

# Ampelite Webglas GC

## Introduction

As the leading supplier of translucent sheeting in Australia, Ampelite maintains a strong commitment to compliance of its products to relevant Australian Standards, building design codes and other statutory requirements.

## Building Code of Australia Compliance Statement

### CONTEXT FOR THIS COMPLIANCE STATEMENT

This compliance statement summarizes the Webglas GC premium sheeting with respect to fire, safety, wind loading and weatherproofing requirements of the National Construction Code (NCC). For use as a roofing material and covering.

The Webglas GC sheeting fully complies, without restriction, with the requirements of Class 2 to Class 9 buildings of the NCC.

### COMPLIANCE IMPLICAITONS FOR WEBGLAS GC

This document summarizes the compliance implications in four areas;

1. Fire
2. Safety Mesh
3. Wind Loading
4. Weatherproofing

#### 1. FIRE

Webglas GC as a roof complies with the fire resistance requirements, **Specification C1.10 Fire Hazard Properties – Table 4.**

AWTA Textile Testing, in accordance with AS1530.3: 1999 “Methods for fire tests on building materials, components and structures - Part 3: Simultaneous determination of ignitability, flame propagation, heat release and smoke release” provides Test Report: 7-471943-CV acknowledging the following regulatory indices:

Ignitability Index	15	Range 0-20
Spread of Flame Index	8	Range 0-10
Heat Evolved Index	8	Range 0-10
Smoke Developed Index	8	Range 0-10

Webglas GC can also now incorporate FS FireCheck an intumescent impregnated glass tissue manufactured within the sheeting. AS/NZS 3837:1998 (GROUP 2 Classification).

#### 2. SAFETY MESH

**Safety mesh is not required beneath the Webglas GC sheeting.** Specifically, within AS1562.3:2006. “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 (vii) allows for an exemption if an impact test as set out in Clause 5.4 resistance to impact (sandbag) for roofing sheet materials, is performed. Technisearch Ltd Test Certificate Project Number 954-27504; Report 2120A provides proof of compliance with the sandbag impact test.

Furthermore, a sheet of our Webglas GC product was then subjected to the equivalent of 20 years UV exposure, through ETRS Ltd. A specific lifetime must be defined for durability against the impact test and proof of such is naturally required. Report Number WC9-283 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. This enables Ampelite to provide a specific life of 20 years. This fact is also reflected in the Webglas GC warranty.

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 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 provides details of concentrated loads for various Webglas GC profiles over varying spans.

Further information can be obtained from an Ampelite office in your area.

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## 3. WIND LOADING

**Limit State Testing for resistance to wind loads has been performed as per the requirements of AS1562.3:2006**, "Design and installation of sheet roof and wall cladding, Part 3: Plastic", Section 5.3 "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 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 the Darwin deemed to comply, 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/NZS 1170.2: 2011 "Structural Design Actions – Wind Actions"

AS1562.3:2006, "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.

**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.

**Further information can be obtained from an Ampelite office in your area.**

## 4. WEATHERPROOFING

### 1. Walling – Non-residential applications

NCC Volume 1 (For Classes 2-9 Buildings) specifies the weatherproofing Performance Requirements that must be met by the wall system in non-residential applications.

Performance Requirements Section – FP1.4 Weatherproofing.

A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause;

- unhealthy or dangerous conditions, or loss of amenity for occupants; and
- undue dampness or deterioration of building elements

**There are no deemed-to-satisfy provisions in respect to FP1.4 for external walls for Classes 2-9 Buildings.**

The **wall system** comprises not only the Webglas GC (GRP) cladding but the integrated performance of all the various features including water resistance via flashing details and sealing, moisture management via flashing and membranes, insulation, windows and door installations etc.

Ampelite does not supply a walling system – it supplies cladding profiles that may be installed on walls. As a consequence Ampelite are unable to certify its products as meeting NCC Performance Requirements for weatherproofing wall claddings for Class 2 – 9 buildings

It is the responsibility of others to design/detail/test the wall system to provide various features (water resistance via flashing details & sealing, moisture management via flashing and membranes, insulation, etc.).

The designer of the building will need to refer to the NCC with regards as to what may be required for the particular situation.

Ampelite Australia Pty. Ltd. is an AS/NZS ISO 9001: 2015 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 Standard AS4256.3: 2006, "Plastic roof and wall cladding materials - Part 3 - Glass fibre reinforced polyester (GRP)".