Gama Consulting Brisbane Pty Ltd
Suite 4, 36 Agnes St
Fortitude Valley QLD 4006
email admingld@gamaconsulting.com.au
p 0407 797 988
w www.gamaconsulting.com.au
ABN 12 672 288 587

17th July 2025

Our Ref: 250106
Client: Apex Building Supplies
Mr. Carl Brandon
32-36 Saltwater Cct
Narangba
QLD 4504

Test Summary Sheet – 0.42, 0.48mm bmt Apdeck700 sheeting profile for roof & wall application (Static wind load to AS 40402-1992).

Dear Mr. Carl Brandon,

The static test program for the 0.42mm bmt and 0.48mm bmt Apdeck700 sheeting profile was carried out by Gama Consulting Pty Ltd. We have acted on your behalf as the technical engineering consultant in relation to the Apdeck700 sheeting profile and its installation for roof and wall applications.

Description of Cladding and Set-Up Tested

- **Product name:** Apdeck700 sheeting profile by Apex Building Products.
- **Cladding details:** 0.42mm and 0.48mm bmt G550 cover width of 700mm, 42mm rib height.
- **Fixing clip details:** The brackets used to fix the cladding to the supports were manufactured from 0.78 mm TCT steel in strips approximately 775 mm long with 3 clips per bracket. The clips were manufactured from 1.24 mm TCT steel and have a trapezoidal shape with a rolled hook either side to engage the contour edges of the internal profile of the cladding ribs. The strip was approximately 40 mm wide with a 11 mm wide × 4.5 mm high stiffening bead along each side. The ends of the strips interlock to form a continuous strip.
- **Clip Fasteners:** The fasteners used to fix the clips to the supports were 5.5 mm, 11 threads per inch self-drilling batten zips with a length of 40 mm (M5.5-11 × 40 mm) and a 14 mm circular integral washer under an 8 mm hex drive head. The brackets were fixed to the supports at every clip in accordance with the client's installation manual.
- **Supports:** 0.55mm bmt G550 top hat battens. Strength of the supports was not evaluated.

Testing Result: Roof and Wall Cladding

Sheeting Profile	Sheeting Thickness	Application	End Span (mm)	Internal Span (mm)	Ultimate Strength Design PRESSURE CAPACITY (kPa)
Apdeck700	0.42mm bmt	Roof and Wall	600	600	3.91
Apdeck700	0.42mm bmt	Roof and Wall	900	900	3.00
Apdeck700	0.42mm bmt	Roof and Wall	1200	1200	1.53
Apdeck700	0.42mm bmt	Roof and Wall	1500	1500	1.32
Apdeck700	0.48mm bmt	Roof and Wall	600	600	3.91
Apdeck700	0.48mm bmt	Roof and Wall	900	900	3.00
Apdeck700	0.48mm bmt	Roof and Wall	1200	1200	2.17
Apdeck700	0.48mm bmt	Roof and Wall	1500	1500	1.79

Notes:

- It is recommended that a local qualified structural engineer check the suitability of the provided Ultimate Limit State Design Wind Capacities provided in the load span table for the intended use/structure and site location.
- It is recommended that in the event of an extreme storm/extreme winds the cladding is inspected by a suitably qualified builder/engineer to confirm the adequacy of the cladding and fasteners post event.
- When the product is fixed over a solid substrate such as plywood the substrate and its fixings need to be designed to resist the forces induced by internal pressure and not the metal cladding provided the substrate effectively seals the roof area and the metal cladding is directly fixed to the substrate at its perimeter in addition to the regular fixing system. In this configuration the metal cladding would be required to resist the uplift forces induced by external suction pressures.

Summary:

The testing program has been carried out in accordance with the requirement of the National Code Construction Series (NCC, 2022). The results listed in the load span table above conform to the structural requirements of NCC and the following Australian Standards.

- AS 1562.1 – 2018: Design and Installation of sheet roof and wall cladding
  - Part 1: Metal
- AS 4040 – 1992: Methods of testing sheet roof and wall cladding
  - Part 0: Introduction, list of methods and general requirements
  - Part 2: Methods of testing sheet roof and wall cladding – Resistance to wind pressures for non-cyclone regions

Matthew Mammone
Director