

**COUNCIL
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07 November 2013

**Absolute
DESIGN**

31A Rutland Street
Rotorua

The Manager
Building Services
Rotorua District Council
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046

BC ONLY

- 7 1 8 7 3

Dear Sir,

Johnson

Re ~~John~~ House Re-roof, 10 Taurus Place, Rotorua.

Metalcraft Industries Ltd propose to replace the existing metal tile roofing with new longrun colorsteel roofing complete with new timber purlins.

I understand that the existing design parameters are:

Wind Zone = Medium

Roof Pitch = 15 degrees

Existing Structure = Trusses @ 900mm centres

Provided the new roof cladding is installed to the parameters I believe that the complete installation will comply with the NZ Building Code.

Roofing profile:

Corrugated 40 gauge

Purlin size:

Ex 75 x 50

Purlin centres:

900mm centres

Purlin timber grade & treatment:

Radiata Pine SG8, H1.2

Purlin fixings:

80mm x 10 gauge self-drilling screw

(Lumberlok blue screw)

Roofing underlay:

Thermakraft 215 self-supporting

Roof details:

As per drawings attached

Yours faithfully



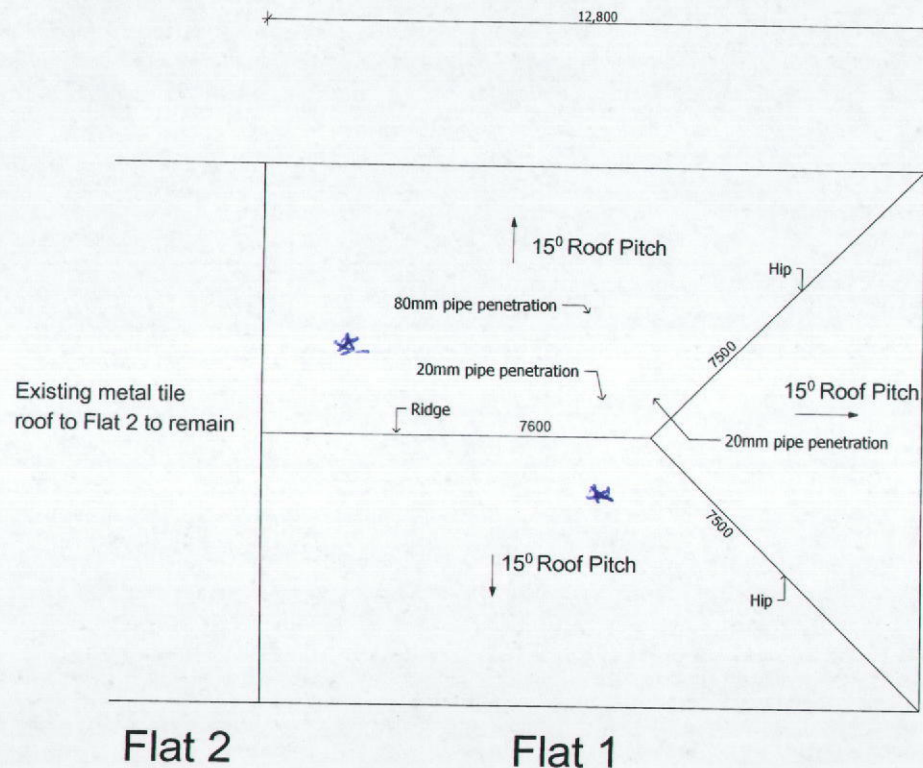
Margot McLaughlin
Absolute Design LBP# BP100139 (Design 2)



RRD001X3G0

Document Number: RDC-426493

Date Registered: 9/12/2013



Flat 2

Flat 1

Roof Plan Scale 1:100

Notes:

Metal tiles to be removed.

New Ex 75 x 50 SG8 H1.2 Radiata pine purlins at 900 ctrs to be installed.

Fixings as per the Lumberlok Purlin and fixing chart (as attached)

New corrugated 40 gauge colorsteel Endura roofing to be installed over new self-support paper Existing fascia, gutters and down pipes to remain.

Required Dek tiles: 1/No3.

All old tiles to be removed from site.

* = smoke alarms

Site Address:
10b Taurus Place
Rotorua

PLANS APPROVED SUBJECT TO ALL REQUIREMENTS OF THE BUILDING ACT 2004 BEING FULLY COMPLIED WITH

DATE: 5/12/13

OFFICER: H Ferguson

CONSENT No: 71873

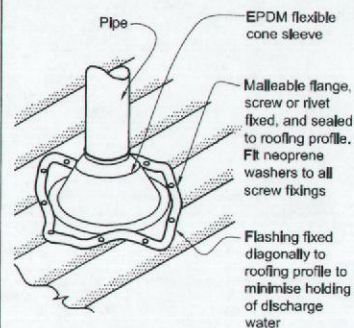
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Absolute DESIGN	31A Rutland Street Rotorua Telephone: 07-349 1635 Facsimile: 07-349 1636 Mobile: 021 2862631 Email: margotmclaughlin@ihug.co.nz	DRAWING TYPE: Roof Plan HOUSE TYPE: Re-Roof	CLIENT: Tessa John 10 Taurus Place Rotorua	REVISIONS:	DATE ISSUED: TIME ISSUED: DRAWN:	Thursday, November 07, 2013 8:55 AM MM	FLOOR AREA: Existing SCALE: 1:100 JOB NO: 1335	SHEET: 1 / 3
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Figure 53: Flashing for small pipes

Paragraphs 8.3, 10, 8.4.17, 9.6, 9.9, 5 and 9.6, 9.6



NOTE:

- (1) Max. roof pitch for this flashing 45°, minimum pitch 10° if base of flange covers one or more complete troughs.
- (2) For pipes up to 85 mm diameter.

Figure 43: Ridge to hip flashings

Paragraphs 8.4.11 and 8.4.12

NOTE: Flashing cover varies according to wind zone - refer Table 7.
For other ridge to hip flashings refer to New Zealand Metal Roofing and Wall Cladding Code of Practice.

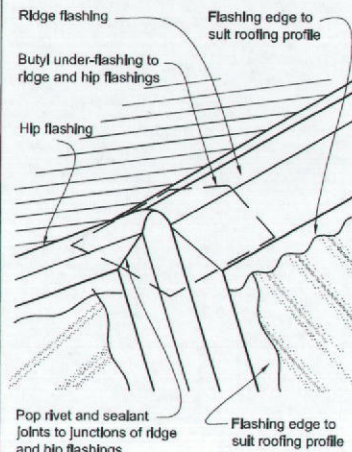


Figure 45: Eaves and roof/wall ridge for profiled metal

Paragraphs 4.5, 8.4.11, 8.4.12, Table 7

Eave flashing required where all of the following conditions are met:

- Roof slope less than or equal to 10°, and
- soffit width less than or equal to 100 mm, and
- wind zones are Very High or Extra High

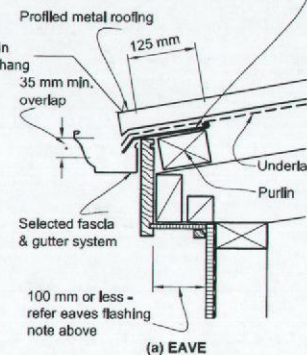
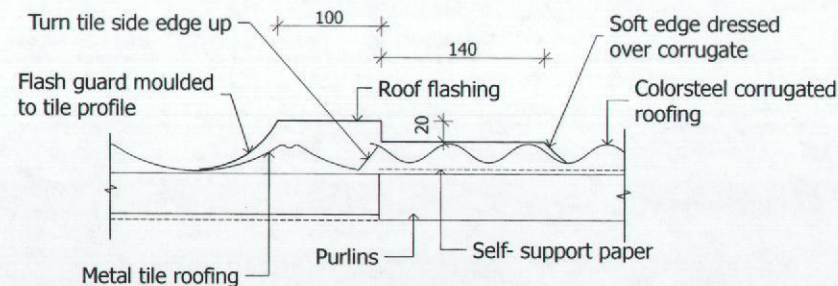
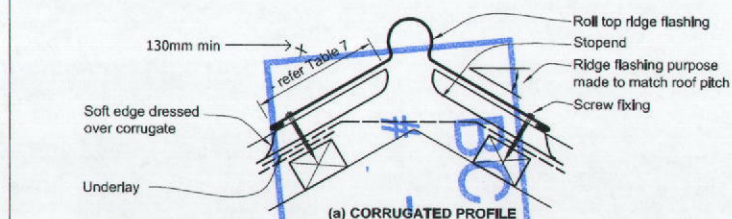


Figure 46: Ridge and hip flashings for profiled metal

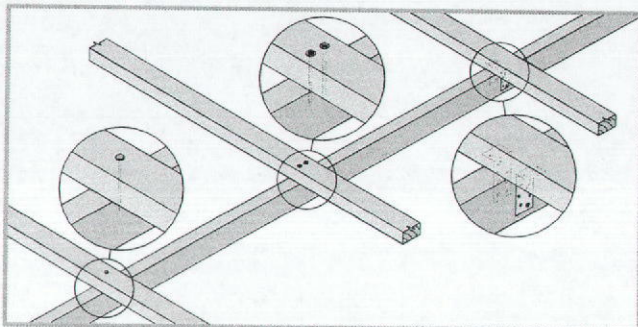
Paragraphs 4.4, 4.5, 8.4.11, 8.4.12, Table 7



PURLIN & BATTEN FIXING CHART ALTERNATIVE SOLUTION TO NZS 3604:2011 TABLES 10.10 & 10.12

NOTE:

- ★ All purlin and batten sizes are as per NZS 3604:2011.
- ★ All fixings assume that the purlin and battens are installed on their flat over the top of the rafter or truss.
- ★ The minimum fixing requirements apply to all purlin locations within the roof area.
- ★ The LUMBERLOK BLUE SCREW where specified requires a minimum of 30mm penetration into rafter or truss i.e. it is suitable for rough sawn timber up to 50mm thick at 18% moisture content.



SELECTION CHART FIXING OPTIONS (minimum fixing requirements)

ROOF WEIGHT	MAX. PURLIN SPAN (mm)	MAX. PURLIN CRS. (mm)	WIND ZONE				
			L	M	H	VH	EH
HEAVY ROOF Tile Battens	900	370	A	A	A	A	A
LIGHT ROOF Tile Battens	900	370	A	A	B	C	C
	1200	370	A	B	C	C	C
LIGHT ROOF Purlins	900	900	C	C	C	C	D
	1200	900	C	C	C	D	D
	1200	1200	C	C	D	E	E

Wind Zone:
As per NZS 3604:2011

L = Low Wind
M = Medium Wind
H = High Wind
VH = Very High Wind
EH = Extra High Wind

STANDARD FIXING OPTIONS

FIXING TYPE A 0.55kN

1 NAIL

Note: Two nails maybe preferred to prevent batten rolling over with high roof pitches.

FIXING TYPE B 0.8kN

2 NAILS

FIXING TYPE C 2.4kN

1 BLUE SCREW

FIXING TYPE D 3.45kN

2 BLUE SCREWS

OR

2 SKEW NAILS plus 2 WIRE DOGS
(for purlin on edge)

FIXING TYPE E 5.5kN

2 NAILS plus 1 CT200

OR

1 PAIR of CPC40

CPC40

CPC40

FIXING DEFINITIONS

NAIL = Either 90mm x 3.15 dia. power-driven nail or 100mm x 3.75 dia. hand-driven nail

BLUE SCREW = 80mm x 10 gauge LUMBERLOK BLUE SCREW

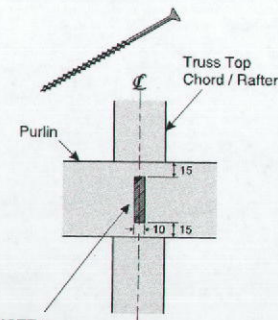
WIRE DOG = LUMBERLOK WIRE DOG either LH or RH

CT200 = LUMBERLOK Ceiling Tie CT200 band over purlin, 4 x LUMBERLOK Product Nails 30mm x 3.15 dia. each end

CPC40 = LUMBERLOK CPC40 with 2 x Type 17-14g x 35mm Hex Head Screws per flange

FIXING TOLERANCES

LUMBERLOK BLUE SCREW



NOTE:
Locate fixings within the shaded area. Care to be taken to avoid over tightening of screws.

PURLIN / BATTEN SPLICE FIXING OPTIONS

FIXING TYPE A & B OVER PURLIN SPLICE

1 nail in each

NOTE:
Skew nail when fixing to 35mm rafter or truss

FIXING TYPE C, D or E OVER PURLIN SPLICE

90 x 35mm block fixed to chord or rafter with 4 x 75mm nails

• TYPE C
1 SCREW
to each purlin

• TYPE D & E
1 NAIL plus 1 SCREW to each purlin