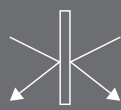# POLYAIR PERFORMA XHD

DESCRIPTION: Extra Heavy Duty, Reflective and Semi Reflective foam core insulation
SUITABILITY: Suitable for residential sheds or garages, masonry double brick walls and terracotta or cement tile roofs

EXTRA HEAVY DUTY | **DOUBLE SIDED REFLECTIVE** | **ANTIGLARE FOIL** | **WATER BARRIER** | **CLASS 2 VAPOUR BARRIER** | **LOW ≤5 BAL SUITABLE**

IMPORTANT INFORMATION

○ This product is only recommended for the applications listed in this datasheet unless advised otherwise by an official Bradford technical representative.

○ This product is a vapour barrier and is not recommended for use behind lightweight cladding except in tropical climate zone 1 - its suitability should be checked with the cladding manufacturer prior to application.

○ This product is not designed to withstand prolonged exposure to UV or weather. Once installed the exterior wall or roof must be applied as soon as possible.

○ Prior to installation, this product should be stored in a cool dry place away from sunlight, and should not come into contact with wet concrete or alkaline based materials.

○ This product contains aluminium foil which conducts electricity. To avoid electrocution, care should be taken to ensure that this product or conductive fasteners used to secure this product, do not come into contact or close proximity with electrical wiring during installation or use.

PRODUCT DESCRIPTION

Bradford Polyair Performa™ XHD is manufactured with two external layers of reflective aluminium foil with the external layer coated in a special antiglare substrate. Bradford Polyair Performa™ XHD also incorporates a foam core structure.

○ This product meets the requirements of the AS/NZS 4200.1 and is suitable for use in Australian applications.

CLIMATE ZONE

This product is recommended for use in warm to cold climate zones where there are lower levels of insulation used in the wall cavity and vapour and water barrier properties are required.

CLASSIFICATION

This product meets the requirements of AS/NZS 4200.1		
CRITERIA		**RESULT**
Product Identifier		Performa XHD
Duty Classification (AS/NZS 4200.1)		Extra Heavy Duty
Tensile Strength (AS/NZS 1301.448s)	Machine	≥ 13
	Lateral	≥10.5
Edge Tear Resistance (TAPPI T470)	Machine	≥ 90
	Lateral	≥ 90
Water Control Classification (AS/NZS 4201.4)		Water Barrier
Vapour Classification (ASTM E96)		Class 2 Vapour Barrier
Vapour Permeability (ASTM E96)		< 0.1429 µg/N.s
Emissivity (AS 4201.5)	Inward Facing	Reflective (0.03)
	Outward Facing	Semi-Reflective (0.05)
Flammability Index (AS 1530.2)		≤ 5 (Low)
Electrical Conductivity (AS/NZS 3100)		Conductive
Resistance to Dry Delamination (AS/NZS 4201.1)		Pass
Resistance to Wet Delamination (AS/NZS 4201.2)		Pass
Shrinkage (AS/NZS 4201.3)		≤ 0.5%
Classifications in accordance with AS/NZS 4200.1. This product should be installed in accordance with AS 4200.2		

APPLICATION TABLES

Thermal Calculations	Pitched Metal Roof *ventilated	Pitched d Roof *ventilated	fl r	Lightweight Clad	Shed Roof
Heat flow in (Summer)	R_t 2.5	R_t 2.2	R_t 2.0	R_t 1.8	R_t 1.7
Heat flow out (Winter)	R_t 1.2	R_t 1.1	R_t 2.1	R_t 1.9	R_t 0.9

*All R values shown are for Polyair Performa XHD 8.0mm. Reduce all R values by 0.1 for Polyair Performa XHD 4.0mm. Pitched metal roof system comprises of: metal roof 22.5°, 40mm airspace, Polyair Performa 4.0 XHD (with slight dust cover), ventilated airspace, 10mm plasterboard ceiling. Pitched tiled roof system comprises of: pitched roof 22.5°, 40mm airspace, Polyair Performa 4.0 XHD (with moderate dust cover), ventilated airspace, 10mm plasterboard ceiling. Brick veneer wall system comprises of: 110mm brick, 35mm airspace, Polyair Performa 4.0 XHD, 90mm airspace, 10mm plasterboard. Lightweight clad wall system comprises of: lightweight cladding, 35mm airspace, Polyair Performa 4.0 XHD, 90mm airspace, 10mm plasterboard. Shed metal roof comprises of: metal roof 11°, 40mm airspace, Polyair Performa 4.0 XHD (with slight dust cover). *Ventilated attic space based on incorporating minimum 2x wind driven ventilators such as Edmonds WindMaster 300mm throat ventilator (total aggregate area 0.14m2) in conjunction with eave vents of not less than 0.2% of the plan ceiling area. Refer to explanation in the BCA 3.12.1.2(b)(ii).

APPLICATION DETAIL

Bradford Polyair Performa™ XHD can be used in residential masonry wall, tiled roof construction, and residential sheds or garage applications. The semi-reflective antiglare side should face outward towards the external cavity and the reflective aluminium side should face inward towards internal stud cavity. The product is designed to provide a reflective air-gap R-Value when the semi-reflective antiglare and reflective aluminium surfaces face a minimum 25mm cavity.

○ This product is suitable for use in BAL regions 12.5 to 40 in accordance with AS 3959.

For more information on how to install this product correctly see the Polyair Installation Guides online at bradfordinsulation.com.au.

PRODUCT DIMENSIONS

PRODUCT NAME	WIDTH (mm)	LENGTH (m)	m² PER ROLL	WEIGHT (kg)	PRODUCT CODE
Performa XHD 4mm	1350	22.25	30	13	152161
Performa XHD 4mm	1350	40	54	19	152429
Performa XHD 8mm	1350	22.25	30	16	152472

R-VALUE ASSUMPTIONS

Product performance is calculated in accordance with AS/NZS 4859.1 and the stated thermal performance is the depicted applications Total R–Value. The contribution of this product to the Total R-Value depends upon installation and environmental conditions, and will be reduced in those cavities that are ventilated. In brick veneer wall applications, a minimum brick cavity air gap of 40mm and stud cavity air gap of 90mm is required to contribute to thermal performance. Addition of bulk insulation to the wall stud cavity diminishes the reflective air gap R-Value contribution of this product.

○ Calculations are based upon a temperature difference of 6°C for heat flow out and 12°C for heat flow in.

○ Emittance of reflective surface ≤0.05 and semi-reflective surface ≤0.09

HEALTH & SAFETY

Information on any known health risks on Bradford products and how to handle them safely is detailed on www.bradfordinsulation.com.au. Additional information is listed in the Material Safety Data Sheets also available on the Bradford website.

PRODUCT CONSTRUCTION

Solid Aluminium (Gold)
Polyair Insulating Foam Core
Solid Aluminium

For further technical advice
call **1300 850 305** or
visit **bradfordinsulation.com.au**