

# NINELINE



## DESIGN GUIDE

### NINELINE™ Batten

With its 45mm rib height, NINELINE™ Batten's application is versatile as it can be specified for residential use including internal walling and/or fencing.



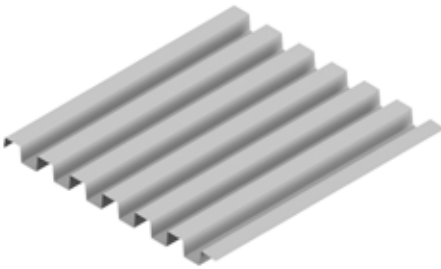
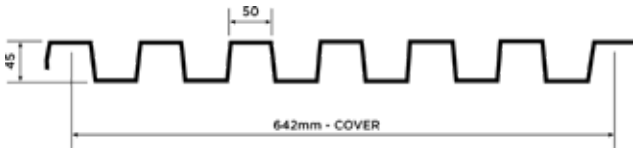
**STRATCO**  
ARCHITECTURAL  
SOLUTIONS

# NINELINE™ Batten

This profile achieves the visual impact of a repeated batten system on a wall, all through a single integrated product.

| PROFILE SPECIFICATIONS |       |
|------------------------|-------|
| Depth                  | 45mm  |
| Cover                  | 642mm |
| Longest Length         | 6.0m  |
| Minimum Length         | 0.6m  |

| MATERIAL SPECIFICATIONS |                         |         |
|-------------------------|-------------------------|---------|
| Base Metal Thickness    | 0.55mm                  |         |
| Tensile Strength        | G300                    | Coating |
| COLORBOND® Range        | Standard                | AM100   |
|                         | Ultra                   | AM100   |
|                         | Metallic                | AM100   |
|                         | Matt Finish             | AM100   |
| Stratco Exclusive       | Bronze                  | AM100   |
|                         | Woodgrain - Maple & Ash | AM100   |
| Other                   | Zincalume®              | AM125   |
|                         | Galvanised Z600         | Z600    |



| Span Type | WIND CLASSIFICATION |      |      |      |
|-----------|---------------------|------|------|------|
|           | N1                  | N2   | N3   | N4   |
| End       | 2100                | 2100 | 1730 | 1330 |
| Internal  | 3000                | 3000 | 2530 | 1940 |

Note 1: All end spans shall not exceed 70% of the maximum allowable internal span.

# NINELINE

Others in the Design Guide Library

- ☐ NINELINE™ Box
- ☐ NINELINE™ Pleat

| WALL CLADDING - PAN FIXING                                                                                                     |                                 |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| All screws must have a neoprene washer for a weather tight seal                                                                |                                 |
|                                                                                                                                | Fasteners required per support: |
|                                                                                                                                | 3                               |
| For spans exceeding 1200mm, secure each overlap mid-span with 3.2mm Rivets (rivets to be sealed to prevent water penetration). |                                 |

| Fastener required per Internal Span: |           |
|--------------------------------------|-----------|
| 1.0m span                            | 1.5m span |
| 12 per m2                            | 6 per m2  |

|        |              |                                                 |
|--------|--------------|-------------------------------------------------|
| Fixing | Steel 1.0mm  | Contour Head 12-14 x 30 Self Drilling with Seal |
|        | Steel 0.55mm | M6.2-13x25 Hex Head Universal Screw with Seal   |
|        | Timber       | M6.2-13x25 Hex Head Universal Screw with Seal   |

| DESIGN PRESSURES (KPA) |                         |
|------------------------|-------------------------|
| Span (mm)              | Serviceability/Strength |
|                        | End/Internal            |
| 900                    | 6.03                    |
| 1200                   | 3.92                    |
| 1500                   | 2.80                    |
| 1800                   | 2.13                    |
| 2100                   | 1.69                    |
| 2400                   | 1.39                    |
| 2700                   | 1.16                    |
| 3000                   | 0.99                    |

These values are for use with steel supports with a minimum thickness of 0.55mm BMT G550.

## DESIGN CRITERIA

### Residential Walling

Design criteria determined in accordance with AS 4055 Wind loads for housing.

Pressures and spans are based on an eaves height not exceeding 6.0m, a roof pitch no greater than 35° and a total roof height of maximum 8.5m.

Walling calculations are based on  $C_{p,e} = -0.65$  and  $C_{p,i} = 0.2$ . A local pressure factor,  $K_l = 2.0$  has been used for end spans which exist within 1200mm of all roofing and walling edges. A local pressure factor,  $K_l = 1.0$ , has been used for internal spans.

If any internal span occurs within 1200mm of any roof edge, the maximum allowable span specified for end spans will apply.

Additional engineering advice can be obtained from Stratco if any design parameters vary from those indicated above.

### Commercial Walling

Design criteria determined in accordance with AS/NZS 1170.2:2021 Wind Actions.

The following criteria were used in the development of the tables:

- Region A & B with a design return period of 500 years for Strength Limit
- State and 25 years for Serviceability Limit State.

Pressure Coefficients for Walling of Enclosed Building:

- Internal,  $C_{p,i} = +0.2$
- External,  $C_{p,e} = -0.65$

Topographic influence has not been considered ( $M_t = 1.0$ ) and spans are based on no shielding ( $M_s = 1.0$ ).

Refer AS/NZS 1170.2 for definition of local pressure ( $K_l$ ) zones.  $K_l = 3.0$  is only applicable for buildings with an aspect ratio greater than 1.0. Aspect ratio defined as the average building height divided by the smaller of building length and width.

Additional engineering advice can be obtained from Stratco if any design parameters vary from those indicated above.

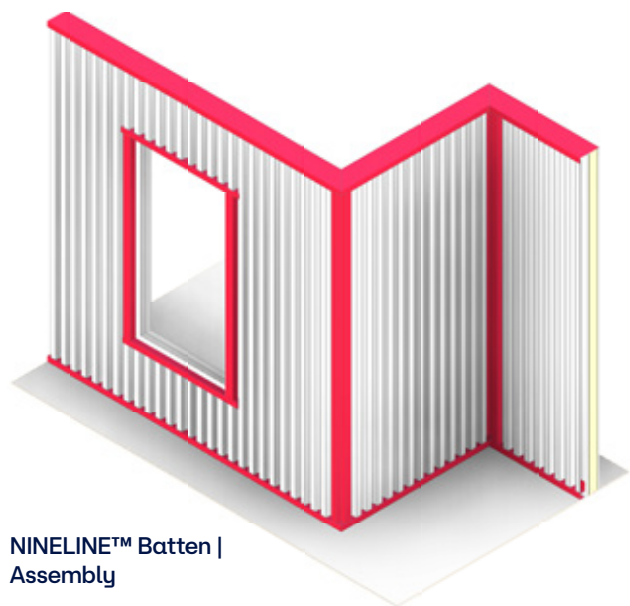
| MAXIMUM ALLOWABLE SPANS (mm) |     |                   |          |           |          |     |                   |          |           |          |     |                    |          |           |          |
|------------------------------|-----|-------------------|----------|-----------|----------|-----|-------------------|----------|-----------|----------|-----|--------------------|----------|-----------|----------|
| Terrain Category             | Kl  | 3m Maximum Height |          |           |          | Kl  | 5m Maximum Height |          |           |          | Kl  | 10m Maximum Height |          |           |          |
|                              |     | Region A0-A5      |          | Region B1 |          |     | Region A0-A5      |          | Region B1 |          |     | Region A0-A5       |          | Region B1 |          |
|                              |     | End               | Internal | End       | Internal |     | End               | Internal | End       | Internal |     | End                | Internal | End       | Internal |
| 1.0                          | 1.0 | 2100              | 3000     | 1440      | 2070     | 1.0 | 2010              | 2880     | 1370      | 1960     | 1.0 | 1840               | 2630     | 1260      | 1800     |
|                              | 1.5 | 1700              | 2440     | 1160      | 1670     | 1.5 | 1620              | 2320     | 1100      | 1580     | 1.5 | 1480               | 2120     | 1010      | 1450     |
|                              | 2.0 | 1450              | 2080     | 990       | 1420     | 2.0 | 1370              | 1970     | 930       | 1340     | 2.0 | 1260               | 1800     | 860       | 1230     |
|                              | 3.0 | 1140              | 1630     | 770       | 1110     | 3.0 | 1080              | 1550     | 740       | 1060     | 3.0 | 980                | 1410     | 670       | 970      |
| 2.0                          | 1.0 | 2100              | 3000     | 1580      | 2260     | 1.0 | 2100              | 3000     | 1580      | 2260     | 1.0 | 2030               | 2910     | 1390      | 1990     |
|                              | 1.5 | 1860              | 2660     | 1270      | 1820     | 1.5 | 1860              | 2660     | 1270      | 1820     | 1.5 | 1640               | 2350     | 1120      | 1600     |
|                              | 2.0 | 1580              | 2260     | 1070      | 1540     | 2.0 | 1580              | 2260     | 1070      | 1540     | 2.0 | 1390               | 1990     | 950       | 1360     |
|                              | 3.0 | 1240              | 1780     | 840       | 1210     | 3.0 | 1240              | 1780     | 840       | 1210     | 3.0 | 1090               | 1570     | 740       | 1070     |
| 2.5                          | 1.0 | 2100              | 3000     | 1680      | 2400     | 1.0 | 2100              | 3000     | 1680      | 2400     | 1.0 | 2100               | 3000     | 1560      | 2230     |
|                              | 1.5 | 1980              | 2830     | 1350      | 1930     | 1.5 | 1980              | 2830     | 1350      | 1930     | 1.5 | 1830               | 2620     | 1250      | 1790     |
|                              | 2.0 | 1680              | 2400     | 1140      | 1640     | 2.0 | 1680              | 2400     | 1140      | 1640     | 2.0 | 1560               | 2230     | 1060      | 1520     |
|                              | 3.0 | 1320              | 1890     | 900       | 1290     | 3.0 | 1320              | 1890     | 900       | 1290     | 3.0 | 1220               | 1750     | 840       | 1200     |
| 3.0                          | 1.0 | 2100              | 3000     | 1780      | 2550     | 1.0 | 2100              | 3000     | 1780      | 2550     | 1.0 | 2100               | 3000     | 1780      | 2550     |
|                              | 1.5 | 2100              | 3000     | 1440      | 2060     | 1.5 | 2100              | 3000     | 1440      | 2060     | 1.5 | 2100               | 3000     | 1440      | 2060     |
|                              | 2.0 | 1790              | 2560     | 1220      | 1750     | 2.0 | 1790              | 2560     | 1220      | 1750     | 2.0 | 1790               | 2560     | 1220      | 1750     |
|                              | 3.0 | 1400              | 2010     | 950       | 1370     | 3.0 | 1400              | 2010     | 950       | 1370     | 3.0 | 1400               | 2010     | 950       | 1370     |

Note 1: All end spans shall not exceed 70% of the maximum allowable internal span.

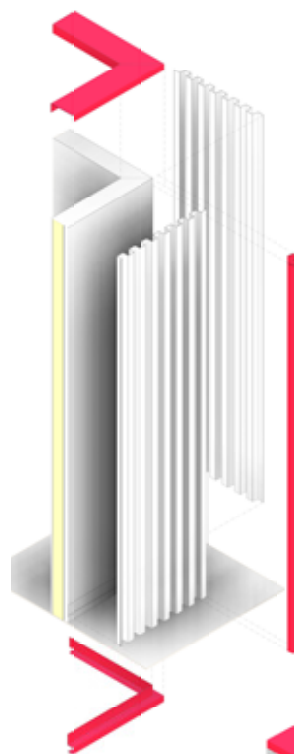
Note 2: For Region A0, utilise Terrain Category 2.0 in all terrains (i.e. T.C. 2.0 throughout).

# NINELINE™ Batten

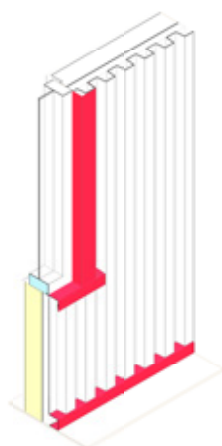
## INDICATIVE INSTALLATION DETAILS



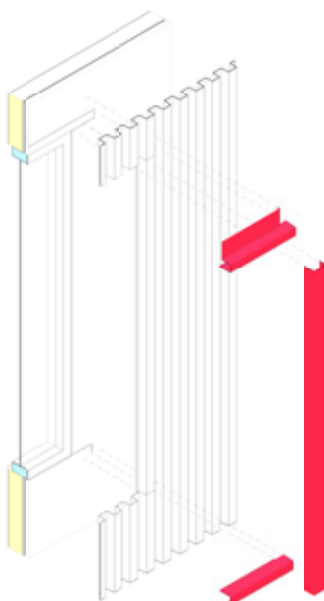
NINELINE™ Batten |  
Assembly



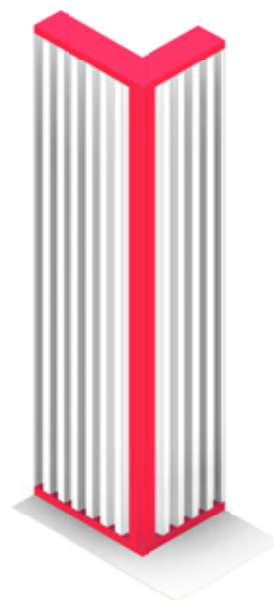
NINELINE™ Batten |  
Ext Corner Assembly



NINELINE™ Batten |  
Window Jamb



NINELINE™ Batten |  
Window Head & Sill



NINELINE™ Batten |  
Ext Corner



1300 155 155 | [stratco.com.au](https://stratco.com.au)

Scan this QR code to



find a Stratco near you.

All brand names, images accompanied by ® or ™ remain the property of Stratco Australia.