

Operations & Maintenance Manual

Protecto-Board - Bituminious Protection



Wallbarn Ltd Unit 16 Capital Business Centre 22 Carlton Road, South Croydon. CR2 0BS



PRODUCT DESCRIPTION

Protecto-board B is a tough semi-flexible waterproofing, protection and recovery board made from APP / SBS bitumen. It is pre-moulded with a polyester reinforcement carrier, giving a very high tensile strength and superior puncture resistance.

It is suitable for a variety of applications in below ground or above ground waterproofing applications as well as roofing, parking, bridge decks, wet areas, planters, pools, fountains and civil works.

PHYSICAL AND CHEMICAL PROPERTIES				
Physical State	Solid			
Colour	Black sheet			
Odour	Not Applicable.			
Water Solubility	Insoluble			
PH	Not Applicable			
Boiling Point/Range (°C)	~ 177 °C.			
Flash Point (closed, °C)	Minimum 250 °C based on bitumen.			
Auto flammability (°C)	> 300 °C.			
Explosive Properties (%):	This product should be handled using methods and techniques that minimise or eliminate dust or fume generation.			
Oxidising Properties:	Not Applicable			
Vapour Pressure (kPa at 20°C):	No data			
Relative Density (at 20°C)	No data			



TECHNICAL DATA

	PROCEDURE	UNITS	TOLERANCE	VALUE
ASTM				
Length		m	<-1%	2
Width		m	<-1%	1
Thickness	ASTM D5147	mm	0.2mm	3.0
Water Absorption (n/a slate)	ASTM D5147	%	mlv	< 0.55
Puncture resistance	ASTM D514	N; mm	mlv	1200; 32
CE				
Visible defects	EN 1850-1	N°/m²	0	0
Length	EN 1848-1	m	<-1%	2
Width	EN 1848-1	m	<-1%	1
Mass per unit area	EN 1849-1	kg/m²	+/- 10%	3.85
Thickness	EN 1849-1	mm	-0.2mm	3.0
Resistance to static loading (method A)	EN 12730	kg	min	25
Resistance to impact	EN 12691	mm	mlv	>700
Reaction to fire	EN 13501-1		Euroclass	F

6.0mm	DDOCEDUDE	HAUTE	TOLEDANICE	VALUE
	PROCEDURE	UNITS	TOLERANCE	VALUE
ASTM				
Length		m	<-1%	2
Width		m	<-1%	1
Thickness	ASTM D5147	mm	-0.2mm	6.0
Water Absorption (n/a slate)	ASTM D5147	%	mlv	< 0.75
Puncture resistance	ASTM D514	N; mm	mlv	1200; 25
CE				
Visible defects	EN 1850-1	N°/m²	0	0
Length	EN 1848-1	m	<-1%	2
Width	EN 1848-1	m	<-1%	1
Mass per unit area	EN 1849-1	kg/m²	+/- 10%	7.65
Thickness	EN 1849-1	mm	-0.2mm	6.0
Resistance to static loading (method A)	EN 12730	kg	min	25
Resistance to impact	EN 12691	mm	mlv	>700
Reaction to fire	EN 13501-1		Euroclass	F

COMPOSITION

High performance semi rigid board manufactured from a tough APP (Atactic Poly Propylene) and SBS (Styrene butadiene Styrene) bituminous mix with fillers and modifiers. > 75% bitumen content. It is reinforced with two layers of laminating polyester carrier fleece held under pressure providing the board with a superior puncture resistance and low deflection coefficient. The boards are coated with Polyethylene film to prevent them sticking together.

Wallbarn Ltd Unit 16 Capital Business Centre 22 Carlton Road, South Croydon. CR2 0BS IMS.T.435.v3



FEATURES

- •Damp proof with very low water absorption. Unaffected by permanent immersion in water.
- •High puncture and impact resistance. Passes the chisel test.
- •Compatible Bituminous, EPDM, TPO, PVC, Polyurethane, Butyl rubber, Epoxy, Acrylic, Chlorinated Rubber and coal tar membranes.
- •Very strong impact resistance from backfilling and abrasion from construction traffic, concreting and other topping work.
- •Maintains shape stability at high temperatures and retains flexibility at low temperatures.
- •It is tough, rot proof and non-biodegradable with over 75% bitumen content.
- •Resistant to salts, chlorides and other chemicals normally found in soils.
- •Ideal as a recovery board in re-roofing projects. Fast, light weight alternative to screed and eliminating the need to remove the old roofing regardless of its type.
- •Semi-flexible membrane that can be bent into shapes and contours without cracking while rigid enough to hold as a board on vertical surfaces.
- •Softening point 115-130°C.
- •Top surface covered in thin 15µ Polyethylene film. Bottom surface covered with a thin Polyethylene film which can be removed with a torch.
- •A variety of thickness are available. Standard products are 3mm and 6mm.

PRODUCT INFORMATION

https://www.wallbarn.com/protection-drainage/protecto-board/

PRODUCT ASSEMBLY

Please see overview instruction video here - <u>How to Use WallbarnProtecto Board -</u> YouTube



PRODUCT INSTALLATION

Before proceeding with the installation of Wallbarn Protecto-Board, it is crucial to assess the condition of the membrane. Carefullyinspect the membraneto ensure there are no tears or holes present. Performing a thorough examination and conducting proper maintenance of the roofing membrane prior to installation will help prevent future issues related to leakage.

It is important to note that installing flooringover a high-quality and well-installed roofing membrane should enhance its effectiveness, rather than serving as a temporary solution for any existing membrane problems. By ensuring the integrity of the roofingmembrane, you can have confidence in the long-term performance and durability of the entire system.

HORIZONTAL FIXING

Protecto-board is loose laid over the compatible membrane and either covered straight away with another layer, pressed into the still tacky heated membrane or spot bonded using compatible adhesive on part of the membrane. Protecto-board can also be installed by butting the boards together and covering the joints with strong bitumen tape. Protecto-board is particularly useful for cutting and shaping around details such as outlets and upstands.







VERTICAL FIXING

Protecto-board can be fixed to the vertical plane by torch bonding to the surface beneath, mechanically fixing or by securing with strong double-sided bitumen Protecto-tape. This is useful for temporary protection, where areas need to be guarded against following trades, and the boards taken up at a later date if required.





PACKING & DELIVERY

Wallbarn Bituminous Protecto-board is supplied in full pallet loads. Each pallet measures 2m x 1m x 1m and weighs 1,400kg; so specialised heavy lifting equipment is required onsite to receive consignments. 3mm thick boards have 200 sheets per pallet; 6mm thick boards have 100 sheets per pallet as standard. Protecto-board should be stored out of direct sunlight. The boards will soften if exposed to heat for prolonged periods and if they come into contact with hot membranes at temperatures above150°C.

**Protecto-Board has a thin polythene coating which prevents the boards sticking together. There is no issue with this product if this peels during installation or removal form the pallet.





Wallbarn Ltd Unit 16 Capital Business Centre 22 Carlton Road, South Croydon. CR2 0BS IMS.T.435.v3



MAINTENANCE DETAILS

If Protecto-board is being used as part of roof buildup, it is designed to be covered and not disturbed in the long-term, so no maintenance is required.

For use as temporary protection, be sure to keep area clean and clear of debris.

HAZARDS IDENTIFICATION

This product does not meet the criteria for requiring classification and identification as per regulation (EC) No 1272/2008 (CLP) and Directive 1999/45/EC (DPD) No 1272/2008 (CLP).

FIRST-AID MEASURES

Eyes: Immediately flush eyes with water for at least 15 minutes. If irritation develops get medical attention.

Skin: Product can be absorbed through the skin upon prolonged contact could cause nausea and headache.

Inhalation: If fumes from the product are inhaled, it is important topromptly remove the affected individual from the exposure area. If the person experiences any difficulty breathing, it is advisable to keep them calm, made as comfortable as possible, and seek immediate medical assistance.

FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Sand, extinguishing powder, Carbon Dioxide or Dry Foam (Macrofoam).

Special Exposure Hazards: Not Known.

Special Protective Equipment: Wear NIOSH (National Institute for Occupational Safety and Health) approved positive pressure, self-contained breathing apparatus (SCBA) and full Impervious Personal Protective Clothing



ACCIDENTAL RELEASE MEASURES

Not usually required, However, if there are substantial amounts of dust or shavings present, it is advisable to use appropriate PPE as required.

In addition, please refer to the following sections for further guidance:

- Section 8: Evacuate the area if necessary.
- Avoid direct contact with skin and eyes.
- Take precautions to avoid inhaling dust or vapors.
- Ensure adequate ventilation in the work area.
- Keep the product away from heat, hot surfaces, sparks, open flames, and other potential sources of ignition.
- No smoking should be permitted in the vicinity.

HANDLING & STORAGE

Handling: Use Good House Keeping Practices for example wear safety glasses with side shields and gloves. If dusts or fumes of this productare generated, avoid inhalation, skin and eye contact. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Storage: In a dry ventilated area room far from sources of heat anddirect sunlight.

PERSONAL PROTECTIVE EQUIPMENT

Occupational Exposure Limits: Not Known.

Engineering Control Measures: Use product in a well ventilated area.

Personal Protective Equipment: Wear suitable protective clothing e.g. overalls, gloves and safety boots to reduce the chances of physical injury while using this product. Local Exhaust Ventilation, goggles and a dust mask to the relevant European standard (EN149) may be required if cutting.



TOXICLOGICAL INFORMATION

The following toxicological assessment is based on a knowledge of the toxicity of the product's components:

Health Effects

On Eyes: On account of the fact of the physical nature (solid at room temperature) direct contact with eyes is unlikely.

On Skin: Product can be absorbed through the skin upon prolonged contact which could cause nausea and headaches.

By Inhalation: In principle owing to the physical nature of this product, inhalation is not likely.

By Ingestion: Due to the physical state of this product, namely solid at room temperature ingestion is unlikely.

ECOLOGICAL INFORMATION

Data not available.

DISPOSAL CONSIDERATIONS

Dispose of this product at any approved solid waste disposal site. Disposal of the product should be in accordance with any local or national laws and regulations.

Product waste: Do not allow to enter into surface water or drains. Dispose according to legislation. Refer to manufacturer/supplier for information on recovery/recycling. Collect and dispose of waste product at an authorised disposal facility.

Contaminated packaging: In accordance with local and national regulations

Further ecological information: Avoid release to the environment.

TRANSPORT INFORMATION

Classification for conveyance: - None required.



WARRANTIES

A limited warranty exists that the products will comply with the test data as laid out earlierin document. Warranty is limited to replacement of products which have been installed in the correct manner and for the correct purpose only. Warranty is limited to the value of the cost price of the materials only, not replacement costs or any other labour cost.

KEY CONTACTS

Wallbarn Ltd.

Unit 16 Capital Business Centre, 22 Carlton Road, South Croydon CR2 0BS

Tel: +44 (0)20 8916 2222

Fax: +44 (0)20 8916 2223

Email: sales@wallbarn.com

Web: www.wallbarn.com

APPENDIX A:

The following table summarizes the documents and URLs referenced in this document:

Digital Information	Location
Protecto-board website URL	https://www.wallbarn.com/protection-drainage/protecto-board/
Wallbarn Ltd Terms & Conditions	https://www.wallbarn.com/terms-conditions-of-supply/



APPENDIX B:

LIMITED WARRANTY

Wallbarn Ltd provides a limited warranty of 15 years for products. This Warranty corresponds to the performance and strength characteristics given in the published technical datasheets.

Wallbarn Ltd warranties that, under normal use and service conditions, and where the products have been installed in the proper manner, Wallbarn Ltd products shall be free from material defects in workmanship and materials, shall not crack, splinter, swell, rot or suffer structural damage from damp or fungal decay.

If a defect occurs within the Warranty Period, the Purchaser shall notify Wallbarn Ltd in writing and, after investigation and confirmation of the defect(s) by a Wallbarn Ltd representative, Wallbarn Ltd's sole responsibility shall be limited to replacement of the affected products or to refund the Purchaser up to the maximum value of the Sales Invoice.

This warranty is null and void if:

- The products are not installed in the proper manner as detailed in official Wallbarn Ltd product catalogues, installation guides and technical datasheets.
- The products are not used for the purposes they are intended, as detailed in official Wallbarn Ltd product catalogues, installation guides and technical datasheets.
- Excessive weights, higher than the maximum weight as detailed in official Wallbarn Ltd product catalogues, installation guides and technical datasheets are placed onto the products.
- The products are installed in contravention of any relevant building regulations, code or standards.
- Any relevant building regulations, code or standards, including fire safety regulations are breached on the project during the construction process.
- There is movement, distortion, collapse or settling of the supporting structure on which Wallbarn Ltd products are installed.
- Any abnormal natural event such as flooding, hurricane, earthquake, lightning, etc., occurs.

Wallbarn Ltd Unit 16 Capital Business Centre 22 Carlton Road, South Croydon. CR2 0BS IMS.T.435.v3



Wallbarn Ltd - Limited Warranty

This limited warranty does not cover any living product or any product which sustains life. This includes sedum and other plants and substrate mixes for M-Tray®and any other green roof system. The living and growing elements of M-Tray® and other green roof systems are specifically excluded from this Warranty.

This Warranty is limited to the maximum amount of the Sales Invoice and Wallbarn Ltd is not liable for any costs of examination, removalor installation of products. WallbarnLtd will not be responsible for any costs or expenses incurred during removal and replacement, including labour or transport costs.

This warranty is given only if the products are used for the purposes they are intended, as detailed in official Wallbarn Ltd product catalogues, installation guides and technical datasheets and are installed in the correct manner.

To make a claim under this Limited Warranty, the Purchaser should contact Wallbarn Ltd with a full report of the defects within the Warranty Period, including photographic evidence and proof of purchase. Any claim should be made to sales@wallbarn.com as soon as possible by the Purchaser.

Our Terms & Conditions of Supply can be found here https://www.wallbarn.com/terms-conditions-of-supply/