

GATE FRAMES BUYERS GUIDE



100% AUSTRALIAN
MADE & OWNED



Since 1979

by

FORTRESS GATES Pty Ltd

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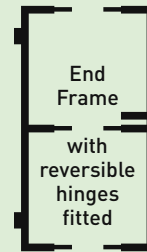
Manufactured under one or more of the
following Patents nos: 953 959 & 569 703.
And other Patents pending.

Available from:

Powerhouse Design 10/16

FIRST Frame Height

Hinges included with E Frames



E1850 BLACK

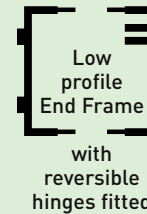
1.85 metre high frame

E1650 GREEN

1.65 metre high frame

E1400 RED

1.40 metre high frame



E1050 BLUE

1.05 metre high frame

E840 GREEN

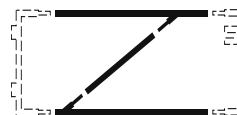
840mm high frame

E710 RED

710mm high frame

TIPS

NOTE: this rail not required
when using Low Profile E840 &
E710 End Frames



Latch bars used to fit
latch or pad bolt

NOTE: this rail
not required
when using
Low Profile
E1050, E840
& E710 End
Frames

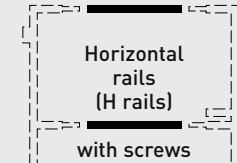


CAUTION

Angle of diagonal brace
requires HD products to be
used with an End Frame with
SAME COLOUR labeling

Use **HD1.3** with **E1650** GREEN ✓
Or **HD1.3** with **E1050** BLUE ✓
NOT **HD1.3** with **E1050** BLUE ✗

THEN Frame Width



100mm H width 100mm
Gate width = H rail width
+ 200mm

STANDARD GATE

H700

Up to 900mm wide gate

H800

Up to 1.0 metre wide gate

H900

Up to 1.1 metre wide gate

H1000

Up to 1.2 metre wide gate

WIDE BRACED GATE

HD1.3

HD1.3

HD1.3

HD1.3

1.2 to 1.5 metre wide gate
with diagonal brace

WIDE BRACED GATE

HD1.6

HD1.6

HD1.6

HD1.6

1.45 to 1.8 metre wide gate
with diagonal brace

EXTRA WIDE BRACED GATE

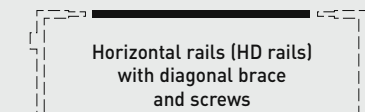
HDD1.9

HDD1.9

HDD1.9

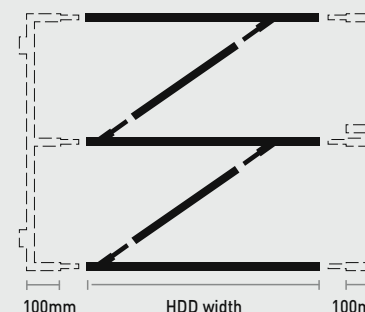
1.75 to 2.1 metre extra
wide gate with diagonal
braces

WIDE BRACED GATE



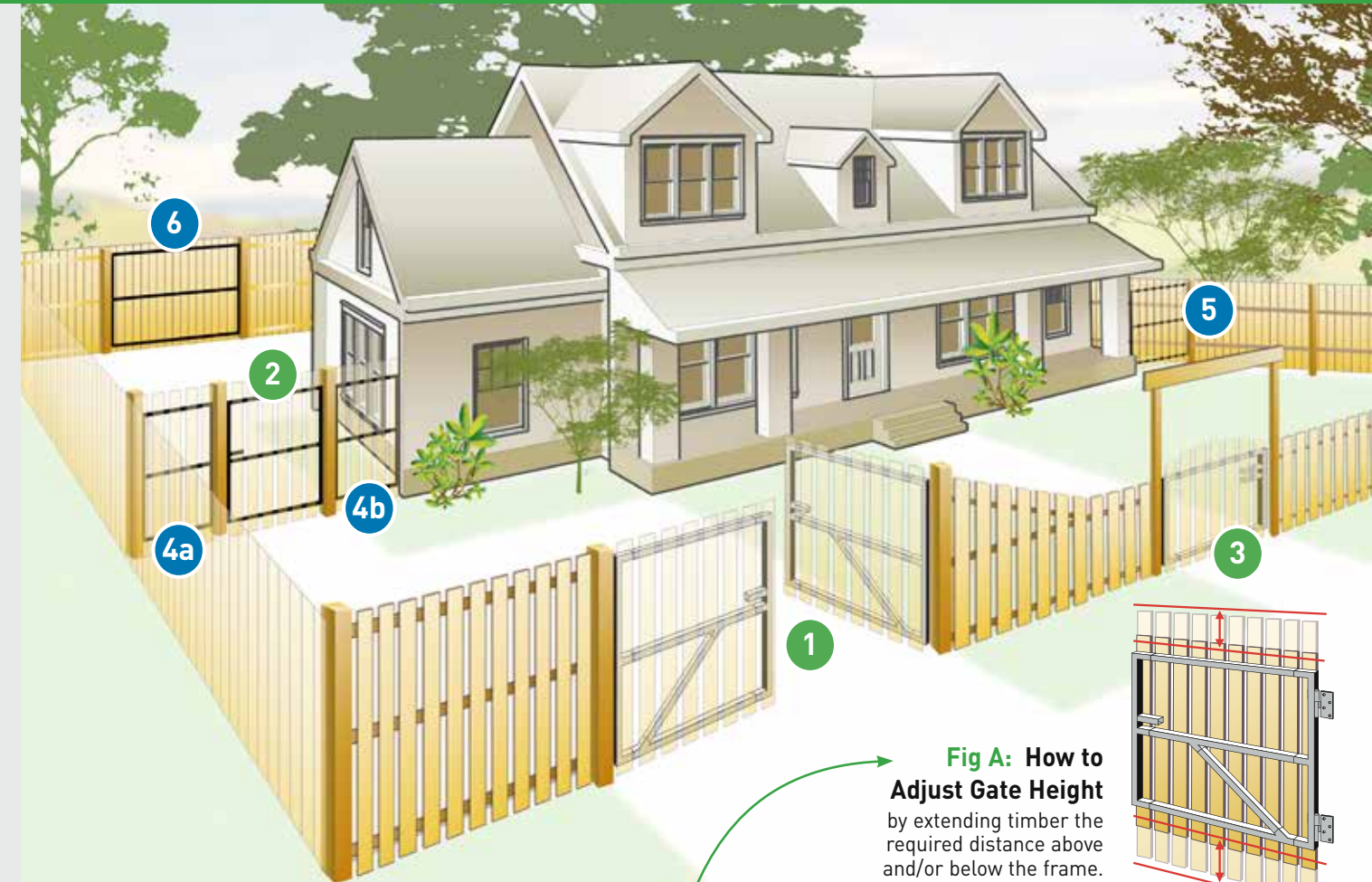
100mm HD width 100mm
Gate width = HD rail width + 200mm

EXTRA WIDE BRACED GATE



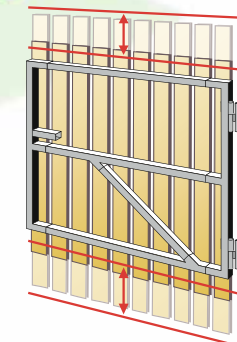
100mm HDD width 100mm

GATE FRAME & FENCE PANEL APPLICATIONS



**Fig A: How to
Adjust Gate Height**

by extending timber the
required distance above
and/or below the frame.



GATES

- Double Gate**
Eg: Driveway - up to 1.85 meters frame height and 4.2 meters wide. For height adjustment see **Fig. A.**
- Single Gate**
eg: Pedestrian gate beside the house - up to 1.85 meters frame height and 2.1 meters wide. For height adjustment see **Fig. A.**
- Feature Gate** eg: Pathway.

FENCE PANELS

- Braces Gate Post**
 - Between gate post and existing side fence rails.
 - Between gate post and house wall.
- Fence Panels** eg: Between house and side fence.
- Removable Fence Panel**
Eg: Complete panel can be unscrewed and replaced for occasional wide access to back yard.

HOW TO ASSEMBLE YOUR OWN

FORTRESS GATE FRAME & FENCE PANELS GALVANISED TUBULAR STEEL



STRONG • GALVANISED • EASY

Your New Fortress Gate


Designed by Peter Wills, Fortress Gates and Panels are fully Australian made and owned.

Fortress Gates are committed to quality and reliability to ensure your gate meets with the requirements of the discerning buyer.

Manufactured from 25mm x 25mm square galvanised steel tubing with sturdy welded joints, these frames won't rot or warp. Your Fortress Gate Frame will allow for different cladding to be added at a later date if trends should change.

Fortress Gates offer a variety of sizes and options to choose from, one of which is sure to suit your needs.

All you need



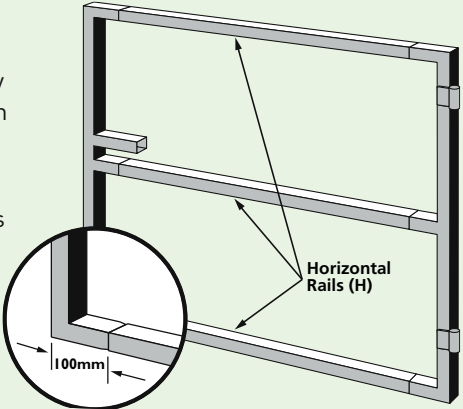
- **Hexagon drill socket** 5/16 or 8mm
- **7/32 or 5.5mm drill bit**
- **Electric drill** (Preferably variable speed & reversible)
- **Self drilling screws** (See chart)
- **Mallet** (or timber block and hammer)
- **Choose your own Cladding**
- **Hacksaw** (if cutting required)
- **Tape Measure**

NOW, FOLLOW THESE SIX SIMPLE STEPS

STEP 1

- Determine width by measuring between gate posts, top and bottom.
- Horizontal "H" rails should be 200mm less than gate width (to allow for 100mm each side of "E" frame).
- Cut "H" rails to suit if your gate is TOO WIDE. Eg: H700, cut to 650 = 850mm wide gate.

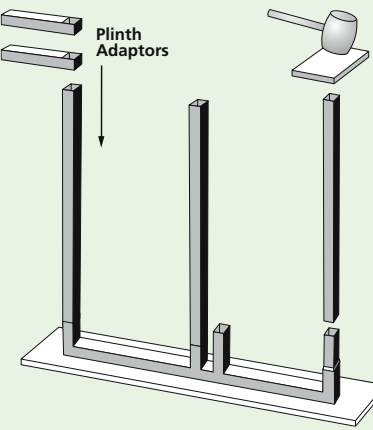
Note: Allow for clearance
SINGLE GATE - should be 10-15mm less than opening
DOUBLE GATE - should be 30-35mm less than opening



STEP 2 BEFORE ASSEMBLY:

- Determine the front of the gate, the hinge side (Hinges are fully reversible), left or right opening and placement of the latch.
- Place the latch side on firm level ground, then bump horizontal rails ("H" rails) on with a mallet or heavy piece of wood. (Hammer must not be used directly onto frame).
- Add plinth adaptors (if required).
- Place hinge side on top of "H" rails and bump into position.
- Now check for correct width, top, centre and bottom.

NOW AVAILABLE with Plinth Adaptors

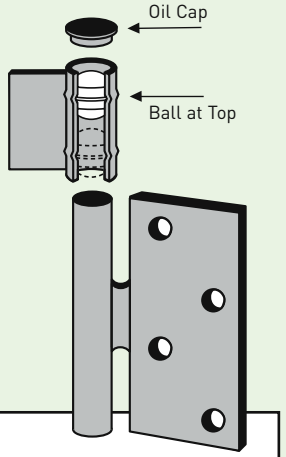


STEP 3

- "E" frames are fitted with **reversible ball-bearing hinges**. This means the hinge pin can be inserted from either end depending on position of the oil cap and ball.
- Oil cap and ball **MUST** be at the top of both hinges. If they are not then **reverse** them as shown.

HOW TO REVERSE HINGE
To reverse hinge remove oil cap, then use hinge pin and hammer to GENTLY dislodge the ball from its retaining groove. It will then slide up the barrel and snap into place in retaining groove at opposite end. Ball moves from end to end but cannot come out.

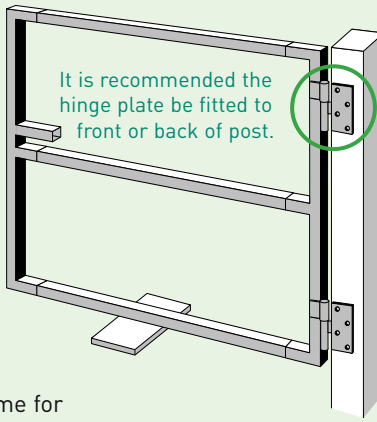
CAUTION: Do not install with one hinge upside down, i.e. ball at bottom and pin inserted from top. This will allow water to fill hinge barrel and possibly cause the hinge to seize.



STEP 4

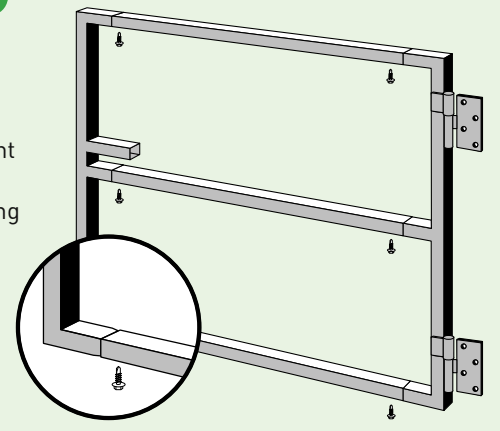
- Place the gate frame into position using a chock to gain the correct height.
- Screw hinge pin plate to the post using one screw only in each plate. When satisfied gate swings properly insert rest of screws.
- Check the swing of the frame for clearance between the post and the ground.
- Ensure the frame is at the correct height for cladding.
- If fancy pickets are used, allow adequate space above the frame.

It is recommended the hinge plate be fitted to front or back of post.



STEP 5

Now screw your frame together with the screws supplied to prevent frame joint from moving while fitting cladding.



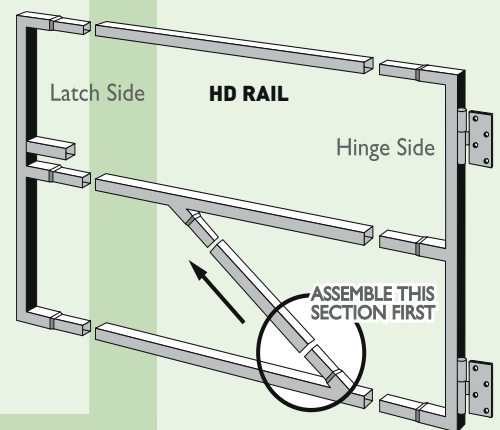
STEP 6

BRACED GATES

- The "HD" rail (horizontal with diagonal brace) is used for wide gates.
- Make sure you use the correct "HD" for the "E" frame as the length and the angle of the brace is pre-set for the height.
- "HD" labels are colour coded to the corresponding "E" frame.

IMPORTANT
Diagonal should point upwards towards the latch side (not down).

"HD" rails may be cut back on the latch side only.



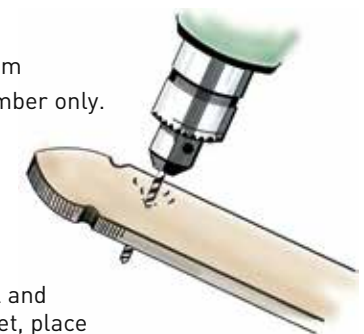
Fixing timber cladding to steel frame




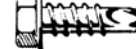
You can select from a wide range of timbers at all leading hardware/timber merchants to fix to the steel frame by using **SELF DRILLING** screws.

1
Mark and drill a 5.5mm (or 7/32) hole in the timber only.

2
Using an electric drill and an 8mm (or 5/16) socket, place **SELF-DRILLING** screw in the hole in timber cladding - then screw **SELF-DRILLING** screw directly into steel frame.

DO NOT PRE-DRILL STEEL



SELF-DRILLING SCREW READY RECKONER		
	SIZE	USE
	No. 10-16 x16mm	For drop bolt, gothic latch, accessories
	No. 12-14 x35mm	Pickets or decking 20-22mm thick
	No. 12-14 x45mm	1" (25mm) boards , e.g. 6"x1" pine
	No. 14 x22mm	For fixing hinges to tubular steel posts - up to 6mm wall thickness

FENCE PANELS

Fence Panels are used in conjunction with Gates to:

- Brace a gate post to a fence or wall (see diagram C below)
- Fill a gap between a gate post and a fence
- Reduce an extra wide gap to a more practical size for a gate
- Allow a gate post to be positioned away from pipes or footings
- Build short sections of fence

ASSEMBLY

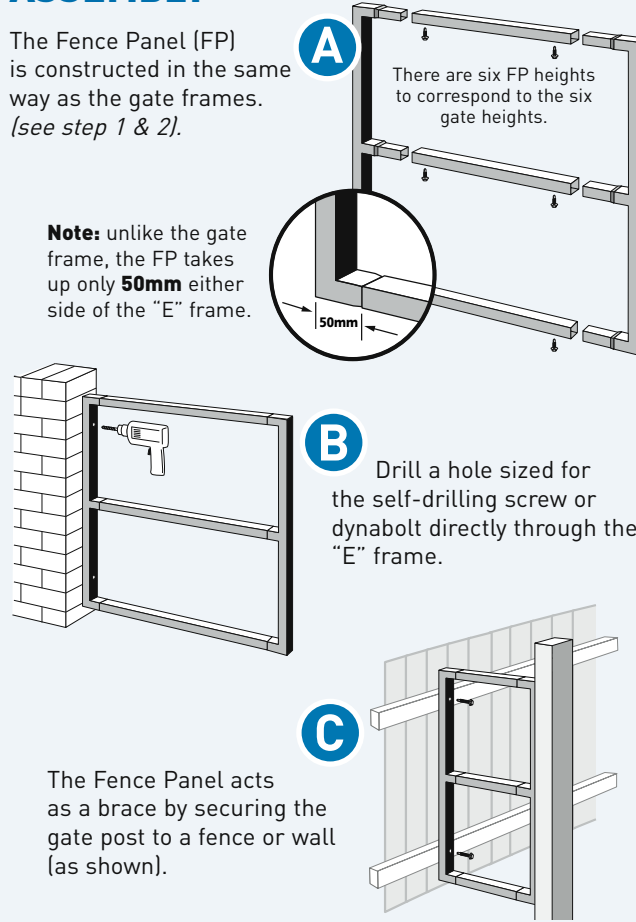
The Fence Panel (FP) is constructed in the same way as the gate frames. (see step 1 & 2).

Note: unlike the gate frame, the FP takes up only **50mm** either side of the "E" frame.

A There are six FP heights to correspond to the six gate heights.

B Drill a hole sized for the self-drilling screw or dynabolt directly through the "E" frame.

C The Fence Panel acts as a brace by securing the gate post to a fence or wall (as shown).



HEIGHT: there are six FP frame heights identical to the gate frame heights

WIDTH: choose from horizontal rails 1.2m, 2.0m, and 2.4m wide or cut to length.