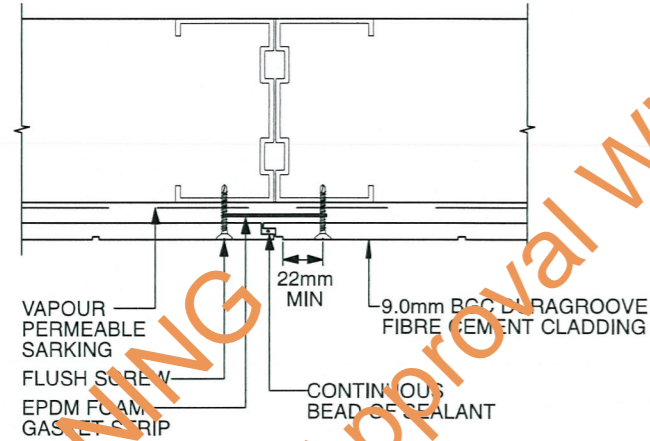
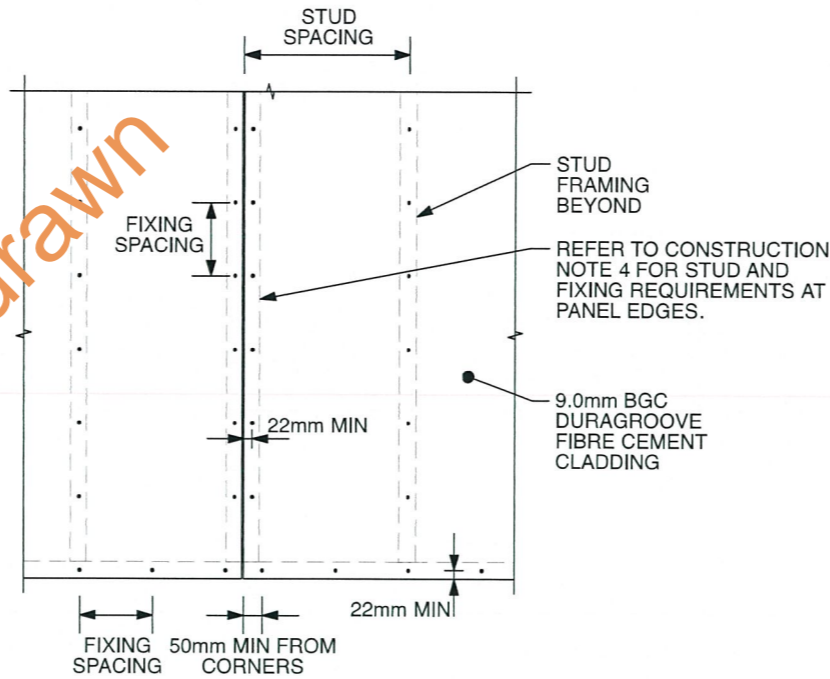


IN ACCORDANCE WITH NCC VOLUME 2 ( SECTION P3.10.1), THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENT P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.



**JOINT DETAIL**



**TYPICAL FIXING DETAILS**

**DURAGROOVE WALL CLADDING TABLE**

WIND CLASS	ULTIMATE LIMIT STATE EXTERNAL PRESSURE WITHIN 1200mm OF CORNERS (kPa)	ULTIMATE LIMIT STATE EXTERNAL PRESSURE ELSEWHERE (kPa)	MAXIMUM STUD SPACING WITHIN 1200mm OF CORNERS (mm)	MAXIMUM FIXING SPACING WITHIN 1200mm OF CORNERS (mm)	MAXIMUM STUD SPACING ELSEWHERE (mm)	MAXIMUM FIXING SPACING ELSEWHERE (mm)
N4	-2.90	-1.45, +1.56	450	150	450	200
N5	-4.27	-2.14, +2.30	300	150	450	180
N6	-5.77	-2.88, +3.11	300	100	450	135
C1	-1.95	-0.98, +1.05	450	200	450	200
C2	-2.90	-1.45, +1.56	450	150	450	200
C3	-4.27	-2.14, +2.30	300	150	450	180
C4	-5.77	-2.88, +3.11	300	100	450	135

**CONSTRUCTION NOTES:**

- BGC 9.0mm DURAGROOVE CLADDING MAY BE FIXED TO A STEEL WALL FRAME AS PER THE WALL CLADDING TABLE ON THIS SPECIFICATION.
- STEEL WALL FRAMING:
  - STEEL WALL FRAMES TO BE CONSTRUCTED IN ACCORDANCE WITH THE NATIONAL ASSOCIATION OF STEEL FRAMED HOUSING (NASH:2005) STANDARD - DESIGN OF RESIDENTIAL AND LOW-RISE HOUSING.
  - ALL STEEL WALL FRAME MEMBERS TO BE IN ACCORDANCE WITH AS4600:2005-COLD-FORMED STEEL STRUCTURES WITH MINIMUM THICKNESS TO BE 0.75mm. (MINIMUM GRADE G550)
  - FOR FIXING INTO STEEL 0.75mm TO 1.2mm, USE N° 10-18x30mm FIBRETEKS.
  - FOR FIXING INTO STEEL GREATER THAN 1.2mm, USE N° 8-18x30mm WINGTEKS.
  - FOR FIXING INTO STEEL GREATER THAN 1.2mm WITH INSULATION OVER, USE N° 10-16x55mm WINGTEKS.
  - WHEN INSTALLING CLADDING OVER INSULATION, ENSURE THAT A MINIMUM OF TWO THREADS PROTRUDE THROUGH THE FAR SIDE OF THE SUPPORT.
  - ALL FIXINGS TO BE CLASS 4 FINISH
- ALL EDGES MUST BE SUPPORTED ON STUDS OR NOGGINS. PROVIDE DOUBLE STUDS OR NOGGINS WHERE REQUIRED TO ACHIEVE THIS AND MAINTAIN MINIMUM EDGE DISTANCES. FIX TO NOGGINS AT SHEET JOINTS AS PER TOP AND BOTTOM PLATE. INTERNAL NOGGINS NOT AT PANEL JOINTS DO NOT REQUIRE FIXINGS.
- ALL FIXINGS ARE TO BE A MINIMUM OF 22mm FROM SHEET EDGES AND A MINIMUM OF 50mm FROM SHEET CORNERS.
- DUE TO HIGHER WIND PRESSURES AT THE EDGES OF BUILDINGS, THE STUD SPACINGS ARE REDUCED AT THESE LOCATIONS.
- THE VALUES PRESENTED IN THE WALL CLADDING TABLE ON THIS SPECIFICATION ARE THE MAXIMUM STUD SPACINGS AS REQUIRED TO SUPPORT CLADDING.

Product Name:

**9.0mm 'DURAGROOVE' Fibre Cement Cladding**

Product Description:

**EXTERNAL WALL CLADDING TO STEEL FRAMING**

Manufacturer's Name:

**BGC Fibre Cement (Australia) Pty Ltd**

121 Bannister Road Canning Vale WA 6155, Australia  
Postal Address: PO Box 1408, Canning Vale WA 6970

Design Criteria:

- WIND CLASSES N4-N6 AND C1 TO C4 TO AS4055-2012 WIND LOADS FOR HOUSING (INCLUDING AMENDMENT 1)
- WIND CLASSES ARE AS OUTLINED IN AS4055-2012-WIND LOADS FOR HOUSING (INCLUDING AMENDMENT 1).
- THE CAPACITIES AND FIXING REQUIREMENTS SHOWN ON THIS CERTIFICATION ARE SUITABLE FOR FIXING TO STEEL STUDS.
- A MATERIAL CAPACITY REDUCTION FACTOR OF 0.8 HAS BEEN USED FOR ALL PROOF TESTING.
- FIBRE CEMENT SHEETS HAVE BEEN MANUFACTURED IN ACCORDANCE WITH AS/NZS 2908.2:2000 CELLULOSE CEMENT PRODUCTS PART 2: FLAT SHEETS OR ISO 8336:2009 FIBRE CEMENT FLAT SHEETS - PRODUCT SPECIFICATION AND TEST METHODS.

Limitations

- MAXIMUM BUILDING DIMENSIONS AND LAYOUT TO BE AS PER AS4055-2012-WIND LOADS FOR HOUSING (INCLUDING AMENDMENT 1).
- CLADDING IS TO BE PAINTED TO BGC'S SPECIFICATION.
- WALL PANELS TO BE MAX 2700 HIGH.
- THIS TABLE APPLIES FOR FIXING TO A STEEL FRAME WITH FIXINGS AS DETAILED ON THIS SPECIFICATION.
- DURAGROOVE CLADDING IS AN EXTERNAL CLADDING SUITABLE ONLY FOR EXTERNAL PRESSURES AND SUCTION LOADS. INTERNAL LININGS THAT ARE ADEQUATE TO RESIST INTERNAL DESIGN PRESSURES MUST BE INSTALLED.
- BGC DURAGROOVE CLADDING IS NOT SUITABLE TO CARRY RACKING LOADS.
- FIXINGS ARE NOT TO BE OVER-DRIVEN INTO FIBRE CEMENT SHEETING. OVER-DRIVEN FIXINGS ARE TO BE REPLACED.
- STUD CAPACITY MAY BE LIMITING AND IS TO BE CHECKED BY A QUALIFIED ENGINEER.
- THE VALUES PRESENTED IN THE WALL CLADDING TABLE ON THIS SPECIFICATION ARE THE MAXIMUM STUD SPACINGS AS REQUIRED TO SUPPORT CLADDING.

**Accepted for Inclusion**

DTCM ref: *m/829*

Chairman's Signature: *[Signature]*

Chairman's Name: **Paul Nowland**

Date of Approval: **6/07/2018** Expiry Date: **6/07/2023**

Notes covering basis of DTC (Relevant test reports etc):

THE CAPACITIES AND FIXING REQUIREMENTS SHOWN ON THIS CERTIFICATION ARE BASED ON THE FOLLOWING DOCUMENTATION:  
• CYCLONE STRUCTURAL TESTING STATION REPORT N° TS486 - FATIGUE LOADING OF DURASHEET. (19/05/1997)

\*Checking Engineers Certification

Name: Martin Holland  
Registration Number: NPER 714230  
Date: **22 AUGUST 2017**  
Signature: *[Signature]*

\*registered as a structural engineer in Australia

\*Certifying Engineers Certification

Name: Adam James  
NT Registration Number: 26968ES  
Date: **23/08/17**  
Signature: *[Signature]*

\*registered as a structural engineer in the Northern Territory