

## TECHNICAL BULLETIN NO 4 MARCH 2006

### WEBGLAS GC—TESTING AND EVALUATION

We have stated in our Technical information that safety mesh is not required beneath the Webglas GC sheeting. Specifically, within AS/NZS 1562.3:1996 – “Design and installation of sheet roof and wall cladding, Part 3: Plastic”. Section 2.4 Safety Precautions, describes provision for the use of safety mesh. 2.4.3.2 Part (g) allows for an exemption if impacts test as set out in Clause 5.3 Resistance to impact (sandbag) for roofing sheet materials, is performed. However a specific lifetime must be defined for durability against the impact test and proof of such is naturally required. Below we have listed the testing and evaluation Webglas GC has undergone.

#### Durability Testing

Technisearch Ltd Test Certificate Project Number 954-27504; Report 2120A provides proof of compliance with the impact test. Furthermore, a sheet of our Webglas GC product was then subjected to the equivalent of 20 years UV exposure, through ETRS Ltd. in WA. Report Number WC96-283 provides details of the Accelerated Weathering of the Webglas GC panel. The ETRS sample sheet was then re-subjected to the impact test through Technisearch Ltd, and subsequently passed the test in Project 628554; Report 628554A dated 2 December 1996. This enables Ampelite to provide the specific life of 20 years, which is reflected in our warranty.

#### Concentrated Load Testing

Webglas GC also fully complies with Concentrated Load Tests as per AS1562.1: 1992 – Design and installation of sheet roof and wall cladding, Part 1: Metal. (This code is for metal roofing and is not required for plastic sheeting; however in the interest of safety Ampelite initiated the study). Tests were carried out by the CSIRO Building, Construction and Engineering in accordance with AS4040.1: 1992, “Methods of testing sheet roof and wall cladding – Part 1: Resistance to concentrated loads”. Report DTS522 dated 24 August 1998 provides details of concentrated loads for various Webglas GC profiles over varying spans. Limit State Testing for resistance to wind loads has been performed as per the requirements of AS/NZS1562.3: 1996, “Design and installation of sheet roof and wall cladding, Part 3: Plastic”, Section 5.2 “Resistance to wind forces”. Vipac Engineers and Scientists Ltd performed the testing meeting the requirements of AS4040.2: 1996 “Methods of testing sheet roof and wall cladding – Part 2: Resistance to wind pressures for non-cyclone regions”. Vipac Report Series 360176\_TST\_2949\_00 dated February to June 2004 details varying Webglas GC profiles over varying spans determining strength limit state for non cyclone regions. Furthermore, extensive testing regarding fixings and Webglas GC within cyclonic conditions to 10,000 cycles required for approval within Darwin has also been performed. The University of Adelaide EngTest, The Department of Civil & Environmental Engineering details Cyclonic Wind Loading Tests to comply with the requirements of the Building Code of Australia, Northern Territory Annexure. References for the testing include; AS/NZS1170.2: 2002 “Structural Design Actions – Wind Actions”. AS/NZS1562.3: 1996, “Design and installation of sheet roof and wall cladding, Part 3: Plastic”. AS4040.0:1992 “Methods of testing sheet roof and wall cladding – Part 0: Introduction, list of methods and general requirements”. AS4040.3: 1992 “Methods of testing sheet roof and wall cladding – Part 3 Resistance to wind pressures for cyclone regions”. Details are listed in Report Number C980304 dated March 1998.

#### Impact Testing

Cyclonic Debris Impact Testing has also been performed by the University of Adelaide EngTest, Department of Civil & Environmental Engineering. These tests were commissioned to also provide compliance to the requirements for debris impact loading necessary to permit use of Webglas GC in the Darwin urban area. Once again, the requirements are set out in the Building Code of Australia, Northern Territory Annexure. The EngTest details are listed in Report Number C980304 dated March 1998.

Ampelite NZ Limited is an AS/NZS ISO 9001: 2002 SAI Global Certification accredited company providing Quality Assurance in Manufacturing, Supply and Servicing. License number QEC 4787 was certified and issued to the company on the 20 June 1995. Ampelite Manufactures its products to Australian/New Zealand Standard AS4256.3: 1994, described as “Plastic roof and wall cladding materials – Part 3 – Glass fibre reinforced polyester (GRP)”.