Platform drilled both sides Ø 48

Porto

Ø 40

560

UWAPC - PLATFORM CORNER

150

STANCHIONS

Closures Bends & Slip Joints

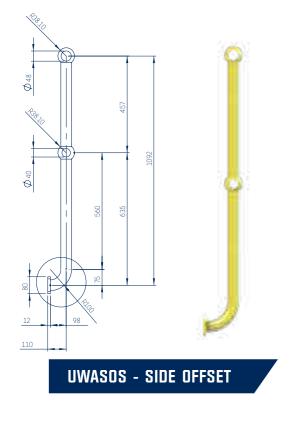
45° Rail Bend UWA45RB

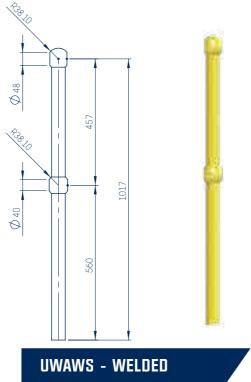
90° Rail Bend

Angle Closure Bend UWAACB

Horizontal Closure Bend UWAHCB

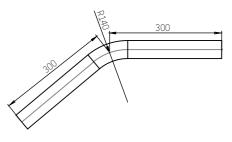


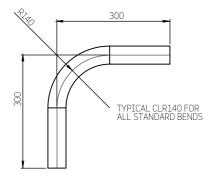


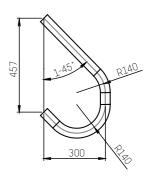


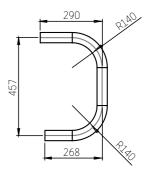
*NOTE: Platform drilled both sides

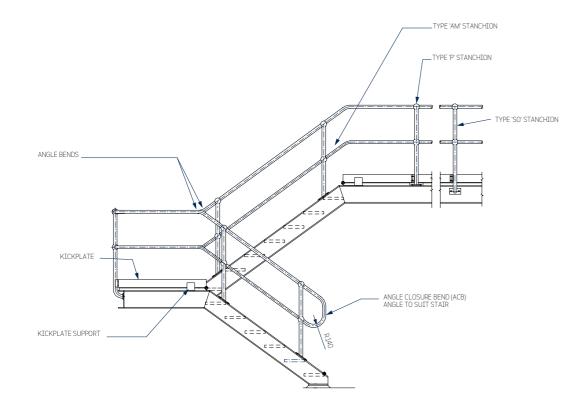
STANDARD PRODUCT GUIDE

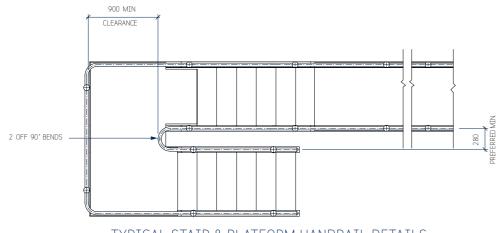




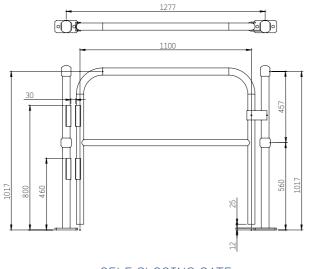








TYPICAL STAIR & PLATFORM HANDRAIL DETAILS



SELF CLOSING GATE

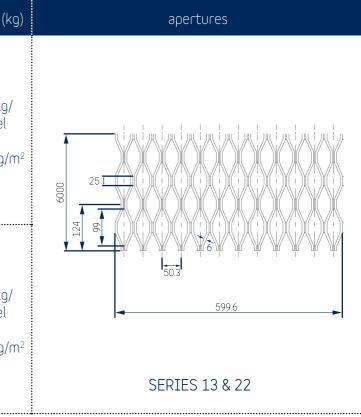
WALKWAY GRATING



SERIES	length (mm)	width (mm)	weight (k
UWG13	6000	600	28.0kg, panel 7.756kg/
UWG22	6000	600	35.0kg, panel 9.757kg/

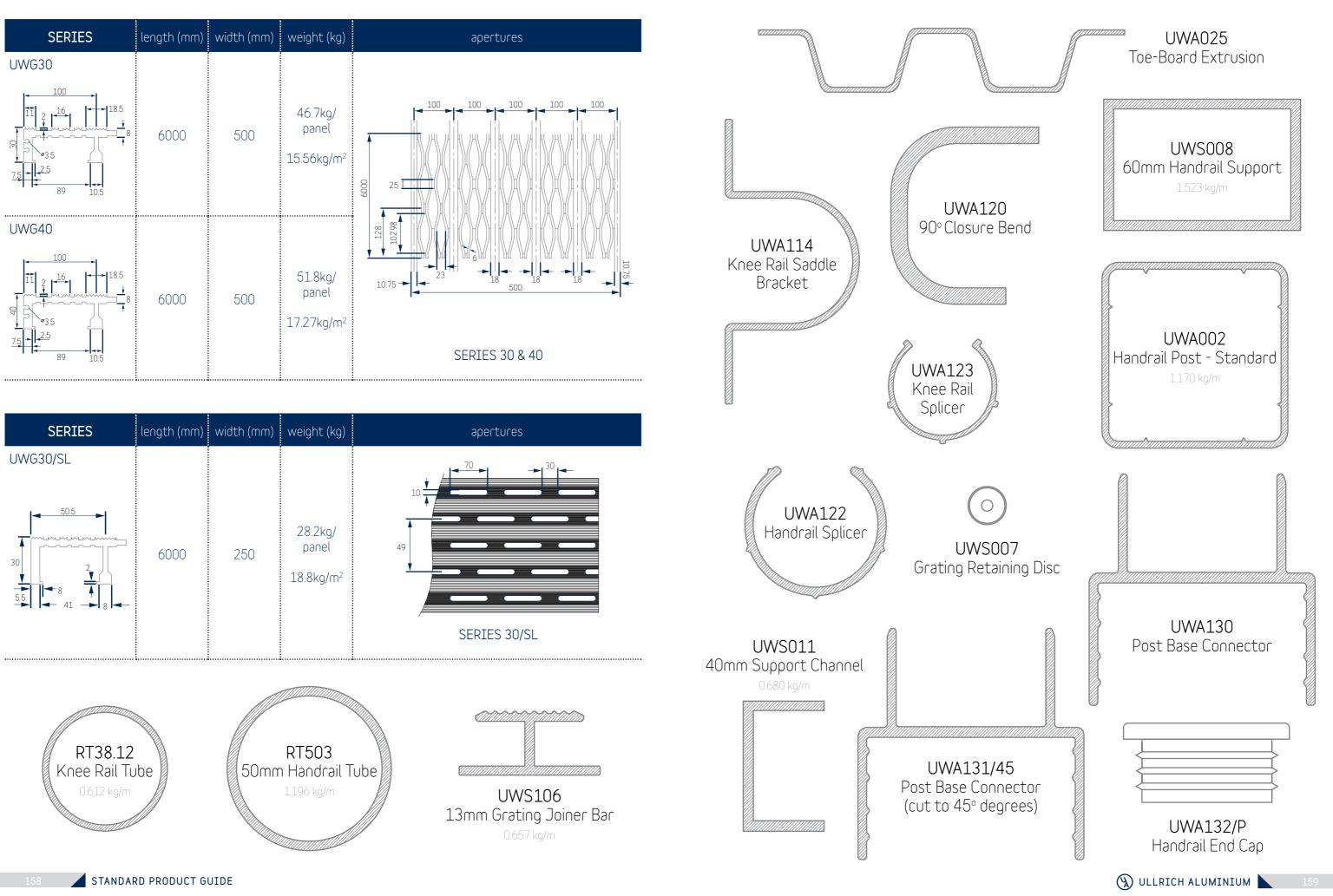
Scan here to view the Ullrich Aluminium - Walkway Grating Brochure





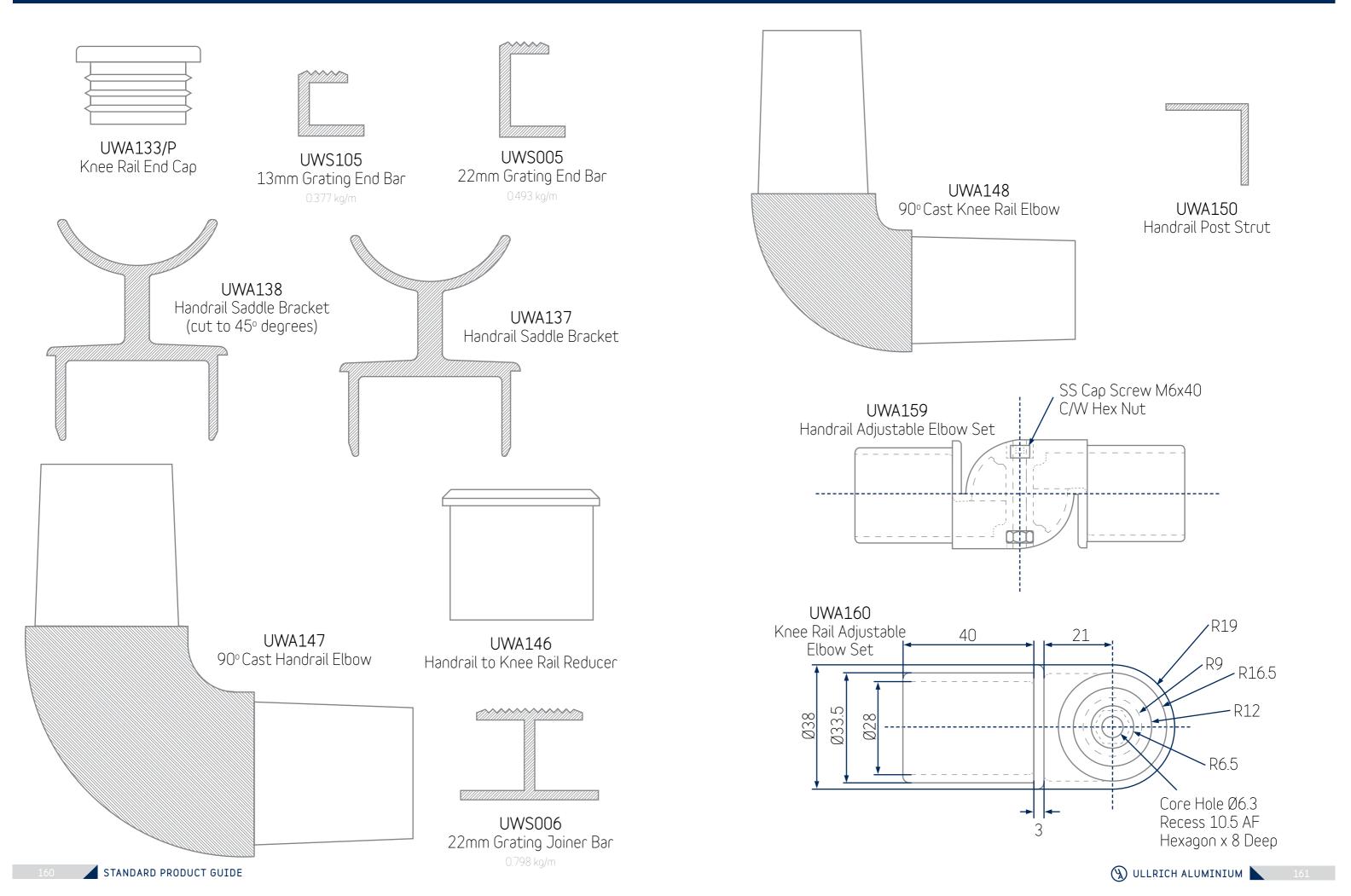
WALKWAY GRATING

WALKWAY GRATING



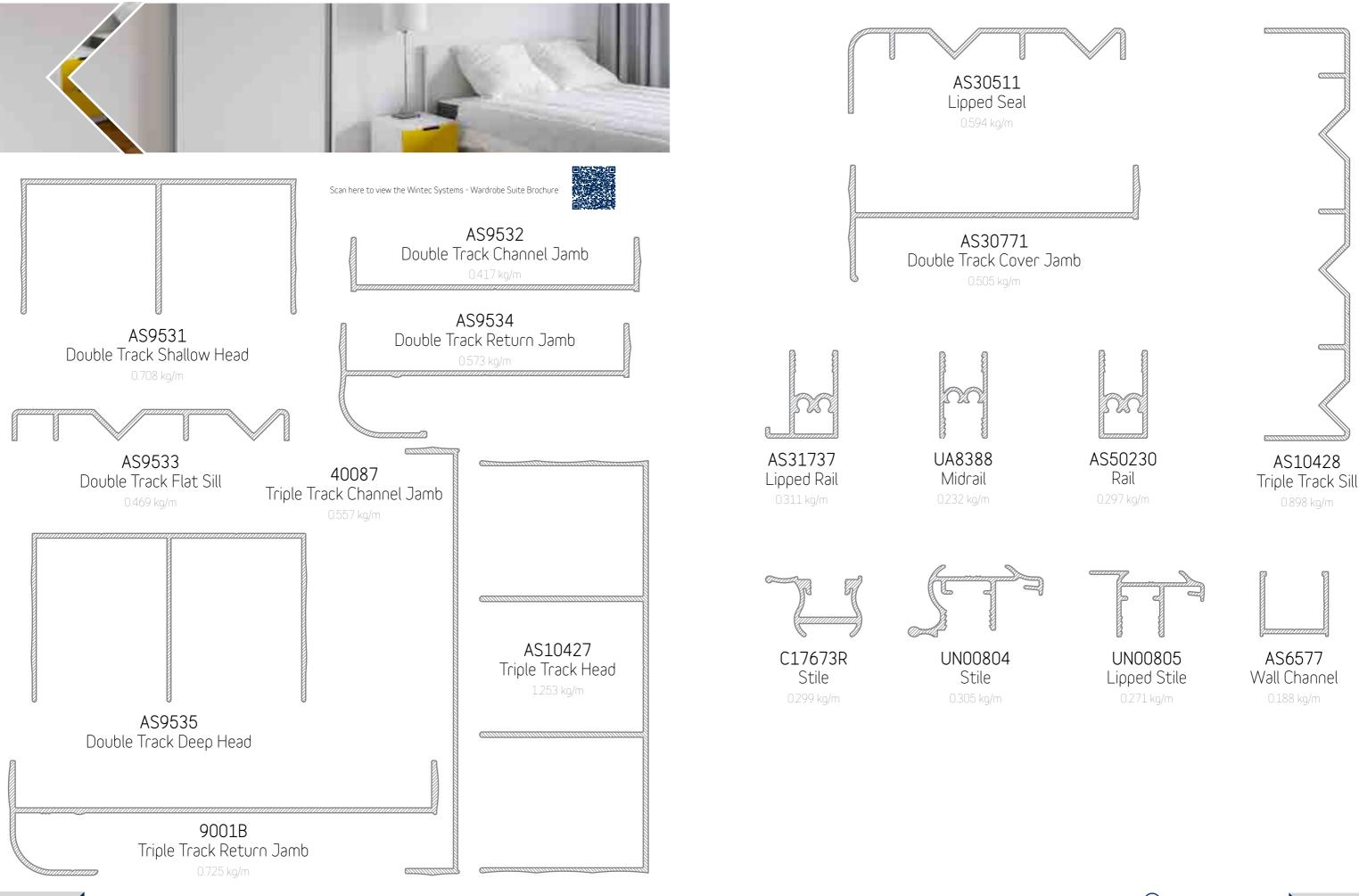
WALKWAY GRATING

WALKWAY GRATING



WARDROBE - VEE GLIDE

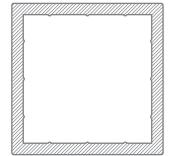
WARDROBE - VEE GLIDE

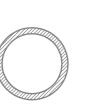




BALUSTRADE - 40 & 50 SERIES

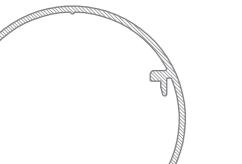






UA8163

UA8956 40mm Post 1.203 kg/m



UA8989 60mmø Handrail

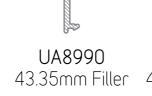
hand

STANDARD PRODUCT GUIDE

UA8993

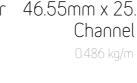
46.55mm x 25.40mm

Top/Bottom Rail



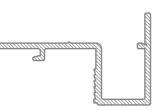
UA8995

0.188 kg/m







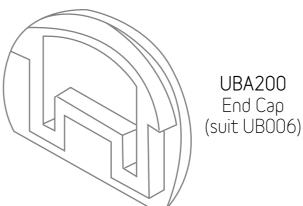


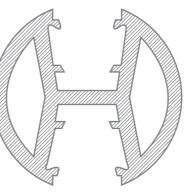
UA8994 43.25mm x 24.50mm Clip In Glazing Channel

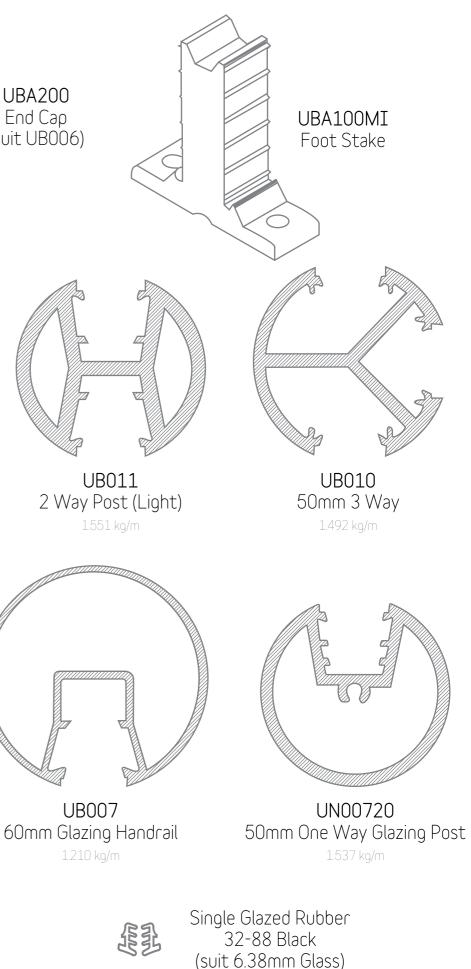


UBA209 End Cap (suit UN00200)

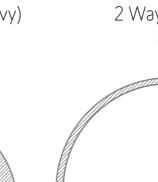
BALUSTRADE - 40 & 50 SERIES

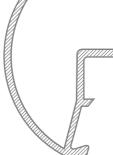






AS21779 2 Way Post (Heavy)







UB012

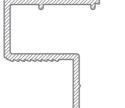
50mm x 120° Post

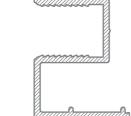
Round Tube 19ø



Scan here to view the Ullrich Aluminium - Balustrade - 40 & 50 Series Product Guide





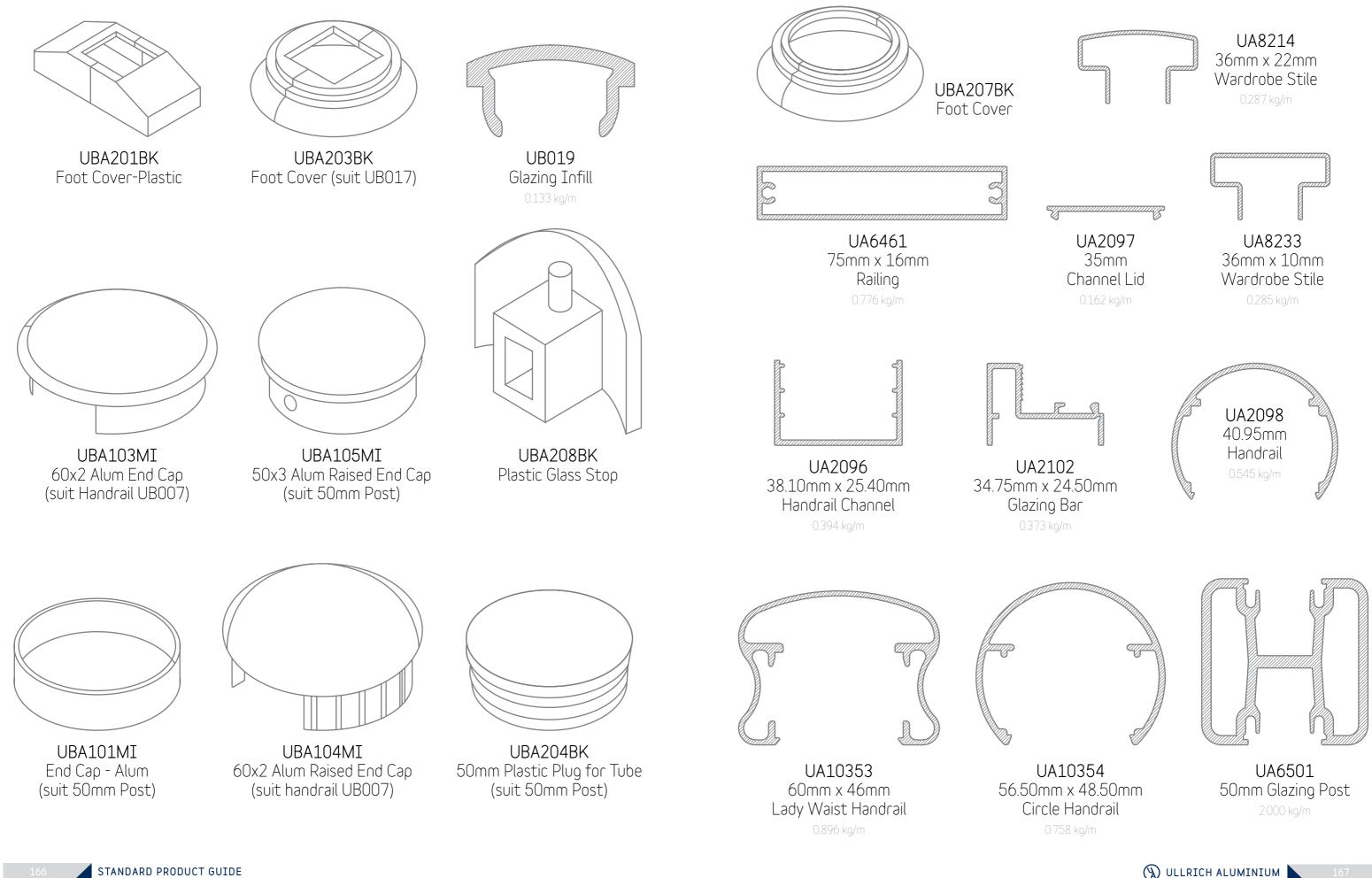


UA8992 46.55mm x 25.40mm 46.55mm x 25.40mm Glazing Channel

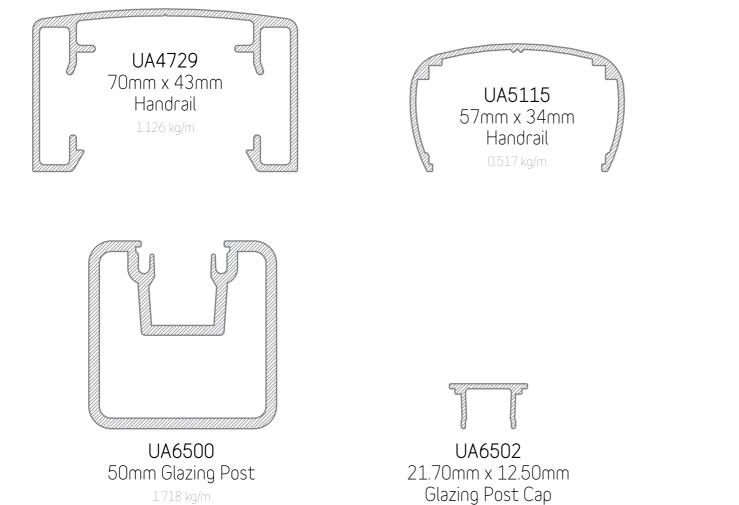
🛞 ULLRICH ALUMINIUM 📐

BALUSTRADE - 40 & 50 SERIES

BALUSTRADE - 40 & 50 SERIES



BALUSTRADE - 40 & 50 SERIES



0.168 kg/m

ULLTRA LIGHT

annan

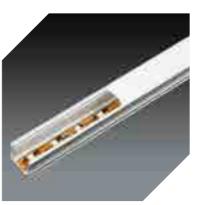


EXCRO1 - CORNER PROFILE

SKU - ORDER CODE			
EXTRUSION	END CAP	MOUNTING BRACKET	
EXCR01	ECCR01/ECCR01H	FBCR01	

EXCRO2 - CORNER PROFILE

SKU - ORDER CODE			
EXTRUSION	END CAP	MOUNTING BRACKET	
EXCR02	ECCR02 / ECCR02H	FBCR02	

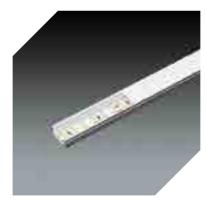


EXLPO2 - LINEAR PROFILE

SKU - ORDER CODE		
EXTRUSION	END CAP	MOUNTING BRACKET
EXLP02	EXLP / ECLP02H	FBLP02



EXPANDED GRILLE



EXLPO3 - LINEAR PROFILE

SKU - ORDER CODE			
EXTRUSION	END CAP	MOUNTING BRACKET	
EXLP03	ECLP03 / ECLP03H	FBLP03	



7MM EXPANDED SECURITY GRILLES

Part Number	Finish	Width (mm)	Length (mm)
G007D2MI	MILL FINISH	1250	2050
G007D25MI	MILL FINISH	1250	2450
G007D6MI	MILL FINISH	1250	6222
G007G2MI	MILL FINISH	778	2121
G007G25MI	MILL FINISH	778	2525
G007G6MI	MILL FINISH	778	6262
G007H2MI	MILL FINISH	945	2121
G007H25MI	MILL FINISH	945	2480
G007H6MI	MILL FINISH	945	6190



EXRSO1 - RECESSED PROFILE

	sku - order code	
EXTRUSION	END CAP	MOUNTING BRACKET
EXRS01	ECRS01/ECRS01H	-



EXRSO3 - RECESSED PROFILE

	sku - order code	
EXTRUSION	END CAP	MOUNTING BRACKET
EXRS03	ECRS03 / ECRS03H	-

9MM EXPANDED SECURITY GRILLES

Part Number	Finish	Width (mm)	Length (mm)
G009D2MI	MILL FINISH	1160	2050
G009D62MI	MILL FINISH	1250	6245

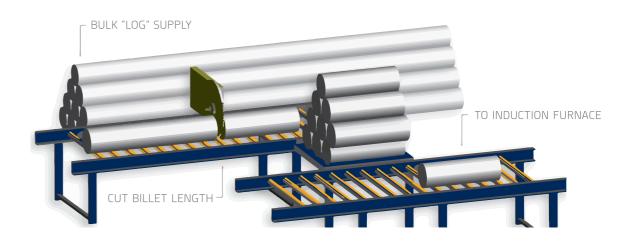




EXTRUSION PROCESS

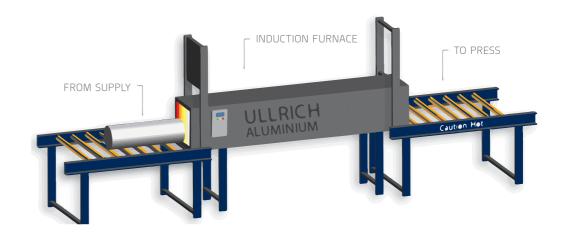
The aluminium process begins with the design process. The function of the profile will determine the shape of the die and the alloy required to form the extrusion.

Aluminium billet is stocked for the extrusion process, it is cut from a longer length of alloyed aluminium log.





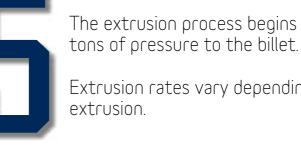
The cut bullets are softened in a heating induction furnace at approximately 660°C.

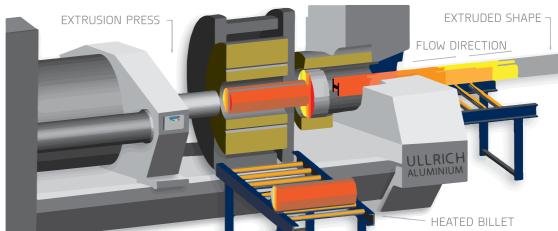


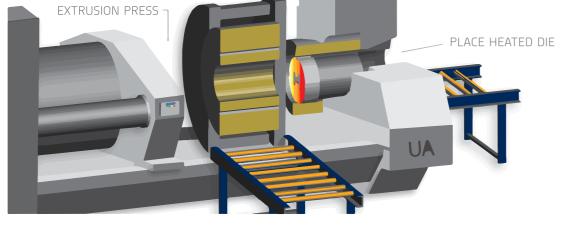
EXTRUSION PROCESS



The extrusion process takes place with the bullet heated between 375°C - 500°C depending on the alloy being used. The extrusion tools and dies are preheated .

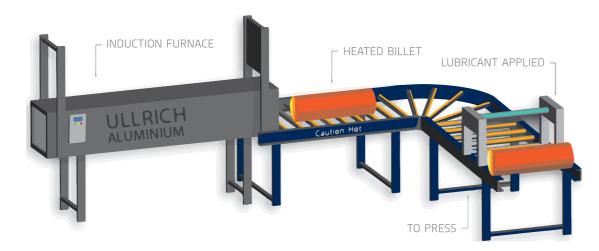






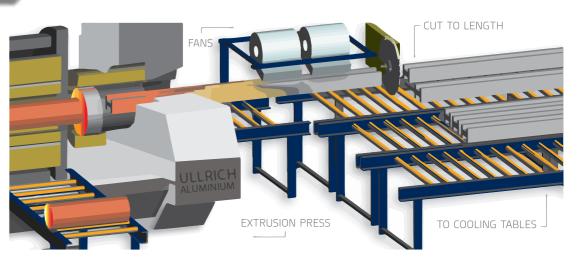


The aluminium alloys for extrusion need to be heated to 450°C it is vital that a release agent or lubricant is applied between the aluminium billet and the dummy block.





Depending on the billet size and die opening, a continuous extrusion as much as 40m long may be produced.



The extrusion process begins when the ram starts applying around 15,000

Extrusion rates vary depending on the alloy used and the shape of the



EXTRUSION PROCESS

EXTRUSION PROCESS



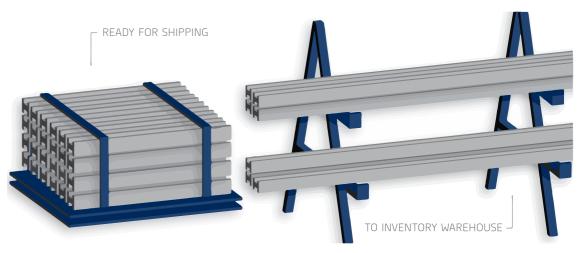
Depending on the alloy, the extrusion is cooled naturally or through the use of air or water.

The extrusion is then transferred to a cooling table where a stretcher and/ or a straighter is applied.



fabricating or packed and prepared for shipment.

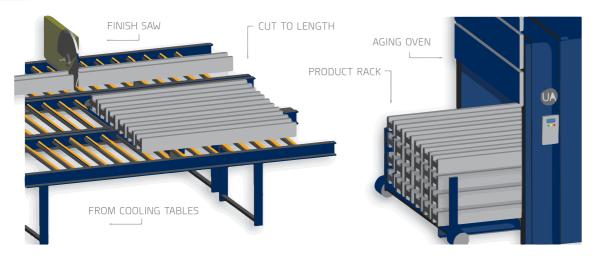






A finish cut saw is used to cut the profile to the specified commercial length.

Some extrusion alloys reach their optimal strength through the process of aging also known as precipitation heat treatment.

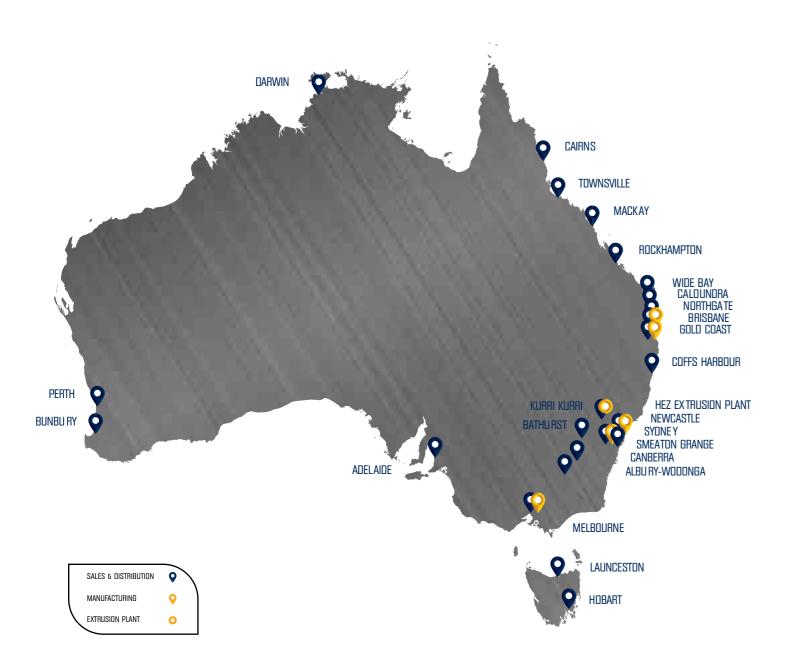


The profiles are moved to other areas of the plant for finishing or



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Coffs Harbour: 13 Cook Drive Coffs Harbour, NSW 2450 +61(2)66902400

> Albury-Wodonga 28 Fallon Street Albury, NSW 2640 +61 (2) 6049 9800

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Banyo, QLD 4014

+61(7)33356700

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Caloundra, QLD 4551

+61(7)53907600

Gold Coast:

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West Burleigh, QLD 4219

+61(7)55861500

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Carole Park, OLD 4300

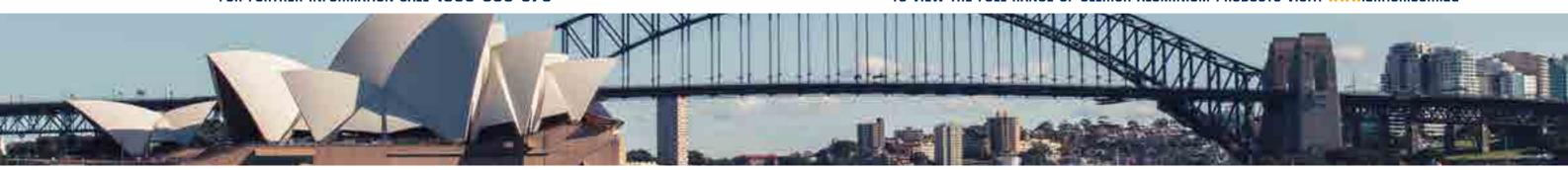
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Mackay: 105-111 Maggilo drive Paget, QLD 4740 +61(7)48642100

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