

## DESIGN INFORMATION - FARM BUILDING

### LT30386

#### LOADS and TIMBER

- Poles, Outer Zone Density Normal 350 kg/m<sup>3</sup> fb= 38MPa, Pole taper 6mm per 1.0m length.
- Purlins and girts - Radiata Pine or Douglas Fir - Rough Sawn VSG8 / MSG8
- Rafters - Radiata Pine or Douglas Fir - Rough Sawn VSG8 / MSG8
- Moisture content can be green. Our recommendation is 20% or less at time of installation.

#### DESIGN LOADS

- Dead loads for Light Roof - 0.25kPa (includes weight of purlins, associated framing and galvanized iron roof).
- Live loads - 1.1kN concentrated load, 0.25kPa uniform load.
- The enclosed charts have been designed for a Building Importance level 1, with 50 years working life. Refer to AS/NZS 1170.0:2002.
- Wind loads - building designed for a modified High Wind
- Snow Loads - building designed for sg= 0.9 kPa
- E/Quake Zone - 1
- (The Snow Load has been calculated specifically for the job site shown on our documentation)
- Soil conditions - ALL foundations to be into natural ground with a minimum bearing capacity of 300 kPa, Øb=0.5

#### DESIGN LOAD REFERENCES

Compliance Document for the New Zealand Building Code Clause B1 Structure Amendment 8	
NZS3603:1993 Amendment 4	Cited Verification Method - B1 / VM1 - Timber Structures Standard
NZS 3604 Amendment 2	Cited Acceptable Solution - B1 / AS1 - Timber Framed Buildings
AS/NZS 1170 Part 0: 2002	Cited Verification Method - B1 / VM1 - Structural Design Actions
AS/NZS 1170 Part 1: 2002	Cited Verification Method - B1 / VM1 - Structural Design Actions
AS/NZS 1170 Part 2: 2002	Cited Verification Method - B1 / VM1 - Structural Design Actions
AS/NZS 1170 Part 3: 2003	Cited Verification Method - B1 / VM1 - Structural Design Actions
ANSI/TPI1 - 2002	Alternative Solution - Metal Plate for Wood Connections
Rutledge Method	Alternative Solution - Footing Design for Cantilever Poles

#### BUILDING ERECTION

Proper bracing must be installed to hold the components true and plumb and in a safe condition until permanent bracing is fixed. All permanent bracing and fixings must be installed before applying any loads.

#### LOAD DETAILS

These drawings have been prepared using the above design loads.

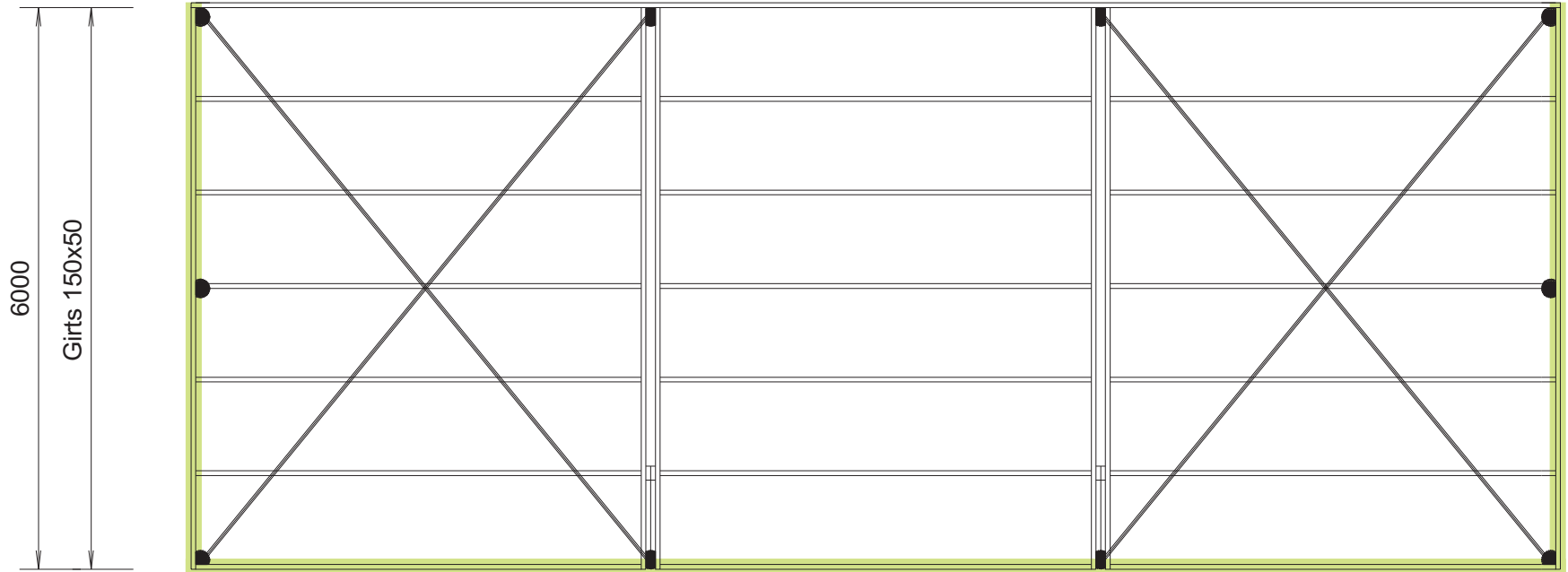
It is the responsibility of the user to ensure that the design data and loads are still correct at the time of construction.

## PRODUCT SPECIFICATION

These details have been designed using specific **GANG-NAIL**<sup>®</sup>, **LUMBERLOK**<sup>®</sup> and **BOWMAC**<sup>®</sup> products and the performance of the building and validity of the Producer Statement is reliant on the correct choice of product.

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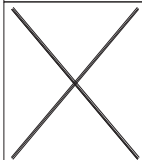
Pitch = 5.71 deg. by others.

**Regarding any future alterations to this shed:**

If at any time the cladding (internal or external) needs to be removed from a wall along a rafter, rafter props must be added.

If this is the case please contact MiTek Farm Buildings for further information.

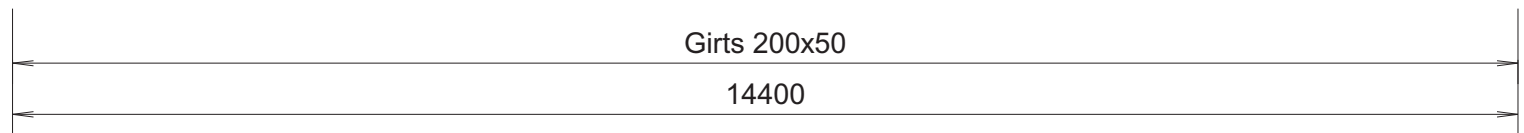
= CLAD WALLS



Single row of tensioned Multibrace laid over purlins. Fix at each end with 11x30x3.15 nails and 3 at each purlin crossing.

POLE

COLUMN



Wind Load: High

Sg = 0.9 kPa

Earthquake Zone: 1

Rafter Span: 6000mm

Pole/Bay Spacing: 4800mm

Girt Size: AS ABOVE

Girt Centres: 1100mm

Purlin Size: 200 x 50mm

Purlin Centres: 1000mm

Rafter Size: 300 x 50mm

Pole Size: 175mm SED

Pole Embedment Depth: 1200mm

Column Type: Round Pole

Int. Pole Size: 150mm

Props Required: 1 per span

Max. Pole Height: 3600mm

Lower Pole Height: 3000mm

Floor Type: Earth

Rough Sawn VSG8 / MSG8

**MiTek New Zealand Ltd.**  
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 CHRISTCHURCH: PO Box 8387, Riccarton, Phone: (03) 348 8691, Fax: (03) 348 0314  
 HOME OF GANG-NAIL® BUILDING SYSTEMS

Job Name: promo

Job Site: promo

Client Name: Thomsons ITM

Client Reference Number: promo

PLAN

Detailed by: Lance Elrick

Checked by:

Date: 21 / 08 / 14

Scale: Drawings to scale

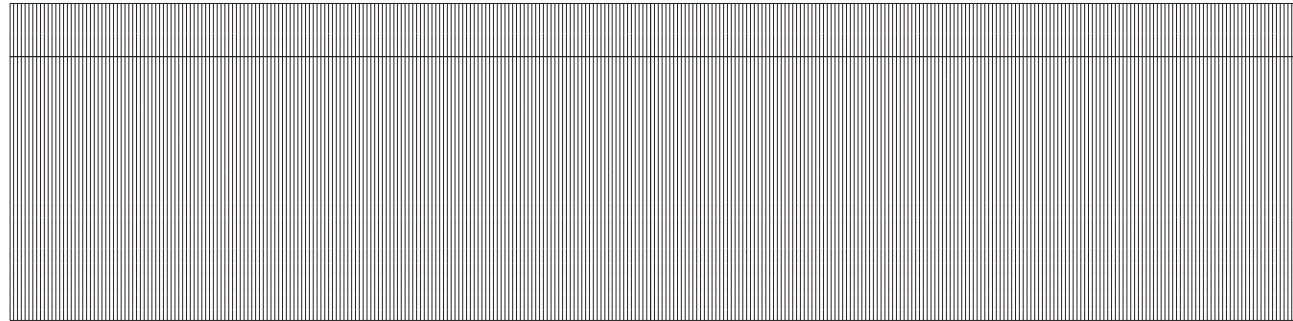
Job Number: LT30386

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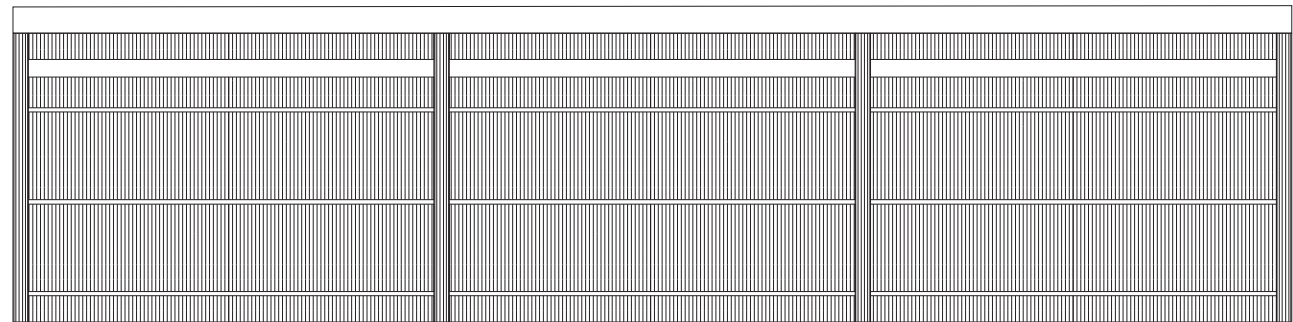
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NOTES:

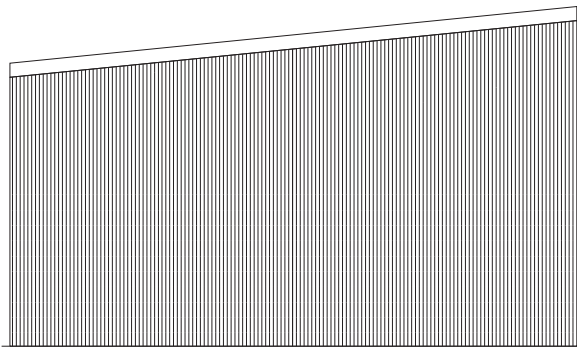
N.B. This design does not include any design or detail of flashing requirements.



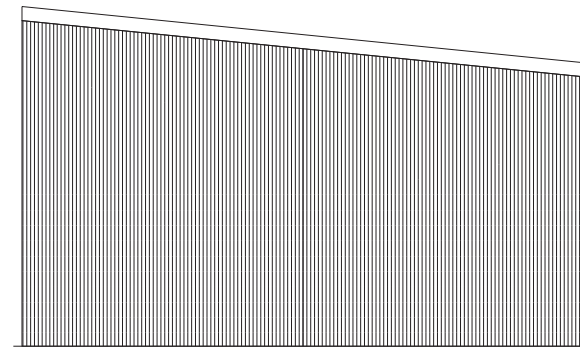
REAR ELEVATION



FRONT ELEVATION



LEFT END ELEVATION



RIGHT END ELEVATION

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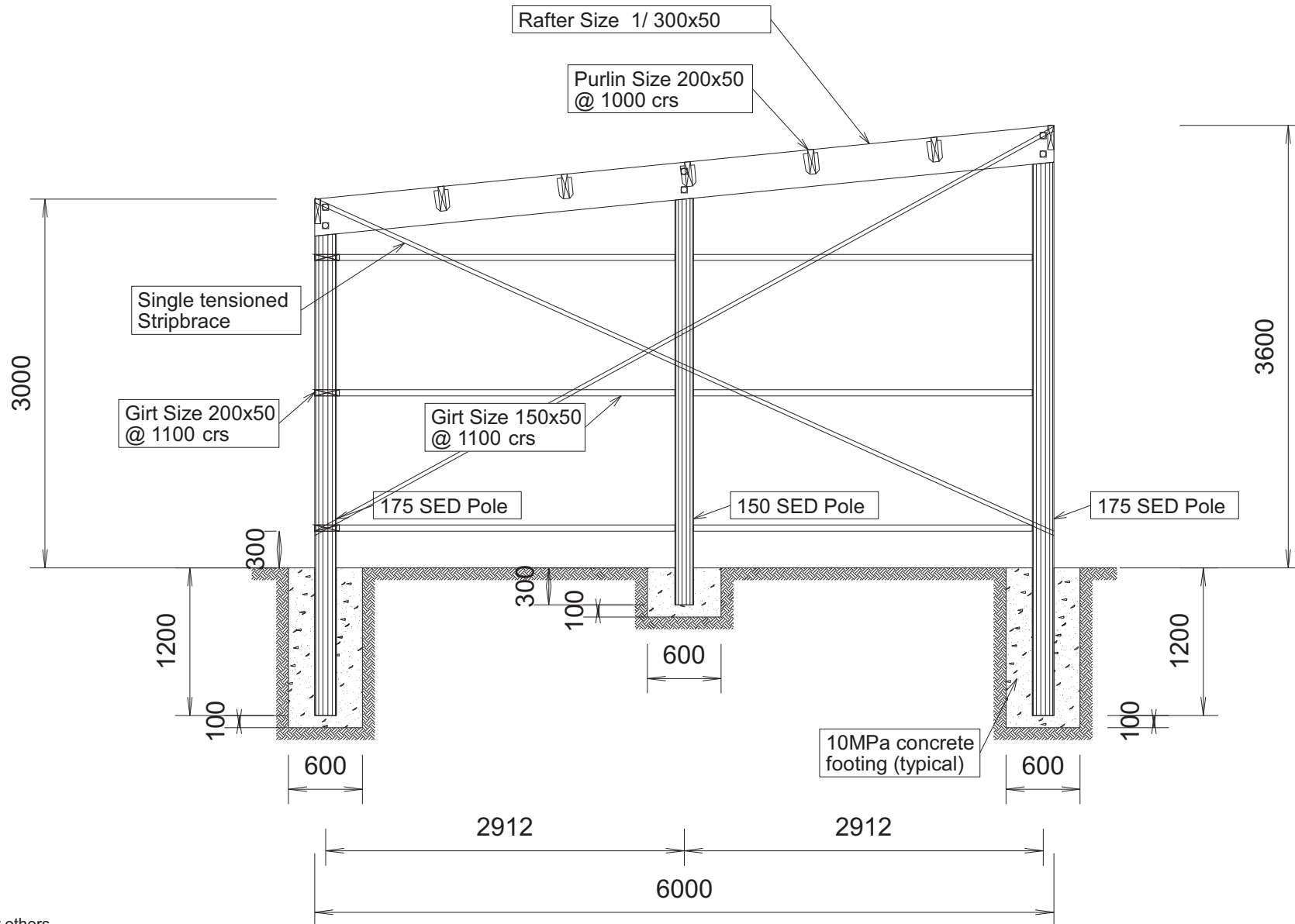
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Note: Girt pattern may vary, as long as spacings do not exceed 1100.



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HOME OF **GANG-NAIL®** BUILDING SYSTEMS

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 promo

**END ELEVATION**

Detailed by:  
 Lance Elrick

Date:  
 21 / 08 / 14

Checked by:

Scale:  
 Drawings to scale

Job Number:  
**LT30386**

Sheet Number:

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