

# **SIGNFIX**

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## **SYSTEMS**

Established in New Zealand over 25 years ago, Signfix Systems Ltd designs, manufactures, imports and distributes a range of Aluminium and Stainless-Steel components for the New Zealand Traffic Engineering sector and Commercial sign industry. We are the sole authorised distributor for Signfix Systems Ltd UK, who is a world leader in developing and supplying quality fixing systems to the sign industry.

At Signfix, we pride ourselves on maintaining a close working relationship with our customers and we focus on putting the customer first and ensure that all customer requirements are met in a timely manner. We have a wide range of practical, innovative, fit for purpose and cost-effective products which are tried and tested and meet the demands of the New Zealand market. All Signfix products exceed the requirements of the RSMA Compliance Standard for Traffic Signs endorsed by the NZTA and P/24 Performance based Specification for Traffic Signs. Drawing on our expertise in extruded aluminium and stainless steel we also can develop tailor-made solutions to suit specific customer requirements. We do not manufacture signs, we specialise in the design and manufacture of all the components behind the sign.

Whilst there are alternative products available in the market all the Signfix products comply with the necessary market / industry requirements and we refuse to compromise on quality. We guarantee all of our products against defects in material and workmanship at the time of delivery. All our components are manufactured under ISO 9001 with no shortcuts or corner cutting. Our focus is to set the standard for consistency and reliability in the industry.

**Signfix are behind some of the best signs in the world.**



## Anti Rotational Brackets



Anti-Rotational Brackets are used for securing signs that have Signfix channel on the reverse, onto round Fluted Aluminium Poles or Steel Poles. ARC Brackets provide a simple, economical and speedy solution.

CODE	ITEM
ARC060	60mm Anti Rotation Bracket
ARC076	76mm Anti Rotation Bracket
ARC089	89mm Anti Rotation Bracket
ARC102	102mm Anti Rotation Bracket
ARC114	114mm Anti Rotation Bracket

Supplied in boxes of 100 Brackets and 100 LIP-LOK Bolts

## LRH Brackets



LRH Brackets are used for securing signs that have Signfix channel on the reverse onto square Timber Posts or square and rectangle Steel Posts up to 150mm x 100mm.

CODE	ITEM
LRH0505	50X50 RHS Bracket
LRH7575	75X75 RHS Bracket
LRH9595	95X95 RHS Bracket
LRH1005	100X50 RHS Bracket
LRH1010	100X100 RHS Bracket
LRH1510	150X100 RHS Bracket

Supplied in boxes of 100 Brackets and 200 LIP-LOK Bolts

## Back to Back Brackets



Back to Back Brackets are designed to economically facilitate the back to back mounting of signs, (at the same height) in-conjunction with the ARC Brackets, avoiding the need to offset the channel extrusion.

CODE	ITEM
BBC060	60mm Back to Back Bracket
BBC076	76mm Back to Back Bracket
BBC089	89mm Back to Back Bracket
BBC102	102mm Back to Back Bracket
BBC114	114mm Back to Back Bracket

Supplied in boxes of 100 Brackets and 100 LIP-LOK Bolts

## Fixing Bolts



M8mm x 35mm LIP-LOK Bolt

Signfix provides a range of fasteners normally supplied with brackets and clips. The Signfix LIP-LOK bolt has 28% more surface grip than a conventional hex head bolt. Under no circumstances should hex head bolts be used in channel extrusions.

CODE	ITEM
M8-35	M8 35mm S/S Lip Lok
M8-16SQ	M8 16mm S/S Sq Head
M8-25SQ	M8 25mm S/S Sq Head
M8-32TIB	M8 32mm S/S Twist Nuts/Bolts
VPN0800	M8 Anti Vandal Nuts / Bolts

M8 Nuts & Bolts: Supplied in bags of 100 Bolts  
Anti Vandal Nuts & Bolts: Supplied in bags of 20 Bolts

## Band-it Strapping



All Signfix Band-it Strapping features a convenient PVC dispenser. Band-it Strapping can be used on poles wider than 89mm and as alternative to other Signfix hardware. For more information refer to pages 14 and 29.

CODE	ITEM
STR13	13mm 30m Roll (Blue)
STR16	16mm 30m Roll (Green)
STR19	19mm 30m Roll (Red)

## Buckles



Signfix Buckles are used in conjunction with the rolls of Signfix Band-it Strapping. For more information refer to pages 14 and 29.

CODE	ITEM
BUC13	13mm SFX Regular Buckles
BUC16	16mm SFX Regular Buckles
BUC19	19mm SFX Regular Buckles

Supplied in boxes of 100 Buckles

## Band-it Tool



The Signfix Band-it Tool is made from forged alloy steel and is zinc plated for full protection against corrosion. The Band-it Tool has a tensioning capability of 1087kgs and a built-in cutter designed for all weights/grades of Band-it strapping. For use and instructions refer to page 29.

CODE	ITEM
RW100TOOL	C001 Banding Tool

## Buckle Straps



Buckle Straps are equivalent in both strength and versatility to Signfix 19mm Band-it Strapping. Buckle Straps are supplied in pre-cut lengths, with a buckle for one off installations. They are available in two lengths.

CODE	ITEM
BS192	19mm x 660mm long (150mm Dia)
BS193	19mm x 1120mm long (300mm Dia)

Supplied in boxes of 50 Straps

## Universal Channel Clamp



Universal Channel Clamps (UCC) are used in-conjunction with Band-it Strapping for fixing signs with channel on the back to any size or shape post, pole or column. The UCC is compatible with all sizes of banding up to 19mm.

### CODE

UCC001

### ITEM

Universal Clamp UCC001

Supplied in boxes of 100 Clamps

## Single Bolt Banding Bracket



The UR251 is a bracket designed for mounting small, single sided panel only signs up to .15m<sup>2</sup> to timber posts when using the Signfix Banding Products.

### CODE

UR251

### ITEM

8mm Single Bolt Bracket (25mm)

Supplied in boxes of 100 Brackets and M8mm x 16mm stainless steel hex head set Screws and Washers

## Toggle Straps



Toggle Straps are a two piece solution used to secure signs that have Signfix channel on the reverse onto a 100mm x 100mm Timber Post. Toggle Straps are manufactured from 19mm Band-it Strapping.

### CODE

TS100CH

### ITEM

Toggle Strap (Pair)

100mm x 100mm x 19mm

Supplied in boxes of 100 Straps

## Insert Plate Adapter



Insert Plate Adapters offer an alternative to LRH Brackets when installing signs on wooden posts. The post is drilled to match the Signfix support channel spacing. A threaded rod is then screwed into an Insert Plate.

### CODE

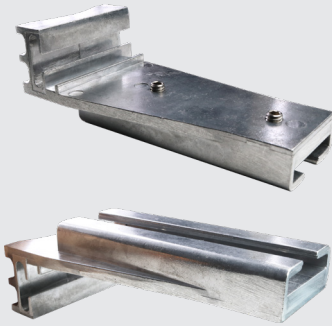
INSPSTUD125

### ITEM

Insert Plate

Supplied in boxes of 100 Adapters and 100 M8mm x 125mm Studs, Nuts and Washers

# Aluminium Street Name Brackets

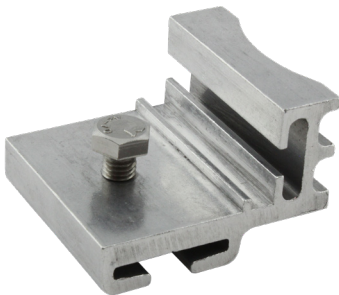


The Aluminium Slide-on Offset Bracket is designed for end mounting Street Name Blade Extrusion up to a maximum size of 0.24m<sup>2</sup>. Brackets are installed top and bottom of the extrusion and then used in-conjunction with either Signfix Stainless Steel Banding or AUO brackets.

CODE	ITEM
SFXSNBKT02	Offset Street Name Bracket

Supplied in boxes of 50 Brackets

## Mid Mount Brackets

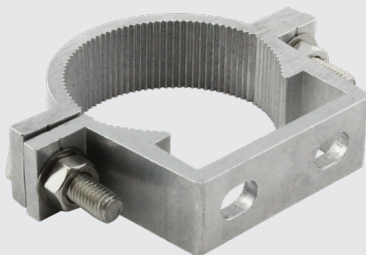


Mid Mount Brackets are designed for mid mounting Street Name Blade Extrusion. Brackets are installed at the top and bottom of the Extrusion and then used in-conjunction with either Signfix Stainless Steel Banding or AUO brackets.

CODE	ITEM
OSBMNZ-01	Mid Mount Bracket

Supplied in boxes of 100 Brackets and M8mm x 10mm stainless steel hex Bolts

## AUO Brackets

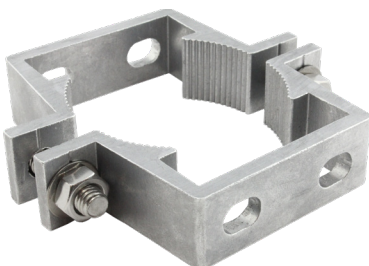


AUO Brackets are used for mounting single sided signs or with Offset Brackets for mounting Street Name Blade Extrusion onto either round Aluminium Fluted Poles or Steel Poles.

CODE	ITEM
AUO060	60mm Alum Bracket 2 Hole
AUO076	76mm Alum Bracket 2 Hole
AUO089	89mm Alum Bracket 2 Hole
AUO114	114mm Alum Bracket 2 Hole

Supplied in boxes of 50 Brackets and 100 M8mm x 32mm Bolts

## Back to Back AUO Brackets



AUO Back to Back Brackets work in the same way as AUO Brackets but are designed for mounting signs back to back or Street Name Blade Extrusion End to End.

CODE	ITEM
AUOB060	60mm Alum Bracket 2 Hole
AUOB076	76mm Alum Bracket 2 Hole
AUOB089	89mm Alum Bracket 2 Hole
AUOB114	114mm Alum Bracket 2 Hole

Supplied in boxes of 50 Brackets and 100 M8mm x 32mm square head Bolts.





## Street Name Blade Extrusion

The Signfix Street Name Blade Extrusion has a full “target/reflective” depths -150, 200, 225 and 250mm. The inside edge of the extrusion is especially tapered to allow easy application of the reflective sheeting and assists with water run off. No Exit Slide-on is also available.

### CODE

### ITEM

SNP150/5	SNB Extrusion 150mm 5.0m
SNP200/5	SNB Extrusion 200mm 5.0m
SNP225/5	SNB Extrusion 225mm 5.0m
SNP250/5	SNB Extrusion 250mm 5.0m
SNPNOEXIT/4.05	SNB No Exit Slide-On 4.05m



## Mini Tee & Universal Offset Brackets

Mini Tee & Universal Offset Brackets are used inconjunction with Mini and Double Extrusion for manufacturing custom made signage. Mini Tee and Mini Offset Brackets are used for signs under 0.56m<sup>2</sup>. Double Tee and Universal Offset Brackets are signs between 0.56m<sup>2</sup> and 0.72m<sup>2</sup>.

### CODE

### ITEM

OSBMM	Mini Tee Offset Bracket (Six Holes)
OSBLM	Universal Offset Bracket (for Double Tee)

Mini Tee: Supplied in boxes of 100 Brackets  
Universal: Supplied in boxes of 100 Brackets



## Mini / Double Tee Extrusion

Mini / Double Tee Extrusion is used with aluminium panels to manufacture custom made signs that are installed the same way as the Street Name Blade Extrusion. Mini Tee can be used on signs up to 450mm long. Double Tee is used on signs exceeding 250mm in depth and signs up to 1500mm long or 0.72m<sup>2</sup>.

### CODE

### ITEM

MINITEE/3	Mini Tee Channel 3.0m
DOUBLETEE/4	Double Tee Channel 4.0m

Both Mini Tee & Double Tee Extrusion accept Sign Plate Material up to 3mm in thickness



## Timber Post Slide-On Brackets

Timber Post Slide-on Brackets are similar to the standard Slide-on Offset Bracket but specifically used for installing Street Name Blade Extrusion onto square Timber Posts. The bracket is secured with either a coach bolt or a bolt through the post (not supplied).

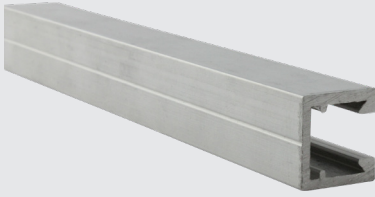
### CODE

### ITEM

TD1010	TD Bracket for Timber Post
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Supplied in boxes of 50 Brackets

## Small Channel



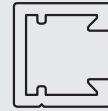
Small Channel is designed specifically for use on small sign plates, PW diamonds up to 900mm, circles up to 900mm dia, RG5 stop signs up to 845mm and RG6 giveaway Signs. For channel spacing refer to pages 22 and 23.

### CODE

CHANSMALL/5

### ITEM

Small Channel 5.0m



## Medium Channel



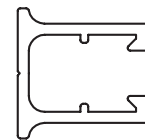
Medium Channel is recommended for use on larger signs including diamonds and circles plus directional signs up to a maximum of 4.1 metres wide. For channel spacing refer to pages 22 and 23.

### CODE

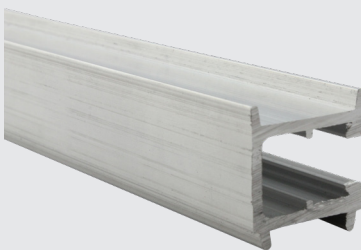
CHANMED/5

### ITEM

Medium Channel 5.0m



## Interlink Channel



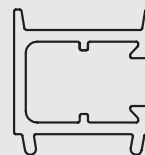
Interlink Channel Extrusion is recommended for use on directional signs up to a maximum of 4.1 metres wide. Used with G-Clip or Butting Plates (Page 9 & 10) for additional security.

### CODE

CHANLINK/5

### ITEM

Interlink Channel 5.0m



## Interlink Mate



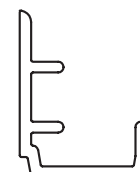
Interlink Mate Channel Extrusion is recommended for use on directional signs up to a maximum of 4.1 metres wide. Used with G-Clips for additional security.

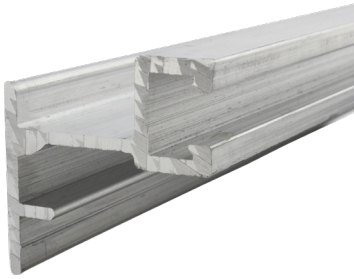
### CODE

CHANILINKMATE/5

### ITEM

Interlink Mate  
Channel 5.0m





## Dovetail Channel

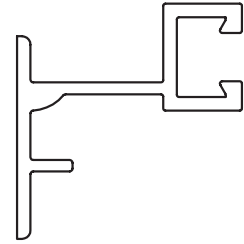
Dovetail Channel is designed for use in the construction of signs exceeding 4.1m wide, utilising the interlocking design of the Dovetail and Dovetail Mate sections. Used with C-Clips for additional security.

### CODE

CHANDTAIL/6

### ITEM

Dovetail Channel 6.0m



## Dovetail Mate

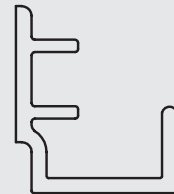
Dovetail Mate Channel is designed for use in the construction of signs exceeding 4.1m wide, utilising the interlocking design of the Dovetail and Dovetail Mate sections.

### CODE

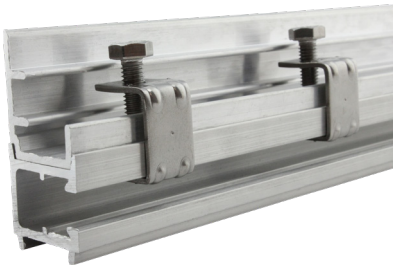
CHANDTAILMATE

### ITEM

Dovetail Mate 6.0m



## G-Clip



G-Clips (MICCL) should always be used with Interlink channels for additional security.

### CODE

MICCL

### ITEM

G-Clip (Interlink)

Supplied in boxes of 100 Clips and M6mm x 20mm hex head Bolts

## C-Clip



C-Clips (DCCL) should always be used to provide additional support to Dovetail and Dovetail Mate intersections.

### CODE

DCCL

### ITEM

C-CLIP (Dovetail)

Supplied in boxes of 100 Clips and M8mm x 32mm twist Bolts



## Channel Coupling



The Channel Coupling is also designed for joining Dovetail extrusions together in signs exceeding 6.1 metres wide, where post centres are known and do not coincide with joints.

### CODE

### ITEM

CHANCOUP	Channel Coupling (Dovetail)
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Supplied in boxes of 20 Couplings and 40 M8mm x 32mm Twist-in Bolts

## Butting Plate



The Butting Plate should always be used with 'Interlink' channels for additional security. Butting Plates come complete with two twist-in bolts, nuts and washers.

### CODE

### ITEM

BUTP002	Butting Plate (Interlink)
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Supplied in boxes of 100 Plates and 200 M8mm x 32mm Twist-in Bolts

## RSJ & Universal Beam Clamp



For use on all flanged supports including RSJ and Universal Beams. The Clamps are made from 1.8mm gauge stainless steel.

### CODE

### ITEM

RSJCLAMP	RSJ Clamp
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Supplied in boxes of 100 Clamps and M8mm LIP-LOK Bolts

## Steel Poles



Our Steel Poles are supplied in either 60 or 76mm diameter and are available in a variety of lengths. The Steel Poles have a white powder coated finish and are supplied with a white plastic cap.

### DIAMETER

### LENGTH

60mm	3.5m, 4.0m
76mm	3.6m, 4.0m



## Aluminium Fluted Poles

Our Aluminium Fluted Poles are extruded from strong structural grade 6061 T6 aluminium with a white powder coated finish and supplied with a white plastic cap.

DIAMETER	LENGTH
60mm	3.5m, 4.0m
76mm	3.5m, 4.0m, 5.0m
89mm	4.0m, 4.5m, 5.0m
102mm	4.5m, 5.0m, 5.5m
114mm	5.0m, 5.5m, 5.87m



## Ground Sockets

Our Ground Sockets are manufactured from strong structural grade 6261 T6 alloy with a powder coated white finish and supplied with a stainless steel T304 grub screw to retain the post.

TO SUIT	LENGTH
60mm	400mm, 600mm, 1000mm
76mm	400mm, 600mm, 1000mm
89mm	1000mm*
102mm	1000mm*
114mm	1000mm*

\* Longer lengths are also available



## Safety Ground Sockets

The Safety Ground Socket can be installed flush with the ground surface. It is manufactured from strong structural grade 6261 T6 alloy with a powder coated grey finish and supplied with a stainless steel T304 wedge to retain the post.

TO SUIT	LENGTH
60mm	400mm, 600mm
76mm	400mm, 600mm



## Wall Mounted Sockets

The Wall Mounted Sockets are perfect for small sign installations where conventional ground sockets are not possible. They are quick and easy to install - Simply bolt onto the surface or onto the wall.

TO SUIT	ITEM
WALMNT060	60mm Wall Mnt Socket
WALMNT076	76mm Wall Mnt Socket

Two sizes available, for either a 60mm OD pole or a 76mm OD pole. Fixings not supplied.

## Surface Mounted Sockets



The Surface Mounted Sockets are perfect for small sign installations where a socket cannot be used. Two sizes available, for either a 60mm OD pole or a 76mm OD pole. Fixings not supplied.

### TO SUIT

### ITEM

SURMNT060	60mm Surface Mnt Socket
SURMNT076	76mm Surface Mnt Socket



Image indicative only.  
(sign sold separately)

## Signfix Bollard Range

The Signfix Bollard Range are highly versatile and used in a wide range of applications. The fluted design allows for easy mounting of Signs incorporating Signfix channel and bracket systems. Two standard sizes available or bollards can be customised to suit your specific requirements.

### CODE

### ITEM

SFXBLD102	1200mm long x 102mm Bollard
SFXBLD114	1200mm long x 114mm Bollard

Minimum Order Quantity: 4



## PVC Edge Marker Post

Our Edge Marker Posts are used to delineate New Zealand's state highway network and roads. The posts are 1400mm long and are manufactured from highly durable PVC. They feature a built in barb for increased ground retention and retro reflective bands.

### CODE

### ITEM

MPSFX900G1.4MDEL	Delineated Marker Post
MPRAMMERSFXKZE	Marker Post Rammer

The 130 x 40mm yellow delineators for the reverse of the edge marker post are available upon request (sold separately)

## VHB Tape



Double-sided tape used in place of a rivet to secure channel to the back of a sign. VHB Tape are 19mm wide and sold in rolls of 33m.

### DIAMETER

### ITEM

VHB19/33	19mm VHB Tape
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# Signfix Interlock Wall Brackets

The Interlock bracket is a split-batten system, capable of supporting large and heavy loads, that allows for easy mounting of signs and features onto both interior and exterior walls.

Consisting of two identical parts, one half is secured to the desired surface either through a fastening (not supplied) or adhesive tape while the other inverted half is similarly fixed to the back of the intended feature. Once attached simply lift or slide into place.

## Features:

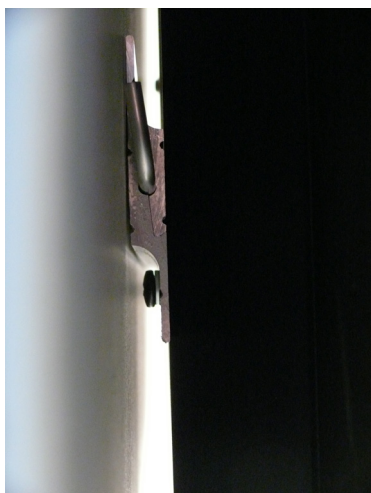
- Interlock design allows for fast installation
- Includes locking pin for added security
- Made from aluminium alloy 6063 T5
- Easily relocated & re-used
- Provides both load bearing strength
- Highly durable
- Ideal for both internal and external use
- Available in pre-cut or full lengths



## Applications:

The Interlock can support the wall mounting of a large range of objects including signs, electronics (eg. interactive whiteboards, televisions and monitors), pictures or household appliances.

This versatility makes it applicable in a wide range of settings from wayfinding and signage outside of a business through to corporate branding and interior design within the office.



## Sizes:

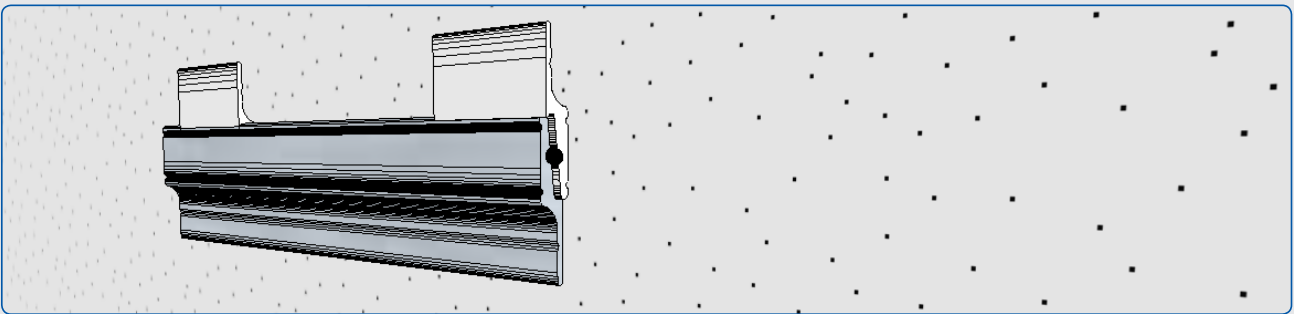
Length	Pin
100mm Pair	1
200mm Pair	1
300mm Pair	1
400mm Pair	1
500mm Pair	2
600mm Pair	2
700mm Pair	2
800mm Pair	2
900mm Pair	2
1000mm Pair	2
Full 2400mm Lenght	2
Excludes holes or fixtures.	

# Interlock Wall Brackets

## How it works:

Having selected one of our pre-cut brackets or having cut your full length to the required width, determine whether the use of tape or fasteners is appropriate and, if necessary, drill holes (M8) at suitable intervals.

Ensure that both halves of the interlock are fixed parallel with their respective surfaces and that the section on the back of the mounted feature is inverted before the piece is lifted into place. Once suspended, the insertion of a pin is recommended to prevent unlocking.



## Specifications:

### Material:

Interlock is extruded from Aluminium Alloy 6063/Temper T5. The product complies with British Standard GB5237-2008.

### Loading:

Based on yield strength of 110MPa, maximum distributed (vertical) load for Interlock under bending is 1.7kN/m. In practice, the most likely failure modality for an implementation will be due to vertical shear load at fastening locations where localised material yield using an 8mm diameter fastener is calculated at 2.5kN per fastening.

It is recommended that shear load per fastener should always be lower than 500N (equivalent to a 50kg weight) and in any case should be compliant with relevant specifications for the fastener.

Add fasteners along Interlock's length to distribute load.

# Signfix Plinth Series

Plinths are a great way of drawing attention to a business, compliment existing signage and provide an attractive focal point for both pedestrians and road users. As the Plinths are free standing and double sided, they can be viewed from either side.

Our Plinths are free standing, compact and available in a range of sizes. They feature a solid galvanized steel frame & footings and ACM panels that are ready to be wrapped. Plinths can be customised, including alternative sizes and lightbox options.



## Features & Benefits

- Engineered frame made from galvanized steel
- ACM supplied with a 7 year guarantee from manufacturer
- Ready to be wrapped, add your own graphics
- Supplied “flat-pack” with instructions on easy assembly
- Standard sizes held in stock to allow for fast turnaround
- Panels can be easily interchanged
- Free-standing and mounted on concrete pad foundations

## Applications

- Wayfinding
- Commercial and business premises
- Parks and reserves
- Event & sports centres
- Entertainment venues
- Public buildings - museums & libraries
- Schools & universities

The Plinths are supplied as a flat packed kit set that are easy to assemble.

Standard Sizes include:

Product Code	Width	Height	Depth
SFXPLS1200	600mm	1200mm	150mm
SFXPLS1500	1000mm	1500mm	150mm
SFXPLS2000	1000mm	2000mm	150mm
SFXPLS2400	1200mm	2400mm	150mm





The Road Safety Manufacturers Association (RSMA) is a non-profit, non-political service organisation. Their goal is to actively encourage the implementation of the road safety initiatives of the NZ Transport Agency (NZTA), the Police and other road safety organisation's, as well as to provide the appropriate professional support.

In partnership with NZTA, the RSMA developed, published and maintains the "RSMA Compliance Standard for Traffic Signs". The standard is the minimum specification for use by NZTA and other roading authorities in contracts/tenders/specifications for NZTA funded sign and support systems. The RSMA (with the support of NZTA) has developed and published an "Approved Products" list.

The Signfix range of products have all been formally approved by NZTA for use on the New Zealand roading network.

## Hardware

All Signfix hardware and fittings are manufactured from durable materials (Stainless Steel AISI 201 or 304, cast or extruded Aluminium). The brackets and fittings form an integral part of the stiffening structure and the correct fittings should always be used for the right application. The information below outlines the different brackets and fittings and specifications:

Type	Specification
Brackets:ARC & LRH	AISI 304 Stainless steel
Back to Back Brackets	AISI 304 Stainless steel
AUO, Back to Back AUO and Mid Mount Brackets	6082 T6 Aluminium alloy
Street Name Blade Brackets	A383 Die Cast Aluminum
Strapping & Buckles	AISI 201 Stainless steel
Universal Channel Clamp	AISI 304 Stainless steel
LIP-LOK Bolts	AISI 304 Stainless steel

All stainless steel fittings have been subjected to ASTM B117 salt – spray testing for 500 hours with no significant corrosion, which makes them ideal for New Zealand conditions.

Mounting Options	ARC	LRH	BBC	INSPSTUD125	Toggle Straps	Strapping /Buckles	Buckle Straps	UCC	UR25I	SFXSNBKT02	OSBMNZ-01	TD1010	OSBMM	OSBLM	AUO Brackets
Aluminium / Steel Poles	√	N/A	√*	N/A	N/A	√	N/A	N/A	√	√*	√*	N/A	√*	√*	√*
Timber Posts	N/A	√	N/A	√	√	√	√	√*	√	√*	N/A	√	N/A	N/A	N/A
Utility Poles	N/A	N/A	√*	N/A	√	√	√	√*	√	√*	√*	N/A	√*	√*	N/A

√\* Brackets used in conjunction with other hardware

The Signfix brackets and clips are universal and will fit any range of Signfix Channel. The LIP-LOK bolts have an ultimate tensile strength of 70N/mm<sup>2</sup> and should be tightened up to a maximum torque load of 25Nm using a calibrated torque wrench. It is recommended that before fitting, all bolts are lightly oiled with a Teflon aerosol spray or liquid to avoid binding when tightening nuts. Washers should always be fitted under the M8 nut as this strengthens the bracket when fully tensioned. Never use bolts without washers supplied, or the fixing will not remain secure.

## Street Name Blade Extrusion

The Signfix Street Name Sign System provides a complete package of fittings for the installation of off-set signs. The system can be used for small bus stop size signs to large street name and directional signs. Correct bracket selection and installation method is crucial to successful Street Name Sign installation. Failure to use the correct brackets may result in drooping signs and or broken banding. The following table outlines the specification for street names blades and brackets:

Size	Specification	Finish	Length
150mm	6061 - T6	Mill Finish	5.0m
200mm	6061 - T6	Mill Finish	5.0m
225mm	6061 - T6	Mill Finish	5.0m
250mm	6061 - T6	Mill Finish	5.0m



Type of Sign Support	Suggested Option
60 or 76mm OD Aluminium Fluted or Steel Poles:	Use the Signfix SFXSNBKT02 bracket with an AUO style Uni-Clamp.
100mm x 100mm Timber Post:	Use the Signfix TD1010 Slide on Bracket for Timber Posts using either a coach screw or bolt through the post. This bracket provides a large solid and flat footprint against the post.
Utility Poles and Columns:	Street Name Sign Installations onto utility poles using stainless steel banding should be offset from the pole to ensure the banding functions as designed. Signfix TD1010 or SFXSNBKT02 brackets are used and they should be offset from the Pole / Column by a length of timber (75mm x 75mm etc) which is in turn banded to the Pole / Column.

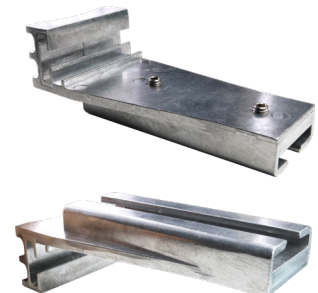
## Aluminium Slide-On Offset Bracket

Our Aluminium Offset Bracket is designed and warranted for use with Signfix Street Name Extrusion. The Signfix Aluminium SFXSNBKT02 Slide-on Offset Bracket is designed and warranted for sign blades not exceeding 0.24 m<sup>2</sup>.

### For example:

- 200mm deep x 1200mm long sign
- 225mm deep x 1075mm long sign or
- 250mm deep x 960mm long sign

Street Name Signs over this limitation should be single sided and mid mounted.



## Mini / Double Tee Extrusion

Mini Tee Extrusion is recommended for use on signs up to 450mm long and accepts sign plate materials up to 3mm in thickness. Two brackets are required, one each to the top and bottom of the sign.

Double Tee Extrusion is used for signs exceeding 250mm in depth and signs up to 1500mm long or 0.72m<sup>2</sup> and accepts sign plate materials up to 3mm in thickness. Signs over these sizes must be constructed and installed as single sided signs and are not suitable for cantilever mounting. Double Tee extrusion is also not compatible with the Signfix NO EXIT extrusion, Mid Mount or OSBMM style brackets.

- Two brackets are required for signs up to 1200mm long or 0.56m<sup>2</sup>
- Four brackets (two each top & bottom) are required for signs 1200mm to 1500mm long or 0.56 to 0.72m<sup>2</sup>.

Our Aluminium Fluted Poles are extruded from strong structural grade 6061 T6 aluminium and supplied with white plastic caps. They are finished with a maintenance free white polyester powder coating making them ideal for coastal locations.

All our Signfix poles are deemed to comply with the impact requirements of NZTA P/24 Performance Based Specification for Small Signs as listed in the RSMA Compliance Standard for Traffic Signs.

## Features & Benefits

- When used with our Anti-Rotational Clips, Ground Sockets and Channel Systems, our Aluminium Fluted Poles are designed to eliminate sign rotation.
- The poles are light and easy to handle as well as being convenient to transport.
- Pole sizes are standardised allowing all available bracket types to fit.
- Aluminium frangible poles size for size are comparable in strength with steel equivalents.
- All Poles are manufactured from marine grade alloy, and as a result will remain maintenance free.
- Our poles are easy to install with no specialist equipment required.
- Frangibility is multi-directional.
- In the event of damage, all poles can be easily removed and replaced using existing foundations.



Signfix poles are available in five sizes with the following geometric properties:

Pole	Specification	Finish / Colour	Lengths	Trough	Crest	I xx yield (mm <sup>4</sup> )
60mm	6061 - T6	Pearl White	3.5m, 4.0m	2.80mm	3.75mm	0.229 x 106
76mm	6061 - T6	Pearl White	3.5m, 4.0m, 5.0m	3.05mm	4.00mm	0.523 x 106
89mm	6061 - T6	Pearl White	4.0m, 4.5m, 5.0m	3.55mm	4.50mm	0.958 x 106
102mm	6061 - T6	Pearl White	4.5m, 5.0m, 5.5m	4.10mm	5.00mm	1.635 x 106
114mm	6061 - T6	Pearl White	5.0m, 5.5m, 5.87m	4.60mm	5.50mm	2.476 x 106

The medium strength structural alloy from which the poles are manufactured has the following characteristics properties:

f yield = 255 MPa  
f ultimate = 295 MPa

% elongation to failure = 7%



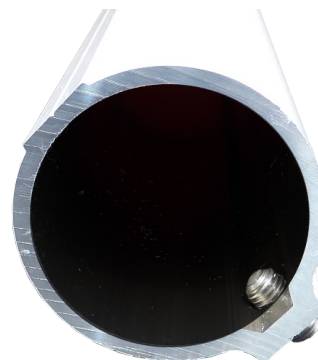
The Signfix ground socket is manufactured from strong structural grade 6061 – T6 alloy with stainless steel T304 grub screws to retain the pole. All ground sockets are powder coated to prevent corrosive attack by the concrete. Ground sockets should be installed with no more than 30 – 60mm showing above ground level. The grub screw should be orientated in the direction of the sign face and torqued to 18Nm<sup>2</sup>.

The Signfix ground sockets all have a minimum wall thickness of 5mm which eliminates damage to the socket wall in accident situations – facilitating simple pole replacement. The sockets are designed to be installed into concrete foundations which have been specified / meet the requirements of the NZTA / RSMA standard.

## Features & Benefits

- Our ground sockets are economical and offer time-efficient installation, avoiding the use of props to support poles while concrete foundations cure.
- The sockets are manufactured from structural 6061 T6 alloy and powder coated (white) to prevent any corrosion on the aluminium from concrete.
- The sockets eliminates vandalism to poles/foundations before concrete has set.
- The socket provides an economical replacement solution for damaged poles as there is no need to dig out and replace foundations. Simply remove the damaged pole from the ground socket and insert the new pole with minimal delay.

Pole	Specification	Finish / Colour	Lengths
60mm	6061 - T6	Pearl White	400mm, 600mm, 1000mm
76mm	6061 - T6	Pearl White	400mm, 600mm, 1000mm. Longer lengths are also available
89mm	6061 - T6	Pearl White	1000mm. Longer lengths are also available
102mm	6061 - T6	Pearl White	1000mm. Longer lengths are also available
114mm	6061 - T6	Pearl White	1000mm. Longer lengths are also available



## Notes:

1. The Signfix Ground Socket is NOT designed to provide reinforcing for foundations. Foundation details should be determined by an engineer pending ground conditions, the number of poles and the size of the sign and windloading.
2. Both NZTA P/24 Specification and the RSMA Standard require that unless foundations are specifically designed minimum support post planting depth shall be one fifth of the mounting height, but not less than 1.0m depth.

The Safety Ground Socket can be installed flush with the surrounding ground surface. It was developed in response to health and safety concerns when the stub of the standard ground socket is left exposed in pedestrian areas. This can occur at installation time prior to the erection of the pole and when poles are removed and not replaced i.e. surface maintenance, house moving companies and vandals etc.

The Signfix Safety Ground Socket is manufactured from structural 6261 T6 alloy and is powder coated (ghost grey) to prevent any corrosion on the aluminium from concrete.

The socket is supplied with a unique purpose designed T410 Stainless Steel Security Wedge (same wedge suits both sizes). It is fitted with a cap that acts as a pole stop and prevents the egress of concrete during installation into the foundation.

## Features & Benefits

- The sockets can be installed flush with the surrounding ground surface.
- The sockets are manufactured from structural 6261 T6 alloy and powder coated (ghost grey) to prevent any corrosion on the aluminium from concrete.
- Designed for 60mm and 76mm OD poles - aluminium, steel and plastic.
- Available in standard sizes and custom lengths.



Socket	Specification	Finish / Colour	Lengths
60mm	6061 - T6	Ghost Grey	400mm, 600mm
76mm	6061 - T6	Ghost Grey	400mm, 600mm

## Notes:

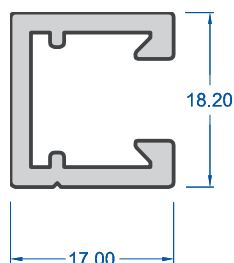
1. The Signfix Safety Ground Socket is NOT designed to provide reinforcing for foundations. Foundation detail i.e. depth and size should be determined by an engineer pending ground conditions, the number of posts, and the size of the sign and wind loading. Reference can also be made to Appendix C Foundation Selection Tables for Small Signs in the RSMA Compliance Standard for Traffic Signs.
2. The Signfix Safety Ground Socket must be installed fully encased in concrete foundations, substantial enough to withstand crash impact, with the top of the socket flush (-0mm +5mm) with the foundation.
3. The product is designed for plastic, steel and aluminium poles. As pole tolerances vary the Security Wedge need only be inserted to a depth that securely retains the pole. Over insertion may compromise wedge removal.

Signfix aluminium channel extrusions are produced and supplied in 6261 – T5 specification alloy. This alloy is classified as a special purpose structural alloy and combines excellent corrosion resistance with high structural properties.

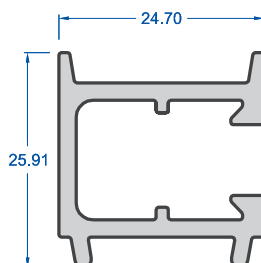
The use of this material produces signs with excellent structural rigidity and resistance to deformation at fixing points.

Type / Length	Specification / Finish	Fixing Techniques	Sign Limitations	Fixing Bolts	Fixing Clips	Fixing Brackets
<b>Small 5.0m</b>	6261 – T5 Mill Finish	Rivets, Self piercing rivets, VHB Tape	For use with small signs, PV Diamonds up to 900x900mm, circles up to 900mm dia. RG5 Stop signs up to 845mm	M8 LIP-LOK, M8 Square head	N/A	ARC, LRH, UCC
<b>Medium 5.0m</b>	6261 – T5 Mill Finish	Rivets, Self piercing rivets, VHB Tape	Recommend for use on large size PV, RG and directional signs up to a maximum of 4.1m wide	M8 LIP-LOK, M8 Square head	N/A	ARC, LRH, UCC
<b>Interlink 5.0m</b>	6261 – T5 Mill Finish	Rivets, Self piercing rivets	Signs not exceeding 4.1m wide	M8 LIP-LOK, M8 Square head	BUTP002 or MICCL	ARC, LRH, UCC
<b>Interlink Mate 5.0m</b>	6261 – T5 Mill Finish	Rivets, Self piercing rivets	Signs not exceeding 4.1m wide	M8 LIP-LOK, M8 Square head	BUTP002 or MICCL	ARC, LRH, UCC
<b>Dovetail 6.0m</b>	6061 – T6 Mill Finish	Rivets, Self piercing rivets	Signs exceeding 4.1m wide	M8 LIP-LOK, M8 Square head	DCCL or Chancoup	ARC, LRH, UCC
<b>Dovetail Mate 6.0m</b>	6061 – T6 Mill Finish	Rivets, Self piercing rivets	Signs exceeding 4.1m wide	M8 LIP-LOK, M8 Square head	DCCL or Chancoup	ARC, LRH, UCC
<b>Mini Tee 6.0m</b>	6106 – T5 Mill Finish	Rivets, Self piercing rivets	Signs up to 1200mm long or 0.56m <sup>2</sup>	Rivets, Self piercing rivets	2 brackets are required for signs up to 1200mm long or 0.56m <sup>2</sup>	n/a
<b>Double Tee 6.0m</b>	6060 – T5 Mill Finish	Rivets, Self piercing rivets	Signs exceeding 250mm in depth and signs up to 1500mm long or 0.72m <sup>2</sup>	Rivets, Self piercing rivets		n/a

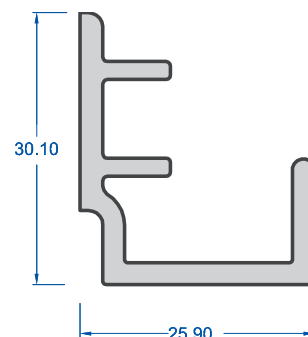
Small Channel



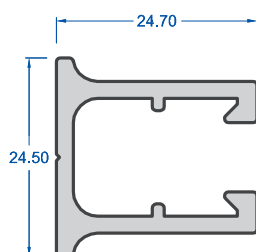
Interlink Channel



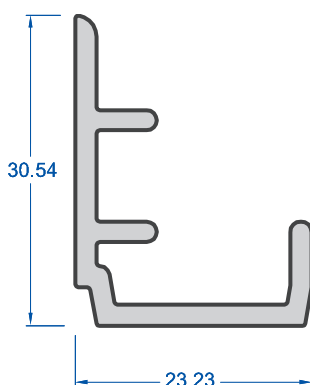
Dovetail Mate Channel



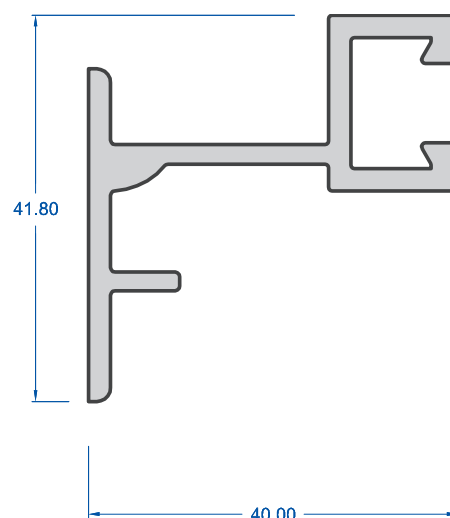
Medium Channel



Interlink Mate Channel



Dovetail Channel



Note: All dimensions are in mm

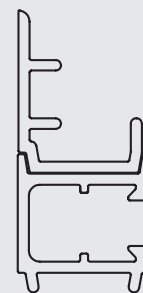


## Interlink System

The Interlink System, is a stackable variant of our tried and proven medium channel design and can be used for any applications where our medium channel design is recommended. Where required, the Interlink System may also be used in combination with the conventional medium extrusion.

It's a highly flexible system that can be used in two ways:

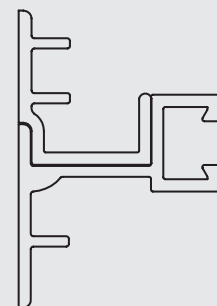
- The channel can interface with itself by means of the neat, matching locating lugs each side of the channel or,
- It can be used with matching 'mate' section that sits neatly into the open face of the interlink channel.



## Dovetail System

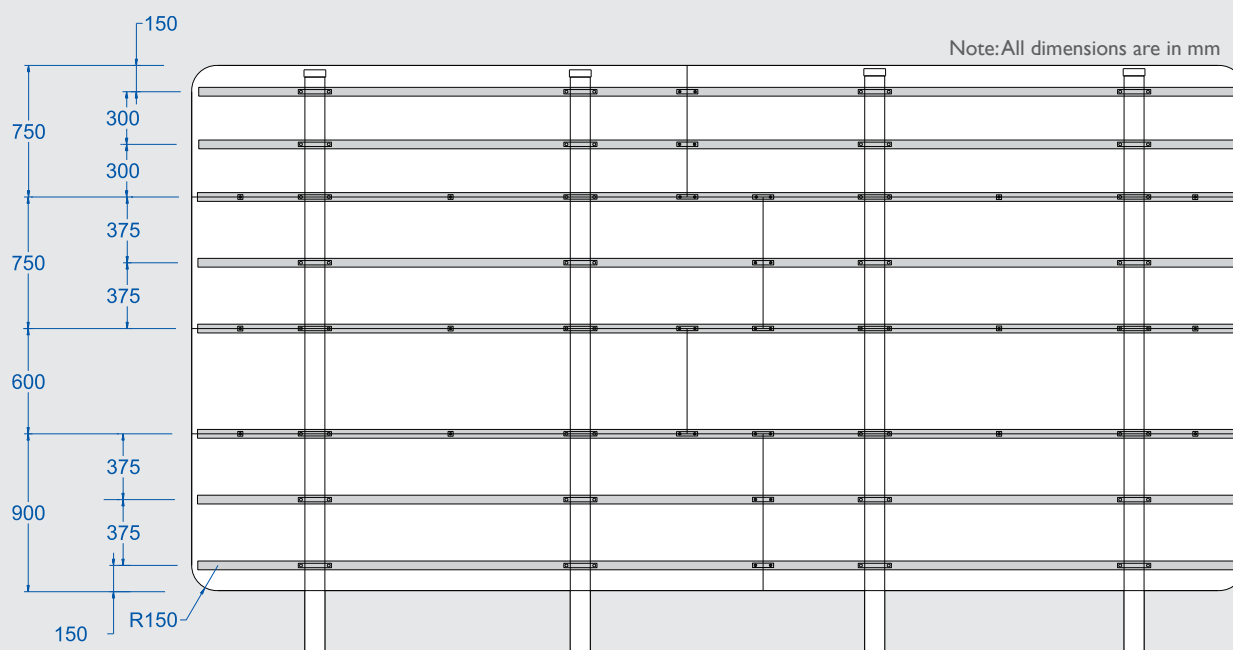
The Dovetail system is designed for large, multi-panel traffic signs. It is the biggest and strongest of our sections, with z-values at least 10% greater than any other equivalent section on the market. The two-part arrangement incorporates a main channel and supporting 'mate', which interlock to create the interface between the sign panels. Together, they combine to provide the ultimate modular, stacking sign system.

The top and bottom extrusions on any assembly should be brought in from the horizontal edge of the plate by approximately 75mm, to keep the extrusions and fixings concealed from front view and to avoid possible interference with externally fitted post caps.



**Joining / support methods for the Dovetail are as following:**

- Joining Fixings – Channel Coupling – should be used for joins falling between post centres. Note, signs constructed in this way should have the joins staggered as shown in diagram.
- Support Fixings – C Clips (DCCL) – provide additional support to intersections. Use on exposed overhangs outside main support posts greater than 1.0 metre, or between posts centres exceed 2.4 metres.



The Signfix spacing charts were developed from structural calculations and testing of Signfix extrusion designs to ensure compliance with current wind load requirements. The summary should not be extended to extrusions supplied by other manufacturers as they display different structural properties and deflection characteristics.

These charts are calculated around values based on the use of 2mm aluminium 5251 H34 sheet. They should not be applied to sign panels fabricated from alternative gauge composition of aluminium or steel or plastic substrates.

Wind pressure = 50m/sec NZS4203

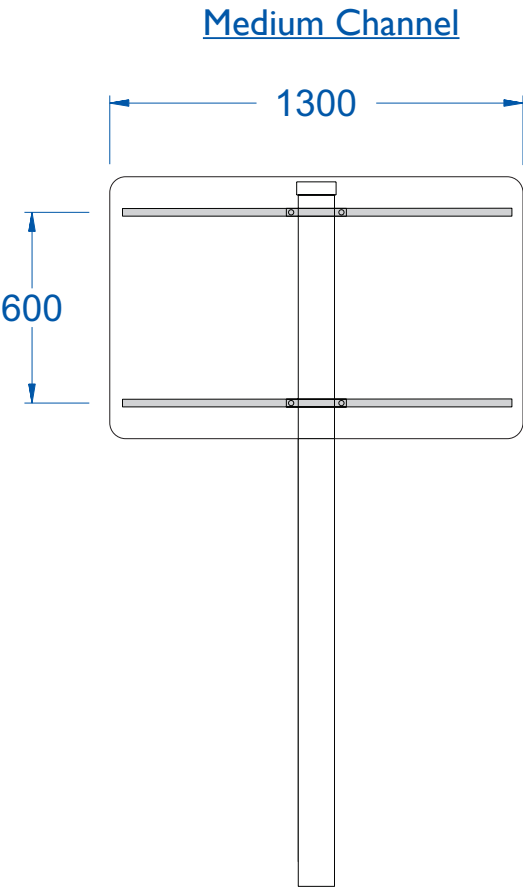
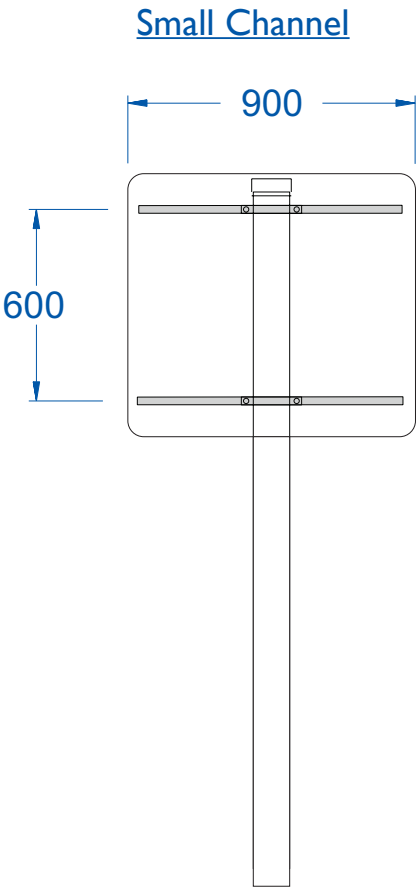
The charts are applicable to Signfix Small Channel, Medium Channel, ‘Interlink’ and ‘Dovetail’ extrusions. Although reference is made to post spacing’s, these charts do not provide guidance on the selection of the correct number, size or specification of posts. This should be the subject of separate structural calculations.

## Single panel on one or two posts

On single post installations do not exceed the maximum sign width shown in Table A (right).

Sign panel with a 0.6m channel spacing, centrally mounted on a single post.

Table A	Max Sign Width (w)
Small Channel	0.9m
Medium Channel	1.3m



Note: All dimensions are in mm

# Single panel on two or three posts

## Using These Charts:

### A. Calculating maximum Medium Channel spacings from known post centres

1. Use Table B to determine the maximum post centres and take note of the corresponding maximum channel spacing value.
2. Use Table C to determine the maximum overhang and take note of the corresponding maximum channel spacing value.
3. Compare the channel spacing values you have calculated from Tables B and C.
4. Adopt the worst case (lowest) reading of the two as the guide for the channel spacing to be adopted.

Table B Maximum Post Centres	
Post Centres	Maximum Medium Channel Spacing (m)
0.9	0.6
0.95	0.6
1	0.6
1.05	0.6
1.1	0.6
1.15	0.6
1.2	0.6
1.25	0.6
1.3	0.6
1.35	0.6
1.4	0.6
1.45	0.55
1.5	0.5
1.55	0.45
1.6	0.4
1.65	0.35
1.7	0.35

Table C Maximum Overhang	
Overhang	Maximum Medium Channel Spacing (m)
0.1	0.6
0.15	0.6
0.2	0.6
0.25	0.6
0.3	0.6
0.35	0.6
0.4	0.6
0.45	0.6
0.5	0.6
0.55	0.6
0.6	0.6
0.65	0.55
0.7	0.5
0.75	0.45
0.8	0.45

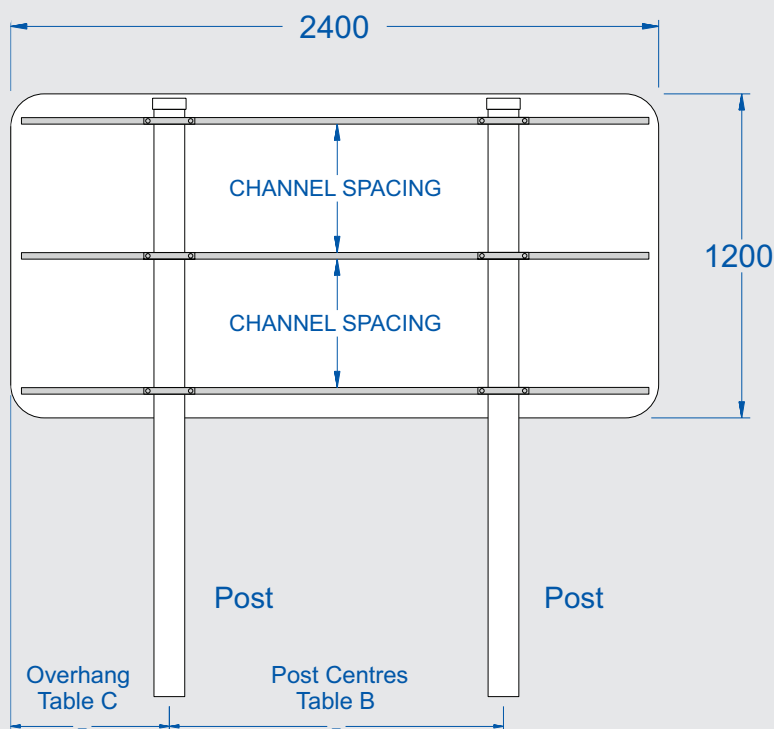
## Example:

### Two posts, Medium Channel, single panel:

If B is 1.6m and the maximum dimension of C is 0.5m. Then using Table B and C, the MAXIMUM spacing between channel will be 0.4m.

### B. Calculating maximum post centres from known channel spacings

Table B and C may be used in reverse to determine whether post centres exceed requirements for known channel spacings.



Note: All dimensions are in mm

## Using These Charts:

### A. Calculating maximum channel spacings from known post centres

1. Use Table D to determine the maximum post centres and note the corresponding maximum channel spacing value.
2. Use Table E to determine the maximum overhang and note the corresponding maximum channel spacing value.
3. Compare the channel spacing values you have calculated from Tables D and E.
4. Adopt the worst case (lowest) reading of the two as the guide for the channel spacings to be adopted.

**Table D - Maximum Post Centres**

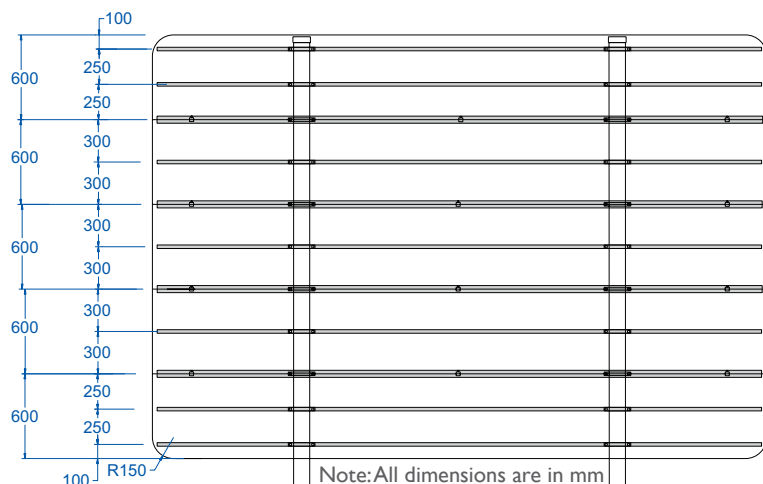
Post Centres	Maximum Channel Spacings (m)		
	Interlink Mate	Interlink	Dovetail Mate
0.9	0.6	0.6	0.6
0.95	0.6	0.6	0.6
1.0	0.6	0.6	0.6
1.05	0.6	0.6	0.6
1.1	0.6	0.6	0.6
1.15	0.6	0.6	0.6
1.2	0.6	0.6	0.6
1.25	0.6	0.6	0.6
1.3	0.6	0.6	0.6
1.35	0.6	0.6	0.6
1.4	0.6	0.6	0.6
1.45	0.55	0.6	0.6
1.5	0.5	0.6	0.6
1.55	0.45	0.6	0.6
1.6	0.45	0.6	0.6
1.65	0.4	0.55	0.6
1.7	0.35	0.5	0.6
1.75	0.35	0.45	0.6
1.8		0.4	0.6
1.85		0.4	0.6
1.9		0.35	0.6
1.95			0.6
2.0			0.6
2.05			0.6
2.1			0.6
2.15			0.6
2.2			0.6
2.25			0.6
2.3			0.6
2.35			0.6
2.4			0.55
2.45			0.5
2.5			0.5
2.55			0.45
2.6			0.45
2.65			0.4
2.7			0.4
2.75			0.35
2.8			0.35
2.85			0.35
2.9			0.3
2.95			0.3
3.0			0.3

### B. Calculating maximum post centres from known channel spacings

Tables D and E may be used in reverse to determine whether post centres exceed requirements for known channel spacings.

**Table E - Maximum Overhang**

Overhang	Maximum Channel Spacing (m)		
	Interlink Mate	Interlink	Dovetail Mate
0.1	0.6	0.6	0.6
0.15	0.6	0.6	0.6
0.2	0.6	0.6	0.6
0.25	0.6	0.6	0.6
0.3	0.6	0.6	0.6
0.35	0.6	0.6	0.6
0.4	0.6	0.6	0.6
0.45	0.6	0.6	0.6
0.5	0.6	0.6	0.6
0.55	0.6	0.6	0.6
0.6	0.6	0.6	0.6
0.65	0.6	0.6	0.6
0.7	0.5	0.6	0.6
0.75	0.45	0.6	0.6
0.8	0.35	0.5	0.6
0.85		0.4	0.6
0.9		0.35	0.6
0.95		0.45	0.6
1.0		0.4	0.6
1.05		0.4	0.6
1.1		0.35	0.6
1.15			0.55
1.2			0.55



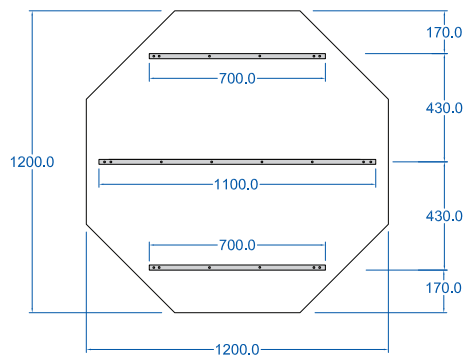
This is designed to show details of channel spacings and channel types for Permanent Warning and Regulatory Sign types. Signfix Charts have been calculated around values based on the use of 2.0mm aluminium 5251 H34 sheet. They should not be applied to sign panels fabricated from alternative gauge aluminium, steel or plastic substrates.

Signfix Channel Charts should not be applied to channel of different design, profile and alloy content.

Note: All dimensions are in mm.

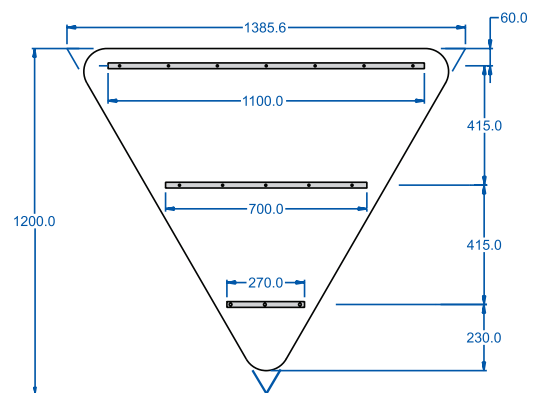
## RG5 Stop Sign 1200mm

Medium Channel



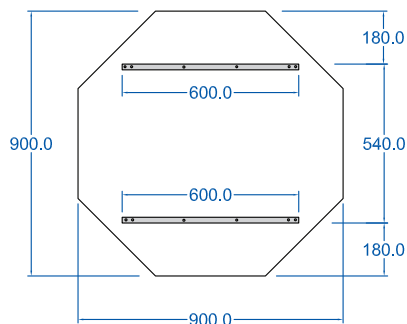
## RG6 Give Way Sign 1200mm

Medium Channel



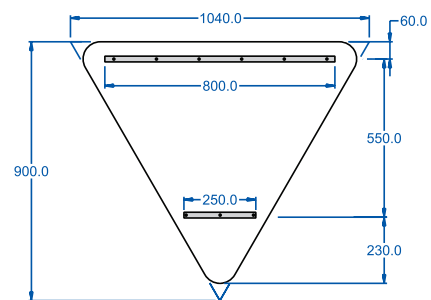
## RG5 Stop Sign 900mm

Small Channel



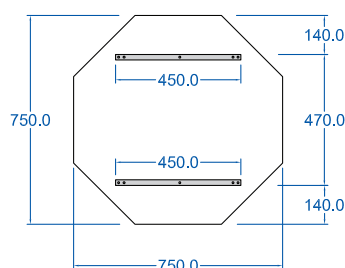
## RG6 Give Way Sign 900mm

Small Channel



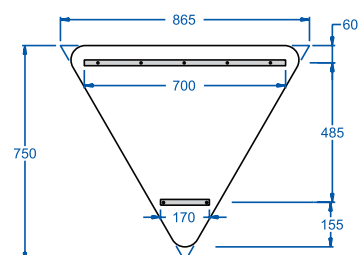
## RG5 Stop Sign 750mm

Small Channel



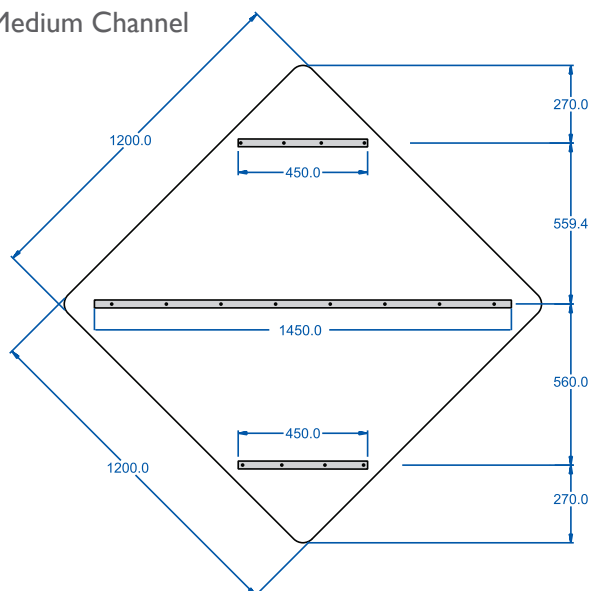
## RG6 Give Way Sign 750mm

Small Channel



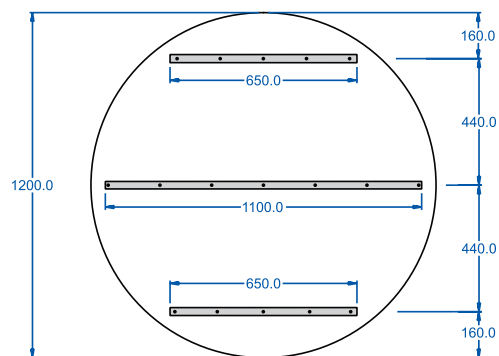
## PW Diamond 1200mm

Medium Channel



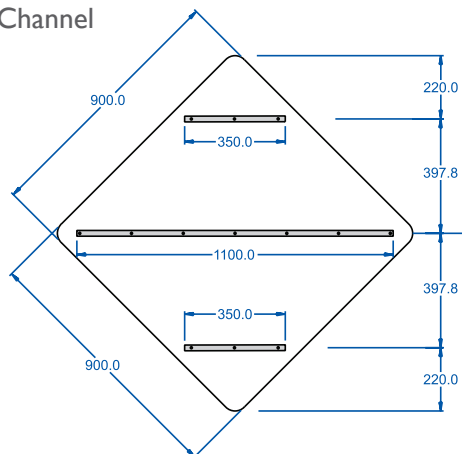
## Circles 1200mm

Medium Channel



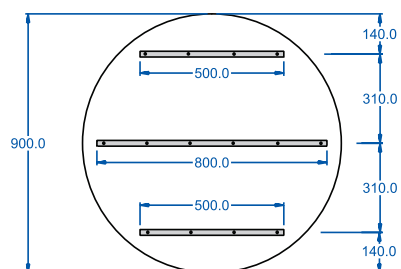
## PW Diamond 900mm

Small Channel



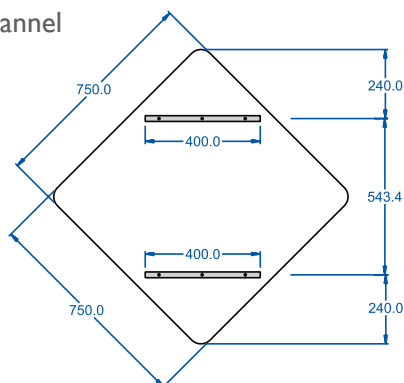
## Circles 900mm

Small Channel



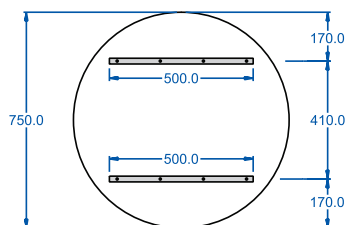
## PW Diamond 750mm

Small Channel



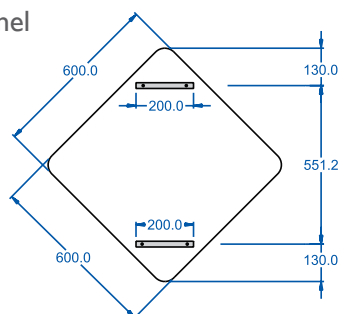
## Circles 750mm

Small Channel



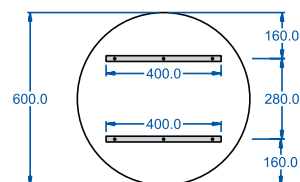
## PW Diamond 600mm

Small Channel



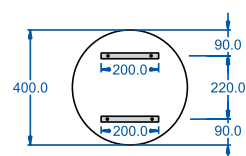
## Circles 600mm

Small Channel



## Circles 450mm

Small Channel



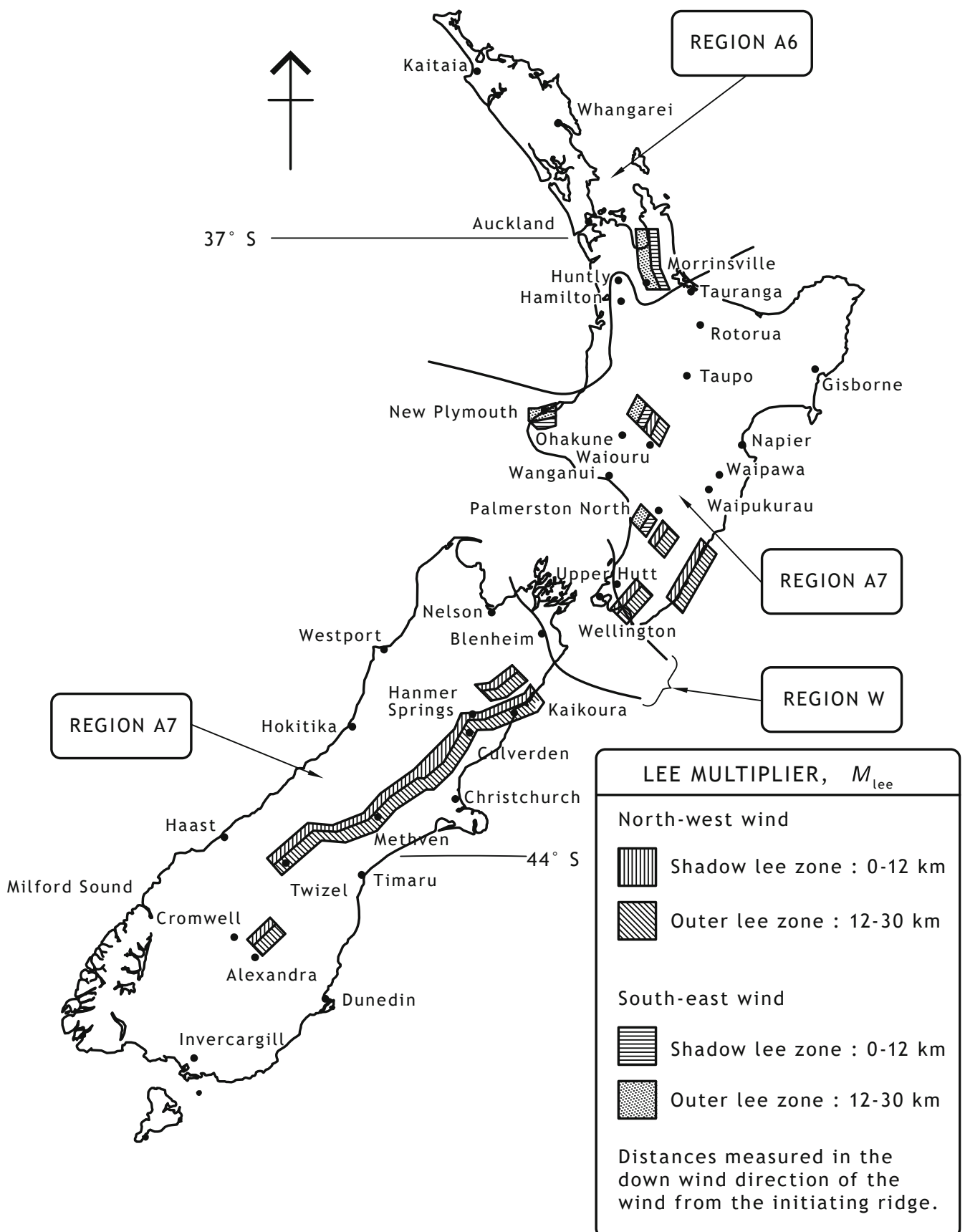


The charts (refer to charts 1 & 2) can be used for the selection of typical post sizes for small signs (sign panel area less than or equal to 4.7m<sup>2</sup>) located at the roadside but note the following apply:

1. Charts are based on open terrain (Terrain Category 2) with gentle topography ( $M_h = 1.0$ ). A conservative approach for signs in hilly terrain (with slopes up to 1 vertical to 5 horizontal), is to multiply the sign area by 1.35 before entering the chart to select the post sizes required. If in shadow lee zones, or areas of known channelling, multiply the sign area by 1.8 before entering the chart. For more severe topography, or a less conservative approach, a specific design is required.
2. For posts in terrain category 3 the sign area may be multiplied by 0.8 before entering the chart to select the post sizes required.
3. A structure importance level of 1 has been used, with an annual probability of exceedance for and ultimate limit state for wind loading of 1/50.
4. A drag force coefficient of 1.5 has been applied, ( $C_d = 1.5$ ).
5. The charts are for single post installations.  
For multiple post installations refer below.
6. Design to AS/NZS 1170 is required for signs at an elevation greater than 500m above sea level.

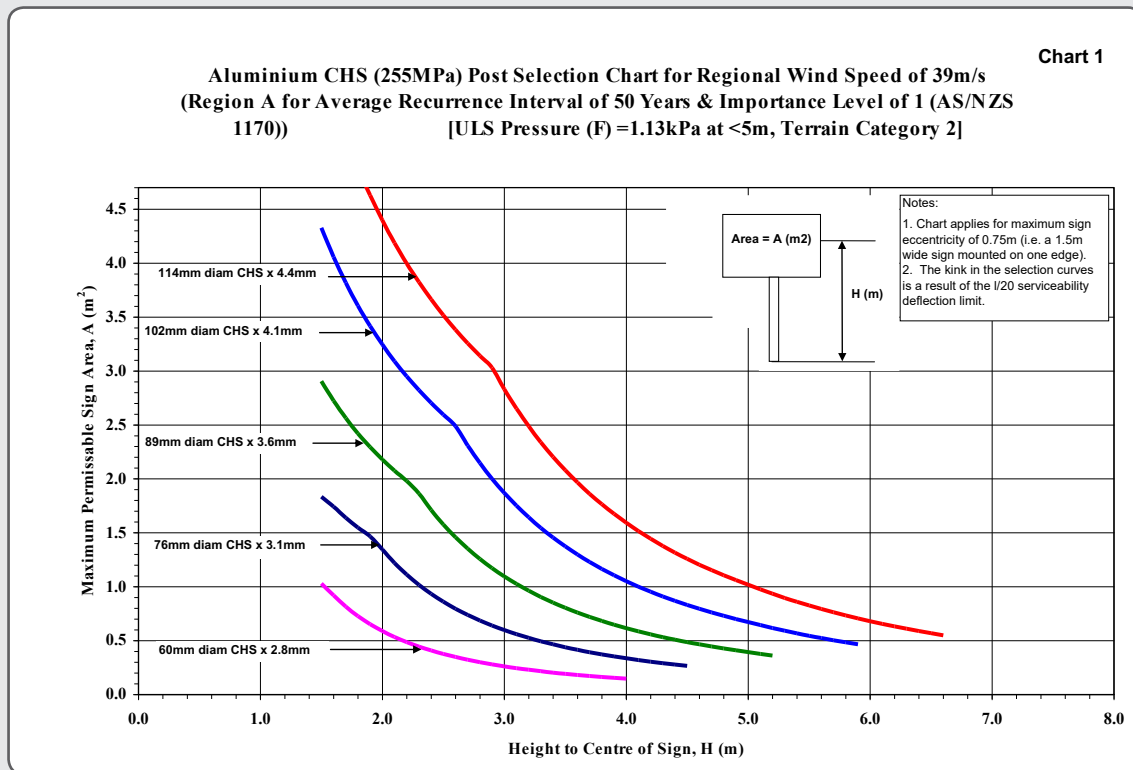
## How to Use the Charts

1. Select the appropriate wind speed for the given sign location. The charts for the regional wind speed of 45m/s apply to Wellington and the Marlborough Sounds, (Region W). The charts for a regional wind speed of 39m/s apply to all other regions, (Regions A6 & A7).
2. Consider the local topography as outlined above and adjust sign area to be entered if necessary.
3. For single post installations select the appropriate sign area (A) and follow the chart across to find the intercept with the required sign height (H) measured from ground level to the centre of the sign panel. The section size required is the one for the curve above this point of intersection.
4. For multiple post installations the required sign area (A) must be multiplied by  $(1.15/n)$  before entering the chart, where n is the number of posts to be used.



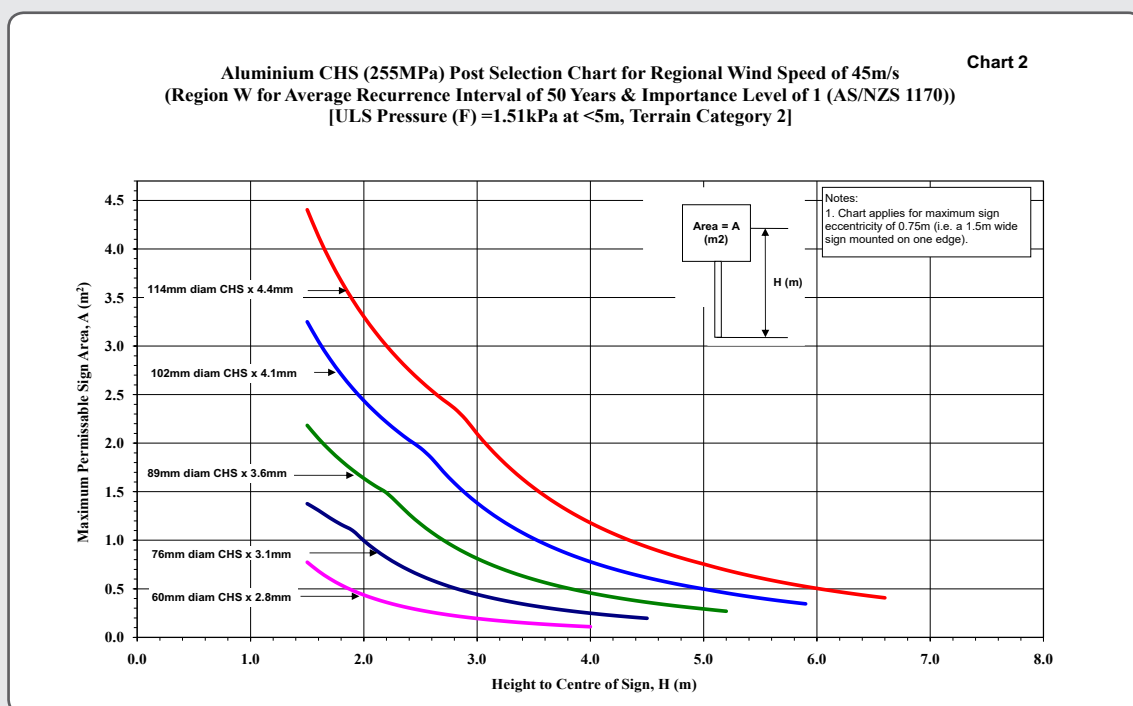
# Post Selection for Wind Speed of 39m/s

To meet the strength requirements of AS/NZS 1170 and cited by the RSMA standard, the maximum sign Area "A" should not exceed that given in the following charts.



RSMA Compliance Standard for Traffic Signs; Amendment No. 1

# Post Selection for Wind Speed of 45m/s



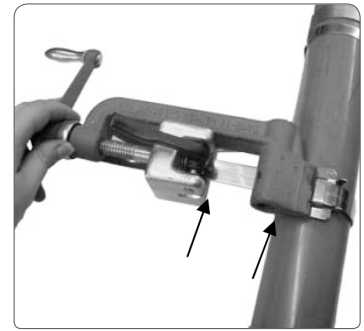
RSMA Compliance Standard for Traffic Signs; Amendment No. 1



The Band may be used from bulk roll as this completely eliminates waste of band. Slide buckle on band as shown, bringing end of band around object to be clamped and again through buckle. Note: The tension screw thread should be lubricated regularly.



Continue the band around the object once more and again through buckle. Double banding develops a great deal more radial compression than single banding. Bend the end of the band under the buckle.



Place the band in the opening of the tool nose and gripper block. Move into the slot as far as possible, to avoid the buckle sliding into the tool nose. Tighten the band clamp by turning the tension handle clockwise while holding the band gripper tight against the band. Note: The spring load of the band gripper is not intended to secure and prevent the band from slipping during the tension process.



Place finger on the Band-It Band at the buckle bridge while tensioning with the tool handle. Once you feel the Band-It Band stop moving, maximum pressure has been exerted. Stop turning the handle.



Roll the tool over the buckle, backing off with the tension handle throughout the entire rolling operation. Failure to back off with the tension handle through-out the entire course of roll-over may result in breaking of the band. There is no loss of tension as the band release is used up in the bend.



Pull the cutting handle to cut the band.



Remove the tool, holding the stub of band down with thumb.



Hammer down the buckle ears to hold the band stub in place to complete the Band-It clamp.