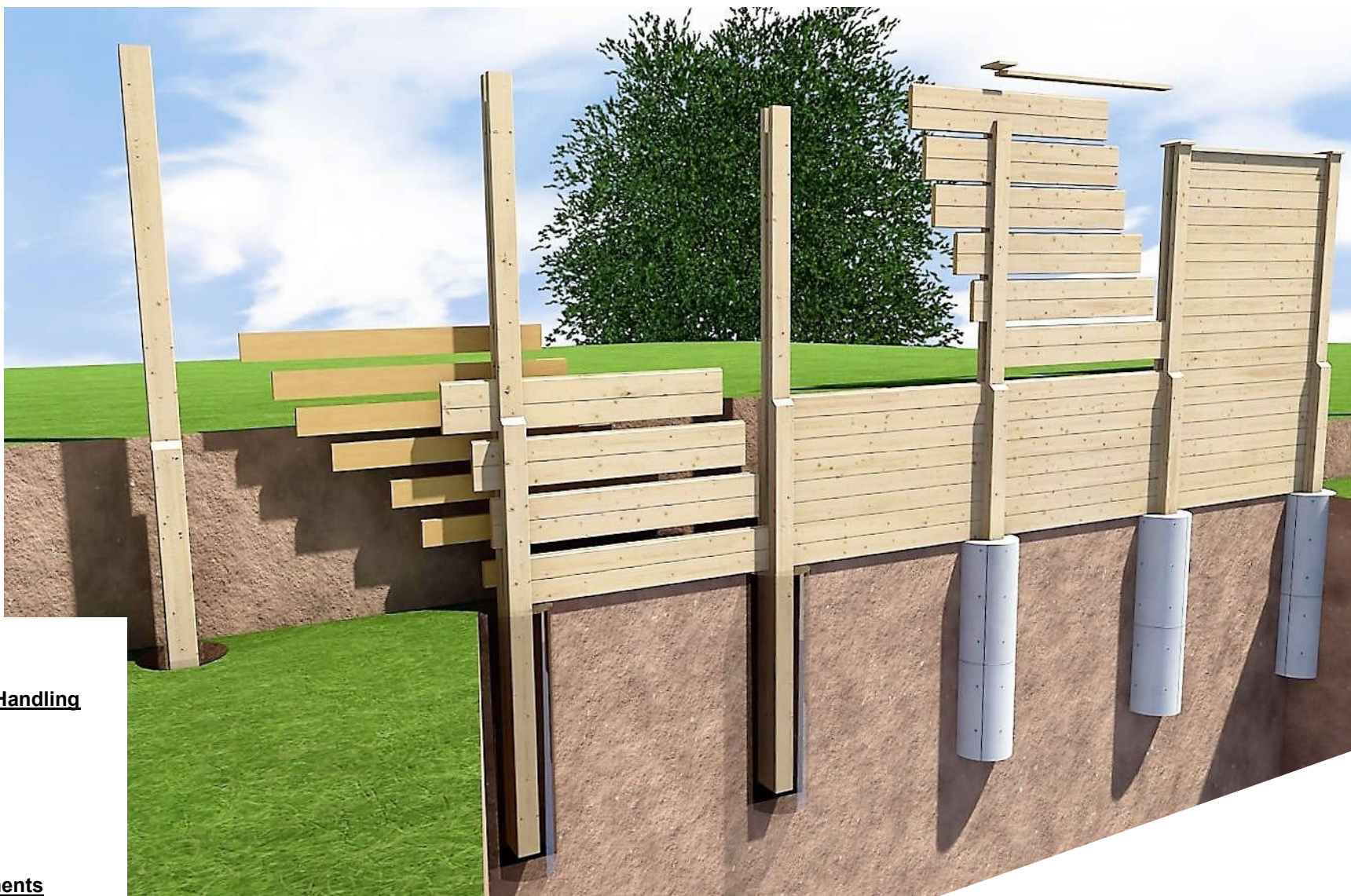


Installation manual for retaining system




Laminata
PROFILI, PUNCIORI E SOLUZIONI RETENIVE


Laminata



Contents:

1.0	Contents
1.1	Tools + Storage & Handling
1.2	Set out
1.3	Post placement
1.4	Post set up
1.5	Concrete in posts
1.6	Panel placement
1.7	Fence assembly
1.8	Fixing pattern
1.9	Fixing and components
1.10	560mm Retaining
1.11	1120mm Retaining
1.12	Acceptable grading
1.13	Unacceptable defects
2.0	Quality Assurance Checklist

Laminata

SHEET	SHEET TITLE: Contents
1.0	REVISION #:
ISSUED:	18/10/2017
PROJECT #:	16LAMI

Installation Manual

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FAX: -

TOOLS YOU NEED



Hammer and Mallet



Concrete mixer



String lines



Long Spirit Level



Circular saw



18v + battery impact driver and drill with multiple spare batteries



Digging tools
i.e. spade
post hole borer

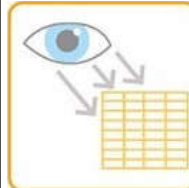


300 dia Auger

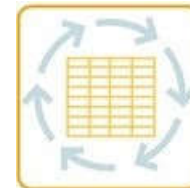


Site equipment
to complete
clean up

STORAGE AND HANDLING



1.



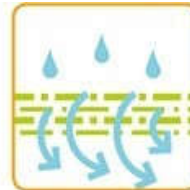
2.



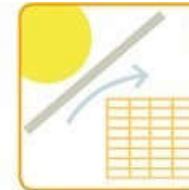
3.



4.



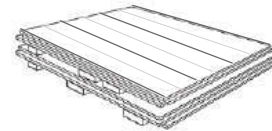
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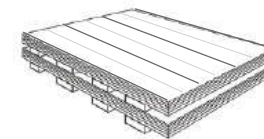
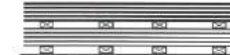
6.

1. Check quality upon delivery
2. Keep stack well ventilated
3. Protect from dirt and dust
4. Allow of airflow under waterproof cover / tarpaulin
5. Store packets on well drained ground
6. Protect from sun damage

WRONG

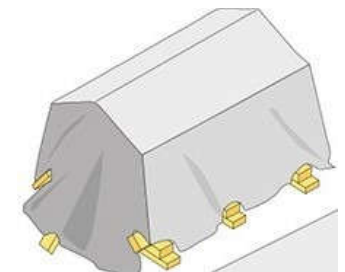


RIGHT



Ensure panel packets are stored on level ground and fillets are aligned to avoid any deformation of panels.

Securely cover packets of panels with ventilation under the tarpaulin.



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SHEET 1.1
SHEET TITLE: What you need
REVISION #:
ISSUED: 18/10/2017
PROJECT #: 16LAMI

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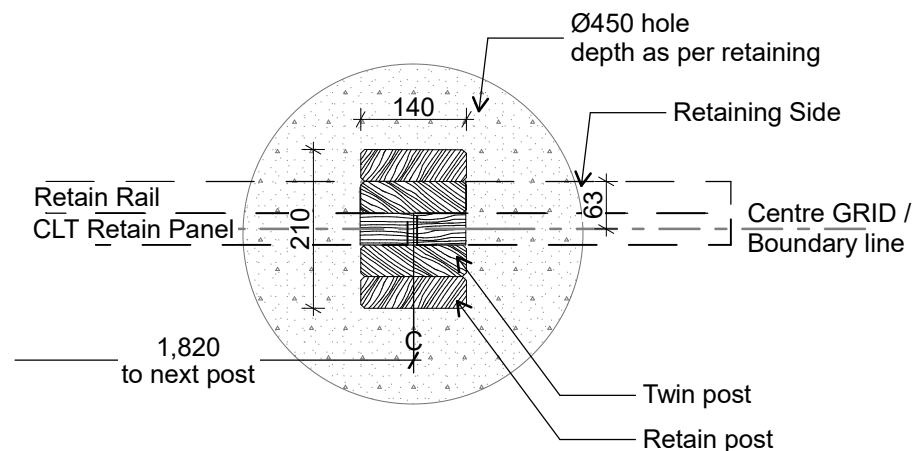
PHONE: 021 215 5865
FAX: -

Take time to get it right!

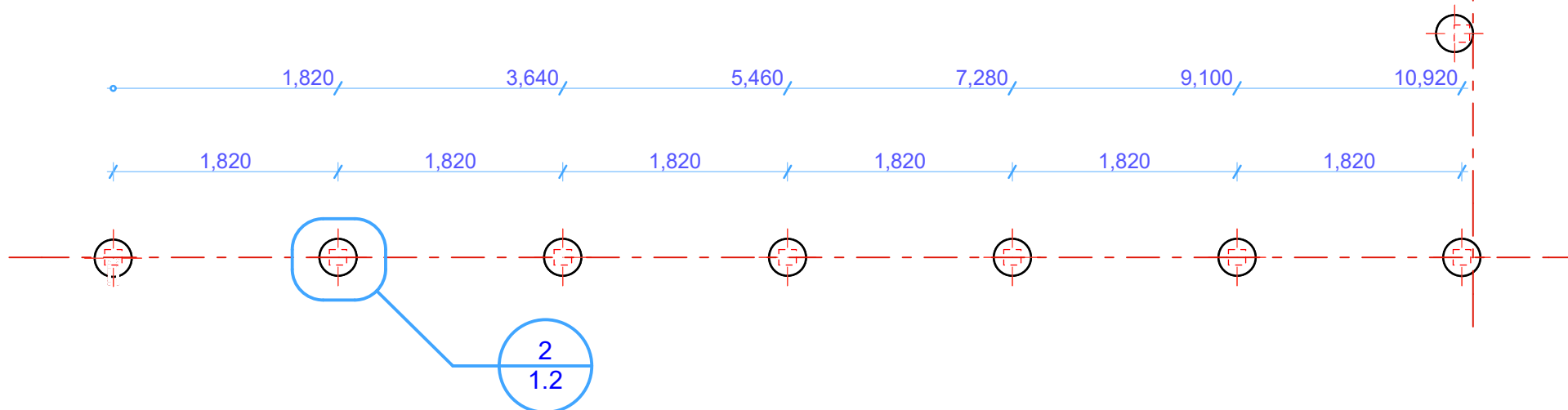
i) Locate boundary pegs :- Ensure boundary pegs are identified so fence panel is set to centre of the line. Confirm with owner.

2. The set out grid lines are determined by the final placement of the fence being usually one of two options;

ii) Inside the Boundary :- On the street front boundary the fence is kept within the property boundary so is offset inside by 25mm.



2	Post in hole setout
1:10	




1

Set Out

1:50

Note: LOCATE BOUNDARY PEGS BEFORE SET OUT -
Retaining and fence may have to be contained within the subject boundary -
CONFIRM WITH OWNER

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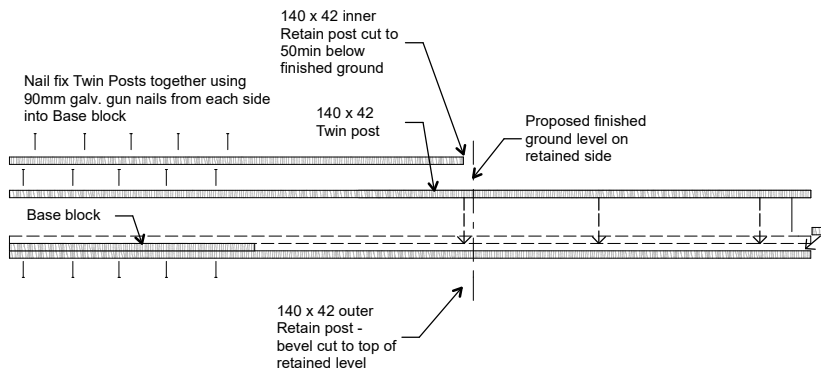
SHEET	SHEET TITLE: Set Out		<h1>Installation Manual</h1>
1.2	REVISION #:		
ISSUED:	18/10/2017		PHONE: 021 215 5865
PROJECT #:	16LAM1		FAX: -

ASSEMBLE QUAD RETAIN POSTS

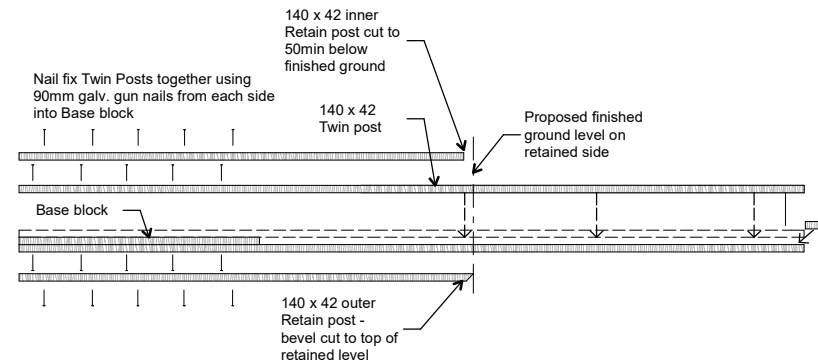
Nail fix the base block to the inside of one post. Nail fix the second Twin Post through the base block. Additional retaining inner and outer posts are then added. Ensure the finished ground level is set out to determine the lengths.

Screw fix a temporary 42mm spacer to the top of the post to ensure it is held square and is easy to align.

550mm RETAINING



825mm RETAINING



CONCRETE FOOTING

Depending on retained height - Ø450 holes are drilled at 1820 crs to the depth required. Refer to boundary engineering sheets.

CONCRETE MIX

Ratio = 6:1 Builders mix 6 : 1 Cement

SET UP CORNER OR END OF RUN TWIN POSTS

Set up end / corner posts first and string setout line between with offset to outside of post to make it easy to aling the posts between.

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SHEET	SHEET TITLE: Post in hole
1.3	REVISION #:
ISSUED:	18/10/2017
PROJECT #:	16LAMI

Installation
Manual

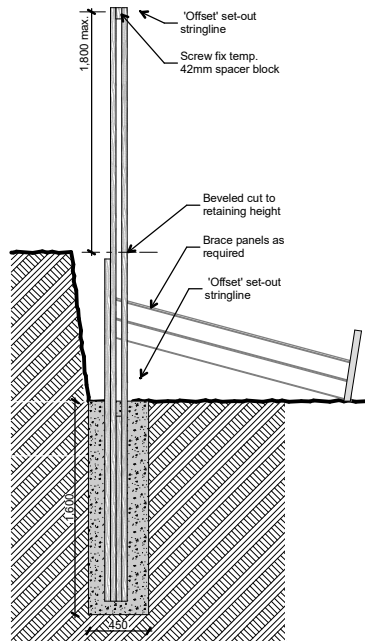
PHONE: 021 215 5865
FAX: -

ASSEMBLE QUAD RETAIN POSTS

Nail fix the base block to the inside of one post. Nail fix the second Twin Post through the base block. Additional retaining inner and outer posts are then added. Ensure the finished ground level is set out to determine the lengths.

Screw fix a temporary 42mm spacer to the top of the post to ensure it is held square and is easy to align.

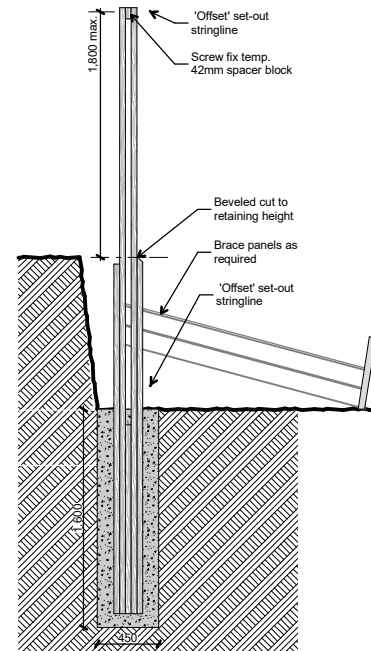
550mm RETAINING



POST EMBEDMENT REQUIREMENTS FOR UP TO 560MM RETAINED HEIGHT :

BORE DIAMETER "D" (MM)	EMBEDMENT DEPTH "L" (M)
400	1.2
450	1.0
500	0.8
550	0.6

825mm RETAINING



POST EMBEDMENT REQUIREMENTS FOR UP TO 1120MM RETAINED HEIGHT :

BORE DIAMETER "D" (MM)	EMBEDMENT DEPTH "L" (M)
400	1.2
450	1.0
500	0.8
550	0.6

Laminata

SHEET SHEET TITLE: Post in Hole

1.5 REVISION #:

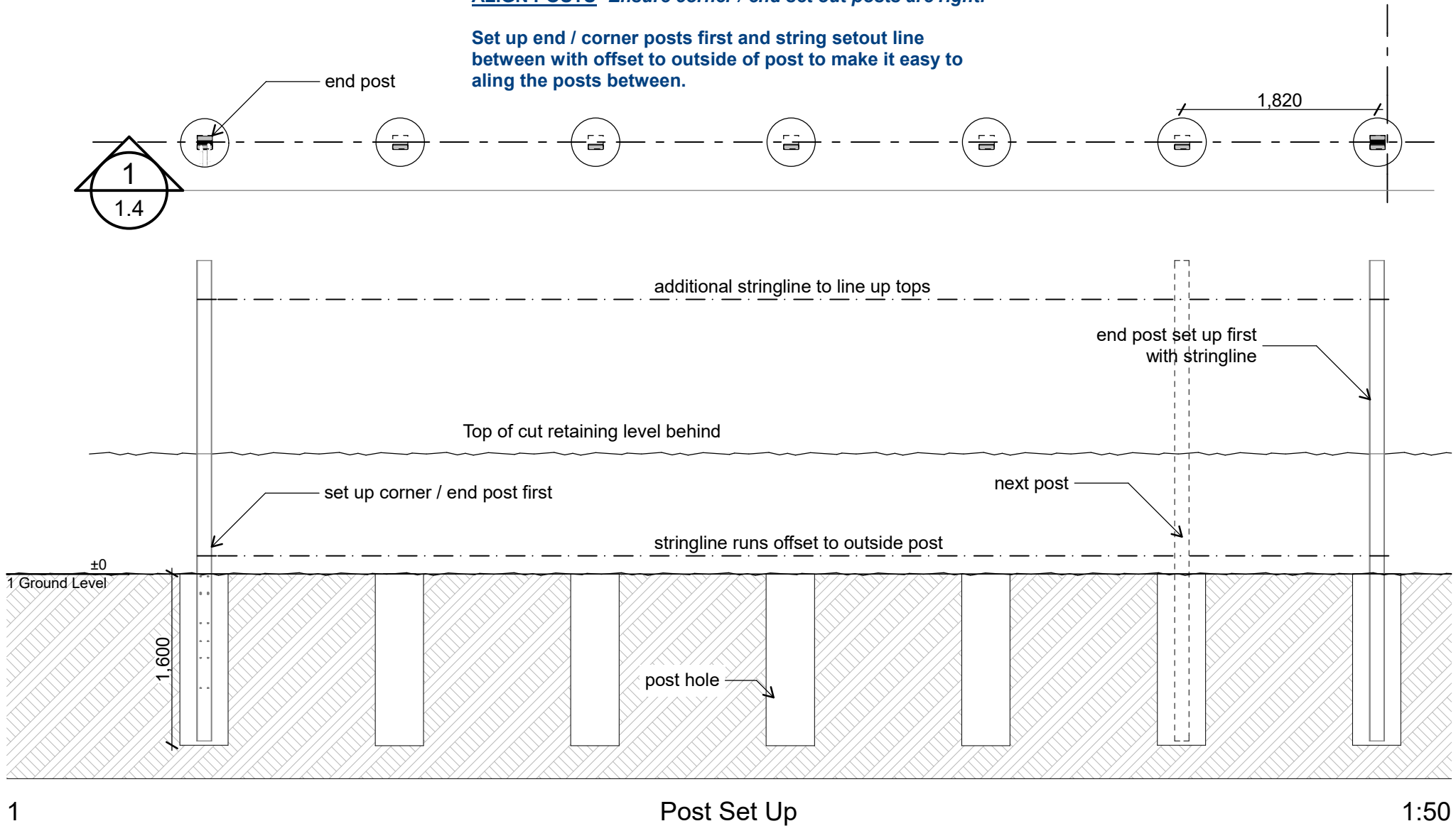
ISSUED: 18/10/2017
PROJECT #: 16LAMI

Installation
Manual

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FAX: -

ALIGN POSTS *Ensure corner / end set out posts are right!*

Set up end / corner posts first and string setout line between with offset to outside of post to make it easy to align the posts between.

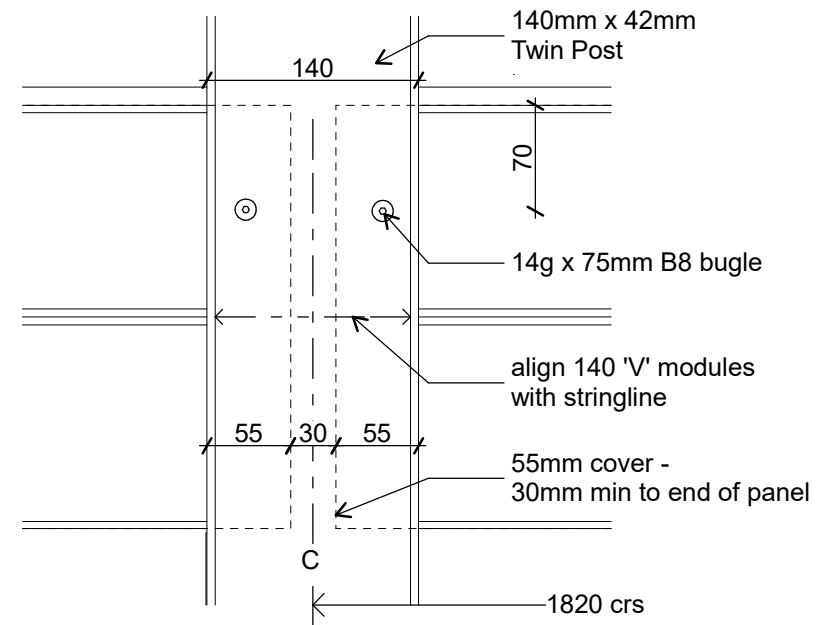
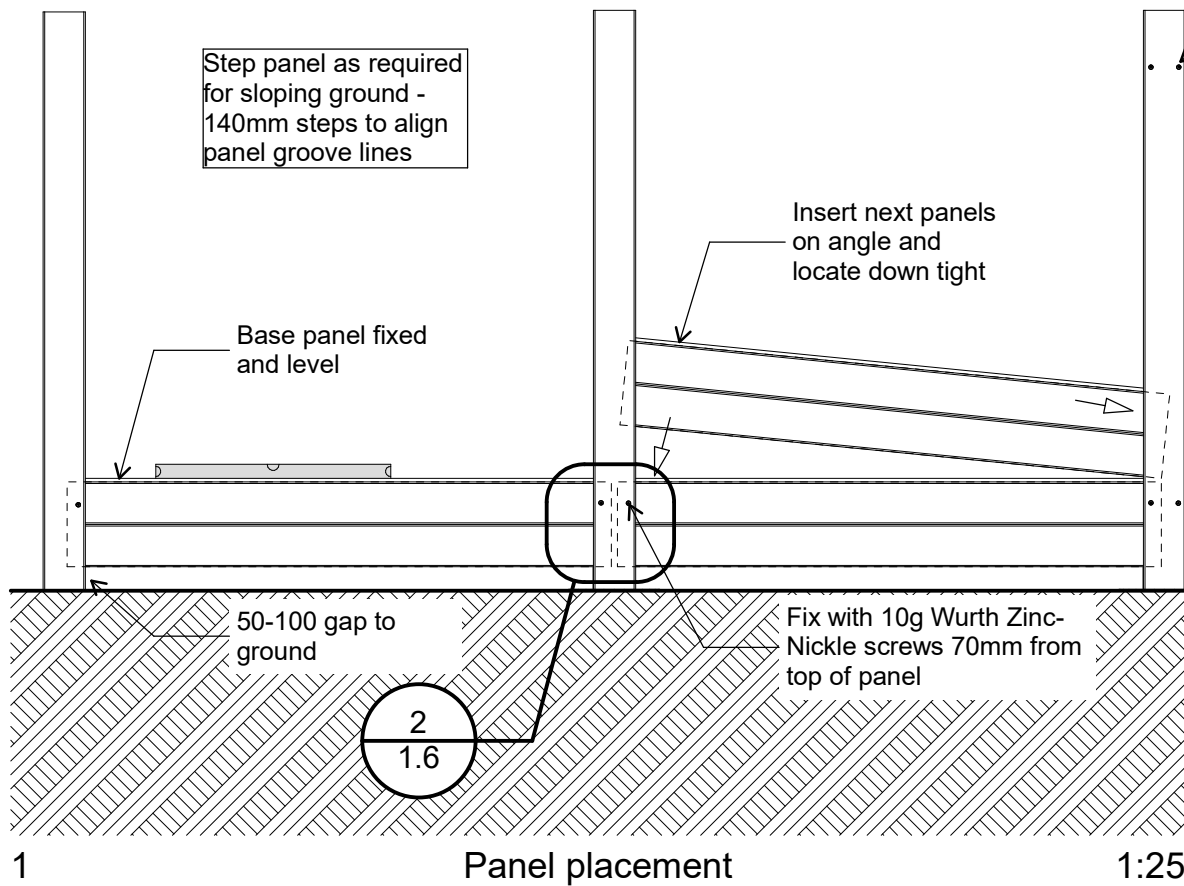


Note: CHECK MEASUREMENTS - 1680 BETWEEN POSTS

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SHEET	SHEET TITLE: Post Holes	1.4	REVISION #:	ISSUED: 18/10/2017	PROJECT #: 16LAMI	PHONE: 021 215 5865	FAX: -
Installation Manual							

PHONE: 021 215 5865
FAX: -



2

Panel Fixing Detail

1:5

BASE PANEL ALIGNMENT

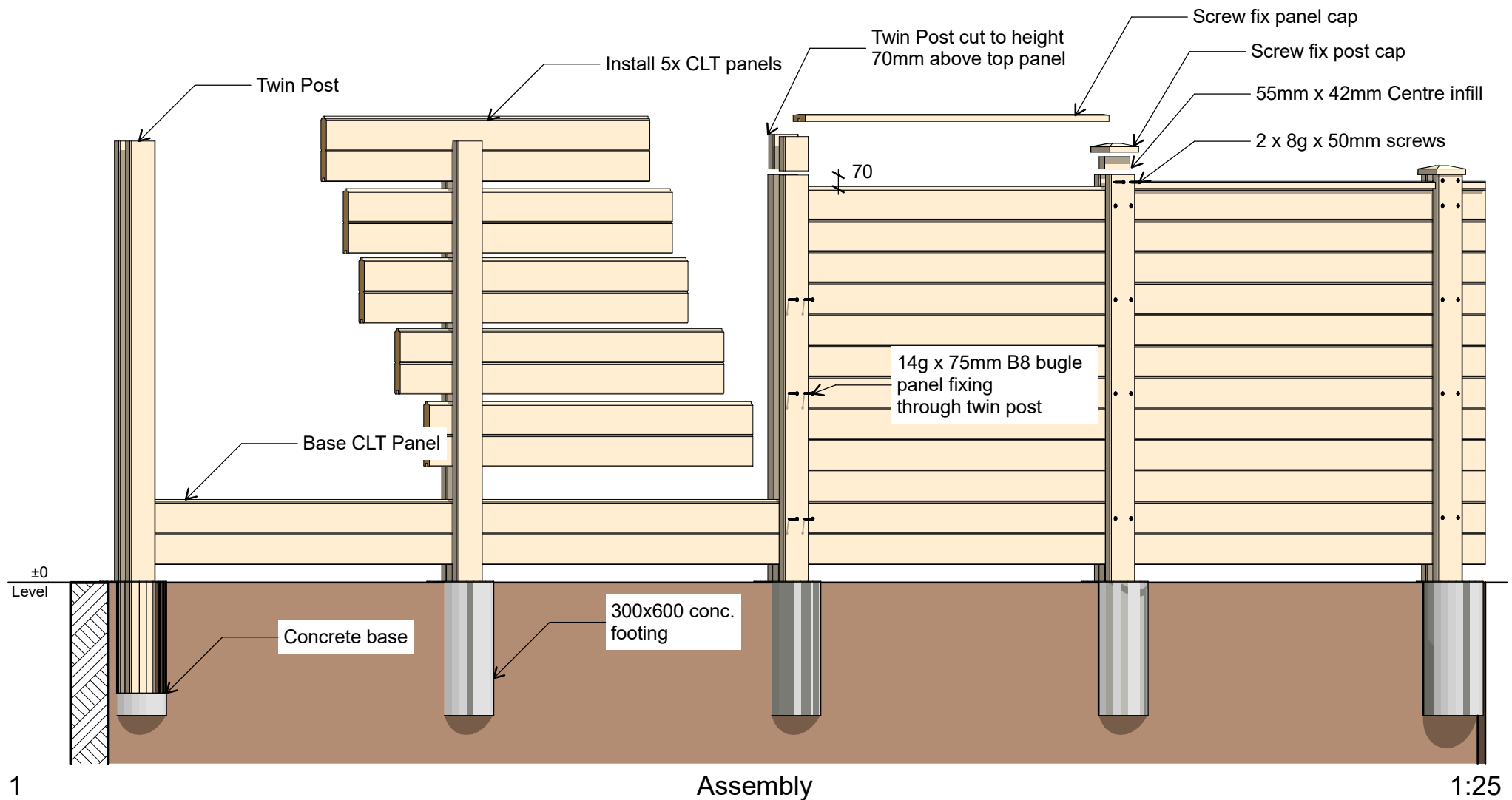
The base panel must be set out and installed along the entire run of the fence to work out the 140mm stepping. Double check with a stringline that all the panel grooves line up. Fix off securely all the base panels with 2 x 10g screws before installing the remaining panels.

Laminata

SHEET	SHEET TITLE: Panel placement
1.6	REVISION #:
ISSUED: 18/10/2017	PROJECT #: 16LAMI

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FAX: -



PANEL & CAP ASSEMBLY

With the Base panels set up and secured in place along the entire length of the fence, the remaining panels can then be inserted. The panels are to be tight down when placed and fixed using the fixing pattern - See 1.8.

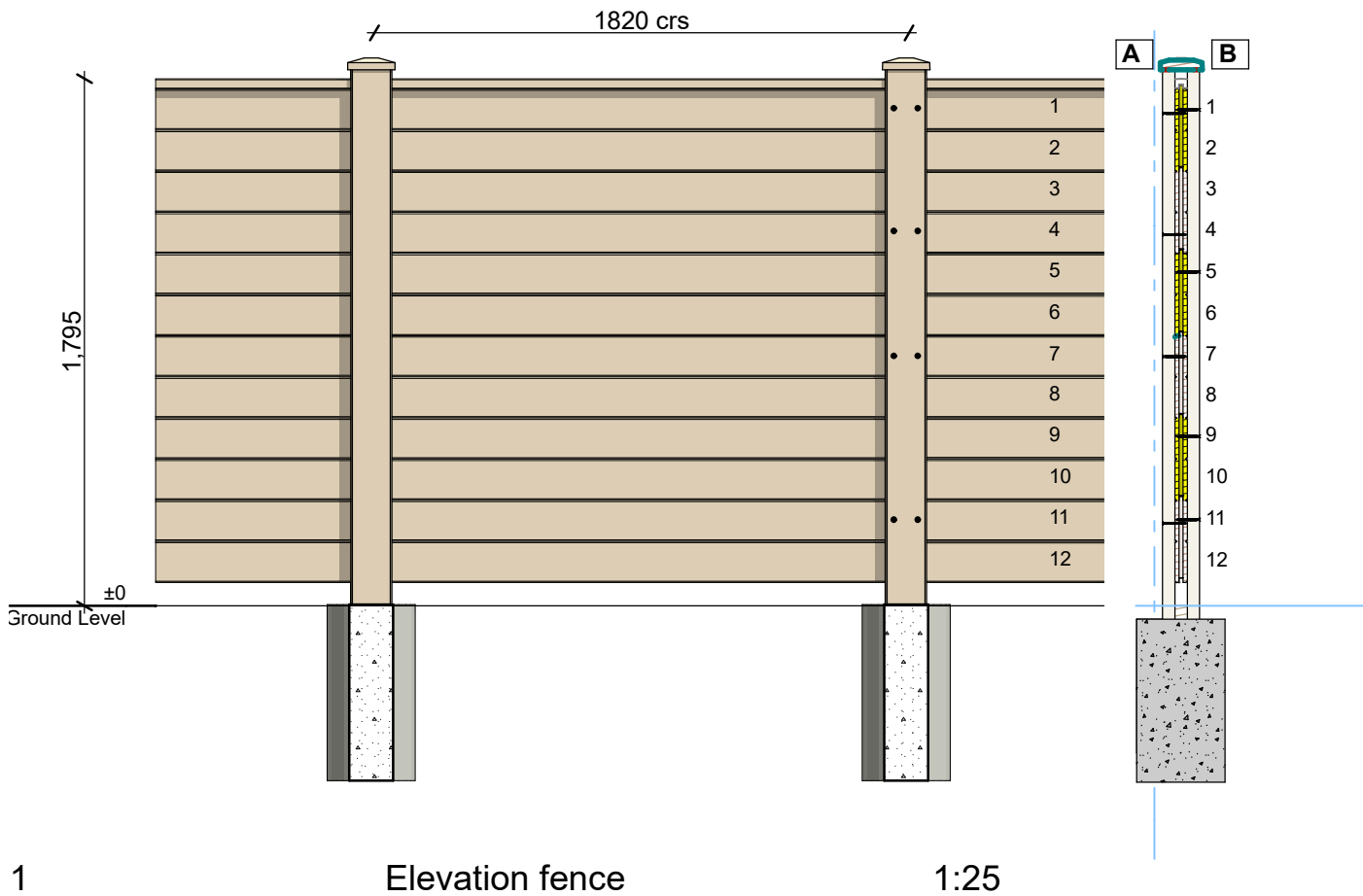
The Twin post is then cut to length 70mm above the top of last panel (not tongue). Insert the 55 x 42mm centre infill - this is increased in size on a stepped fence - See 1.10. Then panel & post caps are fitted to complete the fence.

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SHEET	SHEET TITLE: Assembly overview
1.7	REVISION #:
ISSUED: 18/10/2017	PROJECT #: 16LAMI

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FIXING PATTERNS

Fence Height	Side A	Side B
1200	1,4,7	1,5,7
1500	1,4,7,9	1,5,9
1800	1,4,7,11	1,5,9,11
2100	1,4,7,11,13	1,5,9,13

FIXING PATTERNS

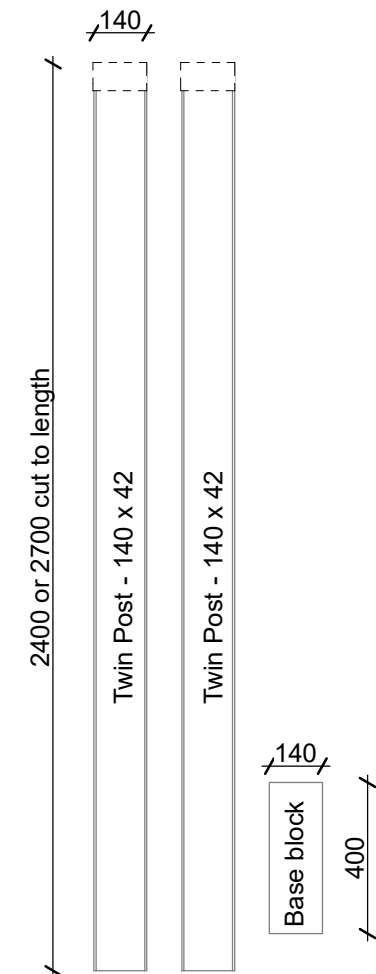
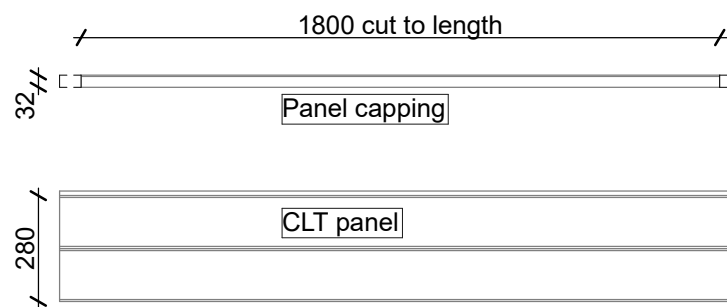
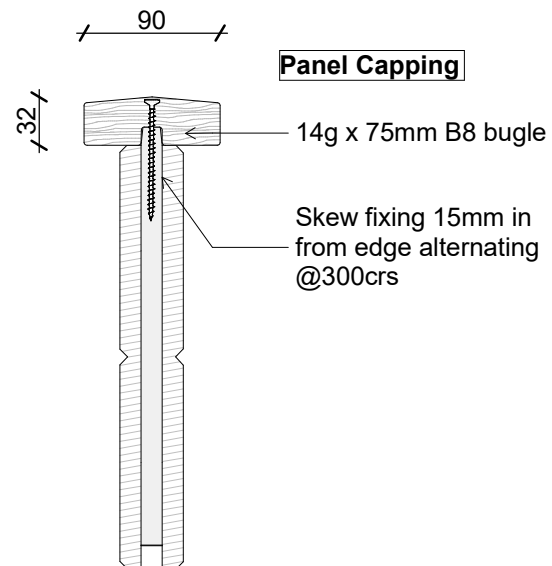
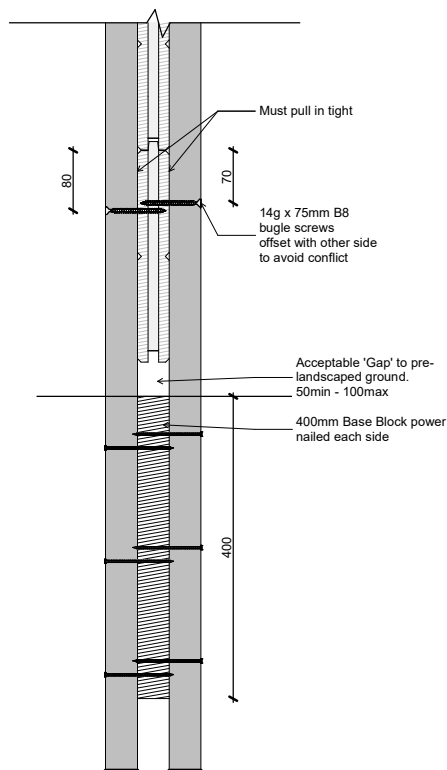
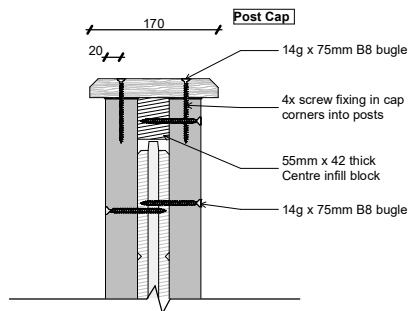
The screw fixing pattern alternates for side A and side B so that each panel is at least fixed once through the Twin Post for either side for the middle panels. The top and bottom panels are always fixed from both sides.

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SHEET 1.8
SHEET TITLE: Completed
Fence
REVISION #:
ISSUED: 18/10/2017
PROJECT #: 16LAMI

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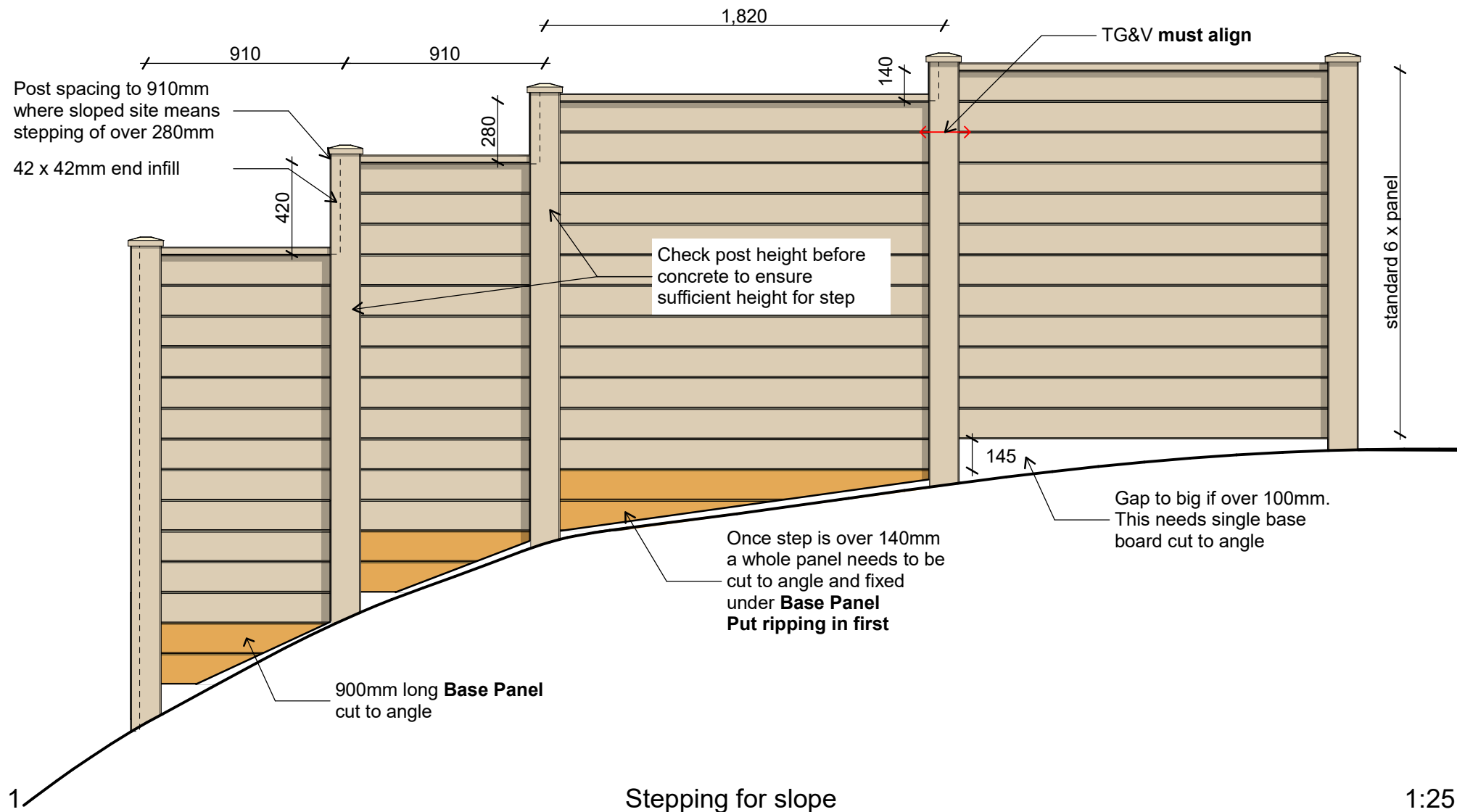


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SHEET	SHEET TITLE: Component
1.9	Fixing
	REVISION #:
ISSUED:	18/10/2017
PROJECT #:	16LAMI

Installation
Manual

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FAX: -



STEPPING FOR SLOPED SITES

It is very important to set out the stepping for sloped sites **BEFORE** any post holes are drilled. Stepping of top of panels is in **140mm MODULES ONLY**.

Ensure posts have sufficient height to be cut for steps.

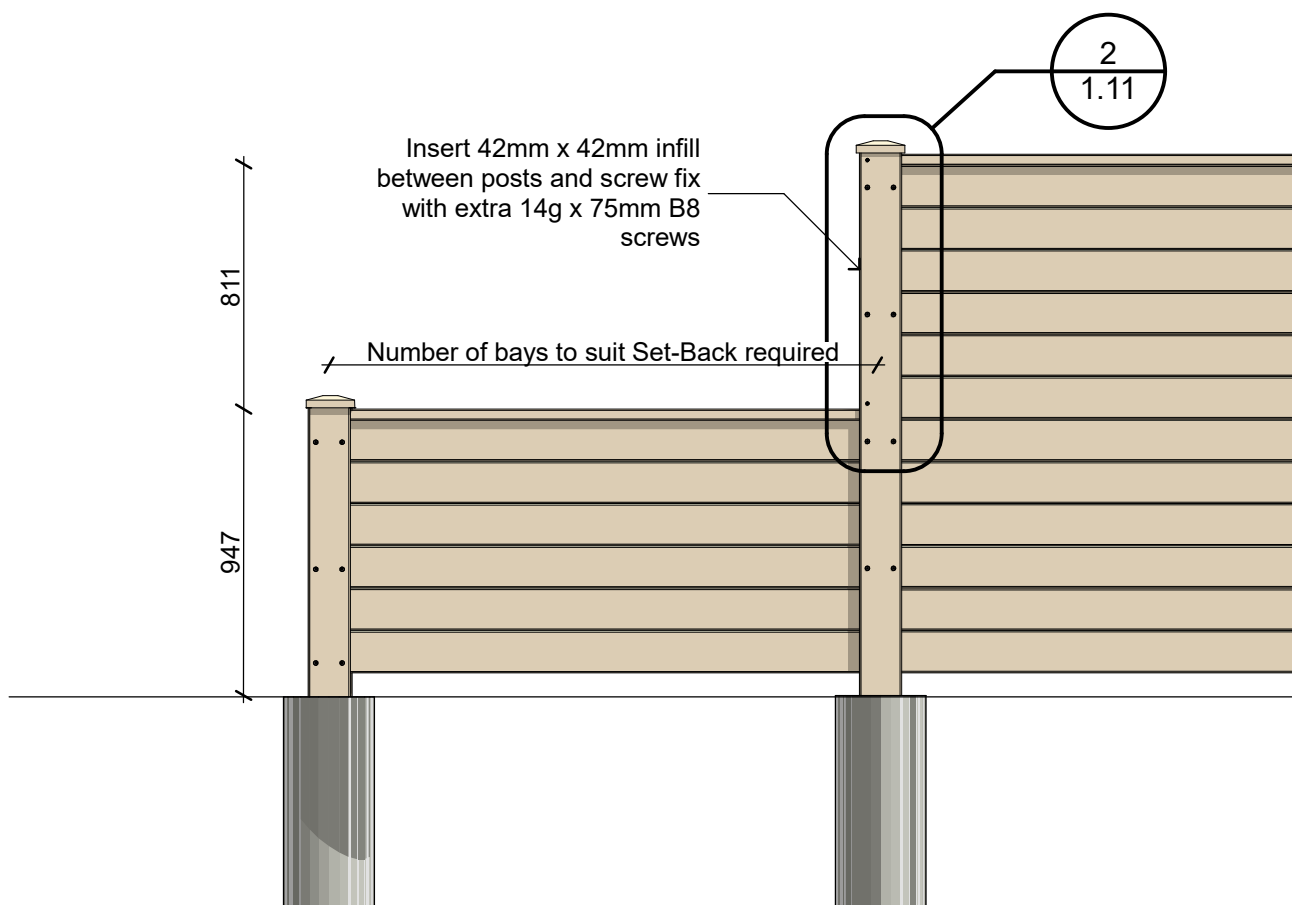
Once step is over 280mm then post spacing must be reduced to 900mm

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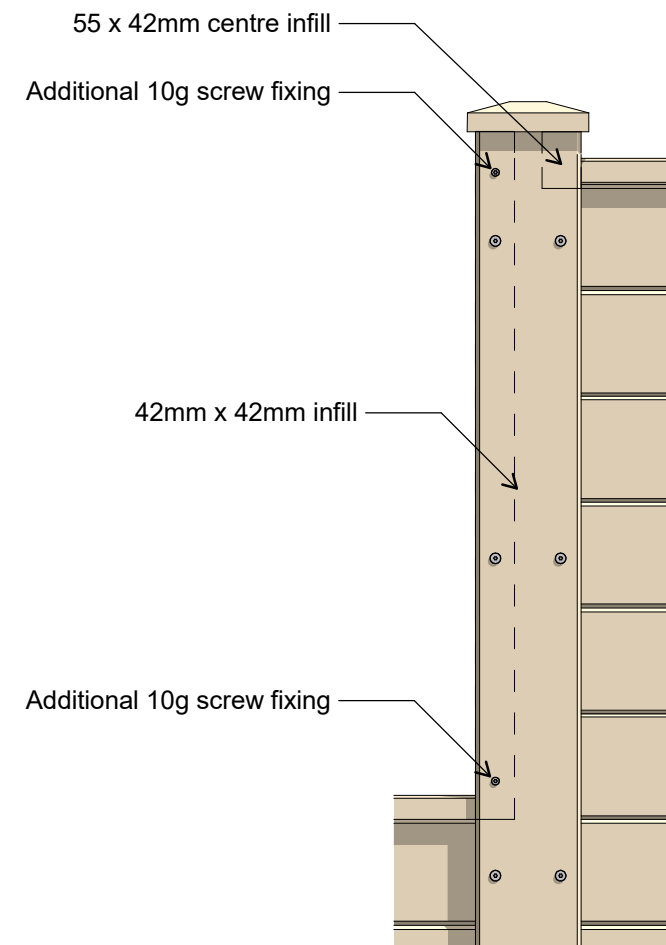
SHEET	SHEET TITLE: 560mm
Retaining	REVISION #:
ISSUED: 18/10/2017	
PROJECT #: 16LAMI	

Installation
Manual

PHONE: 021 215 5865
FAX: -



1 Step to street 1:25



2 Detail 1:10

STEPPING FOR FRONT BOUNDARY SET BACKS

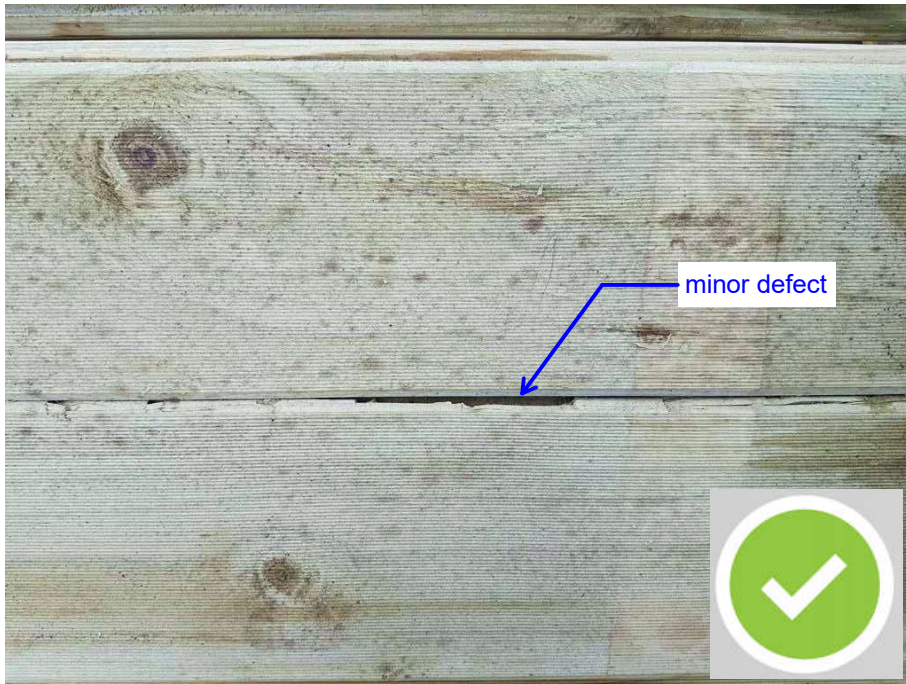
The step at street front must suit **140mm MODULES**.
Check with owner of main contractor the street front step covenant / requirements.

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SHEET	SHEET TITLE: 1120mm
1.11	Retaining
	REVISION #:
ISSUED:	18/10/2017
PROJECT #:	16LAMI

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ACCEPTABLE GRADING

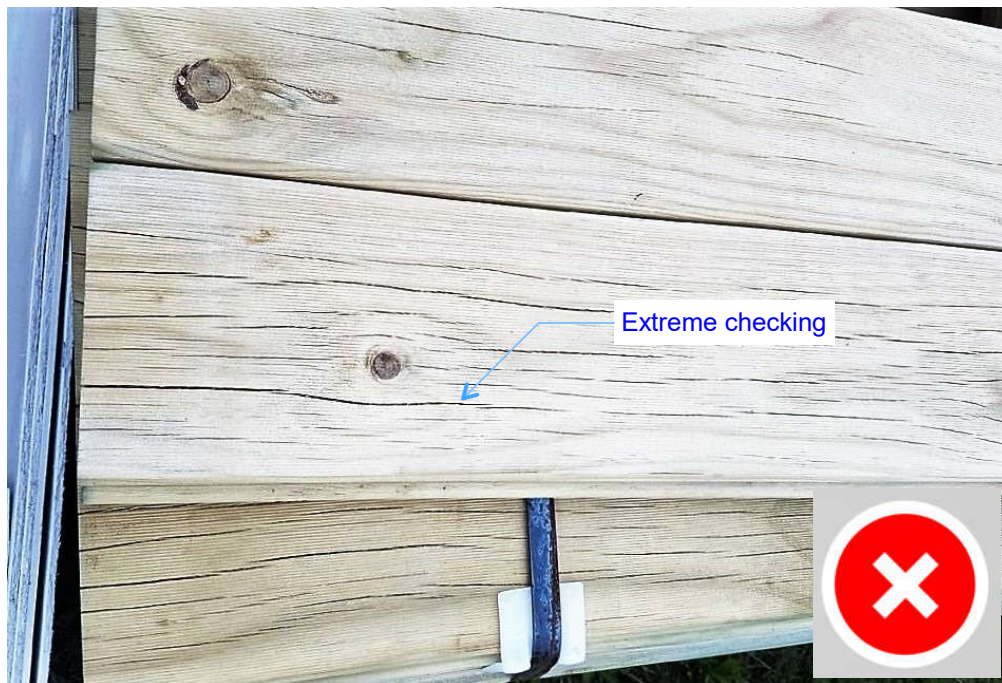
Fiber tear from drying of CLT is expected and will become less pronounced over time. Minor defects are to be tolerated that do not effect panel integrity. Use any minor defect panels for lower panels away from eye level or rippings where possible.

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SHEET	SHEET TITLE: Acceptable
1.12	Defects
	REVISION #:
ISSUED:	18/10/2017
PROJECT #:	16LAMI

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FAX: -



UNACCEPTABLE DEFECTS

Any packet damage from transportation cannot be used as no face of fence is not seen. These panels should be reported and rejected.

Run off of CLT laminars over 7mm wide should not be used unless they can be used up as base ripping that cut off the effected area.

Extreme fibre tear / checking due to incorrect storage of packets exposed to full sun should not be used. packet should remain covered at all times and not be left exposed at 90 to the sun.

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SHEET	SHEET TITLE: Reject
1.13	Defects
	REVISION #:
ISSUED: 18/10/2017	
PROJECT #: 16LAMI	
Installation Manual	
PHONE: 021 215 5865	
FAX: -	

Job number: _____

Site Address: _____

Site contact: _____ Ph: _____

Quoted lineal metres to build: _____ m

Correct material delivered to site: Y / N

Description	Yes (Y) No (N)	Initials
Boundary Pegs Identified and confirmed with Site manager or sales rep. (Double check site plans also)		
Posts Holes marked out at 1820mm centers		
Small panels avoided (if not possible ensure they are 2 even spacing's).		
Holes drilled to minimum 550mm x 300mm		
Two end posts set and string line run down center		
Posts spaced out with 1680mm spacer inside to inside		
Concrete mixed at 6:1		
Double check all posts before leaving site		
Nail in spacer at top of posts if necessary (if posts are sitting there for more then 2 days).		

Total length of fence install: _____ m

POST install sign off:

Name: _____ Signature: _____ Date: _____

PANEL install sign off:

Name: _____ Signature: _____ Date: _____

Post check – Level, spacing's, heights		
Bottom panels established, installed level and 50mm-100mm from ground level		
Bottom panel fixed off with 8 Bugles		
Panels inserted with minimum 25mm fixing within post		
Sash-cramps used to tighten, fixing off 1 bay at a time. (Refer install Manual for fixing pattern).		
Ensure posts are square at the top		
Ensure lines match up and fence is to an 'acceptable standard'. Fixings completed, panels all cramped tight, running level, Panels are all to 'acceptable quality'.		
Cut posts to 70mm above top panel.		
Cut infill's to fit, flush with top of post.		
Cut U-Mould capping to insert between posts. (refer install Manual for fixing pattern).		
Place and fix posts caps, ensure over hang and appearance is acceptable. (Refer install Manual for fixing pattern)		
Final check of all fixings on panels and capping completed.		
Site tidy up of any LAMINATA product		
Total distance of fence installed noted		

NOTES: _____

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SHEET
2.0
SHEET TITLE: QA Checklist
REVISION #:
ISSUED: 18/10/2017
PROJECT #: 16LAMI

Installation
Manual

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we've got this

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