

## Engineering Tables for direct nailing to wood/steel truss or structure

- Ex light gauge steel cold rolled sections as purlins
- 40 Tophat as supplied by Rollforming Services
- Span purlin continuous over minimum two supports
- Max cantilever overhang for soffit take 40% max supported span
- Profiled metal roofings with wind loads as noted or 0.25 LL whichever worst case
- For connections to wood substrate, refer NZS3604:2011 for wind loadings

### 40mm battens for roof and wall cladding

#### 40x73x0.55 Tophat section

Pressure Factor Combinations kCpmax = + or - 2.0. For connections to wood substrate. Refer to NZS3604:2011 for wind loadings.	300 Spacings			600 Spacings			900 Spacings			1200 Spacings		
	Max Span (m)	Fixing to Truss/Rafter		Max Span (m)	Fixing to Truss/Rafter		Max Span (m)	Fixing to Truss/Rafter		Max Span (m)	Fixing to Truss/Rafter	
		Timber	Steel		Timber	Steel		Timber	Steel		Timber	Steel
Medium wind 37m/s 0.821KpA	1.2	Type A	Type A	1.2	Type A	Type B	1.2	Type A	Type B	1.2	Type A	-
High wind 44m/s 1.160KpA	1.2	Type A	Type A	1.2	Type A	Type B	1.2	Type A	-	1.1	Type A	-
Very high wind 50m/s 1.500KpA	1.2	Type A	Type A	1.2	Type B	Type B	1.2	Type A	-	1.0	Type B	-
Extra high wind 55m/s 1.815KpA	1.2	Type A	Type B	1.1	Type B	-	1.2	Type B	-	0.9	Type B	-
Snow, Regions (N2,N3,N4,N5)<150m	1.2	Type A	Type B	1.1	Type B	-	1.2	Type B	-	0.9	Type B	-
Snow, Regions N2>200m	1.2	Type A	Type B	1.1	Type B	-	1.2	Type B	-	0.9	Type B	-
Snow, Alpine Regions>900m	1.2	Type A	Type B	1.1	Type B	-	1.2	Type B	-	0.9	Type B	-

#### 40x73x0.75 Tophat section

Pressure Factor Combinations kCpmax = + or - 2.0. For connections to wood substrate. Refer to NZS3604:2011 for wind loadings.	300 Spacings			600 Spacings			900 Spacings			1200 Spacings		
	Max Span (m)	Fixing to Truss/Rafter		Max Span (m)	Fixing to Truss/Rafter		Max Span (m)	Fixing to Truss/Rafter		Max Span (m)	Fixing to Truss/Rafter	
		Timber	Steel		Timber	Steel		Timber	Steel		Timber	Steel
Medium wind 37m/s 0.821KpA	1.2	Type A	Type A	1.2	Type A	Type A	1.2	Type A	Type B	1.2	Type A	Type B
High wind 44m/s 1.160KpA	1.2	Type A	Type A	1.2	Type A	Type A	1.2	Type A	Type B	1.2	Type A	Type B
Very high wind 50m/s 1.500KpA	1.2	Type A	Type A	1.2	Type A	Type B	1.2	Type A	Type B	1.2	Type B	-
Extra high wind 55m/s 1.815KpA	1.2	Type A	Type A	1.2	Type A	Type B	1.2	Type B	-	1.2	Type B	-
Snow, Regions (N2,N3,N4,N5)<150m	1.2	Type A	Type A	1.2	Type A	Type B	1.2	Type B	-	1.2	Type B	-
Snow, Regions N2>200m	1.2	Type A	Type A	1.2	Type A	Type B	1.2	Type B	-	1.2	Type B	-
Snow, Alpine Regions>900m	1.2	Type A	Type A	1.2	Type A	Type B	1.2	Type B	-	1.2	Type B	-

#### 40x73x0.95 Tophat section

Pressure Factor Combinations kCpmax = + or - 2.0. For connections to wood substrate. Refer to NZS3604:2011 for wind loadings.	300 Spacings			600 Spacings			900 Spacings			1200 Spacings		
	Max Span (m)	Fixing to Truss/Rafter		Max Span (m)	Fixing to Truss/Rafter		Max Span (m)	Fixing to Truss/Rafter		Max Span (m)	Fixing to Truss/Rafter	
		Timber	Steel		Timber	Steel		Timber	Steel		Timber	Steel
Medium wind 37m/s 0.821KpA	1.2	Type A	Type A	1.2	Type A	Type A	1.2	Type A	Type A	1.2	Type A	Type B
High wind 44m/s 1.160KpA	1.2	Type A	Type A	1.2	Type A	Type A	1.2	Type A	Type B	1.2	Type A	Type B
Very high wind 50m/s 1.500KpA	1.2	Type A	Type A	1.2	Type B	Type B	1.2	Type A	Type B	1.1	Type B	-
Extra high wind 55m/s 1.815KpA	1.2	Type A	Type A	1.2	Type B	Type B	1.1	Type B	Type B	1.0	Type B	-
Snow, Regions (N2,N3,N4,N5)<150m	1.2	Type A	Type A	1.2	Type B	Type B	1.1	Type B	Type B	1.0	Type B	-
Snow, Regions N2>200m	1.2	Type A	Type A	1.2	Type B	Type B	1.1	Type B	Type B	1.0	Type B	-
Snow, Alpine Regions>900m	1.2	Type A	Type A	1.2	Type B	Type B	1.1	Type B	Type B	1.0	Type B	-

### Fasteners

For fasteners use a Type A, B, as noted. Minimum number of fasteners required to fix batten to the rafter or truss at truss/batten location:		
Type A	2 x Nails	B20558 Paslode Nails or equivalent from other suppliers
Type B	4 x Nails	B20558 Paslode Nails or equivalent from other suppliers
-	Nail fasteners not recommended. Refer to screw table.	

### Design notes

The tables are based on section properties for Tophat sections outlined in the data provided by Rollforming Services. These tables and associated documents demonstrate compliance with the provisions of the NASH Standards for low rise steel framing. Battens are specifically designed meet the loadings as stated in NZ

Building Code NZS3604:2011. For wind loadings the pressure factor combinations comply with a local pressure factor kCp=+2.0.

For snow loadings the maximum span may be reduced to comply with maximum span for extra high wind loading if this loading controls.

### Certification

The tables are based on the provisions of attached Engineers PS1 for work to meet the NZ Building Code for design.

The E2 requirement stated on the PS1 for fifty year life is based on their use within the building envelop for non-exposed environment.

The product is finished to meet the requirements of durability as per the attached durability statement.

