ALTERIA

SIGNATURE ALUMINIUM SYSTEMS

# TECHNICAL SUPPLEMENT: SPAN & FIXING DETAIL

## Alteria Aluminium Batten & Slat Range

Version 1.2

# CONTENTS

# 1.0 INTRODUCTION

The span table data provided in this guide offer the maximum fixing spacings for Alteria Aluminium's range of battens and slats and is to be used in conjunction with the Alteria Aluminium Installation Guide.

The project engineer is responsible for determining the appropriate wind pressures for the project. There are various factors that can have an effect on the maximum fixing spacings for Alteria battens and slats. The following will need to be known to assist with identifying the maximum fixing spacings to meet the project installation requirements.

- Geographic Wind Region
- Batten/Slat Size
- Fixing Substrate
- Fixing Method

# 2.0 FIXING OPTIONS

In this supplement, Alteria has provided fixing details and span data for the following common fixing methods. Please contact Alteria for advice on other fixing options not included.

- **Direct Two Piece Fix** - Refers to the batten or slat base being directly fixed to the substrate.
- **Mounting Track Fix** - Refers to batten or slat base being fixed to a mounting track.
- **Support Bracket Fix** - Refers to battens being fixed to the substrate using support angle brackets
- **Rear Fix** - Refers to fixing through the back of the substrate into the batten
- **Balustrade Infill** - Refers to battens being direct fixed to balustrade rail as an barrier infill

Table below indicates which fixing options and span table data is available for our range of battens and slats.

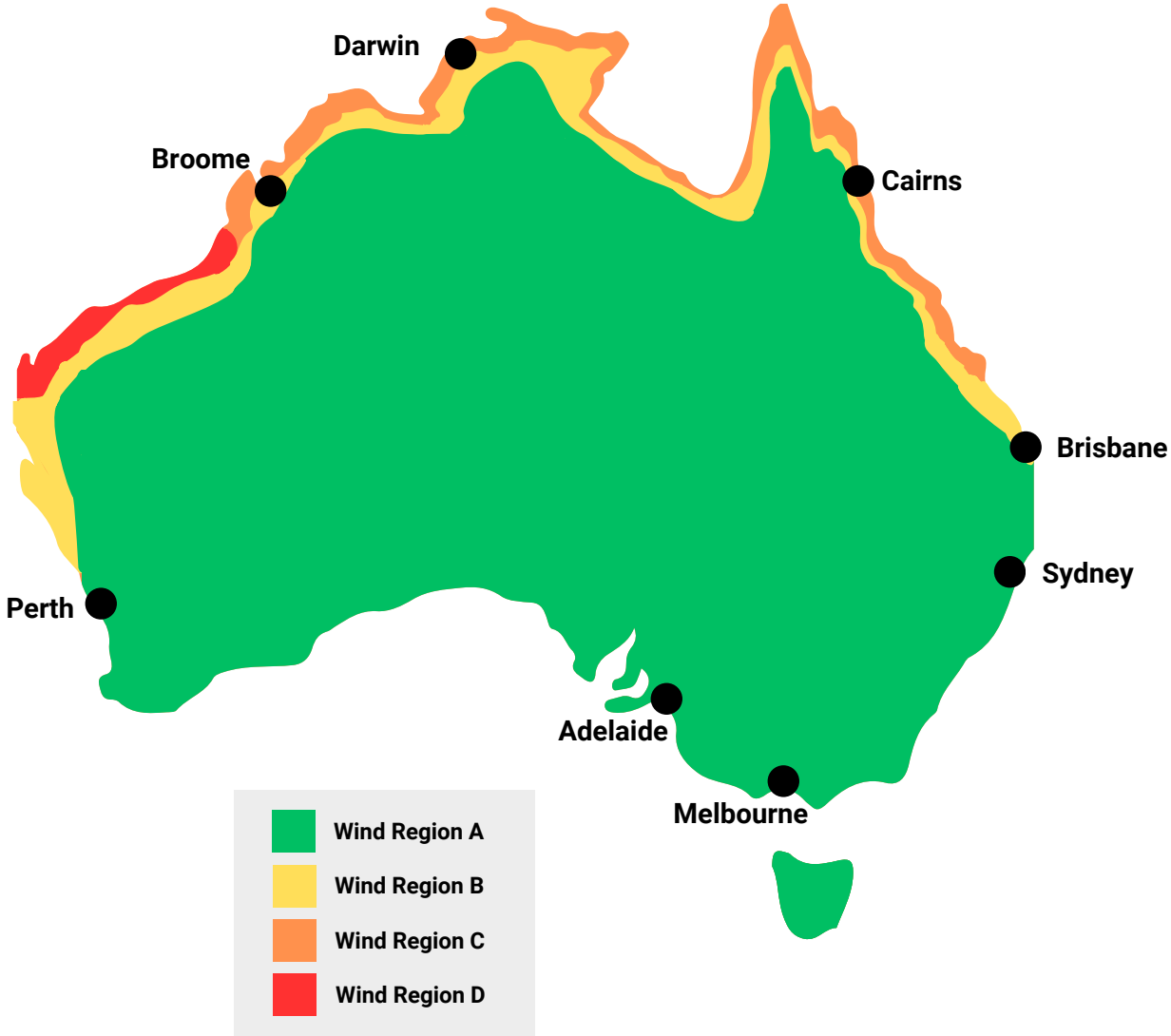
| Profile | Type | FIXING OPTIONS | | | | |
|---|---|---|---|---|---|---|
| | | Direct Two Piece Fix | Support Bracket Fix | Mounting Track Fix | Rear Fix | Balustrade Infill |
| **30 x 30mm** | Two Piece Batten | x | x | x | | x |
| **30 x 50mm** | | x | x | x | | x |
| **30 x 80mm** | | x | x | x | | x |
| **30 x 120mm** | | x | x | x | | x |
| **50 x 50mm** | | x | x | x | | x |
| **50 x 100mm** | | x | x | x | | x |
| **50 x 150mm** | | x | x | x | | x |
| **50 x 200mm** | | x | x | x | | x |
| **50 x 200mm Joiner** | | x | | | | |
| **65 x 19mm** | Two Piece Slat | x | | x | | |
| **90 x 19mm** | | x | | x | | |
| **30 x 30mm** | One Piece Batten | | | | x | |
| **50 x 50mm** | | | | | x | |
| **50 x 100mm** | | | | | x | |

## 3.0 GEOGRAPHIC WIND REGIONS

The table data in this guide uses geographic wind speed regions to identify fixing spans.

Wind Region refers to the classification of various regions across Australia based on their wind speeds and the frequency of extreme weather events. These classifications are defined in accordance with the Australian Standards AS1170.2:2021 Structural Design Actions.

Use the below map to identify what region the residential or commercial dwelling is located.
For more information specific wind region information please refer to AS1170.2:2021.



# 4.0 DESIGN STANDARDS & PARAMETERS

## 4.1 Design Standards

The spant table data in this guide have been created using the following design standards.

- AS/NZS 1170.0 - 2002: Structural design actions Part 0: General principles.
- AS/NZS 1170.1 - 2002: Structural design actions Part 1: Permanent, imposed & other actions.
- AS/NZS 1170.2 - 2021: Structural design actions Part 2: Wind actions
- AS/NZS 1664.1 - 1997: Aluminium structures - Limit state design

## 4.1 Design Assumptions

- This report excludes the assessment of the existing member (strata) that the battens or mounting track systems are fixed to. It is assumed that the strata are adequate for additional loads imposed by the battens and/or mounting track systems.
- The battens and mounting tracks are intended solely for decorative purposes and should not be used as a substitute for building protective layers, such as waterproofing or cladding.
- Spans are applicable to Vertical & Horizontal Orientations (unless specified); Internal & External and Walls, and for Ceilings & Soffit Applications.

## 4.2 Design Parameters

For wind load design, the following values for various parameters have been used. See 4.3 for span spacing adjustments if your project falls outside of these parameters.

| | |
|---|---|
| Terrain category: 2 | Shielding multiplier, Ms: 1 |
| Important level: 2 | Topographic multiplier, Mt: 1 |
| Design life: 50 years | Aspect ratio correction factor, Kar: 1 |
| Building height ≤ 20m | Angle inclination factor, Ki: 1 |

## 4.3 Span Spacing Adjustment Tables

Span Spacing Data has been created based on the above design parameters. If required, the following tables are to be used to adjust the fixing spacings for the Alteria Battens or Slats for installation conditions outside the scope of the above parameters.

The following tables help adjust spacings for the following installation types:

- Building Height above 20 metres - See section 4.3.1
- Terrain Category 1 - See section 4.3.2
- Importance Level 3 and 4 buildings - See section 4.3.3

**NOTE**: The spacing adjustment is a percentage reduction on the spacing extracted from our span table data. For example, if a 2000mm spacing was indicated on the Span Table and it has been indicated that it will need to be reduced by 10%, then the final spacing will be 1800 mm (2000 x 0.9) in this case.

# 4.0 DESIGN STANDARDS & PARAMETERS

## 4.3.1 Span Spacing Adjustment Table for Building Heights >20m

The following table is to be used to adjust the fixing spacings for the Alteria Battens for installation heights greater than 20 metres.

| INSTALLATION HEIGHT | SPAN SPACING ADJUSTMENT |
|---|---|
| 21m to 30m | Less 10% |
| 31m to 40m | Less 15% |
| Over 40m | Requires site-specific engineering |

## 4.3.2 Span Spacing Adjustment Table for Terrain Category

The following table is to be used to adjust the fixing spacings for the Alteria Battens for installations in Terrain Category 1

| TERRAIN CATEGORY | SPAN SPACING ADJUSTMENT |
|---|---|
| Terrain Category 1 | Less 15% |
| Terrian Category 2, 3 & 4 | No Change |

## 4.3.2 Span Spacing Adjustment Table for Importance Level

The following table is to be used to adjust the fixing spacings for the Alteria Battens for installation heights greater than 20 metres.

| IMPORTANCE LEVEL | WIND REGION | SPAN SPACING ADJUSTMENT |
|---|---|---|
| Importance Level 1 & 2 | A | No Change |
| | B | |
| | C | |
| Importance Level 3 | A | Less 5% |
| | B | Less 15% |
| | C | Less 15% |
| Importance Level 4 | A | Less 15% |
| | B | Less 25% |
| | C | Less 30% |

# 5.0 FASTENER DETAIL

## 5.1 Fasteners Per Fixing Point

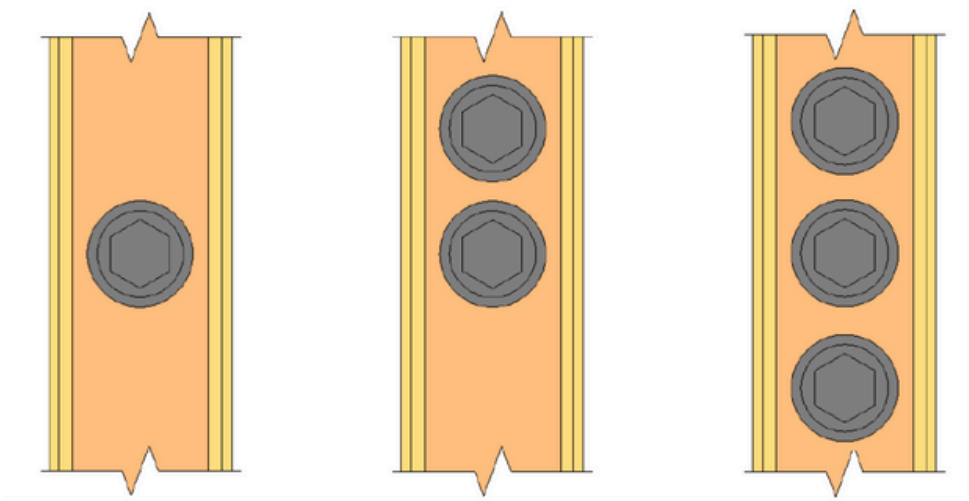
The span table data provided in this guide is is governed by the number of fasteners that are used at each fixing point.

Installer can select the suitable number of fasteners that are detailed in the data tables to meet their span requirements.

## 5.2 Fastener Set Out Detail

When installing fasteners at fixing points, please follow the below arrangement.

### 5.2.1 30mm Batten Series

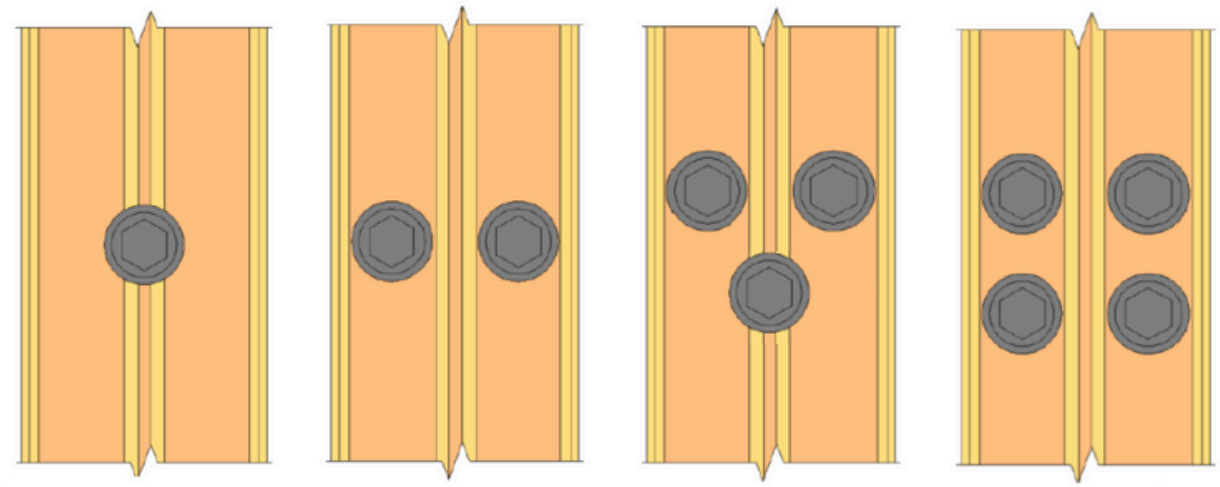


**1 Screw Fixing Detail**

**2 Screw Fixing Detail**

**3 Screw Fixing Detail**

### 5.2.2 50mm Batten Series & 19mm Slat Series



**1 Screw Fixing Detail (Slat Range Only)**

**2 Screw Fixing Detail**

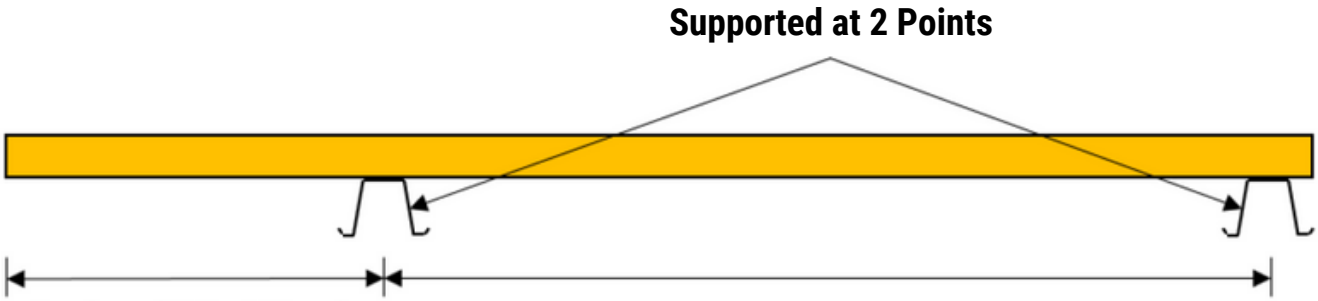
**3 Screw Fixing Detail**

**4 Screw Fixing Detail**

## 6.0 BATTEN OVERHANG ALLOWANCE

An overhang occurs when a batten extends beyond a support leaving one end to freely hang.
The following shall be followed when dealing with overhang deatils:

- Overhangs can span 25% of the adjacent spacing but not more than 500mm.
- Battens which overhang should be supported at a minimum of two points (1 span).




**Overhang Allowance**
Example: 25% of 1000mm = 250mm

**Span**
Example: 1000mm

# 7.0 DIRECT FIX INSTALLATION

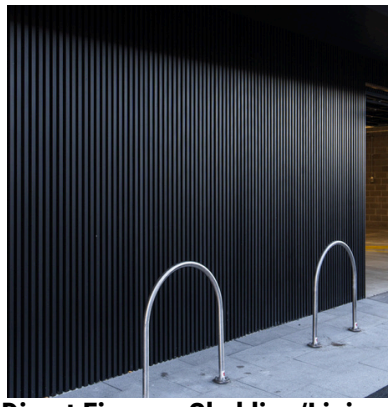
## 7.1 Direct Fix Overview

The Direct Fix Installation method involves securely attaching the batten or slat base to a supporting substructure. The Batten / Slat Cover is then clicked on to the base to conceal the fixings. See 7.2 for fastener detail requirements.

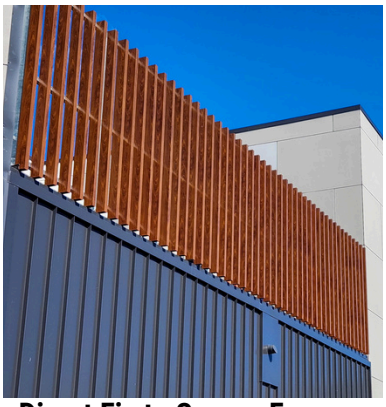
The Span data provided is applicable for vertical & horizontal orientations, internal & external walls and for ceilings & soffit applications. See Alteria's Batten Installation Guide for more information.

There most common direct fix installation options are highlighted below.

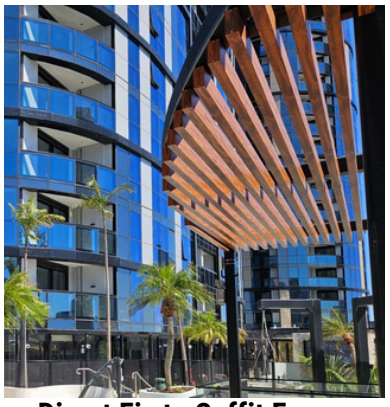
- Direct fix over external cladding or internal linings
- Direct Fix to Screen Frame
- Direct Fix to Soffit Frame



**Direct Fix over Cladding/Linings**



**Direct Fix to Screen Frame**



**Direct Fix to Soffit Frame**

## 7.2 Fastener Detail

The Batten Base is to be fixed using specific fasteners into various supporting strata substrates as follows:

**Steel:**

- ICCONS SD Hex C4 14-11.

**Timber**:

- ICCONS Type 17 Hex C4 14-10
- Screw to be fixed centrally into the timber with a minimum embedment depth of 35mm.

**Masonry:**

- ICCONS Thunderbolt Pro Hex 8mm
- Anchor embedment depth to be 40mm.
- Maximum one anchor per brick.
- Minimum edge distance = one brick.

**Solid Concrete:**

- ICCONS Thunderbolt Pro Hex 8mm.
- Anchor embedment depth to be 65mm.
- Minimum edge distance = 80mm.
- Minimum anchor spacing = 45mm.
- Anchor to be used on concrete with minimum compressive strength, f'c of 25 MPa.

**Concrete Block:**

- ICCONS Thunderbolt Pro Hex 8mm
- Anchor embedment depth to be 40mm.
- Maximum one anchor per cavity.
- Minimum edge distance = 1/2 block.

## 7.3 Fixing Notes

- Fixing anchor procedures are to be installed in accordance with the relevant manufacturer's installation guide.
- Alternative brand fixings can be substituted, providing specification are equivalent. Contact Alteria for advice.
- Use of a mechanical fix or polyurethane glue is recommended for two piece profiles - See install guide.

# 7.4 Span Table Data - Direct Fix Installation - 30mm Batten Series

## 7.4.1 30 x 30mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1600 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1600 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1600 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1600 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1600 |

## 7.4.2 30 x 50mm Two Piece Batten & Cove Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1550 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1550 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1550 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1550 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1550 |

***Span Tables Applicable for Heights up to 20m. See Section 4 for advice on Heights over 20m.***

# 7.4 Span Table Data - Direct Fix Installation - 30mm Batten Series

## 7.4.3 30 x 80mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 1 | 1000 | 800 | 600 |
| | | 2 | 1400 | 1080 | 780 |
| | | 3 | 1800 | 1360 | 960 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 1 | 1000 | 800 | 600 |
| | | 2 | 1400 | 1080 | 780 |
| | | 3 | 1800 | 1360 | 960 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1600 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1600 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 650 | 500 |
| | | 2 | 1400 | 878 | 650 |
| | | 3 | 1800 | 1105 | 800 |

## 7.4.4 30 x 120mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 1 | 650 | 350 | 250 |
| | | 2 | 910 | 473 | 325 |
| | | 3 | 1170 | 595 | 400 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 1 | 650 | 350 | 250 |
| | | 2 | 910 | 473 | 325 |
| | | 3 | 1170 | 595 | 400 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 1000 |
| | | 2 | 1400 | 1350 | 1300 |
| | | 3 | 1800 | 1700 | 1600 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 900 | 650 |
| | | 2 | 1400 | 1215 | 845 |
| | | 3 | 1800 | 1530 | 1040 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 1 | 550 | 300 | 250 |
| | | 2 | 770 | 405 | 325 |
| | | 3 | 990 | 510 | 400 |

***Span Tables Applicable for Heights up to 20m. See Section 4 for advice on Heights over 20m.***

# 7.5 Span Table Data - Direct Fix Installation - 50mm Batten Series

## 7.5.1 50 x 50mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 2 | 2000 | 2000 | 2000 |
| | | 3 | 2800 | 2700 | 2550 |
| | | 4 | 3200 | 2850 | 2550 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 2 | 2000 | 2000 | 2000 |
| | | 3 | 2800 | 2700 | 2550 |
| | | 4 | 3200 | 2850 | 2550 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 2000 | 2000 | 2000 |
| | | 3 | 2800 | 2700 | 2550 |
| | | 4 | 3200 | 2850 | 2550 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 2 | 2000 | 2000 | 2000 |
| | | 3 | 2800 | 2700 | 2550 |
| | | 4 | 3200 | 2850 | 2550 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 2000 | 2000 | 2000 |
| | | 3 | 2800 | 2700 | 2550 |
| | | 4 | 3200 | 2850 | 2550 |

## 7.5.2 50 x 100mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 2 | 2000 | 1150 | 900 |
| | | 3 | 2800 | 1553 | 1170 |
| | | 4 | 2950 | 1955 | 1440 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 2 | 2000 | 1150 | 900 |
| | | 3 | 2800 | 1553 | 1170 |
| | | 4 | 2950 | 1955 | 1440 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 2000 | 2000 | 2000 |
| | | 3 | 2800 | 2700 | 2450 |
| | | 4 | 2950 | 2700 | 2450 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 2 | 2000 | 1850 | 1400 |
| | | 3 | 2800 | 2498 | 1820 |
| | | 4 | 2950 | 2700 | 2240 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 1150 | 650 | 500 |
| | | 3 | 1610 | 878 | 650 |
| | | 4 | 2070 | 1105 | 800 |

***Span Tables Applicable for Heights up to 20m. See Section 4 for advice on Heights over 20m.***

# 7.5 Span Table Data - Direct Fix Installation - 50mm Batten Series

## 7.5.3 50 x 150mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 2 | 1000 | 550 | 400 |
| | | 3 | 1400 | 743 | 520 |
| | | 4 | 1800 | 935 | 640 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 2 | 1000 | 550 | 400 |
| | | 3 | 1400 | 743 | 520 |
| | | 4 | 1800 | 935 | 640 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 2000 | 1850 | 1400 |
| | | 3 | 2800 | 2498 | 1820 |
| | | 4 | 2950 | 2700 | 2240 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 2 | 1550 | 900 | 650 |
| | | 3 | 2170 | 1215 | 845 |
| | | 4 | 2790 | 1530 | 1040 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 550 | 300 | 250 |
| | | 3 | 770 | 405 | 325 |
| | | 4 | 990 | 510 | 400 |

## 7.5.4 50 x 200mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 2 | 550 | 300 | 250 |
| | | 3 | 770 | 405 | 325 |
| | | 4 | 990 | 510 | 400 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 2 | 550 | 300 | 250 |
| | | 3 | 770 | 405 | 325 |
| | | 4 | 990 | 510 | 400 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 1200 | 1050 | 800 |
| | | 3 | 1680 | 1418 | 1040 |
| | | 4 | 2160 | 1785 | 1280 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 2 | 900 | 500 | 400 |
| | | 3 | 1260 | 675 | 520 |
| | | 4 | 1620 | 850 | 640 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 300 | 150 | 100 |
| | | 3 | 420 | 203 | 130 |
| | | 4 | 540 | 255 | 160 |

***Span Tables Applicable for Heights up to 20m. See Section 4 for advice on Heights over 20m.***

## 7.6 Span Table Data - Direct Fix Installation - 50mm Joiner Batten Series

### 7.6.1 50 x 200mm Joiner Two Piece Batten with 50x50mm Batten Cover

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 2 | 350 | 200 | 150 |
| | | 3 | 490 | 270 | 195 |
| | | 4 | 630 | 340 | 240 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 2 | 350 | 200 | 150 |
| | | 3 | 490 | 270 | 195 |
| | | 4 | 630 | 340 | 240 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 1200 | 700 | 500 |
| | | 3 | 1680 | 945 | 650 |
| | | 4 | 2160 | 1190 | 800 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 2 | 600 | 350 | 250 |
| | | 3 | 840 | 473 | 325 |
| | | 4 | 1080 | 595 | 400 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 200 | 100 | 50 |
| | | 3 | 280 | 135 | 65 |
| | | 4 | 360 | 170 | 80 |

### 7.6.2 50 x 200mm Joiner Two Piece Batten with 50x100mm Batten Cover

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 2 | 250 | 150 | 100 |
| | | 3 | 350 | 203 | 130 |
| | | 4 | 450 | 255 | 160 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 2 | 250 | 150 | 100 |
| | | 3 | 350 | 203 | 130 |
| | | 4 | 450 | 255 | 160 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 850 | 500 | 350 |
| | | 3 | 1190 | 675 | 455 |
| | | 4 | 1530 | 850 | 560 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 2 | 400 | 250 | 150 |
| | | 3 | 560 | 338 | 195 |
| | | 4 | 720 | 425 | 240 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 150 | 50 | 50 |
| | | 3 | 210 | 68 | 65 |
| | | 4 | 270 | 85 | 80 |

***Span Tables Applicable for Heights up to 20m. See Section 4 for advice on Heights over 20m.***

## 7.6 Span Table Data - Direct Fix Installation - 50mm Joiner Batten Series

### 7.6.3 50 x 200mm Joiner Two Piece Batten with 50x150mm Batten Cover

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 2 | 200 | 100 | 50 |
| | | 3 | 280 | 135 | 65 |
| | | 4 | 360 | 170 | 80 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 2 | 200 | 100 | 50 |
| | | 3 | 280 | 135 | 65 |
| | | 4 | 360 | 170 | 80 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 600 | 350 | 250 |
| | | 3 | 840 | 473 | 325 |
| | | 4 | 1080 | 595 | 400 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 2 | 300 | 150 | 100 |
| | | 3 | 420 | 203 | 130 |
| | | 4 | 540 | 255 | 160 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 2 | 100 | 50 | 50 |
| | | 3 | 140 | 68 | 65 |
| | | 4 | 180 | 85 | 80 |

# 7.7 Span Table Data - Direct Fix Installation - 19mm Slat Series

## 7.7.1 65 x 19mm Two Piece Slat

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 1 | 1000 | 1000 | 950 |
| | | 2 | 1350 | 1250 | 950 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 1 | 1000 | 1000 | 950 |
| | | 2 | 1350 | 1250 | 950 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 950 |
| | | 2 | 1350 | 1250 | 950 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 950 |
| | | 2 | 1350 | 1250 | 950 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 950 |
| | | 2 | 1350 | 1250 | 950 |

## 7.7.2 90 x 19mm Two Piece Slat

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT - 1.0 BMT | ICCONS SD Hex C4 14-11 | 1 | 1000 | 1000 | 950 |
| | | 2 | 1350 | 1250 | 950 |
| **Timber** F7 Pine & F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | 1 | 1000 | 1000 | 950 |
| | | 2 | 1350 | 1250 | 950 |
| **Solid Concrete N≥25** | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 950 |
| | | 2 | 1350 | 1250 | 950 |
| **Brick** 3 Hole & Solid | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 950 |
| | | 2 | 1350 | 1250 | 950 |
| **Concrete Block** | ICCONS Thunderbolt Pro Hex 8mm | 1 | 1000 | 1000 | 950 |
| | | 2 | 1350 | 1250 | 950 |

*Span Tables Applicable for Heights up to 20m. See Section 4 for advice on Heights over 20m.*

# 8.0 SUPPORT BRACKET FIX - SPAN & FIXING DETAIL

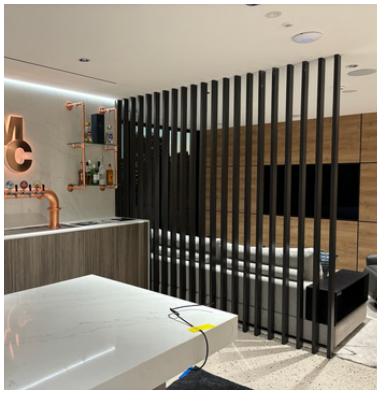
## 8.1 Support Bracket Overview

The Support Bracket Fix Installation method uses Alteria's proprietary L shaped angle brackets to securely attach the batten base to a support substrate. The Batten / Slat Cover is then clicked on to the base to conceal the angle bracket fixings. See 8.2 for fastener detail requirements.

This fixing method is for vertical batten orientation only. The Span data provided is applicable for internal & external walls, ceilings & soffit applications. See Alteria's Batten Installation Guide for more information.

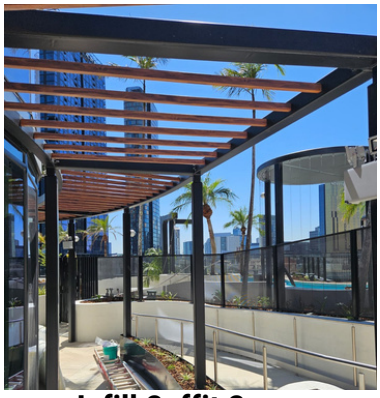
There most common support angle bracket fix installation options are highlighted below.

- Floor to Ceiling Internal Screen
- Floor to Ceiling External Screen
- Infill Soffit Screen



**Floor to Ceiling Internal Screen**

**Floor to Ceiling External Screen**



**Infill Soffit Screen**

## 8.2 Fastener Details - Support Bracket Fix

The Support Angle Bracket is fixed to the batten using fasteners and into various strata substrates as follows:

**Steel:**

- ICCONS SD Hex C4 14-11.

**Timber:**

- ICCONS Type 17 Hex C4 14-10
- Screw to be fixed centrally into the timber with a minimum embedment depth of 35mm.

**Solid Concrete:**

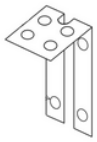
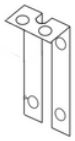
- ICCONS Thunderbolt Pro Hex 6mm.
- Anchor embedment depth to be 50mm.
- Minimum edge distance = 80mm.
- Minimum anchor spacing = 45mm.
- Anchor to be used on concrete with minimum compressive strength, f'c of 25 MPa.

## 8.3 Fixing Notes

- Fixing anchor procedures are to be installed in accordance with the relevant manufacturer's installation guide.
- Alternative brand fixings can be substituted, providing specification are equivalent. Contact Alteria for advice.
- Use of a mechanical fix or polyurethane glue is recommended for two piece profiles - See install guide.

## 8.4 Support Bracket Details

For each batten size, there is a specific support bracket that must be used to meet the spans indicated in the following tables. Below highlights the support bracket required for each batten size.

| | Support Bracket Name | Suitable With | Support Bracket Code |
|---|---|---|---|
|  | Alteria Batten Support Bracket – 30x30/80/120mm | 30x30mm Two Piece Batten<br>30x80mm Two Piece Batten<br>30x120mm Two Piece Batten | T1108 |
|  | Alteria Batten Support Bracket – 30x50mm Batten | 30x50mm Two Piece Batten | A0033 |
|  | Alteria Batten Support Bracket – 50x50/100mm | 50x50mm Two Piece Batten<br>50x100mm Two Piece Batten | A0032 |
|  | Alteria Batten Support Bracket – 50x150/200mm | 50x150mm Two Piece Batten<br>50x200mm Two Piece Batten | T1107 |

# 8.5 Span Table Data - Support Bracket Fix - External Application - 30mm Series

## 8.5.1 30 x 30mm Two Piece Batten

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | T1108 | NA* | NA* | NA* |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 1200* | 1200* | 1200* |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 1600* | 1600* | 1600* |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 1600* | 1600* | 1600* |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 1600* | 1600* | 1600* |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 1600* | 1600* | 1600* |

*span governed by internal span load

## 8.5.2 30 x 50mm Two Piece Batten

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | A0033 | 1800* | 1100 | 800 |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 1800* | 1650 | 1250 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 1800* | 1800 | 1600 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 1800* | 1800 | 1600 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 1800* | 1800 | 1600 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 1800* | 1800 | 1600 |

*span governed by internal span load

## 8.5 Span Table Data - Support Bracket Fix - External Application - 30mm Series

### 8.5.3 30 x 80mm Two Piece Batten

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | T1108 | NA* | NA* | NA* |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 1050 | 550 | 400 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 1650 | 900 | 700 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 2000 | 1600 | 1150 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 2000 | 1850 | 1550 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 2000 | 1800 | 1350 |

*span governed by internal span load

### 8.5.4 30 x 120mm Two Piece Batten

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | T1108 | NA* | NA* | NA* |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 750 | 400 | 300 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 1200 | 650 | 500 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 2000 | 1100 | 850 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 2050 | 1500 | 1100 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 2050 | 1300 | 950 |

*span governed by internal span load

# 8.6 Span Table Data - Support Bracket Fix - External Application - 50mm Series

## 8.6.1 50 x 50mm Two Piece Batten

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | A0032 | 3100* | 3000 | 2650 |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 3100* | 3000 | 2650 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 3100* | 3000 | 2650 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 3100* | 3000 | 2650 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 3100* | 3000 | 2650 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 3100* | 3000 | 2650 |

*span governed by internal span load

## 8.6.2 50 x 100mm Two Piece Batten

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | A0032 | 2950 | 2350 | 1750 |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 2950 | 2750 | 2450 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 2950 | 2750 | 2450 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 2950 | 2750 | 2450 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 2950 | 2750 | 2450 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 2950 | 2750 | 2450 |

*span governed by internal span load

# 8.6 Span Table Data - Support Bracket Fix - External Application - 50mm Series

## 8.6.3 50 x 150mm Two Piece Batten*

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | T1107 | 1500 | 850 | 650 |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 2300 | 1300 | 950 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 2950 | 2050 | 1500 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 2950 | 2800 | 2450 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 2950 | 2800 | 2450 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 2950 | 2800 | 2450 |

*span governed by internal span load

## 8.6.4 50 x 200mm Two Piece Batten*

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | T1107 | 1200 | 650 | 500 |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 1800 | 1000 | 750 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 2850 | 1600 | 1200 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 3150 | 2750 | 2050 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 3150 | 2950 | 2600 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 3150 | 2750 | 2050 |

*span governed by internal span load

# 8.7 Span Table Data - Support Bracket Fix - Internal Application - 30mm Series

## 8.7.1 30 x 30mm Two Piece Batten

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | Internal Application - All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | T1108 | NA |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 1200 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 1600 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 1600 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 1600 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 1600 |

## 8.7.2 30 x 50mm Two Piece Batten

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | Internal Application - All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | A0033 | 1800 |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 1800 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 1800 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 1800 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 1800 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 1800 |

# 8.7 Span Table Data - Support Bracket Fix - Internal Application - 30mm Series

## 8.7.3 30 x 80mm Two Piece Batten

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | Internal Application - All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | T1108 | NA |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 2050 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 2050 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 2050 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 2050 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 2050 |

## 8.7.4 30 x 120mm Two Piece Batten

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | Internal Application - All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | T1108 | NA |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 2450 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 2450 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 2450 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 2450 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 2450 |

## 8.8 Span Table Data - Support Bracket Fix - Internal Application - 50mm Series

### 8.8.1 50 x 50mm Two Piece Batten

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | Internal Application - All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | A0032 | 3100 |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 3100 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 3100 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 3100 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 3100 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 3100 |

### 8.8.2 50 x 100mm Two Piece Batten

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | Internal Application - All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | A0032 | 3500 |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 3500 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 3500 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 3500 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 3500 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 3500 |

# 8.8 Span Table Data - Support Bracket Fix - Internal Application - 50mm Series

## 8.8.3 50 x 150mm Two Piece Batten*

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | Internal Application - All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | T1107 | 3500 |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 3500 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 3500 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 3500 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 3500 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 3500 |

*span governed by internal span load

## 8.8.4 50 x 200mm Two Piece Batten*

| STRATA | FASTENERS | SUPPORT BRACKET REQUIRED | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | Internal Application - All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | T1108 | 3500 |
| **Steel Stud** 0.75 BMT | ICCONS SD Hex C4 14-11 | | 3500 |
| **Steel Stud** 1.0 BMT | ICCONS SD Hex C4 14-11 | | 3500 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | | 3500 |
| **Timber** F17 Hardwood | ICCONS Type 17 Hex C4 14-10 | | 3500 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | | 3500 |

*span governed by internal span load

# 9.0 MOUNTING TRACK FIX

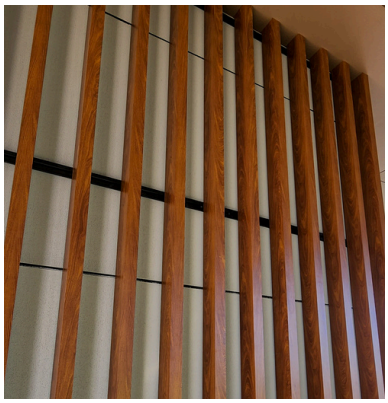
## 9.1 Mounting Track Fix Overview

The Mounting Track Fix Installation method uses Alteria's proprietary mounting track which is installed over the external cladding/internal lining and securely attached to the support substrate. The batten/slat base is then secured to the mounting track and then the batten / slat cover is clicked on to the base to conceal the fixings. See 9.2 for fastener detail requirements.

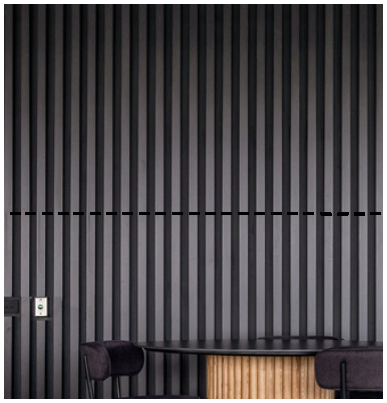
This fixing method is suitable for vertical batten orientation. The Span data provided is applicable for internal & external walls, ceilings & soffit applications. See Alteria's Batten Installation Guide for more information.

There most common mounting track installation options are highlighted below.

- Mounting Track Fix over external cladding
- Mounting Track Fix over internal lining



**Mounting Track Fix over External Cladding**



**Mounting Track Fix over Internal Lining**

## 9.2 Fastener Details

The Mounting Track is to be fixed using specific fasteners into various supporting strata substrates as follows:

**Steel:**

- ICCONS SD Hex C4 14-11.

**Timber**:

- ICCONS Type 17 Hex C4 14-10
- Screw to be fixed centrally into the timber with a minimum embedment depth of 35mm.

**Masonry:**

- ICCONS Thunderbolt Pro Hex 8mm
- Anchor embedment depth to be 40mm.
- Maximum one anchor per brick.
- Minimum edge distance = one brick.

**Solid Concrete:**

- ICCONS Thunderbolt Pro Hex 8mm.
- Anchor embedment depth to be 65mm.
- Minimum edge distance = 80mm.
- Minimum anchor spacing = 45mm.
- Anchor to be used on concrete with minimum compressive strength, f'c of 25 MPa.

**Concrete Block:**

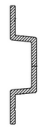
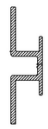
- ICCONS Thunderbolt Pro Hex 8mm
- Anchor embedment depth to be 40mm.
- Maximum one anchor per cavity.
- Minimum edge distance = 1/2 block.

## 9.3 Fixing Notes

- Fixing anchor procedures are to be installed in accordance with the relevant manufacturer's installation guide.
- Alternative brand fixings can be substituted, providing specification are equivalent. Contact Alteria for advice.
- Use of a mechanical fix or polyurethane glue is recommended for two piece profiles - See install guide.

## 9.4 Mounting Track Details

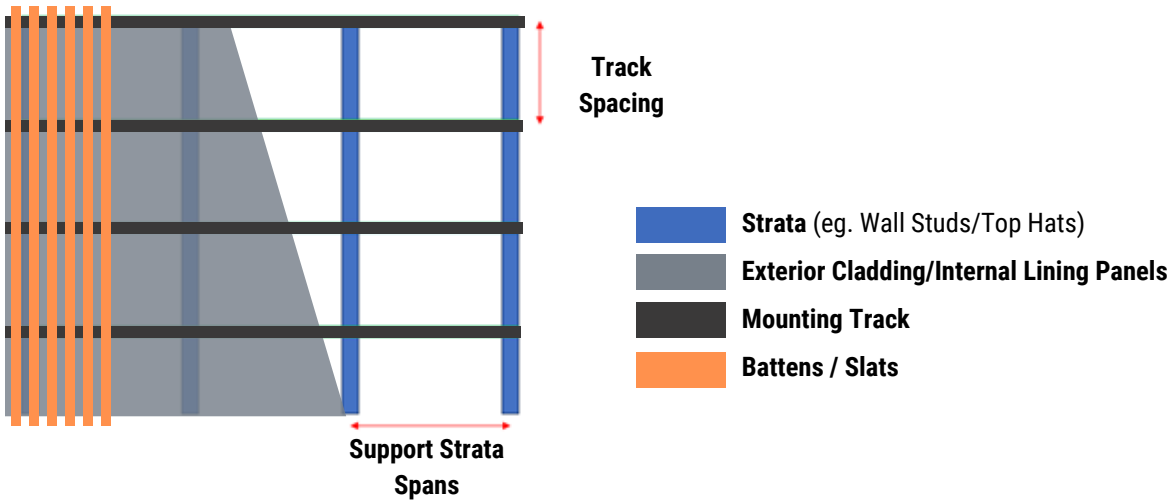
There are two Mounting Tracks available based on the application. For more information, refer to Alteria Aluminium's Batten Installation Guide.

| | Mounting Track Name | Uses | Support Bracket Code |
|---|---|---|---|
|  | Alteria Mounting Track - 60mm Standard External/Internal - 6500mm | Internal & External Application | A0014 |
|  | Alteria Mounting Track - 60mm Acoustic Internal - 6500mm | Internal Application Only - For use with Acoustic Panel (Up to 12mm) | A0013 |

## 9.5 Mounting Track - Strata Spacings

For Mounting Track Installation it is necessary for the mounting track to be secured over the cladding/lining through to the support structure / strata (eg. Wall Studs/Top Hats) at specified spans.

The span table data provided indicates the Support Strata Spacings and the Track Spacings. See below for reference.



# 9.6 Span Table Data - 60mm Standard Mounting Track - External Application

## 9.6.1 30mm Two Piece Batten Series

| PROFILE | MOUNTING TRACK TO STRATA | | BATTEN TO MOUNTING TRACK | | MAXIMUM SPACINGS (MM) | | | |
|---|---|---|---|---|---|---|---|---|
| | Fastener Type | # Fasteners | Fastener Type | # Fasteners | Spacing Type | Wind Region A | Wind Region B | Wind Region C |
| **30 x 30mm Two Piece Batten** | **Steel:** ICCONS SD Hex C4 14-11 | 2 | ICCONS SD Hex C4 14-11 ICCONS | 1 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 850 | 450 | 350 |
| **30 x 50mm Two Piece Batten** | **Timber:** ICCONS Type 17 Hex C4 14-10 | 2 | | 1 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1100 | 600 | 450 |
| **30 x 80mm Two Piece Batten** | **Concrete/ Masonry** ICCONS Thunderbolt Pro Hex 8mm | 2 | | 1 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 700 | 500 |
| **30 x 120mm Two Piece Batten** | | 2 | | 1 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 600 | 300 | 250 |

## 9.6.2 50mm Two Piece Batten Series

| PROFILE | MOUNTING TRACK TO STRATA | | BATTEN TO MOUNTING TRACK | | MAXIMUM SPACINGS (MM) | | | |
|---|---|---|---|---|---|---|---|---|
| | Fastener Type | # Fasteners | Fastener Type | # Fasteners | Spacing Type | Wind Region A | Wind Region B | Wind Region C |
| **50 x 50mm Two Piece Batten** | **Steel:** ICCONS SD Hex C4 14-11 | 2 | ICCONS SD Hex C4 14-11 ICCONS | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 750 | 400 | 300 |
| **50 x 100mm Two Piece Batten** | **Timber:** ICCONS Type 17 Hex C4 14-10 | 2 | | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1050 | 550 | 400 |
| **50 x 150mm Two Piece Batten** | **Concrete/ Masonry** ICCONS Thunderbolt Pro Hex 8mm | 2 | | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 900 | 500 | 350 |
| **50 x 200mm Two Piece Batten** | | 2 | | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 550 | 300 | 200 |

## 9.6.3 19mm Two Piece Slat Series

| PROFILE | MOUNTING TRACK TO STRATA | | BATTEN TO MOUNTING TRACK | | MAXIMUM SPACINGS (MM) | | | |
|---|---|---|---|---|---|---|---|---|
| | Fastener Type | # Fasteners | Fastener Type | # Fasteners | Spacing Type | Wind Region A | Wind Region B | Wind Region C |
| **60 x 19mm Two Piece Slat** | **Steel:** ICCONS SD Hex C4 14-11 **Timber:** ICCONS Type 17 Hex C4 14-10 **Concrete/Masonry** ICCONS Thunderbolt Pro Hex 8mm | 2 | ICCONS SD Hex C4 14-11 ICCONS | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 750 | 400 | 300 |
| **90 x 19mm Two Piece Slat** | | 2 | | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1050 | 550 | 400 |

***Span Tables Applicable for Heights up to 20m. See Section 4 for advice on Heights over 20m.***

# 9.7 Span Table Data - 60mm Standard Mounting Track - Internal Application

## 9.7.1 30mm Two Piece Batten Series

| PROFILE | MOUNTING TRACK TO STRATA | | BATTEN TO MOUNTING TRACK | | MAXIMUM SPACINGS (MM) | | | |
|---|---|---|---|---|---|---|---|---|
| | Fastener Type | # Fasteners | Fastener Type | # Fasteners | Spacing Type | Wind Region A | Wind Region B | Wind Region C |
| **30 x 30mm Two Piece Batten** | **Steel:** ICCONS SD Hex C4 14-11 | 2 | ICCONS SD Hex C4 14-11 ICCONS | 1 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **30 x 50mm Two Piece Batten** | **Timber:** ICCONS Type 17 Hex C4 14-10 | 2 | | 1 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **30 x 80mm Two Piece Batten** | **Concrete/ Masonry** ICCONS Thunderbolt Pro Hex 8mm | 2 | | 1 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **30 x 120mm Two Piece Batten** | | 2 | | 1 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |

## 9.7.2 50mm Two Piece Batten Series

| PROFILE | MOUNTING TRACK TO STRATA | | BATTEN TO MOUNTING TRACK | | MAXIMUM SPACINGS (MM) | | | |
|---|---|---|---|---|---|---|---|---|
| | Fastener Type | # Fasteners | Fastener Type | # Fasteners | Spacing Type | Wind Region A | Wind Region B | Wind Region C |
| **50 x 50mm Two Piece Batten** | **Steel:** ICCONS SD Hex C4 14-11 | 2 | ICCONS SD Hex C4 14-11 ICCONS | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **50 x 100mm Two Piece Batten** | **Timber:** ICCONS Type 17 Hex C4 14-10 | 2 | | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **50 x 150mm Two Piece Batten** | **Concrete/ Masonry** ICCONS Thunderbolt Pro Hex 8mm | 2 | | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **50 x 200mm Two Piece Batten** | | 2 | | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1100 |

## 9.7.3 19mm Two Piece Slat Series

| PROFILE | MOUNTING TRACK TO STRATA | | BATTEN TO MOUNTING TRACK | | MAXIMUM SPACINGS (MM) | | | |
|---|---|---|---|---|---|---|---|---|
| | Fastener Type | # Fasteners | Fastener Type | # Fasteners | Spacing Type | Wind Region A | Wind Region B | Wind Region C |
| **60 x 19mm Two Piece Slat** | **Steel:** ICCONS SD Hex C4 14-11 **Timber:** ICCONS Type 17 Hex C4 14-10 **Concrete/Masonry** ICCONS Thunderbolt Pro Hex 8mm | 2 | ICCONS SD Hex C4 14-11 ICCONS | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **90 x 19mm Two Piece Slat** | | 2 | | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |

***Span Tables Applicable for Heights up to 20m. See Section 4 for advice on Heights over 20m.***

## 9.8 Span Table Data - 60mm Acoustic Mounting Track - Internal Application

### 9.8.1 30mm Two Piece Batten Series

| PROFILE | MOUNTING TRACK TO STRATA | | BATTEN TO MOUNTING TRACK | | MAXIMUM SPACINGS (MM) | | | |
|---|---|---|---|---|---|---|---|---|
| | Fastener Type | # Fasteners | Fastener Type | # Fasteners | Spacing Type | Wind Region A | Wind Region B | Wind Region C |
| **30 x 30mm Two Piece Batten** | **Steel:** ICCONS SD Hex C4 14-11 | 2 | ICCONS SD Hex C4 14-11 ICCONS | 1 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **30 x 50mm Two Piece Batten** | **Timber:** ICCONS Type 17 Hex C4 14-10 | 2 | | 1 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **30 x 80mm Two Piece Batten** | **Concrete/ Masonry** ICCONS Thunderbolt Pro Hex 8mm | 2 | | 1 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **30 x 120mm Two Piece Batten** | | 2 | | 1 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |

### 9.8.2 50mm Two Piece Batten Series

| PROFILE | MOUNTING TRACK TO STRATA | | BATTEN TO MOUNTING TRACK | | MAXIMUM SPACINGS (MM) | | | |
|---|---|---|---|---|---|---|---|---|
| | Fastener Type | # Fasteners | Fastener Type | # Fasteners | Spacing Type | Wind Region A | Wind Region B | Wind Region C |
| **50 x 50mm Two Piece Batten** | **Steel:** ICCONS SD Hex C4 14-11 | 2 | ICCONS SD Hex C4 14-11 ICCONS | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **50 x 100mm Two Piece Batten** | **Timber:** ICCONS Type 17 Hex C4 14-10 | 2 | | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **50 x 150mm Two Piece Batten** | **Concrete/ Masonry** ICCONS Thunderbolt Pro Hex 8mm | 2 | | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1200 |
| **50 x 200mm Two Piece Batten** | | 2 | | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1150 |

### 9.8.3 19mm Two Piece Slat Series

| PROFILE | MOUNTING TRACK TO STRATA | | BATTEN TO MOUNTING TRACK | | MAXIMUM SPACINGS (MM) | | | |
|---|---|---|---|---|---|---|---|---|
| | Fastener Type | # Fasteners | Fastener Type | # Fasteners | Spacing Type | Wind Region A | Wind Region B | Wind Region C |
| **60 x 19mm Two Piece Slat** | **Steel:** ICCONS SD Hex C4 14-11 **Timber:** ICCONS Type 17 Hex C4 14-10 **Concrete/Masonry** ICCONS Thunderbolt Pro Hex 8mm | 2 | ICCONS SD Hex C4 14-11 ICCONS | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 1100 |
| **90 x 19mm Two Piece Slat** | | 2 | | 2 | Strata Spacing | 600 | 600 | 600 |
| | | | | | Track Spacing | 1200 | 1200 | 900 |

***Span Tables Applicable for Heights up to 20m. See Section 4 for advice on Heights over 20m.***

# 10.0 REAR FIX

## 10.1 Rear Fix Overview

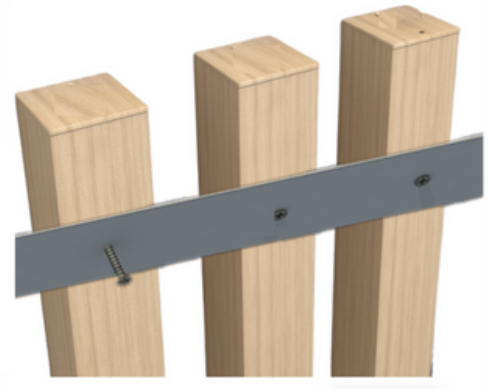
The Rear Fix installation methods is used for our One Piece Batten range. Battens are fixed from the rear using fasteners. See 10.2 for fastener detail requirements.

Span data provided is applicable for vertical & horizontal orientations and for internal & external walls, ceilings & soffit applications. See Alteria's Batten Installation Guide for more information.

There most common rear fix installation options are highlighted below.

- Rear Fix through Frame

**Rear Fix through Frame**



**Rear Fix through Frame - Example**

## 10.2 Fastener Details

Battens are fixed using specific fasteners into various supporting strata substrates as follows:

**Steel:**

- ICCONS SD Hex C4 14-11.

## 10.3 Fixing Notes

- Fixing anchor procedures are to be installed in accordance with the relevant manufacturer's installation guide.
- Alternative brand fixings can be substituted, providing specification are equivalent. Contact Alteria for advice.
- Use of a mechanical fix or polyurethane glue is recommended for two piece profiles - See install guide.

## 10.4 Span Table Data - Rear Fix - One Piece Batten Series

### 10.4.1 30 x 30mm One Piece Batten / Square Hollow Section

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud**<br>0.75 BMT - 1.15 BMT | ICCONS<br>SD Hex<br>C4 14-11 | 2 | 1950 | 1850 | 1600 |

### 10.4.2 50 x 50mm One Piece Batten / Square Hollow Section

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud**<br>0.75 BMT - 1.15 BMT | ICCONS<br>SD Hex<br>C4 14-11 | 2 | 2900 | 2700 | 2400 |

### 10.4.3 50 x 100mm One Piece Batten / Rectangular Hollow Section

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) | | |
|---|---|---|---|---|---|
| | | | Wind Region A | Wind Region B | Wind Region C |
| **Steel Stud**<br>0.75 BMT - 1.15 BMT | ICCONS<br>SD Hex<br>C4 14-11 | 2 | 1200 | 650 | 500 |

# 11.0 BALUSTRADE INFILL

## 11.1 Balustrade Infill Overview

Selected Alteria Aluminium Two-Piece Battens are suitable to use as balustrade infills that can be securely fixed to top and bottom supporting balustrade rails (supplied by others) in residential and office building applications. Installers are required to follow barrier installation requirements set out by relevant codes.

There most common mounting track installation options are highlighted below.

- Barrier Infill Direct Fix to Top and Bottom Steel Balustrade Rails
- Barrier Infill Direct Fix to Top Steel Balustrade Rail and Bottom Concrete Slab

**Top & Bottom Rail**

**Top Rail & Bottom Concrete Slab**

## 11.2 Balustrade Applications

Alteria Aluminium Two Piece Battens are suitable to use in Residential Applications and Office Building Applications, and not for use as areas of congregation or susceptible to overcrowding.

## 11.3 Fastener Details

The Mounting Track is to be fixed using specific fasteners into various supporting strata substrates as follows:

**Steel:**

- ICCONS SD Hex C4 14-11.

**Timber**:

- ICCONS Type 17 Hex C4 14-10
- Screw to be fixed centrally into the timber with a minimum embedment depth of 35mm.

**Solid Concrete:**

- ICCONS Thunderbolt Pro Hex 8mm.
- Anchor embedment depth to be 65mm.
- Minimum edge distance = 80mm.
- Minimum anchor spacing = 45mm.
- Anchor to be used on concrete with minimum compressive strength, f'c of 25 MPa.

## 11.4 Fixing Notes

- Fixing anchor procedures are to be installed in accordance with the relevant manufacturer's installation guide.
- Alternative brand fixings can be substituted, providing specification are equivalent. Contact Alteria for advice.
- Use of a mechanical fix or polyurethane glue is recommended for two piece profiles - See install guide.

## 11.5 Span Table Data - Balustrade Infill - Residential Application - 30mm Series

### 11.5.1 30 x 30mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | 1 | 1200 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | 1 | 1200 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | 1 | 1200 |

### 11.5.2 30 x 50mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | 1 | 1500 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | 1 | 1500 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | 1 | 1500 |

### 11.5.3 30 x 80mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | 2 | 1900 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | 2 | 1900 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | 2 | 1900 |

### 11.5.4 30 x 120mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | 2 | 2300 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | 2 | 2300 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | 2 | 2300 |

## 11.6 Span Table Data - Balustrade Infill - Residential Application - 30mm Series

### 11.6.1 50 x 50mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | 2 | 2500 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | 2 | 2500 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | 2 | 2500 |

### 11.6.2 50 x 100mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | 2 | 3000 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | 2 | 3000 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | 2 | 3000 |

### 11.6.3 50 x 150mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | 2 | 3500 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | 2 | 3500 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | 2 | 3500 |

### 11.6.4 50 x 200mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud** 0.55 BMT | ICCONS SD Hex C4 14-11 | 2 | 4000 |
| **Timber** F7 Pine | ICCONS Type 17 Hex C4 14-10 | 2 | 4000 |
| **Solid Concrete** N≥25 | ICCONS Thunderbolt Pro Hex 6mm | 2 | 4000 |

# 11.7 Span Table Data - Balustrade Infill - Office Building Application - 30mm Series

## 11.7.1 30 x 30mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud**<br>0.55 BMT | ICCONS SD Hex<br>C4 14-11 | 2 | 900 |
| **Timber**<br>F7 Pine | ICCONS Type 17 Hex<br>C4 14-10 | 2 | 900 |
| **Solid Concrete**<br>N≥25 | ICCONS Thunderbolt Pro<br>Hex 6mm | 2 | 900 |

## 11.7.2 30 x 50mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud**<br>0.55 BMT | ICCONS SD Hex<br>C4 14-11 | 2 | 1000 |
| **Timber**<br>F7 Pine | ICCONS Type 17 Hex<br>C4 14-10 | 2 | 1000 |
| **Solid Concrete**<br>N≥25 | ICCONS Thunderbolt Pro<br>Hex 6mm | 2 | 1000 |

## 11.7.3 30 x 80mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud**<br>0.55 BMT | ICCONS SD Hex<br>C4 14-11 | 2 | 1300 |
| **Timber**<br>F7 Pine | ICCONS Type 17 Hex<br>C4 14-10 | 2 | 1300 |
| **Solid Concrete**<br>N≥25 | ICCONS Thunderbolt Pro<br>Hex 6mm | 2 | 1300 |

## 11.7.4 30 x 120mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud**<br>0.55 BMT | ICCONS SD Hex<br>C4 14-11 | 2 | N/A |
| **Timber**<br>F7 Pine | ICCONS Type 17 Hex<br>C4 14-10 | 2 | N/A |
| **Solid Concrete**<br>N≥25 | ICCONS Thunderbolt Pro<br>Hex 6mm | 2 | N/A |

# 11.8 Span Table Data - Balustrade Infill - Office Building Application - 50mm Series

## 11.8.1 50 x 50mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud**<br>0.55 BMT | ICCONS SD Hex<br>C4 14-11 | 2 | 1950 |
| **Timber**<br>F7 Pine | ICCONS Type 17 Hex<br>C4 14-10 | 2 | 1950 |
| **Solid Concrete**<br>N≥25 | ICCONS Thunderbolt Pro<br>Hex 6mm | 2 | 1950 |

## 11.8.2 50 x 100mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud**<br>0.55 BMT | ICCONS SD Hex<br>C4 14-11 | 2 | 2500 |
| **Timber**<br>F7 Pine | ICCONS Type 17 Hex<br>C4 14-10 | 2 | 2500 |
| **Solid Concrete**<br>N≥25 | ICCONS Thunderbolt Pro<br>Hex 6mm | 2 | 2500 |

## 11.8.3 50 x 150mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud**<br>0.55 BMT | ICCONS SD Hex<br>C4 14-11 | 2 | 3000 |
| **Timber**<br>F7 Pine | ICCONS Type 17 Hex<br>C4 14-10 | 2 | 3000 |
| **Solid Concrete**<br>N≥25 | ICCONS Thunderbolt Pro<br>Hex 6mm | 2 | 3000 |

## 11.8.4 50 x 200mm Two Piece Batten

| STRATA | FASTENERS | # FASTENERS PER FIXING POINT | MAXIMUM FASTENER SPACINGS (MM) |
|---|---|---|---|
| | | | All Regions |
| **Steel Stud**<br>0.55 BMT | ICCONS SD Hex<br>C4 14-11 | 2 | N/A |
| **Timber**<br>F7 Pine | ICCONS Type 17 Hex<br>C4 14-10 | 2 | N/A |
| **Solid Concrete**<br>N≥25 | ICCONS Thunderbolt Pro<br>Hex 6mm | 2 | N/A |

## 12.0 SUPPORT & ADVICE

If you require any additional support, please contact Alteria Aluminium. For a copy of the current Installation Guides and Technical Documents please visit alteria.com.au or contact Alteria Customer Service.

**1300 25 88 25**
**support@alteria.com.au**

## 13.0 DISCLAIMER

The information in this document is a guide only. It is intended for use by specifiers, builders, cladding installers and other contractors who may be involved with the installation of the Alteria Aluminium fixing system.

If you are an installer ensure that you follow the design, moisture management detail, preparation requirements and materials as set out by the designer. If you are a specifier or a responsible party for the project, please ensure the information in this manual is appropriate for the application you are planning.

As all project conditions are unique, there are likely to be variations to how this product is used, which can affect the use and quality of the products, as such no warranty is given or implied with respect to such situations.

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