

GENERAL DESIGN CONSIDERATIONS

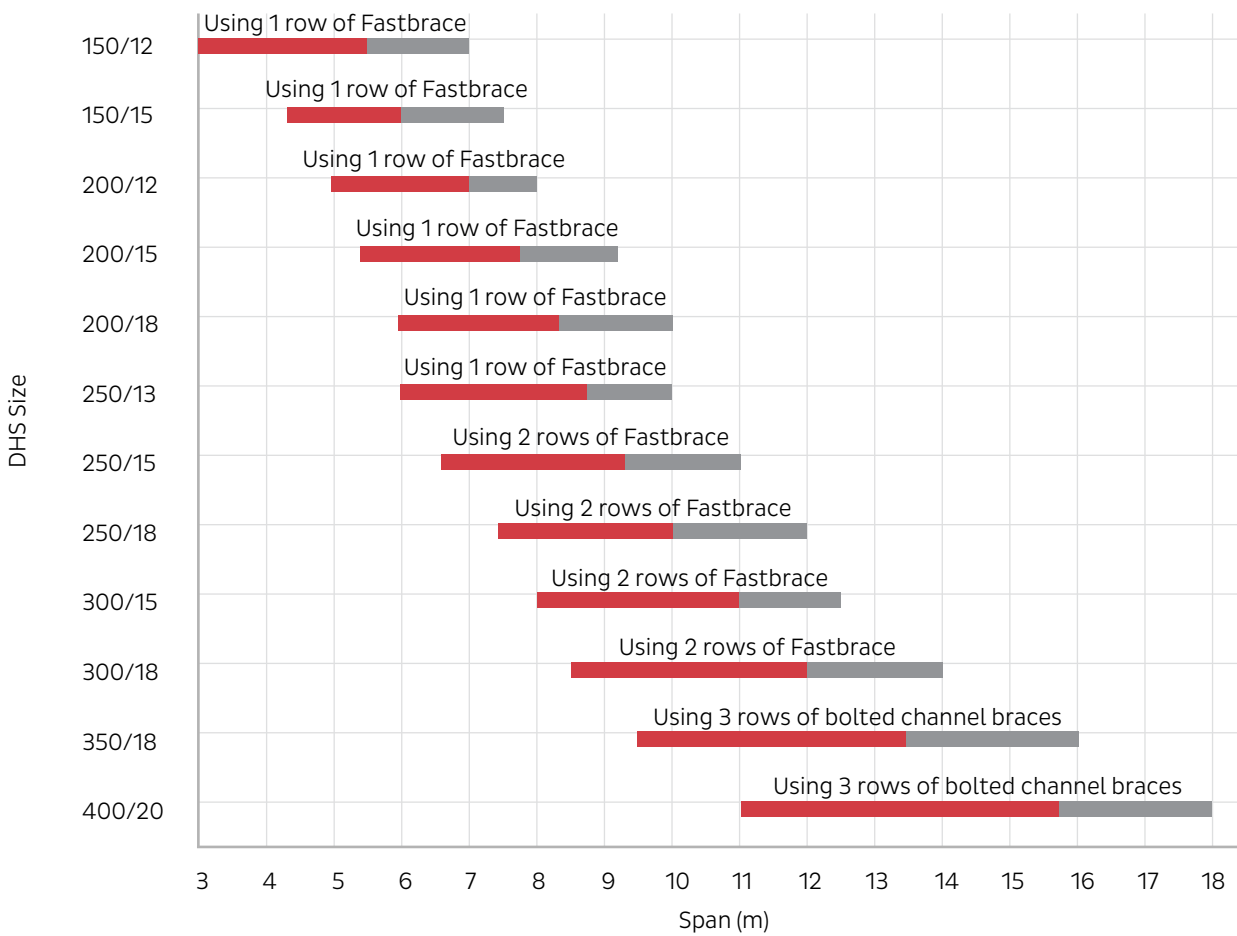
OPTIMISATION

The charts and tables in this section are based on typical product use and are intended as a quick reference guide only. These must not be used for design purposes or as a substitute for specific design in sections 2.3 and 2.4 as there may be specific cases in this section where the spans indicated on these charts and tables will not be achievable.

2.2.1

DHS PURLIN SYSTEM QUICK REFERENCE GUIDE

1. This guide is intended to be used as an indicator of the purlin and bracing options suitable for particular spans.
2. Final purlin and bracing design must be based on detailed design specific to each building.



Key: Single Spans (red bar) Lapped Spans (grey bar)

TOP NOTCH PURLIN SYSTEM QUICK REFERENCE GUIDE

The following quick reference guide is intended for use as a preliminary design for farm building and non-habitable sheds and is for guidance only. It is not a substitute for final design or building consent requirements.

1. The quick reference guide is based on AS/NZS 1170:2002 design actions with nominal internal (+0.3) pressures and an allowance for local peak pressures ($K_l C_{pe} + C_{pi} = 1.4$), with a maximum building height of 8 metres and a maximum building height/depth ratio of 0.6.

Urban and rural purlins are designed for a 1 in 500 year Ultimate Limit State (ULS) wind event and wind serviceability deflections of span/150 (1 in 25 year wind event).

Farm purlins are designed for a 1 in 100 year Ultimate Limit State (ULS) wind event and maximum wind serviceability deflections of span/90 (1 in 25 year wind event).

2. In **snow** regions specific design is required. **The tables are not appropriate above 200 metres elevation for Canterbury, Otago and Southland, nor above 450 metres for the West Coast, Marlborough and the Central/Lower North Island.**

3. Terrain Categories (TC) from AS/NZS 1170 are defined as follows:

Urban areas are those built-up with numerous obstructions 3-5 metres high, such as areas of suburban housing (TC = 3).

Sheltered Rural assumes rural with some sheltering from trees and adjacent buildings (TC = 2^{1/2}).

Rural assumes open terrain or grassland with few, well-scattered obstructions such as isolated trees and buildings (TC = 2).

Farm indicates buildings of low importance with a low degree of hazard to life and other property on open terrain (TC = 2).

4. **Fasteners** use the following number and fastener gauge, i.e. 2/12g requires 2 x 12g fasteners:

| Top Notch Purlin | | | | |
|-----------------------------------|-------|-------|-------|-------|
| | 60 | 100 | 120 | 150 |
| At purlin ends | 2/12g | 2/12g | 2/14g | 2/14g |
| At internal (continuous) supports | 4/12g | 6/12g | 6/14g | 8/14g |

5. **For Lapped Top Notch purlins**, laps shall be a minimum of 15% of maximum adjacent Top Notch span.

TOP NOTCH PURLIN SYSTEM QUICK REFERENCE GUIDE

2.2.2

All New Zealand (except Wellington and Marlborough Sounds)

| Top Notch Spacing (mm) | Span (m) | Urban (TC=3) | | | Sheltered Rural (TC=2½) | | | Rural (TC=2) | | | Farm (TC=2) | | |
|------------------------|----------|--------------|------------|------------|-------------------------|------------|------------|--------------|------------|------------|-------------|------------|------------|
| | | Single | Double | Lapped | Single | Double | Lapped | Single | Double | Lapped | Single | Double | Lapped |
| 1200 | 1.50 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 |
| 1200 | 1.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 |
| 1200 | 2.00 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 |
| 1200 | 2.25 | 100 x 0.75 | 60 x 0.75 | 60 x 0.75 | 100 x 0.75 | 60 x 0.75 | 60 x 0.75 | 100 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 |
| 1200 | 2.50 | 100 x 0.75 | 60 x 0.75 | 60 x 0.75 | 100 x 0.75 | 60 x 0.95 | 60 x 0.75 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 | 100 x 0.75 | 60 x 0.75 | 60 x 0.75 |
| 1200 | 2.75 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 | 100 x 0.95 | 60 x 0.95 | 60 x 0.95 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 |
| 1200 | 3.00 | 100 x 0.75 | 100 x 0.75 | 60 x 0.95 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 60 x 0.95 |
| 1200 | 3.25 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 |
| 1200 | 3.50 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.95 | 100 x 0.75 | 100 x 0.95 | 100 x 0.95 | 100 x 0.95 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 |
| 1200 | 3.75 | 120 x 0.95 | 100 x 0.75 | 100 x 0.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.95 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 |
| 1200 | 4.00 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 0.95 | 100 x 0.95 | 100 x 0.95 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 |
| 1200 | 4.25 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 0.95 | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 100 x 0.95 | 100 x 0.95 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 |
| 1200 | 4.50 | 150 x 0.95 | 100 x 0.95 | 100 x 0.95 | 150 x 0.95 | 120 x 0.95 | 100 x 0.95 | 150 x 1.15 | 100 x 0.95 | 120 x 0.95 | 150 x 0.95 | 120 x 0.95 | 100 x 0.75 |
| 1200 | 4.75 | 150 x 0.95 | 120 x 0.95 | 100 x 0.95 | 150 x 1.15 | 120 x 0.95 | 120 x 0.95 | 150 x 1.15 | 120 x 0.95 | 150 x 0.95 | 150 x 1.15 | 120 x 0.95 | 100 x 0.95 |
| 1200 | 5.00 | 150 x 1.15 | 120 x 0.95 | 120 x 0.95 | 150 x 1.15 | 150 x 0.95 | 120 x 0.95 | 150 x 1.15 | 150 x 0.95 | 120 x 0.95 | 150 x 1.15 | 150 x 0.95 | 100 x 0.95 |
| 1200 | 5.25 | 150 x 1.15 | 150 x 0.95 | 120 x 0.95 | 150 x 0.95 | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 100 x 0.95 |
| 1200 | 5.50 | | 150 x 0.95 | 120 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 100 x 0.95 |
| 1200 | 5.75 | | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 120 x 0.95 |
| 1200 | 6.00 | | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 120 x 0.95 |
| 1200 | 6.25 | | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 |
| 1200 | 6.50 | | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | | 150 x 0.95 | 150 x 0.95 |
| 1200 | 6.75 | | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | | | 150 x 0.95 | 150 x 0.95 |
| 1200 | 7.00 | | | 150 x 1.15 | | | | | | | | 150 x 1.15 | 150 x 1.15 |
| 1200 | 7.25 | | | 150 x 1.15 | | | | | | | | 150 x 1.15 | 150 x 1.15 |
| 1200 | 7.50 | | | | | | | | | | | 150 x 1.15 | 150 x 1.15 |

Note: TC = Terrain Category from AS/NZS 1170.

TOP NOTCH PURLIN SYSTEM QUICK REFERENCE GUIDE

2.2.2

All New Zealand (except Wellington and Marlborough Sounds)

| Top Notch Spacing (mm) | Span (m) | Urban (TC=3) | | | Sheltered Rural (TC=2½) | | | Rural (TC=2) | | | Farm (TC=2) | | |
|------------------------|----------|--------------|------------|------------|-------------------------|------------|------------|--------------|------------|------------|-------------|------------|------------|
| | | Single | Double | Lapped | Single | Double | Lapped | Single | Double | Lapped | Single | Double | Lapped |
| 1700 | 1.50 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 |
| 1700 | 1.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 |
| 1700 | 2.00 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 | 100 x 0.95 | 60 x 0.75 | 60 x 0.75 | 100 x 0.75 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 |
| 1700 | 2.25 | 100 x 0.75 | 60 x 0.75 | 60 x 0.75 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 |
| 1700 | 2.50 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 | 100 x 0.75 | 100 x 0.75 | 60 x 0.95 | 100 x 0.95 | 60 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 60 x 0.95 |
| 1700 | 2.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 |
| 1700 | 3.00 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.95 | 100 x 0.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 |
| 1700 | 3.25 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 |
| 1700 | 3.50 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 1.15 | 100 x 0.95 | 120 x 0.95 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 |
| 1700 | 3.75 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 0.95 | 120 x 0.95 | 100 x 0.95 | 150 x 0.95 | 120 x 0.95 | 100 x 0.95 | 150 x 0.95 | 120 x 0.95 | 100 x 0.75 |
| 1700 | 4.00 | 150 x 0.95 | 120 x 0.95 | 100 x 0.95 | 150 x 1.15 | 120 x 0.95 | 100 x 0.95 | 150 x 0.95 | 120 x 0.95 | 120 x 0.95 | 150 x 1.15 | 120 x 0.95 | 100 x 0.95 |
| 1700 | 4.25 | 150 x 1.15 | 120 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 0.95 | 120 x 0.95 | 150 x 0.95 | 150 x 1.15 | 120 x 0.95 | 150 x 1.15 | 150 x 0.95 | 100 x 0.95 |
| 1700 | 4.50 | 150 x 1.15 | 150 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 120 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 100 x 0.95 |
| 1700 | 4.75 | 150 x 1.15 | 150 x 0.95 | 120 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 120 x 0.95 |
| 1700 | 5.00 | | 150 x 1.15 | 120 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 |
| 1700 | 5.25 | | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 |
| 1700 | 5.50 | | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 |
| 1700 | 5.75 | | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 6.00 | | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 6.25 | | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 6.50 | | | | | | | | | | | | 150 x 1.15 |
| 1700 | 6.75 | | | | | | | | | | | | 150 x 1.15 |
| 1700 | 7.00 | | | | | | | | | | | | |
| 1700 | 7.25 | | | | | | | | | | | | |
| 1700 | 7.50 | | | | | | | | | | | | |

Note: TC = Terrain Category from AS/NZS 1170.

TOP NOTCH PURLIN SYSTEM QUICK REFERENCE GUIDE

2.2.2

Wellington and Marlborough Sounds

| Top Notch Spacing (mm) | Span (m) | Urban (TC=3) | | | Sheltered Rural (TC=2½) | | | Rural (TC=2) | | | Farm (TC=2) | | |
|------------------------|----------|--------------|------------|------------|-------------------------|------------|------------|--------------|------------|------------|-------------|------------|------------|
| | | Single | Double | Lapped | Single | Double | Lapped | Single | Double | Lapped | Single | Double | Lapped |
| 1200 | 1.50 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 |
| 1200 | 1.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 |
| 1200 | 2.00 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 | 100 x 0.75 | 60 x 0.75 | 60 x 0.75 | 100 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 |
| 1200 | 2.25 | 100 x 0.75 | 60 x 0.75 | 60 x 0.75 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 |
| 1200 | 2.50 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 60 x 0.95 |
| 1200 | 2.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 |
| 1200 | 3.00 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 |
| 1200 | 3.25 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 |
| 1200 | 3.50 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 0.95 | 100 x 0.95 | 120 x 0.95 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 |
| 1200 | 3.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 0.95 | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 100 x 0.95 | 120 x 0.95 | 150 x 0.95 | 120 x 0.95 | 100 x 0.95 |
| 1200 | 4.00 | 150 x 0.95 | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 120 x 0.95 | 100 x 0.95 | 150 x 1.15 | 100 x 0.95 | 120 x 0.95 | 150 x 1.15 | 120 x 0.95 | 100 x 0.95 |
| 1200 | 4.25 | 150 x 1.15 | 120 x 0.95 | 120 x 0.95 | 150 x 1.15 | 150 x 0.95 | 120 x 0.95 | 150 x 1.15 | 150 x 0.95 | 120 x 0.95 | 150 x 1.15 | 150 x 0.95 | 100 x 0.95 |
| 1200 | 4.50 | 150 x 1.15 | 120 x 0.95 | 120 x 0.95 | 150 x 1.15 | 150 x 0.95 | 120 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 | 100 x 0.95 |
| 1200 | 4.75 | 150 x 1.15 | 150 x 0.95 | 120 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 120 x 0.95 | 120 x 0.95 |
| 1200 | 5.00 | | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 |
| 1200 | 5.25 | | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 |
| 1200 | 5.50 | | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 |
| 1200 | 5.75 | | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1200 | 6.00 | | | 150 x 1.15 | 150 x 1.15 | | | | | | | | 150 x 1.15 |
| 1200 | 6.25 | | | 150 x 1.15 | 150 x 1.15 | | | | | | | | 150 x 1.15 |
| 1200 | 6.50 | | | | | | | | | | | | 150 x 1.15 |
| 1200 | 6.75 | | | | | | | | | | | | 150 x 1.15 |
| 1200 | 7.00 | | | | | | | | | | | | |
| 1200 | 7.25 | | | | | | | | | | | | |
| 1200 | 7.50 | | | | | | | | | | | | |

Note: TC = Terrain Category from AS/NZS 1170.

TOP NOTCH PURLIN SYSTEM QUICK REFERENCE GUIDE

2.2.2

Wellington and Marlborough Sounds

| Top Notch Spacing (mm) | Span (m) | Urban (TC=3) | | | Sheltered Rural (TC=2½) | | | Rural (TC=2) | | | Farm (TC=2) | | | | | |
|------------------------|----------|--------------|------------|------------|-------------------------|------------|------------|--------------|------------|------------|-------------|------------|------------|------------|------------|------------|
| | | Single | Double | Lapped | Single | Double | Lapped | Single | Double | Lapped | Single | Double | Lapped | | | |
| 1700 | 1.50 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.95 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 |
| 1700 | 1.75 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 | 60 x 0.95 | 60 x 0.75 | 60 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 | 60 x 0.75 |
| 1700 | 2.00 | 100 x 0.75 | 60 x 0.95 | 60 x 0.75 | 100 x 0.75 | 60 x 0.95 | 60 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 60 x 0.75 |
| 1700 | 2.25 | 100 x 0.75 | 100 x 0.75 | 60 x 0.95 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.95 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 60 x 0.95 |
| 1700 | 2.50 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 | 100 x 0.75 |
| 1700 | 2.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 | 100 x 0.95 | 100 x 0.75 | 100 x 0.95 | 100 x 0.95 | 100 x 0.75 | 100 x 0.75 |
| 1700 | 3.00 | 120 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 1.15 | 100 x 0.95 | 100 x 0.75 | 120 x 0.95 | 100 x 0.95 | 100 x 0.95 | 100 x 0.95 | 100 x 0.95 | 100 x 0.75 |
| 1700 | 3.25 | 150 x 0.95 | 100 x 0.95 | 100 x 0.75 | 150 x 1.15 | 100 x 0.95 | 100 x 0.95 | 120 x 0.95 | 100 x 0.95 | 100 x 0.95 | 100 x 0.95 | 100 x 0.95 | 100 x 0.95 | 100 x 0.95 | 100 x 0.95 | 100 x 0.75 |
| 1700 | 3.50 | 150 x 1.15 | 120 x 0.95 | 100 x 0.95 | 150 x 1.15 | 100 x 0.95 | 100 x 0.95 | 150 x 0.95 | 100 x 0.95 | 100 x 0.95 | 120 x 0.95 | 150 x 1.15 | 120 x 0.95 | 100 x 0.95 | 100 x 0.95 | 100 x 0.95 |
| 1700 | 3.75 | 150 x 1.15 | 150 x 0.95 | 100 x 0.95 | 150 x 1.15 | 100 x 0.95 | 100 x 0.95 | 120 x 0.95 | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 | 150 x 0.95 | 100 x 0.95 | 100 x 0.95 |
| 1700 | 4.00 | | 150 x 0.95 | 120 x 0.95 | 150 x 1.15 | 100 x 0.95 | 100 x 0.95 | 150 x 0.95 | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 | 100 x 0.95 | 100 x 0.95 |
| 1700 | 4.25 | | 150 x 1.15 | 120 x 0.95 | 150 x 1.15 | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 120 x 0.95 | 100 x 0.95 |
| 1700 | 4.50 | | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 |
| 1700 | 4.75 | | 150 x 1.15 | 150 x 0.95 | 150 x 1.15 | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 0.95 | 150 x 0.95 |
| 1700 | 5.00 | | | 150 x 1.15 | 150 x 1.15 | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 5.25 | | | 150 x 1.15 | 150 x 1.15 | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 5.50 | | | 150 x 1.15 | 150 x 1.15 | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 5.75 | | | | | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 6.00 | | | | | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 6.25 | | | | | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 6.50 | | | | | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 6.75 | | | | | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 7.00 | | | | | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 7.25 | | | | | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |
| 1700 | 7.50 | | | | | 100 x 0.95 | 100 x 0.95 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 | 150 x 1.15 |

Note: TC = Terrain Category from AS/NZS 1170.