

## AliBat (by Nu-Wall) Structural Cavity Batten – Installation Reference

### Introduction

This installation reference offers guidelines for the application of AliBat cavity battens over timber frame constructions. AliBat battens can also be installed over steel framing and other substrates. While not all are covered in this document and referenced drawings, assistance is available with detailing of such specifications.

This document is designed to be used in conjunction with published specification drawings, copies of which are available upon request; alternatively they may be downloaded in PDF format from the AliBat website – [www.alibat.co.nz](http://www.alibat.co.nz). The only fabrication required prior to installation is cutting to length; as such, installation should be well within the capabilities of a competent builder.

Please refer to the documents “AliBat (by Nu-Wall) Structural Cavity Batten – General Information” and “AliBat (by Nu-Wall) Structural Cavity Batten – Specification Reference” for guidance in selection and application.

### Preparation

Before starting any installation check the following:

That all components are stored safely and securely off the ground in dry conditions and away from potential damage or theft.

Ensure all safety equipment is at hand; e.g. eye- and ear-protection, and that you follow established safe practice with access equipment.

### Tools

The following should suffice for most situations –

Level or dumpy level.

Chalk line.

Drop-and-draw saw for cutting battens to length.

Ensure saw is equipped with a blade appropriate for cutting aluminium.

Electric drill with square drive.

### Structure and framing

Timber framing must generally comply with NZS 3604 for buildings or parts of buildings within the scope limitations of NZS 3604. Buildings or parts of buildings outside the scope of NZS 3604 must be to a specific design in accordance with NZS 3603 and AS/NZS 1170. Where specific design is required, the framing

must be of at least equivalent stiffness to the framing provisions of NZS 3604. In all cases studs must be at maximum 600 mm centres. Where AliBat Structural Cavity Battens are to be installed horizontally, there is no specific requirement for horizontal dwangs to be present. Where AliBat battens are to be installed vertically, dwangs should be fitted flush between the studs at maximum 800 mm centres.

Steel framing must be to a specific design meeting the requirements of the NZBC. The minimum framing specification is ‘C’ section studs and noggs of overall section size of 75 mm web and 32 mm flange. Steel thickness must be minimum 0.75 mm. In all cases, studs must be at maximum 600 mm centres. Where AliBat Structural Cavity Battens are to be installed horizontally, there is no specific requirement for horizontal dwangs to be present. Where AliBat battens are to be installed vertically, dwangs should be fitted flush between the studs at maximum 800 mm centres.

### Fixing requirements

AliBat is supplied pre-drilled with 2 x 10-gauge countersunk holes at 100mm centres along its length, to enable fixing to studs across a range of spacings. Fixing to timber framing should be made using 2 x 10gx50mm screws per structural specifications for the project, but at maximum 600mm centres. Where light-gauge structural framing is being used, fixing of the battens to framing should be made using 2 x 10gx40mm TEK screws. Where a rigid air barrier (RAB) and/or thermal break are incorporated, screw length should be increased to accommodate the thickness of these.

### Installation

AliBat structural cavity battens should be installed over the building underlay, or rigid air barrier (RAB), to the wall framing at maximum 600 mm centres. Refer to the information following, relating to Layout, for information specific to the project requirements.

Where drawings and/or other project information have been supplied, indicating the layout and application of material, these will have been prepared from scale drawings, necessitating certain judgements regarding dimensions. Such information should be viewed as a guide only; dimensions should be verified by measuring on-site.

---

## AliBat (by Nu-Wall) Structural Cavity Batten – Installation Reference

---

2

### Layout; battens at 600mm centres

Where battens are installed vertically behind horizontal cladding, positioning of these is normally coincident with the framing's vertical studs. Where battens are installed horizontally behind vertical cladding, positioning of these is governed only by the required spacing (max. 600mm); it is not necessary for the batten to be supported by horizontal dwangs.

Refer to drawing **AliBat Layout600** for more detailed information.

### Layout; battens at 300mm centres

Where battens are installed vertically behind horizontal cladding, positioning of these is normally coincident with the framing's vertical studs with an additional intermediate batten. It is not necessary for the intermediate batten to be supported by a stud. Where battens are installed horizontally behind vertical cladding, positioning of these is governed only by the required spacing (max. 300mm); it is not necessary for the batten to be supported by horizontal dwangs.

Refer to drawing **AliBat Layout300** for more detailed information.

### Cutting aluminium

AliBat is no more difficult to cut than timber battens. For most cutting a power saw, fitted with a purpose-made tungsten carbide blade, having a minimum of 60 teeth, negative rake, should be employed. All other sawing equipment should also be fitted with blades suitable for cutting aluminium. Use of timber cutting blades with AliBat is not recommended.

### Key Points

- Maintain safe work practices.
- Store the product where it will be protected from damage and secure from theft.
- Determine the specific fixing sequence and set-outs for your job prior to commencement.
- When handling and cutting, take care to protect any pre-finished surface and double check measurements before cutting. Return off-cuts to storage – they may be required for use elsewhere on the job.
- Follow good trade practices and general principles relating to cladding and weather-tightness.
- Responsibility for final compliance with all local or national regulations lies with the builder / installer.