



ALUMASC ROOFING

Proposed Specification

Project:
Brynglas House

Project ID: SP143935-S3
Date of issue: 14/01/2025



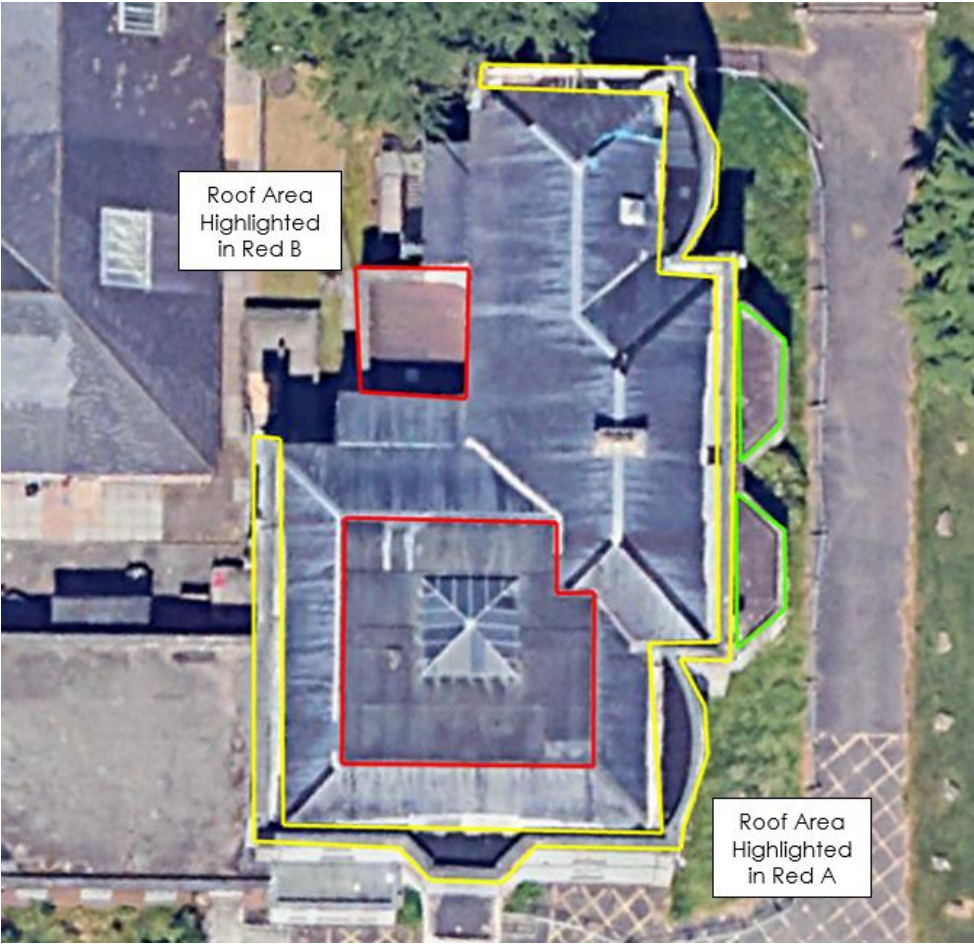
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This specification is based on the use of **Derbigum Olivine**, a glass and polyester reinforced, atactic polypropylene (APP)/Thermoplastic Polyolefin (TPO) polymer-modified bitumen membrane, which offers enhanced performance properties including flexibility, increased resistance to heat ageing and UV, excellent fire performance, and has a proven track record of success with a life of at least 50 years according to BBA certification.

It is surfaced with a natural olivine granule, which has an opaque olive-green appearance. The olivine (magnesium iron silicate) granules cause a chemical reaction to CO₂ in rainwater which converts it to harmless silicon dioxide (SiO₂, i.e. sand), magnesium carbonate (MgCO₃, i.e. inorganic salt) and water. One square metre of Derbigum Olivine will neutralise approx. 1.75kg of CO₂.

Derbigum Membrane is the subject of BBA Certificate 86/1593, and its manufacture is registered to ISO 14001. Derbigum Roofing Systems are subject of BBA Certificate 18/5563.

The Derbigum range is only supplied to registered contractors, whose contracts managers and operatives must undergo a stringent training programme at Alumasc's head office, prior to obtaining registered status. The quality of workmanship is monitored on-site on an ongoing basis to ensure compliance with the warranty and current codes of practice.

Alumasc Building Products Ltd is registered as a Firm of Assessed Capability, in accordance with BSI Quality Assurance Standard BS EN ISO 9001 – Registration Numbers Q06401 and FM35898.



This specification is based on the use of **Euroroof Self-Adhesive Cap Sheet**, a glass and polyester reinforced, SBS modified bitumen membrane which offers all the benefits of high performance membrane combined with flame-free application.

The Euroroof range is only supplied to registered contractors, whose contracts managers and operatives must undergo a stringent training programme at Alumasc's head office, prior to obtaining registered status. The quality of workmanship is monitored on-site on an ongoing basis to ensure compliance with the warranty and current codes of practice.

Alumasc Building Products Ltd is registered as a Firm of Assessed Capability, in accordance with BSI Quality Assurance Standard BS EN ISO 9001 – Registration Numbers Q06401 and FM35898.



This specification is based on the use of **Euroroof Premium Cap Sheet**, a polyester reinforced, superior atactic polypropylene (APP) polymer-modified bitumen membrane which offers enhanced performance properties including flexibility, increased resistance to heat ageing and UV, and excellent fire performance.

Euroroof Premium Cap Sheet is the subject of BBA Certificate 24/7275, and its manufacture is registered to ISO 14001.

The Euroroof range is only supplied to registered contractors, whose contracts managers and operatives must undergo a stringent training programme at Alumasc's head office, prior to obtaining registered status. The quality of workmanship is monitored on-site on an ongoing basis to ensure compliance with the warranty and current codes of practice.

Alumasc Building Products Ltd is registered as a Firm of Assessed Capability, in accordance with BSI Quality Assurance Standard BS EN ISO 9001 – Registration Numbers Q06401 and FM35898.



System Warranty - Roof Areas Highlighted in Red

The above specification/s shall be installed in accordance with the appropriate sections of all current relevant codes of practice, Building Regulations, and manufacturer's installation instructions for products supplied by the company. The works shall be installed by an Alumasc Registered Contractor, and, as agreed in the contract, the Alumasc Certificate of a 30 Year System Warranty shall be issued to the Building Owner from the date of final completion.

This warranty assures the building owner that, in the event that the roof fails to remain watertight as a consequence of latent defect in the waterproofing membrane supplied by Alumasc, details designed by Alumasc or faulty workmanship of the Alumasc Registered Contractor, Alumasc undertakes to reinstate the waterproof integrity of the roof.

This warranty is conditional upon the full system being purchased from Alumasc and installed in accordance with the above specification. Substitution of any products, or installation by means other than those described, will invalidate the warranty offered.

The warranty offered is subject to prevailing terms and conditions, available upon request.

System Warranty - Roof Areas Highlighted in Yellow & Green

The above specification/s shall be installed in accordance with the appropriate sections of all current relevant codes of practice, Building Regulations, and manufacturer's installation instructions for products supplied by the company. The works shall be installed by an Alumasc Registered Contractor, and, as agreed in the contract, the Alumasc Certificate of a 25 Year System Warranty shall be issued to the Building Owner from the date of final completion.

This warranty assures the building owner that, in the event that the roof fails to remain watertight as a consequence of latent defect in the waterproofing membrane supplied by Alumasc, details designed by Alumasc or faulty workmanship of the Alumasc Registered Contractor, Alumasc undertakes to reinstate the waterproof integrity of the roof.

This warranty is conditional upon the full system being purchased from Alumasc and installed in accordance with the above specification. Substitution of any products, or installation by means other than those described, will invalidate the warranty offered.

The warranty offered is subject to prevailing terms and conditions, available upon request.



Project information

Project: Brynglas House
Location: Newport
Postcode: NP20 5QU

Area 1: Roof Area Highlighted in Red A
Area 2: Roof Area Highlighted in Red B
Area 3: Roof Area Highlighted in Yellow
Area 4: Roof Area Highlighted in Green

Project ID: SP143935-S3
Date of issue: 14/01/2025

Client information

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Project Summary

AREA 1	
Project Information	
Building Type:	Commercial
Roof Name	Roof Area Highlighted in Red A
Roof Size (m2)	100
Slope	Min. 1:80
Height (Metres)	9
Exposure	Low
Core Sample	Plywood deck, two layer felt

Schedule of Products	
	ALUMASC BITUMEN PRIMER
	EUROROOF TORCH-ON AVCL
	130mm ALUMASC BGT PIR INSULATION
	EUROROOF PU INSULATION ADHESIVE
	HI-TEN UNIVERSAL UNDERLAY
	DERBIGUM OLIVINE CAP SHEET
	Safe2Torch FF Underlay: EurorooF Self-Adhesive Underlay
	Safe2Torch FF Cap Sheet: Derbigum Olivine Cap Sheet
	EUROROOF SA PRIMER
	EUROROOF DETAIL ADHESIVE
	ALUMASC PIR ANGLE FILLETS
	DERBIGUM BLACK (detail reinforcement strip)
	ALUMASC TERMINATION BAR
	ALUMASC ROOFING SEALANT
	ALUMASC GRP CHECK TRIM
	WALKWAY - CAP SHEET (In contrasting colour)

Preliminaries

The details contained within this proposal are based on information available at the time of writing and/or the condition of the roof when the Alumasc Site Survey Report was undertaken. It covers the correct installation of Alumasc products, and the preparation work necessary to provide a suitable substrate to receive the proposed works.

These proposals relate to the roof waterproofing area only. They do not include associated work to be carried out by other trades, which may be required to complete a satisfactory refurbishment. This specification is valid for 12 months from the date of issue.

Item	Description	Rate	Total
1.01	All works must comply with the requirements of the Health & Safety at Work Act and any additional requirements of the client. The contractor must liaise with the client or building owner to identify any potential hazards that could affect safe working practices prior to the commencement of works.		
1.02	A detailed method or work statement, design risk evaluation (Incl. RAMS), and program of works are to be provided by the roofing contractor and agreed by all relevant parties prior to commencing works.		
1.03	Employers and those in control of any work at height activity must assess the risk and put appropriate control measures in place by following a hierarchy of control measures such as making sure work is properly planned, supervised and carried out by competent people. This includes using the right type of equipment for working at height.		
1.04	Alumasc Roofing is a registered member of the NFRC Safe2Torch initiative to significantly reduce the risks when using gas torches, either to dry out roofs or when used to install torch-on membranes. Whilst the specification herein promotes safety best practice to mitigate risk identified at roof survey stage, it is the responsibility of the contractor to carry out their own assessment of the potential risks on all aspects of the contract by using flame-free products to any combustible materials that may be present (whether visible or not), or otherwise where there is a potential hazard. Alumasc will accept no liability for any loss, damage, or injury attributable to the use of a gas torch application on or adjacent to combustible materials. To all areas considered a risk, the contractor must enforce a torch-free zone as dictated by their own insurers, however, it is recommended that this should be no less than 900mm.		
1.05	If a naked flame is used for drying a roof surface, it is important that all operatives using a gas torch are familiar with and understand the principles of the Safe2Torch conditions as set out by the NFRC. Where the use of a naked flame is not permitted at any stage of the contract, drying the roof surface must be completed using hot air blowers, or a other suitable alternative method that does not involve using gas torches.		
1.06	Wherever a gas torch is employed, the contractor must observe the greater of a minimum one-hour fire watch, or the period dictated by their own insurers, after cessation of torching. Fire extinguishing equipment must be readily available in accordance with health and safety legislation.		
1.07	It is the responsibility of the client or building owner to ensure that the building shall be designed, constructed, or refurbished so that, in the event of a fire, the external envelope of the building has sufficient resistance to prevent fire spread across the relevant boundaries in accordance with all relevant sections of the Building Regulations. In the event of any doubt, further guidance should be sought from Building Control and/or a suitably qualified fire safety officer.		



Item	Description	Rate	Total
1.08	Where the Building Regulations and/or project design does not allow the use of combustible building materials such as timber, these elements are to be substituted for an A2-s1, d0 or A1 rated i.e. non-combustible alternative. If in doubt, consult with Alumasc technical services for further information and guidance.		
1.09	Safe and effective transport of materials to working level is to be determined by the contractor subject to on-site conditions and accessibility. Care must be taken when storing materials and equipment not to overload the deck or structure.		
1.10	All roofing materials supplied must be stored carefully undercover and raised clear of the ground, on a clean level surface, away from excessive heat. Bituminous rolls must be stored on end. Ideally, insulation should be stored inside wherever possible. If outside storage is unavoidable, the shrink wrap packaging alone is not under any circumstances sufficient and must be covered with tarpaulin or heavy duty waterproof sheets at all times. All adhesives, liquid products, and self-adhesive rolls are to be stored in a temperature controlled space >5°C. Containers which are opened must be carefully resealed and kept upright to prevent leakage.		
1.11	The contractor is responsible for coordination, supervision and administration of the works and is to give notice of the anticipated dates of completion for inspection in accordance with Alumasc requirements.		
1.12	Roofs accessed for regular maintenance of plant, or parts of the building, should be given consideration in providing a predetermined route to and from the entry point to minimise potential hazards.		
1.13	It is suggested that a provisional sum is allowed for to cover unspecified items and unforeseen issues that may become apparent during the course of works.		



Roof Area Highlighted in Red A

Specification					
2.0	Preparatory Works				
Item	Description	Qty	Unit	Rate	Total
2.01	STANDING WATER Standing water is present above the existing roof covering. Whilst the new proposed waterproofing system will be unaffected by limited areas of standing water, without rectification water may continue to hold as a consequence of the existing surface profile and inefficient falls present.				
2.02	CLEAR VEGETATION Vegetation, moss and lichen growths are to be carefully removed and cleared from site. The roof surface should then be cleaned using a fungicidal wash and pressure washed.				
2.03	POWER WASH ROOF All surfaces are to be power washed to ensure a clean surface suitable for inspection and any necessary repairs. A minimum of 1500 psi is recommended for power wash preparation. At no point should the power washer be operating at a high pressure whereby the substrate is being damaged during the cleaning process. Adjust the pressure if required to ensure all contaminants and friable materials are removed from the surface. Please note that suitable precautions must be made when working with high pressures to avoid high-risk areas of existing known failures. Ensure surface is fully dry before works commence.				
2.04	REPAIR EXISTING WATERPROOFING Remove all debris and non-adherent areas of existing finish. Prepare existing surface to provide an acceptable base for overlay roofing, cutting and sealing all blisters and buckles. Where areas are extensively affected cut back and dry out. Patch level with suitable repair materials compatible with the existing to match the adjacent level. Where temporary, insufficiently bonded, failed, or incompatible materials are present, remove to expose underlying compatible substrate. The existing surface is to be even and free from any irregularities that may compromise the works/and or performance. It is the responsibility of the appointed contractor to verify and report any deficiencies so that they can be corrected prior to the installation of the proposed works. Outlets and apertures must be temporarily protected from ingress of debris to prevent blockage of downpipe/s; protection should be removed during non-operating periods.				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
2.05	REMOVE ALL FELT FLASHINGS Remove existing felt skirtings, flashings, and all associated details. Any imperfections or damage to existing substrates, upstands etc. which are to receive new waterproofing must be made good with suitable repair materials prior to installation of the proposed works.				
2.06	RAISE EXISTING UPSTANDS Upstand details are likely to be compromised by the installation of the new waterproofing system. Where applicable, provision should be made to raise the upstand heights to achieve a minimum 150mm above the new finished roof level. Alumasc cannot take responsibility in the event of water ingress over and above the termination of our waterproofing. NB. The position of existing damp proof course/cavity trays must be considered. Care must be taken to ensure that termination of the new roofing system below, or appropriate rectification is made to ensure water cannot ingress behind the system.				
2.07	REMOVE SLATES Remove and safely set aside the bottom two or three courses of slates to facilitate the correct application of the waterproofing system. Provision should be made to ensure that a minimum 150mm upstand height is achieved parallel to the finished roof level, install additional layboard where required. Once the detail work is completed the slates must be reinstated and/or replaced. Care must be taken to ensure that any breather membrane/undertile felt is also reinstalled to ensure correct construction methods are maintained. Any broken or damaged slates must be replaced.				
2.08	INSPECT EXISTING RAINWATER GOODS Inspect and water test all rainwater goods including downpipes to ensure free drainage. Any defects are to be brought to the attention of the client and/or principal designer to agree on remedial action.				
2.09	REDUNDANT SUPPORTS Redundant steelwork beams and/or support plinths are to be removed and cleared from site. The disturbed surfaces are to be made good with suitable repair materials to finish level with surrounding area/s prior to installation of the proposed works.				
	Sub-total				



3.0	Substrate Preparation				
Item	Description	Qty	Unit	Rate	Total
3.01	PRIME EXISTING ROOFING Prior to application of the primer coat, all surfaces must be dry, clean, and free from all contaminants. Prime the existing waterproofing with Alumasc Bitumen Primer by roller or brush at the specified coverage rate ensuring an even and full coat across the substrate, allow to dry completely. Typical coverage rate: 6-12m²/L (150-300m² per 25 litre drum). Rough or porous surfaces will reduce the coverage rate, Drying time approx. 30 mins. dependent on ambient conditions, adapt accordingly to suit the temperature and humidity at the time of the installation. Do not apply if rainfall is imminent.				
	Sub-total				

4.0	Vapour Control				
Item	Description	Qty	Unit	Rate	Total
4.01	AIR & VAPOUR CONTROL LAYER Install Eurorof Torch-On AVCL to the primed substrate by torch application to achieve a continuous bond across the full width of the membrane, with 100mm side and 150mm end laps, leaving a continuous bead of bitumen extruded from all laps. Extend a separate flashing piece cut from the full width of the roll and fully seal around all penetrations and at the roof perimeter. Provide a minimum 75mm lap above the top of the insulation or angle fillet where applicable. A minimum 100mm lap must be provided at the foot of the detail to the field area. For insulated upstands, the AVCL is to be taken up the full extent of the detail. Flame-free installation methods and/or materials must be used in the vicinity of any potentially combustible materials which may be encountered (whether visible or not), or otherwise where it is considered appropriate by the contractor to minimise a potential hazard. Where applicable, stop short of the detail and complete using Eurorof Self-Adhesive AVCL fully bonded to the substrate, primed with Eurorof SA Primer. All side and end laps are to be heat sealed, leaving a continuous bead of bitumen extruded from all laps.				
	Sub-total				



5.0	Thermal Insulation				
Item	Description	Qty	Unit	Rate	Total
5.01	THERMAL INSULATION The surface must be clean, dry and free of any foreign materials. Install 130mm Alumasc BGT PIR Insulation to achieve U-value of 0.18W/m²K. Bond to the prepared surface using 10mm continuous parallel beads of Eurorof PU Insulation Adhesive evenly spaced at a rate of 4 beads per metre at 250mm centres to the field area (40m²/6kg can), and increasing to 6 beads per metre at 175mm centres to roof perimeters (30m²/6kg can). Coverage rates will vary depending on substrate conditions. Board edges are to be fully supported and laid in a staggered bond pattern with joints lightly butted. There should be no gaps at abutments. Where multiple layers are required, the board joints are to be staggered relative to each other and bonded as described. Insulation must be laid into the adhesive promptly and only enough applied that can be covered in a timely manner. Cure rates approx. 90 mins at 5°C 60 mins at 10°C 30 mins at 20°C 15 mins at 30°C. Eliminate uneven surfaces to ensure positive contact between the insulation board and surface area. Firmly press the board into place to ensure full contact and adhesion. Hard edge protection is to be provided to all exposed edges of the insulation. Make allowances where appropriate to accommodate the waterproofing layers and avoid creating a step. Minimum application temperature of PU adhesive is 5°C. In accordance with BS EN 1991-1-4, the roof perimeter zone is calculated for PU application purposes as either 2 x the building height, or the longest elevation, divided by 10, whichever is the smaller, but should be no less than 2m in width. These general guidelines are to be superseded by a project specific wind load calculation where applicable.				
	Sub-total				

6.0	Underlay				
Item	Description	Qty	Unit	Rate	Total
6.01	UNDERLAY Install Hi-Ten Universal Underlay by torch application to achieve a continuous bond across the full width of the membrane, with 100mm side and 150mm end laps, leaving a continuous bead of bitumen extruded from all laps.				
	Sub-total				



7.0	Cap Sheet				
Item	Description	Qty	Unit	Rate	Total
7.01	CAP SHEET Install Derbigum Olivine Cap Sheet by torch application to achieve a continuous bond across the full width of the membrane, with 100mm side and 150mm end laps, pressure rolled simultaneously with a long handled 15kg lap roller, leaving a 5-10mm continuous bead of bitumen extruded from all laps. Any excess compound is to be left as a continuous bead - do not spread or remove. - Position the membrane starting from the lowest point of the roof. - Membrane sheets must be staggered, avoiding any overlaps against the fall. - Pre-cut the lower corner of the end of each roll at 45° where it will be overlapped by the end lap of the next roll. - Apply the second layer of membrane astride and over the first layer (always in the same direction and approximately 1/4 of its length from the previous sheet). - Heat the entire surface, making sure that the compound forms a liquid mass in front of the roll (saturating any superficial porosity). NIGHT JOINTS Progress of the works will be such as to maintain the waterproof integrity of the roof/s. At the end of each working day, or earlier in the event of adverse weather, a night joint must be formed to seal off the completed (or part-completed) areas and prevent water ingress. All open laps and joints to be sealed in accordance with current codes of practice. ON COMPLETION Appropriate protection must be provided from all other trades, storage of materials, and foot traffic to maintain conditions that ensure installed work is without damage or deterioration during the entire construction period. Final inspection of the waterproofing (and/or leak testing where appropriate) must take place on completion and the protection is removed.				
	Sub-total				



8.0	BUR Detailing				
Item	Description	Qty	Unit	Rate	Total
8.01	DETAILING PRODUCTS Form using separate flashings of Hi-Ten Universal Underlay and Derbigum Olivine Cap Sheet, each to be fully bonded by torch application, leaving a continuous bead of bitumen extruded from all laps. All surfaces must be free from any irregularities that may adversely affect the adhesion of the membrane. Prime with Alumasc Bitumen Primer ensuring an even and full coat. Where overlaps or flashing pieces lap onto a mineral surfaced finish, warm and dress the granules into the pre-heated bitumen prior to sealing the overlap. Flame-free installation methods and/or materials must be used in the vicinity of any exposed potentially combustible materials which may be encountered (whether visible or not), or otherwise where it is considered appropriate by the contractor to minimise a potential hazard.				
8.02	FLAME-FREE DETAILING TO COMBUSTIBLE RISKS Form using separate flashings of Eurorof Self-Adhesive Underlay fully bonded by removing the release film, and Derbigum Olivine Cap Sheet fully adhered in Eurorof Detail Adhesive. Side and end laps are to be heat sealed, leaving a continuous bead of bitumen extruded from all laps. Eurorof Detail Adhesive is to be applied to both the specified underlay and the reverse side of the Derbigum membrane by brush or roller at an approx. coverage rate of 2m²/L ensuring full coverage. Avoid puddling as this will cause uneven drying. Firmly pressure roll the surface to achieve a continuous bond across the full width of the membrane. All surfaces to receive self-adhesive membranes must be even and free from any irregularities that may adversely affect the adhesion of the membrane. Prime with Eurorof SA Primer ensuring an even and full coat. It is the responsibility of the appointed contractor to undertake adhesion tests when using self-adhesive membranes to establish a full bond is achieved to the primed substrate. A method statement is available on request. Alumasc technical must be notified where the bond is found to be unsatisfactory. For un-insulated surfaces that are found to be rough or uneven, it is acceptable to use heat by application of hot-air to enhance the adhesion of the self-adhesive membrane.				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
8.03	VERTICAL DETAILING To all detail work install a 100x100mm reinforcing strip of Derbigum Black into the angle at all upstands prior to subsequent membranes being installed. Overlap the main field cap sheet onto the reinforcing strip by the full 100mm. Install a final flashing piece of the cap sheet, fully bonded to the upstand and overlapping onto the main horizontal sheet area by a minimum of 100mm. Alternatively, install Alumasc PIR Angle Fillets, 50x50mm, bedded in Alumasc PU Insulation Adhesive. In accordance with BS6229 Code of Practice for Flat Roofs, continuity of the waterproofing is to be maintained for a vertical height of 150mm above the finished roof level at all abutments. Alumasc cannot take responsibility in the event of water ingress over and above the termination of our waterproofing. Where upstands are greater than 250mm in height, the capping sheet flashing is to be mechanically fixed at the leading upper edge.				
8.04	UPSTAND TO PITCHED ROOF Inspect and carry out any repairs necessary. Dress the specified waterproofing system over a layboard to achieve a minimum 150mm upstand height parallel with the finished roof level and mechanically fasten the membrane at the top edge of the flashing detail using Alumasc Termination Bar. Ensure separate flashings are formed and the waterproofing is fully supported. Any breather membrane/undertile felt is to overlap the installed waterproofing ensuring best practice is maintained.				
8.05	CHECK KERB WITH GRP TRIM Install perimeter check kerb using treated timber to provide a minimum height of 50mm above the finished level of the waterproofing system. Splayed timber and/or angle fillets are required to provide a 45° chamfer to the inner face. Where applicable, raise the existing kerb height to achieve the above design requirement. Dress the specified waterproofing up and across the check kerb to the external edge. Install new Alumasc GRP Check Trim to outer edge, fixed at 300mm centres over the first layer of waterproofing. All lengths should be close butt jointed. Apply a secondary layer of waterproofing to the primed trim, overlapping onto the underlying membrane by a minimum of 100mm. Seal between top edge of trim and waterproofing with Alumasc Roofing Sealant. Depth of trim is to be confirmed by the appointed principal designer and/or contractor.				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
8.06	WALKWAY - CONTRASTING COLOUR Ensure the surface to be bonded is dry, clean and free from all contaminants. Install an additional layer of the specified mineral cap sheet fully bonded to the finished waterproofing to create a walkway for fire escape. The cap sheet should be of contrasting colour to highlight the desired route. Remove the salvage edge from the membrane prior to being installed.				
	Sub-total				



Project Summary

AREA 2

Project Information	
Building Type:	Commercial
Roof Name	Roof Area Highlighted in Red B
Roof Size (m2)	100
Slope	Min. 1:80
Height (Metres)	9
Exposure	Low
Plywood deck, VCL, 50mm PIR insulation, two layer felt	
Core Sample	Core sample is assumed due to no access and must be confirmed before works begin. This specification is subject to change upon confirmation.

Schedule of Products	
EUROROOF SA PRIMER	
EUROROOF SELF-ADHESIVE AVCL	
ALUMASC BGT PIR CUT TO FALLS INSULATION	
EUROROOF PU INSULATION ADHESIVE	
HI-TEN UNIVERSAL UNDERLAY	
DERBIGUM OLIVINE CAP SHEET	
ALUMASC BITUMEN PRIMER	
Safe2Torch FF Underlay: Euroroo Self-Adhesive Underlay	
Safe2Torch FF Cap Sheet: Derbigum Olivine Cap Sheet	
EUROROOF DETAIL ADHESIVE	
ALUMASC PIR ANGLE FILLETS	
DERBIGUM BLACK (detail reinforcement strip)	
ALUMASC TERMINATION BAR	
ALUMASC ROOFING SEALANT	
ALUMASC GRP CHECK TRIM	
ALUMASC GUTTERS & DOWNPIPES	
WALKWAY - CAP SHEET (In contrasting colour)	
ROOF-PRO - PIPE & DUCT SUPPORTS	

Preliminaries

The details contained within this proposal are based on information available at the time of writing and/or the condition of the roof when the Alumasc Site Survey Report was undertaken. It covers the correct installation of Alumasc products, and the preparation work necessary to provide a suitable substrate to receive the proposed works.

These proposals relate to the roof waterproofing area only. They do not include associated work to be carried out by other trades, which may be required to complete a satisfactory refurbishment. This specification is valid for 12 months from the date of issue.

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1.02	A detailed method or work statement, design risk evaluation (Incl. RAMS), and program of works are to be provided by the roofing contractor and agreed by all relevant parties prior to commencing works.		
1.03	Employers and those in control of any work at height activity must assess the risk and put appropriate control measures in place by following a hierarchy of control measures such as making sure work is properly planned, supervised and carried out by competent people. This includes using the right type of equipment for working at height.		
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1.07	It is the responsibility of the client or building owner to ensure that the building shall be designed, constructed, or refurbished so that, in the event of a fire, the external envelope of the building has sufficient resistance to prevent fire spread across the relevant boundaries in accordance with all relevant sections of the Building Regulations. In the event of any doubt, further guidance should be sought from Building Control and/or a suitably qualified fire safety officer.		



Item	Description	Rate	Total
1.08	Where the Building Regulations and/or project design does not allow the use of combustible building materials such as timber, these elements are to be substituted for an A2-s1, d0 or A1 rated i.e. non-combustible alternative. If in doubt, consult with Alumasc technical services for further information and guidance.		
1.09	Safe and effective transport of materials to working level is to be determined by the contractor subject to on-site conditions and accessibility. Care must be taken when storing materials and equipment not to overload the deck or structure.		
1.10	All roofing materials supplied must be stored carefully undercover and raised clear of the ground, on a clean level surface, away from excessive heat. Bituminous rolls must be stored on end. Ideally, insulation should be stored inside wherever possible. If outside storage is unavoidable, the shrink wrap packaging alone is not under any circumstances sufficient and must be covered with tarpaulin or heavy duty waterproof sheets at all times. All adhesives, liquid products, and self-adhesive rolls are to be stored in a temperature controlled space >5°C. Containers which are opened must be carefully resealed and kept upright to prevent leakage.		
1.11	The contractor is responsible for coordination, supervision and administration of the works and is to give notice of the anticipated dates of completion for inspection in accordance with Alumasc requirements.		
1.12	Roofs accessed for regular maintenance of plant, or parts of the building, should be given consideration in providing a predetermined route to and from the entry point to minimise potential hazards.		
1.13	It is suggested that a provisional sum is allowed for to cover unspecified items and unforeseen issues that may become apparent during the course of works.		



Roof Area Highlighted in Red B

Specification					
2.0	Preparatory Works				
Item	Description	Qty	Unit	Rate	Total
2.01	STRIP BACK EXISTING WATERPROOFING TO DECK Strip existing roofing sectionally from deck and fully inspect its condition. Prepare the existing deck renewing any defective sections prior to application of the new roofing system, provide additional fixings where necessary. Only strip as much as can be subsequently made watertight in the same day. All factors which may affect the subsequent performance of the roof e.g. failed structural elements, should be repaired prior to installation of the proposed works. The finished surface is to be even and free from any irregularities that may compromise the works/and or performance. It is the responsibility of the appointed contractor to verify and report any deficiencies so that they can be corrected prior to the installation of the proposed works. Outlets and apertures must be protected from ingress of debris to prevent blockage of downpipe/s; protection should be removed during non-operating periods.				
2.02	REMOVE ALL FELT FLASHINGS Remove existing felt skirtings, flashings, and all associated details. Any imperfections or damage to existing substrates, upstands etc. which are to receive new waterproofing must be made good with suitable repair materials prior to installation of the proposed works.				
2.03	RAISE EXISTING UPSTANDS Upstand details are likely to be compromised by the installation of the new waterproofing system. Where applicable, provision should be made to raise the upstand heights to achieve a minimum 150mm above the new finished roof level. Alumasc cannot take responsibility in the event of water ingress over and above the termination of our waterproofing. NB. The position of existing damp proof course/cavity trays must be considered. Care must be taken to ensure that termination of the new roofing system below, or appropriate rectification is made to ensure water cannot ingress behind the system.				
2.04	CUT BACK RENDER The existing render system and stop bead are to be carefully cut back to accommodate the increase in upstand height required by the installation of the new waterproofing system. A new termination detail is to be formed to match the original detail ensuring that a minimum 150mm above the new finished roof level is achieved.				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
2.05	REMOVE SLATES Remove and safely set aside the bottom two or three courses of slates to facilitate the correct application of the waterproofing system. Provision should be made to ensure that a minimum 150mm upstand height is achieved parallel to the finished roof level, install additional layboard where required. Once the detail work is completed the slates must be reinstated and/or replaced. Care must be taken to ensure that any breather membrane/undertile felt is also reinstalled to ensure correct construction methods are maintained. Any broken or damaged slates must be replaced.				
2.06	INSPECT EXISTING RAINWATER GOODS Inspect and water test all rainwater goods including downpipes to ensure free drainage. Any defects are to be brought to the attention of the client and/or principal designer to agree on remedial action.				
2.07	REDUNDANT SUPPORTS Redundant steelwork beams and/or support plinths are to be removed and cleared from site. The disturbed surfaces are to be made good with suitable repair materials to finish level with surrounding area/s prior to installation of the proposed works.				
2.08	EXTRACTION UNITS & DUCTING Mechanical extraction units are to be isolated and carefully set aside to facilitate the works by specialist skilled labour. Where applicable, kerbs are to be raised to achieve a minimum 150mm above the new finished roof level. Ductwork sections and supports are to be extended/adapted where necessary. On completion, any sections supported at roof level are to be reinstalled onto a sacrificial layer of cap sheet to protect the newly installed system.				
	Sub-total				



3.0	Substrate Preparation				
Item	Description	Qty	Unit	Rate	Total
3.01	PRIME SUBSTRATE Prior to application of the primer coat, all surfaces must be dry, clean, and free from all contaminants. Prime the substrate with Eurorof SA Primer by roller or brush at the specified coverage rate ensuring an even and full coat across the substrate, allow to touch dry. Only prime an area that can be subsequently covered on the same day. Typical coverage rate: 4-8m²/L (100-200m² per 25 litre drum). Rough or porous surfaces will reduce the coverage rate, Open time 5 - 30 mins. dependent on ambient conditions, adapt accordingly to suit the temperature and humidity at the time of the installation. Always check the product by touching with a gloved finger to check that it doesn't string when pressed to determine whether it is suitable for further product application. Do not apply if rainfall is imminent.				
	Sub-total				

4.0	Vapour Control				
Item	Description	Qty	Unit	Rate	Total
4.01	AIR & VAPOUR CONTROL LAYER Install Eurorof Self-Adhesive AVCL to the primed substrate with 75mm side and 100mm end laps. Remove the release film and firmly pressure roll the surface to achieve a continuous bond across the full width of the membrane. Ensure that the membrane is accurately aligned, including overlaps, before removing the release film, and that it does not move as the film is removed. Side and end laps are to be heat sealed leaving a continuous bead of bitumen extruded from all laps. Extend a separate flashing piece cut from the full width of the roll and fully seal around all penetrations and at the roof perimeter. Provide a minimum 75mm lap above the top of the insulation or angle fillet where applicable. A minimum 100mm lap must be provided at the foot of the detail to the field area. For insulated upstands, the AVCL is to be taken up the full extent of the detail. It is the responsibility of the installer to undertake adhesion tests to all non Alumasc supplied materials in advance of the primary application to verify a full bond is achieved to the primed substrate. Where there are any adhesion issues, consult Alumasc technical services. Installation must only proceed if proven to be satisfactory.				
	Sub-total				



5.0	Thermal Insulation				
Item	Description	Qty	Unit	Rate	Total
5.01	THERMAL INSULATION The surface must be clean, dry and free of any foreign materials. Install Alumasc BGT PIR Cut to Falls Insulation in accordance with the bespoke detailed installation plan provided. U-value target 0.18W/m²K. Bond to the prepared surface using 10mm continuous parallel beads of Eurorof PU Insulation Adhesive evenly spaced at a rate of 4 beads per metre at 250mm centres to the field area (40m²/6kg can), and increasing to 6 beads per metre at 175mm centres to roof perimeters (30m²/6kg can). Coverage rates will vary depending on substrate conditions. Board edges are to be fully supported and laid in a staggered bond pattern with joints lightly butted. There should be no gaps at abutments. Where multiple layers are required, the board joints are to be staggered relative to each other and bonded as described. Insulation must be laid into the adhesive promptly and only enough applied that can be covered in a timely manner. Cure rates approx. 90 mins at 5°C 60 mins at 10°C 30 mins at 20°C 15 mins at 30°C. Eliminate uneven surfaces to ensure positive contact between the insulation board and surface area. Firmly press the board into place to ensure full contact and adhesion. Hard edge protection is to be provided to all exposed edges of the insulation. Make allowances where appropriate to accommodate the waterproofing layers and avoid creating a step. Minimum application temperature of PU adhesive is 5°C. In accordance with BS EN 1991-1-4, the roof perimeter zone is calculated for PU application purposes as either 2 x the building height, or the longest elevation, divided by 10, whichever is the smaller, but should be no less than 2m in width. These general guidelines are to be superseded by a project specific wind load calculation where applicable. Cut to falls insulation schemes are designed to provide effective drainage for flat roofs. It cannot, however, be guaranteed that 100% drainage efficiency will be achieved primarily due to building and construction tolerances. Consequently, there may still be limited amounts of standing water after rainfall. In such cases, our waterproofing warranty remains valid and the integrity of the membrane is unaffected.				
	Sub-total				



6.0	Underlay				
Item	Description	Qty	Unit	Rate	Total
6.01	UNDERLAY Install Hi-Ten Universal Underlay by torch application to achieve a continuous bond across the full width of the membrane, with 100mm side and 150mm end laps, leaving a continuous bead of bitumen extruded from all laps.				
	Sub-total				

7.0	Cap Sheet				
Item	Description	Qty	Unit	Rate	Total
7.01	CAP SHEET Install Derbigum Olivine Cap Sheet by torch application to achieve a continuous bond across the full width of the membrane, with 100mm side and 150mm end laps, pressure rolled simultaneously with a long handled 15kg lap roller, leaving a 5-10mm continuous bead of bitumen extruded from all laps. Any excess compound is to be left as a continuous bead - do not spread or remove. - Position the membrane starting from the lowest point of the roof. - Membrane sheets must be staggered, avoiding any overlaps against the fall. - Pre-cut the lower corner of the end of each roll at 45° where it will be overlapped by the end lap of the next roll. - Apply the second layer of membrane astride and over the first layer (always in the same direction and approximately 1/4 of its length from the previous sheet). - Heat the entire surface, making sure that the compound forms a liquid mass in front of the roll (saturating any superficial porosity). NIGHT JOINTS Progress of the works will be such as to maintain the waterproof integrity of the roof/s. At the end of each working day, or earlier in the event of adverse weather, a night joint must be formed to seal off the completed (or part-completed) areas and prevent water ingress. All open laps and joints to be sealed in accordance with current codes of practice. ON COMPLETION Appropriate protection must be provided from all other trades, storage of materials, and foot traffic to maintain conditions that ensure installed work is without damage or deterioration during the entire construction period. Final inspection of the waterproofing (and/or leak testing where appropriate) must take place on completion and the protection is removed.				
	Sub-total				



8.0	BUR Detailing				
Item	Description	Qty	Unit	Rate	Total
8.01	DETAILING PRODUCTS Form using separate flashings of Hi-Ten Universal Underlay and Derbigum Olivine Cap Sheet, each to be fully bonded by torch application, leaving a continuous bead of bitumen extruded from all laps. All surfaces must be free from any irregularities that may adversely affect the adhesion of the membrane. Prime with Alumasc Bitumen Primer ensuring an even and full coat. Where overlaps or flashing pieces lap onto a mineral surfaced finish, warm and dress the granules into the pre-heated bitumen prior to sealing the overlap. Flame-free installation methods and/or materials must be used in the vicinity of any exposed potentially combustible materials which may be encountered (whether visible or not), or otherwise where it is considered appropriate by the contractor to minimise a potential hazard.				
8.02	FLAME-FREE DETAILING TO COMBUSTIBLE RISKS Form using separate flashings of Eurorof Self-Adhesive Underlay fully bonded by removing the release film, and Derbigum Olivine Cap Sheet fully adhered in Eurorof Detail Adhesive. Side and end laps are to be heat sealed, leaving a continuous bead of bitumen extruded from all laps. Eurorof Detail Adhesive is to be applied to both the specified underlay and the reverse side of the Derbigum membrane by brush or roller at an approx. coverage rate of 2m²/L ensuring full coverage. Avoid puddling as this will cause uneven drying. Firmly pressure roll the surface to achieve a continuous bond across the full width of the membrane. All surfaces to receive self-adhesive membranes must be even and free from any irregularities that may adversely affect the adhesion of the membrane. Prime with Eurorof SA Primer ensuring an even and full coat. It is the responsibility of the appointed contractor to undertake adhesion tests when using self-adhesive membranes to establish a full bond is achieved to the primed substrate. A method statement is available on request. Alumasc technical must be notified where the bond is found to be unsatisfactory. For un-insulated surfaces that are found to be rough or uneven, it is acceptable to use heat by application of hot-air to enhance the adhesion of the self-adhesive membrane.				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
8.03	VERTICAL DETAILING To all detail work install a 100x100mm reinforcing strip of Derbigum Black into the angle at all upstands prior to subsequent membranes being installed. Overlap the main field cap sheet onto the reinforcing strip by the full 100mm. Install a final flashing piece of the cap sheet, fully bonded to the upstand and overlapping onto the main horizontal sheet area by a minimum of 100mm. Alternatively, install Alumasc PIR Angle Fillets, 50x50mm, bedded in Alumasc PU Insulation Adhesive. In accordance with BS6229 Code of Practice for Flat Roofs, continuity of the waterproofing is to be maintained for a vertical height of 150mm above the finished roof level at all abutments. Alumasc cannot take responsibility in the event of water ingress over and above the termination of our waterproofing. Where upstands are greater than 250mm in height, the capping sheet flashing is to be mechanically fixed at the leading upper edge.				
8.04	UPSTAND WITH LEAD FLASHING Inspect and carry out any repairs to the upstand to ensure the substrate is suitable to receive the new waterproofing system. Dress the specified waterproofing system to the upstand, ensure separate flashings are formed. Install Code 4 lead flashing chased into the upstand by a minimum of 25mm, secure in place with Hall Clips at 450mm centres and where flashing pieces overlap. Use appropriate Lead Pointing Sealant, or the more traditional method of mortar to point in the lead. Carry out all lead work in accordance with the Lead Sheet Association recommendations.				
8.05	UPSTAND WITH TERMINATION BAR Inspect and carry out any repairs to the upstand to ensure the substrate is suitable to receive the new waterproofing system. Dress the specified waterproofing system to the upstand, ensure separate flashings are formed. Mechanically fix Alumasc Termination Bar at a maximum 300mm centres placed at the top edge of the flashing detail, and seal with Alumasc Roofing Sealant.				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
8.06	ENCAPSULATE PARAPET - GRP TRIM Inspect and carry out any repairs to the upstand. Board over rough surfaces to the top and internal face of the perimeter upstands with new exterior grade plywood to BS EN 636-2, or Oriented strand board (OSB 3) to BS EN 300-OSB/3, prior to waterproofing works. Dress the specified waterproofing up and across the parapet detail to the external edge, ensure separate flashings are formed and the waterproofing is fully supported. Install new Alumasc GRP Check Trim to outer edge, fixed at 300mm centres over the first layer of waterproofing. All lengths should be close butt jointed. Apply a secondary layer of waterproofing to the primed trim, overlapping onto the underlying membrane by a minimum of 100mm. Seal between top edge of trim and waterproofing with Alumasc Roofing Sealant. Depth of trim is to be confirmed by the appointed principal designer and/or contractor.				
8.07	NEW GUTTERS/DOWNPipes Install new Alumasc Gutters & Downpipes to all appropriate edges as directed by the client or principal designer. Specification of goods is to be provided under separate cover. Rainwater goods must be tested by the appointed contractor upon completion of the works prior to handover.				
8.08	FORM NEW INTERNAL GUTTER A new internal gutter is to be formed within the insulation. Secure treated timber battens to define the outer edge of the gutter for the full length. The thickness should be reduced compared with the adjacent insulation to avoid creating a step in the waterproofing. Install a reduced thickness of the specified insulation to the sole of the gutter. Refer to Alumasc quotation for the required thickness of insulation. Dress the specified waterproofing into the gutter sole increasing the membrane laps to 150mm to provide additional security.				
	Sub-total				



Waterproofing Specification

Brynglas House

Item	Description	Qty	Unit	Rate	Total
8.09	WALKWAY - CONTRASTING COLOUR Ensure the surface to be bonded is dry, clean and free from all contaminants. Install an additional layer of the specified mineral cap sheet fully bonded to the finished waterproofing to create a walkway for fire escape. The cap sheet should be of contrasting colour to highlight the desired route. Remove the salvage edge from the membrane prior to being installed.				
Sub-total					

9.0		Accessories			
Item	Description	Qty	Unit	Rate	Total
9.01	ROOF-PRO NON-PENETRATIVE SUPORTS Roof-Pro offers a range of pre-fabricated systems tailored to meet all project requirements to support Pipework Runs, Ductwork Runs, Cable Runs and Combined Services Runs. Standard and bespoke solutions are available to provide the most cost-effective and coordinated solution. Each support solution is designed to ensure maximum wind stability and effective load management. The requirements are to be finalised with the client and/or principal designer and confirmed under separate cover. Further details can be found via the following link: http://www.roof-pro.co.uk				
Sub-total					



Project Summary

AREA 3	
Project Information	
Building Type:	Commercial
Roof Name	Roof Area Highlighted in Yellow
Roof Size (m2)	60
Slope	Min. 1:80
Height (Metres)	9
Exposure	Low
Timber deck, geotextile membrane with lead	
Core Sample	Core sample is assumed due to no access and must be confirmed before works begin. This specification is subject to change upon confirmation.

Schedule of Products	
EUROROOF SA PRIMER	
EUROROOF SELF-ADHESIVE UNDERLAY	
EUROROOF SELF-ADHESIVE CAP SHEET	
ALUMASC PIR ANGLE FILLETS	
ALUMASC GRP CHECK TRIM	
ALUMASC ROOFING SEALANT	
ALUMASC GUTTERS & DOWNPIPES	

Preliminaries

The details contained within this proposal are based on information available at the time of writing and/or the condition of the roof when the Alumasc Site Survey Report was undertaken. It covers the correct installation of Alumasc products, and the preparation work necessary to provide a suitable substrate to receive the proposed works.

These proposals relate to the roof waterproofing area only. They do not include associated work to be carried out by other trades, which may be required to complete a satisfactory refurbishment. This specification is valid for 12 months from the date of issue.

Item	Description	Rate	Total
1.01	All works must comply with the requirements of the Health & Safety at Work Act and any additional requirements of the client. The contractor must liaise with the client or building owner to identify any potential hazards that could affect safe working practices prior to the commencement of works.		
1.02	A detailed method or work statement, design risk evaluation (Incl. RAMS), and program of works are to be provided by the roofing contractor and agreed by all relevant parties prior to commencing works.		
1.03	Employers and those in control of any work at height activity must assess the risk and put appropriate control measures in place by following a hierarchy of control measures such as making sure work is properly planned, supervised and carried out by competent people. This includes using the right type of equipment for working at height.		
1.04	Alumasc Roofing is a registered member of the NFRC Safe2Torch initiative to significantly reduce the risks when using gas torches, either to dry out roofs or when used to install torch-on membranes. Whilst the specification herein promotes safety best practice to mitigate risk identified at roof survey stage, it is the responsibility of the contractor to carry out their own assessment of the potential risks on all aspects of the contract by using flame-free products to any combustible materials that may be present (whether visible or not), or otherwise where there is a potential hazard. Alumasc will accept no liability for any loss, damage, or injury attributable to the use of a gas torch application on or adjacent to combustible materials. To all areas considered a risk, the contractor must enforce a torch-free zone as dictated by their own insurers, however, it is recommended that this should be no less than 900mm.		
1.05	If a naked flame is used for drying a roof surface, it is important that all operatives using a gas torch are familiar with and understand the principles of the Safe2Torch conditions as set out by the NFRC. Where the use of a naked flame is not permitted at any stage of the contract, drying the roof surface must be completed using hot air blowers, or a other suitable alternative method that does not involve using gas torches.		
1.06	Wherever a gas torch is employed, the contractor must observe the greater of a minimum one-hour fire watch, or the period dictated by their own insurers, after cessation of torching. Fire extinguishing equipment must be readily available in accordance with health and safety legislation.		
1.07	It is the responsibility of the client or building owner to ensure that the building shall be designed, constructed, or refurbished so that, in the event of a fire, the external envelope of the building has sufficient resistance to prevent fire spread across the relevant boundaries in accordance with all relevant sections of the Building Regulations. In the event of any doubt, further guidance should be sought from Building Control and/or a suitably qualified fire safety officer.		



Item	Description	Rate	Total
1.08	Where the Building Regulations and/or project design does not allow the use of combustible building materials such as timber, these elements are to be substituted for an A2-s1, d0 or A1 rated i.e. non-combustible alternative. If in doubt, consult with Alumasc technical services for further information and guidance.		
1.09	Safe and effective transport of materials to working level is to be determined by the contractor subject to on-site conditions and accessibility. Care must be taken when storing materials and equipment not to overload the deck or structure.		
1.10	All roofing materials supplied must be stored carefully undercover and raised clear of the ground, on a clean level surface, away from excessive heat. Bituminous rolls must be stored on end. Ideally, insulation should be stored inside wherever possible. If outside storage is unavoidable, the shrink wrap packaging alone is not under any circumstances sufficient and must be covered with tarpaulin or heavy duty waterproof sheets at all times. All adhesives, liquid products, and self-adhesive rolls are to be stored in a temperature controlled space >5°C. Containers which are opened must be carefully resealed and kept upright to prevent leakage.		
1.11	The contractor is responsible for coordination, supervision and administration of the works and is to give notice of the anticipated dates of completion for inspection in accordance with Alumasc requirements.		
1.12	Roofs accessed for regular maintenance of plant, or parts of the building, should be given consideration in providing a predetermined route to and from the entry point to minimise potential hazards.		
1.13	It is suggested that a provisional sum is allowed for to cover unspecified items and unforeseen issues that may become apparent during the course of works.		



Roof Area Highlighted in Yellow

Specification					
2.0	Preparatory Works				
Item	Description	Qty	Unit	Rate	Total
2.01	STRIP BACK EXISTING LEAD TO DECK Strip existing lead sectionally from deck and fully inspect its condition. Prepare the existing deck renewing any defective sections prior to application of the new roofing system, provide additional fixings where necessary. Only strip as much as can be subsequently made watertight in the same day. All factors which may affect the subsequent performance of the roof e.g. failed structural elements, should be repaired prior to installation of the proposed works. The finished surface is to be even and free from any irregularities that may compromise the works/and or performance. It is the responsibility of the appointed contractor to verify and report any deficiencies so that they can be corrected prior to the installation of the proposed works. Outlets and apertures must be protected from ingress of debris to prevent blockage of downpipe/s; protection should be removed during non-operating periods.				
2.02	REMOVE ALL WATERPROOFING FLASHINGS Remove existing waterproofing from skirtings, flashings, and all associated details. Any imperfections or damage to existing substrates, upstands etc. which are to receive new waterproofing must be made good with suitable repair materials prior to installation of the proposed works.				
2.03	RAISE EXISTING UPSTANDS Upstand details are likely to be compromised by the installation of the new waterproofing system. Where applicable, provision should be made to raise the upstand heights to achieve a minimum 150mm above the new finished roof level. Alumasc cannot take responsibility in the event of water ingress over and above the termination of our waterproofing. NB. The position of existing damp proof course/cavity trays must be considered. Care must be taken to ensure that termination of the new roofing system below, or appropriate rectification is made to ensure water cannot ingress behind the system.				
2.04	CUT BACK RENDER The existing render system and stop bead are to be carefully cut back to accommodate the increase in upstand height required by the installation of the new waterproofing system. A new termination detail is to be formed to match the original detail ensuring that a minimum 150mm above the new finished roof level is achieved.				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
2.05	COPING STONES Carefully remove all existing coping stones from the parapet and clear from site.				
2.06	REMOVE SLATES Remove and safely set aside the bottom two or three courses of slates to facilitate the correct application of the waterproofing system. Provision should be made to ensure that a minimum 150mm upstand height is achieved parallel to the finished roof level, install additional layboard where required. Once the detail work is completed the slates must be reinstated and/or replaced. Care must be taken to ensure that any breather membrane/undertile felt is also reinstalled to ensure correct construction methods are maintained. Any broken or damaged slates must be replaced.				
2.07	INSPECT EXISTING RAINWATER GOODS Inspect and water test all rainwater goods including downpipes to ensure free drainage. Any defects are to be brought to the attention of the client and/or principal designer to agree on remedial action.				
2.08	REDUNDANT SUPPORTS Redundant steelwork beams and/or support plinths are to be removed and cleared from site. The disturbed surfaces are to be made good with suitable repair materials to finish level with surrounding area/s prior to installation of the proposed works.				
2.09	CABLES Existing cables are to be temporarily removed or raised for the duration of the works to facilitate the installation of the new waterproofing system. The client is to be consulted to determine the best approach. All cables are to be repositioned on completion of works as necessary.				
	Sub-total				



3.0	Substrate Preparation				
Item	Description	Qty	Unit	Rate	Total
3.01	PRIME SUBSTRATE Prior to application of the primer coat, all surfaces must be dry, clean, and free from all contaminants. Prime the substrate with Eurorof SA Primer by roller or brush at the specified coverage rate ensuring an even and full coat across the substrate, allow to touch dry. Only prime an area that can be subsequently covered on the same day. Typical coverage rate: 4-8m²/L (100-200m² per 25 litre drum). Rough or porous surfaces will reduce the coverage rate, Open time 5 - 30 mins. dependent on ambient conditions, adapt accordingly to suit the temperature and humidity at the time of the installation. Always check the product by touching with a gloved finger to check that it doesn't string when pressed to determine whether it is suitable for further product application. Do not apply if rainfall is imminent.				
	Sub-total				

4.0	Underlay				
Item	Description	Qty	Unit	Rate	Total
4.01	UNDERLAY Install Eurorof Self-Adhesive Underlay to the primed surface with 75mm side and 150mm end laps. Remove the release film and firmly pressure roll the surface to achieve a continuous bond across the full width of the membrane. Ensure that the membrane is accurately aligned, including overlaps, before removing the release film, and that it does not move as the film is removed. Side and end laps are to be heat sealed leaving a continuous bead of bitumen extruded from all laps. It is the responsibility of the installer to undertake adhesion tests to all non Alumasc supplied materials in advance of the primary application to verify a full bond is achieved to the primed substrate. Where there are any adhesion issues, consult Alumasc technical services. Installation must only proceed if proven to be satisfactory. Prime all surfaces with Eurorof SA Primer prior to application.				
	Sub-total				



5.0	Cap Sheet				
Item	Description	Qty	Unit	Rate	Total
5.01	CAP SHEET Install Eurorof Self-Adhesive Cap Sheet to the primed substrate with 100mm side and 150mm end laps. Remove the release film and firmly pressure roll the surface to achieve a continuous bond across the full width of the membrane. Ensure that the membrane is accurately aligned, including overlaps, before removing the release film, and that it does not move as the film is removed. Side and end laps are to be heat sealed and pressure rolled simultaneously with a long handled 15kg lap roller, leaving a 5-10mm continuous bead of bitumen extruded from all laps. Any excess compound is to be left as a continuous bead - do not spread or remove. For hot air welding it is recommended that automatic welders are used for all field joints. Manual hand held welders should be ideally used for detailing and inaccessible areas only. - Position the membrane starting from the lowest point of the roof. - Membrane sheets must be staggered, avoiding any overlaps against the fall. - Pre-cut the lower corner of the end of each roll at 45° where it will be overlapped by the end lap of the next roll. - Apply the second layer of membrane astride and over the first layer (always in the same direction and approximately 1/4 of its length from the previous sheet). It is the responsibility of the installer to undertake adhesion tests to all non Alumasc supplied materials in advance of the primary application to verify a full bond is achieved to the primed substrate. Where there are any adhesion issues, consult Alumasc technical services. Installation must only proceed if proven to be satisfactory. All surfaces are to be primed with Eurorof SA Primer, except where Eurorof Duo Self-Adhesive Underlay is specified. NIGHT JOINTS Progress of the works will be such as to maintain the waterproof integrity of the roof/s. At the end of each working day, or earlier in the event of adverse weather, a night joint must be formed to seal off the completed (or part-completed) areas and prevent water ingress. All open laps and joints to be sealed in accordance with current codes of practice. ON COMPLETION Appropriate protection must be provided from all other trades, storage of materials, and foot traffic to maintain conditions that ensure installed work is without damage or deterioration during the entire construction period. Final inspection of the waterproofing (and/or leak testing where appropriate) must take place on completion and the protection is removed.				
	Sub-total				



6.0	BUR Detailing				
Item	Description	Qty	Unit	Rate	Total
6.01	DETAILING PRODUCTS Form using separate flashings of Eurorof Self-Adhesive Underlay and Eurorof Self-Adhesive Cap Sheet, each to be fully bonded by removing the release film. Side and end laps are to be heat sealed and firmly pressure rolled, leaving a continuous bead of bitumen extruded from all laps. All surfaces must be even and free from any irregularities that may adversely affect the adhesion of the membrane. Prime with Eurorof SA Primer ensuring an even and full coat. It is the responsibility of the appointed contractor to undertake adhesion tests when using self-adhesive membranes to establish a full bond is achieved to the primed substrate. A method statement is available on request. Alumasc technical must be notified where the bond is found to be unsatisfactory. For un-insulated surfaces that are found to be rough or uneven, it is acceptable to use heat by application of torch or hot-air to enhance the adhesion of the self-adhesive membrane. The appropriate use of heat is subject to the absence of combustible materials.				
6.02	VERTICAL DETAILING To all detail work install a 100x100mm reinforcing strip of the Alumasc specified underlay into the angle at all upstands prior to subsequent membranes being installed. Overlap the main field cap sheet onto the reinforcing strip by the full 100mm. Install a final flashing piece of the cap sheet, fully bonded to the upstand and overlapping onto the main horizontal sheet area by a minimum of 100mm. Alternatively, install Alumasc PIR Angle Fillets, 50x50mm, bedded in Alumasc PU Insulation Adhesive. In accordance with BS6229 Code of Practice for Flat Roofs, continuity of the waterproofing is to be maintained for a vertical height of 150mm above the finished roof level at all abutments. Alumasc cannot take responsibility in the event of water ingress over and above the termination of our waterproofing. Where upstands are greater than 250mm in height, the capping sheet flashing is to be mechanically fixed at the leading upper edge.				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
6.03	UPSTAND WITH LEAD FLASHING Inspect and carry out any repairs to the upstand to ensure the substrate is suitable to receive the new waterproofing system. Dress the specified waterproofing system to the upstand, ensure separate flashings are formed. Install Code 4 lead flashing chased into the upstand by a minimum of 25mm, secure in place with Hall Clips at 450mm centres and where flashing pieces overlap. Use appropriate Lead Pointing Sealant, or the more traditional method of mortar to point in the lead. Carry out all lead work in accordance with the Lead Sheet Association recommendations.				
6.04	ENCAPSULATE PARAPET - GRP TRIM Inspect and carry out any repairs to the upstand. Board over rough surfaces to the top and internal face of the perimeter upstands with new exterior grade plywood to BS EN 636-2, or Oriented strand board (OSB 3) to BS EN 300-OSB/3, prior to waterproofing works. Dress the specified waterproofing up and across the parapet detail to the external edge, ensure separate flashings are formed and the waterproofing is fully supported. Install new Alumasc GRP Check Trim to outer edge, fixed at 300mm centres over the first layer of waterproofing. All lengths should be close butt jointed. Apply a secondary layer of waterproofing to the primed trim, overlapping onto the underlying membrane by a minimum of 100mm. Seal between top edge of trim and waterproofing with Alumasc Roofing Sealant. Depth of trim is to be confirmed by the appointed principal designer and/or contractor.				
6.05	NEW GUTTERS/DOWNPipes Install new Alumasc Gutters & Downpipes to all appropriate edges as directed by the client or principal designer. Specification of goods is to be provided under separate cover. Rainwater goods must be tested by the appointed contractor upon completion of the works prior to handover.				
	Sub-total				



Project Summary

AREA 4

Project Information	
Building Type:	Commercial
Roof Name	Roof Area Highlighted in Green
Roof Size (m2)	40
Slope	Min. 1:80
Height (Metres)	9
Exposure	Low
Plywood deck, VCL, 50mm PIR insulation, two layer felt	
Core Sample	Core sample is assumed due to no access and must be confirmed before works begin. This specification is subject to change upon confirmation.

Schedule of Products	
EUROROOF SA PRIMER	
EUROROOF SELF-ADHESIVE AVCL	
ALUMASC BGT PIR CUT TO FALLS INSULATION	
EUROROOF PU INSULATION ADHESIVE	
EUROROOF PREMIUM UNDERLAY	
EUROROOF PREMIUM CAP SHEET	
ALUMASC BITUMEN PRIMER	
Safe2Torch FF Underlay: Euroroo Self-Adhesive Underlay	
Safe2Torch FF Cap Sheet: Euroroo Self-Adhesive Cap Sheet	
ALUMASC PIR ANGLE FILLETS	
ALUMASC GRP CHECK TRIM	
ALUMASC ROOFING SEALANT	
ALUMASC GUTTERS & DOWNPIPES	



Preliminaries

The details contained within this proposal are based on information available at the time of writing and/or the condition of the roof when the Alumasc Site Survey Report was undertaken. It covers the correct installation of Alumasc products, and the preparation work necessary to provide a suitable substrate to receive the proposed works.

These proposals relate to the roof waterproofing area only. They do not include associated work to be carried out by other trades, which may be required to complete a satisfactory refurbishment. This specification is valid for 12 months from the date of issue.

Item	Description	Rate	Total
1.01	All works must comply with the requirements of the Health & Safety at Work Act and any additional requirements of the client. The contractor must liaise with the client or building owner to identify any potential hazards that could affect safe working practices prior to the commencement of works.		
1.02	A detailed method or work statement, design risk evaluation (Incl. RAMS), and program of works are to be provided by the roofing contractor and agreed by all relevant parties prior to commencing works.		
1.03	Employers and those in control of any work at height activity must assess the risk and put appropriate control measures in place by following a hierarchy of control measures such as making sure work is properly planned, supervised and carried out by competent people. This includes using the right type of equipment for working at height.		
1.04	Alumasc Roofing is a registered member of the NFRC Safe2Torch initiative to significantly reduce the risks when using gas torches, either to dry out roofs or when used to install torch-on membranes. Whilst the specification herein promotes safety best practice to mitigate risk identified at roof survey stage, it is the responsibility of the contractor to carry out their own assessment of the potential risks on all aspects of the contract by using flame-free products to any combustible materials that may be present (whether visible or not), or otherwise where there is a potential hazard. Alumasc will accept no liability for any loss, damage, or injury attributable to the use of a gas torch application on or adjacent to combustible materials. To all areas considered a risk, the contractor must enforce a torch-free zone as dictated by their own insurers, however, it is recommended that this should be no less than 900mm.		
1.05	If a naked flame is used for drying a roof surface, it is important that all operatives using a gas torch are familiar with and understand the principles of the Safe2Torch conditions as set out by the NFRC. Where the use of a naked flame is not permitted at any stage of the contract, drying the roof surface must be completed using hot air blowers, or a other suitable alternative method that does not involve using gas torches.		
1.06	Wherever a gas torch is employed, the contractor must observe the greater of a minimum one-hour fire watch, or the period dictated by their own insurers, after cessation of torching. Fire extinguishing equipment must be readily available in accordance with health and safety legislation.		
1.07	It is the responsibility of the client or building owner to ensure that the building shall be designed, constructed, or refurbished so that, in the event of a fire, the external envelope of the building has sufficient resistance to prevent fire spread across the relevant boundaries in accordance with all relevant sections of the Building Regulations. In the event of any doubt, further guidance should be sought from Building Control and/or a suitably qualified fire safety officer.		



Item	Description	Rate	Total
1.08	Where the Building Regulations and/or project design does not allow the use of combustible building materials such as timber, these elements are to be substituted for an A2-s1, d0 or A1 rated i.e. non-combustible alternative. If in doubt, consult with Alumasc technical services for further information and guidance.		
1.09	Safe and effective transport of materials to working level is to be determined by the contractor subject to on-site conditions and accessibility. Care must be taken when storing materials and equipment not to overload the deck or structure.		
1.10	All roofing materials supplied must be stored carefully undercover and raised clear of the ground, on a clean level surface, away from excessive heat. Bituminous rolls must be stored on end. Ideally, insulation should be stored inside wherever possible. If outside storage is unavoidable, the shrink wrap packaging alone is not under any circumstances sufficient and must be covered with tarpaulin or heavy duty waterproof sheets at all times. All adhesives, liquid products, and self-adhesive rolls are to be stored in a temperature controlled space >5°C. Containers which are opened must be carefully resealed and kept upright to prevent leakage.		
1.11	The contractor is responsible for coordination, supervision and administration of the works and is to give notice of the anticipated dates of completion for inspection in accordance with Alumasc requirements.		
1.12	Roofs accessed for regular maintenance of plant, or parts of the building, should be given consideration in providing a predetermined route to and from the entry point to minimise potential hazards.		
1.13	It is suggested that a provisional sum is allowed for to cover unspecified items and unforeseen issues that may become apparent during the course of works.		



Roof Area Highlighted in Green

Specification					
2.0	Preparatory Works				
Item	Description	Qty	Unit	Rate	Total
2.01	STRIP BACK EXISTING WATERPROOFING TO DECK Strip existing roofing sectionally from deck and fully inspect its condition. Prepare the existing deck renewing any defective sections prior to application of the new roofing system, provide additional fixings where necessary. Only strip as much as can be subsequently made watertight in the same day. All factors which may affect the subsequent performance of the roof e.g. failed structural elements, should be repaired prior to installation of the proposed works. The finished surface is to be even and free from any irregularities that may compromise the works/and or performance. It is the responsibility of the appointed contractor to verify and report any deficiencies so that they can be corrected prior to the installation of the proposed works. Outlets and apertures must be protected from ingress of debris to prevent blockage of downpipe/s; protection should be removed during non-operating periods.				
2.02	REMOVE ALL FELT FLASHINGS Remove existing felt skirtings, flashings, and all associated details. Any imperfections or damage to existing substrates, upstands etc. which are to receive new waterproofing must be made good with suitable repair materials prior to installation of the proposed works.				
2.03	RAISE EXISTING UPSTANDS Upstand details are likely to be compromised by the installation of the new waterproofing system. Where applicable, provision should be made to raise the upstand heights to achieve a minimum 150mm above the new finished roof level. Alumasc cannot take responsibility in the event of water ingress over and above the termination of our waterproofing. NB. The position of existing damp proof course/cavity trays must be considered. Care must be taken to ensure that termination of the new roofing system below, or appropriate rectification is made to ensure water cannot ingress behind the system.				
2.04	CUT BACK RENDER The existing render system and stop bead are to be carefully cut back to accommodate the increase in upstand height required by the installation of the new waterproofing system. A new termination detail is to be formed to match the original detail ensuring that a minimum 150mm above the new finished roof level is achieved.				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
2.05	BRICKWORK/MASONRY Inspect masonry and mortar joints which are not be covered by the proposed works for damage, make good with compatible materials where required. Mortar joints must be sound and preferably flush pointed.				
2.06	INSPECT EXISTING RAINWATER GOODS Inspect and water test all rainwater goods including downpipes to ensure free drainage. Any defects are to be brought to the attention of the client and/or principal designer to agree on remedial action.				
	Sub-total				

3.0	Substrate Preparation				
Item	Description	Qty	Unit	Rate	Total
3.01	PRIME SUBSTRATE Prior to application of the primer coat, all surfaces must be dry, clean, and free from all contaminants. Prime the substrate with Eurorof SA Primer by roller or brush at the specified coverage rate ensuring an even and full coat across the substrate, allow to touch dry. Only prime an area that can be subsequently covered on the same day. Typical coverage rate: 4-8m²/L (100-200m² per 25 litre drum). Rough or porous surfaces will reduce the coverage rate, Open time 5 - 30 mins. dependent on ambient conditions, adapt accordingly to suit the temperature and humidity at the time of the installation. Always check the product by touching with a gloved finger to check that it doesn't string when pressed to determine whether it is suitable for further product application. Do not apply if rainfall is imminent.				
	Sub-total				

4.0	Vapour Control				
Item	Description	Qty	Unit	Rate	Total
4.01	AIR & VAPOUR CONTROL LAYER Install Eurorof Self-Adhesive AVCL to the primed substrate with 75mm side and 100mm end laps. Remove the release film and firmly pressure roll the surface to achieve a continuous bond across the full width of the membrane. Ensure that the membrane is accurately aligned, including overlaps, before removing the release film, and that it does not move as the film is removed. Side and end laps are to be heat sealed leaving a continuous bead of bitumen extruded from all laps.				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
4.01	Extend a separate flashing piece cut from the full width of the roll and fully seal around all penetrations and at the roof perimeter. Provide a minimum 75mm lap above the top of the insulation or angle fillet where applicable. A minimum 100mm lap must be provided at the foot of the detail to the field area. For insulated upstands, the AVCL is to be taken up the full extent of the detail. It is the responsibility of the installer to undertake adhesion tests to all non Alumasc supplied materials in advance of the primary application to verify a full bond is achieved to the primed substrate. Where there are any adhesion issues, consult Alumasc technical services. Installation must only proceed if proven to be satisfactory.				
	Sub-total				

5.0	Thermal Insulation				
Item	Description	Qty	Unit	Rate	Total
5.01	THERMAL INSULATION The surface must be clean, dry and free of any foreign materials. Install Alumasc BGT PIR Cut to Falls Insulation in accordance with the bespoke detailed installation plan provided. U-value target 0.18W/m²K. Bond to the prepared surface using 10mm continuous parallel beads of Eurorof PU Insulation Adhesive evenly spaced at a rate of 4 beads per metre at 250mm centres to the field area (40m²/6kg can), and increasing to 6 beads per metre at 175mm centres to roof perimeters (30m²/6kg can). Coverage rates will vary depending on substrate conditions. Board edges are to be fully supported and laid in a staggered bond pattern with joints lightly butted. There should be no gaps at abutments. Where multiple layers are required, the board joints are to be staggered relative to each other and bonded as described. Insulation must be laid into the adhesive promptly and only enough applied that can be covered in a timely manner. Cure rates approx. 90 mins at 5°C 60 mins at 10°C 30 mins at 20°C 15 mins at 30°C. Eliminate uneven surfaces to ensure positive contact between the insulation board and surface area. Firmly press the board into place to ensure full contact and adhesion. Hard edge protection is to be provided to all exposed edges of the insulation. Make allowances where appropriate to accommodate the waterproofing layers and avoid creating a step. Minimum application temperature of PU adhesive is 5°C.				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
5.01	In accordance with BS EN 1991-1-4, the roof perimeter zone is calculated for PU application purposes as either 2 x the building height, or the longest elevation, divided by 10, whichever is the smaller, but should be no less than 2m in width. These general guidelines are to be superseded by a project specific wind load calculation where applicable. Cut to falls insulation schemes are designed to provide effective drainage for flat roofs. It cannot, however, be guaranteed that 100% drainage efficiency will be achieved primarily due to building and construction tolerances. Consequently, there may still be limited amounts of standing water after rainfall. In such cases, our waterproofing warranty remains valid and the integrity of the membrane is unaffected.				
	Sub-total				

6.0	Underlay				
Item	Description	Qty	Unit	Rate	Total
6.01	UNDERLAY Install Eurorof Premium Underlay by torch application to achieve a continuous bond across the full width of the membrane, with 100mm side and 150mm end laps, leaving a continuous bead of bitumen extruded from all laps.				
	Sub-total				

7.0	Cap Sheet				
Item	Description	Qty	Unit	Rate	Total
7.01	CAP SHEET Install Eurorof Premium Cap Sheet by torch application to achieve a continuous bond across the full width of the membrane, with 100mm side and 150mm end laps, pressure rolled simultaneously with a long handled 15kg lap roller, leaving a 5-10mm continuous bead of bitumen extruded from all laps. Any excess compound is to be left as a continuous bead - do not spread or remove. - Position the membrane starting from the lowest point of the roof. - Membrane sheets must be staggered, avoiding any overlaps against the fall. - Pre-cut the lower corner of the end of each roll at 45° where it will be overlapped by the end lap of the next roll. - Apply the second layer of membrane astride and over the first layer (always in the same direction and approximately 1/4 of its length from the previous sheet). - Heat the entire surface, making sure that the compound forms a liquid mass in front of the roll (saturating any superficial porosity).				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
7.01	NIGHT JOINTS Progress of the works will be such as to maintain the waterproof integrity of the roof/s. At the end of each working day, or earlier in the event of adverse weather, a night joint must be formed to seal off the completed (or part-completed) areas and prevent water ingress. All open laps and joints to be sealed in accordance with current codes of practice. ON COMPLETION Appropriate protection must be provided from all other trades, storage of materials, and foot traffic to maintain conditions that ensure installed work is without damage or deterioration during the entire construction period. Final inspection of the waterproofing (and/or leak testing where appropriate) must take place on completion and the protection is removed.				
	Sub-total				

8.0	BUR Detailing				
Item	Description	Qty	Unit	Rate	Total
8.01	DETAILING PRODUCTS Form using separate flashings of Eurorof Premium Underlay and Eurorof Premium Cap Sheet, each to be fully bonded by torch application, leaving a continuous bead of bitumen extruded from all laps. All surfaces must be free from any irregularities that may adversely affect the adhesion of the membrane. Prime with Alumasc Bitumen Primer ensuring an even and full coat. Where overlaps or flashing pieces lap onto a mineral surfaced finish, warm and dress the granules into the pre-heated bitumen prior to sealing the overlap. Flame-free installation methods and/or materials must be used in the vicinity of any exposed potentially combustible materials which may be encountered (whether visible or not), or otherwise where it is considered appropriate by the contractor to minimise a potential hazard.				
	Sub-total				



Item	Description	Qty	Unit	Rate	Total
8.02	FLAME-FREE DETAILING TO COMBUSTIBLE RISKS Form using separate flashings of Eurorof Self-Adhesive Underlay, and Eurorof Self-Adhesive Cap Sheet, each to be fully bonded by removing the release film. Side and end laps are to be heat sealed and firmly pressure rolled, leaving a continuous bead of bitumen extruded from all laps. All surfaces to receive self-adhesive membranes must be even and free from any irregularities that may adversely affect the adhesion of the membrane. Prime with Eurorof SA Primer, including the underlay, ensuring an even and full coat. It is the responsibility of the appointed contractor to undertake adhesion tests when using self-adhesive membranes to establish a full bond is achieved to the primed substrate. A method statement is available on request. Alumasc technical must be notified where the bond is found to be unsatisfactory. For un-insulated surfaces that are found to be rough or uneven, it is acceptable to use heat by application of hot-air to enhance the adhesion of the self-adhesive membrane.				
8.03	VERTICAL DETAILING To all detail work install a 100x100mm reinforcing strip of the Alumasc specified underlay into the angle at all upstands prior to subsequent membranes being installed. Overlap the main field cap sheet onto the reinforcing strip by the full 100mm. Install a final flashing piece of the cap sheet, fully bonded to the upstand and overlapping onto the main horizontal sheet area by a minimum of 100mm. Alternatively, install Alumasc PIR Angle Fillets, 50x50mm, bedded in Alumasc PU Insulation Adhesive. In accordance with BS6229 Code of Practice for Flat Roofs, continuity of the waterproofing is to be maintained for a vertical height of 150mm above the finished roof level at all abutments. Alumasc cannot take responsibility in the event of water ingress over and above the termination of our waterproofing. Where upstands are greater than 250mm in height, the capping sheet flashing is to be mechanically fixed at the leading upper edge.				
8.04	UPSTAND WITH LEAD FLASHING Inspect and carry out any repairs to the upstand to ensure the substrate is suitable to receive the new waterproofing system. Dress the specified waterproofing system to the upstand, ensure separate flashings are formed. Install Code 4 lead flashing chased into the upstand by a minimum of 25mm, secure in place with Nail Clips at 450mm centres and where flashing pieces overlap. Use appropriate Lead Pointing Sealant, or the more traditional method of mortar to point in the lead. Carry out all lead work in accordance with the Lead Sheet Association recommendations.				
	Sub-total				



Waterproofing Specification

Brynglas House

Item	Description	Qty	Unit	Rate	Total
8.05	ENCAPSULATE PARAPET - GRP TRIM Inspect and carry out any repairs to the upstand. Board over rough surfaces to the top and internal face of the perimeter upstands with new exterior grade plywood to BS EN 636-2, or Oriented strand board (OSB 3) to BS EN 300-OSB/3, prior to waterproofing works. Dress the specified waterproofing up and across the parapet detail to the external edge, ensure separate flashings are formed and the waterproofing is fully supported. Install new Alumasc GRP Check Trim to outer edge, fixed at 300mm centres over the first layer of waterproofing. All lengths should be close butt jointed. Apply a secondary layer of waterproofing to the primed trim, overlapping onto the underlying membrane by a minimum of 100mm. Seal between top edge of trim and waterproofing with Alumasc Roofing Sealant. Depth of trim is to be confirmed by the appointed principal designer and/or contractor.				
8.06	NEW GUTTERS/DOWNPipes Install new Alumasc Gutters & Downpipes to all appropriate edges as directed by the client or principal designer. Specification of goods is to be provided under separate cover. Rainwater goods must be tested by the appointed contractor upon completion of the works prior to handover.				
	Sub-total				



Health & Safety

It is strictly the contractor's responsibility to ensure that all works are executed in accordance with current health and safety legislation. Work at Height Regulations 2005. Guidance may be taken from HSE publication reference: HSG33 - Health and Safety in Roof Work; INDG284 - Working on roofs & INDG401 - Working at Height.

It is imperative that safe access, egress, and edge/fall protection which complies with the Workplace (Health, Safety and Welfare) Regulations 1992 is in place for the duration of the works, inspection, and maintenance of the warranted AlumasC Roofing system throughout its life cycle.

Safety scaffolding, the location of rubbish skips, access ladders etc. should be agreed upon with the client and/or principal contractor and be in accordance with current Health and Safety regulations.

A COSHH assessment should be carried out for all materials used to adequately control, exposure to substances hazardous to health. Keeping a copy of the safety data sheet is not a COSHH assessment.

Product and Material Safety Data Sheets are available for all relevant products supplied by AlumasC; available for download from <http://www.alumascroofing.com>

Inspection

Regular site inspections will be made by AlumasC Roofing during the works to ensure that the installation is executed to satisfy the warranty requirements and relevant standards. A report will be issued detailing the works observed during the inspection and will, where applicable, make recommendations for appropriate rectification which the contractor is to undertake.

Final warranty inspection: It is strictly the responsibility of the registered contractor to notify AlumasC to arrange an inspection upon completion of each stage of the works, and that the inspection takes place prior to the application of any surfacing above the waterproof covering.

Once the final inspection has been carried out, the warranty will be issued via the roofing contractor upon acceptable rectification of any snags as identified by AlumasC, or without undue delay should all be satisfactory.

In situations where works can only be undertaken outside of standard business hours as stipulated by the building owner, they cannot be monitored by AlumasC, and as a result, the company won't take responsibility or be liable for any outcome related to that work. AlumasC can only undertake regular inspections during business hours to inspect the quality and progress subject to agreement with the building owner.

All inspections and/or maintenance actions carried out at roof level must be in full compliance with the Work at Height Regulations 2005 Hierarchy of controls; Employers and those in control of any work at height activity must assess the risk and put appropriate control measures in place such as making sure work is properly planned, supervised and carried out by competent people. This includes using the right type of equipment for working at height.

Maintenance

It is recommended that a flat roof be inspected at a minimum frequency of twice a year; in spring and autumn accounting for the effects of annual extremes of weather. Inspection should also be carried out following works on the roof by other trades, or following installation of new roof equipment.

- ✓ Check the exposed membrane for any signs of mechanical or chemical damage.
- ✓ Remove any unnecessary debris from the roof area (especially objects which could cause damage).
- ✓ Clear any blockages to outlet gratings/drainage points/gutters (e.g. leaves, litter, and sediment).
- ✓ Cut back overhanging trees where applicable.
- ✓ Check visually for any loosened flashings at perimeters and penetrations.
- ✓ Check soundness of pointing and any mastic sealants at terminations.
- ✓ Ensure continuity of surface protection e.g. ballast covering where present.
- ✓ Inspect rooflights and other penetrations for any damage (e.g. cracks to glazing, missing vent tops), which could result in leakage and/or condensation.
- ✓ Check for any other building components for soundness (e.g. patent glazing, parapet walls etc.)
- ✓ Keep records of your inspections for future reference.

Further guidance can be taken from BS6229 Flat Roofs With Continuously Supported Coverings - Code of Practice.



General Information

- Prior to execution the Alumasc project specification, associated drawings, and installation instructions for all materials must be studied, understood and followed. These proposals relate to the roof waterproofing area only. They do not include associated works which are to be carried out by appropriately trained tradesmen as part of the works.
- Installation may only be carried out by Alumasc registered operatives, who have sufficient training for each specialist system and awareness to work safely, under the direction of qualified supervisors. The contractor must ensure they have "trained & carded" operatives for the relevant Alumasc Waterproofing System prior to works. Additionally, at least one carded and trained operative must be on site at all times during the installation.
- A physical inspection is required by the contractor to verify the condition of the roof prior to commencement of works. It is the contractor's sole responsibility to fully acquaint themselves with the extent of the works and the conditions under which they are to be executed. Any discrepancies found between the specification and/or site report provided are to be highlighted by the contractor to the contract administrator prior to installation.
- The contractor shall carry out the works in accordance with all statutory requirements and "Best Practice". Should any detail arise where it is not clear how this can be achieved, the contractor is to seek advice and approval for all proposals from Alumasc before completing the works.
- The contractor must ensure satisfactory aesthetic appearance of the completed works is achieved.
- The design must take account of all structural factors to ensure that the waterproof covering is able to accommodate the effect of movement to avoid stress or deformation under these conditions. It is the responsibility of the client and/or their appointed design professional to notify Alumasc accordingly if applicable so that appropriate measures can be considered.
- Where applicable, in accordance with current legislation provision is to be made for insulation to minimise the effects of thermal bridging e.g. roof/wall abutment etc. to be determined by the appointed design professional and/or Building Control.
- Unless otherwise calculated and/or notified the specification proposal will assume a wind load figure of no greater than 3.6 kN/m² for a fully bonded application and 2.4 kN/m² for a partially bonded application. Alumasc must be notified where the wind load is known to exceed these parameters to confirm suitability.
- Where applicable, all roof services and plant, access walkways, platforms, pipes etc. are to be mounted on suitable support systems e.g. as supplied by Roof-Pro, providing at least 500mm clearance above the roof membrane, in order to facilitate access for future inspection/maintenance or repair.
- The waterproofing components' resistance to dead and imposed loading must be assessed to avoid failure of the component/and or reduction in performance. Where resistance is deemed inadequate, suitable measures to mitigate load intensity will need to be considered.
- The building owner or their appointed design professional must have satisfied themselves that the roof structure and deck are suitable to receive the dead load of the proposed specification.
- Where applicable, all work on fragile roofs must be carried out in accordance with current Health and Safety legislation, with specific reference to the Working at Height Regulations 2005, HSG33 Health & Safety in Roof Work and HSE Document INDG284: Working on Roofs. A risk assessment must be carried out by the relevant parties prior to any works being undertaken. The Health & Safety Executive should be contacted for further information if guidance on this matter is required.
- It is strictly the responsibility of the client and/or their appointed design professional to ensure compliance of the proposed specification with all relevant Building Regulations by consultation with Building Control. In the event of any doubt about the interpretation or application of the Building Regulations in relation to any of the works, clarification must be sought directly from Building Control.
- The substitution of any products (or installation by means other than those described) is strictly prohibited unless agreed in writing, in advance, with Alumasc Building Products Ltd.
- Alumasc Building Products Ltd will not accept any liability arising from unauthorised variations or un-notified changes in circumstances relating to the application or performance of Alumasc products or systems. We reserve the right to make alterations in keeping with technical developments or improvements.

