BattenMan
CB-22 Metal
Ceiling & Wall Batten System
INTRODUCING
THE BATTENMAN
CEILING BATTEN SYSTEM FOR
RESIDENTIAL AND LIGHT COMMERCIAL USE

The BattenMan Ceiling batten System is suitable for most internal dry lining applications. The system provides a high performance ceiling with provides control of movement induced stress in ceilings. The BattenMan CB-22 ceiling batten system can be used for wall strapping, new ceiling structures or to upgrade existing ceilings.

Ceiling height is variable to accommodate services, ducting etc. The low profile batten is ideal for use in situations where floor to ceiling height is constrained. Our Metal Furring System is compatible with most ceiling linings used in New Zealand and conforms to the NZBC

This brochure explains :-

- How to select and specify the appropriate components.
- How to install the CB-22 metal batten ceiling system.
- Where the CB-22 ceiling systems are used.

In accordance with the manufacturers’ policy of continuous improvement, we reserve the right to alter specifications without prior notice. Whilst every precaution has been taken to ensure the accuracy of data, information or recommendations herein no liability in respect of such data, information or recommendations whether given negligently or otherwise can be accepted by the company. BML 20/8/2015
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1. Product Description and Features

The BattenMan CB-22 metal ceiling batten is a cold-rolled section manufactured from 50g ZM75 G550 galvanised steel. It provides the builder/specifier with a stable, accurate and lightweight steel framing system which is ideal for the application of Plasterboard.

The CB-22 steel ceiling battens are versatile and easy to use, providing strength, lightness and rigidity with low cost. The 22mm deep profile can be used as a ceiling batten for internal fixing of ceiling and wall linings.

The top flange of the profile has an embossed surface to make it easier for the plasterboard screws to grip and “bite-in” without slippage during awkward installation positioning. The lips of the bottom flanges are rounded for improved safety during handling and installation by the plasterboard trades. Nominal lapping (non-structural) is simple and will ensure continuity and straightness of fastener alignment.

- High strength and light weight
- Won’t shrink warp, twist or burn
- Compatible with all popular domestic ceiling plasterboards

Note:

- Best results are obtained when fixing Plasterboard to metal battens by reducing the screw gun speed to around 2000rpm.
- Installation shall not commence until the building is fully enclosed and dry.
- Timber elements to which the batten is fixed are to have moisture no greater than 16% at the time of lining.
- Do not place the batten in direct contact with CCA treated timber, copper piping or chemically-treated products, which are likely to react with the galvanised coating.
- Electrical wiring to be in accordance with the NZBC Approved Document G9. Store battens in a dry flat area. Handle and store the battens in a manner as to prevent distortion or damage by other trades.
a. Metal Ceiling Batten Components

<table>
<thead>
<tr>
<th>CB-22 Metal Batten</th>
<th>BC-22 Batten Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="CB-22 Metal Batten" /></td>
<td><img src="image2" alt="BC-22 Batten Channel" /></td>
</tr>
<tr>
<td>BA-22 Batten Angle</td>
<td>BH-22 Batten Hanger</td>
</tr>
<tr>
<td><img src="image3" alt="BA-22 Batten Angle" /></td>
<td><img src="image4" alt="BH-22 Batten Hanger" /></td>
</tr>
</tbody>
</table>

b. Batten Lengths

BattenMan battens are available in the following stock lengths

- 3.0 m
- 6.0 m

Battens are also available in custom long run lengths up to a maximum of 7.5 m. Batten lengths are only limited by available transport and handling facilities.
2. Instillation:

   a. Ceiling Batten – Direct Fixing

   ![Fig-2 Diagram]

   Batten can be fixed directly to timber through top flanges using fasteners approved by Manufacturer.

**Fig-2**

- Where there is no ribbon plate, fix the first batten no more than 50mm from the top plate in their longitudinal direction.

- Fix battens direct to trusses or ceiling joists using fasteners through each flange.

- When using Perimeter angle or channel, fix batten to angle using one wafer head screw.

- Join battens by overlapping battens by a minimum of 200mm directly under ceiling trusses and secure with four (4) 10-16 wafer head Tek screws. (Fig-3)

- Where girder trusses are used, or the primary framing changes direction, trimmers shall be fitted to ensure the maximum spans specified are not exceeded.

- Do not join battens in end spans.

- Do not direct fix batten to the underside of trafficable floors. Ceiling battens are designed to carry the weight of the ceiling only – always use batten hangers.

   ![Fig-3 Diagram]

   Four 10 x 16 Wafer head screws

   Minimum of 200mm overlap point

   CB-22 batten

   **Fig-3**
b. Perimeter fixing

- Perimeter channel to be fixed to top plate in line with batten spacing's.
- Perimeter channel is to be fixed to the top plate so that the long leg is to the bottom.
- Perimeter angle to be fixed to top plate in line with batten spacing.
c. Ceiling Batten – Batten hanger Fixing

- Ensure that the framing complies with the requirements of AS/NZS2589.1:1997.

- The ceiling batten hanger allows for levelling of the ceiling framing, as well as independent movement of the ceiling.

- Fix the batten hanger to the side of the truss or ceiling joist firstly by nailing or screwing through the central slot in the batten hanger.

- Adjust the batten hangers by string line or laser level until they are all level. Fix secondary nails or screws through the batten hanger after levelling and simply snap the batten into position.

- Where the ceiling is to be constructed to the underside of a trafficable floor, it is recommended that batten hangers be used.

- Leave a minimum of 10mm clear spacing between the batten and the substrate when using batten hangers.

- Supplementary bottom chord bracing may be required when fixing batten hangers.

![Diagram of ceiling batten hanger fixing method]

Fig-7

d. Cutting battens:
For cutting the CB-22 metal batten you may use any of the following:-

- Tin Snips
- Hack Saw
- Drop saw with appropriate blade
- Angle grinder with appropriate blade
3. Ceiling loading limits:

- Light fittings or similar point loads up to 25kg in total may be supported on the ceiling batten for batten spans up to 900mm.

- Light fittings or similar point loads up to 10kg in total may be supported on the ceiling batten for battens spanning up to 1200mm.

- Point loads are to be directly fixed to the ceiling batten (not to plasterboard) using appropriate expanding anchor

<table>
<thead>
<tr>
<th>Plasterboard thickness</th>
<th>Max Batten Span</th>
<th>Multi span (continuous over 2 or more spans)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10mm</td>
<td>450</td>
<td>1200</td>
</tr>
<tr>
<td>13mm</td>
<td>600</td>
<td>1200</td>
</tr>
</tbody>
</table>

4. Daiphragm Ceilings:

BattenMan CB-22 metal batten systems may be used in ceiling diaphragms as required provided that the following conditions are met;

- The batten is either fixed directly to the underside of the ceiling framing OR
- The batten is fixed to a block or continuous member that has been securely attached to the ceiling framing with 4x90mm nails (minimum)

**NOTE:** It is not acceptable to install a ceiling diaphragm on batten hangers without additional support as shown in fig 8 below.
5. Pitched & Raked ceilings

Changes in plane can be achieved by attaching a folded metal angle to the junction.

- Minimum 0.55mm BMT.
- Fastened on each edge using 2.8mm x 30mm Nails or 32mm x 8g wafer head screws at 300mm centres.
- Plasterboard linings to be fastened to each edge of the folded angle at 150mm centres.

6. Fasteners:

<table>
<thead>
<tr>
<th>Application</th>
<th>Recommended head fastener</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixing metal Batten to Timber Substrate</td>
<td>No:6 Scavenger Head self tapping screws Minimum 30mm penetration into substrate</td>
</tr>
<tr>
<td>Steel Substrate 0.55mm</td>
<td>No: 10-16 wafer head Tek screw Minimum 3 full threads penetration</td>
</tr>
</tbody>
</table>

7. Compliance with the New Zealand Building Code

The BattenMan metal ceiling batten, as detailed in this brochure, fully complies with the following New Zealand and Australian standard: AS/NZS2589 Parts 1 and 2:1997 for use with plasterboard and gypsum ceiling and wall linings, provided they are fitted in accordance with the manufacturer’s recommendations.
8. Warranty:

The BattenMan metal ceiling batten system is warranted to be free from defects in material and workmanship, and will replace and/or repair any product found to be defective, if installed by an authorised BattenMan installer. This warranty is in addition to any rights the customer may have in law.

9. Delivery, Storage and Handling

BattenMan battens are delivered to the job site in strapped bundles. If these are not required for immediate use they should be stored ideally in a ventilated dry location. The storage area should permit easy access for inspection and handling. If materials are stored outdoors, stack materials off the ground, supported on a level platform, and fully protected from the weather. Handle materials carefully to prevent damage. Remove damaged items and provide new items.

10. Safety first

When install metal ceiling battens ensure that the following are observed to protect you and others on the job site.

虿 Cut steel is sharp—wear gloves. Always clear any swarf left from the cutting process.

虿 Always wear eye protection when cutting steel and when driving screws or nails. A screw/nail may jump off the power screwdriver or nail gun and can cause eye injuries.

虿 Always ensure that you have a stable platform when working above ground level.

虿 Battens may contain traces of oil used in the roll forming process. Care should be taken when handling battens that may be slippery.

虿 Hearing protection should be worn when operating a nail gun.
We Value Your Feedback
To continue with the development of our products and systems, we value your input. Please send any suggestions, including your name, contact details, and relevant sketches to:

sales@battenman.co.nz