

**Project Name:
The Source Youth Centre**



PROTEUS SYSTEM AND MEMBRANE RANGE

PROTEUS PRO-FELT® HIGH PERFORMANCE MEMBRANES

PROTEUS PRO-SYSTEM® COLD INSTALLED, SEAMLESS WATERPROOFING

PROTEUS PRO-THERM PIR WARM ROOF INSULATION

COLD MELT® BURIED/GREEN WATERPROOFING

PROTEUS HOT MELT® INVERTED/GREEN/ PODIUM DECK SYSTEMS

PROTEUS PRO-THERM XPS INVERTED ROOF INSULATION

PRO-BW® FAST CURE BALCONY WATERPROOFING



S_PSBUR15 concrete-timber deck_140618

Proteus Industrial Technologies Ltd.

21a Sirdar Road
Brook Road Industrial
Estate Rayleigh
Essex SS6 7XF

Tel: 01268 777 871
Fax: 0845 299 1215
Email: office@proteuswaterproofing.co.uk
www.proteuswaterproofing.co.uk



PROTEUS PRO-SYSTEM PLUS® BUR
Built Up Roof System
Timber Deck

Prepared for:	<p>Lawson Queay River House, Bellfarm Lane, Uckfield, East Sussex, TN22 1AY. Peter Myall pmyall@lawsonqueay.co.uk 01825 761644.</p> <p>Date: 20th Nov 2018</p>
Prepared by:	<p>Alan Joy Alan.joy@proteuswaterproofing.co.uk 07880 220016</p>
Site:	<p>The Source Youth Centre Uckfield East Sussex</p>
Description of roof Area(s):	<p>Hall Roof</p>
INTERNAL USE ONLY Substrate:	<p>100 Timber</p>



Description:

Following a site survey, the project brief is to strip existing build up and provide a new Proteus Waterproofing High Performance Built Up Roof with Seamless Waterproofing.

The new timber deck is to be overlaid with **PROTEUS PRO-SYSTEM PLUS® BUR**, improving the thermal performance and a lifespan for the roof of **20 years**.

Building Regulations - Approved Document L1B Conservation of fuel and power in existing buildings: requires that (when re-roofing), the existing roof construction must achieve the threshold U-value of **0.35 W/m²K** or better. If the threshold value is not achieved then the roof must be thermally upgraded to meet the current required maximum U-value of **0.18 W/m²K**.

Building Regulations – Part B Regulations for fire safety in residential homes, including new and existing dwellings, flats, residential accommodation, schools, colleges and offices. For these regulations to be correctly met, further information may be required to establish the appropriate insulation choice for this Specification; particularly above internal party walls and the provision of non-combustible insulation where necessary.

The following Specification has been prepared to meet this requirement by introducing:

PROTEUS PRO-THERM INSULATION 130mm is cold bonded to the upper face of the vapour control layer with **PRO-BOND FOAMING ADHESIVE**.

PROTEUS PRO-SYSTEM PLUS® BUR is a High Performance Built Up Roof system which is cold installed, greatly reducing the risk an open flame roof torch poses.

- Remove existing build up to Roof And Gutter
- Install new Timber Substrate
- Pro Prime SA WITH Pro Vapour SA
- Pro Therm Insulation with Pro Foaming Adhesive
- Pro Prime SA WITH Pro Carrier SA
- Embedment Coat Pro System Plus with Pro Force
- Top Coat Pro System Plus
- New Facias and Pro Edge Trims



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PHOTOGRAPHIC REPORT:



Roof to hall is mineral felt over 15mm fibre board on a cement board substrate, to be stripped and a new timber deck installed.





Lead lined gutter to be stripped out new timber installed and fully encapsulated from the roof finishing under a new metal profile roof on the Citizen's advice center section of the building.

SYSTEM SCHEDULE

Product	Description	Pack Size
Pro-Epoxy Primer	Primer for Metal Surfaces	5ltr
Pro-Prime® SA	Primer for Self-Adhesive Membranes	5ltr
Pro-Vapour Control Membrane SA	Self-Adhesive Vapour Control	1.08m x 20m
Pro-Bond Foaming Adhesive	Adhesive for Undulating Surfaces	750ml
Proteus Pro-Therm Insulation PIR	Flat Board Insulation	1200 x 600 x 130
Pro-Vapour Carrier Membrane SA	Self-Adhesive Carrier Membrane	1.08m x 20m
Proteus Pro-System Plus®	Liquid Waterproofing	15ltr
Pro-Force	Reinforcement Matting	0.95m x 127m
Proteus Sealant	Sealant	310ml x 12
Proteus Edge Trims	Edge/Drip Trims	3m



PRELIMINARIES/HEALTH & SAFETY:

Before tendering, the contractor should examine the drawings and specification documents, visit the site and ascertain all local conditions and restrictions, accessibility, the full extent and nature of the work, the supply and conditions affecting labour and the execution of the contract generally. No claims arising from failure to do so will be considered.

The contractor is to take their own roof core samples to satisfy themselves in regard to the existing roof build-up and to ascertain the extent of the work required in removing the existing roof covering. No claims arising from failure to do so will be considered.

All roofing materials are to be supplied by **Proteus Waterproofing** and to be fit for purpose and of the type and quality described herein. Any sub-standard materials will be rejected. No alternatives are to be used without written consent by **Proteus Waterproofing**.

All products must be stored according to the Manufacturer instructions, ideally inside a building or site container. However, if external storage is unavoidable, store clear of the ground or supporting surface and protected at all times from moisture, frost, mechanical damage etc. Rolls of waterproofing to be stored on end on a flat firm surface. Cover with a waterproof sheet allowing venting to avoid condensation build up.

The roof waterproofing work should adhere to **Building Regulations current document, Part L**. It is recommended confirmation of individual project requirements for thermal performance of the roof is sought by the client or the client's representatives from the local Building Control office before work commencement. When installing multi-layer waterproofing systems without insulation, **Proteus Waterproofing** understands that the consideration to thermal performance compliance under **Building Regulations Part L** is being dealt with separately by the client, and as requested will not form part of our recommendations.

Please contact **Proteus Waterproofing** to ascertain the correct **U Value** to be achieved.

It is the responsibility of the roofing contractor to liaise with the Main Contractor or Client concerning the possible temporary disruption or suspension of existing services to the building during the works.

Specified Exceptions:

Proteus Waterproofing specifically exclude the following, and cannot be held responsible or liable for any defects arising from;

Structural failures caused by additional loadings onto the roof, subsidence, heave or landslip to the building, fire, explosion, lightning, earthquake, storm, flood, bursting and overflowing of water tanks, apparatus or pipes, impact by aircraft and articles dropped from them, impact by vehicles, riot, civil commotion, malicious or deliberate damage, any other accidental damage, other third party installations, inherent or latent defects of the building or existing roofing system including the roof deck or the substrate, substrate movement, discharge or spillage of any third party substance (chemical or otherwise), water entry from adjacent structures or anywhere else in the building other than from the finished system, lack of maintenance and abnormal use.

The contractor shall employ none but fully qualified, competent tradesmen and the whole of the work shall be carried out and completed in accordance with industry "Best Practice".

The contractor shall carry out the works without undue inconvenience and nuisance and without danger to occupants and users.

Following completion of the installed, specified roofing works, provision should be given to the protection of all finished surfaces from damage by subsequent building operations. Additional work will be required to return the membrane to a warrantable condition if the membrane is damaged due to inadequate protection.

Any elements that may affect the future performance of the specified system shall be reported to the client and **Proteus Waterproofing** at the earliest possible opportunity. It is the responsibility of the contractor to acquaint themselves with all relevant codes of practice referred to within the specification. **Proteus Waterproofing** take no responsibility for misinterpretation or lack of knowledge for third parties.

The works shall be carried out in accordance with the requirements of **BS 6229:2003** Code of Practice for flat roofs with continuously supported coverings and **BS 8217:2004** Reinforced bitumen membranes for roofing Code of Practice.

The roofing membrane system, insulation and any ancillary items, (roof lights, trim, outlets) included in this specification shall be obtained from:

Proteus Waterproofing
21a Sirdar Road
Brook Road Industrial Estate
Rayleigh
Essex
SS6 7XF
Tel: 01268 777871

The works shall be carried out in accordance with all current relevant legislation, and recommendations from the **Health & Safety Executive (HSE)** including **HSG33 Health & Safety** in roof work.

The Contractor is to comply with **Control of Substances Hazardous to Health Regulations 1988**. All relevant information relating to hazard assessment to be submitted with tender.

The Contractor is to allow for all necessary temporary protection to leave the site weather tight at all times.

The Contractor is to allow for the removal from the site of all debris and surplus materials, which have arisen from the execution of the works.

The Contractor is to allow for protection of the works from traffic and damage during the construction period.

Where possible any newly installed roof decking should be protected, and covered from the weather to ensure drying out is not necessary. However, in the event of a roof becoming wet, it is important to ensure drying out is done safely.

There are several methods of drying out a roof that can be employed by the roofing contractor, but the most common method used due to speed and effectiveness is still by use of a gas torch. When a gas torch is to be used for drying, a thorough roof inspection of all fire related risks is essential. Where risks are identified, the operative must adopt a torch free area in line with the contractor's public liability insurance, however, it is recommended that this should be no less than 900mm.

Methods of drying within a restricted area will vary from wiping with dry rags, mops etc., then allowing natural weather conditions to finish the drying, or the use of hot air guns.

Please note that it is your responsibility as the contractor to ensure that all the recommendations detailed in this specification, and any changes or additions subsequently made, with or without Proteus' knowledge, particularly in respect of insulation design, are approved by a building control fire safety officer prior to the commencement of any works on site.

SCOPE OF WORKS

BUILT UP ROOF SPECIFICATION: PROTEUS PRO-SYSTEM PLUS® BUR				
Description	Size	No	£Unit	£Total
<p>Specification Validity: This Specification is valid for a period of 12 months, after which time it is recommended a further inspection is carried out in case changes require amendments to the proposed Specification. Should a site inspection by Proteus Waterproofing not have been carried out, this is to be arranged prior any works commencement to confirm the Specification. The site inspection may require changes and amendments to the proposed Specification.</p>				
<p>Substrate: This Document refers to the installation of PROTEUS PRO-SYSTEM PLUS® BUR onto a timber deck.</p>				
<p>Standard Application: PROTEUS PRO-SYSTEM PLUS® must not be applied in standing water or freezing conditions or if these conditions are likely to occur before the membrane has dried. Only apply at deck temperatures between +2C and +40C. Primers, sealants etc. may require higher atmospheric temperatures, check Product Data Sheets. Coverage rates can vary with temperature. Avoid storing in cold conditions prior to application. Coverage rates are for guidance only. Site application tests are recommended to confirm actual coverage rates.</p>				
<p>Colour Coded: PROTEUS PRO-SYSTEM PLUS® is applied in colour coded coats, allowing the embedment coat to fully dry before the application of subsequent coats. Apply subsequent coats at right angles to the previous, cured coat. Normal recoat time is 4-8 hours in ventilated conditions.</p>				



ROOF AND SUBSTRATE PREPARATION

Description	Size	No	£Unit	£Total
<p>General Building Works: Any associated building works, such as cutting chases, brick-work repairs, mortar joint repairs, rendering etc. should be carried out prior the installation of the roof system.</p>				
<p>Removal of Existing: The roof coverings and substrate board are to be carefully removed and disposed of ready to except new deck and gutter cheeks.</p>				
<p>Metal Surface: All metal surfaces to be coated should be wire brushed and cleaned before being primed.</p>				
<p>Oil & Grease Contaminants: To remove any persistent oil and grease, use a suitable detergent which is soap based.</p>				
<p>Drain Ware/ Outlets: Inspect all drain ware and/or rain outlets, including down pipes, to ensure free flow of waste water. Make ready to introduce a new PROTEUS REFURBISHMENT OUTLET. It is recommended drainage pipes are inspected using CCTV equipment.</p>				
<p>Detail Integrity: Check integrity of the existing substrate, skirting's and collars. Other details should be cut back if required, making sure the substrate is sound and dimensionally stable. All protrusion pipes should be extended where necessary to accommodate new waterproofing level.</p>				
<p>Edge Details: Existing defective trims, lead flashings and up-stand details must be removed and renewed ready to receive the new items.</p>				
<p>Roof Openings: At the end of each day ensure all openings are sealed to prevent water ingress. Identify redundant penetrations, which should be removed and disposed of. Any opening are to be sealed to prevent water ingress.</p>				
<p>Defective Timber/uPVC: Remove and replace any defective timber to the existing roof such as timber decks, structural joists, timber fillets, barge boards, fascias hard edges etc.</p>				

Description	Size	No	£Unit	£Total
<p>New Timber Deck/Gutter: Install new 18mm WPB plywood/OSB3 Board conforming to BS EN 1995. Fix the new plywood directly to the structure with non-corroding screw fastenings. Tape all timber joints. Prime the timber deck ready to receive the PRO-VAPOUR CONTROL/CARRIER MEMBRANE SA.</p>				



PRIMING

Description	Size	No	£/Unit	£/Total
Metal Substrate: Apply PRO-EPOXY PRIMER to all areas to be waterproofed @ a minimum rate of 0.15ltr/m² . Ensure that the primer is fully cured prior to the waterproofing system being applied. PRO-EPOXY PRIMER is supplied in two packs, Part A and Part B .				
Pro-Prime® SA: Apply PRO-PRIME® SA @ a minimum rate of 0.20ltr/m² to all substrate areas ready to accept PRO-VAPOUR CONTROL/CARRIER MEMBRANE SA .				
NOTE Coverage Rates: Uneven, rough and porous substrates may increase the stated coverage rates. 'Gridding' of the areas is essential to ensure correct film thickness.				



INSULATION AND WATERPROOFING

Description	Size	No	£Unit	£Total
<p>Building Regulations – Part B: This specification does not automatically meet Part B as further information about the general construction is required from the client to establish this requirement correctly.</p>				
<p>PROTEUS SELF-ADHESIVE VAPOUR CONTROL: Apply the PRO-VAPOUR CONTROL SA to the already primed areas. Weight should be applied to all areas to ensure a full bond (For best results use a weighted roller). Side Laps and head laps are to be a minimum of 75mm to ensure a watertight seal. The carrier membrane is to be continued onto the full skirtings, edge details etc.</p>				
<p>PROTEUS INSULATION ATTACHMENT: Immediately place PROTEUS PRO-THERM PIR INSULATION boards into foamed PRO-BOND FOAMING ADHESIVE applied @ a minimum coverage rate of 0.056ltr/m2. Do not slide boards into place. Do not allow the adhesive to 'skin' before installing insulation boards. (Stagger boards in a brick board format). Sumps to outlets and chutes must be a minimum of 500mm x 500mm square, and 50mm lower than the main insulated area. Hard Edges are to be fixed around the sump.</p>				
<p>Substrate deflections: Briefly step each board into place to ensure full contact with the vapour barrier. Substrates with irregular surfaces may prevent the insulation board from making positive contact with the vapour barrier. Relief cuts or temporary weights may be required to ensure proper contact. Tape the boards where required to ensure a continued, flat surface.</p>				
<p>Up-stands: All boards shall be cut and butted where the roof deck intersects a vertical surface. The boards shall be cut to fit a maximum of 6mm away from the vertical surface.</p>				
<p>Hard Edge: Hard edge details should be installed to form the edge when creating a change of direction to the waterproofing, including forming internal gutter detail.</p>				
<p>Night/Day Joints: Extend PRO-VAPOUR CONTROL/CARRIER MEMBRANE SA from the top of PROTEUS PRO-THERM PIR INSULATION onto the roof</p>				

Description	Size	No	£Unit	£Total
<p>substrate and all details/skirtings etc by a minimum of 100mm to form a watertight seal.</p> <p>PROTEUS PRO-SYSTEM PLUS® can also be used to form a night/day joint around complex detail to form a watertight seal.</p> <p>Do not leave openings which may allow water ingress into the Built Up Roof system.</p>				
<p>PROTEUS SELF-ADHESIVE CARRIER MEMBRANE:</p> <p>Apply the PRO-CARRIER MEMBRANE SA to the primed insulation and associated surfaces. Weight should be applied to all areas to ensure a full bond (For best results use a weighted roller). Side Laps and head laps are to be a minimum of 75mm to ensure a watertight seal. The carrier membrane is to be continued onto the full skirtings, edge details etc.</p>				
<p>Existing Substrate Embedment Coat:</p> <p>PROTEUS PRO-SYSTEM PLUS® embedment coat must be applied @ a minimum rate of:</p> <p>Pro-Carrier Membrane SA: @ a minimum rate of 1.25ltr/m2.</p> <p>Uneven, rough and porous substrates may increase the stated coverage rates. 'Gridding' of the areas is essential to ensure correct film thickness.</p>				
<p>Reinforcement:</p> <p>Whilst the embedment coat is still wet a layer of PRO-FORCE is to be fully saturated into this coat and cut to suit the profile of the roof.</p> <p>PROTEUS PRO-SYSTEM PLUS® embedment coat is to be 'drawn through' the PRO-FORCE. Allow the mat to be broken down by the embedment coat. Application is to be carried out using suitable rollers or brushes.</p> <p>Allow the reinforced first coat to cure prior to the application of the subsequent coat. Side lap and end lap details must be a minimum of 75mm.</p>				
<p>Embedment Coat Snagging:</p> <p>Prior the subsequent coat application, all areas of cured embedment coat must be inspected for outstanding wicks, pin holes and fibres, repair accordingly.</p>				
<p>20 Years Top Coat:</p> <p>PROTEUS PRO-SYSTEM® Top Coat must be applied at @ minimum rate of 0.75ltr/m2.</p>				

DETAILING

Description	Size	No	£Unit	£Total
<p>Perimeter Detail: Fix a new PROTEUS EDGE TRIM of an appropriate depth to the perimeter edge. The trims are to be mechanically fixed with screws at 300mm centres. A bridging piece is to be installed at each section joint. The trim is to overlap any openings by a minimum of 25mm. The PROTEUS PRO-SYSTEM® is to be terminated tightly into the top lip of the trim and sealed with PROTEUS SEALANT. Where required install new fascias (PVC) the clients specification.</p>				
<p>Rainwater Outlets: Install an appropriate PROTEUS REFURBISHMENT OUTLET and dress the system into the outlet as far as possible, encapsulating any pipe joints.</p>				
<p>Pipes and Protrusions: Apply the PROTEUS PRO-SYSTEM PLUS® system onto the primed protrusions 150mm above the finished waterproofing level. Install a stainless steel jubilee clip around the collar of the PROTEUS PRO-SYSTEM PLUS®.</p>				
<p>Change of levels: Dress the waterproofing system specified up and over the change of level step.</p>				
<p>Challenging Apertures: Dress PROTEUS PRO-SYSTEM PLUS® onto the underside the new/existing threshold. Seal to a minimum height of 150mm above the finished waterproofing level. Seal with PROTEUS SEALANT.</p>				
<p>Pitched Sheet Roofs: Pro System Plus is to terminate onto lay board under the new profiled sheet Roof</p>				
<p>Gutter New Pro system roof to be seamless transition into the new gutter</p>				



COMPLETION/CONTRACTORS/GUARANTEES

Description	Size	No	£Unit	£Total
<p>Inspection: The roof will be inspected by PROTEUS WATERPROOFING and a progress report undertaken to ensure all work is being carried out as per specification by the PROTEUS WATERPROOFING Licensed Contractor. The works will require an inspection to ensure the works meet the required standards, and have been executed by competent operatives.</p>				
<p>Proteus Snag List: A snagging list will be produced to be followed to address any areas deemed to be outside of the specification requirements.</p>				
<p>Final Sign off: At the completion of the specified project, all works must be signed off by PROTEUS WATERPROOFING to ensure the Proteus system within the specification has been applied as specified.</p>				
<p>LICENSED CONTRACTORS: PROTEUS WATERPROOFING Licensed Contractors must have been trained in the specified system. The Licensed Contractor must offer reasonable notice to Proteus Waterproofing of commencement of the works, so that regular inspections can be scheduled throughout the works program. The Guarantee can be issued following a final inspection of the works, as carried out by a trained, Licensed Contractor. The Licensed Contractor is to request the final inspection on practical completion of the contract. All snagging and corrections must be made prior the final inspection.</p>				
<p>PROTEUS INSURANCE BACKED GUARANTEE: A 20 Year Proteus Insurance Backed Guarantee is required, subject to the current terms and conditions of the guarantee which are available separately upon request. The installation of the Proteus system within the specification shall be carried out by a competent, Licensed Contractor Note: The insurance is an independent pre-paid policy supplied by an FCA regulated provider.</p>				

Approved Contractor List

<p>Clarke Roofing David Beer david@clarke-roofing.co.uk 01323 640 777 4 Hammonds Drive Eastbourne East Sussex BN23 6PW</p>	<p>Sussex Asphalte Ltd. Julian Coulter info@sussexasphalte.co.uk 01273 417 315 Clarendon Place Portslade Sussex BN41 1DJ</p>
<p>MITIE Tilley Roofing Company (Sevenoaks) Ralph Barrie Ralph.Barrie@mitie.com 01732 762 626 Chaucer House Chaucer Business Park Watery Lane Kemsing Sevenoaks TN15 6QY</p>	<p>Opus Waterproofing Solutions John Patterson john@opuswaterproofing.co.uk 01732 400115 27 Quarry Hill Road, Borough Green, Sevenoaks, TN15 8RQ</p>
<p>Richard Soan Roofing Services Ltd. Richard Soan enquiries@richardson.co.uk 01273 486 110 Daveys Lane Lewes East Sussex BN7 2BQ</p>	<p>Southern Mastic Asphalt Kevin Roe kevin@southernmasticroofing.com 01634 242 133 Unit E Birling Place Farm Stangate Road Birling Kent ME19 5JN</p>

Proteus Industrial Technologies Ltd.

21 Sirdar Road
Brook Road Industrial Estate
Rayleigh
Essex SS6 7XF

Tel: 0844 247 8 247

Fax: 0845 299 1215

Email: office@proteuswaterproofing.co.uk

www.proteuswaterproofing.co.uk

