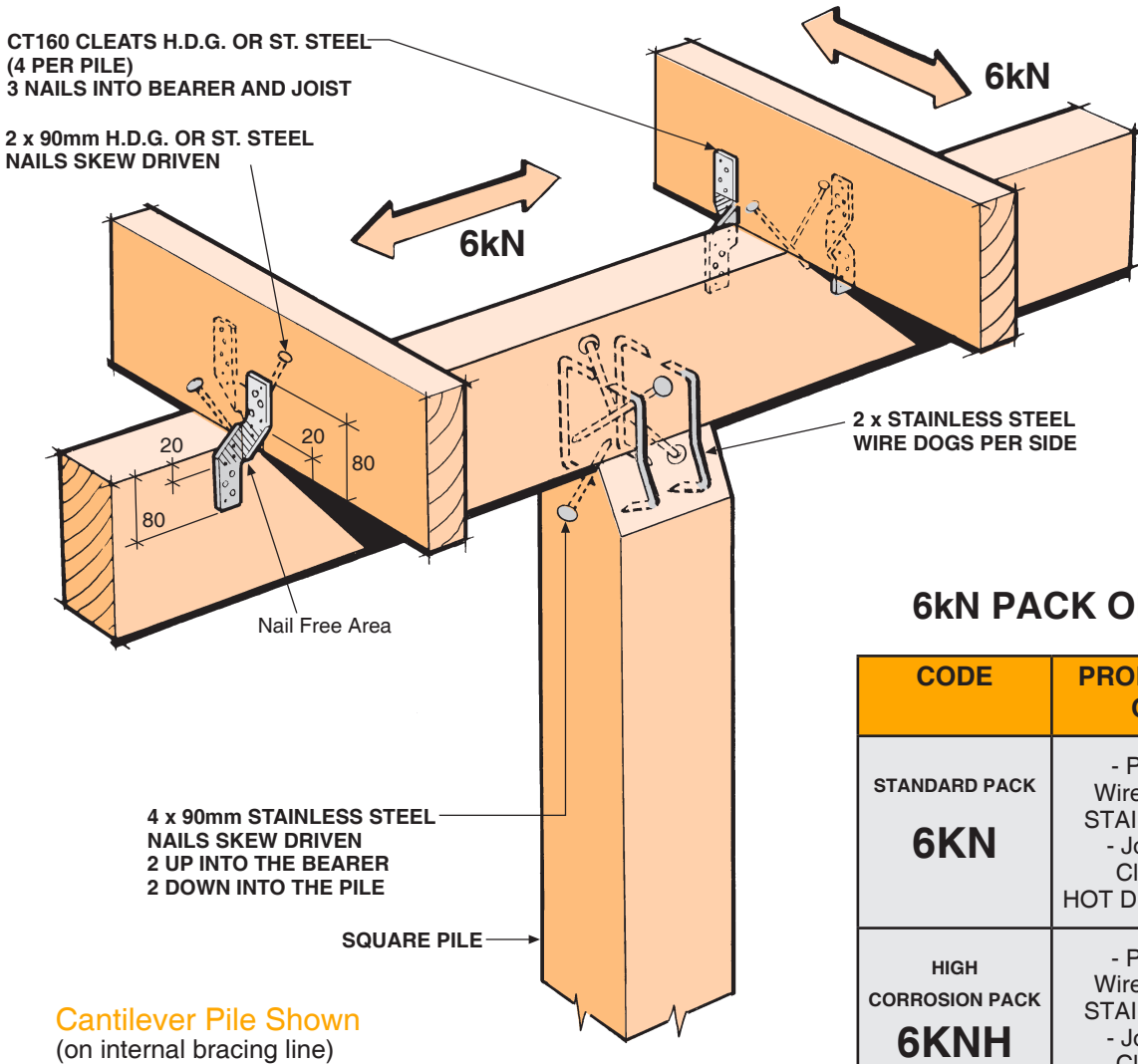


## 6kN PILE FIXING FOR CANTILEVER PILES

- ★ The 6kN Pile Fixing must be installed in accordance with this brochure
- ★ Auckland University Tested. Test Ref. 4613
- ★ All subfloor construction must be in accordance with NZS 3604:2011
- ★ NZS 3604 requires lines of lateral support to floor joists within 300mm of bearer or bracing lines, refer to Clause 7.1.2
- ★ Joists deeper than 150mm require solid hogging over cantilever pile

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### 6kN PACK OPTIONS

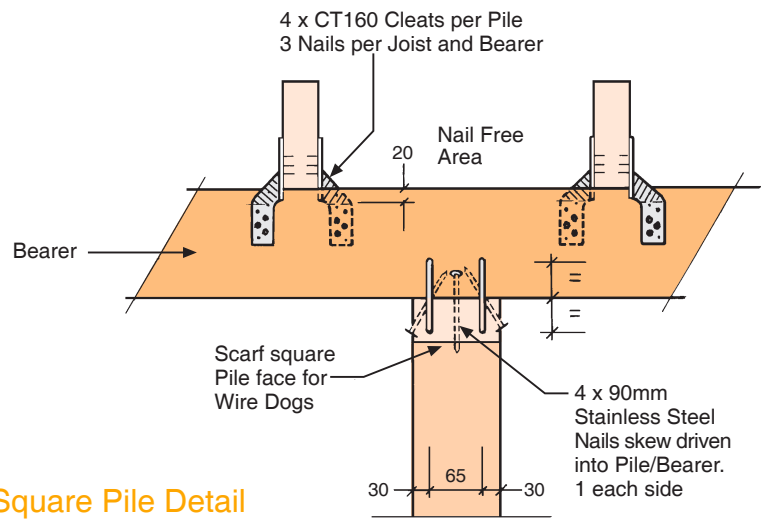
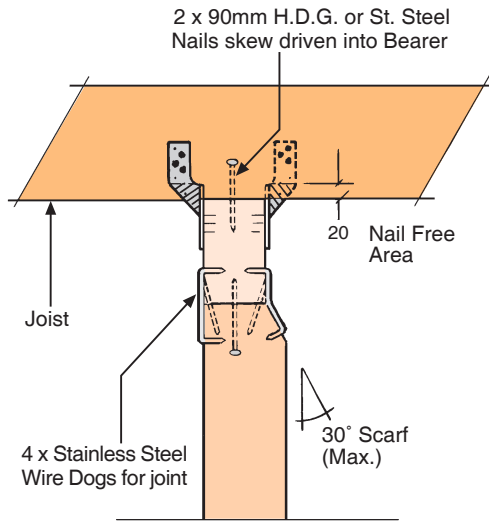
CODE	PRODUCT FINISH OPTIONS
STANDARD PACK <b>6KN</b>	- Pile to Bearer Wire Dogs & Nails STAINLESS STEEL - Joist to Bearer Cleats & Nails HOT DIP GALVANISED
HIGH CORROSION PACK <b>6KNH</b>	- Pile to Bearer Wire Dogs & Nails STAINLESS STEEL - Joist to Bearer Cleats & Nails STAINLESS STEEL

★ See Over For Corrosion Table.

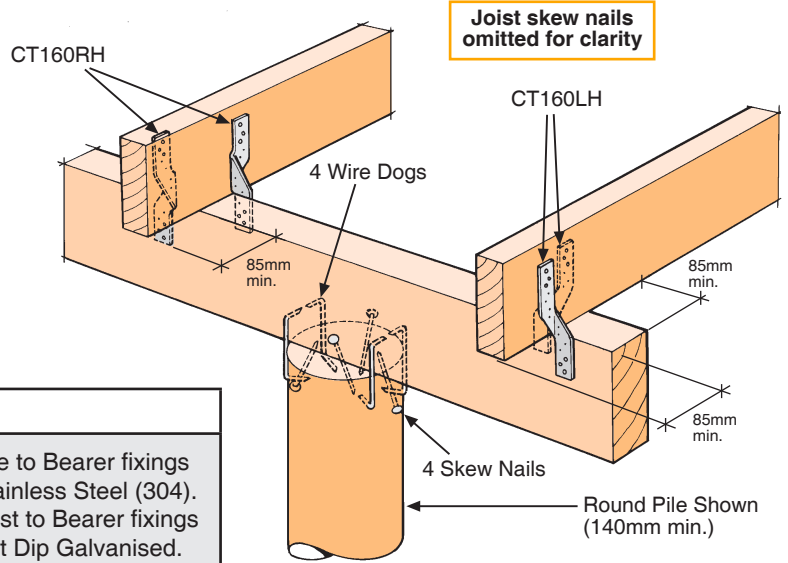
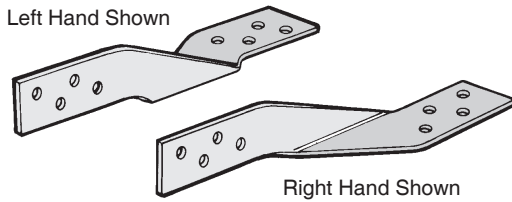


SCAN FOR  
INSTALLATION  
VIDEO

<https://vimeo.com/117351500>



Square Pile Detail



**CORROSION HAZARD USE TABLE**

<b>Standard Pack (6KN)</b> - Zones B & C - If Joist to Bearer Fixings ABOVE 600mm from Ground level	Pile to Bearer fixings Stainless Steel (304). Joist to Bearer fixings Hot Dip Galvanised.
<b>High Corrosion Pack (6KNH)</b> - Zone D - All Fixings BELOW 600mm from Ground level	All items Stainless Steel (304).

**6kN Joint Fixing Schedule**

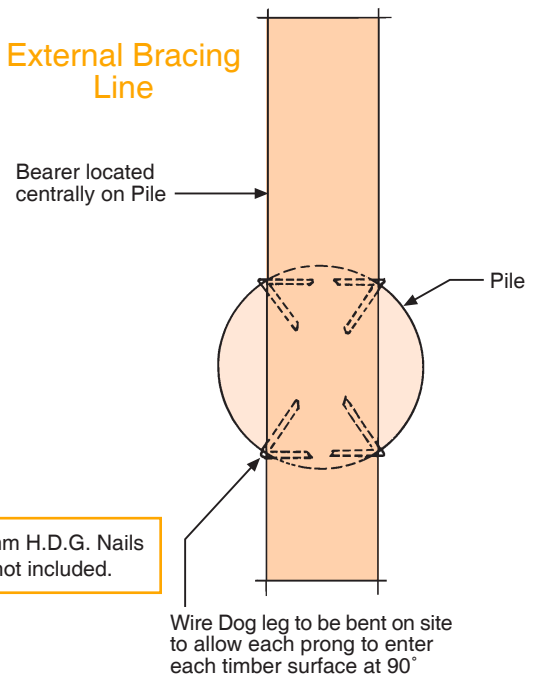
- PILE TO BEARER**
  - Wire Dog Staples (4 per joint) Stainless Steel
  - 4 x 90mm Skew Nails (1 per face) Stainless Steel
- JOIST TO BEARER**
  - CT160 Cleats (4 per pile) 160mm long
  - 3 Nails per Cleat into Joist
  - 3 Nails per Cleat into Bearer
  - 2 Skew Nails 90mm (1 per side)
- NAILS**
  - 24 x 45mm x 3.55 dia. Spiral Nails (for Joist to Bearer fixings)
  - 4 x 90mm x 4 dia. St. Steel Nails (6KN Pack only)
  - 8 x 90mm x 4 dia. St. Steel Nails (6KNH Pack only)

**6kN Pile Set Contents** Each set represents 1 x 6kN Pile Fixing (packed 10 sets per carton)

- 4 x Wire Dog Staples Stainless Steel
- 4 x CT160 Cleats
- 24 x 45mm x 3.55 dia. Spiral Nails
- 90mm St. Steel Nails to suit 4 - 6KN pack
- 8 - 6KNH pack

} Refer front page for Product Finish Options

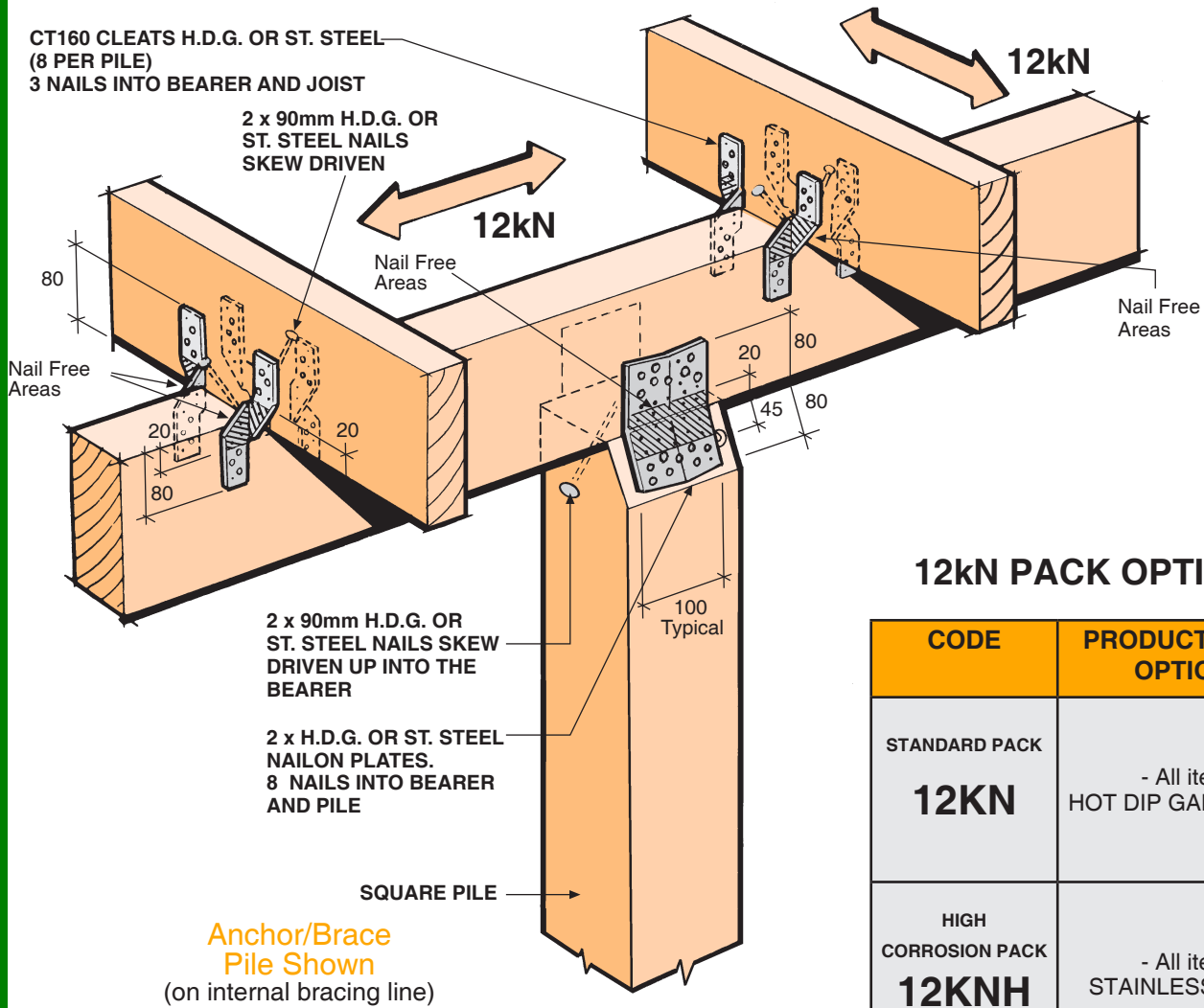
**External Bracing Line**



## 12kN PILE FIXING FOR BRACED PILES OR ANCHOR PILES

- ★ The 12kN Pile Fixing must be installed in accordance with this brochure
- ★ Auckland University Tested. Test Ref. 4613
- ★ All subfloor construction must be in accordance with NZS 3604:2011
- ★ NZS 3604 requires lines of lateral support to floor joists within 300mm of bearer or bracing lines, refer to Clause 7.1.2
- ★ Joists deeper than 150mm require solid nogging over braced or anchor pile

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### 12kN PACK OPTIONS

CODE	PRODUCT FINISH OPTIONS
STANDARD PACK <b>12KN</b>	- All items HOT DIP GALVANISED
HIGH CORROSION PACK <b>12KNH</b>	- All items STAINLESS STEEL

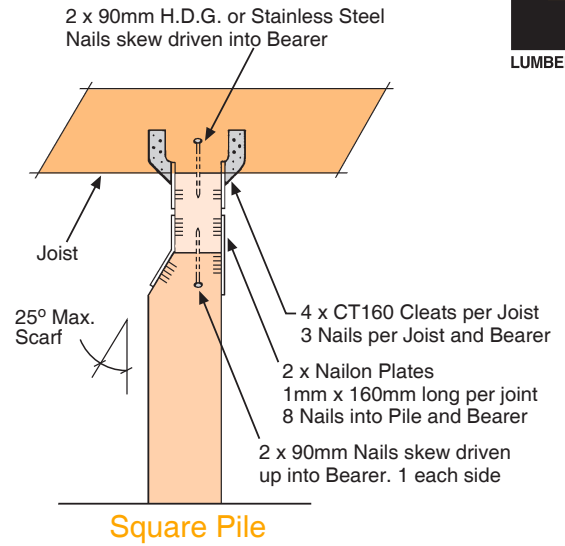
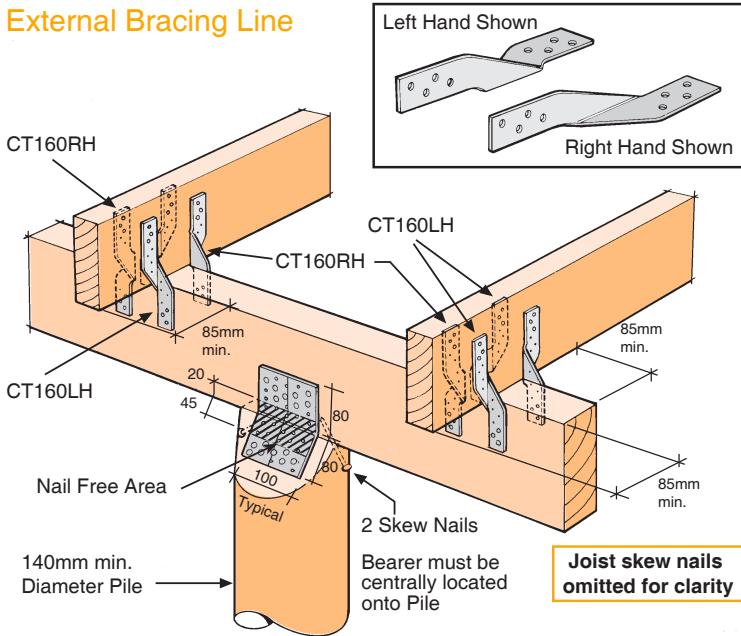
★ See Over For Corrosion Table.



SCAN FOR  
INSTALLATION  
VIDEO

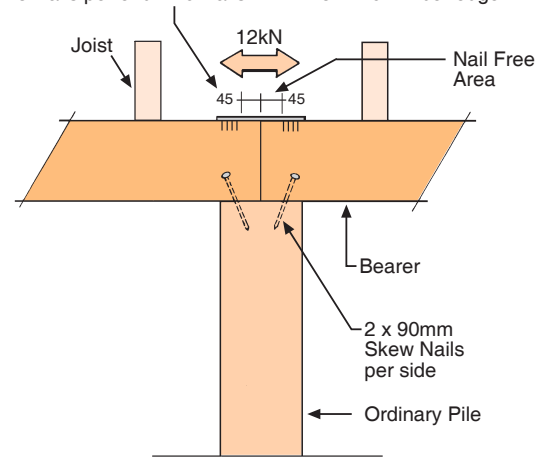
<https://vimeo.com/117350344>

### External Bracing Line



### Square Pile

Nailon Plate 1mm x 160mm long (ex 12kN Pack)  
8 Nails per end. No Nails within 18mm of timber edge

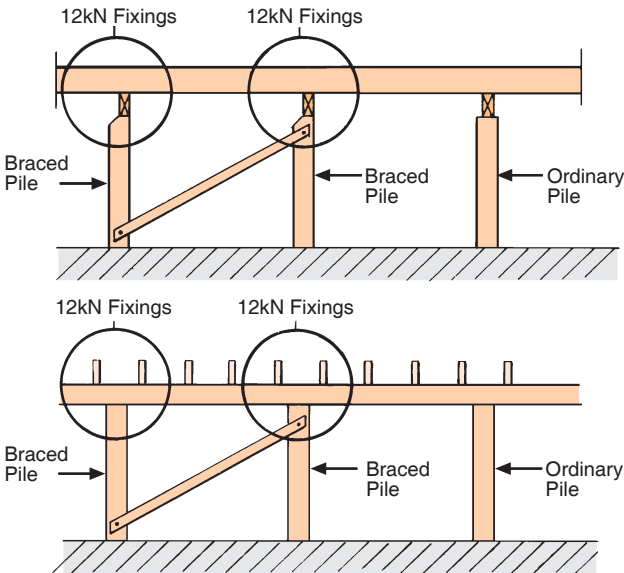


### 12kN Bearer Splice

Clause 6.12.7.2  
NZS 3604:2011

### CORROSION HAZARD USE TABLE

<b>Standard Pack (12KN)</b> - Zones B & C - All Fixings ABOVE 600mm from Ground level	All items Hot Dip Galvanised.
<b>High Corrosion Pack (12KNH)</b> - Zone D - All Fixings BELOW 600mm from Ground level	All items Stainless Steel (304).



### Sample Subfloor Elevations

12kN Fixing - Pile to Bearer  
- Joists to Bearer

### 12kN Joint Fixing Schedule

#### PILE TO BEARER

- Nailon Plate (2 per joint) 1mm x 100mm (Typical) x 160mm long
- 8 Nails per Plate into Pile
- 8 Nails per Plate into Bearer
- 2 Skew Nails 90mm (1 per face)

#### JOIST TO BEARER

- CT160 Cleats (4 per Joist) 160mm long
- 3 Nails per Cleat into Joist
- 3 Nails per Cleat into Bearer
- 2 Skew Nails 90mm (1 per side)

#### NAILS

- 80 x 45mm x 3.55 dia. Spiral Nails
- 6 x 90mm x 4 dia. St. Steel Nails (12KNH Pack only)

### 12kN Pile Set Contents

Each set represents 1 x 12kN Pile Fixing  
(packed 4 sets per carton)  
2 x Nailon Plates 160mm long  
8 x CT160 Cleats  
80 x 45mm x 3.55 dia. Spiral Nails  
90mm x 4 dia. St. Steel Angular Groove 6 - 12KNH Pack

} Refer front page for Product Finish Options

90mm H.D.G. Nails not included.

## Demand Calculation Sheet

### Job Details

Name: Jeff & Gwen McTainsh  
 Street and Number: 594 Koutu Loop Road  
 Lot and DP Number: Lot 6, DP 546669  
 City/Town/District: Opononi  
 Designer: Logan Roberts  
 Company: Lightbulb Architecture  
 Date: Tuesday, 25 January 2022

### Building Specification

Number of Storeys: 1  
 Floor Loading: 2 kPa  
 Foundation Type: Subfloor  
 Subfloor Cladding Weight: Light  
**Single**  
 Cladding Weight: Light  
 Roof Weight: Light  
 Room in Roof Space: No  
 Roof Pitch (degrees): 8  
 Roof Height above Eaves (m): 0.95  
 Building Height to Apex (m): 4.3  
 Ground to Lower Floor (m): 0.65  
 Average Stud Height (m): 2.4  
 Building Length (m): 13.3  
 Building Width (m): 4.5  
 Building Plan Area (m<sup>2</sup>): 53.2

### Building Location

Wind Zone = High

Earthquake Zone 1

Soil Type: D & E (Deep to Very Soft)  
 Annual Prob. of Exceedance: 1 in 500 ( Default)

### Bracing Units required for Wind

	Along	Across
Single Level	183	454
Subfloor Level	352	952

### Bracing Units required for Earthquake

	Along & Across
Single Level	281
Subfloor Level	363

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## Subfloor Level Along Resistance Sheet

Job Name: Jeff & Gwen McTainsh

Wind	EQ
Demand	
352	363
Achieved	

Line	Element	Length or No.	Angle (degrees)	Type	Supplier	Wind (BUs)	EQ (BUs)	NaN%	NaN%
A	1	3.00		Anchor Pile	NZS3604				
B	1	4.00		Anchor Pile	NZS3604				

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## Subfloor Level Across Resistance Sheet

Job Name: Jeff & Gwen McTainsh

Wind	EQ
Demand	
952	363
Achieved	

Line	Element	Length or No.	Angle (degrees)	Type	Supplier	Wind (BUs)	EQ (BUs)	NaN%	NaN%
M	1	2.00		Anchor Pile	NZS3604				
N	1	3.00		Anchor Pile	NZS3604				
O	1	2.00		Anchor Pile	NZS3604				

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