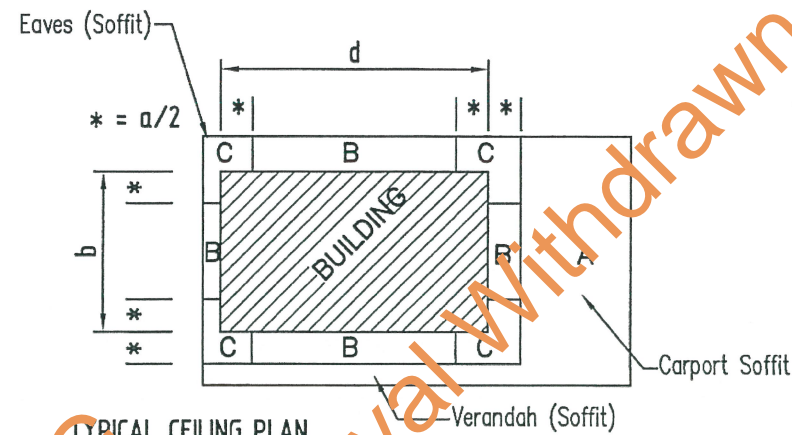


IN ACCORDANCE WITH NCC VOLUME 2 (SECTION P3.10.1), THIS PRODUCT SATISFIES PERFORMANCE REQUIREMENT P2.1.1 FOR CONSTRUCTION IN A HIGH WIND AREA.

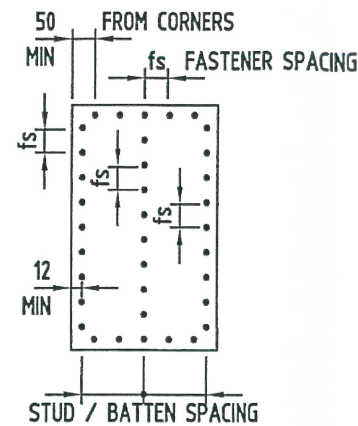


TYPICAL CEILING PLAN

Dimension 'a' is minimum 0.2 x 'd', 0.2 x 'd' or height of soffit above ground

LOCAL PRESSURE AREAS

- A - general areas away from building (x 1.0)
- B - from $\frac{a}{2}$ from building corners (x 1.5)
- C - up to $\frac{a}{2}$ from building corners (x 2.0)



TYPICAL 6mm 'DURALINER' FIXING DETAILS

TERRAIN CATEGORY	LOCAL PRESSURE AREA	ULTIMATE LIMIT STATE PRESSURE (kPa)	STUD/BATTEN SPACING (mm)	FASTENER SPACING (mm)	TESTED CAPACITY PRESSURE (kPa)
1	A	-2.06, +2.22	450	200	-2.90
	B	-3.10, +3.34	300	150	-5.76
	C	-4.13	300	150	-5.76
2	A	-1.55, +1.67	450	200	-2.90
	B	-2.33, +2.51	450	200	-2.90
	C	-3.10	300	150	-5.76
2.5	A	-1.42, +1.53	450	200	-2.90
	B	-2.13, +2.29	450	200	-2.90
	C	-2.84	450	200	-2.90
3 & 4	A	-1.29, +1.39	450	200	-2.90
	B	-1.94, +2.08	450	200	-2.90
	C	-2.58	450	200	-2.90

CONSTRUCTION NOTES

'Duraliner' shall be fastened to a steel subframe in accordance with the support and fastener spacings tabulated above. Fasteners shall be fixed 12mm minimum from sheet edges and 50mm minimum from sheet corners. All sheet edges and joints must be supported by steel framing. Fasteners to steel supports from 0.60mm B.M.T. to 1.6mm B.M.T. shall be 'Buildex' or similar M5x20 Countersunk Ribbed Head self-drilling screws. Fix to Hardwood (F14) supports with 30 X 2.8 galv. flat head nails. Duraliner shall not be fixed directly to steel frames with a typical B.M.T. greater than 1.6mm, framing to be battened out prior to fixing. Exposed 'Duraliner' cladding must be painted. The negative ULS pressures are deemed to govern, due to the associated critical failure mechanism.

Product Name
6.0mm 'DURALINER' Fibre Cement Cladding

Product Description
EXTERNAL SOFFIT CLADDING (Flush Jointing)

Manufacturer's Name
BCG Fibre Cement (Australia) Pty Ltd
121 Bannister Road Canning Vale WA 6155, Australia
Postal Address: PO Box 1408, Canning Vale WA 6970

Design Criteria
REGION 'C' WIND LOADING TO AS / NZS 1170.2:2011
Structural Design Actions Part 2 - Wind Actions (incl. Amdt 1,2,3)
DESIGN NOTES
Limit State design pressures were determined in accordance with AS / NZS 1170.2:2011 Structural Design Actions Part 2 - Wind Actions (incl. Amdt 1,2,3) using shielding, topographic, combination, dynamic response, and structural importance multipliers equal to 1.0.
Strength: regional wind speed: V500 = 69.3m/s
Terrain/Height Multiplier (Mz cat):

TC	h=5m	Cpe = +0.7,-0.65
1	1.05	
2	0.91	
2.5	0.87	
3 & 4	0.83	

- Limitations
- BCG External cladding to be painted to BCG specifications.
 - Ceiling space has been designed for zero internal pressure or -0.2 (pressure coefficient) for sealed structure.
 - Domestic housing up to 5 meters high (h ≤ 5m)
 - 6mm 'Duraliner' is an external cladding subject only to external pressure and suction loadings. Internal linings competent to resist internal design pressures must be installed. The racking strength of Duraliner has not been tested and therefore should not be allowed for in the design of a structure.
 - The building aspect ratio (r) of the structure to be ≤ 1. If r > 1 further checks of additional local pressures to be carried out by a fully qualified structural engineer. r is defined as the average roof height divided by the lesser of b and d.
 - Testing was conducted for negative (suction) pressures only. Comparison has only been made between these values and the negative ULS values which are deemed to govern.
 - A material capacity reduction factor of 0.8 was applied to the test capacity pressures nominated in the table to calculate the test pressures (Pt) used during the proof testing, which was carried out by Cyclone Structural Testing Station (James Cook University).

Accepted for Inclusion

DTCM ref: M/290/01

Chairman's Signature:

Chairman's Name: STEVEN J EURLICH

Date of Approval: 17 March 2016 Expiry Date: 16 March 2021

Test Reports
Cyclic pressure test carried out at JCU Cyclone Structural Testing Station.
Report TS542 dated 22/05/2000

**Design Engineers Certification
Name: Adam James
Registration Number: 26968ES
Date: 24/11/2015
Signature:

**Certifying Engineers Certification
Name: Rob O'Reilly
NT Registration Number: 213665ES
Date: 24/11/2015
Signature:

*registered as a structural engineer in Australia *registered as a structural engineer in Northern Territory