

PRODUCT SPECIFICATION SHEET

ARCPANEL ECOTEK PANEL

PRODUCT DESCRIPTION:

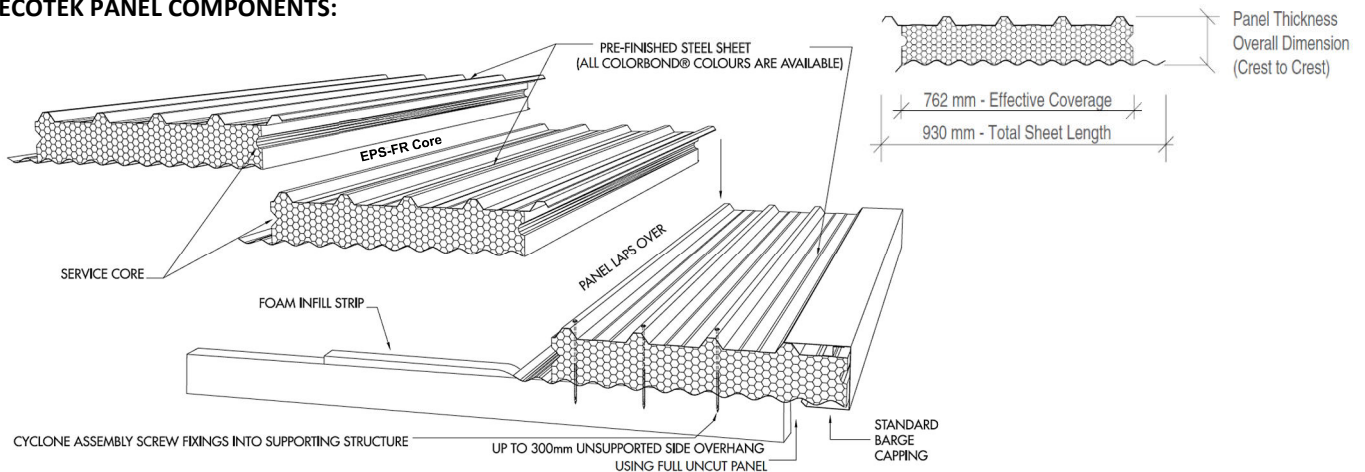
A prefabricated insulated panel system with a fire retardant expanded polystyrene core (EPS-FR). Certified for GROUP 1 lining material, BAL-29 bushfire attack level and cyclonic wind applications, making it the ideal roofing solution for residential and commercial applications, compliant with the National Construction Code.

ARCPANEL Ecotek Panel is available with a trapezoidal profiled steel top sheet and a corrugated profiled steel bottom sheet, panel thickness from 90mm to 250mm and in straight and large curved panel configurations. The Ecotek Panel insulated roof system combines aesthetic, innovative design, with high strength, high durability and high energy efficiency.

PRODUCT MATERIALS:

External face: Pre-painted steel roof sheeting thickness no less than 0.42BMT
 Insulation Core: EPS-FR Expanded Polystyrene foam with fire retardant
 Internal Face: Pre-painted steel roof sheeting thickness no less than 0.42BMT

ECOTEK PANEL COMPONENTS:



PANEL SIZES & R-VALUE

90mm (R1.7), 110mm (R2.3), 130mm (R2.8), 150mm (R3.4), 175mm (R4.0), 200mm (R4.7), 210mm (R5.0), 250mm (R6.1)

REFERENCED STANDARDS:

Compliance for Fire Performance

- AS ISO 9705 Group Number 1 in accordance the NCC Specification C1.10
- AS 1530.3 Simultaneous determination of ignitability, flame propagation, heat release and smoke release

Compliance for Bushfire Performance

- AS 3959 External surface exposure to bushfire attack BAL-29 rating in accordance with AS 3959-2018

Compliance for Thermal Performance

- AS 4859.1:2018 Thermal insulation materials for buildings Part 1 & Part 2
- The Australian Institute of Refrigeration Air-conditional & Heating (AIRAH) handbook

Compliance for Building Design – Structural Design Actions

- AS1170.0 Structural Design Actions - General
- AS1170.1 Structural Design Actions – Permanent Imposed Actions
- AS1170.2 Structural Design Actions – Wind Actions
- AS1170.3 Structural Design Actions – Snow & Ice Actions
- AS1170.4 Structural Design Actions – Earthquake
- AS1562 Design and Installation of sheet roof and wall cladding
- AS4055 Wind Loads for Housing
- NCC Volume One Performance specification BP1.1
- NCC Volume Two Performance specification P2.1.1
- AS4040.2 Methods of testing roof sheets – non cyclonic
- AS 4040.3 Methods of testing roof sheets – cyclonic

Use of Dark Colours: Please note: Increased expansion, deflection and movement is expected of the panel when using dark colours having a solar absorbance of greater than 0.68. The Building Designer is to allow for increased deflection. Colours with a BlueScope 'Dark' classification are not recommended to be used as a top roof or outer wall sheeting. Arcpanel warranty does not cover structural damage to the building or to the panels caused by extreme dry heat loads and surface temperatures in excess of 78deg C.

ARCPANEL Ecotek Panel must be designed and installed in accordance with the Design, Detailing & Installation Guide Version 2019.01 or later, in accordance with NCC, local building regulations and SA HB 39 installation code for metal roof and wall cladding. For further information, contact Arcpanel on 1300 200 004 or email info@arcpanel.com.au.