



Installation Guide





# PRODUCT INFORMATION

Metalcraft Ceiling Batten System is easy to install and manufactured using 0.55 BMT G550 high tensile Z275 galvanised steel from New Zealand Steel.



Ceiling battens can be supplied either stand alone or with a hanger tab to accommodate different installation requirements and is suitable for residential and commercial internal applications.

### BENEFITS OF A STEEL CEILING BATTEN

The Metalcraft Ceiling Batten System will provide a more stable substrate for fixing ceiling linings to as it is less prone to shrinkage and movement that is typically associated with timber battens.

The Metalcraft Ceiling Batten System has the following feature and benefits:

- Lightweight
- Suitable for various installation applications.
- Strong and Stable material less prone to shrinkage.

# SCOPE OF USE

The Metalcraft Ceiling Batten System is appraised for use as ceiling battens directly supporting ceiling linings in buildings within the following Scope:

- On framed ceilings within the scope limitations on NZS 3604; and
- On timber and light gauge steel-framed ceilings subject to specific design.

Refer to BRANZ Appraisal no: 981 (2017).

# HANDLING AND STORAGE

The Metalcraft Ceiling Batten System components and accessories must be stacked flat off the ground and supported on a level platform. They must be kept dry at all times and care must be taken to avoid damage to the profiles.

#### **COMPLIANCE & WARRANTIES**

The Metalcraft Ceiling Batten System is manufactured from steel sourced from New Zealand Steel and complies to AS 1397:2011.

The Metalcraft Ceiling Batten System when used in enclosed, dry environments is expected to have a serviceable life in excess of 50 years and will meet the NZBC requirements.

# QUALITY ASSURANCE

The Metalcraft Ceiling Batten System is manufactured in a controlled factory situation which ensures consistent quality of product.

The manufactured product is checked for compliance with the design dimensions for every length.

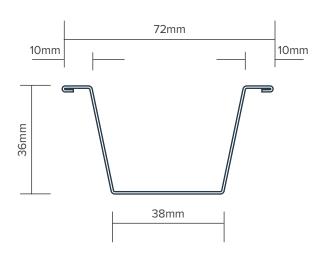
### **TECHNICAL SUPPORT**

Contact any Metalcraft Roofing branch for assistance.

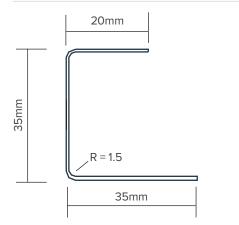
# DESIGN AND INSTALLATION

Dimensions are nominal and may vary with changes in material

# **CEILING BATTEN**



### PERIMETER CHANNEL

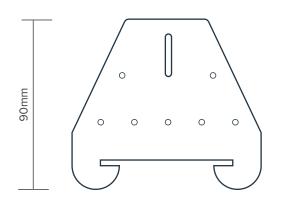


The Metalcraft Perimeter Channel is a roll formed steel C-section formed from the same material as the Metalcraft Ceiling Batten and is available in 3m lengths. The Metalcraft Perimeter Channel shall be screw-fixed to supporting framing at the perimeter of the room at 1200mm maximum centres. The Metalcraft Ceiling Batten System provides a dimensionally stable support frame for ceiling linings in non structural or non fire resistance rated situations. The Metalcraft Ceiling Batten is designed to be either directly screw fixed to the underside of rafters, ceiling joists, truss chords or floor joists through the double thickness flanges, or connected by way of Metalcraft Hanger tabs.

The Metalcraft Ceiling Batten System is a 35mm deep trapezoidal top-hat steel channel section with flanges folded to double thickness, formed from galvanised coil steel (G550 grade, 0.55BMT, Z275) supplied by New Zealand Steel. It is available in 3.6, 4.8 and 6m lengths.

The Metalcraft Ceiling Batten features uniform indentations to the face to aid easy installation of self-drilling plasterboard screws.

#### HANGER TAB



The Metalcraft Hanger Tab is a pressed metal tab, stamped from galvanised coil steel (G300 grade, 0.75BMT, Z275) supplied by New Zealand Steel. It is screw fixed to the sides of timber ceiling joists, truss chords or floor joists with three 32x8g gold passivated, wafer head, coarse thread screws and readily facilitates the leveling and alignment of Metalcraft Ceiling Battens to allow for construction tolerances in timber framing prior to fixing of ceiling linings. The hangar tab is able to accommodate a drop of 25mm from the underside of the ceiling joist.

#### ACCESSORIES

Accessories used with the Metalcraft Ceiling Batten system which are supplied by the building contractor are:

- Fasteners for Metalcraft Ceiling Batten System components to timber are 32 x8G wafer head, gold passivated, coarse thread screws.
- Fasteners for fixing Metalcraft Ceiling Batten System components to light steel framing are Konnect ST12 -14 tpi x20mm CLS5 Steeltite self drilling screws.

# INSTALLATION INSTRUCTIONS

### INSTALLATION

Installation of the Metalcraft Ceiling Batten System must be completed by, or under the supervision of a Licensed building practitioner with the relevant Licence Class, in accordance with this brochure and the BRANZ Appraisal No. 981 (2017).

#### ELECTRICITY

Separation or protection to the Metalcraft Ceiling Batten System from electricity sources must be provided to avoid the risk of electric shock.

#### HEALTH AND SAFETY

Personal protective equipment must be used when handling or cutting the Metalcraft Ceiling Batten System Components such as protective eye wear and gloves. Sharp cut edges should be filed smooth prior to fixing in place.

Dust resulting from the cutting or smoothing of components of the Metalcraft Ceiling Batten System may be a respiratory irritant and the use of a suitable face mask is recommended.

# PREVENTION OF FIRE

Separation or protection must be provided to Metalcraft Ceiling Batten System from heat sources such as fire places, heating appliances, flues and chimneys. Part 7 of NZBC Acceptable Solutions C/AS1 - C/AS6 and NZBC Verification Method C/VM1 provide methods for separation and protection of combustible materials from heat sources. The Metalcraft Ceiling Batten itself is non combustible, but separation from heat sources is required to prevent heat transfer to associated elements such as timber or plasterboard.

### STRUCTURE

The Metalcraft Ceiling Batten System is suitable to support single layered ceiling linings up to a maximum weight of 25Kg/m2.

e.g. - 13mm plasterboard is nominally 12kg/m2.

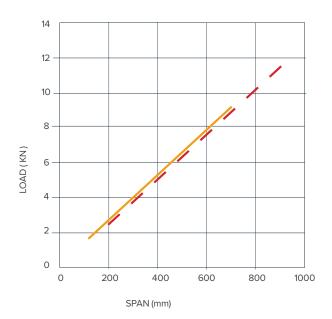
Ceiling Battens shall be spaced at either 600mm maximum centres or the maximum permissible span as specified in the load span table to the right.

Ceiling Battens shall span a maximum of 1200mm between supporting framing for a continuous span, and 900mm maximum for a single span.

The Metalcraft Ceiling Batten can support the weight of small, lightweight items fixed to the ceiling lining. Heavy Items such as range hoods, garage door openers, large luminaries and the like must be fixed to truss chords, ceiling joists or blocking fixed between these elements.

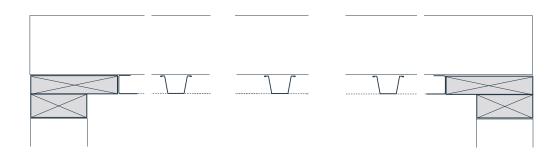
# LOAD SPAN GRAPH

- DIRECT FIXED TO TIMBER OR STEEL Steel Batten - Screwed
  - HANGER BRACKET Steel Batten Hanger



# INSTALLATION INSTRUCTIONS

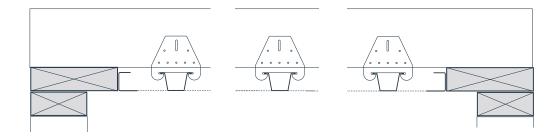
# DIRECT FIXING TO TIMBER OR STEEL:



- 1. Create a datum line for the ceiling. This can be done by using a string line that is perpendicular to the set out of the ceiling batten. The best place for this datum line is somewhere in the centre of room and as close to the joist as possible.
- 2. Install hanger brackets using three 32 x 8G wafer head screws into timber and for steel use Steeltite ST12 -14x20 CLS5 screws. Hanger bracket shall be installed to support ceiling batten at intervals as specified in load span graph below.
- 3. Install the perimeter channels using 32 x 8G wafer head screws into timber and for steel use Steeltite ST12 -14x20 CLS5 screws. Fix at maximum 1200mm centres.
- 4. Cut the batten using tin snips or an angle grinder to the correct length so it can be positioned into the perimeter channels. Abrasive cutting techniques will damage the galvanised coating.

The Metalcraft Ceiling Batten can be end-joined by butt joining where the ceiling battens meet the supporting framing.

# HANGER BRACKET:



- 1. Create a datum line for the ceiling this can be done by using a string line that is perpendicular to the set out of the ceiling batten. The best place for this datum line is somewhere in the centre of room and as close to the joist as possible.
- 2. Install the perimeter channels using 32 x 8G wafer head screws into timber and for steel use Steeltite ST12 -14x20 CLS5 screws. Fix at maximum 1200mm centres and through either side of the batten, adjust with a string line or laser for a level plane.
- 3. Cut the batten using tin snips or an angle grinder to the correct length so it can be positioned into the perimeter channels and screw into bottom chord using one on either side of the batten. Abrasive cutting techniques will damage the galvanised coating.

The Metalcraft Ceiling Batten can be end-joined by butt joining where the ceiling battens meet the supporting framing. Join on truss with supporting block either side of truss.

# BRANCHES

WHANGAREI 42-44 Rewa Rewa Road, Whangarei 09 470 0870 sales.whangarei@metalcraftroofing.co.nz

AUCKLAND NORTH SHORE 4 Silverfield, Wairau Park, Glenfield, Auckland 09 444 1813 sales.auckland@metalcraftroofing.co.nz

#### AUCKLAND EAST TAMAKI

26 Trugood Drive East Tamaki, Auckland 09 273 2820 orders.akl@metalcraftroofing.co.nz

HAMILTON

25 Sheffield Street, Hamilton 07 849 3807 sales.hamilton@metalcraftroofing.co.nz

#### TAURANGA

42 Poturi St, Tauriko, Tauranga 07 575 7032 sales.tauranga@metalcraftroofing.co.nz

ROTORUA 15 Monokia Street, Rotorua 07 350 1138 sales.rotorua@metalcraftroofing.co.nz

**NEW PLYMOUTH** 218 De Havilland Drive, Bell Block, New Plymouth 06 755 2113 sales.newplymouth@metalcraftroofing.co.nz

For more information on Metalcraft Roofing visit:

Metalcraft Roofing is part of United Industries Ltd.

For more information on United Industries visit:

PALMERSTON NORTH 76 Malden Street, Palmerston North 06 358 9149

sales.palmerston@metalcraftroofing.co.nz

HASTINGS

1454A Omahu Road, Hastings 06 873 9020 sales.hastings@metalcraftroofing.co.nz

#### WELLINGTON

201 Gracefield Rd, Seaview, Lower Hutt 04 566 2253 sales.wellington@metalcraftroofing.co.nz

CHRISTCHURCH

85 Columbia Ave, Hornby, Christchurch 03 349 7350 sales.christchurch@metalcraftroofing.co.nz

CROMWELL 20 McNulty Road, Cromwell 03 445 4180 sales.cromwell@metalcraftroofing.co.nz

#### DISCLAIMER

As part of Metalcraft Roofing's policy of continued improvement, final specifications may vary from those contained in this publication.

The company reserves the right at any time and without notice to change the design, materials or features and withdraw products from the market without incurring any liability whatsoever.

This publication is issued as a general guide only and should not be treated as a substitute for technical advice. Contact with your nearest Metalcraft branch is recommended to confirm current specifications and availability.



www.metalcraftgroup.co.nz Brochure version: Sept 2018

www.metalcraftgroup.co.nz

www.unitedindustries.co.nz.





Metalcraft Roofing are members of the Roofing Association, New Zealand and the New Zealand Metal Roofing Manufacturers Incorporated.