PROTEUS PRO-COLD®

DATASHEET

Reference Date:
Issue 2, May 2021

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Proteus Pro-Cold®
COMPANY: Proteus Waterproofing Ltd, 21a Sirdar Road, Brook Road Industrial Estate, Rayleigh, Essex SS6 7XF, United Kingdom
EMERGENCY CONTACT NUMBER: +44 (0) 1268 777871

DESCRIPTION

Proteus Pro-Cold® is a single component, seamless and cold-applied waterproofing membrane for flat roofs and pitched roofs for both new builds and refurbishments. It cures to provide a completely seamless waterproof protection and weather resistant making it suitable for use in all climates.

Proteus Pro-Cold® does not brittle. It uses atmospheric moisture to trigger its cure process and unlike conventional polyurethane systems, can cure under water without gassing or foaming. It also becomes resistant to rain damage quickly, without loss of performance.

BENEFITS

- Totally seamless - based upon moisture triggered chemistry
- Quick and easy application
- Elastomeric
- Cold applied – eliminating the risk of fire
- Low maintenance and minimal disruptions
- Highest European fire rating BROOF(t4)
- Good UV resistance and colour stability
- Application temperature +2°C and rising
- High adhesion
- Crack-bridging abilty

FORM

COLOURS: Standard Colours: Slate Grey and Light Grey.

CONTAINER SIZE:13 litres & 5.5 litres

DURABILITY

When subjected to normal service conditions, Proteus Pro-Cold® will provide an effective waterproof barrier up to 10, 15, and 20 years dependent on system.

All systems can be overcoated at the end of their designed life at a fraction of the cost, for an original installed cost excluding inflation. Therefore, it avoids the need to strip out the system and prevents product going to landfill.

A wet electronic leak test is required for all inverted/buried systems prior to the waterproofing membrane being covered.

CERTIFICATION

- CE Marking and declaration of performance to European Technical Assessment
- Highest European fire rating BRoofT4
- Local Authority Building Control (LABC) Certification

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Registered Office: Charter House, 105 Leigh Road, Leigh-On-Sea, Essex, SS9 1JL | Registered company number: 08458402

INSTALLATION - Please refer to Proteus Pro-Cold® Application guide for more details

SURFACE PREPARATION AND APPLICATION:
All areas should be clean, dry, free from dirt, dust, grease and any loose aggregate removed. Proteus Pro-Cold® should not be applied in wet conditions or when rain is imminent. The surface must be free of any visible moisture.
PRIMERS: Proteus Pro-Cold® is bitumen compatible, no primer required. Metal, concrete, single-ply, other coatings and porous surfaces will require priming. Consult the Proteus technical department for guidance.
MIXING: Proteus Pro-Cold® is to be mixed for at least 2-3 minutes or until liquid is uniform. May require extended mixing in low temperatures.
CURE TIMES: Allow minimum 4 to 6 hours to overcoat at 20°C. Cure times may be extended at low temperatures and low humidity. Typical overcoat time overnight/24hrs.
AIR TEMPERATURE: +2°C min. / +30˚C max.
SURFACE TEMPERATURE: +2˚C min. / +30˚C max.
SUBSTRATE MOISTURE CONTENT: Surface must be dry and not at risk of condensation forming.
DEW POINT: Surface Temp. 3˚C min. above dew point (metal surfaces will be more prone to temperature fluctuations occuring and will chill effects).
SHOWER PROOF: 30 minutes
LIFE EXPECTANCY: Minimum life expectancy to first major maintenance is 10, 15, or 20 years dependent on system.

STORAGE CONDITIONS/SHELF LIFE

STORAGE: Store in original, unopened and undamaged sealed packaging in dry conditions at temperatures >5˚c and <25˚C.
*Protect from Frost
SHELF LIFE: 9 Months- When sorted in accordance with the above recommendations.

COVERAGE RATES

Proteus Pro-Cold® Base Coat and Top Coat are the same material. The Base Coat is always fully reinforced while wet with Pro-Force 225gram/m² GFM. Note: Base Coat & Top Coat can be applied in two different colours.

SMALL ROOF AREAS: The 10 year system can be installed in one application, by installing as wet-on-wet with reinforcement.

VERTICAL/PITCHED: Substrates may require Top Coat applied in more than one application, to achieve the required system Dry Film Thickness (DFT).

Table Below assumes a non-porous, smooth substrate – Base Coat consumption may increase with rough/porous surfaces. For further information – Contact Proteus technical Services

Type of Substrate	Base Coat			Top Coat		
	10 Years	15 Years	20 Years	10 Years	15 Years	20 Years
Asphalt	1.0Ltr/m²	1.0Ltr/m²	1.0Ltr/m²	0.5Ltr/m²	0.75Ltr/m²	1.0Ltr/m²
Pro-Carrier SA	1.0Ltr/m²	1.0Ltr/m²	1.0Ltr/m²	0.5Ltr/m²	0.75Ltr/m²	1.0Ltr/m²
Mineral Felt	1.5Ltr/m²	1.5Ltr/m²	1.5Ltr/m²	0.5Ltr/m²	0.75Ltr/m²	1.0Ltr/m²

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TECHNICAL DATA

Specific weight UNI EN ISO 2811-1	1.50 ± 0.03 g/ml		
Viscosity at 20°C UNI EN ISO 2555	18.000 mPa .s		
Solid content EN ISO 3251	83±1% by volume, 87% by weight		
Theoretical consumption	2.000 -2500 g/m2		
Thickness	1000-1250 µm		
Curing at 22°C, 50% R.H.	Dry to the touch Insensitive to rain Over-application Completely cured	- - - -	4-6 hours 6 hours 24 hours 10 days
Permeability to carbon dioxide EN 1062-6	Sd > 50 m		
Permeability to water vapour EN ISO 7783-2	Sd < 5 m		
Capillary absorption and permeability to water EN ISO 1062-3	< 0.1 $kg/m^2 \cdot h^{0.5}$		
Adhesion to concrete (traction) EN 1542	> 6 MPa		
Tensile strength UNI EN 12311-2	> 6 M Pa		
Elongation at failure UNI EN 12311-2	> 600 % (Unreinforced)		
Shore A Hardness EN ISO 868	70		

PACKAGE DISPOSAL

The Hazardous Waste (England & Wales) (Amendment) Regulations 2016, The Special Waste Amendment (Scotland) Regulations 2004 and, The Hazardous Waste Regulations (Northern Ireland) 2005, state that all waste products which are classified as hazardous must be disposed of in the appropriate manner.

Once cured, Proteus Pro-Cold® forms an inert, non- hazardous plastic material that does not require specialised waste removal. All liquid material must be fully cured before disposal and it is recommended that hazard labels are either removed, covered or marked as "neutralised" to avoid possible misunderstanding as these hazards relate to the product in liquid form only.

FIRE TEST

STANDARD	RESULT
BROOF(t4) Highest European Fire Test Available	Pass
Flash Point	52˚C

HEALTH SAFETY

Refer to MSDS and tin label prior to use.

ADDITIONAL PRECAUTIONS

- Ensure all air conditioning units are switched off or isolated before application, to stop vapour being drawn into the building
- Always use Pro-Carrier Membrane SA between insulation boards and liquid coating
- Timber based roof decks, irregular substrates and areas with high movement require a separation layer (e.g. Pro-Carrier Membrane SA)
- Do not use to line fish ponds
- Do not apply cementitious products directly onto Proteus Pro-System® , grit salt and/or other de-icing agents must not be used between layers of Proteus Pro-System® as this may adversely alter the cure and inter-coat adhesion
- Where outgassing is likely for a particular substrate, Proteus Cold Melt® DPM Primer is to be applied (see separate datasheet)
- Use industrial safety gloves. Use suitable eye protection
- Do not dilute with any solvent
- Do not use for indoor applications

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FURTHER INFORMATION

All products should be sold in accordance with the manufacturer's instructions. The manufacturer cannot be held responsible where conditions of use are beyond our control. Proteus Waterproofing Ltd products are available for sale in accordance with Proteus Waterproofing Ltd's standard conditions of sale, which are available upon request. Whilst any information contained herein is to the best of our knowledge true and accurate, no warranty is given or implied in connection with any recommendations, agents, or distributors, as the conditions of use and any labour involved are beyond our control.

Our warranty is therefore limited to the quality of supplied product.

OTHER INFORMATION

Specification Guidance: A full bespoke specification is available upon request. Please contact Proteus Waterproofing for further details.

Approved Contractor Scheme: Proteus Waterproofing's Approved Contractor Scheme offers full training in its roofing systems. Please contact Proteus Waterproofing for further details.

Proteus Waterproofing Ltd. states to the best of its knowledge the information in this document is accurate and reliable as of the date of publication; however, the company does not assume any liability whatsoever for the accuracy and completeness of the above information.

Proteus Waterproofing Ltd. makes no warranties which extend beyond the description contained herein. It is the customer's responsibility to check this is the most up-to-date material safety datasheet.

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