

## ANGLE BRACE

### FEATURES AND BENEFITS

**EASY:** No tensioning required and sits flat against the stud.

**VERSATILE:** Available in two specifications. The stronger angle brace, Maxi Brace requires one diagonal length to achieve an AS1684 Type A bracing unit. The smaller Mini Brace requires two lengths in two sections of wall but can be rebated into the stud for a completely flush finish ahead of plastering.

**Note:** Pryda Mini Brace 18 x 16 x 1.2mm is no longer available.

**STRONG:** Angled form makes Angle Brace the strongest Bracing option in compression.

### SPECIFICATIONS

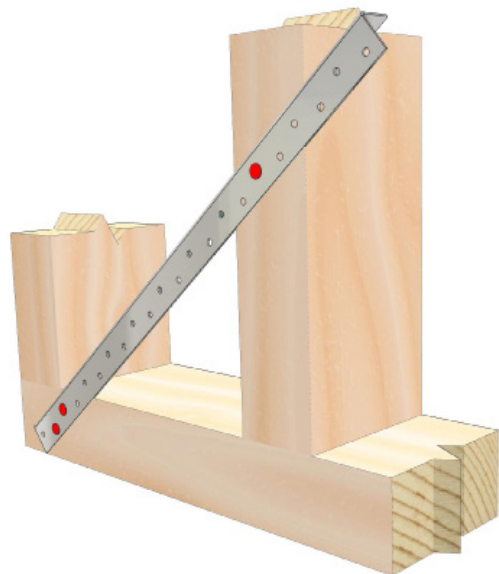
STEEL	G300
THICKNESS	1.2mm
CORROSION RESISTANCE	Z275
FASTENERS	Pryda Timber Connector Nails 35 x 3.15mm
LENGTHS	3.6, 4.2, 4.8m

Wall bracing solution that is strong in compression and tension.



#### AS1684 & NCC COMPLIANT

- Type A wall bracing unit as per AS1684-2010.



# INSTALLATION – AS1684 TYPE A BRACING UNIT

## ANGLE BRACE

PRODUCT CODE	MATERIAL	SIZE	LENGTH	QUANTITY	DESIGN TENSION CAPACITY ΦNJ) KN	DESIGN COMPRESSION CAPACITY (ΦNJ) (KN)			
						450MM SPACINGS		600MM SPACINGS	
						0°	45°	0°	45°
MINI BRACE*									
MB36*	G300 Z275 Galvanised Steel	18 x 16 x 1.2mm	3.6m	100	7.8	N/A			
MB42*			4.2m						
MB48*			4.8m						
MAXI BRACE									
AB36	G300 Z275 Galvanised Steel	20 x 18 x 1.2mm	3.6m	100	9.5	3.7	2.6	2.7	1.9
AB42			4.2m						
AB48			4.8m						

Note: Pryda Mini Brace 18 x 16 x 1.2mm is no longer available, marked with \*.

## PRYDA TIMBER CONNECTOR NAILS

PRODUCT CODE	MATERIAL	SIZE	PACK CONFIGURATION	QUANTITY
OSNGB	Galvanised Steel	35 x 3.15mm Flat Head	500g cardboard packs x 10	5kg
OSNG			1kg cardboard packs x 10	10kg
TPOSNG			5kg Trade pack x 1	5kg
OSNBCI/SS	S316 Stainless Steel		500g clamshell pack x 1	500g

## WALL BRACING UNITS – DETAILS

Note: Pryda Mini Brace 18 x 16 x 1.2mm is no longer available.

### Mini Brace, Two Lengths, Type A Unit

This bracing unit comprises two sections of the same wall with Pryda Mini Brace braces in opposing diagonals, as shown below. These two wall sections are considered to work together. AS1684 has a maximum wall height of 3.0 m (except at gable or skillion ends). Design capacity of these units is 0.8 kN/m for wall heights up to 2.7 m and 0.72 kN/m for 3.0 m height. The table values given below are the total capacity from both wall sections and assumes that both wall sections are of equal length.

WALL HEIGHT	BRACING CAPACITY (KN) FOR BRACING LENGTH OF EACH WALL SECTION (M)									
(m)	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7
2.7	2.7	2.9	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1
3.0	2.4	2.6	2.7	2.8	3.0	3.1	3.2	3.4	3.5	3.6

Note: For walls higher than 2.7 m, reduce the bracing unit's capacity in inverse proportion to the wall height, eg, for 3.6 m walls, take  $2.7/3.6 = 0.75$  times the capacity for 2.7 m height.

### IMPORTANT:

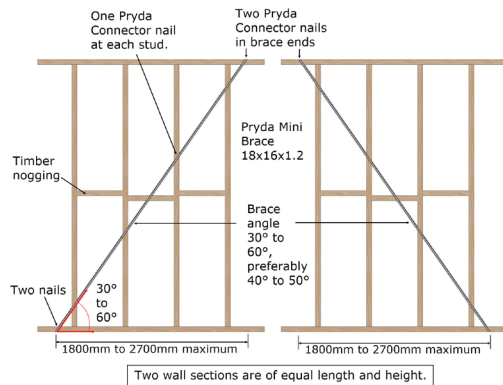
READ THIS DATASHEET IN CONJUNCTION WITH BRACING DESIGN GUIDE AND REFER TO ESSENTIAL NOTES AND GENERAL NOTES.

# INSTALLATION – AS1684 TYPE A BRACING UNIT

Note: Pryda Mini Brace 18 x 16 x 1.2mm is no longer available.

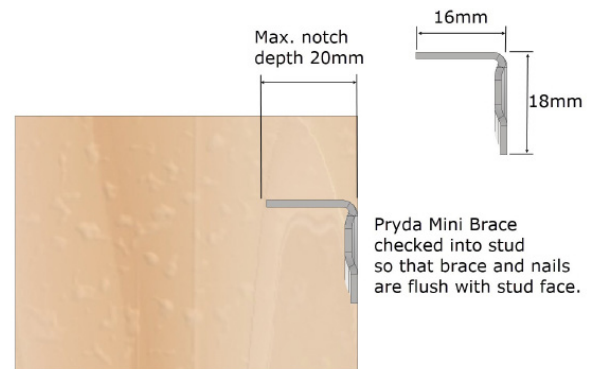
RACKING CAPACITY	
0.8kN/m at up to 2.7m wall height	0.72 kN/m up to a maximum of 3.0m wall height.
	Requires two lengths of Mini Brace

## STEP 1



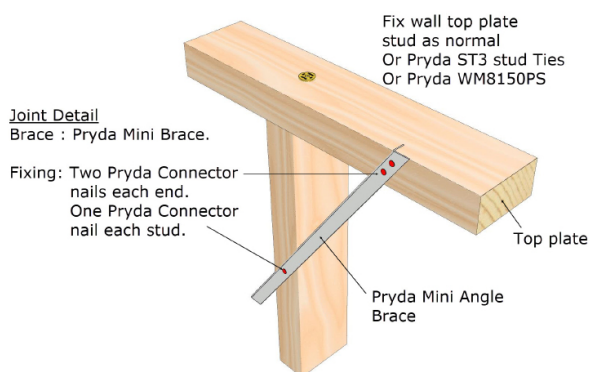
- Ensure wall is square and plumb
- Get two same lengths of Mini Brace lay in opposing diagonal directions as shown
- Keep the Mini Brace at an angle close to 45° (min 30° max 60°) and ensure the anchored ends of the brace are at least 150mm from the end of the top or bottom plates
- Use the Mini Brace as a ruler to draw a line across the frame to mark where you will slot into the studs

## STEP 2



- Cut the slots where you have marked to a maximum depth of 20mm. Cut studs must be designed as notched.
- For a flush finish, check the studs to a max of 3mm

## STEP 3



## INSTALLATION – AS1684 TYPE A BRACING UNIT

### Maxi Brace, One Length, Type A Unit (Racking Capacity = 1.5 kN/m)

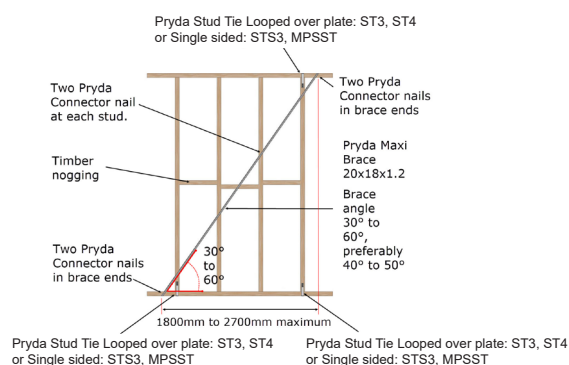
This bracing unit comprises one section of the wall, with one brace of Pryda Maxi Brace, as shown below. Maximum wall height in AS1684 is 3.0 m (except at gable or skillion ends). Design capacity is 1.5 kN/m for wall heights up to 2.7 m and 1.35 kN/m for 3.0 m height.

WALL HEIGHT	BRACING CAPACITY (KN) FOR BRACING LENGTH (M)									
(m)	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7
2.7	2.7	2.9	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1
3.0	2.4	2.6	2.7	2.8	3.0	3.1	3.2	3.4	3.5	3.6

Note: For walls higher than 2.7 m, reduce the bracing unit's capacity in inverse proportion to the wall height, eg, for 3.6 m walls, take  $2.7/3.6 = 0.75$  times the capacity for 2.7 m height. Use galvanised Pryda Timber Connector Nails (OSNG) size 35 x 3.15 mm.

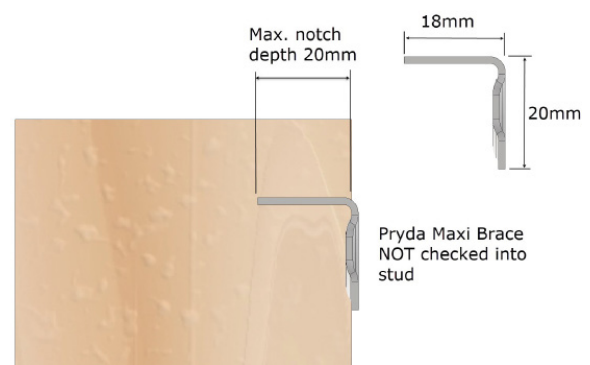
RACKING CAPACITY	
0.8kN/m at up to 2.7m height	0.72 kN/m up to a maximum of 3.0m high
	One length of Maxi Brace

#### STEP 1



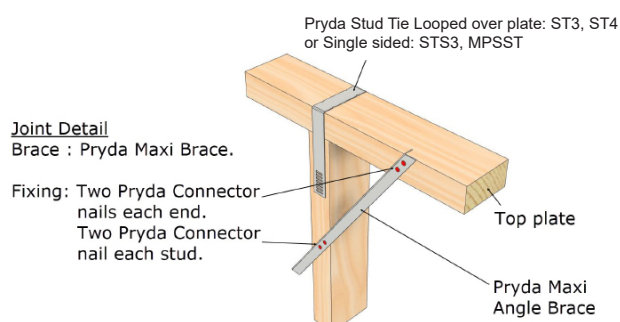
- Ensure wall is square and plumb
- Keep the Maxi Brace at an angle close to 45° (min 30° max 60°) and ensure the anchored ends of the brace are at least 150mm from the end of the top or bottom plates
- Use the Maxi Brace as a ruler to draw a line across the frame to mark where you will slot into the studs

#### STEP 2



- Cut the slots where you have marked to a maximum depth of 20mm. Cut studs must be designed as notched
- Maxi Brace must not be checked into the stud edge because the notch depth would then exceed the 20mm maximum specified in AS1684

#### STEP 3



- Fit the lengths of Maxi Brace ensuring the vertical leg is facing down for safety as shown in Step 2.
- Fasten as per detail above

## FASTENING ANGLE BRACE

### BUILD WITH CONFIDENCE

#### WHERE POSSIBLE, HAND NAILING WITH PRYDA TIMBER CONNECTOR NAILS IS ALWAYS PREFERRED, WHY?

- Pryda Timber Connector Nails are forged in one piece, unlike clouts that are two pieces soldered together, meaning the head can pop off
- Pryda Nails are the correct diameter, ensuring a tight fit in prepunched holes = a stronger connection
- Design values and testing have all been conducted using Pryda Timber Connector Nails
- Hand hammered nails ensure correct nail positioning and drive depth (not driven too shallow or too deep)
- The corrosion resistance and material specification of Pryda Nails is known and can be certified

### USING PASLODE MACHINE DRIVEN NAILS

Where appropriate, Paslode Machine Driven Nails listed below may be used instead of the specified 35 x 3.15mm Pryda Timber Connector Nails to fix Pryda connectors provided that:

- There is one additional nail per connection than specified in the bracing details (eg. 2 instead of 1, 3 instead of 2, 5 instead of 4 etc.)
- Machine driven nails are driven at nail spacings and edge distances similar to the hole pattern, ensuring that these nails are not:
  - Driven into the holes
  - Located not closer than 5mm from the edge of a hole
  - Grouped together
  - Within 10mm from the edge

Screw hardened, electro galvanised Paslode nails that are appropriate include:

- Duo-Fast C SHEG 32 x 2.3 ( D40810)
- Paslode 32 x 2.5mm (B25110)
- Duo-Fast 32 x 2.5mm (D41060)
- Pas Coil 32 x 2.5 SHEG 2 Pack (B25250)
- Impulse 32 x 2.5 SHEG (B40020)



**WRONG FIXING METHOD**



**CORRECT FIXING METHOD**

### ANGLE BRACE TIPS

1. For safety always install Angle Brace with the vertical leg facing downwards
2. Use the Angle Brace as a ruler to draw your cut line on
3. Angle Brace is pre-tensioned, so when bracing walls ensure everything is plumb and square prior to installing
4. Ensure nails are at least 10mm away from timber end or edges to prevent splitting
5. Keep wall bracing angles within 30° to 60° or the Brace will not be compliant
6. Do not overcut the slot, AS1684 specifies a maximum slot depth of 20mm



#### LOOKING FOR MORE DETAILED DESIGN VALUES?

SEE OUR BRACING DESIGN GUIDE AVAILABLE AT [PRYDA.COM.AU](https://www.pryda.com.au)