

This product has been determined to satisfy NCC Performance Requirement H1P1 for structural resistance of materials and forms of construction in high wind areas

# SUPERDEK® WALL CLADDING

## Region C



Fixing screws to comply to AS3566, I-2002 Self-drilling screws for the building and construction industries - General requirements and mechanical properties.

| Fastener Details |                              |                                                                                               |
|------------------|------------------------------|-----------------------------------------------------------------------------------------------|
| Steel            | Minimum 0.75mm (BMT)         | Class 4 M6 x 25mm self drilling screw with neoprene washer.                                   |
| Timber           | Hardwood F11/JD2 or stronger | Class 4 minimum 12g x 45 mm timber screws with neoprene washer, minimum 35mm embedment depth. |
|                  | Softwood F7/JD4 or stronger  | Class 4 minimum 12g x 45 mm timber screws with neoprene washer, minimum 35mm embedment depth. |

**Note:** For spans > 1200mm side lap fixing midspan using an 8 x 15mm self drilling stitch screw with seal or 3.2mm sealed blind rivets are recommended (maximum 600mm centres). This provides a weather proof seal and secures the overlap.

| Design Pressures - Strength Limit State Capacity (kPa) |            |       |          |            |       |          |
|--------------------------------------------------------|------------|-------|----------|------------|-------|----------|
| Span (mm)                                              | 0.42mm BMT |       |          | 0.48mm BMT |       |          |
|                                                        | Single     | End   | Internal | Single     | End   | Internal |
| 400                                                    | 11.50      | 11.50 | 12.58    | 13.14      | 13.14 | 14.37    |
| 600                                                    | 6.90       | 6.90  | 7.55     | 8.00       | 8.00  | 8.75     |
| 900                                                    | 4.71       | 4.71  | 5.15     | 5.78       | 5.78  | 6.32     |
| 1200                                                   | 3.00       | 3.00  | 3.28     | 4.00       | 4.00  | 4.37     |
| 1500                                                   | 1.78       | 1.78  | 1.95     | 2.65       | 2.65  | 2.90     |
| 1800                                                   | 1.05       | 1.05  | 1.14     | 1.73       | 1.73  | 1.90     |
| 2100                                                   | 0.80       | 0.80  | 0.87     | 1.25       | 1.25  | 1.37     |

| Maximum Allowable Spans (mm) |     |                                |            |      |          |            |      |          |                                |            |      |          |            |      |          |                                 |            |      |          |            |      |          |
|------------------------------|-----|--------------------------------|------------|------|----------|------------|------|----------|--------------------------------|------------|------|----------|------------|------|----------|---------------------------------|------------|------|----------|------------|------|----------|
|                              |     | 3m Maximum Average Roof Height |            |      |          |            |      |          | 5m Maximum Average Roof Height |            |      |          |            |      |          | 10m Maximum Average Roof Height |            |      |          |            |      |          |
| Terrain Category             | KI  | Pz (kPa)                       | 0.42mm BMT |      |          | 0.48mm BMT |      |          | Pz (kPa)                       | 0.42mm BMT |      |          | 0.48mm BMT |      |          | Pz (kPa)                        | 0.42mm BMT |      |          | 0.48mm BMT |      |          |
|                              |     |                                | Single     | End  | Internal | Single     | End  | Internal |                                | Single     | End  | Internal | Single     | End  | Internal |                                 | Single     | End  | Internal | Single     | End  | Internal |
| 1.0                          | 1.0 | 3.29                           | 1100       | 1100 | 1150     | 1340       | 1340 | 1400     | 3.57                           | 1060       | 1060 | 1110     | 1280       | 1280 | 1350     | 4.08                            | 970        | 970  | 1030     | 1180       | 1180 | 1250     |
|                              | 1.5 | 4.09                           | 970        | 970  | 1030     | 1180       | 1180 | 1250     | 4.43                           | 920        | 920  | 980      | 1120       | 1120 | 1190     | 5.07                            | 830        | 830  | 890      | 1010       | 1010 | 1080     |
|                              | 2.0 | 4.88                           | 850        | 850  | 910      | 1040       | 1040 | 1110     | 5.29                           | 800        | 800  | 860      | 970        | 970  | 1040     | 6.05                            | 700        | 700  | 770      | 860        | 860  | 930      |
|                              | 3.0 | 6.47                           | 650        | 650  | 720      | 800        | 800  | 880      | 7.01                           | 590        | 590  | 650      | 720        | 720  | 800      | 8.02                            | 530        | 530  | 580      | 590        | 590  | 680      |
| 2.0                          | 1.0 | 2.90                           | 1180       | 1180 | 1220     | 1430       | 1430 | 1490     | 2.90                           | 1180       | 1180 | 1220     | 1430       | 1430 | 1490     | 3.50                            | 1070       | 1070 | 1120     | 1300       | 1300 | 1360     |
|                              | 1.5 | 3.60                           | 1050       | 1050 | 1100     | 1280       | 1280 | 1340     | 3.60                           | 1050       | 1050 | 1100     | 1280       | 1280 | 1340     | 4.34                            | 930        | 930  | 990      | 1130       | 1130 | 1200     |
|                              | 2.0 | 4.30                           | 940        | 940  | 1000     | 1140       | 1140 | 1210     | 4.30                           | 940        | 940  | 1000     | 1140       | 1140 | 1210     | 5.19                            | 810        | 810  | 870      | 990        | 990  | 1060     |
|                              | 3.0 | 5.69                           | 740        | 740  | 810      | 910        | 910  | 980      | 5.69                           | 740        | 740  | 810      | 910        | 910  | 980      | 6.87                            | 600        | 600  | 670      | 740        | 740  | 820      |
| 2.5                          | 1.0 | 2.65                           | 1220       | 1220 | 1270     | 1500       | 1500 | 1560     | 2.65                           | 1220       | 1220 | 1270     | 1500       | 1500 | 1560     | 2.96                            | 1160       | 1160 | 1210     | 1420       | 1420 | 1480     |
|                              | 1.5 | 3.29                           | 1100       | 1100 | 1160     | 1340       | 1340 | 1410     | 3.29                           | 1100       | 1100 | 1160     | 1340       | 1340 | 1410     | 3.68                            | 1040       | 1040 | 1090     | 1260       | 1260 | 1320     |
|                              | 2.0 | 3.93                           | 1000       | 1000 | 1050     | 1210       | 1210 | 1280     | 3.93                           | 1000       | 1000 | 1050     | 1210       | 1210 | 1280     | 4.39                            | 930        | 930  | 980      | 1120       | 1120 | 1190     |
|                              | 3.0 | 5.20                           | 810        | 810  | 870      | 990        | 990  | 1060     | 5.20                           | 810        | 810  | 870      | 990        | 990  | 1060     | 5.82                            | 730        | 730  | 790      | 890        | 890  | 970      |
| 3.0                          | 1.0 | 2.41                           | 1270       | 1270 | 1320     | 1560       | 1560 | 1620     | 2.41                           | 1270       | 1270 | 1320     | 1560       | 1560 | 1620     | 2.41                            | 1270       | 1270 | 1320     | 1560       | 1560 | 1620     |
|                              | 1.5 | 2.99                           | 1160       | 1160 | 1210     | 1410       | 1410 | 1470     | 2.99                           | 1160       | 1160 | 1210     | 1410       | 1410 | 1470     | 2.99                            | 1160       | 1160 | 1210     | 1410       | 1410 | 1470     |
|                              | 2.0 | 3.57                           | 1060       | 1060 | 1110     | 1280       | 1280 | 1350     | 3.57                           | 1060       | 1060 | 1110     | 1280       | 1280 | 1350     | 3.57                            | 1060       | 1060 | 1110     | 1280       | 1280 | 1350     |
|                              | 3.0 | 4.73                           | 880        | 880  | 930      | 1060       | 1060 | 1130     | 4.73                           | 880        | 880  | 930      | 1060       | 1060 | 1130     | 4.73                            | 880        | 880  | 930      | 1060       | 1060 | 1130     |

**Note:** For walling applications a local pressure of KI=3.0 is only applicable on buildings with an average roof height which exceeds the buildings shortest horizontal plan dimension. Typically, building designs require cladding to be secured to every wall stud regardless of allowable cladding spans. Consult your project engineer for confirmation if this is not the case.

Product Name

Superdek® Wall Cladding

Product Description

Stratco Superdek® Wall Cladding is manufactured from 0.42 or 0.48 BMT G550 steel. Cladding available in colour or zinc/al finish, minimum AM100 coating.

Manufacturer's Details

Stratco (Australia) Pty Ltd

780 Stuart Highway, Berrimah NT 0828. ABN 30 007 528 850

Design Criteria

The following criteria was used in the development of the tables:  
Region C with an annual probability of exceedance of 1:500

1.  $V_r = 66\text{m/s}$  (limit state), with  $M_c = 1.05$
2.  $M_s/M_e/M_d = 1.00$
3.  $K_{c,e} = K_{c,i} = 0.9$
4. Importance Level 2

| Height (m) | Terrain/Height Multiplier ( $M_{z,cat}$ ) |      |      |      |
|------------|-------------------------------------------|------|------|------|
|            | 1.0                                       | 2.0  | 2.5  | 3.0  |
| ≤3         | 0.97                                      | 0.91 | 0.87 | 0.83 |
| ≤5         | 1.01                                      | 0.91 | 0.87 | 0.83 |
| ≤10        | 1.08                                      | 1.00 | 0.92 | 0.83 |

Pressure Coefficients:

Internal  $C_{p,i} = +0.7 / -0.65$   
External  $C_{p,e} = -0.65 / +0.8$

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

Limitations

1. Design pressures and maximum allowable spans are based on four fasteners per sheet per support.
2. The maximum allowable spans have considered serviceability requirements with an annual probability of exceedance of 1:25.
3. When fixing over insulation, screw length shall be increased to ensure sufficient penetration of the fastener.
4. Maximum allowable overhang is 200mm for wall cladding.
5. For elevated buildings the external pressure coefficient increases and maximum allowable spans are to be reduced by 6%.
6. Refer AS/NZS 1170.2:2021 Structural Design Actions Part 2: Wind Actions for definition of local pressure zones.

Accepted for inclusion in Deemed to Comply Manual

DTCM drawing number: M/396/01-01

Chairperson Signature:

Chairperson Name: Elisha Harris

Date of Approval: 27/10/2025 Expiry Date: 27/10/2030

Notes covering basis of DTC (Relevant test reports etc)

1. Cyclonic Fatigue Testing in accordance with the NCC 2022 BCA Volume Two - Low-High-Low Pressure Testing, and AS4040.3:2018.
2. Design Criteria determined in accordance with AS/NZS 1170.2:2021 *Wind Actions*.
3. Cyclonic Testing of Superdek Walling, Report No. 219, 23 April 2014, Stratco Testing Facility, Gepps Cross, South Australia.

Checking Engineer

Name: Glenn Turner

Registration Number: NER 3823731

Date: 16/07/2025

Signature:

Must be an Australian registered structural engineer

Certifying Engineer

Name: Hamish Bills

NT Registration Number: 127148ES

Date: 16/07/2025

Signature:

Must be a registered structural engineer in the Northern Territory