



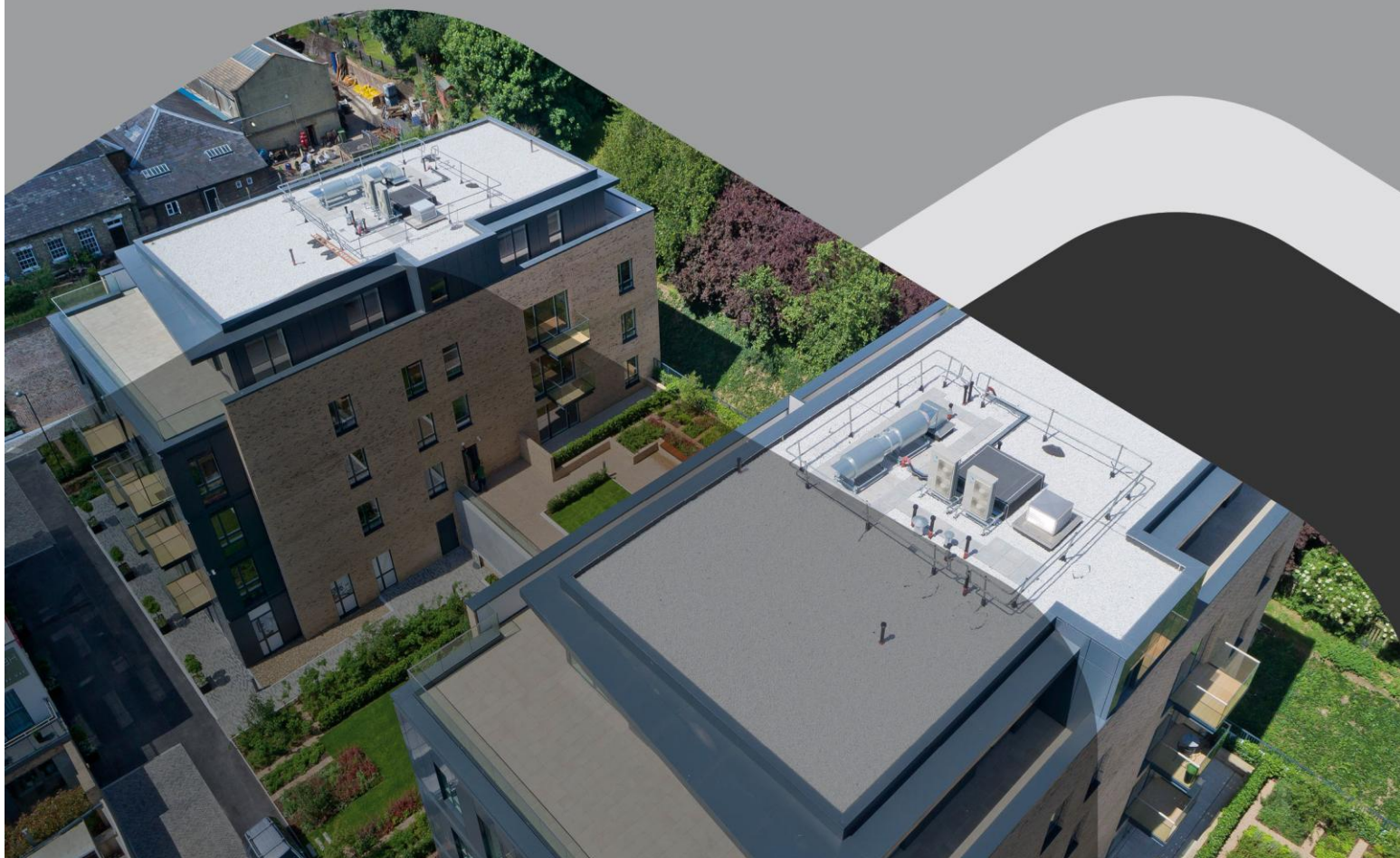
# ALUMASC ROOFING

## Proposed Specification

Project:  
Civic Centre Newport

Project ID: SP143805-S16R1

Date of issue: 10/08/2026



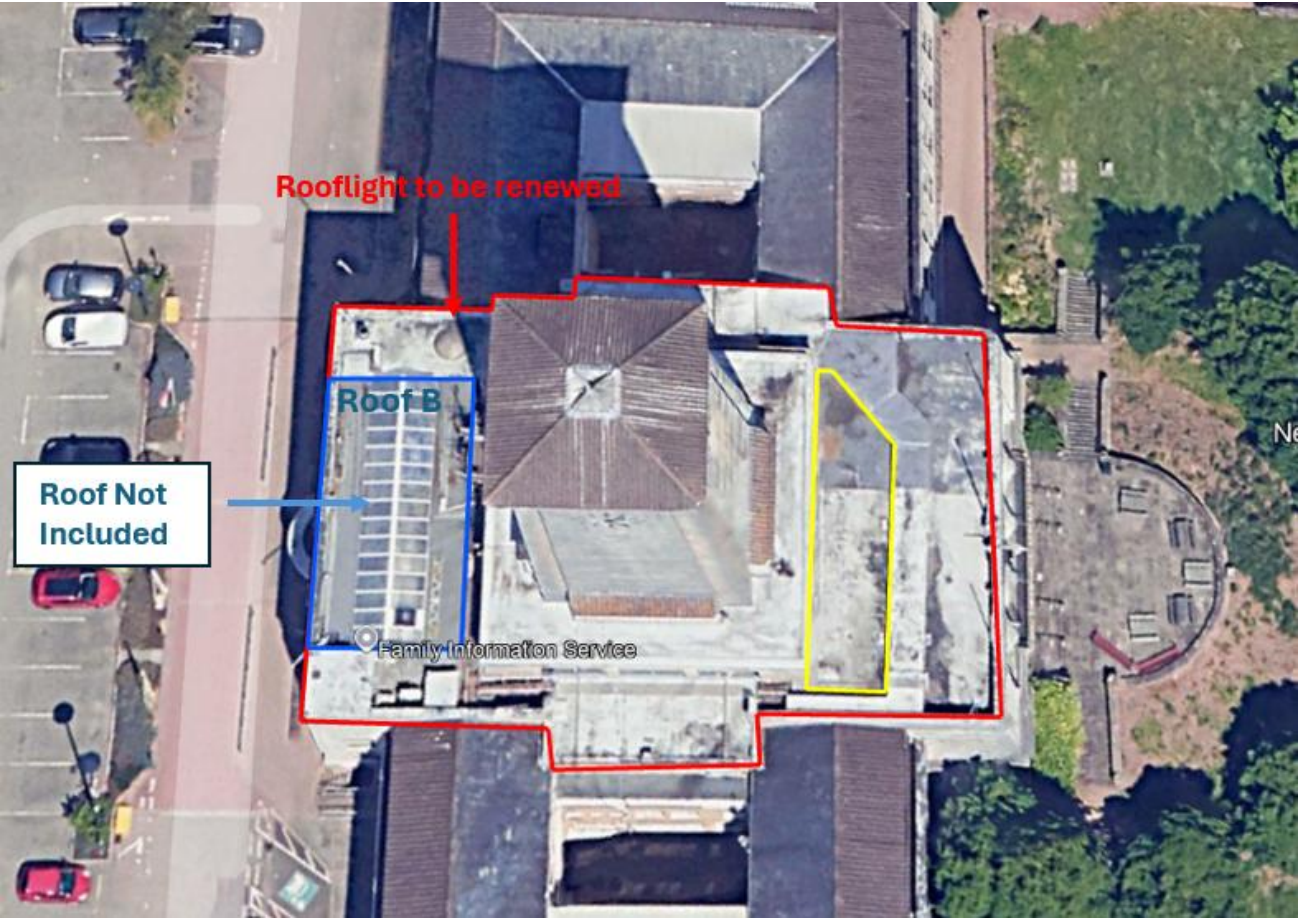
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This specification is based on the use of **Derbigum Olivine**, a glass and polyester reinforced, atactic polypropylene (APP)/Thermoplastic Polyolefin (TPO) polymer-modified bitumen membrane, which offers enhanced performance properties including flexibility, 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 CO<sub>2</sub> in rainwater which converts it to harmless silicon dioxide (SiO<sub>2</sub>, i.e. sand), magnesium carbonate (MgCO<sub>3</sub>, i.e. inorganic salt) and water. One square metre of Derbigum Olivine will neutralise approx. 1.75kg of CO<sub>2</sub>.

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.



**System Warranty**

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 35 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: Civic Centre Newport  
Location: Newport  
Postcode: NP  
  
Area 1: Roof Area Highlighted in Red  
Area 2: Roof Area Highlighted in Yellow  
Project ID: SP143805-S16R1  
Date of issue: 10/08/2026

### Client information

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Project Summary

| AREA 1              |                              |
|---------------------|------------------------------|
| Project Information |                              |
| Building Type:      | Government                   |
| Roof Name           | Roof Area Highlighted in Red |
| Slope               | Min. 1:80                    |
| Height (Metres)     | 15                           |
| Exposure            | Low                          |
| Core Sample         | Concrete deck, asphalt       |

| Schedule of Products |                                                               |
|----------------------|---------------------------------------------------------------|
|                      | ALUMASC BITUMEN PRIMER                                        |
|                      | HI-TEN UNIVERSAL UNDERLAY                                     |
|                      | DERBIGUM OLIVINE CAP SHEET                                    |
|                      | Safe2Torch Enc. Underlay: Derbicoat Selfix HP Underlay        |
|                      | Safe2Torch Enc. Cap Sheet: Derbigum Olivine Cap Sheet         |
|                      | Safe2Torch FF Underlay: Derbicoat Selfix HP 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                                       |
|                      | ROOF-PRO PRODRAIN RAINWATER OUTLET/S                          |
|                      | WALKWAY - CAP SHEET (In contrasting colour)                   |
|                      | ROOF-PRO LITE ANCHOR FIXING-Securing lightning conductor tape |
|                      | NEW ROOF-PRO FREESTANDING GUARDRAIL - Edge protection system  |
|                      | ROOF-PRO - PIPE & DUCT SUPPORTS                               |
|                      | ROOF-PRO - CONDENSER UNIT SUPPORTS                            |
|                      | ROOF-PRO - ACCESS SOLUTIONS                                   |
|                      | ALUMASC A RANGE ROOFLIGHT/S                                   |



### 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 | <p>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.</p> <p>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.</p> <p>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.</p> |      |       |
| 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 | <p>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.</p> <p>All adhesives, liquid products, and self-adhesive rolls are to be stored in a temperature controlled space &gt;5°C. Containers which are opened must be carefully resealed and kept upright to prevent leakage.</p> |      |       |
| 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |       |
| 1.14 | Legislation guidance requires that the roofs of heated buildings must not exceed 0.35W/m²k at any point to reduce the risk of internal surface condensation. This specification falls short of this requirement and the client should be made aware.                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |       |



Roof Area Highlighted in Red

| Specification |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |      |      |       |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| 2.0           | Preparatory Works                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |      |      |       |
| Item          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Qty | Unit | Rate | Total |
| 2.01          | <p><b>WALL JOIST HANGERS &amp; WALKWAY</b></p> <p>Existing walkway platforms are to be carefully removed and disposed of. Supply and install new proprietary joist hangers securely fixed to the surrounding walls, complete with timber joists sized and fixed in accordance with the structural requirements and manufacturer's recommendations. Form a new 18mm exterior grade plywood deck over the opening, with plywood boarding fixed to the joists to provide a stable, continuous deck suitable for access and maintenance use.</p> <p>Provide and install a suitable access hatch within the new deck, together with a fixed CAT ladder to enable safe access to the lower roof area. All works are to be carried out by competent operatives, with safe access, edge protection and protection to openings maintained throughout the works.</p> |     |      |      |       |
| 2.02          | <p><b>EXTENT OF WORKS</b></p> <p>Where the entire surface area is not being treated, precautions should be taken where possible to eliminate the possibility of water migration from adjacent areas.</p> <p>Install new timber separation kerb between the proposed refurbishment works and those areas which are not included. This should provide a minimum 150mm upstand above finished roof level.</p> <p>The new waterproofing is to be taken up and over the timber kerb, terminating a minimum 300mm onto the adjacent area and providing a 150mm overlap to the underlay, and a further 150mm overlap to the cap sheet.</p>                                                                                                                                                                                                                        |     |      |      |       |
| 2.03          | <p><b>STANDING WATER</b></p> <p>Standing water is present above the existing roof covering.</p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |      |      |       |
| 2.04          | <p><b>CLEAR VEGETATION</b></p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |      |      |       |
|               | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Qty | Unit | Rate | Total |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| 2.05 | <p>POWER WASH ROOF</p> <p>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.</p> <p>Ensure surface is fully dry before works commence.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |      |      |       |
| 2.06 | <p>REPAIR EXISTING ASPHALT</p> <p>Remove all debris and non-adherent areas of existing finish.</p> <p>Prepare the existing surface to provide an acceptable base for overlay roofing, repair all asphalt defects by gentle warming and redressing. Any slumped asphalt should be warmed and made good. 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.</p> <p>Where temporary, insufficiently bonded, failed, or incompatible materials are present, remove to expose underlying compatible substrate.</p> <p>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 commencing with the application.</p> <p>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.</p> |     |      |      |       |
| 2.07 | <p>REMOVE ALL ASPHALT FLASHINGS</p> <p>Remove existing asphalt skirtings 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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Qty | Unit | Rate | Total |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| 2.08 | BRICKWORK/MASONRY<br>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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |      |      |       |
| 2.09 | RAISE EXISTING UPSTANDS & REPAIR CAVITY WALL VENTS<br>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.<br><br>NB. The position of existing damp proof course/cavity trays/cavity wall vents 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. The cavity wall vents are to be renewed prior to application of the waterproofing system. |     |      |      |       |
| 2.10 | PIPES<br>Remove all existing waterproofing. Collar and sleeves are to be extended to achieve a minimum 150mm upstand above the new finished roof level.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |      |      |       |
| 2.11 | REMOVE ABUTMENT WINDOWS BY OTHERS<br>Windows which abut the flat roof area are to be carefully removed and cleared from site by others. Existing cill heights are to be raised to achieve a minimum 150mm upstand above the new finished roof level and decorated internally to match.<br><br>The new waterproofing detail is to be in place prior to the installation of the new windows, encapsulating the upstand, and overlapping onto the horizontal.                                                                                                                                                                                                                                                                                                                                   |     |      |      |       |
| 2.12 | LOW-LEVEL WINDOWS RENEWED BY OTHERS<br>Existing low-level windows and frames are to be renewed and painted by others. Allowances for internal adaptations and redecoration works should be made where applicable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |      |      |       |
| 2.13 | REMOVE & REPLACE LOW-LEVEL DOORS<br>Existing door/s and frame are to be removed and discarded. Threshold/s are to be raised to achieve a minimum 150mm upstand above the new finished roof level. Supply and fix new exterior grade powder coated doors to RAL colour Oyster White, framework, and associated fittings, as specified by the client and/or principal designer.                                                                                                                                                                                                                                                                                                                                                                                                                |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Qty | Unit | Rate | Total |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| 2.14 | <p>REMOVE &amp; DISCARD ROOFLIGHTS</p> <p>Existing rooflight unit/s are to be carefully removed and discarded. Where no longer required, redundant openings are to be boarded over with 18mm grade plywood, or suitable non-combustible alternative as identified.</p>                                                                                                                                                                                                                                                    |     |      |      |       |
| 2.15 | <p>INSPECT EXISTING RAINWATER GOODS</p> <p>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.</p>                                                                                                                                                                                                                                                                |     |      |      |       |
| 2.16 | <p>DOWNPIPES</p> <p>Downpipe/s and fittings to abutments are to be removed where required to facilitate the proposed works. Allowances are to be made for modifications and/or the new positioning of brackets to accommodate for the increase in roof height.</p> <p>On completion ensure sufficient angled bends are fitted with sufficient clearance above the line of the waterproofing.</p>                                                                                                                          |     |      |      |       |
| 2.17 | <p>EXTRACTION UNITS &amp; DUCTING</p> <p>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.</p> <p>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.</p> |     |      |      |       |
| 2.18 | <p>AIR CONDITIONING UNITS</p> <p>A/C units are to be isolated, degassed, and carefully set aside to facilitate the works by appropriately skilled labour.</p> <p>The units are to be repositioned on suitable supports above a sacrificial layer of cap sheet to protect the newly installed system. Unit/s are to be fully inspected and regassed by specialist on completion of works.</p>                                                                                                                              |     |      |      |       |
| 2.19 | <p>PLANT - REDUNDANT</p> <p>Where no longer required redundant or defective plant equipment should be removed prior to works. Redundant steelwork beams and/or support plinths are also to be removed and cleared from site.</p> <p>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.</p>                                                                                                                    |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                | Qty | Unit | Rate | Total |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| 2.20 | <b>CABLES</b><br>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.                                                                                                                                |     |      |      |       |
| 2.21 | <b>REMOVE LIGHTNING CONDUCTORS</b><br>Existing lightning conductor sections are to be removed and replaced as part of the works.                                                                                                                                                                                                                                                                                                           |     |      |      |       |
| 2.22 | <b>REMOVE HANDRAIL</b><br>Dismantle existing handrail system and counterweights and clear from site. Any penetrations to the waterproofing and/or abutments are to be infilled, repaired, and made good with suitable repair materials.<br><br>Ensure temporary protection/restraint measures are in place to prevent falls from height in accordance with current legislation. Reinstall appropriate edge protection as soon as possible. |     |      |      |       |
| 2.23 | <b>FLAG POLES</b><br>Existing flag poles are to be removed and replaced as part of the works.                                                                                                                                                                                                                                                                                                                                              |     |      |      |       |
| 2.24 | <b>MAN-SAFE</b><br>A new man-safe system is to be designed and fitted by others .                                                                                                                                                                                                                                                                                                                                                          |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                           |     |      |      |       |

| <b>3.0</b> | <b>Substrate Preparation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |      |      |       |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| Item       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Qty | Unit | Rate | Total |
| 3.01       | <b>PRIME EXISTING ROOFING</b><br>Prior to application of the primer coat, all surfaces must be dry, clean, and free from all contaminants.<br><br>Prime the existing roofing 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.<br><br>Typical coverage rate: 6-12m <sup>2</sup> /L (150-300m <sup>2</sup> per 25 litre drum). Rough or porous surfaces will reduce the coverage rate,<br><br>Drying time approx. 30 mins. dependent on ambient conditions, adapt accordingly to suit the temperature and humidity at the time of the installation.<br><br>Do not apply if rainfall is imminent. |     |      |      |       |
|            | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |      |      |       |



| 4.0  | Underlay                                                                                                                                                                                                                                           |     |      |      |       |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| Item | Description                                                                                                                                                                                                                                        | Qty | Unit | Rate | Total |
| 4.01 | <p>UNDERLAY</p> <p>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.</p> |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                   |     |      |      |       |

| 5.0  | Cap Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |      |      |       |
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| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Qty | Unit | Rate | Total |
| 5.01 | <p>CAP SHEET</p> <p>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.</p> <ul style="list-style-type: none"> <li>- Position the membrane starting from the lowest point of the roof.</li> <li>- Membrane sheets must be staggered, avoiding any overlaps against the fall.</li> <li>- 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.</li> <li>- 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).</li> <li>- Heat the entire surface, making sure that the compound forms a liquid mass in front of the roll (saturating any superficial porosity).</li> </ul> <p>NIGHT JOINTS</p> <p>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.</p> <p>ON COMPLETION</p> <p>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.</p> |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |      |      |       |



| 6.0  | BUR Detailing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |      |      |       |
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| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Qty | Unit | Rate | Total |
| 6.01 | <p><b>DETAILING PRODUCTS</b></p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |      |      |       |
| 6.02 | <p><b>ENCAPSULATION OF COMBUSTIBLE RISKS</b></p> <p>Form using separate flashings of Derbicoat Selfix HP Underlay fully bonded by removing the release film, and Derbigum Olivine Cap Sheet fully bonded by torch application. Side and end laps are to be heat sealed, leaving a continuous bead of bitumen extruded from all laps.</p> <p><b>FLAME-FREE DETAILING TO COMBUSTIBLE RISKS</b></p> <p>Form using separate flashings of Derbicoat Selfix HP 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.</p> <p>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 2m<sup>2</sup>/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.</p> <p>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.</p> |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Qty | Unit | Rate | Total |
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| 6.03 | <p><b>VERTICAL DETAILING</b></p> <p>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.</p> <p>Alternatively, install Alumasc PIR Angle Fillets, 50x50mm, bedded in Alumasc PU Insulation Adhesive.</p> <p>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.</p> <p>Where upstands are greater than 250mm in height, the capping sheet flashing is to be mechanically fixed at the leading upper edge.</p> |     |      |      |       |
| 6.04 | <p><b>UPSTAND WITH LEAD FLASHING</b></p> <p>Inspect and carry out any repairs to the upstand to ensure the substrate is suitable to receive the new waterproofing system.</p> <p>Dress the specified waterproofing system to the upstand, ensure separate flashings are formed.</p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                   |     |      |      |       |
| 6.05 | <p><b>UPSTAND WITH TERMINATION BAR</b></p> <p>Inspect and carry out any repairs to the upstand to ensure the substrate is suitable to receive the new waterproofing system.</p> <p>Dress the specified waterproofing system to the upstand, ensure separate flashings are formed.</p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Qty | Unit | Rate | Total |
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| 6.06 | <p>WELTED DRIP TO EXTERNAL GUTTER</p> <p>The roof perimeter detail is to be completed by forming a welted drip.</p> <p>Where applicable, ensure treated timber edge protection is provided to the insulation. The thickness should be reduced compared with the adjacent insulation to avoid creating a step in the waterproofing.</p> <p>Install minimum 50mm x 25mm treated timber batten. Form a welted drip to the outer edge and fold neatly around a 6mm timber drip former, mechanically fastened to the drip batten.</p> <p>Use the tail of the membrane to provide a minimum 100mm overlap onto the underlying membrane.</p>                                            |     |      |      |       |
| 6.07 | <p>PIPE PENETRATIONS</p> <p>Ensure the surface to be bonded is dry, clean and free from all contaminants.</p> <p>Prime all surfaces with the appropriate Alumasc primer. Dress the specified waterproofing up all pipe penetrations, ensure separate flashings are formed. Stainless steel jubilee clip is to be placed around the waterproofing to the top edge of the flashing detail.</p> <p>Ensure that the continuity of the waterproof covering is maintained for a vertical height of 150mm above the finished roof level; extend the pipe/s where applicable.</p> <p>Protect the waterproofing with a proprietary metal apron and seal with Alumasc Roofing Sealant.</p> |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Qty | Unit | Rate | Total |
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| 6.08 | <p>RAINWATER OUTLETS</p> <p>Roof drainage must comply with BS EN 12056-3. Where required, please consult Alumasc technical services for further guidance.</p> <p>Install suitably sized Roof-Pro ProDrain Rainwater Outlet/s.</p> <p>The 400mm spigot is to be cut to the required length (minimum 100mm into existing pipework) and inserted through the existing outlet into the pipework, a watertight seal is formed between the existing pipework and tail pipe with an 'O' ring providing an excellent seal whilst still allowing for movement.</p> <p>The factory bonded 500x500mm bituminous flange is to be fully bonded to the specified underlay, and the primary cap sheet fully bonded onto the full width of the flange. A sacrificial layer of underlay must be provided for single-layer applications.</p> <p>Rainwater goods must be tested by the contractor upon completion of the works prior to handover.</p> |     |      |      |       |
| 6.09 | <p>SACRIFICIAL LAYER</p> <p>Ensure the surface to be bonded is dry, clean and free from all contaminants.</p> <p>Install an appropriately sized sacrificial layer of the specified cap sheet directly below any roof mounted plant and/or rainwater downpipes to provide additional protection.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                        | Qty | Unit | Rate | Total |
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| 6.10 | <p>WALKWAY - CONTRASTING COLOUR</p> <p>Ensure the surface to be bonded is dry, clean and free from all contaminants.</p> <p>Install an additional layer of mineral cap sheet fully bonded to the underlying membrane to define a designated walkway.</p> <p>The cap sheet should be of contrasting colour to highlight the desired route. Remove the selvedge edge from the membrane prior to being installed.</p> |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                   |     |      |      |       |

| 7.0  | Accessories                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |      |      |       |
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| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Qty | Unit | Rate | Total |
| 7.01 | <p>ROOF-PRO LIGHTNING CONDUCTOR FIXING</p> <p>Roof-Pro Lite Anchor Fixing is a purpose-made clip mechanically fixed to a membrane to secure lightning conductor tape to a flat roof.</p> <p>Install the pad onto the primed surface, application method subject to membrane type, centres to be no more than 1000mm, closer centres may be required in high wind uplift areas. At junctions and changes of direction, install as close as practical to either side of these locations.</p> <p>Suitable for bare (02 code) or PVC coated (04 code) lightning conductor tapes up to 25 x 3mm in size. Colour is to be selected to match chosen roof finish.</p>                         |     |      |      |       |
| 7.02 | <p>NEW ROOF-PRO GUARDRAIL</p> <p>New Roof-Pro Freestanding Guardrail System is to be installed which is a non-penetrative edge protection solution that relies upon a proven counterbalance weight rather than a mechanical fastener to provide the requisite stability.</p> <p>Manufactured from galvanized steel tube, galvanised malleable cast iron fittings and recycled PVC counterweights. Components that are in contact with the roof finish are to be covered with a protective pad.</p> <p>Guardrail height set to 1100mm, with vertical supports at maximum 2.50m centres.</p> <p>Installed to manufacturer's instructions, checked and certified by Alumasc Roofing.</p> |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Qty | Unit | Rate | Total |
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| 7.03 | <p>ROOF-PRO NON-PENETRATIVE SUPPORTS</p> <p>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.</p> <p>Standard 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.</p> <p>The requirements are to be finalised with the client and/or principal designer and confirmed under separate cover.</p> <p>Further details can be found via the following link:<br/><a href="http://www.roof-pro.co.uk">http://www.roof-pro.co.uk</a></p>                                                                                                                  |     |      |      |       |
| 7.04 | <p>ROOF-PRO NON-PENETRATIVE SUPPORTS</p> <p>Roof-Pro offers a wide range of pre-fabricated condenser unit support frames to meet all project requirements.</p> <p>Product range is readily available in a number of standard sizes and designs. The PF range is complemented by smaller DX Units, as well as larger VRV and VRF systems.</p> <p>Standard 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.</p> <p>The requirements are to be finalised with the client and/or principal designer and confirmed under separate cover.</p> <p>Further details can be found via the following link:<br/><a href="http://www.roof-pro.co.uk">http://www.roof-pro.co.uk</a></p> |     |      |      |       |
| 7.05 | <p>ROOF-PRO NON-PENETRATIVE ACCESS</p> <p>Roof-Pro offers a range of pre-fabricated engineered access solutions to aid safe passage around flat roofs.</p> <p>Product range comprises of Step Overs, Stair Mod Kits, Roof Level Changes, Access Platforms and Walkways. Each system complies with BS5395 and Building Regulations (Document K).</p> <p>The requirements are to be finalised with the client and/or principal designer and confirmed under separate cover.</p> <p>Further details can be found via the following link:<br/><a href="http://www.roof-pro.co.uk">http://www.roof-pro.co.uk</a></p>                                                                                                                                                                                                 |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Qty | Unit | Rate | Total |
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| 7.06 | <p>NEW ROOFLIGHT TO EXISTING KERB</p> <p>New Alumasc A Range Rooflight to be installed onto existing builder's kerb using a kerb adaptor.</p> <p>Existing builder kerbs is to be raised (and widened - where required) to achieve a minimum of 150mm above the finished roof level. Allowances are to be made for making good and redecoration internally where existing surfaces have been disturbed.</p> <p>Prime all surfaces with the appropriate Alumasc primer. Dress the specified waterproofing system to the kerb ensuring separate flashings are formed.</p> <p>Protect any openings against falling objects.</p> <p>Rooflight specification and glazing type is to be finalised with the client and/or principal designer and confirmed under separate cover.</p> |     |      |      |       |
|      | Sub-total                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |      |      |       |

Project Summary

| AREA 2              |                                 |
|---------------------|---------------------------------|
| Project Information |                                 |
| Building Type:      | Government                      |
| Roof Name           | Roof Area Highlighted in Yellow |
| Slope               | Min. 1:80                       |
| Height (Metres)     | 15                              |
| Exposure            | Low                             |
| Core Sample         | Concrete deck, asphalt          |

| Schedule of Products                                          |
|---------------------------------------------------------------|
| ALUMASC BITUMEN PRIMER                                        |
| EUROROOF TORCH-ON AVCL                                        |
| ALUMASC BGT PIR CUT TO FALLS INSULATION                       |
| EUROROOF PU INSULATION ADHESIVE                               |
| HI-TEN UNIVERSAL UNDERLAY                                     |
| DERBIGUM OLIVINE CAP SHEET                                    |
| Safe2Torch Enc. Underlay: Derbicoat Selfix HP Underlay        |
| Safe2Torch Enc. Cap Sheet: Derbigum Olivine Cap Sheet         |
| Safe2Torch FF Underlay: Derbicoat Selfix HP 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                                       |
| WALKWAY - CAP SHEET (In contrasting colour)                   |
| ROOF-PRO LITE ANCHOR FIXING-Securing lightning conductor tape |
| ROOF-PRO - ACCESS SOLUTIONS                                   |



### 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 |
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| 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 | <p>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.</p> <p>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.</p> <p>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.</p> |      |       |
| 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 |
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| 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 | <p>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.</p> <p>All adhesives, liquid products, and self-adhesive rolls are to be stored in a temperature controlled space &gt;5°C. Containers which are opened must be carefully resealed and kept upright to prevent leakage.</p> |      |       |
| 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          | <p>EXTENT OF WORKS</p> <p>Where the entire surface area is not being treated, precautions should be taken where possible to eliminate the possibility of water migration from adjacent areas.</p> <p>Install new timber separation kerb between the proposed refurbishment works and those areas which are not included. This should provide a minimum 150mm upstand above finished roof level.</p> <p>The new waterproofing is to be taken up and over the timber kerb, terminating a minimum 300mm onto the adjacent area and providing a 150mm overlap to the underlay, and a further 150mm overlap to the cap sheet.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |      |      |       |
| 2.02          | <p>STRIP BACK EXISTING WATERPROOFING TO CONCRETE</p> <p>Strip existing roofing sectionally from the concrete deck and fully inspect its condition. Prepare existing deck to provide an acceptable base for re-roofing. Only strip as much as can be subsequently made watertight in the same day.</p> <p>The system will follow the profile of the substrate to which it is installed. Depressions and/or negative falls should be identified pre-works and brought to the attention of all relevant parties. If deemed unsatisfactory, correction would be recommended to ensure that all design parameters are sustained throughout the lifecycle of the roof in accordance with prevailing standards, regulations and codes of practice.</p> <p>The finished surface is to be even and free from any irregularities that may compromise the works/and or performance.</p> <p>It is the responsibility of the appointed contractor to ensure moisture content and stability of substrate does not impair roof integrity. Acceptable methods of drying roof areas, where required, must be agreed upon with the client prior to the commencement of works.</p> <p>Outlets and apertures must be protected from ingress of debris to prevent blockage of downpipe/s; protection should be removed during non-operating periods.</p> |     |      |      |       |
| 2.03          | <p>REMOVE ALL ASPHALT FLASHINGS</p> <p>Remove existing asphalt skirtings and all associated details.</p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |      |      |       |
|               | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Qty | Unit | Rate | Total |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| 2.04 | <p>RAISE EXISTING UPSTANDS</p> <p>Upstand details are likely to be compromised by the installation of the new waterproofing system.</p> <p>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.</p> <p>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.</p> |     |      |      |       |
| 2.05 | <p>REMOVE &amp; REPLACE LOW-LEVEL DOORS</p> <p>Existing door/s and frame are to be removed and discarded. Threshold/s are to be raised to achieve a minimum 150mm upstand above the new finished roof level. Supply and fix new exterior grade powder coated doors to RAL colour Oyster White, framework, and associated fittings, as specified by the client and/or principal designer.</p>                                                                                                                                                                                                                                                                            |     |      |      |       |
| 2.06 | <p>INSPECT EXISTING RAINWATER GOODS</p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                              |     |      |      |       |
| 2.07 | <p>PLANT - REDUNDANT</p> <p>Where no longer required redundant or defective plant equipment should be removed prior to works. Redundant steelwork beams and/or support plinths are also to be removed and cleared from site.</p> <p>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.</p>                                                                                                                                                                                                                                                                  |     |      |      |       |
| 2.08 | <p>CABLES</p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                         |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |      |      |       |



| Item | Description                                                                                                               | Qty | Unit | Rate | Total |
|------|---------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| 2.09 | REMOVE LIGHTNING CONDUCTORS<br>Existing lightning conductor sections are to be removed and replaced as part of the works. |     |      |      |       |
| 2.10 | ACCESS LADDER/S<br>Unbolt ladder access platform and clear from site.                                                     |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                          |     |      |      |       |

| <b>3.0</b> | <b>Substrate Preparation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |      |      |       |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| Item       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Qty | Unit | Rate | Total |
| 3.01       | <p>PRIME SUBSTRATE</p> <p>Prior to application of the primer coat ensure that all surfaces are dry and free from contaminants.</p> <p>Prime the substrate 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.</p> <p>Typical coverage rate: 6-12m<sup>2</sup>/L (150-300m<sup>2</sup> per 25 litre drum). Rough or porous surfaces will reduce the coverage rate,</p> <p>Drying time approx. 30 mins. dependent on ambient conditions, adapt accordingly to suit the temperature and humidity at the time of the installation.</p> <p>Do not apply if rainfall is imminent.</p> |     |      |      |       |
|            | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |      |      |       |



| 4.0  | Vapour Control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |      |      |       |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Qty | Unit | Rate | Total |
| 4.01 | <p>AIR &amp; VAPOUR CONTROL LAYER</p> <p>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.</p> <p>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.</p> <p>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.</p> |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |      |      |       |

| 5.0  | Thermal Insulation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |      |      |       |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Qty | Unit | Rate | Total |
| 5.01 | <p>THERMAL INSULATION</p> <p>The surface must be clean, dry and free of any foreign materials.</p> <p>Install Alumasc BGT PIR Cut to Falls Insulation in accordance with the bespoke detailed installation plan provided.</p> <p>U-value target 0.18W/m²K.</p> <p>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.</p> |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Qty | Unit | Rate | Total |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| 5.01 | <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Minimum application temperature of PU adhesive is 5°C.</p> <p>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.</p> <p>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.</p> |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |      |      |       |

| <b>6.0</b> | <b>Underlay</b>                                                                                                                                                                                                                                    |     |      |      |       |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| Item       | Description                                                                                                                                                                                                                                        | Qty | Unit | Rate | Total |
| 6.01       | <p>UNDERLAY</p> <p>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.</p> |     |      |      |       |
|            | <b>Sub-total</b>                                                                                                                                                                                                                                   |     |      |      |       |



| 7.0  | Cap Sheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |      |      |       |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Qty | Unit | Rate | Total |
| 7.01 | <p>CAP SHEET</p> <p>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.</p> <ul style="list-style-type: none"> <li>- Position the membrane starting from the lowest point of the roof.</li> <li>- Membrane sheets must be staggered, avoiding any overlaps against the fall.</li> <li>- 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.</li> <li>- 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).</li> <li>- Heat the entire surface, making sure that the compound forms a liquid mass in front of the roll (saturating any superficial porosity).</li> </ul> <p>NIGHT JOINTS</p> <p>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.</p> <p>ON COMPLETION</p> <p>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.</p> |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |      |      |       |



| 8.0  | BUR Detailing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |      |      |       |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Qty | Unit | Rate | Total |
| 8.01 | <p>DETAILING PRODUCTS</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |      |      |       |
| 8.02 | <p>ENCAPSULATION OF COMBUSTIBLE RISKS</p> <p>Form using separate flashings of Derbicoat Selfix HP Underlay fully bonded by removing the release film, and Derbigum Olivine Cap Sheet fully bonded by torch application. Side and end laps are to be heat sealed, leaving a continuous bead of bitumen extruded from all laps.</p> <p>FLAME-FREE DETAILING TO COMBUSTIBLE RISKS</p> <p>Form using separate flashings of Derbicoat Selfix HP 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.</p> <p>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 2m<sup>2</sup>/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.</p> <p>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.</p> |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |      |      |       |



| Item | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Qty | Unit | Rate | Total |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| 8.03 | <p><b>VERTICAL DETAILING</b></p> <p>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.</p> <p>Alternatively, install Alumasc PIR Angle Fillets, 50x50mm, bedded in Alumasc PU Insulation Adhesive.</p> <p>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.</p> <p>Where upstands are greater than 250mm in height, the capping sheet flashing is to be mechanically fixed at the leading upper edge.</p> |     |      |      |       |
| 8.04 | <p><b>UPSTAND WITH TERMINATION BAR</b></p> <p>Inspect and carry out any repairs to the upstand to ensure the substrate is suitable to receive the new waterproofing system.</p> <p>Dress the specified waterproofing system to the upstand, ensure separate flashings are formed.</p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |      |      |       |
|      | <b>Sub-total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |      |      |       |



| Item             | Description                                                                                                                                                                                                                                                                                                                                                                                                            | Qty | Unit | Rate | Total |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| 8.05             | <p><b>SACRIFICIAL LAYER</b><br/>Ensure the surface to be bonded is dry, clean and free from all contaminants.</p> <p>Install an appropriately sized sacrificial layer of the specified cap sheet directly below any roof mounted plant and/or rainwater downpipes to provide additional protection.</p>                                                                                                                |     |      |      |       |
| 8.06             | <p><b>WALKWAY - CONTRASTING COLOUR</b><br/>Ensure the surface to be bonded is dry, clean and free from all contaminants.</p> <p>Install an additional layer of mineral cap sheet fully bonded to the underlying membrane to define a designated walkway.</p> <p>The cap sheet should be of contrasting colour to highlight the desired route. Remove the selvedge edge from the membrane prior to being installed.</p> |     |      |      |       |
| <b>Sub-total</b> |                                                                                                                                                                                                                                                                                                                                                                                                                        |     |      |      |       |

| <b>9.0</b>       | <b>Accessories</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |      |      |       |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------|------|-------|
| Item             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Qty | Unit | Rate | Total |
| 9.01             | <p><b>ROOF-PRO LIGHTNING CONDUCTOR FIXING</b><br/>Roof-Pro Lite Anchor Fixing is a purpose-made clip mechanically fixed to a membrane to secure lightning conductor tape to a flat roof.</p> <p>Install the pad onto the primed surface, application method subject to membrane type, centres to be no more than 1000mm, closer centres may be required in high wind uplift areas. At junctions and changes of direction, install as close as practical to either side of these locations.</p> <p>Suitable for bare (02 code) or PVC coated (04 code) lightning conductor tapes up to 25 x 3mm in size. Colour is to be selected to match chosen roof finish.</p> |     |      |      |       |
| 9.02             | <p><b>ROOF-PRO NON-PENETRATIVE ACCESS</b><br/>Roof-Pro offers a range of pre-fabricated engineered access solutions to aid safe passage around flat roofs.</p> <p>Product range comprises of Step Overs, Stair Mod Kits, Roof Level Changes, Access Platforms and Walkways. Each system complies with BS5395 and Building Regulations (Document K).</p> <p>The requirements are to be finalised with the client and/or principal designer and confirmed under separate cover.</p> <p>Further details can be found via the following link:<br/><a href="http://www.roof-pro.co.uk">http://www.roof-pro.co.uk</a></p>                                               |     |      |      |       |
| <b>Sub-total</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |      |      |       |



### 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.

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.

**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.

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/m<sup>2</sup> for a fully bonded application and 2.4 kN/m<sup>2</sup> 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.

