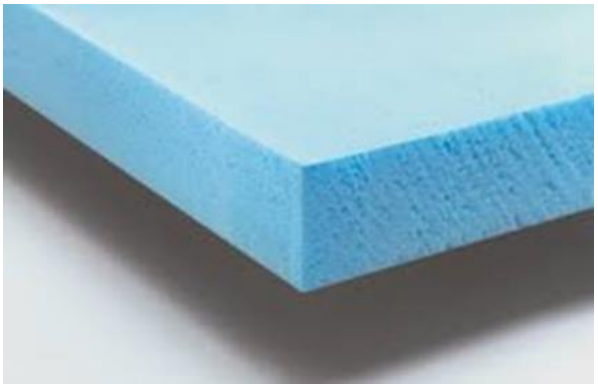
AWTA PRODUCT TESTING

Information Sheet

XPS – Extruded Polystyrene Foam

Ageing to EN 13164:2012 +A1:2015, Annex C



AS/NZS 4859:2018, Clause 8.2.2
Declared thermal resistance shall be determined from the aged values determined in accordance with the following:

Accelerated ageing procedures detailed in EN 13164:2012 + A1:2015

C.2 XPS without diffusion tight facing

This testing is suitable for products of not less than one day and not more than 90 days old.

Sample required	10 Specimens 1-100mm thick: 300mm x 300mm 100-200mm thick: 610 x 610mm	Lead time
Preparation	Slice each specimen into 10mm layers	
Ageing at 23°C & 50% RH	Product thickness 20-70mm (90 days)	110 days
	Product thickness 70-120mm (50 days)	70 days
	Product thickness 120mm-200mm (30 days)	50 days
Thermal resistance test	ASTM C518 / AS 4859.1	

C.3 XPS with diffusion tight facing both sides

Sample required	10 Specimens 1-100mm thick: 300mm x 300mm 100-200mm thick: 610 x 610mm	Lead time
Preparation	Specimens to be supplied without diffusion tight facing No slicing required	
Ageing at 23°C & 50% RH	60 days	70 days
Thermal resistance test	ASTM C518 / AS 4859.1	

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.

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Thermal Transmission Properties

Specification: AS/NZS 4859.1:2018
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 (λ) and R-value is determined.

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	
Product facing	☐ None ☐ Without diffusion tight facing ☐ With diffusion tight facing both sides
Name of your product	
Nominal composition	
Nominal thickness	
Special instructions	

Delivery Address	Further information
AWTA Product Testing Level 1, 191 Racecourse Rd, Flemington VIC 3031, Australia	Phone: (03) 9371 2400 Email: producttesting@awta.com.au

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***