

# Determination of Declared Thermal Resistance in accordance with AS/NZS 4859.1:2018

## EPS – Expanded Polystyrene Foam

No ageing required

AS/NZS 4859:2018, Clause 8.2.2

“Expanded polystyrene (EPS) does not contain low thermal conductivity blowing agents so thermal resistance determination does not require any allowance for ageing.”



### T19F10

(Nominal thickness only)

Sample required: 10 specimens 300x300mm @ nominal thickness (up to 100mm)

### T19F10 x 2

(for product range, testing of thinnest & thickest product)

Sample required: 10 specimens 300x300mm from thinnest product  
10 specimens 300x300mm from from thickest product (up to 100mm)

AS/NZS 4859.1:2018, clause 2.3.3.6 allows, where a group of homogeneous bulk insulation products of similar chemical and physical composition and differing only in thickness, that only the thickest and the thinnest products need to be tested. The highest declared thermal conductivity shall apply to the whole group.

Delivery Address	Further information
AWTA Product Testing Level 1, 191 Racecourse Rd, Flemington VIC 3031, Australia	AWTA Product Testing Phone: (03) 9371 2400 Email: <a href="mailto:producttesting@awta.com.au">producttesting@awta.com.au</a>

**IMPORTANT NOTE:** That by submitting samples for testing **YOU AGREE** that the resulting testing shall be performed under our terms and conditions for testing and consulting services: [www.awtaproducttesting.com.au/index.php/about/terms-and-conditions](http://www.awtaproducttesting.com.au/index.php/about/terms-and-conditions)

## Thermal Transmission Properties

Specification: AS/NZS 4859.1:2018

Test Method: ASTM C518:2017

The National Construction Code requires a Declared Insulation Value ( $R_{50/90}$ ) to be determined in accordance with AS/NZS 4859.1:2018 "*Materials for the thermal insulation of buildings*". For Formed Shaped, Formed in-situ, Reflective Products and Low Density Compressible Batts, this specification calls up test method ASTM C518:2017.

ASTM C518 measures the steady state thermal transmission through flat specimens using a heat flow meter apparatus. From the test, the thermal conductivity ( $\lambda$ ) and R-value is determined.

AS/NZS 4859.1-2018 requires that the thermal resistance and thermal conductivity are measured at a standard mean temperature of 23°C for products sold within Australia and 15°C for products sold in New Zealand.

We offer thermal transmission testing compliance with AS/NZS 4859.1:2018, including ageing processes (see over) required to determine the Declared Thermal Resistance ( $R_{50/90}$ ) and Declared Thermal Conductivity ( $\lambda_{50/90}$ ).

Company name	
Company Address:	
Contact person	
Contact email	
Contact phone number	
<b>Package Required</b>	
Name of your product	
Nominal composition	
Nominal thickness	
Special instructions	

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