

Signfix[®]
A U S T R A L I A

PRODUCT CATALOGUE



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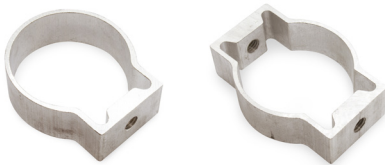
BRACKETS & CLAMPS

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BRACKETS & CLAMPS

ALUMINIUM BRACKETS & FIXINGS

Structural aluminium alloy brackets that offer a robust fitting for small flat signs on 50mm NB and 65mm NB poles. Highly resistant to corrosion and impacts.



SINGLE AND DOUBLE SIDED BRACKETS

CODE	DESCRIPTION	QTY (BOX)
TD1SGNFX	50MM NB ALUM RING BRACKET	200
TD2SGNFX	50MM NB D/SIDED ALUM RING BRACKET	200

BOLTS & WASHERS NOT INCLUDED



FRISBEE BRACKET

CODE	DESCRIPTION	QTY (BOX)
RZ200	50MM NB FRISBEE HALF BRACKET	100

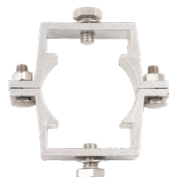
BOLTS & WASHERS NOT INCLUDED



SINGLE SIDED HEAVY DUTY DOUBLE BOLT UNI-CLAMP

CODE	DESCRIPTION	QTY (BOX)
AU060MCH-02	50MM NB ALUM UNI-CLAMP S/SIDED	50
AU076MCH-02	65MM NB ALUM UNI-CLAMP S/SIDED	50

BOLTS, WASHERS AND NUTS INCLUDED



DOUBLE SIDED HEAVY DUTY DOUBLE BOLT UNI-CLAMP

CODE	DESCRIPTION	QTY (BOX)
AU0060BMCH-02	50MM NB ALUM UNI-CLAMP D/SIDED	50
AU0076BMCH-02	65MM NB ALUM UNI-CLAMP D/SIDED	50

BOLTS, WASHERS AND NUTS INCLUDED



SINGLE BOLT UNI-CLAMP BRACKETS

CODE	DESCRIPTION	QTY (BOX)
TD1UNI060	50MM NB TWO PIECE TD1 TYPE UNI-CLAMP	100
TD1UNI076	65MM NB TWO PIECE TD1 TYPE UNI-CLAMP	50

BOLTS & WASHERS INCLUDED



M10 FIXING BOLTS

CODE	DESCRIPTION	QTY (BOX)
M10-HEXCP21	M10 X 21MM M/G CONE POINT HEX	100
M10-HEXCP25	M10 X 25MM M/G CONE POINT SET SCREW	100
M10-16HEXSET	M10 X 16MM M/G HEX SET SCREW	100
M10-MGWASH	M10 X 2MM M/G FLAT WASHER	100
M10-SSWASH	M10 X 1.2MM S/S FLAT WASHER	100

STEEL CHANNEL CLAMPS, BRACKETS & FIXINGS

Signfix clamps, brackets and clips secure signs to posts of every shape and size. Signs installed using Signfix products offer greater on-site flexibility and can be offset with ease.

The stainless steel product range is manufactured using AISI 304 alloy, a highly durable material particularly beneficial when impact resistance and anti-corrosion is important.

The stainless steel fittings have been subjected to ASTM B117 salt-spray testing for 500 hours with no significant corrosion. They are highly suitable in coastal regions.

With a market presence of over 20 years, the Signfix range of superior quality products have proven longevity.



SINGLE BOLT SADDLE BRACKETS

CODE	DESCRIPTION	QTY (BOX)
ARC060CH	S/STEEL BRACKET FOR 50MM NB POLE	200
ARC076CH	S/STEEL BRACKET FOR 65MM NB POLE	200
ARC089CH	S/STEEL BRACKET FOR 80MM NB POLE	100
ARC102CH	S/STEEL BRACKET FOR 90MM NB POLE	100
ARC114CH	S/STEEL BRACKET FOR 100MM NB POLE	100

BOLTS & NUTS NOT INCLUDED



DOUBLE BOLT SADDLE BRACKETS

CODE	DESCRIPTION	QTY (BOX)
HDTB140CH	S/STEEL 2 BOLT BRACKET FOR 125MM NB POLE	50
HDTB165CH	S/STEEL 2 BOLT BRACKET FOR 150MM NB POLE	50

BOLTS & NUTS NOT INCLUDED



MILD STEEL GALVANISED STIRRUP BRACKET C/W NUT & BOLT

CODE	DESCRIPTION	QTY (BOX)
STRB060G	GALV STEEL BRACKET FOR 50MM NB POLE	100
STRB076G	GALV STEEL BRACKET FOR 65MM NB POLE	100

BOLT & NUT INCLUDED

BRACKETS & CLAMPS

STEEL CHANNEL CLAMPS, BRACKETS & FIXINGS



RSJ M10 TOE CLAMP C/W TEE BOLT, WASHER & NYLOC NUT

CODE	DESCRIPTION	QTY (BOX)
RSJ003	M10 S/STEEL TOE CLAMP C/W 50T BOLT & NUT	200

BOLT & NUT INCLUDED



BACK TO BACK CLIPS

CODE	DESCRIPTION	QTY (BOX)
BBC060CH	S/STEEL CLIP FOR 50MM NB POLE	400
BBC076CH	S/STEEL CLIP FOR 65MM NB POLE	400
BBC089CH	S/STEEL CLIP FOR 80MM NB POLE	400
BBC102CH	S/STEEL CLIP FOR 90MM NB POLE	400

BOLT & NUT NOT INCLUDED



RHS BRACKETS

CODE	DESCRIPTION	QTY (BOX)
LRH5050CH	50 X 50MM S/STEEL LRH* BRACKET	100
LRH7550CH	75 X 50MM S/STEEL LRH* BRACKET	100
LRH7575CH	75 X 75MM S/STEEL LRH* BRACKET	100
LRH3876CH	38 X 76MM S/STEEL LRH* BRACKET	100
LRH8989CH	89 X 89MM S/STEEL LRH* BRACKET	100
LRH1005CH	100 X 50MM S/STEEL LRH* BRACKET	100
LRH1010CH	100 X 100MM S/STEEL LRH* BRACKET	100
LRH12575CH	125 X 75M S/STEEL LRH* BRACKET	100
HRH1510CH	150 X 100MM S/STEEL RHS** BRACKET	100
HRH2010CH	200 X 100MM S/STEEL RHS** BRACKET	100
HRH2515CH	250 X 150MM S/STEEL RHS** BRACKET	100

*LIGHT RECTANGULAR HOLLOW SECTION POSTS **HEAVY RECTANGULAR HOLLOW SECTION POSTS
BOLT & NUT NOT INCLUDED



FIXINGS FOR STAINLESS STEEL CHANNEL CLAMPS & BRACKETS

CODE	DESCRIPTION	QTY (BOX)
M10-32CHB	M10 X 32MM MECHANICALLY GALVANISED CUP HEAD NUT & BOLT	100
M10-40CHB	M10 X 40MM MECHANICALLY GALVANISED CUP HEAD NUT & BOLT	200
M10-32T	M10 X 32MM MECHANICALLY GALVANISED TEE BOLT & NUT	500
M10-50TNYLOC	M10 X 50MM MECHANICALLY GALVANISED TEE BOLT & NYLOC NUT	100
M10-50T-SET	M10 X 50MM MECHANICALLY GALVANISED TEE BOLT & HEX NUT	100

ALUMINIUM CHANNEL

The aluminium alloy M10 channel provides a robust structure for Signfix clamps, brackets and fixings.

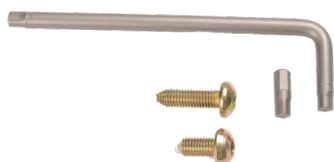


M10 CHANNEL

CODE	DESCRIPTION	QTY (BOX)
M10-CHANNEL/6	M10 CHANNEL 6M LENGTH MILL	PER LENGTH

ANTI-THEFT VANDAL PROOF FIXINGS

High performance M10 trilobular fixings to prevent theft and vandalism.



TRILOB SPANNER / TRILOB DRILL BIT / TRILOB BOLT

CODE	DESCRIPTION	QTY (BOX)
TRIOBSPAN	M10 TRILOBULAR SPANNER	EACH
TRIOBKEY	SECURITY KEY FOR TRILOBULAR SCREW	EACH
M10-TRIOB20SS	M10 X 20MM TRILOBULAR COUNTERSUNK SET SCREW ZY	100
M10-TRIOB21CP	M10 X 21MM TRILOBULAR CONE POINT SET SCREW ZY	100
M10-TRIOB25ZY	M10 X 25MM TRILOBULAR SET SCREW ZY	100
M10-TRIOB25SS	M10 X 25MM TRILOBULAR SET SCREW SS	100
M10-TRIOB40	M10 X 40MM TRILOBULAR BOLT ZY	100



SHEAR NUTS GALVANISED M10

CODE	DESCRIPTION	QTY (BOX)
M10-SHEARNG	M10 SHEAR NUT GALV	100

BRACKETS & CLAMPS

STREET BLADE BRACKETS

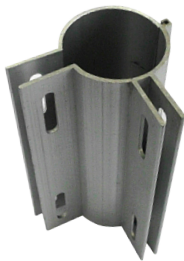
Street blade brackets are available for 50NB & 65NB poles.



SNB 1 WAY

CODE	DESCRIPTION	QTY (BOX)
SNB-150-50	50MM NB X 150 STREET NAME BLADE BRACKET	EACH
SNB-200-50	50MM NB X 200 STREET NAME BLADE BRACKET	EACH
SNB-150-65	65MM NB X 150 STREET NAME BLADE BRACKET	EACH
SNB-200-65	65MM NB X 200 STREET NAME BLADE BRACKET	EACH

BOLTS, WASHERS AND NUTS INCLUDED



SNB 2 WAY

CODE	DESCRIPTION	QTY (BOX)
SNB2-150-50	50MM NB X 150 2 WAY STREET NAME BLADE BRACKET	EACH
SNB2-200-50	50MM NB X 200 2 WAY STREET NAME BLADE BRACKET	EACH

BOLTS, WASHERS AND NUTS INCLUDED



SNB 3 WAY

CODE	DESCRIPTION	QTY (BOX)
SNB3-150-50	50MM NB X 150 3 WAY STREET NAME BLADE BRACKET	EACH
SNB3-200-50	50MM NB X 200 3 WAY STREET NAME BLADE BRACKET	EACH

BOLTS, WASHERS AND NUTS INCLUDED



MINI OFFSET BRACKET

CODE	DESCRIPTION	QTY (BOX)
OSBMSNP-01	MINI OFFSET BRACKET C/W TWO M10 SLOTTED HOLE ANGLE	EACH

BOLTS, WASHERS AND NUTS NOT INCLUDED

BAND-IT® BANDS, BUCKLES & BRACKETS

Signfix offers the sign industry the versatility of stainless steel bands and fittings specially designed and packaged for sign makers and installers. The premium quality stainless steel is compatible with other Signfix materials, suiting small to large diameter poles.



201 GRADE S/STEEL BAND, BUCKLES AND BANDING TOOL

CODE	DESCRIPTION	QTY (BOX)
STR13	13MM S/STEEL BAND X 30M COIL	5
STR16	16MM S/STEEL BAND X 30M COIL	5
STR19	19MM S/STEEL BAND X 30M COIL	5
C001	BANDING TOOL	1
BUC13	13MM S/STEEL BUCKLES (REGULAR)	100
BUC16	16MM S/STEEL BUCKLES (REGULAR)	100
BUC19	19MM S/STEEL BUCKLES (REGULAR)	100
RB138	10MM S/STEEL BAND (REGULAR) X 30M COIL	1
RS138	10MM S/STEEL BUCKLES (REGULAR)	100
BS192	PRE-CUT BANDS S/STEEL FOR 150MM OD POLE	50
BS193	PRE-CUT BANDS S/STEEL FOR 300MM OD POLE	50

STR13, STR16, STR19 – to calculate the approximate amount of banding required, multiply the pole diameter by 3.14 or pi (π), then add on an extra 120mm for fixing with the Band-It Tool, e.g. 114mm OD pole x 3.14 = 358mm + 120mm = 478mm.

Also available: 316 grade s/steel for coastal regions.



BANDING BRACKETS

CODE	DESCRIPTION	QTY (BOX)
UR151	FLARED 19MM HIGH BRACKET COMPLETE WITH M8 X 12MM SET SCREW AND WASHER MAXIMUM BAND WIDTH 13MM	100
UR251	FLARED 27MM HIGH BRACKET COMPLETE WITH M8 X 16MM SET SCREW AND WASHER MAXIMUM BAND WIDTH 19MM	100
UR251CH	FLARED 29MM HIGH BRACKET COMPLETE WITH M10 X 16MM SET SCREW AND WASHER MAXIMUM BAND WIDTH 19MM	200
MR135-9	135MM LONG S/STEEL BANDING BRACKET	100
D007	L BANDING BRACKET	50
UCC002	M10 UNIVERSAL CHANNEL CLAMP	100

BRACKETS & CLAMPS

HAZARD BOARD BRACKET KIT

Available from Signfix, Hazard Board Heavy Duty Brackets are designed to mitigate road signs spearing vehicle windscreens. TMR Queensland has developed and tested a new design and issued Standard Drawing 1452. By strengthening the post connections with heavy duty clamps, the risk of sight board signs spearing is reduced as the sign is pulled down with the post on impact, rather than sliding off the post.

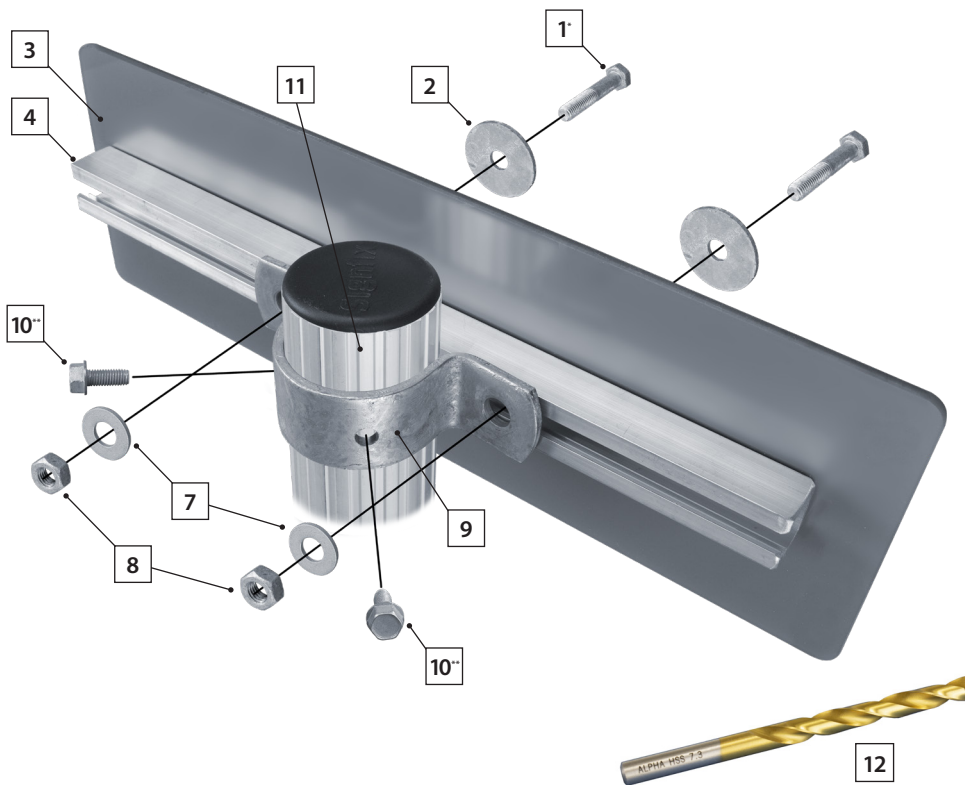
This project was awarded the 2018 Innovation Award at the Department of Transport and Main Roads Engineering Technology Forum

HAZARD BOARD HEAVY DUTY BRACKET KIT

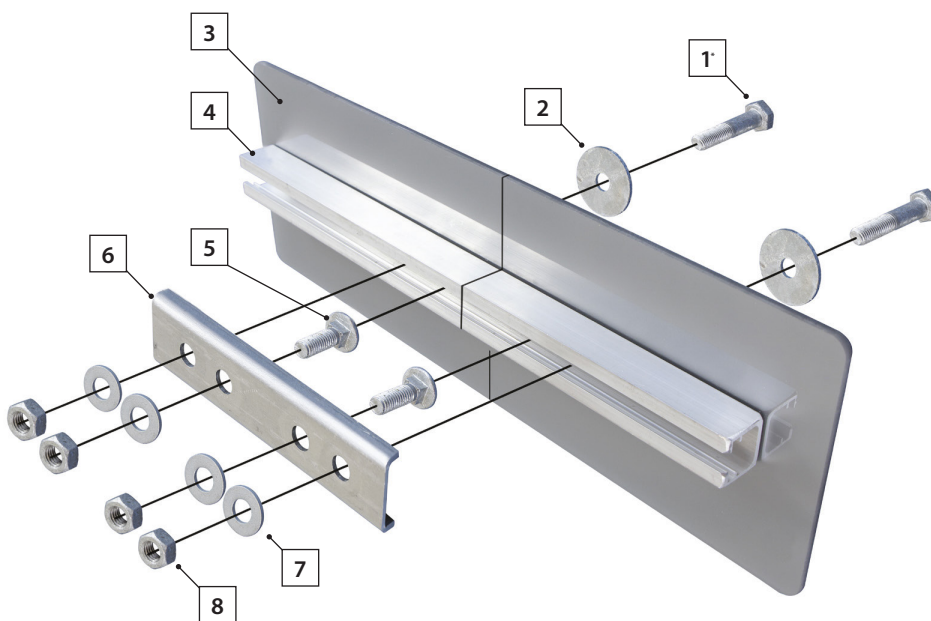
CODE	DESCRIPTION
HAZ-BRACKETKIT	HAZARD BOARD HEAVY DUTY BRACKET KIT QLD TMR SPECIFICATION DRAWING SD1452



COMPONENT ASSEMBLY



SPLICE PLATE ASSEMBLY CONNECTION AT SIGN JOINT



COMPONENT LIST

ITEM	DESCRIPTION
1*	M10 X 55 HEX BOLD. GRADE 4.6 GALVANISED
2	FLAT WASHER 40 OD X 11 ID X 2MM THICK GALVANISED
3***	ALUMINIUM SIGN FACE
4***	TYPE 1 ALUMINIUM STIFFENER RAIL
5	M10 X 30 COACH BOLT. GRADE 4.6 GALVANISED
6	SPLICE PLATE ALUMINIUM
7	M10 FLAT WASHER GALVANISED
8	M10 HEX NUT. GRADE 4.6 GALVANISED
9	HEAVY DUTY POST CLAMP GALVANISED
10**	M8 X 20 TAPITE HEX SELF-TAPPING SCREW
11	SIGN POST 60 OD
12	7.3MM DRILL BIT

Notes:

* Drill 10mm dia. holes through stiffener rail and sign face to fit M10 bolts.

** Drill 7.3 dia. holes in post to accept Tapitite screws

*** NI = Not Included

FRANGIBLE SIGN SUPPORT STRUCTURES

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FRANGIBLE SIGN SUPPORT STRUCTURES

INTRODUCTION

Signfix™ is Australia's leading frangible aluminium signpost range and used extensively by state and territory road authorities. In addition to its compliant passive safety features, Signfix is popular with construction contractors due to its lightweight design and ease of installation.

The Signfix range can be installed as a single sign support or a multi leg assembly. The system allows up to 16m² single sign dimensions in the major Australia wind zone regions.

We are pleased to introduce **Optimast**® into the market, a complimentary frangible signpost range for larger sign dimensions of up to 40m² across the major Australia wind regions. The increased signage area enables road designers and engineers to specify passive sign structures for large scale traffic messaging such as highway directional signage.

Both the Signfix and Optimast ranges are convenient *out of the box* products, thus requiring very little intervention from sign installation crews or civil engineers.

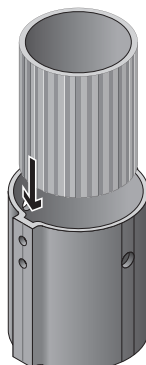


Signfix frangible poles range 60-114mm in outer diameter and hold up to 16m² road signs in Australian wind regions.

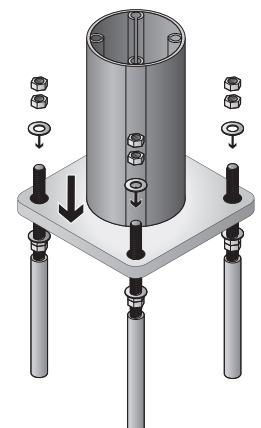


Optimast range 127-244mm in diameter and hold up to 40m² road signs in Australian wind regions

- > Signfix fluted poles come in 3.2m-6.5m lengths, depending on the pole diameter.
- > Pole sizes: Ø60mm, Ø76mm, Ø89mm, Ø102mm, Ø114mm.
- > Poles inserted into corresponding sized aluminium ground sleeve sockets, set in concrete foundations.
- > Ground sleeves vary 300-1000mm in length
- > Upon vehicle impact, the sleeve acts as a shear point, safely breaking away the pole at the socket top.



- > Optimast poles come in 5.0m-8.0m lengths, depending on the pole diameter
- > Pole sizes: Ø127mm, Ø168mm, Ø219mm, Ø244mm.
- > Poles are affixed to base plates with shear bolts.
- > The base plates are attached to anchor cradles set in concrete with foundation bolts.
- > Upon vehicle impact, shear bolts safely breakaway the pole from the base plate.

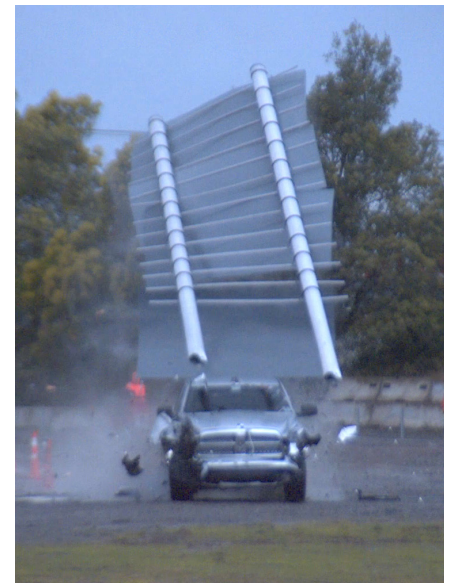


MASH APPROVAL

Austrroads, the peak body of Australasian road transport and traffic agencies, require new and existing road safety products to comply to the updated testing guidelines of AS/NZS3845.1 (2015) and AS/NZS3845.2 (2017). Road safety products must now be tested to the American Association of State Highway and Transport Officials (AASTO) 2009 Manual for Assessing Safety Hardware (MASH) guidelines. MASH testing supersedes NCHRP 350 testing for Australia and New Zealand road barrier products.

After extensive vehicle impact tests were undertaken on the Signfix and Optimast product ranges by a leading FHWA testing facility, the Signfix and Optimast product ranges are MASH compliant and approved by Austrroads Safety Barrier Assessment Panel (ASBAP) for use on Australia and New Zealand road networks.

Signfix and Optimast product ranges are MASH compliant and approved by Austrroads Safety Barrier Assessment Panel (ASBAP) for use on Australia and New Zealand road networks.

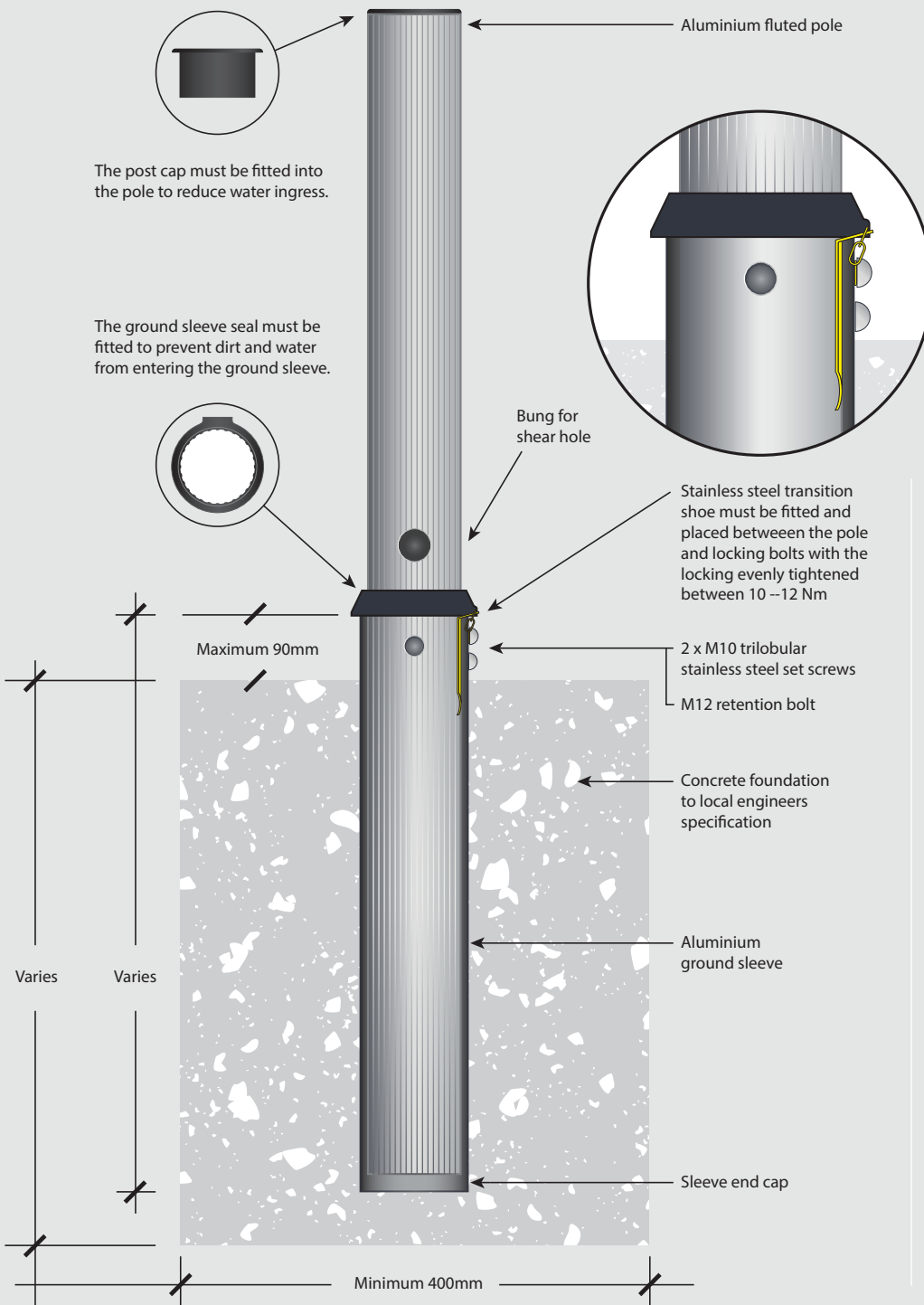


MASH APPROVED



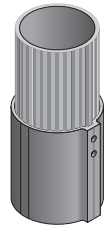
MASH test reports for Signfix and Optimast are available upon request.

FEATURES OF THE SIGNFIX® SYSTEM



The requirement to meet stringent MASH testing guidelines have led to modifications of the Signfix frangible sign support product range as detailed below:

SIGNFIX NCHRP 350 COMPLIANT DESIGN (100NB)

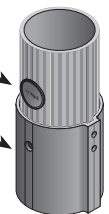


Product Codes
AFP114/6.5
SLV1141000

SIGNFIX MASH COMPLIANT DESIGN (100NB)

2 sealed apertures located 90° each side from facing traffic

Restraint bolt to secure sleeve and pole



Product Codes
AFPM114/6.5
SLVM1141000



ROAD SAFETY

- > Longstanding performance in Australia conditions.
- > The patented Signfix fluted pole and socket system meets or exceeds the MASH testing thresholds for frangible structures.
- > Successfully undertaken rigorous impact testing with 1100kg and 2270kg vehicles at speeds of 30km/h and 100km/h by a leading FHWA accredited testing agency.
- > Occupant Impact Velocity below the preferred 3.0m/s thresholds (4.9m/s maximum).
- > Occupant Ride-down Deceleration well below the preferred 15.0g threshold.
- > Deformations of vehicle occupant department and post impact vehicle trajectory within acceptable limitations.



INSTALLATION

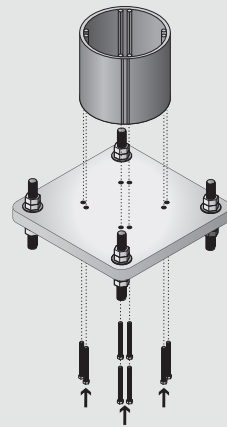
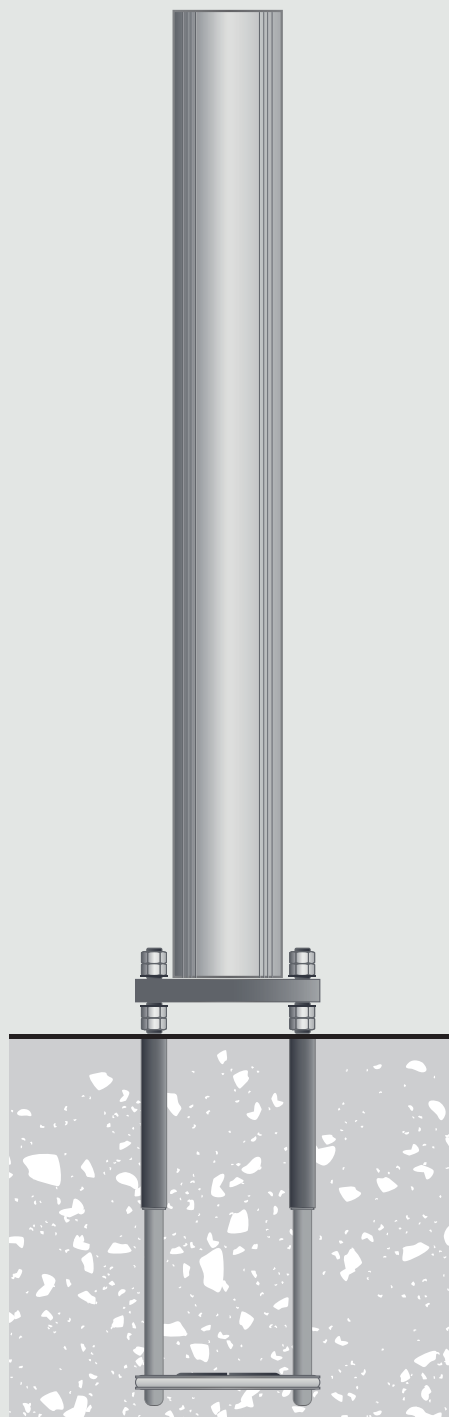
- > The lightweight extruded aluminium components are easy to handle and convenient to transport.
- > Simple to install with no specialist equipment required – props are not required for installing ground sleeves and larger poles during the foundation hardening process.
- > Damaged poles are easily removed, and replacement poles re-installed into existing sleeve foundations.
- > Wind chart system allows installers to easily determine optimal pole configuration (number of poles and size).
- > Clear instruction manuals provided.



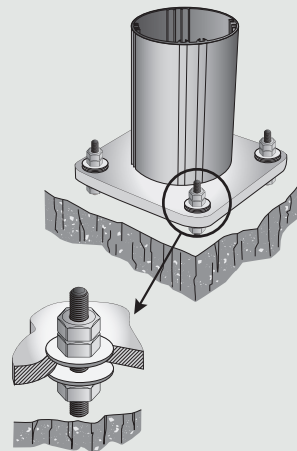
DESIGN

- > Structurally designed to support a sign area of up to 16m².
- > The fluted pole diameter sizes fit all standard bracket types.
- > Lightweight Signfix aluminium frangible poles are similar in strength to steel equivalents.
- > Patented stainless-steel transition shoe is supplied to prevent wear and eliminate any electrolysis action between the locking bolts and pole.
- > Revised MASH design range comes with polymer seals, plugs and caps to prevent water ingress.
- > Corrosion resistance from high quality marine grade aluminium alloy.

FEATURES OF THE OPTIMAST® SYSTEM

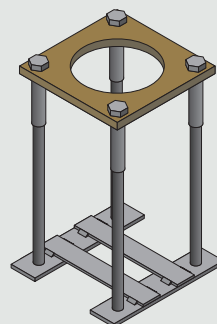


The extruded aluminium mast is delivered assembled with shear bolts attached to the base plate



The foundation bolt arrangements range from:

- > M16 (Ø127)
- > M20 (Ø168, Ø219)
- > M24 (Ø244)



The Anchor Cradle Assembly comprises of a pre-fabricated socket type anchor, a wooden 'template' that can be used for shuttering/battering purposes and 4 securing bolts. These bolts are used simply as an aid to cast the anchor cradle and as a means of preventing site debris from entering the socket(s).



ROAD SAFETY

- > Proven performance in the UK, Germany and France, Optimast complies to BS EN 12767 and has achieved the highest safety accreditation, 100 NE3.
- > The Optimast system meets or exceeds the MASH testing thresholds for frangible structures.
- > Successfully undertaken rigorous impact testing by a leading FHWA accredited testing agency.
- > Occupant Impact Velocity below the preferred 3.0m/s thresholds (4.9m/s maximum).
- > Occupant Ride-down Deceleration below the preferred 15.0g threshold.
- > Deformations of vehicle occupant department and post impact vehicle trajectory within acceptable limitations.



INSTALLATION

- > The extruded aluminium mast (5-8m lengths), shear bolts and base plate are delivered fully assembled.
- > Simple to install base plate with foundation bolts onto an anchor cradle socket set into a concrete foundation.
- > Easy to replace damaged poles, which are easily removed and re-installed onto existing foundations.
- > Wind chart system allows installers to easily determine optimal pole configuration (number of poles and size).
- > Clear instruction manuals provided.



DESIGN

- > Structurally designed to support large directional signs of up to 40m².
- > Signfix provides specialised Optimast clamps with rubber lining to affix mast to sign channel.
- > Strong extruded aluminium cylindrical design has similar strength to steel equivalents.
- > Corrosion resistant high-quality marine grade aluminium alloy.

50NB & 65NB SIGNFIX FRANGIBLE SIGN SUPPORTS

FLUTED ALUMINIUM POLES

The high-strength marine grade alloy used in 50NB and 65NB Signfix fluted aluminium poles is light weight and has excellent corrosion resistance.

Standard pole lengths:

50NB (60OD) > 3.2m, 4.0m & 4.5m

65NB (76OD) > 4.5m

ACCESSORIES AND COMPONENTS

SLEEVE WEDGE

Standard zinc plated wedge. 60OD and 76OD sleeves are designed to be fitted with a standard wedge, allowing sleeves to be installed flush at ground level.

POLY POST CAP & POLY SLEEVE SEAL

To reduce water ingress the poly cap and poly seal tightly form firm fits at the top of the post and sleeve.

RESTRAINT BOLT

Securing the pole in the sleeve retained with a kinmar security nut and SS bolt.

POWDER COATED ALUMINIUM GROUND SLEEVES

Designed to suit both 50NB and 60NB aluminium fluted and galvanised steel poles, Signfix ground sleeves are made from high strength marine grade alloy. The alloy has excellent corrosion resistance and over the years has proven performance with aluminium frangible poles.

GROUND SLEEVE LENGTHS

50NB (60OD) > 300mm, 400mm, 450mm & 600mm

65NB (76OD) > 600mm

Features include:

- > The external shape ensures sleeves will not rotate when set in concrete.
- > Internal dimensions of all sleeves are designed to be a snug fit with the pole.
- > Sleeves are fitted with PVC end caps to prevent concrete entering the sleeve during installation.

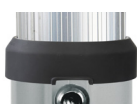
Sleeves can be supplied with an M10 tapped hole located 15mm below the sleeve top, to fit either an M10 hex bolt or a trilobular security set screw. This option is ideal for securing PVC poles and in this instance, it is recommended that the sleeves are placed 30mm above ground level.



65NB pole assembly



Poly Cap



Poly Sleeve Seal



Sleeve Wedge



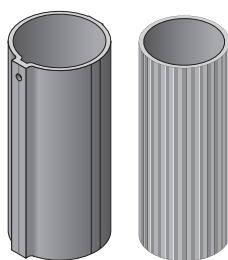
Restraint Bolt Assembly



50NB ground sleeves available in 300, 400, 450 and 600mm lengths

Patent protected

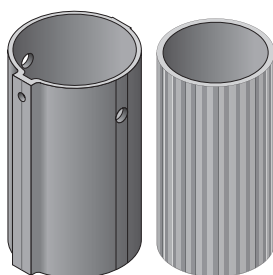
50NB (60OD) SIGNFIX FRANGIBLE POLES



50NB POLES, SLEEVES & ACCESSORIES

CODE	DESCRIPTION
AFP060/3.2	50MM NB X 3.2M ALUM FLUTED POLE MILL FINISH
AFP060/4	50MM NB X 4.0M ALUM FLUTED POLE MILL FINISH
SLV060300	50MM NB X 300MM ALUM GROUND SLEEVE FOR 50MM NB POLE
SLV060300-DT	50MM NB X 300MM ALUM GROUND SLEEVE FOR 50MM NB POLE DRILLED & TAPPED W TRILOB
SLV060400	50MM NB X 400MM ALUM GROUND SLEEVE FOR 50MM NB POLE
SLV060400-DT	50MM NB X 400MM ALUM GROUND SLEEVE FOR 50MM NB POLE DRILLED & TAPPED W TRILOB
SLV060450	50MM NB X 450MM ALUM GROUND SLEEVE FOR 50MM NB POLE
SLV060450-DT	50MM NB X 450MM ALUM GROUND SLEEVE FOR 50MM NB POLE DRILLED & TAPPED W TRILOB
SLV060600	50MM NB X 600MM ALUM GROUND SLEEVE FOR 50MM NB POLE
SLV060600-DT	50MM NB X 600MM ALUM GROUND SLEEVE FOR 50MM NB POLE DRILLED & TAPPED W TRILOB
SLVWEDGE060	GROUND SLEEVE WEDGE
POLYCAP060	50MM NB POLY POST CAP
POLYSEAL060	50MM NB POLY SLEEVE SEAL
AFPMRST060	RESTRAINT DEVICE TO SUIT 50MM NB POLE

65NB (76OD) SIGNFIX FRANGIBLE POLES



65NB POLES, SLEEVES & ACCESSORIES

CODE	DESCRIPTION
AFP076/4.5M	65MM NB X 4.5M ALUM FLUTED POLE MILL FINISH
SLV076600M	65MM NB X 600MM ALUM GROUND SLEEVE FOR 65MM NB POLE
POLEKIT076M	65NB KIT SET C/W POLYCAP076, POLYSEAL076, POLYPLUG076 X 2, M12 X 104MM RESTRAINT BOLT, KINMAR NUT, NYLON WASHER X 2
POLYCAP076	65MM NB POLY POST CAP
POLYSEAL076	65MM NB POLY SLEEVE SEAL
AFPRST076	RESTRAINT DEVICE TO SUIT 65MM NB POLE
KINMARSOCKETM	KINMAR DRIVE SOCKET - M12

M – Denotes MASH range

80NB, 90NB & 100NB SIGNFIX FRANGIBLE SIGN SUPPORTS

FLUTED ALUMINIUM POLES

The high-strength marine grade alloy used in 80NB, 90NB and 100NB Signfix fluted aluminium poles is light weight and has excellent corrosion resistance.

Standard pole lengths:

80NB (89OD) > 5.5m lengths

90NB (102OD) > 6.0m lengths

100NB (114OD) > 6.5m lengths

ACCESSORIES AND COMPONENTS

TRANSITION WEAR SHOE

80NB, 90NB and 100NB sleeves are designed to be fit with a transition shoe & two trilobular fasteners.

The patented stainless steel transition shoe fits between the aluminium pole wall and M10 trilobular locking bolts, to prevent fracture points and eliminate any electrolysis action. The innovative stainless steel transition shoe **MUST** be placed between the pole and locking bolts and tightened evenly between 10 and 12 Nm.

POLY POST CAP & POLY SLEEVE SEAL

To reduce water ingress the poly cap and poly seal tightly form firm fits at the top of the post and sleeve.

RESTRAINT BOLT (KINMAR)

Calibrated to secure a pole and sleeve to shear safely through stringent MASH vehicle impact tests.

POWDER COATED ALUMINIUM GROUND SLEEVES

Designed to suit 80NB, 90NB and 100NB aluminium frangible poles, Signfix ground sleeves are made from high strength marine grade alloy. The powder coated sleeve has excellent resistance to corrosion and over the years has proven performance with our aluminium poles.

GROUND SLEEVE LENGTHS

80NB (89OD) > 750mm lengths

90NB (102OD) > 850mm lengths

100NB (114OD) > 1000mm lengths

Features include:

- > The external shape ensures sleeves will not rotate when set in concrete.
- > Internal dimensions of all sleeves are designed to be a snug fit with the pole.

Sleeves are fitted with PVC end caps to prevent concrete entering the sleeve during installation.



Transition Shoe



Poly Cap



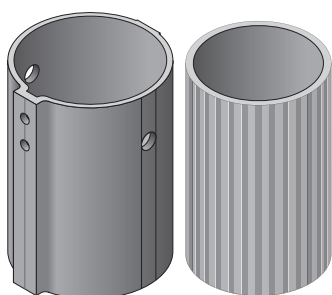
Poly Sleeve Seal



Restraint Bolt Assembly

Patent protected

80NB (89OD) SIGNFIX FRANGIBLE POLES

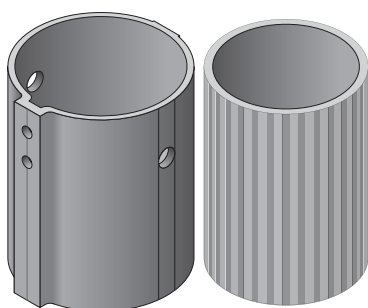


80NB POLES, SLEEVES & ACCESSORIES

CODE	DESCRIPTION
AFPM089/5.5M	80MM NB X 5.5M ALUM FLUTED POLE MILL FINISH
SLV089750M	80MM NB X 750MM ALUM GROUND SLEEVE FOR 80MM NB POLE
POLEKIT089M	80NB KIT SET C/W POLYCAP089, POLYSEAL089, POLYPLUG089 X 2, M12 X 119MM RESTRAINT BOLT, KINMAR NUT, NYLON WASHER X 2
POLYCAP089	80MM NB POLY POST CAP
POLYSEAL089	80MM NB POLY SLEEVE SEAL
AFPRST089	RESTRAINT DEVICE TO SUIT 80MM NB POLE
KINMARSOCKETM	KINMAR DRIVE SOCKET - M12

M - Denotes MASH range

90NB (102OD) SIGNFIX FRANGIBLE POLES

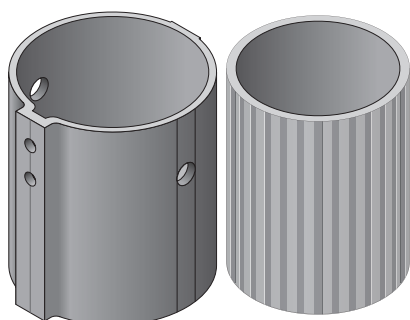


90NB POLES, SLEEVES & ACCESSORIES

CODE	DESCRIPTION
AFP102/6M	90MM NB X 6M ALUM FLUTED POLE MILL FINISH
SLV102850M	90MM NB X 850MM ALUM GROUND SLEEVE FOR 90MM NB POLE
POLEKIT102M	90NB KIT SET C/W POLYCAP102, POLYSEAL102, POLYPLUG102 X 2, M12 X 133MM RESTRAINT BOLT, KINMAR NUT, NYLON WASHER X 2
POLYCAP102	90MM NB POLY POST CAP
POLYSEAL102	90MM NB POLY SLEEVE SEAL
AFPRST102	RESTRAINT DEVICE TO SUIT 90MM NB POLE
KINMARSOCKETM	KINMAR DRIVE SOCKET - M12

M - Denotes MASH range

100NB (114OD) SIGNFIX FRANGIBLE POLES



100NB POLES, SLEEVES & ACCESSORIES

CODE	DESCRIPTION
AFP114/6.5M	100MM NB X 6.5M ALUM FLUTED POLE MILL FINISH
AFP114PCG61M	POWDER COATING GREEN G61 100MM NB POLES
SLV1141000M	100MM NB X 1M ALUM GROUND SLEEVE FOR 100MM NB POLE
POLEKIT114M	100NB KIT SET C/W POLYCAP114, POLYSEAL114, POLYPLUG114 X 2, M12 X 146MM RESTRAINT BOLT, KINMAR NUT, NYLON WASHER X 2
POLYCAP114	100MM NB POLY POST CAP
POLYSEAL114	100MM NB POLY SLEEVE SEAL
AFPRST114	RESTRAINT DEVICE TO SUIT 100MM NB POLE
KINMARSOCKETM	KINMAR DRIVE SOCKET - M12

M - Denotes MASH range

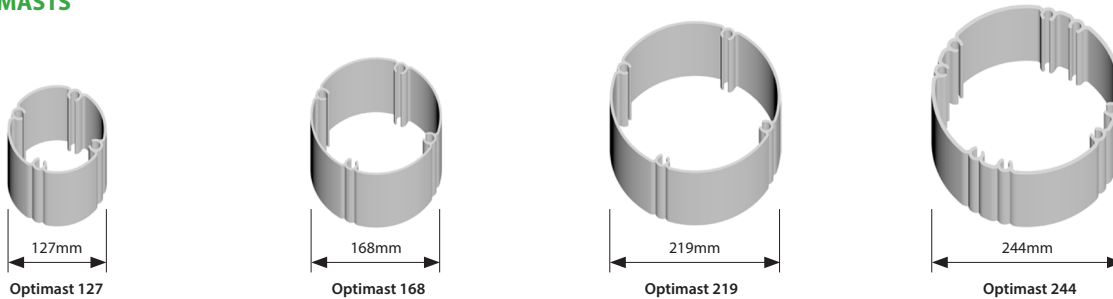
OPTIMAST FRANGIBLE SIGN SUPPORT SYSTEM COMPONENTS

Structurally designed to support signs of up to 40m², Optimast is the largest & strongest frangible support system available in Australia.

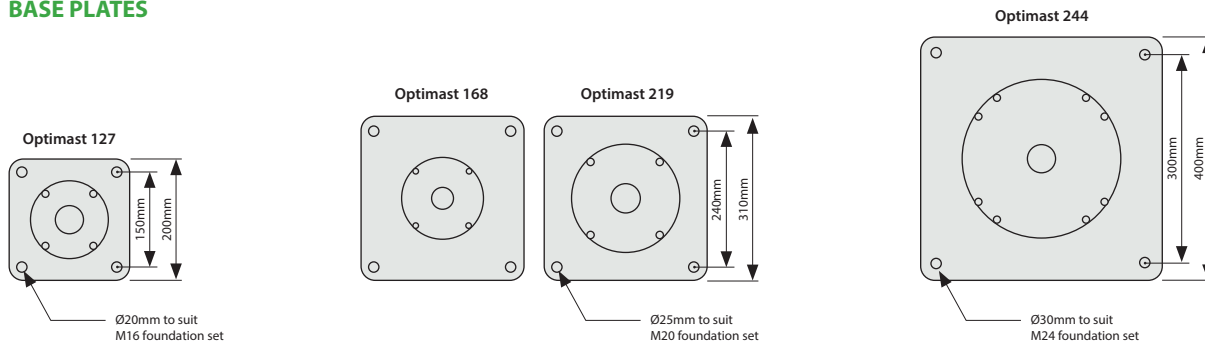
Optimast is constructed using recyclable aluminium and offers pole dimensions of 127mm, 168mm, 219mm and 244mm, suiting a large range of sign sizes.

Optimast is designed so that the pole breaks away at the shear bolt when impacted by a vehicle, leaving the baseplate, foundation bolts and anchor cradle intact. The anchor cradle and concrete foundation should remain undamaged and the baseplate can be easily removed – thus a new mast can be installed onto the existing anchor cradle foundation.

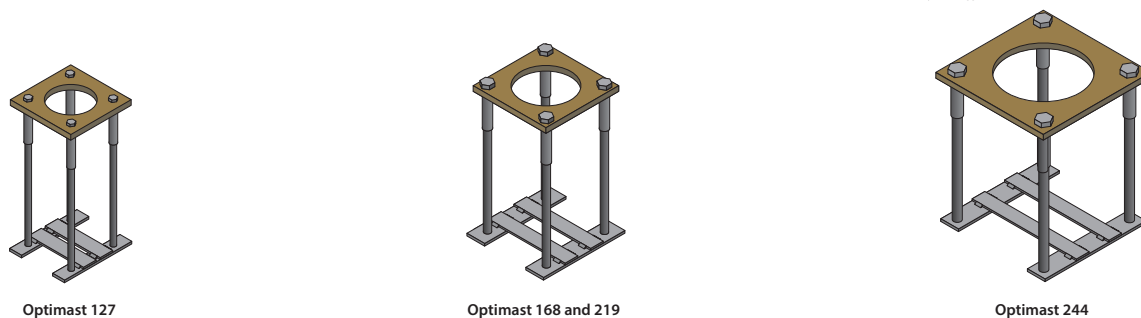
MASTS



BASE PLATES



FOUNDATION ANCHOR CRADLES



127 OPTIMAST FRANGIBLE MAST C/W BASE PLATE



127 POLES & BASE PLATE

CODE	DESCRIPTION
OPTI127X5000	127MM OD X 5M ALUM SIGN MAST POLE, C/W FITTED CAP & BASE PLATE

HEAVY DUTY 2-BOLT 'D' BRACKETS (FOR OPTIMAST SIGN POLES)

CODE	DESCRIPTION	QTY (BOX)
OPTIFIXING127	HEAVY DUTY S/STEEL 2-BOLT 'D' CLIP WITH RUBBER INSERT FOR 127 OPTIMAST POLE	50

CODE	DESCRIPTION
M10-50T-SET	M10 X 50MM MECHANICALLY GALVANISED TEE BOLT & HEX NUT

168 OPTIMAST FRANGIBLE MAST C/W BASE PLATE



168 POLES & BASE PLATE

CODE	DESCRIPTION
OPTI168X5500	168MM OD X 5.5M ALUM SIGN MAST POLE, C/W FITTED CAP & BASE PLATE

HEAVY DUTY 2-BOLT 'D' BRACKETS (FOR OPTIMAST SIGN POLES)

CODE	DESCRIPTION	QTY (BOX)
OPTIFIXING168	HEAVY DUTY S/STEEL 2-BOLT 'D' CLIP WITH RUBBER INSERT FOR 168 OPTIMAST POLE	50

CODE	DESCRIPTION
M10-50T-SET	M10 X 50MM MECHANICALLY GALVANISED TEE BOLT & HEX NUT

219 OPTIMAST FRANGIBLE MAST C/W BASE PLATE



219 POLES & BASE PLATE

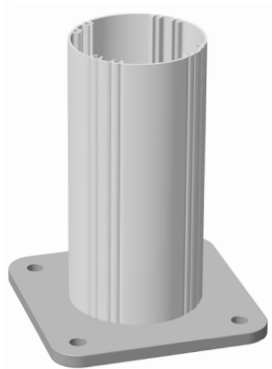
CODE	DESCRIPTION
OPTI219X6000	219MM OD X 6M ALUM SIGN MAST POLE, C/W FITTED CAP & BASE PLATE

HEAVY DUTY 2-BOLT 'D' BRACKETS (FOR OPTIMAST SIGN POLES)

CODE	DESCRIPTION	QTY (BOX)
OPTIFIXING219	HEAVY DUTY S/STEEL 2-BOLT 'D' CLIP WITH RUBBER INSERT FOR 219 OPTIMAST POLE	50

CODE	DESCRIPTION
M10-50T-SET	M10 X 50MM MECHANICALLY GALVANISED TEE BOLT & HEX NUT

244 OPTIMAST FRANGIBLE MAST C/W BASE PLATE



244 POLES & BASE PLATE

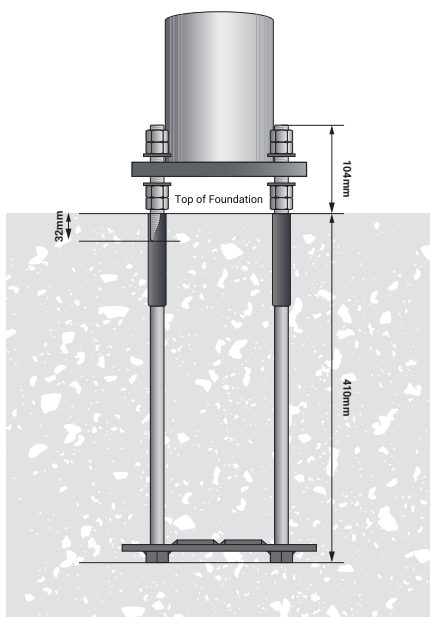
CODE	DESCRIPTION
OPTI244X8000	244MM OD X 8M ALUM SIGN MAST POLE, C/W FITTED CAP & BASE PLATE
OPTI244X7500	244MM OD X 7.5M ALUM SIGN MAST POLE, C/W FITTED CAP & BASE PLATE

HEAVY DUTY 2-BOLT 'D' BRACKETS (FOR OPTIMAST SIGN POLES)

CODE	DESCRIPTION	QTY (BOX)
OPTIFIXING244	HEAVY DUTY S/STEEL 2-BOLT 'D' CLIP WITH RUBBER INSERT FOR 244 OPTIMAST POLE	50

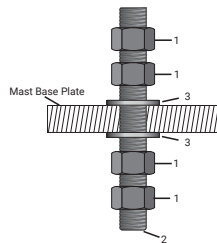
CODE	DESCRIPTION
M10-50T-SET	M10 X 50MM MECHANICALLY GALVANISED TEE BOLT & HEX NUT

127 ANCHOR CRADLE AND FOUNDATION STUD SET



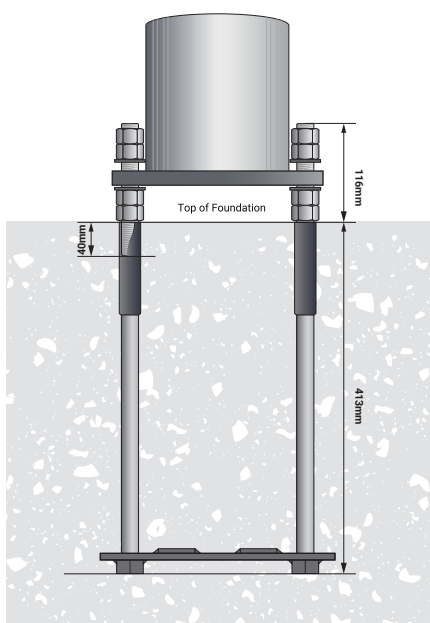
127 ANCHOR CRADLE

CODE	DESCRIPTION
OPTI127ANCRADLE	127MM OD ANCHOR CRADLE ASSEMBLY C/W 4 X M16 FOUNDATION SOCKETS
M16FBS	M16 FOUNDATION BOLT SET C/W 16 X M16 HEX NUTS, 4 X M16 X 136MM STUD AND 8 X M17 X 45 X 6 S/S WASHER



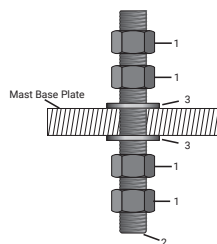
ITEM NO.	PART NUMBER	QTY.
1	M16 HEX NUT	16
2	M16 X 136 STUD	4
3	M17 X 45 X 6 WASHER	8

168 ANCHOR CRADLE AND FOUNDATION STUD SET



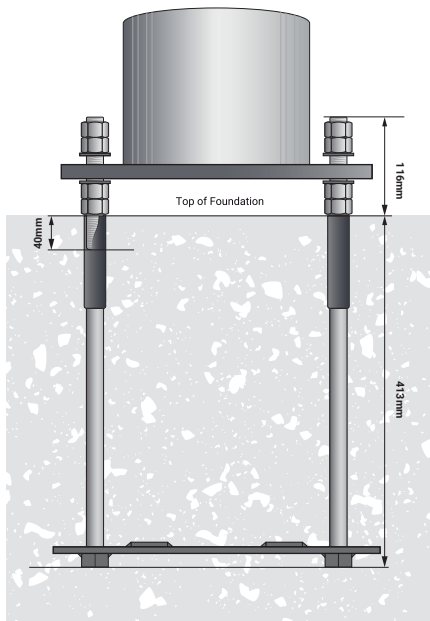
168 ANCHOR CRADLE

CODE	DESCRIPTION
OPTI168ANCRADLE	168MM OD ANCHOR CRADLE ASSEMBLY C/W 4 X M20 FOUNDATION SOCKETS
M20FBS	M20 FOUNDATION BOLT SET C/W 16 X M20 HEX NUTS, 4 X M20 X 156MM STUD AND 8 X M21 X 50 X 6 S/S WASHER



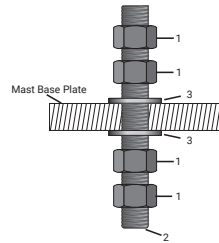
ITEM NO.	PART NUMBER	QTY.
1	M20 HEX NUT	16
2	M20 X 156 STUD	4
3	M21 X 50 X 6 WASHER	8

219 ANCHOR CRADLE AND FOUNDATION STUD SET



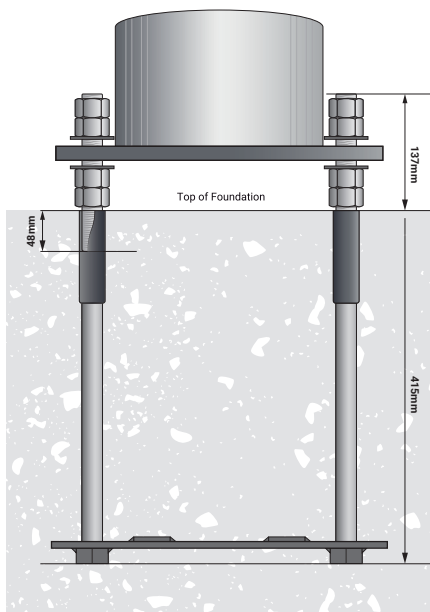
219 ANCHOR CRADLE

CODE	DESCRIPTION
OPTI219ANCRADLE	219MM OD ANCHOR CRADLE ASSEMBLY C/W 4 X M20 FOUNDATION SOCKETS
M20FBS	M20 FOUNDATION BOLT SET C/W 16 X M20 HEX NUTS, 4 X M20 X 156MM STUD AND 8 X M21 X 50 X 6 S/S WASHER



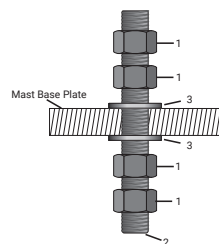
ITEM NO.	PART NUMBER	QTY.
1	M20 HEX NUT	16
2	M20 X 156 STUD	4
3	M21 X 50 X 6 WASHER	8

244 ANCHOR CRADLE AND FOUNDATION STUD SET



244 ANCHOR CRADLE

CODE	DESCRIPTION
OPTI244ANCRADLE	244MM OD ANCHOR CRADLE ASSEMBLY C/W 4 X M24 FOUNDATION SOCKETS
M24FBS	M24 FOUNDATION BOLT SET C/W 16 X M24 HEX NUTS, 4 X M24 X 185MM STUD AND 8 X M25 X 60 X 8 S/S WASHER



ITEM NO.	PART NUMBER	QTY.
1	M24 HEX NUT	16
2	M24 X 186 STUD	4
3	M25 X 60 X 6 WASHER	8

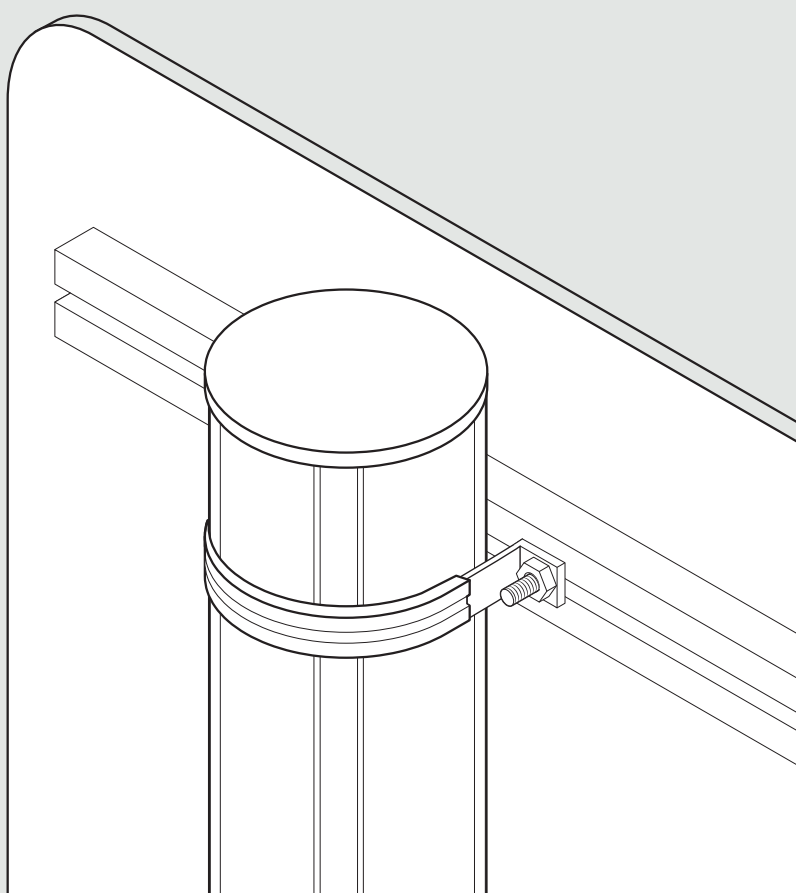
OPTIMAST SIGN FIXING

Sign installation must take place immediately after the mast has been installed.

The Optimast heavy duty 2-bolt D brackets with rubber insert, M10 x 50T bolt and nut must be used when attaching the sign.

When the sign is mounted in the current position, the fixings are to be tightened to the correct torque settings of 18 Nm.

We advise threads to be lubricated with Rocal anti-seize stainless lubricant or similar.



FRANGIBLE SIGN SUPPORT INSTALLATION

SIGNFIX® INSTALLATION	32
OPTIMAST® INSTALLATION	36

SIGNFIX INSTALLATION

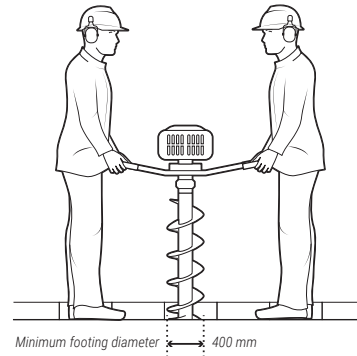
1. GROUND WORK

1.1 Excavate the hole

For multi-pole installations, start with the pole closest to the curb.

Foundations should be excavated to a minimum diameter of 400mm¹ and a depth equal to the ground sleeve length.

Remove all loose debris from the footing before pouring concrete.

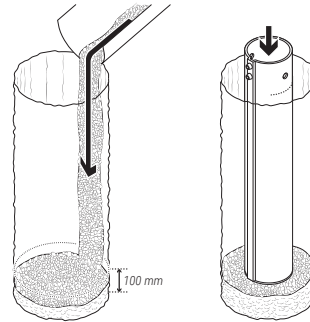


1.2 Pour concrete

Concrete must be a minimum strength of 28Mpa.

Pour 100mm of concrete into the footing then bed the sleeve base into the centre of the footing, ensuring the embedment depth line is at ground level. The top of the sleeve will be 50-90mm above ground level, depending on sleeve size.

The trilobular locking bolts must face the oncoming traffic.

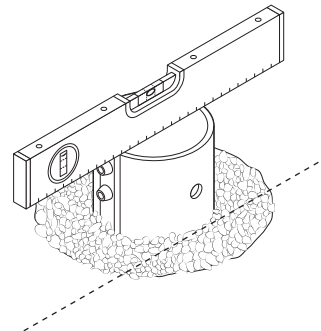


Ensuring the sleeve remains perpendicular and centred with a spirit level, pour concrete around the sleeve to the embedment depth line.

The ground sleeve may float vertically up during this concrete pour. To prevent this, maintain downward pressure on the sleeve to ensure the correct position is maintained above ground.

Once the kerbside sleeve is in place, repeat the process with the remaining sleeves.

Once all the sleeves are installed, cover and leave concrete to cure for 24 hours.



¹Diameter of excavation may differ by engineer's recommendations and state road authority specifications.

2. ALUMINIUM POLE INSTALLATION

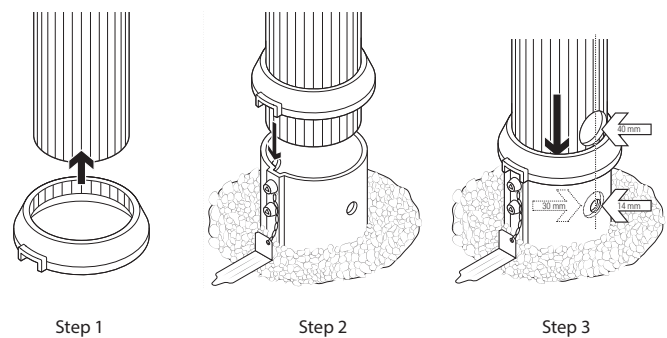
2.1 Pole insertion

Line up the flute patterns of both the ground sleeve seal and aluminium pole, then push the ground sleeve seal approximately 10mm over the base of the aluminium pole (the end closest to the pre-cut post restraint bolt holes).

Align the seal flange with the locking bolts, then slide the pole into the ground sleeve. The ground sleeve seal will slide up the pole into the correct position once the pole reaches the base of the ground sleeve.

Ensure the restraint holes in the ground sleeve line up with the corresponding post restraint bolt holes in pole.

The correct placement will also result in the pole shear holes aligned to the post restraint holes in the sleeve.

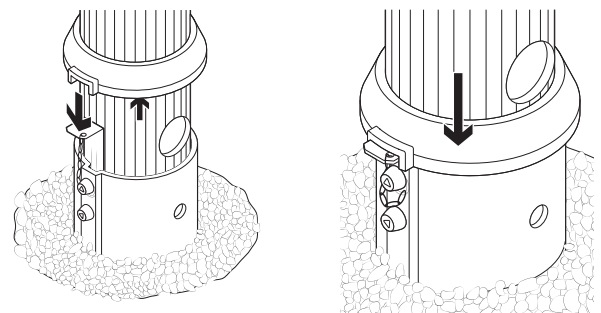


2.2 Transition shoe insertion

Insert the transition shoe by lifting the aluminium pole 100mm out of the ground sleeve and insert the transition shoe so that the lip is sitting flush with the top of the ground sleeve and on top of the locking bolts.

Lower the aluminium pole back into the ground sleeve, lining up the centre groove in the transition shoe with a flute in the aluminium pole.

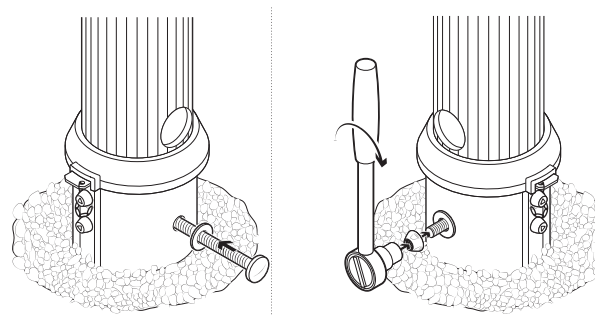
This will ensure the transition shoe is a snug fit between the ground sleeve and aluminium pole.



2.3 Retention bolt assembly installation

Place a nylon washer onto the M12 stainless steel bolt head and insert the bolt through the hole to the other side of the ground sleeve.

Locating the thread end of the bolt, fit a nylon washer & kinmar lock nut onto the thread and tighten to 10-12 Nm torque with the kinmar socket.



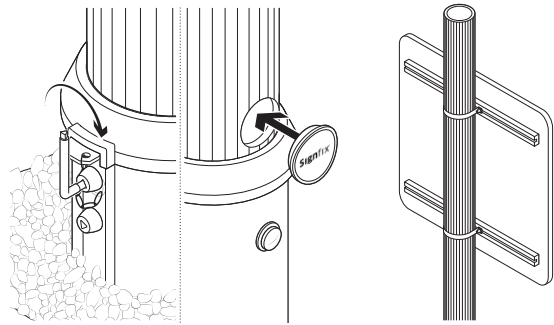
SIGNFIX INSTALLATION

2. ALUMINIUM POLE INSTALLATION (cont.)

2.4 Fasten transition shoe & insert shear hole bung plugs

Using the trilobular spanner or trilobular key, tighten the sleeve locking bolts to 10-12 Nm torque.

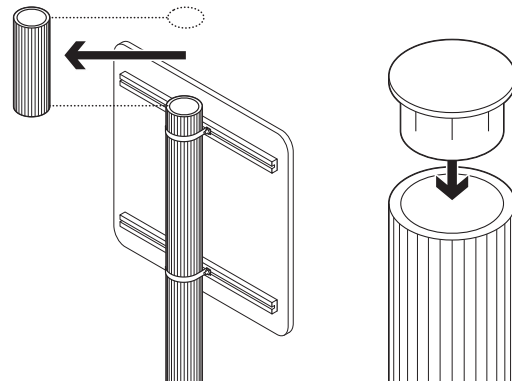
Push both bung plugs into the pre-cut shear holes located on each side of the fluted aluminium pole and just above the ground sleeve seal.

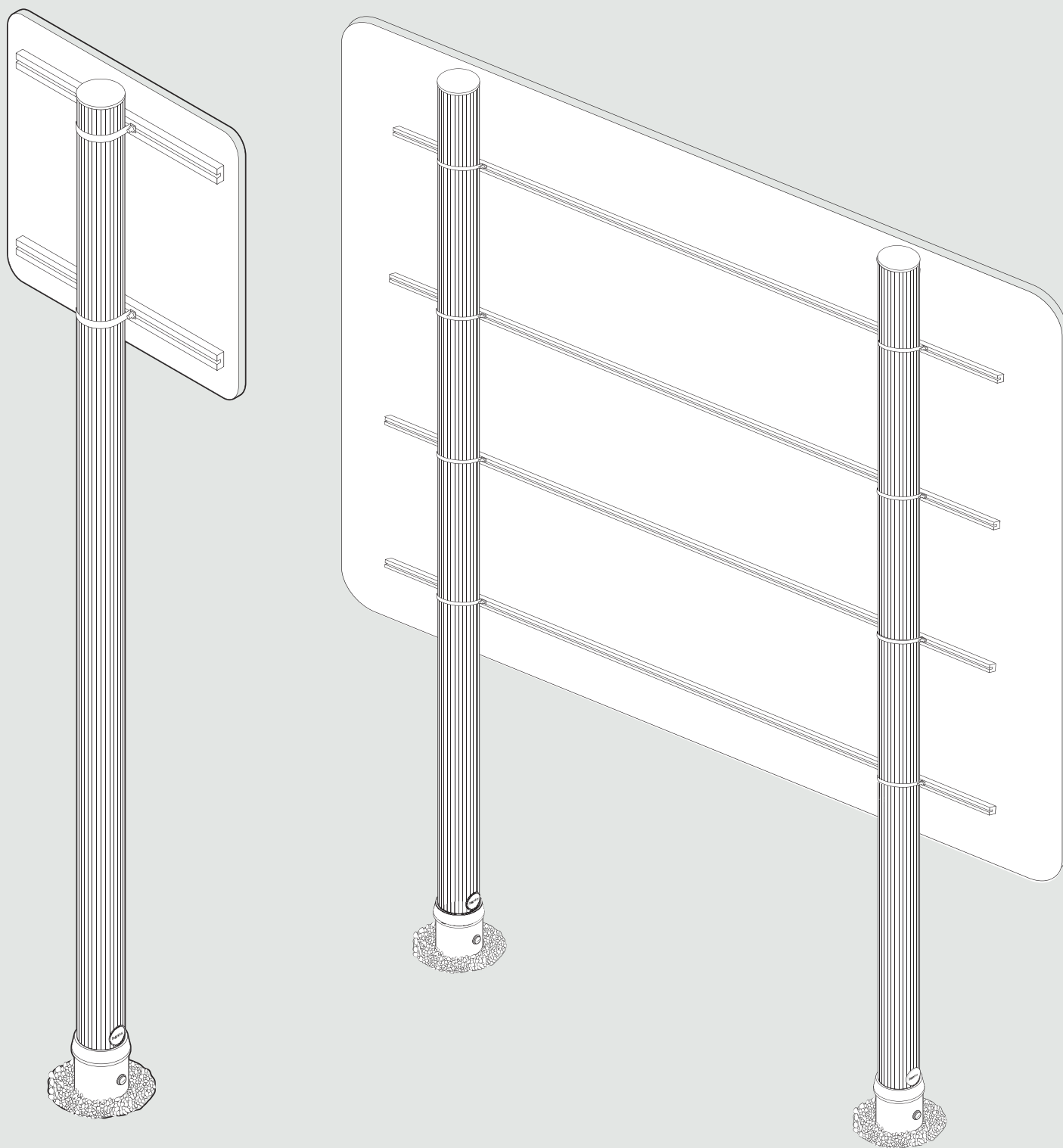


3. INSTALL THE SIGN ONTO ALUMINIUM POLE ASSEMBLIES

Cut aluminium poles to required size.

Fit poly caps to aluminium poles.





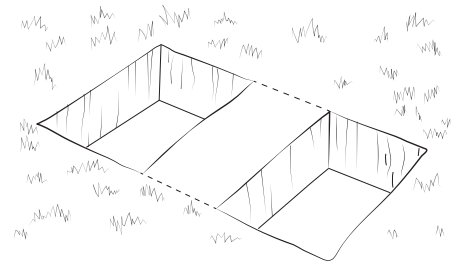
NB. Drawings are not to scale, and used for illustrative purposes only.

OPTIMAST INSTALLATION

1. GROUND WORK

1.1 Excavate the trench

Using suitable equipment, excavate the trench to the dimensions specified by the independent scheme designer.

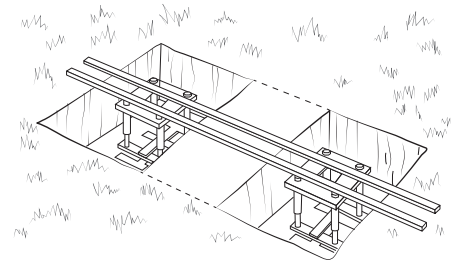


1.2 Secure anchor cradles

The anchor cradle must be securely suspended in the foundation in its final position.

Level and align prior to concreting the foundation. This is usually achieved by nailing or screwing the template board to timbers spanning across the excavation or the foundation shuttering.

The underside of the removable template board is to be set to the top of concrete level. The template board should be checked with a spirit level to ensure it is level and the arrangement checked to ensure it is robust and rigid before concreting.



1.3 Pour concrete

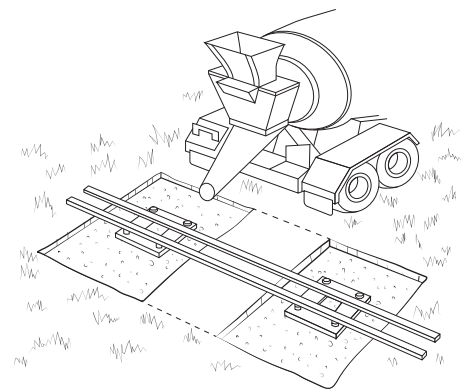
Anchorage and baseplates of the masts should be exposed and not buried under soil. The top of the concrete foundation should be level or not more than 50mm above the surrounding ground or paving to prevent the underside of errant vehicles catching on the concrete before hitting the sign mast in a vehicle impact. The concrete must be mechanically vibrated to ensure that all air pockets and voids are eliminated from the foundation concrete.

Signfix recommends minimum concrete grade of 28MPa. However, the final design is the responsibility of the scheme designer.

Immediately after concreting the bolt position the alignment should be re-checked to ensure the anchor cradles have not moved.

The template boards may be removed the day after concreting but the temporary/disposable bolts should be retained to protect the anchor socket threads until the sign mast can be erected.

Masts and sign plates should not be erected until the contractor is satisfied the concrete has reached a cube strength of 28MPa. To erect masts earlier after concreting, stronger concrete can be used to shorten the time needed to achieve the 28MPa cube strength.



2. ERECTION OF THE OPTIMAST ONTO THE ANCHOR CRADLES

2.1 Insert foundation studs into anchor cradle socket

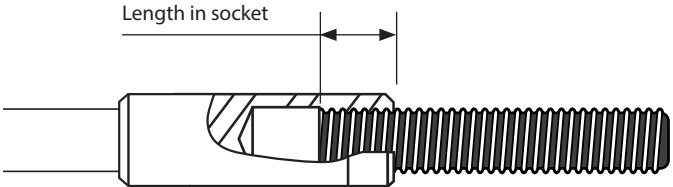
Remove any debris from around the anchor and check the concrete for high spots that may prevent the mast from seating correctly on the bolts.

Remove and dispose of the temporary/disposable bolts and the template board.

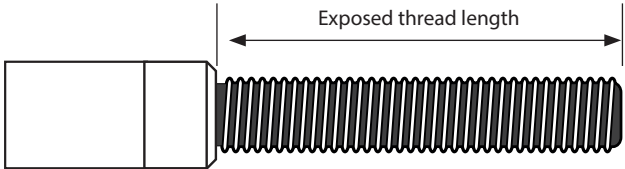
Grease anchor studs and the internal threads of the anchorage sockets threads with Rocol anti-seize stainless lubricant or similar.

Screw the 4 studs by hand into the anchor socket as per the table below.

Bolt insertion depths:		
Mast Type	Stud Diameter	Length in socket
127	M16	32mm
168	M20	40mm
219	M20	40mm
244	M24	48mm



Maximum height of exposed thread:		
Mast Type	Stud Diameter	Exposed thread length
127	M16	104mm
168	M20	116mm
219	M20	116mm
244	M24	137mm



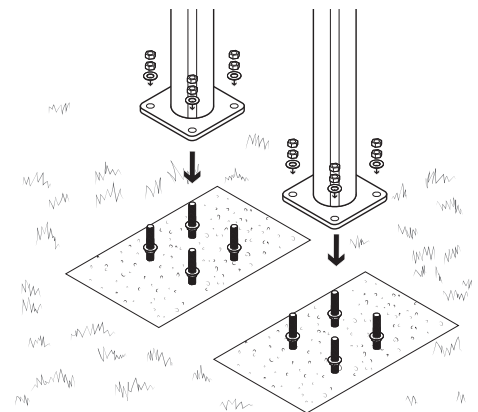
2.2 Fitting the Optimast

Screw one stainless steel nut down each stud until they lock tight onto each socket in the concrete. Tighten each nut with a spanner but do not apply excess torque, this will prevent the stud from turning during subsequent operations.

Screw a second stainless nut down onto each stud until they are all approximately 3 mm above the first nut. Check across all four second stainless nuts with a spirit level and adjust by screwing up or down until all four nuts are precisely level to create a level bed for the mast base plate.

Apply to each stud a stainless-steel washer.

Lower the mast onto the studs, taking care not to damage the threads.



OPTIMAST INSTALLATION

2. ERECTION OF THE OPTIMAST ONTO THE ANCHOR CRADLES (cont.)

2.3 Securing the Optimast

Apply a stainless-steel washer to each stud, then a third stainless steel nut and hand-tighten. Check the base plate is fully seated on all four studs and the mast is vertical. If not, slacken off third stainless steel nut and adjust the nuts under the baseplate. Hand-tighten the nuts on top again and re-check.

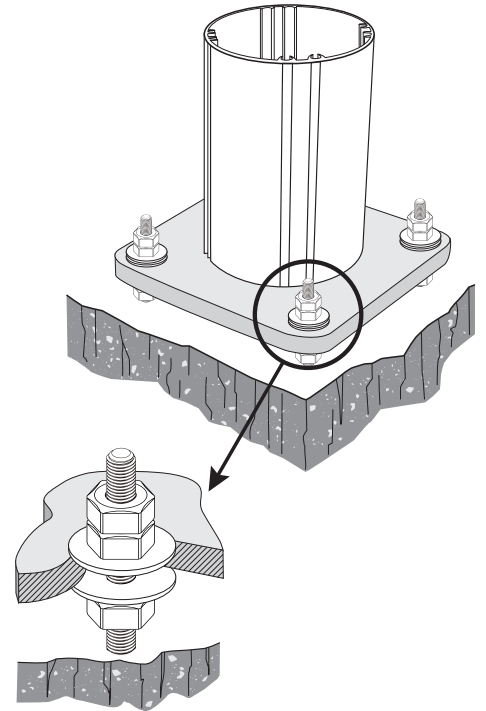
When you are satisfied that the mast is vertical and fully seated, tighten the third stainless steel nut to the recommended torque using a torque wrench. See below table for torque settings.

The nuts below the baseplate should be checked to ensure they do not rotate and if necessary, an open ended spanner should be used to prevent any rotation.

Apply a fourth stainless steel nut to each stud and tighten to the torque recommended using a torque wrench. See below table for torque settings.

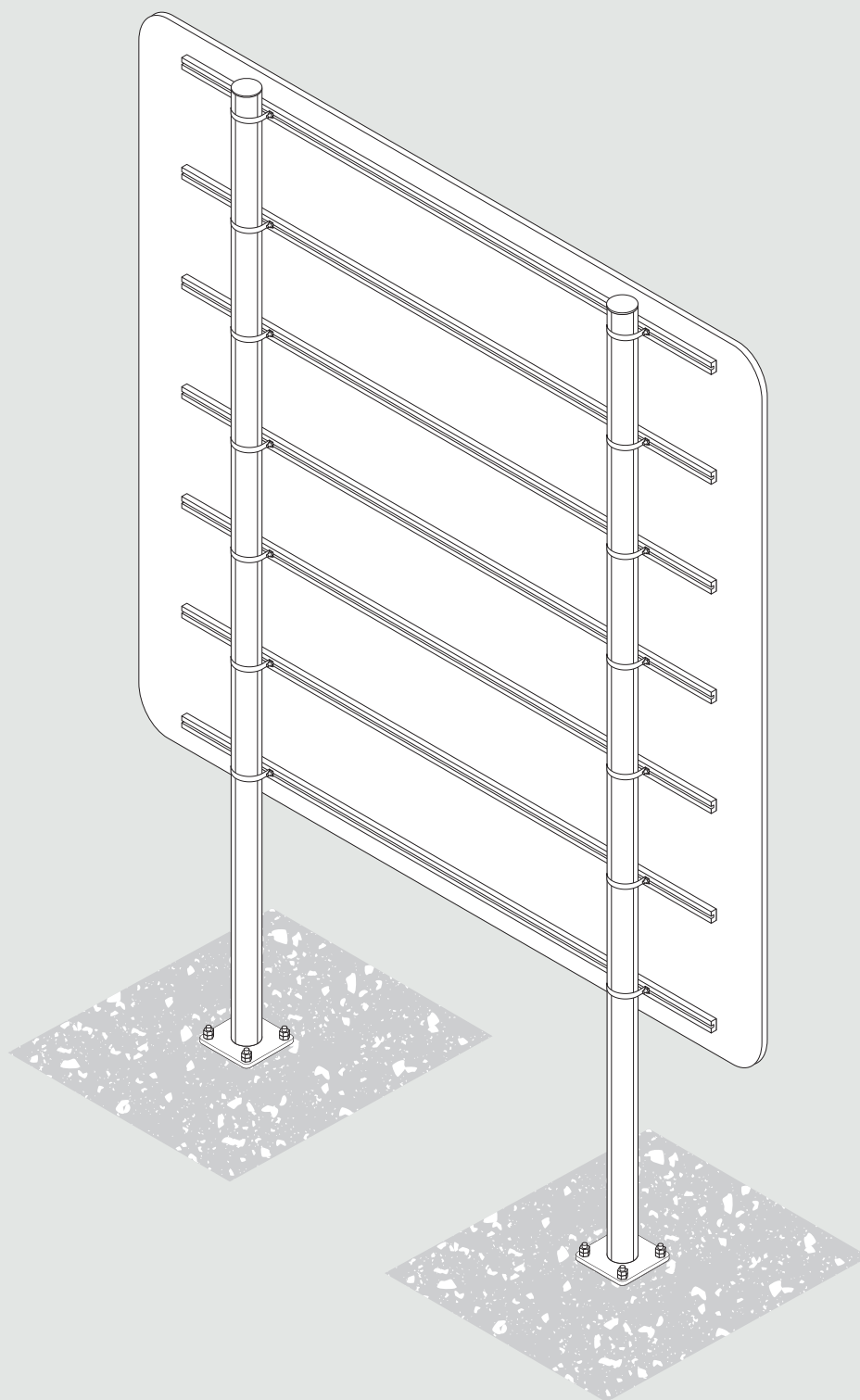
Screw the first stainless steel nut touching the concrete/socket up against the second stainless steel nut under the base plate and firmly tighten with an open ended spanner.

Re-check the mast is vertical using a suitable measuring device.



Torque wrench setting for foundation bolt sets:

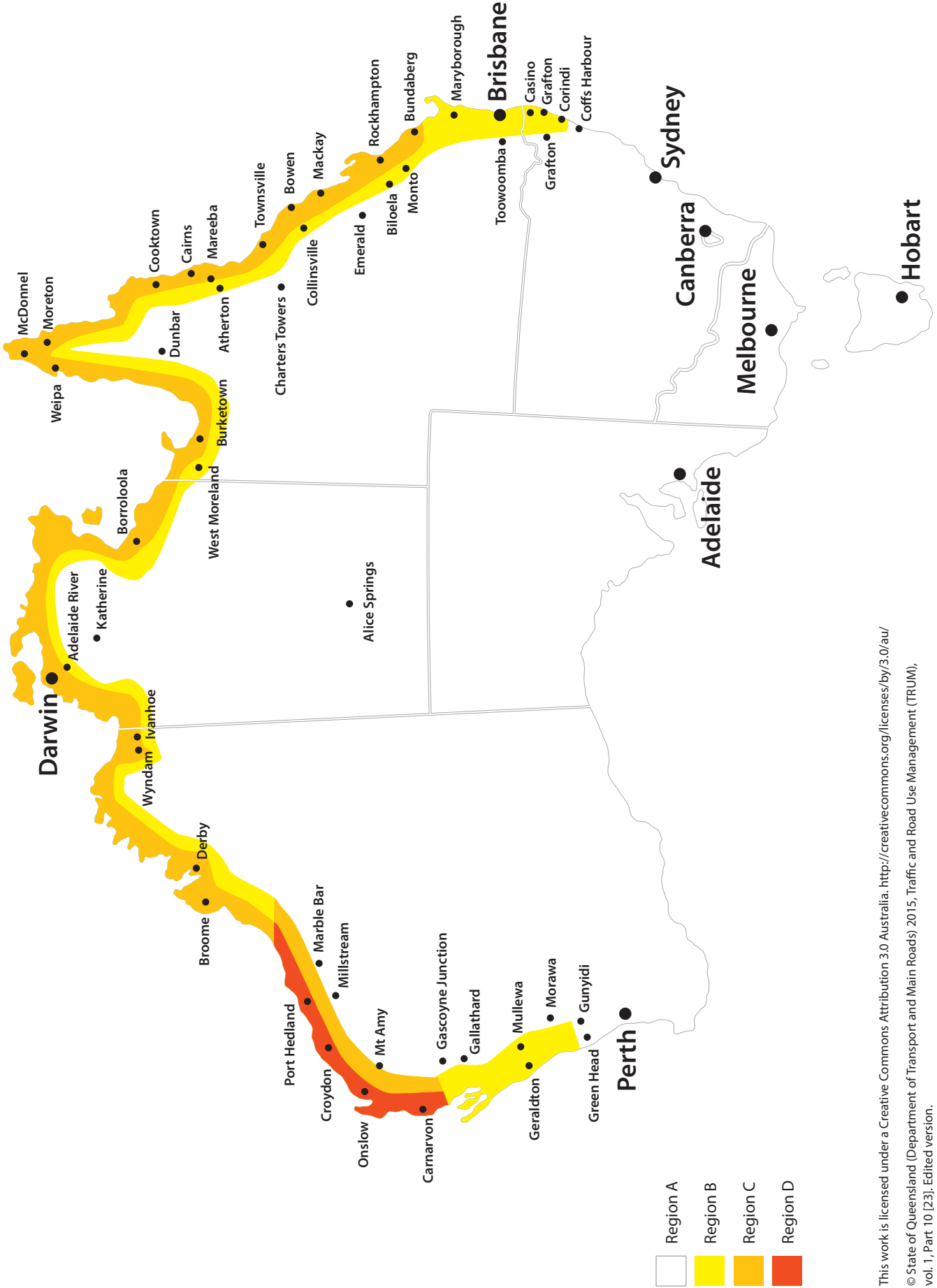
Optimast type	Foundation stud size and material	Torque applied to third nut Nm	Torque applied fourth nut Nm
127	M16 A4-80	187	94
168 & 219	M20 A4-80	364	182
244	M24 A4-80	629	315



WIND CHARTS

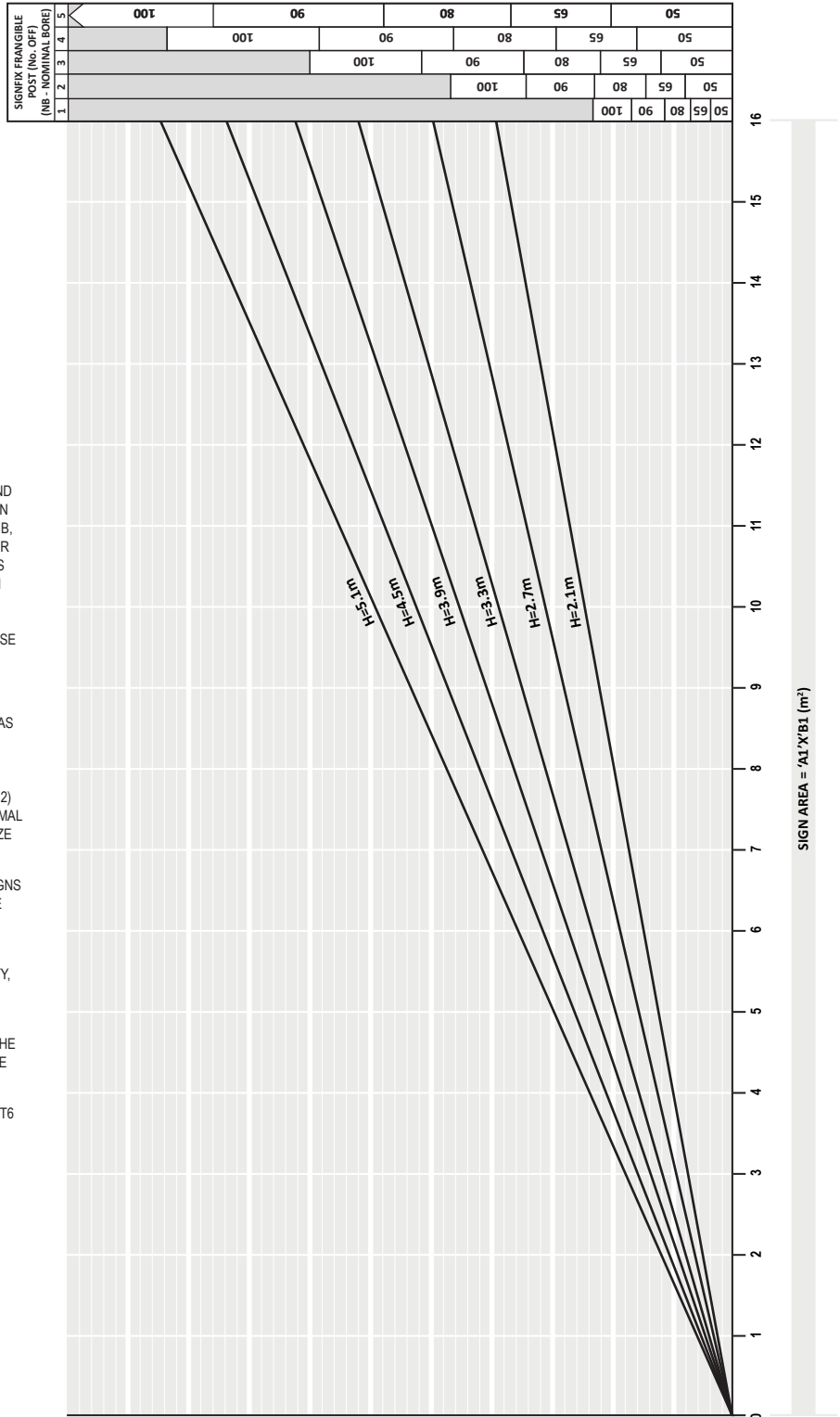
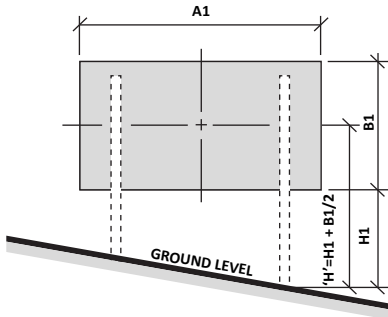
AUSTRALIAN WIND REGIONS	42
<hr/>	
SIGNFIX – REGION A (<16M² SIGNS)	43
<hr/>	
SIGNFIX – REGION B (<12M² SIGNS)	44
<hr/>	
SIGNFIX – REGION C (<10M² SIGNS)	45
<hr/>	
OPTIMAST – REGION A1 (<10M² SIGNS)	46
<hr/>	
OPTIMAST – REGION A2 (<28M² SIGNS)	47
<hr/>	
OPTIMAST – REGION A3 (<40M² SIGNS)	48
<hr/>	
OPTIMAST – REGION B1 (<10M² SIGNS)	49
<hr/>	
OPTIMAST – REGION B2 (<28M² SIGNS)	50
<hr/>	
OPTIMAST – REGION B3 (<40M² SIGNS)	51
<hr/>	
OPTIMAST – REGION C1 (<10M² SIGNS)	52
<hr/>	
OPTIMAST – REGION C2 (<28M² SIGNS)	53
<hr/>	
OPTIMAST – REGION C3 (<40M² SIGNS)	54
<hr/>	

AUSTRALIAN WIND REGIONS



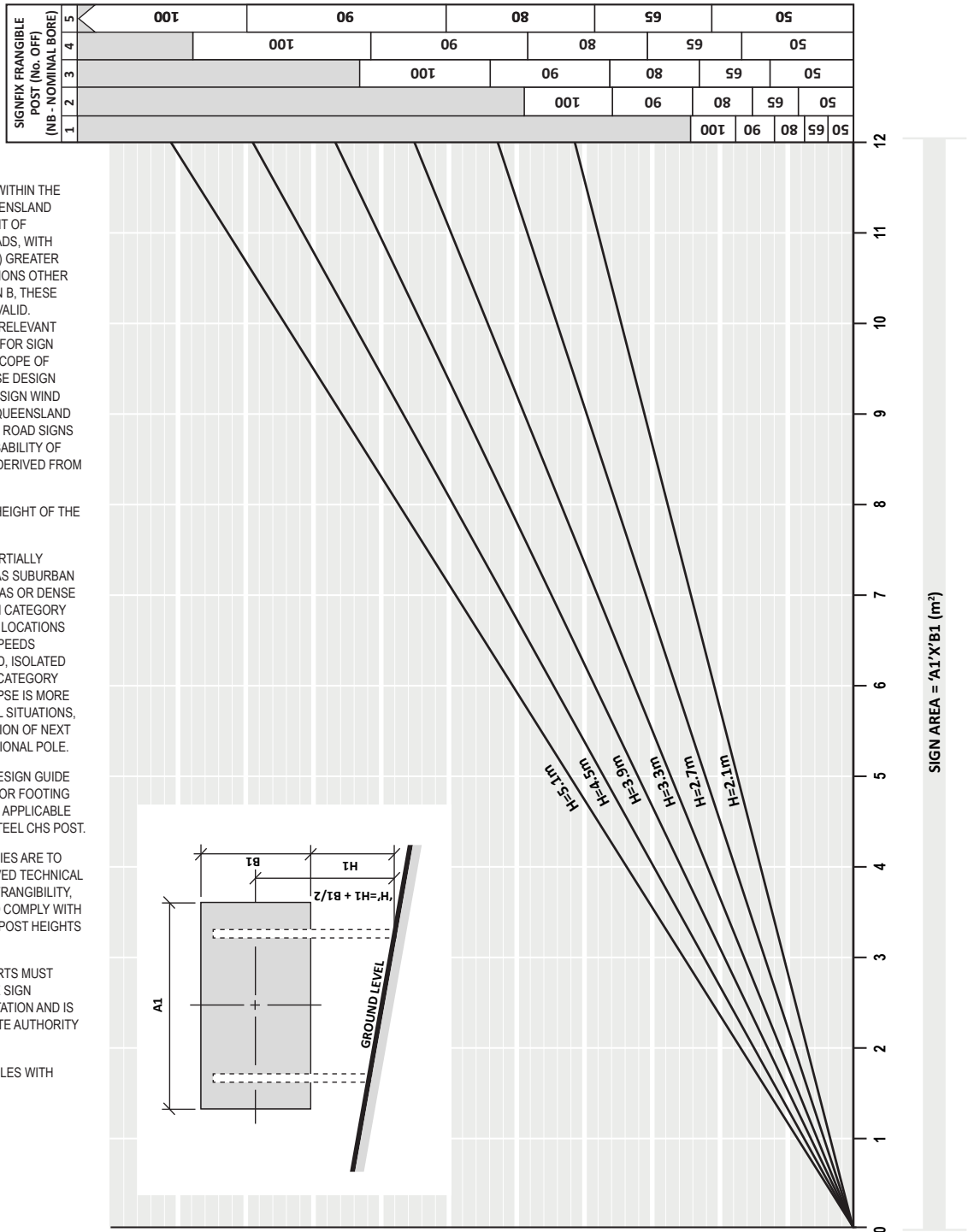
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SIGNFIX > WIND REGION A



- FOR SIGNS NOT LOCATED WITHIN THE JURISDICTION OF THE QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS, WITH THE SIGN AREAS ("A1"x"B1") GREATER THAN 10M² AND/OR IN REGIONS OTHER THAN REGION A OR REGION B, THESE DESIGN CHARTS ARE NOT VALID. REFER TO AS1742.2 OR TO RELEVANT STATE AUTHORITY GUIDES FOR SIGN SUPPORTS OUTSIDE THE SCOPE OF THE DESIGN CHARTS. THESE DESIGN CHARTS ARE BASED ON DESIGN WIND SPEEDS ADOPTED IN THE QUEENSLAND DESIGN GUIDE (TRUM) FOR ROAD SIGNS WHICH HAVE HIGHER PROBABILITY OF EXCEEDANCE THAN THOSE DERIVED FROM AS1170.
- ON UNEVEN GROUND 'H' = HEIGHT OF THE TALLEST POST.
- CHARTS ARE BASED ON PARTIALLY SHIELDED TERRAIN SUCH AS SUBURBAN HOUSING, INDUSTRIAL AREAS OR DENSE FOREST (AS1170.2 TERRAIN CATEGORY 3). FOR SIGNS IN EXPOSED LOCATIONS PRONE TO HIGHER WIND SPEEDS SUCH AS OPEN GRASSLAND, ISOLATED TREES (AS1170.2 TERRAIN CATEGORY 2) OR WHERE POST COLLAPSE IS MORE HAZARDOUS THAN NORMAL SITUATIONS, USE CHARTS WITH SELECTION OF NEXT POST SIZE UP OR AN ADDITIONAL POLE.
- REFER TO QUEENSLAND DESIGN GUIDE (TRUM) FOR ROAD SIGNS FOR FOOTING SIZES. USE FOOTING SIZES APPLICABLE TO THE SAME DIAMETER STEEL CHS POST.
- WHERE SIGNAGE ASSEMBLIES ARE TO COMPLY WITH THE APPROVED TECHNICAL CONDITIONS OF USE FOR FRANGIBILITY, THE SIGN GEOMETRY IS TO COMPLY WITH THE FOLLOWING MINIMUM POST HEIGHTS (H+B) = 2.4M
- SINGLE POST SIGN SUPPORTS MUST ONLY BE USED WHERE THE SIGN ATTACHMENT RESISTS ROTATION AND IS IN ACCORDANCE WITH STATE AUTHORITY GUIDELINES.
- CHARTS ARE BASED ON POLES WITH ALUMINIUM GRADE 6061-T6

SIGNFIX > WIND REGION B



- FOR SIGNS NOT LOCATED WITHIN THE JURISDICTION OF THE QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS, WITH THE SIGN AREAS ("A1"X"B1") GREATER THAN 10M² AND/OR IN REGIONS OTHER THAN REGION A OR REGION B, THESE DESIGN CHARTS ARE NOT VALID. REFER TO AS1742.2 OR TO RELEVANT STATE AUTHORITY GUIDES FOR SIGN SUPPORTS OUTSIDE THE SCOPE OF THE DESIGN CHARTS. THESE DESIGN CHARTS ARE BASED ON DESIGN WIND SPEEDS ADOPTED IN THE QUEENSLAND DESIGN GUIDE (TRUM) FOR ROAD SIGNS WHICH HAVE HIGHER PROBABILITY OF EXCEEDANCE THAN THOSE DERIVED FROM AS1170.
- ON UNEVEN GROUND 'H' = HEIGHT OF THE TALLEST POST.
- CHARTS ARE BASED ON PARTIALLY SHIELDED TERRAIN SUCH AS SUBURBAN HOUSING, INDUSTRIAL AREAS OR DENSE FOREST (AS1170.2 TERRAIN CATEGORY 3). FOR SIGNS IN EXPOSED LOCATIONS PRONE TO HIGHER WIND SPEEDS SUCH AS OPEN GRASSLAND, ISOLATED TREES (AS1170.2 TERRAIN CATEGORY 2) OR WHERE POST COLLAPSE IS MORE HAZARDOUS THAN NORMAL SITUATIONS, USE CHARTS WITH SELECTION OF NEXT POST SIZE UP OR AN ADDITIONAL POLE.
- REFER TO QUEENSLAND DESIGN GUIDE (TRUM) FOR ROAD SIGNS FOR FOOTING SIZES. USE FOOTING SIZES APPLICABLE TO THE SAME DIAMETER STEEL CHS POST.
- WHERE SIGNAGE ASSEMBLIES ARE TO COMPLY WITH THE APPROVED TECHNICAL CONDITIONS OF USE FOR FRANGIBILITY, THE SIGN GEOMETRY IS TO COMPLY WITH THE FOLLOWING MINIMUM POST HEIGHTS (H+B) = 2.4M
- SINGLE POST SIGN SUPPORTS MUST ONLY BE USED WHERE THE SIGN ATTACHMENT RESISTS ROTATION AND IS IN ACCORDANCE WITH STATE AUTHORITY GUIDELINES.
- CHARTS ARE BASED ON POLES WITH ALUMINIUM GRADE 6061-T6

SIGNFIX > WIND REGION C

SIGNFIX FRANGIBLE POST (No. OFF) (NB - NOMINAL BORE)	5	100	96	88	80	72	64	56
	4	100	96	88	80	72	64	56
	3	100	96	88	80	72	64	56
	2	100	96	88	80	72	64	56
	1	100	96	88	80	72	64	56

- FOR SIGNS NOT LOCATED WITHIN THE JURISDICTION OF THE QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS, WITH THE SIGN AREAS ("A1"X"B1") GREATER THAN 10M2 AND/OR IN REGIONS OTHER THAN REGION A OR REGION B, THESE DESIGN CHARTS ARE NOT VALID. REFER TO AS1742.2 OR TO RELEVANT STATE AUTHORITY GUIDES FOR SIGN SUPPORTS OUTSIDE THE SCOPE OF THE DESIGN CHARTS. THESE DESIGN CHARTS ARE BASED ON DESIGN WIND SPEEDS ADOPTED IN THE QUEENSLAND DESIGN GUIDE (TRUM) FOR ROAD SIGNS WHICH HAVE HIGHER PROBABILITY OF EXCEEDANCE THAN THOSE DERIVED FROM AS1170.
- ON UNEVEN GROUND 'H' = HEIGHT OF THE TALLEST POST.
- CHARTS ARE BASED ON PARTIALLY SHIELDED TERRAIN SUCH AS SUBURBAN HOUSING, INDUSTRIAL AREAS OR DENSE FOREST (AS1170.2 TERRAIN CATEGORY 3). FOR SIGNS IN EXPOSED LOCATIONS PRONE TO HIGHER WIND SPEEDS SUCH AS OPEN GRASSLAND, ISOLATED TREES (AS1170.2 TERRAIN CATEGORY 2) OR WHERE POST COLLAPSE IS MORE HAZARDOUS THAN NORMAL SITUATIONS, USE CHARTS WITH SELECTION OF NEXT POST SIZE UP OR AN ADDITIONAL POLE.
- REFER TO QUEENSLAND DESIGN GUIDE (TRUM) FOR ROAD SIGNS FOR FOOTING SIZES. USE FOOTING SIZES APPLICABLE TO THE SAME DIAMETER STEEL CHS POST.
- WHERE SIGNAGE ASSEMBLIES ARE TO COMPLY WITH THE APPROVED TECHNICAL CONDITIONS OF USE FOR FRANGIBILITY, THE SIGN GEOMETRY IS TO COMPLY WITH THE FOLLOWING MINIMUM POST HEIGHTS $(H+B) = 2.4M$
- SINGLE POST SIGN SUPPORTS MUST ONLY BE USED WHERE THE SIGN ATTACHMENT RESISTS ROTATION AND IS IN ACCORDANCE WITH STATE AUTHORITY GUIDELINES.
- CHARTS ARE BASED ON POLES WITH ALUMINIUM GRADE 6061-T6

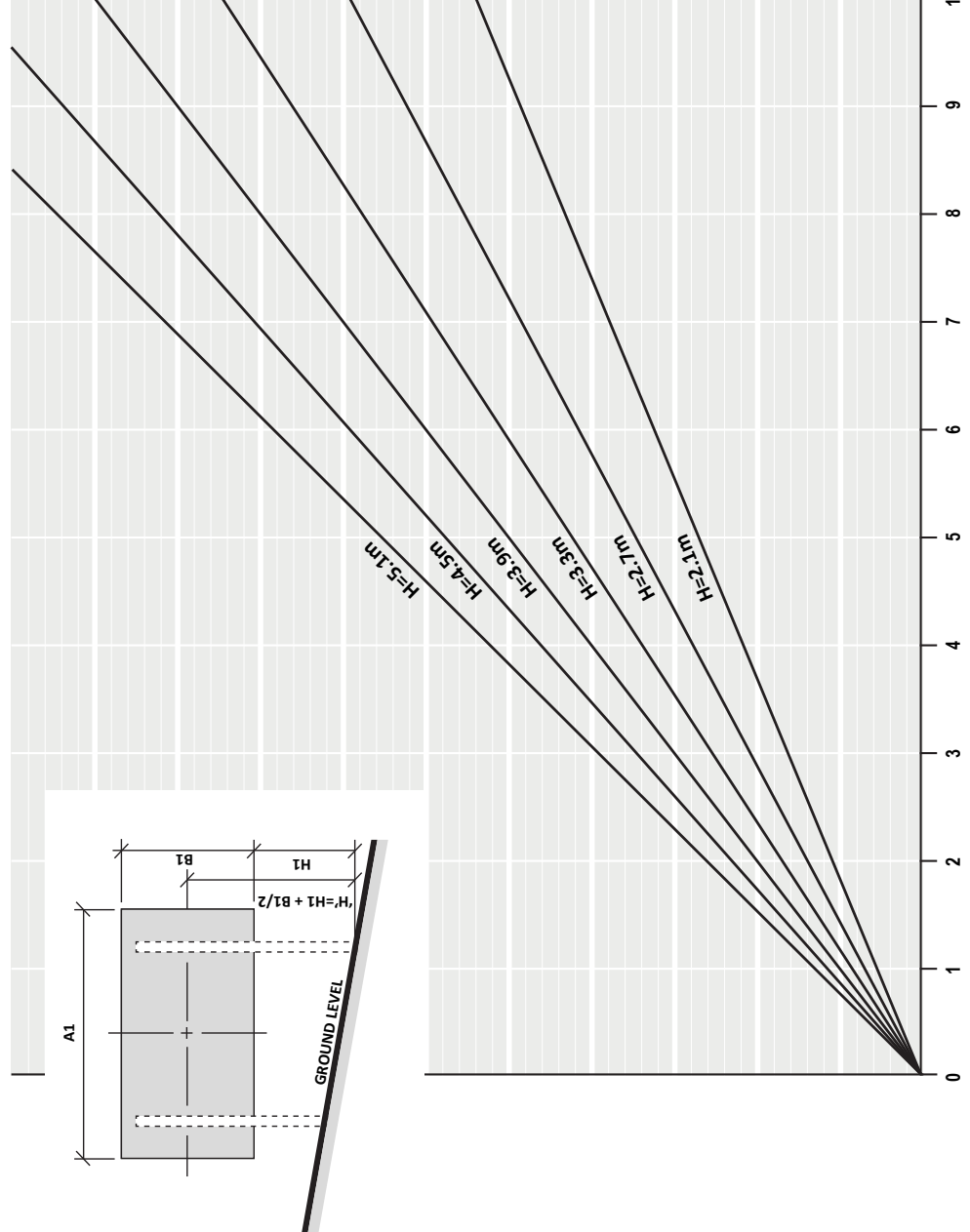
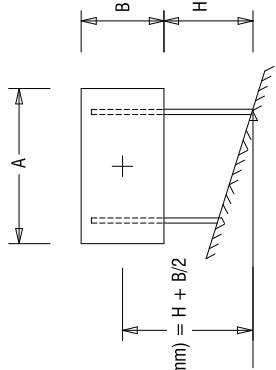


CHART A.1 - OPTIMAST POSTS - REGION A: SIGN AREA (A x B) ≤ 10m²

NOTES

1. FOR SIGNS NOT LOCATED WITHIN THE JURISDICTION OF THE QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS, THESE DESIGN CHARTS ARE NOT VALID. REFER TO AS 1742.2 OR TO RELEVANT STATE AUTHORITY GUIDES FOR SIGN SUPPORTS OUTSIDE THE SCOPE OF THE DESIGN CHARTS. THESE DESIGN CHARTS ARE BASED ON DESIGN WIND SPEEDS ADOPTED IN THE QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS WHICH HAVE HIGHER PROBABILITY OF EXCEEDANCE THAN THOSE DERIVED FROM AS 1170.2.
2. ON UNEVEN GROUND H = HEIGHT OF THE TALLEST POST.
3. CHARTS ARE BASED ON PARTIALLY SHIELDED TERRAIN SUCH AS SUBURBAN HOUSING, INDUSTRIAL AREAS OR DENSE FOREST (AS 1170.2 TERRAIN CATEGORY 3). FOR SIGNS IN EXPOSED LOCATIONS PRONE TO HIGHER WIND SPEEDS SUCH AS OPEN GRASSLAND, ISOLATED TREES (AS 1170.2 TERRAIN CATEGORY 2) OR WHERE POST COLLAPSE IS MORE HAZARDOUS THAN NORMAL SITUATIONS, USE CHARTS WITH SELECTION OF NEXT POST SIZE UP OR AN ADDITIONAL POLE.
4. FOR LARGER SIGNS, REFER TO CHARTS A.2 AND A.3.
5. REFER TO QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS FOR FOOTING SIZES. USE FOOTING SIZES APPLICABLE TO THE SAME DIAMETER STEEL POST.
6. WHERE SIGNAGE ASSEMBLIES ARE TO COMPLY WITH THE APPROVED TECHNICAL CONDITIONS OF USE FOR FRANGIBILITY, THE SIGN GEOMETRY IS TO COMPLY WITH THE FOLLOWING MINIMUM POST HEIGHTS (H+H'): OPTIMAST 127 = 2.4M, OPTIMAST 168/OPTIMAST 219/OPTIMAST 244 = 4.6M
7. SINGLE POST SIGN SUPPORTS MUST ONLY BE USED WHERE THE SIGN ATTACHMENT RESISTS ROTATION AND IS IN ACCORDANCE WITH STATE AUTHORITY GUIDELINES.
8. REFER TO THE OPTIMAST PRODUCT MANUAL FOR ADDITIONAL TECHNICAL INFORMATION.



$H' (mm) = H + B/2$

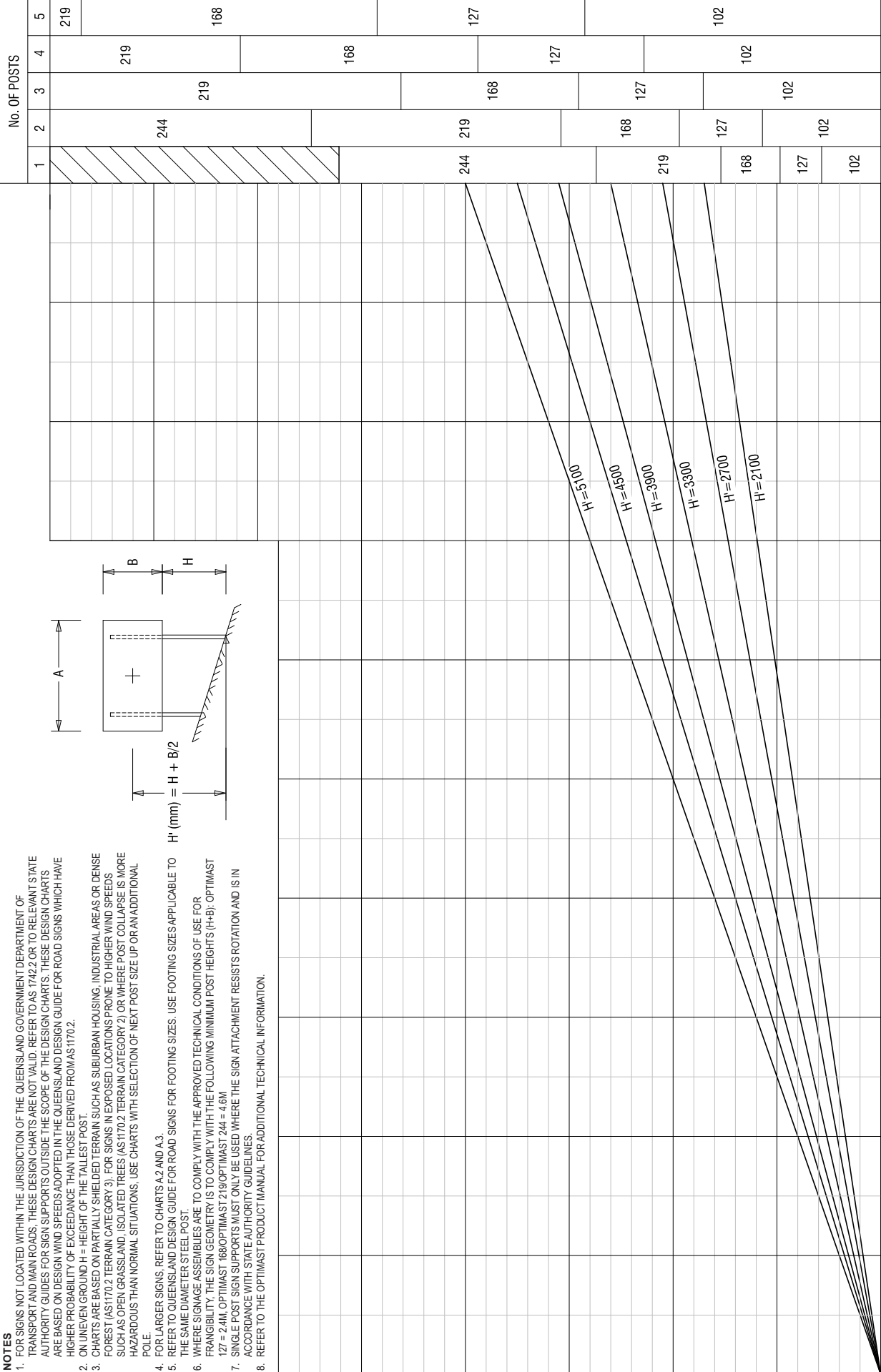
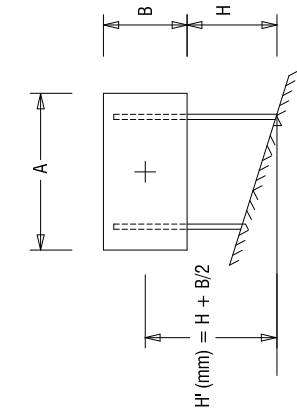


CHART A.2 - OPTIMAST POSTS - REGION A: SIGN AREA (A x B) ≤ 28m²



- NOTES**
- FOR SIGNS NOT LOCATED WITHIN THE JURISDICTION OF THE QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS, THESE DESIGN CHARTS ARE NOT VALID. REFER TO AS 1742.2 OR TO RELEVANT STATE AUTHORITY GUIDES FOR SIGN SUPPORTS OUTSIDE THE SCOPE OF THE DESIGN CHARTS. THESE DESIGN CHARTS ARE BASED ON DESIGN WIND SPEEDS ADOPTED IN THE QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS WHICH HAVE HIGHER PROBABILITY OF EXCEEDANCE THAN THOSE DERIVED FROM AS 1170.2.
 - ON UNEVEN GROUND H = HEIGHT OF THE TALLEST POST.
 - CHARTS ARE BASED ON PARTIALLY SHIELDED TERRAIN SUCH AS SUBURBAN HOUSING, INDUSTRIAL AREAS OR DENSE FOREST (AS 1170.2 TERRAIN CATEGORY 3). FOR SIGNS IN EXPOSED LOCATIONS PRONE TO HIGHER WIND SPEEDS SUCH AS OPEN GRASSLAND, ISOLATED TREES (AS 1170.2 TERRAIN CATEGORY 2) OR WHERE POST COLLAPSE IS MORE HAZARDOUS THAN NORMAL SITUATIONS, USE CHARTS WITH SELECTION OF NEXT POST SIZE UP OR AN ADDITIONAL POLE.
 - FOR SMALLER SIGNS, REFER TO CHART A.1. LARGER SIGNS, REFER TO CHART A.3.
 - REFER TO QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS FOR FOOTING SIZES. USE FOOTING SIZES APPLICABLE TO THE SAME DIAMETER STEEL POST.
 - WHERE SIGNAGE ASSEMBLIES ARE TO COMPLY WITH THE APPROVED TECHNICAL CONDITIONS OF USE FOR FRANGIBILITY, THE SIGN GEOMETRY IS TO COMPLY WITH THE FOLLOWING MINIMUM POST HEIGHTS (H+B): OPTIMAST 127 = 2.4M, OPTIMAST 168/OPTIMAST 219/OPTIMAST 244 = 4.6M.
 - SINGLE POST SIGN SUPPORTS MUST ONLY BE USED WHERE THE SIGN ATTACHMENT RESISTS ROTATION AND IS IN ACCORDANCE WITH STATE AUTHORITY GUIDELINES.
 - REFER TO THE OPTIMAST PRODUCT MANUAL FOR ADDITIONAL TECHNICAL INFORMATION.

No. OF POSTS						OPTIMAST POSTS														
						1	2	3	4	5	1	2	3	4	5					
<p style="text-align: center;">$H' (\text{mm}) = H + B/2$</p> <p style="text-align: center;">$H = 5100$ $H = 4500$ $H = 3900$ $H = 3300$ $H = 2700$ $H = 2100$</p>											244	244	244	244	244	244	244	244	244	244
											244	244	244	244	244	244	244	244	244	244
											219	219	219	219	219	219	219	219	219	219
											168	168	168	168	168	168	168	168	168	168
											127	127	127	127	127	127	127	127	127	127
											102	102	102	102	102	102	102	102	102	102
											168	168	168	168	168	168	168	168	168	168
REFER CHART A.1.																				

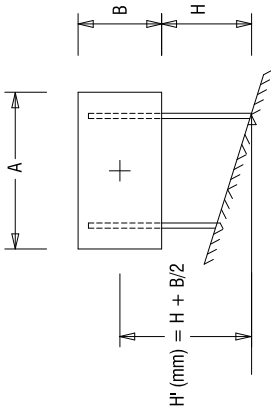
SIGN AREA (A x B) m²

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

CHART A.3 - OPTIMAST POSTS - REGION A: SIGN AREA (A x B) ≤ 40m²

NOTES

1. FOR SIGNS NOT LOCATED WITHIN THE JURISDICTION OF THE QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS, THESE DESIGN CHARTS ARE NOT VALID. REFER TO AS 17422 OR TO RELEVANT STATE AUTHORITY GUIDES FOR SIGN SUPPORTS OUTSIDE THE SCOPE OF THE DESIGN CHARTS. THESE DESIGN CHARTS ARE BASED ON DESIGN WIND SPEEDS ADOPTED IN THE QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS WHICH HAVE HIGHER PROBABILITY OF EXCEEDANCE THAN THOSE DERIVED FROM AS1170.2.
2. ON UNEVEN GROUND H = HEIGHT OF THE TALLEST POST.
3. CHARTS ARE BASED ON PARTIALLY SHIELDED TERRAIN SUCH AS SUBURBAN HOUSING, INDUSTRIAL AREAS OR DENSE FOREST (AS1170.2 TERRAIN CATEGORY 3). FOR SIGNS IN EXPOSED LOCATIONS PRONE TO HIGHER WIND SPEEDS SUCH AS OPEN GRASSLAND, ISOLATED TREES (AS1170.2 TERRAIN CATEGORY 2) OR WHERE POST COLLAPSE IS MORE HAZARDOUS THAN NORMAL SITUATIONS, USE CHARTS WITH SELECTION OF NEXT POST SIZE UP OR AN ADDITIONAL POLE.
4. FOR SMALLER SIGNS, REFER TO CHARTS A.1 AND A.2.
5. REFER TO QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS FOR FOOTING SIZES. USE FOOTING SIZES APPLICABLE TO THE SAME DIAMETER STEEL POST.
6. WHERE SIGNAGE ASSEMBLIES ARE TO COMPLY WITH THE APPROVED TECHNICAL CONDITIONS OF USE FOR FRANGIBILITY, THE SIGN GEOMETRY IS TO COMPLY WITH THE FOLLOWING MINIMUM POST HEIGHTS (H-B): OPTIMAST 127 = 2.4M; OPTIMAST 168/OPTIMAST 219/OPTIMAST 244 = 4.6M.
7. SINGLE POST SIGN SUPPORTS MUST ONLY BE USED WHERE THE SIGN ATTACHMENT RESISTS ROTATION AND IS IN ACCORDANCE WITH STATE AUTHORITY GUIDELINES.
8. REFER TO THE OPTIMAST PRODUCT MANUAL FOR ADDITIONAL TECHNICAL INFORMATION.



						OPTIMAST POSTS					
						1	2	3	4	5	
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											

REFER CHART A.2.

SIGN AREA (A x B)m²

CHART B.1 - OPTIMAST POSTS - REGION B: SIGN AREA (A x B) ≤ 10m²

NOTES

1. FOR SIGNS NOT LOCATED WITHIN THE JURISDICTION OF THE QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS, THESE DESIGN CHARTS ARE NOT VALID. REFER TO AS 1742.2 OR TO RELEVANT STATE AUTHORITY GUIDES FOR SIGN SUPPORTS OUTSIDE THE SCOPE OF THE DESIGN CHARTS. THESE DESIGN CHARTS ARE BASED ON DESIGN WIND SPEEDS ADOPTED IN THE QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS WHICH HAVE HIGHER PROBABILITY OF EXCEEDANCE THAN THOSE DERIVED FROM AS 1170.2.
2. ON UNEVEN GROUND H = HEIGHT OF THE TALLEST POST.
3. CHARTS ARE BASED ON PARTIALLY SHIELDED TERRAIN SUCH AS SUBURBAN HOUSING, INDUSTRIAL AREAS OR DENSE FOREST (AS 1170.2 TERRAIN CATEGORY 3). FOR SIGNS IN EXPOSED LOCATIONS PRONE TO HIGHER WIND SPEEDS SUCH AS OPEN GRASSLAND, ISOLATED TREES (AS 1170.2 TERRAIN CATEGORY 2) OR WHERE POST COLLAPSE IS MORE HAZARDOUS THAN NORMAL SITUATIONS, USE CHARTS WITH SELECTION OF NEXT POST SIZE UP OR AN ADDITIONAL POLE.
4. FOR LARGER SIGNS, REFER TO CHARTS B.2 AND B.3.
5. REFER TO QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS FOR FOOTING SIZES. USE FOOTING SIZES APPLICABLE TO THE SAME DIAMETER STEEL POST.
6. WHERE SIGNAGE ASSEMBLIES ARE TO COMPLY WITH THE APPROVED TECHNICAL CONDITIONS OF USE FOR FRANGIBILITY, THE SIGN GEOMETRY IS TO COMPLY WITH THE FOLLOWING MINIMUM POST HEIGHTS (H+B):
OPTIMAST 127 = 2.4M, OPTIMAST 168/OPTIMAST 219/OPTIMAST 244 = 4.6M
7. SINGLE POST SIGN SUPPORTS MUST ONLY BE USED WHERE THE SIGN ATTACHMENT RESISTS ROTATION AND IS IN ACCORDANCE WITH STATE AUTHORITY GUIDELINES.
8. REFER TO THE OPTIMAST PRODUCT MANUAL FOR ADDITIONAL TECHNICAL INFORMATION.

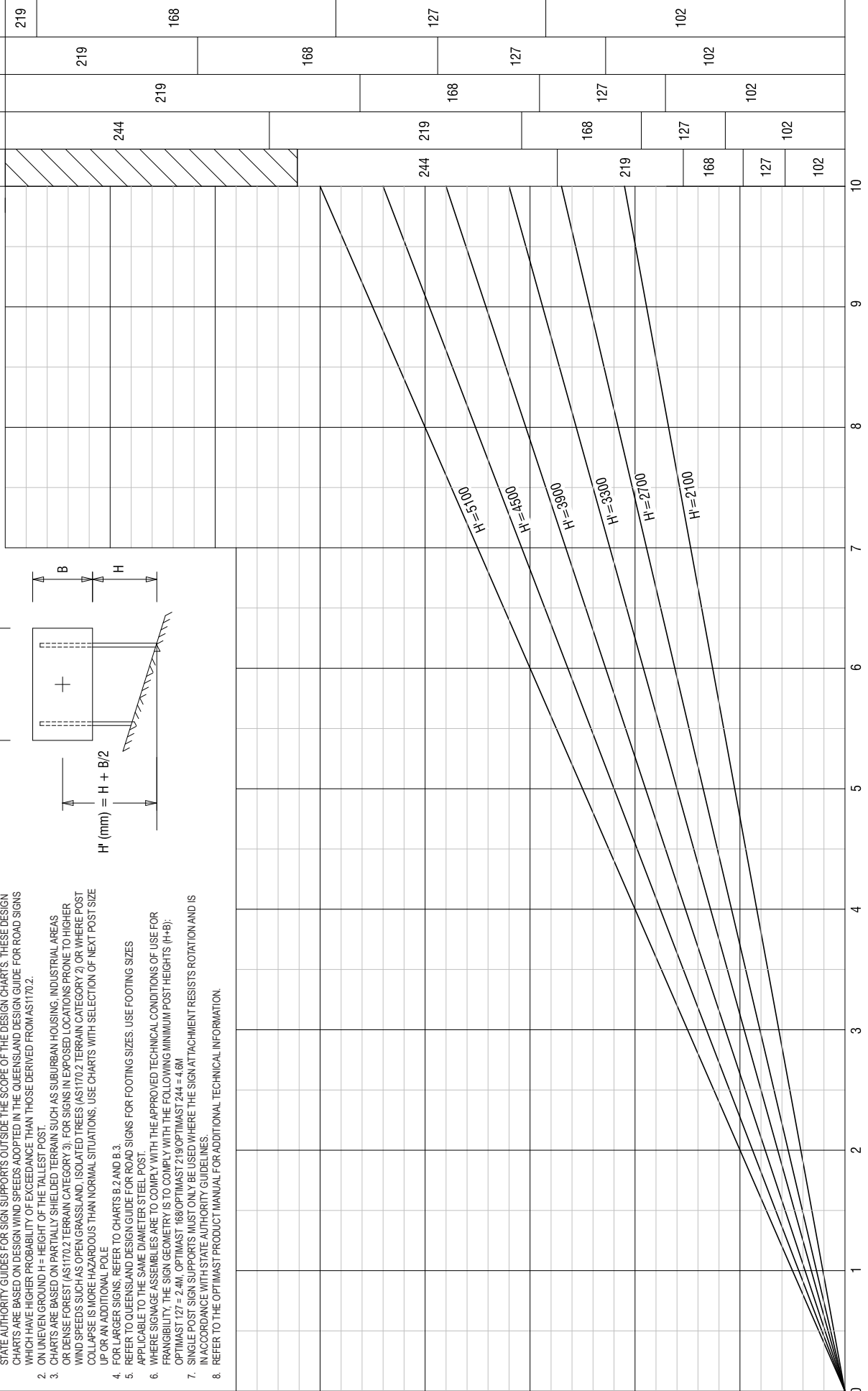
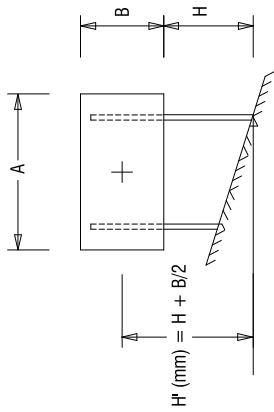
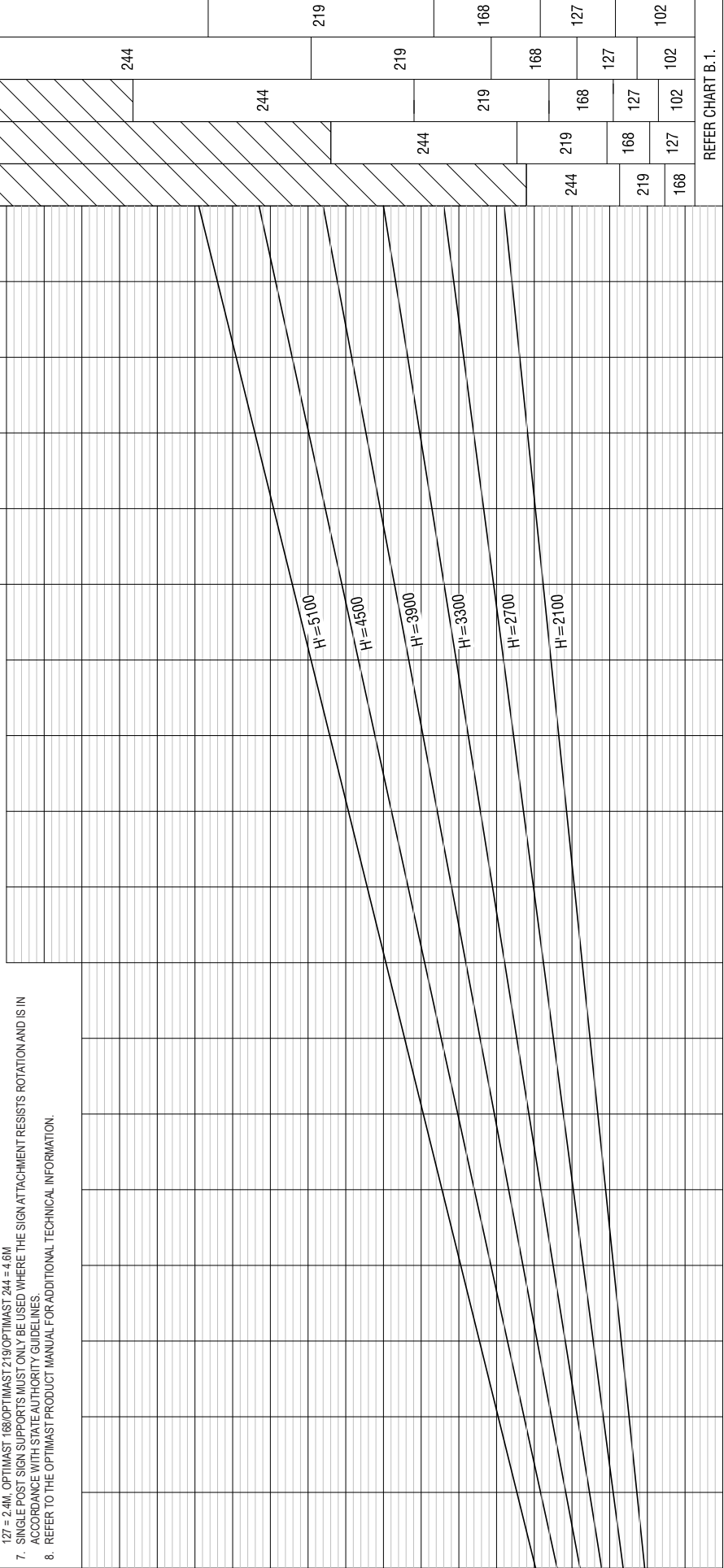
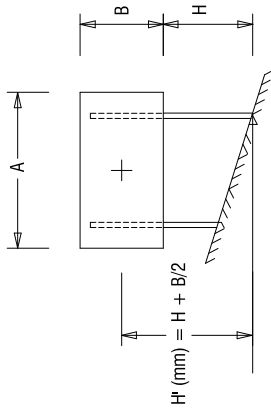


CHART B.2 - OPTIMAST POSTS - REGION B: SIGN AREA (A x B) ≤ 28m²

NOTES

- FOR SIGNS NOT LOCATED WITHIN THE JURISDICTION OF THE QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS, THESE DESIGN CHARTS ARE NOT VALID. REFER TO AS 1742.2 OR TO RELEVANT STATE AUTHORITY GUIDES FOR SIGN SUPPORTS OUTSIDE THE SCOPE OF THE DESIGN CHARTS. THESE DESIGN CHARTS ARE BASED ON DESIGN WIND SPEEDS ADOPTED IN THE QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS WHICH HAVE HIGHER PROBABILITY OF EXCEEDANCE THAN THOSE DERIVED FROM AS1170.2.
- ON UNEVEN GROUND H = HEIGHT OF THE TALLEST POST.
- CHARTS ARE BASED ON PARTIALLY SHIELDED TERRAIN SUCH AS SUBURBAN HOUSING, INDUSTRIAL AREAS OR DENSE FOREST (AS1170.2 TERRAIN CATEGORY 3). FOR SIGNS IN EXPOSED LOCATIONS PRONE TO HIGHER WIND SPEEDS SUCH AS OPEN GRASSLAND, ISOLATED TREES (AS1170.2 TERRAIN CATEGORY 2) OR WHERE POST COLLAPSE IS MORE HAZARDOUS THAN NORMAL SITUATIONS, USE CHARTS WITH SELECTION OF NEXT POST SIZE UP OR AN ADDITIONAL POLE.
- FOR SMALLER SIGNS, REFER CHART B.1. FOR LARGER SIGNS, REFER TO CHART B.3.
- REFER TO QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS FOR FOOTING SIZES. USE FOOTING SIZES APPLICABLE TO THE SAME DIAMETER STEEL POST.
- WHERE SIGNAGE ASSEMBLIES ARE TO COMPLY WITH THE APPROVED TECHNICAL CONDITIONS OF USE FOR FRANGIBILITY, THE SIGN GEOMETRY IS TO COMPLY WITH THE FOLLOWING MINIMUM POST HEIGHTS (H+B): OPTIMAST 127 = 2.4M, OPTIMAST 168/OPTIMAST 219/OPTIMAST 244 = 4.6M.
- SINGLE POST SIGN SUPPORTS MUST ONLY BE USED WHERE THE SIGN ATTACHMENT RESISTS ROTATION AND IS IN ACCORDANCE WITH STATE AUTHORITY GUIDELINES.
- REFER TO THE OPTIMAST PRODUCT MANUAL FOR ADDITIONAL TECHNICAL INFORMATION.



REFER CHART B.1.

CHART B.3 - OPTIMAST POSTS - REGION B: SIGN AREA (A x B) ≤ 40m²

NOTES

- FOR SIGNS NOT LOCATED WITHIN THE JURISDICTION OF THE QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS, THESE DESIGN CHARTS ARE NOT VALID. REFER TO AS 1742.2 OR TO RELEVANT STATE AUTHORITY GUIDES FOR SIGN SUPPORTS OUTSIDE THE SCOPE OF THE DESIGN CHARTS. THESE DESIGN CHARTS ARE BASED ON DESIGN WIND SPEEDS ADOPTED IN THE QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS WHICH HAVE HIGHER PROBABILITY OF EXCEEDANCE THAN THOSE DERIVED FROM AS1170.2.
- ON UNEVEN GROUND, H = HEIGHT OF THE TALLEST POST.
- CHARTS ARE BASED ON PARTIALLY SHIELDED TERRAIN SUCH AS SUBURBAN HOUSING, INDUSTRIAL AREAS OR DENSE FOREST (AS1170.2 TERRAIN CATEGORY 3). FOR SIGNS IN EXPOSED LOCATIONS PRONE TO HIGHER WIND SPEEDS SUCH AS OPEN GRASSLAND, ISOLATED TREES (AS1170.2 TERRAIN CATEGORY 2) OR WHERE POST COLLAPSE IS MORE HAZARDOUS THAN NORMAL SITUATIONS, USE CHARTS WITH SELECTION OF NEXT POST SIZE UP OR AN ADDITIONAL POLE.
- FOR SMALLER SIGNS, REFER TO CHARTS B.1 AND B.2.
- REFER TO QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS FOR FOOTING SIZES. USE FOOTING SIZES APPLICABLE TO THE SAME DIAMETER STEEL POST.
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- REFER TO THE OPTIMAST PRODUCT MANUAL FOR ADDITIONAL TECHNICAL INFORMATION.

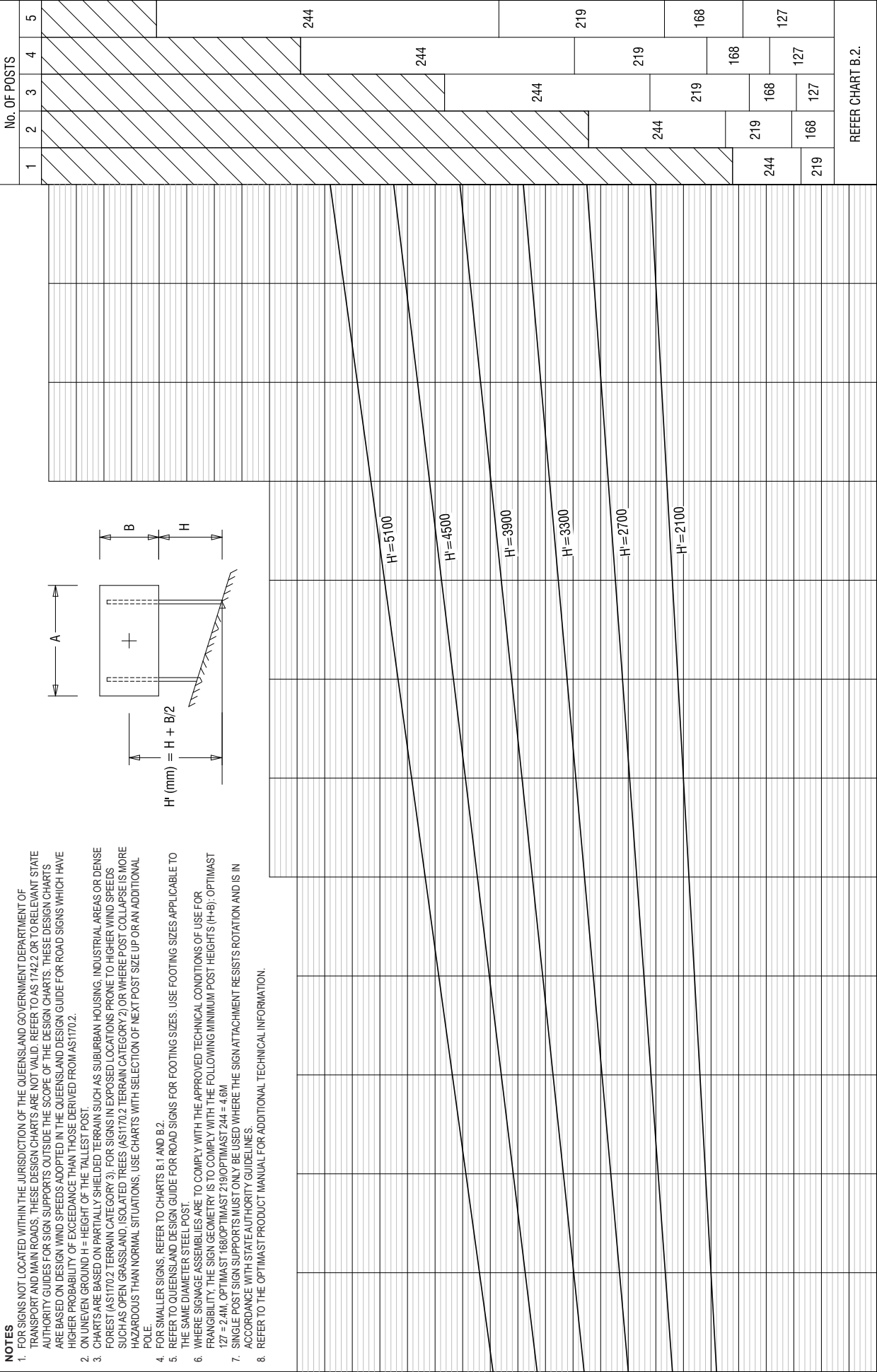
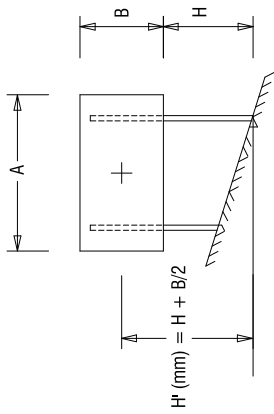


CHART C.1 - OPTIMAST POSTS - REGION C: SIGN AREA (A x B) ≤ 10m²

NOTES

- FOR SIGNS NOT LOCATED WITHIN THE JURISDICTION OF THE QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS, THESE DESIGN CHARTS ARE NOT VALID. REFER TO AS 1742.2 OR TO RELEVANT STATE AUTHORITY GUIDES FOR SIGN SUPPORTS OUTSIDE THE SCOPE OF THE DESIGN CHARTS. THESE DESIGN CHARTS ARE BASED ON DESIGN WIND SPEEDS ADOPTED IN THE QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS WHICH HAVE HIGHER PROBABILITY OF EXCEEDANCE THAN THOSE DERIVED FROM AS1170.2.
- ON UNEVEN GROUND H = HEIGHT OF THE TALLEST POST.
- CHARTS ARE BASED ON PARTIALLY SHIELDED TERRAIN SUCH AS SUBURBAN HOUSING, INDUSTRIAL AREAS OR DENSE FOREST (AS1170.2 TERRAIN CATEGORY 3). FOR SIGNS IN EXPOSED LOCATIONS PRONE TO HIGHER WIND SPEEDS SUCH AS OPEN GRASSLAND, ISOLATED TREES (AS1170.2 TERRAIN CATEGORY 2) OR WHERE POST COLLAPSE IS MORE HAZARDOUS THAN NORMAL SITUATIONS, USE CHARTS WITH SELECTION OF NEXT POST SIZE UP OR AN ADDITIONAL POLE.
- FOR LARGER SIGNS, REFER TO CHARTS C.2 AND C.3.
- REFER TO QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS FOR FOOTING SIZES. USE FOOTING SIZES APPLICABLE TO THE SAME DIAMETER STEEL POST.
- WHERE SIGNAGE ASSEMBLES ARE TO COMPLY WITH THE APPROVED TECHNICAL CONDITIONS OF USE FOR FRANGIBILITY, THE SIGN GEOMETRY IS TO COMPLY WITH THE FOLLOWING MINIMUM POST HEIGHTS (H+B): OPTIMAST 127 = 2.4M, OPTIMAST 168/OPTIMAST 219/OPTIMAST 244 = 4.6M
- SINGLE POST SIGN SUPPORTS MUST ONLY BE USED WHERE THE SIGN ATTACHMENT RESISTS ROTATION AND IS IN ACCORDANCE WITH STATE AUTHORITY GUIDELINES.
- REFER TO THE OPTIMAST PRODUCT MANUAL FOR ADDITIONAL TECHNICAL INFORMATION.

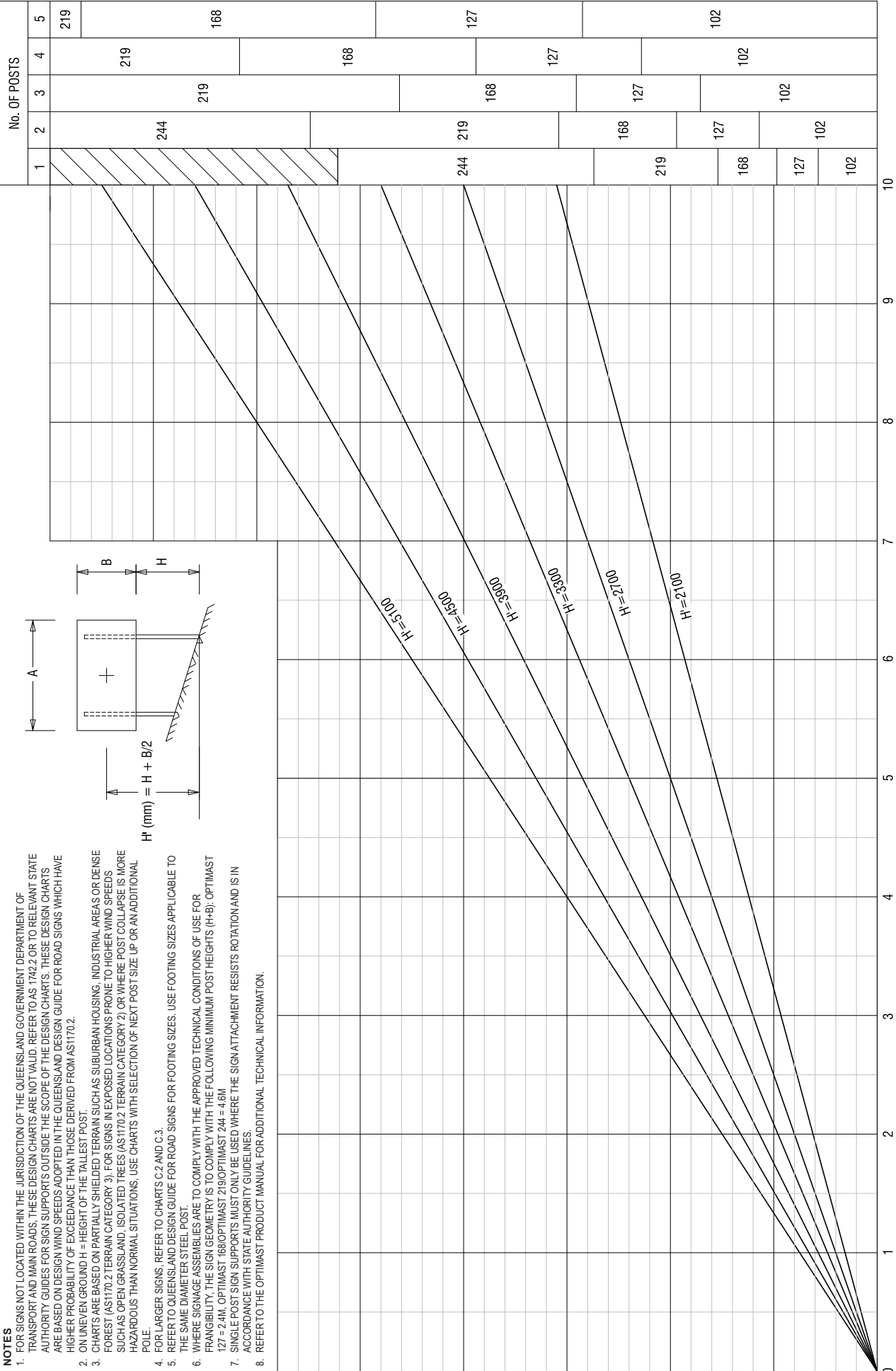
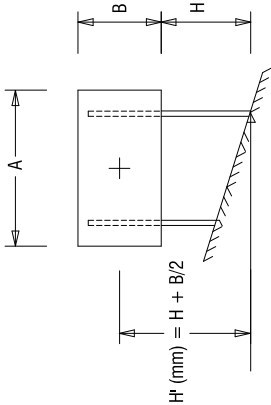
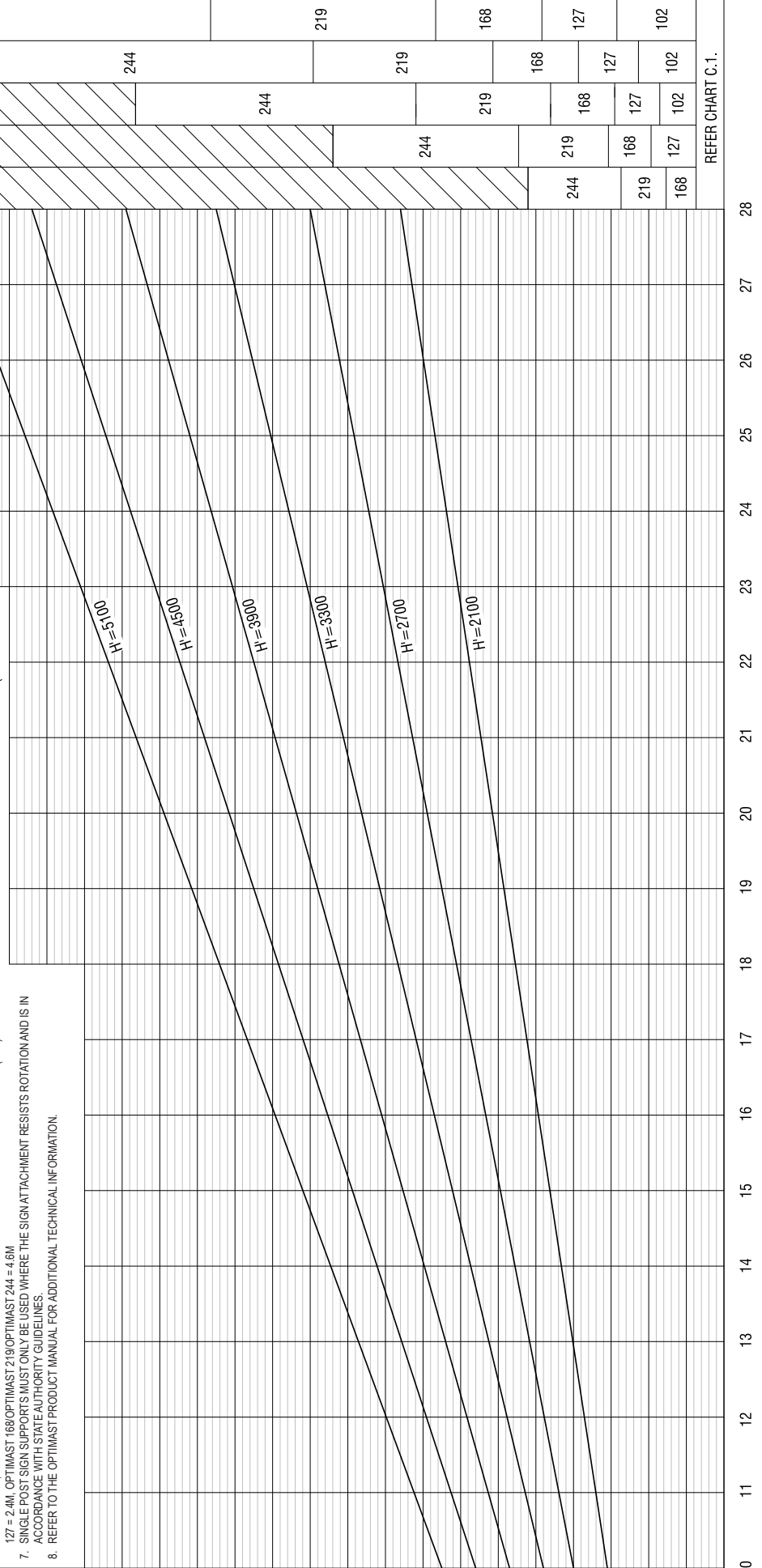
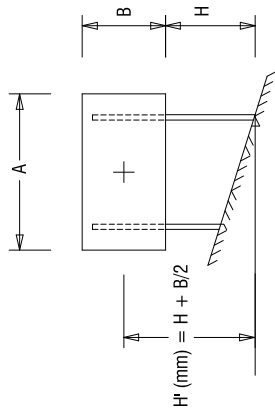


CHART C.2 - OPTIMAST POSTS - REGION C: SIGN AREA (A x B) ≤ 28m²

NOTES

- FOR SIGNS NOT LOCATED WITHIN THE JURISDICTION OF THE QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS, THESE DESIGN CHARTS ARE NOT VALID. REFER TO AS 1742.2 OR TO RELEVANT STATE AUTHORITY GUIDES FOR SIGN SUPPORTS OUTSIDE THE SCOPE OF THE DESIGN CHARTS. THESE DESIGN CHARTS ARE BASED ON DESIGN WIND SPEEDS ADOPTED IN THE QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS WHICH HAVE HIGHER PROBABILITY OF EXCEEDANCE THAN THOSE DERIVED FROM AS1170.2.
- ON UNEVEN GROUND H = HEIGHT OF THE TALLEST POST.
- CHARTS ARE BASED ON PARTIALLY SHIELDED TERRAIN SUCH AS SUBURBAN HOUSING, INDUSTRIAL AREAS OR DENSE FOREST (AS1170.2 TERRAIN CATEGORY 3). FOR SIGNS IN EXPOSED LOCATIONS PRONE TO HIGHER WIND SPEEDS SUCH AS OPEN GRASSLAND, ISOLATED TREES (AS1170.2 TERRAIN CATEGORY 2) OR WHERE POST COLLAPSE IS MORE HAZARDOUS THAN NORMAL SITUATIONS, USE CHART'S WITH SELECTION OF NEXT POST SIZE UP OR AN ADDITIONAL POLE.
- FOR SMALLER SIGNS, REFER TO CHART C.1. LARGER SIGNS, REFER TO CHART C.3.
- REFER TO QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS FOR FOOTING SIZES. USE FOOTING SIZES APPLICABLE TO THE SAME DIAMETER STEEL POST.
- WHERE SIGNAGE ASSEMBLIES ARE TO COMPLY WITH THE APPROVED TECHNICAL CONDITIONS OF USE FOR FRANGIBILITY, THE SIGN GEOMETRY IS TO COMPLY WITH THE FOLLOWING MINIMUM POST HEIGHTS (H-B): OPTIMAST 127 = 2.4M, OPTIMAST 168/OPTIMAST 219/OPTIMAST 244 = 4.6M.
- SINGLE POST SIGN SUPPORTS MUST ONLY BE USED WHERE THE SIGN ATTACHMENT RESISTS ROTATION AND IS IN ACCORDANCE WITH STATE AUTHORITY GUIDELINES.
- REFER TO THE OPTIMAST PRODUCT MANUAL FOR ADDITIONAL TECHNICAL INFORMATION.



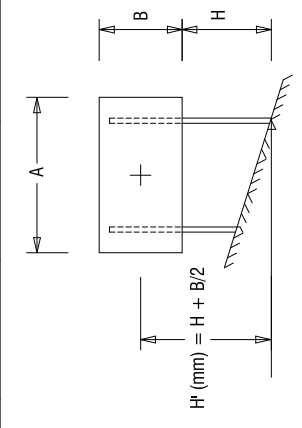
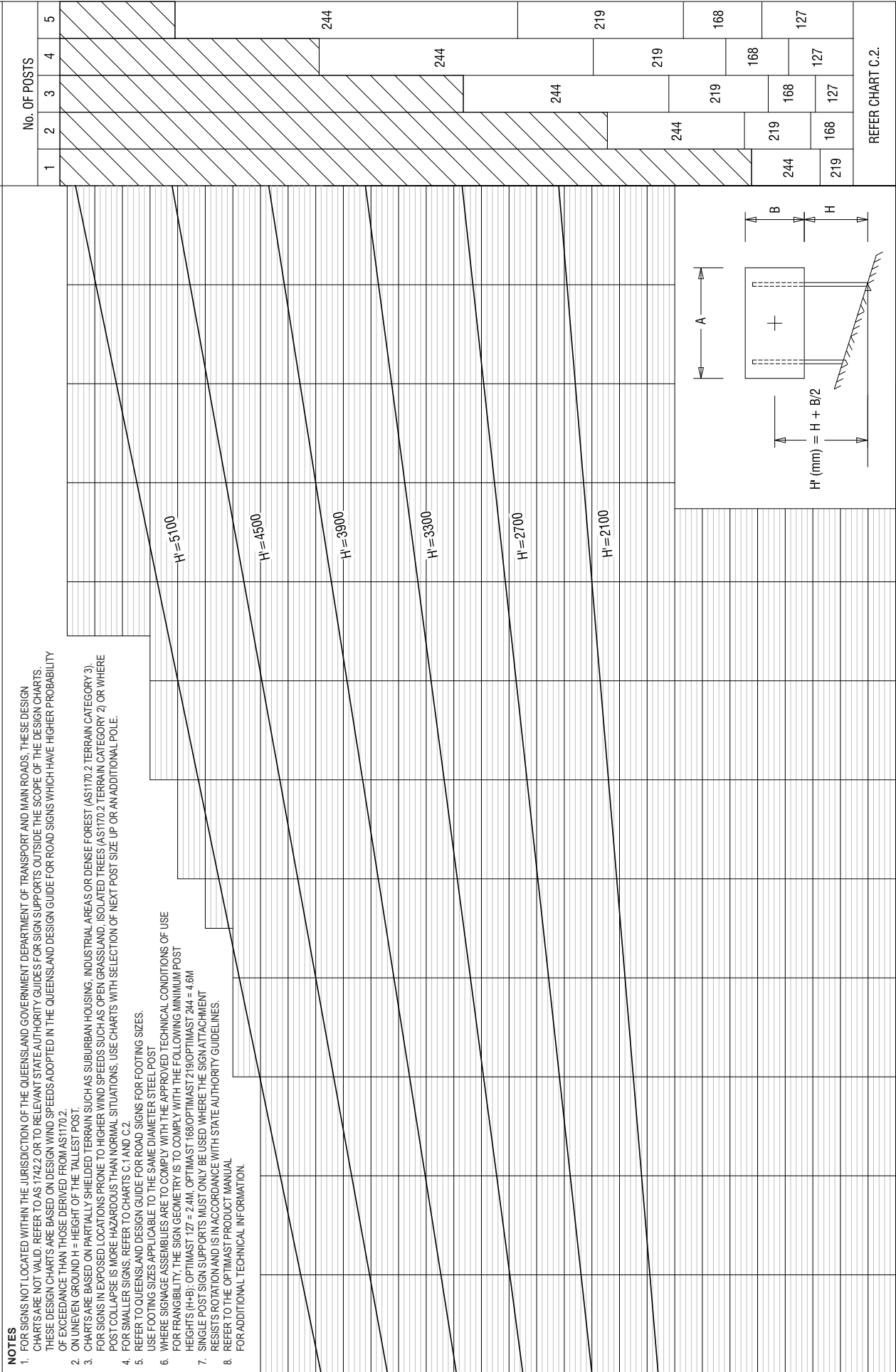
SIGN AREA (A x B)m²

REFER CHART C.1.

CHART C.3 - OPTIMAST POSTS - REGION C: SIGN AREA (A x B) ≤ 40m²

NOTES

- FOR SIGNS NOT LOCATED WITHIN THE JURISDICTION OF THE QUEENSLAND GOVERNMENT DEPARTMENT OF TRANSPORT AND MAIN ROADS, THESE DESIGN CHARTS ARE NOT VALID. REFER TO AS 1742.2 OR TO RELEVANT STATE AUTHORITY GUIDES FOR SIGN SUPPORTS OUTSIDE THE SCOPE OF THE DESIGN CHARTS. THESE DESIGN CHARTS ARE BASED ON DESIGN WIND SPEEDS ADOPTED IN THE QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS WHICH HAVE HIGHER PROBABILITY OF EXCEEDANCE THAN THOSE DERIVED FROM AS1170.2.
- ON UNEVEN GROUND H = HEIGHT OF THE TALLEST POST.
- CHARTS ARE BASED ON PARTIALLY SHIELDED TERRAIN SUCH AS SUBURBAN HOUSING, INDUS TRIAL AREAS OR DENSE FOREST (AS1170.2 TERRAIN CATEGORY 3). FOR SIGNS IN EXPOSED LOCATIONS PRONE TO HIGHER WIND SPEEDS SUCH AS OPEN GRASSLAND, ISOLATED TREES (AS1170.2 TERRAIN CATEGORY 2) OR WHERE POST COLLAPSE IS MORE HAZARDOUS THAN NORMAL SITUATIONS, USE CHARTS WITH SELECTION OF NEXT POST SIZE UP OR AN ADDITIONAL POLE.
- FOR SMALLER SIGNS, REFER TO CHARTS C.1 AND C.2.
- REFER TO QUEENSLAND DESIGN GUIDE FOR ROAD SIGNS FOR FOOTING SIZES.
- USE FOOTING SIZES APPLICABLE TO THE SAME DIAMETER STEEL POST.
- WHERE SIGNAGE ASSEMBLIES ARE TO COMPLY WITH THE APPROVED TECHNICAL CONDITIONS OF USE FOR FRANGIBILITY, THE SIGN GEOMETRY IS TO COMPLY WITH THE FOLLOWING MINIMUM POST HEIGHTS (H+B): OPTIMAST 127 = 2.4M; OPTIMAST 168/OPTIMAST 219/OPTIMAST 244 = 4.6M
- SINGLE POST SIGN SUPPORTS MUST ONLY BE USED WHERE THE SIGN ATTACHMENT RESISTS ROTATION AND IS IN ACCORDANCE WITH STATE AUTHORITY GUIDELINES.
- REFER TO THE OPTIMAST PRODUCT MANUAL FOR ADDITIONAL TECHNICAL INFORMATION.





Signfix Australia is a division of Delnorth Pty Ltd ABN 26 051 954 977.

The Signfix system was originally pioneered in England in 1979 and has since become a world leader in developing quality fixing systems to the sign industry. Signfix was established in Australia as a major supplier of sign fixing systems 20 years ago. Its products are approved by government road transport and infrastructure departments nationwide.

Our aim is to provide and maintain the highest standard of road safety with emphasis on continuous improvement of product through innovation and development.

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