

Specification of Works

In respect of:

The Market House 61 High Street Tring Hertfordshire HP23 4AB

Prepared for:

Tring Town Council The Market House 61 High Street Tring Hertfordshire HP23 4AB



SPECIFICATION OF WORKS



- At: The Market House 61 High Street Tring Hertfordshire HP23 4AB
- For: Tring Town Council The Market House 61 High Street Tring Hertfordshire HP23 4AB

Prepared by:

Brasier Freeth LLP

Wentworth Lodge Great North Road Welwyn Garden City Hertfordshire AL8 7SR

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1.0 PRELIMINARIES AND GENERAL CONDITIONS

1.1 DESCRIPTION OF SITE

The property is a Grade II Listed, two storey building with an information centre and a separate shop at ground floor level which is sub-let to a retail tenant. The first floor comprises offices and a council chamber which are occupied by Tring Town Council.

The building is timber framed and was formerly open at ground floor with oak posts on stone bases, however, this has been infilled with full height glazing forming the ground floor shop, this is set back from the first floor.

The timber frame is visible to the external elevations and is provided with roughcast rendered infill panels between the timbers. The property has a multi-pitched roof with gable ends to the front, rear and left hand sides, all finished with red clay tiles, and there is a central cupola finial. There is also a small flat roof to the rear finished with mineral felt.

The windows are mostly timber framed with combination of leaded lights, Georgian wired and obscured glazing. However, there are also some uPVC replacement windows to the rear.

The off road parking provided in the rear yard is demised to the Police Station, not Tring Town Council.

1.2 SCOPE OF WORK

The works within this specification include the following:

- Roof repairs.
- Maintenance of rainwater goods.
- Wall repairs and repointing.
- Render repairs.
- External joinery repairs.
- Replacement Windows.
- External redecoration.

1.3 EMPLOYER/CLIENT

Tring Town Council The Market House 61 High Street Tring Hertfordshire HP23 4AB

Contact:Lydia Housden, Clerk to the CouncilTel:01442 823347Email:clerk@tring.gov.uk

1.4 CONTRACT ADMINISTRATOR (C.A.)

Brasier Freeth LLP Wentworth Lodge Great North Road Welwyn Garden City Hertfordshire AL8 7SR

Contact: Paul Raitt Mobile: 07831 490665 Email: paul.raitt@brasierfreeth.com

1.5 PRINCIPAL DESIGNER

Not Applicable.

1.6 CONTRACT DRAWINGS

Refer to drawings:

- 01 Location Plan
- 02 Block Plan

1.7 VISITORS AND SITE INSTRUCTION BOOKS

The Contractor will provide a Visitors' book in which shall be recorded the names of all visitors to the site (apart from Contractor's workmen).

The C.A. will provide a Site Query book for site instructions. No claim for extra works will be entertained without a supporting entry in the pad.

Both books shall be kept on site in a secure place and shall be available at all times for use. They must be handed to the C.A. at the time of the hand over inspection.

1.8 TENDER

The Employers do not bind themselves to accept the lowest Tender submitted and the Contractor is to have no claim for the cost of preparing their estimate.

The Council does not bind itself to accept any tender, but every effort will be made to reach a decision on a preferred tenderer in a reasonable time following the tender submission.

The Tender shall remain open for acceptance for a period of three months.

The Contractor shall visit the site and inspect the drawings and satisfy himself as to the local conditions, assess the full extent and character of conditions affecting labour and the execution of the Contract generally as no subsequent claim on the ground of insufficient or inaccurate information will be entertained. He will be held to have fully informed and satisfied himself by his own independent observations and enquiries as to the nature, extent and practicability of the works, the places where materials can be obtained and disposed of and any other points which affect the Tender. The accuracy of dimensions and measured quantities provided by the C.A. is not guaranteed.

The Tender shall be exclusive of Value Added Tax. Payment and recovery of any tax for which the Contractor is liable is to be the Contractor's responsibility and except as provided in the said Supplemental Agreement the Contractor will be deemed to have allowed in his Tender for all other incidental costs and expenses which he may incur thereby.

If the Contractor cannot tender for any parts of the works defined herein, he must inform the C.A. as soon as possible, defining the relevant sections and stating his reasons for his inability to tender.

1.9 CONTRACTOR TO PRICE THE WHOLE OF THE WORKS

The Contractor shall allow for all labour materials and plant to complete the whole of the works shown on the drawings or described in the Specification whether or not the same is specifically described provided it can reasonably be inferred or results from works described in the Specification or shown in the drawings.

The priced items in the Specification shall together be deemed to be the Schedule of Rates referred to in the Form of Contract.

The Specifications states briefly the works involved dividing the work into items which shall be priced separately. Costs relating to items in the Specification which are not priced will be deemed to have been included elsewhere in the Tender.

Where the structure is altered or cut away, prices shall include for supplying and erecting all struts, needles, raking, flying or dead shore and any other supports necessary to support and uphold all parts of the building whether specifically so described or not. On completion, strike and remove and reinstate all works disturbed.

1.10 DETERMINATION OF QUERIES

Any queries or any points which might give rise to uncertainty shall be referred to the C.A. before the submission of a Tender and at least three days prior to the stipulated closing date and time for receipt of Tenders. All rulings and replies given by the C.A. will be notified simultaneously to all Contractors tendering.

1.11 THE CONTRACT

1.11.1 The Form of Contract will be the JCT Minor Works Building Contract 2016.

Allow for the obligations, liabilities and services described in the clauses therein and enumerated below.

Recitals	
First	The Works and address
Second	The Contract Specification, Drawings or Work Schedules
Third	The Contractor has supplied the Employer with a copy of the Priced Contract Specification
Fourth	For the purposes of the construction Industry Scheme (CIS) under the Finance Act 2004, the status of the Employer is, as at the base date, that stated in the Contract Particulars
Fifth	For the purposes of the CDM Regulations 2015 the status of the project that comprises or includes the works is stated in the Contract Particulars
Sixth	Where so stated in the Contract Particulars, this Contract is supplemented by the Framework Agreement identified in those particulars
Seventh	The Supplemental Provisions identified in the Contract Particulars apply
Articles	
1	Contractor's obligations
2	Contract Sum
3	Contract Administrator
4	Principal Designer
5	Principal Contractor
6	Adjudication
7	Arbitration

Contract Particulars

Legal Proceedings

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Clause, etc.	Subject	
Fourth Recital Schedule 2 (paragraphs 1.1, 1.2, 1.5, 1.6, 2.1 & 2.2)	Base Date	1 st July 2022
Fourth Recital and Clause 4.2	Construction Industry Scheme (CIS)	* Employer at the Base Date is not a 'Contractor' for the purposes of the CIS
Fifth Recital	CDM Regulations	* The project is not notifiable
Sixth Recital	Framework Agreement (if applicable) (state date, title and parties)	N/A

Seventh Recital and Schedule 3	Supplemental Provisions (where nether entry against an item below is deleted, the relevant paragraph applies	
	Collaborative working	* paragraph 1 applies
	Health & Safety	* paragraph 2 applies
	Cost savings and value improvements	* paragraph 3 applies
	Sustainable development and environmental considerations	* paragraph 4 applies
	Performance indicators and monitoring	* paragraph 5 does not apply
	Notification and negotiation of disputes	* paragraph 6 applies
	Where paragraph 6 applies, the respective nominees of the Parties are	Employer's nominee Lydia Housden
		Contractor's nominee TBC TBC
		Or such replacement as each party may notify to the other from time to time
Article 7	Arbitration (If neither entry is deleted, Article 7 and Schedule 1 do not apply. If disputes and differences are to be determined by arbitration and not by legal proceedings, it <u>must</u> be stated that Article 7 and Schedule 1 apply)	Article 7 and Schedule 1 (Arbitration) apply.
2.2	Date for Commencement of the Works	1 st August 2022
2.2	Date for Completion	1 st September 2022

2.8	Liquidated damages	at the rate of £ 500 per week		
2.10	Rectification Period	12months		
	(the period is 3 months unless a different period is stated)	From the date of practical completion of the Works		
4.3	Interim payments – Interim Valuation Dates (Unless	The first Interim Valuation Date is		
	otherwise stated, the first Interim Valuation Date is one	2 Weeks after commencement		
	month after the Works commencement date	And thereafter at intervals of		
	specified in these particulars (against the reference to clause 2.2) and thereafter at monthly intervals.)	1 Month		
4.3	Payments due prior to	95 per cent		
	practical completion – percentage of the total value of work etc. (The percentage is 95 per cent unless a different rate is stated)	P0.00		
4.3	Payments becoming due on or after practical completion –			
	percentage of the total amount to be paid to the contractor. (The percentage is 97.5 per cent unless a different rate is stated)	97.5per cent		
4.3 and 4.8	Fluctuations provision	*Schedule 2 (Contribution, levy		
	(Unless another provision or entry is selected, Schedule 2 applies)	and tax changes) applies/ *no fluctuations provision applies/		
		*the following fluctuations provision applies		
4.3 and 4.8	Percentage addition for Schedule 2 (paragraph 13) (if applicable)	N/A		
4.8.1	Supply of documentation for computation of amount to be finally certified	3 months (from the date of practical completion)		
	(The period is 3 months unless a different period is stated)			
5.3	Contractor's Public liability insurance: injury to persons or property – the required level of cover is not less than.	£ 5,000,000		

5.4A, 5.4B & 5.4C	Insurance of the Works, etc. – alternative provisions	Clauses 5.4B (Works and Existing structures insurance by Employer in Joint Names) applies
5.4A and 5.4B	Percentage to cover professional fees (if no other percentage is stated, it shall be 15 per cent)	15 per cent
5.4C	Insurance arrangements – details of the required policy or policies	Are set out in the following document(s) N/A
7.2 Sabadula 1	Adjudication Nominating body – where no Adjudicator is named or where the named Adjudicator is unwilling or unable to act (whenever that is established) (Where the Adjudicator is not named and a nominator has not been selected, the nominator shall be one of the nominators listed opposite selected by the Party requiring the reference to adjudication)	The Adjudicator is: *The Royal Institution of Chartered Surveyors
Schedule 1 (paragraph 2.1)		

EXECUTION

The Contract will be executed under hand.

EXTENSION OF TIME

When a notice of the cause of any delay or likely delay in the progress of the Works is given under Contract clause 2.7, written notice must also be given of all other clauses which apply concurrently. The Contractor shall, as soon as possible, submit to the C.A.:-

- Relevant particulars of the expected effects, if appropriate related to the concurrent clauses.
- An estimate of the extent, if any, of the expected delay in the completion of the works beyond the Date for Completion.
- All other relevant information required by the C.A.

1.12 General Clauses

1.12.1 Water, Lighting and Power

The Contractor is to provide water, lighting and power for use on the works including that required by Sub-Contractors, also all temporary connections, plumbing services, etc., and clear away same on completion. It should be noted that the electricity supply may have been cut off in which case it will be necessary to apply for a reconnection to establish a temporary supply. The Contractor shall pay all fees and charges in connection therewith.

1.12.2 Contractors to Provide Everything Necessary (Particularly Plant and Scaffolding)

The Contractor shall provide all materials, labour, cartage, carriage, hoisting, tackle, plant, including any special and mechanical plant, fuel and running expense, etc., for the due execution of the work and to erect and maintain good and sufficient scaffolding, staging, ladders and cradles, fenders, fans, shoring, temporary screens, fences or partitions, tarpaulins, dust sheets, etc., temporary buildings, etc., and is to be responsible for making good any damage caused by the use thereof.

1.12.3 Making Good Footpaths, Fences, etc.

The Contractor shall make good public and private roads, footpaths, fences, hedges, lawns, etc., where damaged or destroyed by the works or workmen, and satisfy all claims legally demandable owing to traffic arising from these works.

In the event of the stacking of materials on the public footpath or highway taking place either without a licence or in contravention of a condition of a licence, then the Borough Engineer will serve a notice upon the Contractor via his site representative giving a period within which such stacking must be brought into compliance or terminated.

1.12.4 Damage to Pavements

The Contractor shall take all steps necessary to make good pavements outside each property named in the Contract, including those of each adjoining property on either side, where damaged or destroyed during the course of the works.

1.12.5 **Protection of Roads, Sewers and Public Services**

Take all necessary precautions to protect all sewers, roads, drainage connections, services and lines from injury due to the execution of the works; protect also the surface of roads from damage by carting of materials or any other works incidental to the Contract. If any such mains, services or lines are to be found in the way of any new work or otherwise requiring attention, the Contractor shall protect same from injury and give notice to the Authorities of persons concerned and allow for the lowering, diversion or removal of such mains, services or lines as may be necessary. No claim for delay or for damages to the works will be allowed. Afford the various Statutory Authorities facilities for attending their mains, services and lines as may be necessary and for laying new or additional mains.

1.12.6 Work off Adjoining Owner's Property

No workman employed on the work shall be allowed to trespass upon adjoining properties. The Contractor's attention is drawn to the fact that certain works may have to be executed off adjoining Owner's property and he shall allow for this and give all notices and make all arrangements necessary for the proper execution of these Works. The Contractor shall indemnify the Employer against any claim or action for damages on account of any trespass or other misconduct of his employees of any Sub-Contractor.

1.12.7 P.C and Provisional Sums

All goods or work to cover the cost of which Prime Costs or Provisional Sums are provided in the Specification will be obtained from firms selected by the C.A. and the Contractor shall do nothing in respect thereof without the C.A.'s Instructions in writing being first obtained.

The Contractor shall produce receipted accounts for all P.C and Provisional Sums mentioned in the Specification at the time of settling the various accounts.

All P.C and Provisional Sums and provisional work are at the disposal of the C.A. and if not required or if paid direct by the Employer will be omitted at the settlement of accounts, together with any profit added.

The Nominated Sub-Contractors shall be paid the sum as included in the certificates issued to the Contractor and no further payments for the Nominated Sub-Contractor will be included in the Certificates until the receipts for the previous payments to them are produced.

The Contractor shall attend upon all Trades and afford the necessary general attendance and usual facilities such as the use of plant and fixed scaffolding, the provision of water, temporary lighting, messrooms, sanitary accommodation, welfare facilities, space for office accommodation and for storage of plant and materials and clearing away rubbish, etc., to all Nominated Sub-Contractors and specialists or tradesmen employed by the Employer so that their work may proceed at the same time as his own. The Contractor shall supply full size setting out templates for Sub-Contractor's work and all necessary dimensions and is to be responsible for the accuracy of the same.

The Contractor shall be responsible for unloading, storage and safe custody of Nominated Sub-Contractors' or specialists' goods, plant, etc., upon delivery to the site and handling materials to positions as and when required, but the Sub-Contractors or specialists will be responsible, after commencing work at the site, for the weatherproof conditions of their materials and plant stored on the site.

The Contractor will be held responsible for the correct ordering, protection and safe custody of all goods provided by Nominated Suppliers from the time of their delivery up to the site until they are delivered up to the Employer as part of the building or are removed from the site, as the case may be. The amounts payable by the Employer to the Contractor in respect of such goods will be calculated in relation to the actual goods incorporated in the finished work; breakages; losses, etc., being matters for settlement between the Contractor and the Nominated Supplier concerned, neither of whom shall have any claim in respect of same against the Employer.

Any disputes which may arise between the Contractor and any nominated Supplier or Sub-Contractor in regard to delays, defects, contra-charges and the like, will be matters for settlement between the Contractor and the nominated Supplier or Sub-Contractor concerned, neither of whom shall have any claim in respect of same against the Employer.

The Contractor shall be responsible for verifying all information and dimensions given to Nominated Suppliers and Nominated Sub-Contractors to enable them to carry out work allotted to them under the Contract. The Contractor shall be required to ascertain from all the various Sub-Contractors (including those nominated by the C.A.) all particulars relating to their works in regard to the position in which chases, holes, mortices and similar items will be required to be formed or left before the work is put in hand. The Contractor shall be deemed to have included for this as part of the Contractor's attendance.

All dimensions and particulars necessary for the execution of Sub-Contractor's work and work of other late Trades are to be taken from the actual work and not from the drawings.

In all instances where the works "Prime Costs" or the initials "P.C" occur they are intended to mean the net value after deducting all trade or other discounts <u>except a discount of 2 1/2% in the case of Nominated Sub-Contractor's work and 5% in the case of Nominated Suppliers which is provided for in all cases.</u> The term "Fix Only" in the Specification must be taken to include <u>for receiving, unloading or assistance to unload, unpacking of goods or plant, delivery to position storage of same, return of empty cases, crates, etc., carriage paid, hoisting to required positions, assembling and fixing.</u>

All P.C Sums included in this Specification in respect of work to be executed by Public Authorities and Statutory Undertakings shall be deemed to include 2 1/2 per cent cash discount. Should such discount(s) not be allowed by the Public Authorities and Statutory Undertakings in their charge(s), amount(s) equivalent to such discount(s) shall be included in the Final Account for the Contract.

It should be noted that in order to qualify for the cash discount on Nominated Suppliers' accounts, payments shall in general be made within thirty days of the end of the month during which delivery is made and that the Contractor shall therefore himself be responsible for any defects which may arise in relation to these goods at a later date. Further, in making payments to the Contractor, the Employer will be entitled to deduct a retention, this the Contractor will be unable to do when paying Nominated Supplier.

No guarantee is given that the C.A. will check Nominated Suppliers' accounts by the time payments are due to be made to them by the Contractor. In the majority of cases such accounts will not be checked until goods are fixed in position and are in working order.

The Contractor shall provide receipted accounts for the C.A.'s inspection as, where and when required by them with reference to all P.C items for the purpose of checking the amounts due to the Contractor.

1.12.8 Provision of Materials and Fittings

The provision of all necessary materials and fittings is implied in each item unless re-use of the existing is specially mentioned. It is essential, before the work is commenced, that the Contractor shall contact the C.A. to make an inspection with him in regard to any alterations which may have occurred at the premises through looting or otherwise since the Tender was submitted. No claims for any extra costs will be entertained unless the premises have been so inspected within seven days of the date of the order to commence the work or by arrangements made immediately prior to the acceptance of the Tender.

1.12.9 Watching, Lighting, Welfare, etc.

The Contractor shall allow in his Tender for all necessary watching and lighting and the care of the whole of the works including protection from weather and other damage. He shall provide facilities for specialist Contractors and all expenses in connection with the provision of safety and welfare of workmen in accordance with the Local Working Rule Agreement and the Building (Safety, health and Welfare) Regulations.

1.12.10 Holidays with Pay, Insurance, Working Rule Agreement, etc.

The Contractor shall be responsible for and shall include in his Tender for all costs and expenses due from the Employer in connection with the works particularly in connection with:

- (a) The Holidays with Pay Scheme for the Building and Civil Engineering Industries.
- (b) The London Working Rule Agreement
- (c) The National Insurance Act and the National Insurance (Industrial) Injuries Act.
- (d) Holidays with pay and any other outgoing caused by National or Local Trade Agreement.

1.12.11 Materials and Workmanship Generally

Any materials or composition of materials described under one trade or in one instance and only referred to under another trade or item shall be similar in quality or composition.

Suitable existing material, if sound, may be re-used in the works providing the prior consent of the C.A. is obtained prior to the fixing. All new materials shall be, so far as practical, in accordance with the appropriate current British Standards Institution Specification. All materials shall be applied or fixed in a thorough and workmanlike manner. Where applicable all methods of work and workmanship shall be in accordance with the latest Code of Practice.

1.12.12 Latrines

Maintain and keep in good order latrines or sanitary accommodation for workmen as required.

1.12.13 Convenience and Protection of Tenants

The convenience and protection of any tenants or licensees remaining in occupation are to be carefully considered and the works carried out with a minimum of inconvenience to them consistent with the nature and extent of the works.

1.12.14 Covering Up

The Contractor will be required to provide all requisite tarpaulins, etc., to cover up exterior works if necessary, while in progress. In cases where it is stated in the Invitation to Tender or the Specification or if it is afterwards arranged that any tenants or licensees will remain in occupation of the premises (or any part thereof) comprising the site of the works, the Contractors shall also:

- Provide such coverings as may be reasonably necessary to protect the occupant's furniture and floor coverings from damage of any kind;
- (b) Ensure that gas, water, electricity, sanitary and other essential services are fully maintained during the progress of the works;
- (c) Ensure that before leaving the work daily all plant, ladders, materials, etc., are left so that nothing can be made use of by children or other persons or in any unlawful manner.

1.12.15 Rubbish

The Contractor shall remove from the site all debris and rubbish arising out of these works as it arises, including that arising from Sub-Contractors and other work.

1.12.16 Dry Rot

Any dry rot or suspected dry rot discovered during the progress of the work, however slight, is to be reported at once to the C.A. who will issue instructions. On completion of such work, no plastering or other finishing is to be carried out until the C.A. has given his approval. The Contractor shall take every precaution to keep timber free from infection.

1.12.17 Asbestos

Any asbestos found on site is to be brought to the attention of the C.A. All asbestos which is to be removed shall be removed by an approved specialist.

1.12.18 Extra Works

The Contractor shall not without written sanction from the C.A. carry out any work which he considers is not included in his Tender or Contract.

Any additional work likely to involve extra cost shall be pointed out to the C.A. at the time of the discovery and a written order shall be obtained before proceeding.

In cases of urgency (e.g. blocked drains, dangerous walls, etc.) notice in writing shall be given by the Contractor to the C.A. immediately setting out the full circumstances relating to such urgent additional work.

The extent of which old plaster to walls, ceilings and partitions is removed shall be agreed before-hand if this work involves extra cost, and the manner in which old and defective work is removed shall be such as to minimise the extent of such works.

Where extra work has been caused by improper methods, carelessness or lack of supervision by the Contractor, no additional payment will be made.

1.12.19 Cleaning on Completion

Allow for scrubbing and washing all floors, staircases, etc. Wash and clean all glass both inside and out and leave premises clean and tidy, all to the C.A.'s approval.

Touch up paintwork as required and leave premises entirely fit for occupation.

1.12.20 Control of Fly Tipping In Building Contracts

The Contractor shall be responsible for preventing excavated material, rubbish, rubble, surplus materials, etc., arising from the works being dumped anywhere other than on a recognised tip lawfully so used. Without prejudice to the generality of the foregoing he shall:

- (a) Sub-let carting away only to bona-fide carriers;
- (b) Obtain from such carriers the location of the tip or tips proposed to be used by them;
- (c) If and when required by the C.A. obtain and submit to the C.A. written evidence that all loads of excavated material, rubbish, rubble, surplus material, etc., have rubbish, rubble, surplus material, etc., have been deposited at a recognised tip lawfully so used.

Should it be shown to the satisfaction of the C.A. that any excavated material, rubbish, rubble, surplus materials, etc., have been deposited anywhere other than a recognised tip lawfully so used, the Contractor will be held responsible for clearing away such deposits at his own cost and ensuring that they are placed in a recognised tip lawfully so used and for securing the dismissal from the site of the driver of the vehicle concerned and, where the work is sub-let, the firm of carriers by whom he is employed.

1.13 TERMS USED IN REFURBISHMENT/ALTERATION

1.13.1 **Remove** means isolate, disconnect, dismantle as necessary and remove the stated element, work or component and all associated accessories, fastenings, supports, linings and bedding materials and dispose of unwanted materials. It includes removing associated pipework, wiring, ductwork or other services unless specifically stated otherwise or unless the item referred to is required to be reused or replaced with a similar item.

1.13.2 **Replace** means:

- (a) Remove the stated existing components, features and finishes;
- (b) Provide and fit components, features or finishes which, unless specified otherwise must match those which have been removed;
- (c) Make good as necessary.
- 1.13.3 **Repair** means carry out local remedial work to components, features and finishes as found in the existing building, resecure or refix as necessary and leave in a sound and neat condition. It does not include replacement of components or parts of components or redecoration.
- 1.13.4 **Make Good** means carry out local remedial work to components, features and finishes which have been disturbed by other previous work under this Contract and leave in a sound and neat condition. It does not include replacement components or parts of components. The meaning of the term shall not be limited by this definition where used in connection with the defects liability provisions of the Contract.
- 1.13.5 **Ease** means make minor adjustments to moving parts of the stated component to achieve good fit in both open and closed positions and ensure free movement in relation to fixed surrounds. Make good as necessary.

- 1.13.6 **To Match Existing** means use products, materials and methods to match closely all visual characteristics and features of the existing work with joints between existing and new work as inconspicuous as possible.
- 1.13.7 **Overhaul** in conjunction with doors and casement windows means adjust the opening part to open and close readily within the existing lining or frame including allowances for decorations (3 coats of paint). Remove paint from the hinges, door closers, locks or latches and oil to leave in ready working order. Adjust door closers to close properly and readily. Carefully remove and refix stops to a close fit with the adjusted position.
- 1.13.8 **Overhaul** in conjunction with timber double hung sliding sash windows with box frames means removing paint and operative closing devices, removing the staff and parting beads and renewing with new approved beads, adjusting the sliding sashes by either planning or planting new matching sections to ensure a smooth regular action within the box frame, removing the sash cords and renewing with new waxed sash cords, adjusting the balances with new or additional weights, replacing the sashes and leaving in full working order. Allowances are to be made for decorations where these are specified.

1.14 MANAGEMENT OF THE WORKS

1.14.1 Insurances

Before starting work on site submit documentary evidence and/or policies and receipts for the insurances required by the Conditions of Contract.

1.14.2 Insurance Claims

If any event occurs which may give rise to any claim or proceeding in respect of loss or damage to the Works or injury or damage to persons or property arising out of the Works, forthwith give notice in writing to the Employer, the C.A. and the Insurers. Indemnify the Employer against any loss which may be caused by failure to give such notice.

1.14.3 **Programme**

As soon as possible and before starting work on site prepare in an approved form a programme for the Works which must make allowance for all:

- (a) Sub-Contractor's work;
- (c) Running in, adjustment and testing of engineering services;
- (d) Work resulting from instructions issued in regard to the expenditure of Provisional Sums;
- (d) Work by others concurrent with the Contract.

1.14.4 Site Meetings

- (a) The C.A. will hold site meetings to review progress and other matters;
- (b) Ensure the availability of accommodation and attend all such meetings.

1.14.5 Notice of Completion

Give C.A. at least two weeks' notice of the anticipated dates of Practical Completion of the whole or parts of the Works.

1.14.6 Security and Safety

Adequately safeguard the site, the works, materials, plant, etc. from damage or theft. Comply with all statutory requirements to protect all persons from any hazards. Provide the C.A. with copies of all Method Statements, Safety Plans, and Risk Assessments, etc. Use products, methods of work and protective measures to minimise health and safety hazards.

1.14.7 Estimated Cost of Variations

If the C.A. issues details of a proposed instruction with a request for an estimate of cost, submit such an estimate without delay and in any case within 7 days.

1.14.8 Measurements

Give reasonable notice to the C.A. before covering up work which the C.A. requires to be measured.

1.14.9 Interim Valuations

At least 7 days before the established dates for interim valuations submit to the C.A. details of amounts due under the Contract together with all necessary supporting information.

1.15 SAMPLES/APPROVALS

1.15.1 Samples

Where approval of products is specified submit samples or other evidence of suitability. Do not confirm orders or use products until approval of samples has been obtained. Retain approved samples in good clean condition on site for comparison with products used in the Works. Remove when no longer required. Samples of new mouldings, etc. will be required of each particular type prior to commencement of repair or renewal works.

1.15.2 Approvals

Where products or work are specified to be approved or the C.A. instructs or requires that they are to be approved the same must be supplied and executed to comply with all other requirements and in respect of the stated or implied characteristics either to the express approval of the C.A. or to match a sample expressly approved by the C.A. as a standard for the purpose.

1.16 PROTECT AGAINST THE FOLLOWING:

1.16.1 Noise

- (a) Comply generally with BS 5228;
- (b) Fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by manufacturers of the compressors, tools or vehicles;
- (c) Do not use pneumatic drills and other noisy appliances before 8.30am and after 5.00 PM weekdays or at any time at weekends without consent of the C.A;
- (d) Do not use or permit employees or Sub-Contractors to use radios or other audio equipment.

1.16.2 Pollution

Take all reasonable precautions to prevent pollution of the site, the works and the general environment including streams and waterways.

1.16.3 Nuisance

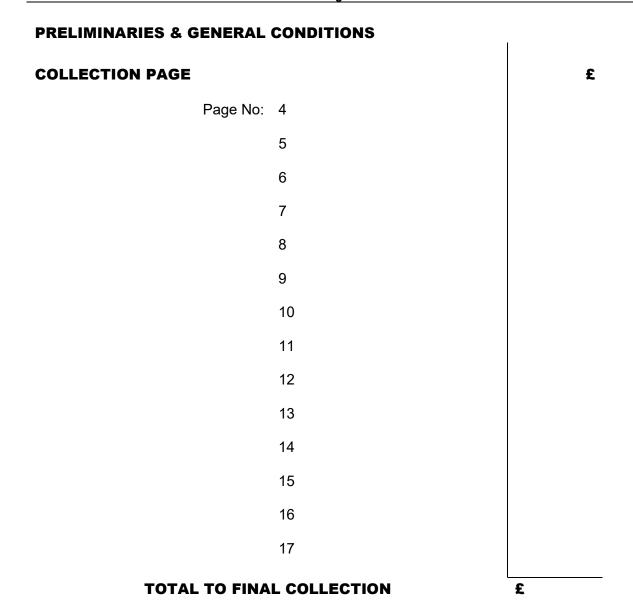
Take all necessary precautions to prevent nuisance from smoke, dust, rubbish, vermin and other causes.

1.16.4 Fire

Take all necessary precautions to prevent personal injury, death and damage to the works or other property from fire. Comply with Joint Code of Practice "Fire Prevention on Construction Sites" 1992 published by the Building Employers Confederation, the Loss Prevention Council and the National Contractors' Group. Burning off using a naked flame or hot air gun will not be permitted without prior written consent from the C.A. Smoking will not be permitted on the site at any time.

1.17 EXISTING SERVICES

Notify all service authorities and adjacent owners of the proposed works not less than one week before commencing site operations. Before starting work check positions of existing services. Observe Service authorities' recommendations for work adjacent to existing services. Do not interfere with their operation without consent of the Service authorities or other owners. If any damage to services results from the works notify C.A. and appropriate service authority without delay. Make arrangements for making good without delay to the satisfaction of the Service authority or other owner as appropriate.



2.0 MATERIALS AND WORKMANSHIP

2.1 DEMOLITION & ALTERATIONS

- 2.1.1 The Contractor is to provide all scaffolding and protection to the property and adjacent properties necessary in order to carry out all the demolition works safely and without risk of damage to persons or property. The Contractor will be held directly responsible for any claims arising out of any such damage.
- 2.1.2 All demolition work described is to be carried out so as to cause minimal inconvenience to Tenants, the public or the occupants of any adjacent properties.
- 2.1.3 The materials arising from excavations, demolitions, pulling down, etc. shall, unless otherwise described, become the property of the Contractor and he is to allow credit for them in his prices.
- 2.1.4 All surplus material and rubbish is to be carted away. The term "carry away" shall include getting out, filling into barrows, wheeling, loading and carrying to a licensed tip.
- 2.1.5 Materials described as "set aside for reuse" shall be cleaned, prepared for refixing and stored and protected until required.
- 2.1.6 The Contractor is to provide where necessary temporary support to adjacent properties and the sections of the property to be retained during the course of the demolition works where the existing support has been temporarily removed. The Contractor is required to protect any party wall exposed as a result of the works. All temporary support works are to be to the satisfaction of the C.A. and the District Surveyor/Building Inspector. All such prices in connection with temporary support are deemed to be included in the Contract Sum.
- 2.1.7 All demolition works are to be carried out during normal working hours and in strict compliance with any Local Authority bye-laws.
- 2.1.8 The prices of demolition, concrete, brickwork, masonry, etc. shall include for cutting out, cutting back and plugging off as appropriate of any redundant piping, tubing, conduit, wire bars, etc. that may be encountered.

2.2 EXCAVATIONS & EARTHWORK

- 2.2.1 Trenches shall be excavated as required to construct foundations for structures as shown on the drawings and described in the Specification hereinafter. Any other excavation beyond that required shall be made up in concrete as described for foundations, at the Contractor's own expense.
- 2.2.2 The bottom of the excavation is to be levelled, rammed and approved by the C.A. and where appropriate the District Surveyor/Building Inspector before any concreting or backfilling.
- 2.2.3 Should the Contractor notice any change in the soil type during the course of excavation he should notify the C.A. immediately.
- 2.2.4 All good quality top soil which has been excavated is to be stored on site and distributed over the site on completion of the works. Any surplus soil is to be removed from site.
- 2.2.5 All turf affected by the works is to be carefully lifted in sections and stored on site in a suitable position. During dry weather the Contractor is required to keep all rolled turf moist.
- 2.2.6 All trenches and excavations are to be fully protected from the weather during the course of the works by tarpaulins, boarding's and counter trenches dug to stop rainwater entering the trenches.
- 2.2.7 Any excavations near roads, rights of way, footpaths, etc. are to be adequately protected at all times during the works by suitable sturdy boarding/guard rails illuminated where necessary.
- 2.2.8 The price for excavation should include for planking and strutting, cutting off and grubbing up roots, breaking up old drains or other obstructions, double handling, supporting by timbers or other adequate means. Planking and strutting should include everything necessary to uphold the face of the trench including heavy timbering to prevent settlement or damage to adjacent buildings, roads, footpaths, etc.
- 2.2.9 Excavations for underpinning are to be carried out in a maximum of one metre sections or as otherwise specified by the C.A. All brickwork being underpinned is to be carefully needled across the trench.
- 2.2.10 Hardcore shall be approved hard brick or stone rubble free from any foreign material, e.g. timber, plaster or soil, etc. and broken to pass a 75mm ring spread, levelled, well rammed and consolidated to the thickness described. The price shall include for blinding surface of hardcore with fine ballast ash or sharp sand.
- 2.2.11 Returning, filling and ramming shall be carried out with the best of the excavated material, filled in up to the levels required in layers not exceeding 225mm thick, each layer well consolidated with the addition of water if required or directed before the next layer is added.

2.2.12 The Contractor shall not undertake any excavation which may be considered hazardous and in breach of Health & Safety legislation or regulations. In the event of any risk whatsoever the Contractor is to immediately cease all work and seek the C.A.'s instructions.

2.3 CONCRETE WORK

- 2.3.1 Water shall be clean drinking tap water.
- 2.3.2 Cement for use above ground level shall be ordinary quality Portland cement to BS EN 197-1:2000.
- 2.3.3 Cement for use in foundations, for floor slabs, pavings, drainage work and any work in contact with the ground shall be sulphate resisting cement to BS 4027:1996.
- 2.3.4 All cement shall be delivered in the manufacturer's sealed bags and stored in a clean dry place on a boarded platform.
- 2.3.5 Use of high alumina cement is not permitted.
- 2.3.6 Cement which has commenced to set shall not be used or regauged.
- 2.3.7 Sand shall be clean riverbed sand free from all salts.
- 2.3.8 Fine and coarse aggregate shall comply with BS EN 882:2004 and be stored on a clean drained base.
- 2.3.9 Fine aggregate should be graded from 5 mm downwards. Coarse aggregate should be graded from 20mm to 5mm.
- 2.3.10 Concrete shall be composed of cement, fine and coarse aggregate with the correct water/cement ratio for the prescribed mix and shall be mixed to a uniform colour and consistency in the following proportions where specified:
 - (a) Nominal 1:12 50 kg cement/4.2 m³ "all in" aggregate;
 - (b) Nominal 1:3:6 50 kg cement/0.1 m³ aggregate/0.3 m³ coarse aggregate (foundations, ground floor slabs, manhole bases and benching, beds and surrounds to drains);
 - (c) Nominal 1:2:4 50 kg/.07 m³ fine aggregate/.14 m³ coarse aggregate (steps, casings to steel beams, all precast concrete and all reinforced concrete).
- 2.3.11 Ready mixed concrete shall comply with BS EN 206-1:2000 and may only be used with the prior approval of the C.A. Delivery tickets must be retained by the Contractor for inspection.
- 2.3.12 When mixing is done by hand or in a batch mixer on site materials are to be measured in gauge boxes on a platform.
- 2.3.13 The platform, boxes, mixer and tools must be kept clean and free from partially set cement.
- 2.3.14 All concrete is to be mixed evenly and uniformly in either a clean mixing machine or on a clean surface free from any deleterious matter.
- 2.3.15 No additives shall be used to assist setting or for any other reason.
- 2.3.16 No concrete is to be mixed or placed when the temperature is below 4°C (38° F) and the Contractor shall prevent any damage by frost and shall make good any frost damage entirely at his own expense to the approval of the C.A.
- 2.3.17 The Contractor is to ensure that during the first five days of curing all concrete is prevented from rapid drying out. During warm weather the concrete is to be covered with soaked tarpaulins which are to be kept damp at all times. The concrete must not be loaded until the curing period is complete.
- 2.3.18 The concrete once mixed is to be placed immediately on mixing and to be well tamped and consolidated into trenches. All planking and strutting to trenches is to be removed immediately after the concrete has been placed and the concrete well packed in against the trench walls. Mechanical vibration is to be employed where necessary and all costs arising there from are deemed to be included.
- 2.3.19 The Contractor is to provide suitable test cubes 150m³ when requested by the C.A. for testing purposes.
- 2.3.20 No concrete shall be placed after it has developed its initial set. It shall not be dropped from a height greater than 1 metre and where concrete has to be stopped and restarted at a later date the sections of existing concrete which are to abut the new are to be well hacked, brushed down and painted with cement: sand slurry 1:1 mix immediately prior to placing the new concrete.

- 2.3.21 The concrete shall be well tamped into moulds of formwork around reinforcement and exposed surfaces and shall be protected from premature drying and rain.
- 2.3.22 Precast concrete components are to be free from cracks, chips or any other imperfections. On request from the C.A. the Contractor is to provide invoices from the suppliers of precast concrete products as evidence that they have been obtained from the agreed source. Prices for precast concrete shall include for moulds, reinforcement hoisting and setting. Fair finish shall be that produced by wrot formwork.
- 2.3.23 Precast copings are to comply with BS 5642 Part2:1983 to dimensions as specified later or shown on drawings.
- 2.3.24 Precast paving slabs are to be 50mm thick type A complying with BS EN ISO 7263 :2011 and to be laid on a 25mm dry mix bed of sand/lime on a well consolidated base. Joints are to be filled with sand/lime mortar after tamping into position.
- 2.3.25 Lintels are to be cast using mix "C" concrete. When precast lintels are used the top shall be clearly marked. Lintels are to be reinforced with 1 N ° 12.5 mm bars per 115mm width. The bars are to have standard hooked ends. All lintels are to be minimum 230mm longer than their clear span. Their depth to be calculated as follows:
 - (a) Up to 915mm: 150mm;
 - (b) 914 1525mm: 230mm;
 - (c) 1525mm 2135mm: 305mm

Lintels over openings in plasterboard shall be keyed for plaster. Where particularly specified brick arches shall be provided to lintels in external walls tied with non-ferrous ties at 225mm centres into insitu lintels.

- 2.3.26 Unless specified otherwise no steel or pre-stressed concrete lintels shall be used unless prior approval is obtained from the C.A. in writing.
- 2.3.27 Screeding to concrete floors is to be 75mm thickness or as otherwise specified in cement sand mix 1:4 to a level plain surface with a wood float, free from cracks and hollows. The Contractor is deemed to include for providing and fixing 150mm wide strips of galvanised EML over pipework which has been insulated and hidden within the screed. Expansion joints consisting of 12mm thick flexcell or other similar approved material are to be provided at 5m intervals. The position of all expansion joints is to be agreed with the C.A. on site. In all circumstances the substrate is to be fully swept and prepared to ensure satisfactory screed adhesion. If the substrate is in an unsatisfactory state which may prejudice adhesion the Contractor shall be required to provide suitable bonding agents having obtained the C.A.'s prior approval. The provision and application of any necessary bonding agents together with any other work necessary to achieve satisfactory adhesion is deemed included within the Contract price.

2.4 DPCs AND DPM's

- 2.4.1 Damp-proof membranes are to be either
 - (a) 1200 gauge Visqueen, lapped 225mm and tape sealed with PVC self-adhesive tape 50mm wide, at all joints, turned up perimeter walls and partitions, etc. by 300mm; or
 - (b) a single layer of Bituthene self-adhesive DPM material laid in strict accordance with manufacturer's instructions. Extend up all abutments by 300mm. Use recommended primer to achieve requisite adhesion; or
 - (c) 3No full brush applied coats of Synthaprufe as manufactured by Messrs Ruberoid used in strict accordance with the manufacturer's instructions. Final coat to be blinded with sand whilst still tacky. Extend coats up all abutments, etc. by 300mm.
- 2.4.2 Slate and bitumen damp-proof courses shall comply with BS 743:1970 (with AMD's). DPCs shall be a minimum height of 150mm above external ground level and where fixed vertically they shall be of one continuous length.
- 2.4.3 Bitumen damp-proof courses shall be asbestos based lead cored type 5F laid and bedded for the full wall thickness. Joints shall be applied minimum 150 mm full width at corners, and neatly pointed where exposed.
- 2.4.4 Where slates are specified, they shall be first quality Westmorland slates. Use of second hand slates is not permitted unless expressly stated hereinafter.
- 2.4.5 Unless otherwise specified DPCs shall be reinforced plastic hyloads or similar approved by the C.A., equal to wall width. Where possible joints are to be formed at quoins and are to be full width lap joints. Where a joint occurs along a straight section of wall the minimum joint lap is to be 255mm or the DPC width whichever is the greater.

- 2.4.6 The positioning of DPCs is as follows:
 - Horizontally beneath concrete or stone subsill or threshold turned upwards or back and tucked between the underside of the window frame and sill/threshold and wall beneath;
 - (b) 150mm above ground level in any new walls or partitions or in any other position suitable to arrest the ingress of rising damp;
 - (c) On chimney stacks 150mm above the lowest point where the stack emerges through the roof covering;
 - (d) Below brick on edge and precast concrete copings;
 - (e) On parapet walls, 150mm above an abutting roof slope;
 - (f) Between external walls and garden walls where they abut;
 - (g) Where it is necessary to form a cavity tray over a lintel (extending 150mm beyond jambs of opening and sloping towards the outer face) or in a parapet cavity wall (sloping towards the inner face);
 - (h) In a suitable position in sleeper walls for suspended ground floor construction;
 - (i) At the interface between inner and outer leaves of construction in a cavity wall;
 - (j) Any other location within the construction deemed necessary in order to prevent damp ingress into the interior of the premises or the structure itself. Where in doubt contact the C.A. for instructions.

2.5 BRICKWORK & BLOCKWORK

- 2.5.1 All bricks shall be hard, sound, square, even in size, clean and equal to samples approved by the C.A., Clay Bricks shall comply in all respects to with BS EN 3921:2001.
- 2.5.2 All brickwork and blockwork shall comply with BS 8000 Part 3: 2001 (AMD 6195:1990).
- 2.5.3 Common bricks shall be flettons as supplied by London Brick Company or similar approved by the C.A. They shall be laid frog up in accordance with BS EN 1996:-1-2:2005 and shall have a minimum compressive crushing strength of 20.7 N/mm².
- 2.5.4 London stock bricks shall be frogged and have a minimum compressive strength of 16 N/mm².
- 2.5.5 Semi engineering bricks (Class B) shall be frogged and have a minimum compressive strength of 48.5 N/mm².
- 2.5.6 Engineering bricks (Class A) shall be frogged and have a minimum compressive strength of 68.9N/mm².
- 2.5.7 Sand/lime bricks shall comply in all respects with BS EN 771-2:2003(AMD 5427 1987) and must be stored in a dry place. Minimum compressive strength to be 20.5 N/mm².
- 2.5.8 "Bricks to match existing" where specified shall be deemed to mean bricks which are of a similar appearance, design and crushing strength to the existing. The Contractor is required to provide the C.A. with sample bricks for approval prior to ordering and construction.
- 2.5.9 Brick rubbers shall be soft clay bricks suitable for accurate grinding to form arches and special features, the colour of which is to match existing brick rubbers. Each rubber is to be joggled and slightly frogged on each abutting face.
- 2.5.10 Blocks shall comply with BS 6073 Part 2: 2008 (AMD 3944:1982: & AMD 4462:1984) and be Thermalite, Celcon or similar approved by the C.A. They shall comply in every respect with the manufacturer's specifications and with building regulations applicable for the construction specified.
- 2.5.11 External airbricks shall be yellow clay airbricks or red terracotta airbricks to BS 493:1995+A1:2010 and be free from cracks, chips or any imperfections.
- 2.5.12 All ties shall be stainless steel straight or twisted strip as specified, with fishtail ends to BS EN 1243:2011 (AMD 3651:1981 & AMD 4024:1982) extending a minimum of two thirds into each brick or blockwork joint.
- 2.5.13 Water cement and sand for use in mortar shall be as specified in Section 2.3 above. Lime shall be hydrated lime complying with BS EN 4559-1:2010: delivered and stored as for cement.
- 2.5.14 Cement mortar shall be composed of 1:3 sulphate resistant cement/sand by volume for all work below DPC level. Cement/lime mortar shall be composed of 1:1:6 ordinary cement/lime/sand by volume for all other brickwork and blockwork except where specifically directed.

- 2.5.15 No additives or plastering agents shall be used. No mortar is to be reworked or retempered once it has commenced to set.
- 2.5.16 Walls should be carried up uniformly, no one portion being raised more than 900mm above another at one time and they should be laid with courses level and perpends plumb throughout.
- 2.5.17 All bricks and blocks shall be well butted with mortar before being laid. Mortar is to be mixed in either a clean mixing machine or on a clean surface free from all deleterious matter.
- 2.5.18 Joints of all new fair faced brickwork are to be raked out a minimum of 12.5 mm deep as the work proceeds. Bonding of the brickwork is to match existing and jointing and pointing is to be weather struck unless described otherwise. Areas of existing brickwork where specified are to be raked out to a minimum of 19mm, the brickwork well wetted and pointed with cement/lime mortar to match existing. All pointed brickwork shall be cleaned down on completion.
- 2.5.19 The bonding of brickwork and blockwork is to match existing, and jointing and pointing is to be weather struck unless described otherwise. Where blockwork/brickwork abutments are not to be bonded together the joint must be reinforced with straight line wall ties 150mm long at 225mm vertical intervals. Garden wall abutments with external walls are to be straight jointed with a vertical DPC inserted between the two walls. Where brickwork and blockwork are to be bonded into existing brickwork or blockwork, these are to be bonded in English or Flemish bonds to the adjoining walls and pointed externally on completion with a neat weather struck joint in cement/lime mortar to match existing adjoining pointing.
- 2.5.20 Care should be taken to ensure that all facework is kept free from mortar droppings and that adjacent scaffold boards are turned back during heavy rain and at night.
- 2.5.21 Frame lugs or cramps are to have fishtailed ends and be of hot dipped galvanised steel built into the brickwork or blockwork with a minimum depth of 75mm at 750mm centres.
- 2.5.22 No brickwork or blockwork shall be built after the ambient outside temperature reaches +4° C on a falling thermometer or before +2° C on a rising thermometer. In seasons liable to frost all brickwork and blockwork laid during the day shall be properly covered and protected against frost at night. Any brickwork or blockwork damaged by frost shall be pulled down and rebuilt as directed by the C.A. at the Contractor's expense. The Contractor shall provide and maintain a foreman on site at all times during the winter season.
- 2.5.23 Wall restraint ties shall be 6mm x 25mm x 305mm MS twisted if necessary, with fish tail ends and fixed to the sides of joists where the joists are at right angles to the walls, or fixed across the top of 3 N° joists where the wall is parallel to the joists.
- 2.5.24 Chimney pots are to be of terracotta type of a suitable size and design to match existing. Where specified hereinafter the pots are to be protected by means of hog backed spigot terracotta terminals properly bedded and fixed into position.
- 2.5.25 Joist hangers are to be built into a corresponding horizontal brick joint allowing for all raking out and repointing.
- 2.5.26 All vent grilles are to be hot dipped galvanised steel perforated grilles 225 x 225mm minimum size properly decorated in accordance with this specification prior to fixing.
- 2.5.27 Wall straps are to be 25 x 6mm galvanised steel bar with a twisted and bent down end (100mm minimum) built into the brickwork of the external wall to be restrained. The other end of the strap is to be fixed across the top surface of 2 N° joists (flush with the surface in small rebates) where the floor joists are parallel to the external wall. Where floor joists are at right angles to the external wall the straps are to be fixed to the side of alternate joists of 100mm centres with gauge 14 MS countersunk screws. In this instance the total length of strap abutting and fixed to the joists must not be less than 550mm. Noggins to be provided below spiked in position.

2.6 ROOFING

- 2.6.1 Slates for overhauling or reslating existing roofs shall be sound, second hand and equal to samples approved by the C.A. or new complying with BS EN 12326-1:2004 and laid in accordance with BS 5534 Part1:1991 & Part 2:1986, fixed with 2 N° 38mm aluminium slate nails per slate for head nail slates, or 2 N° 50mm aluminium ditto for centre nail slates. Lap to be minimum 75mm.
- 2.6.2 Roofing felt under reslated or retiled roofs should comply with BS 747:2000 Class 1F hession reinforced untearable bituminous felt laid over rafters turned up a minimum of 100mm at abutments and lapped minimum 150mm at joints. No joints will be permitted in the length.
- 2.6.3 Commercial zinc for roofing shall be a minimum of 14 gauge (0.8mm) and laid in accordance with BS CP 143 Part 5:1964.

2.6.4 Lead is to be British lead complying with BS EN 12588:2006. Unless specified otherwise thicknesses are to be as follows:

Aprons and flashings Code 4 Soakers Code 4 Cill coverings Code 4 Back gutters to stacks Code 5 Hip and ridge flashings Code 5 Flat roofs Code 6 Flashing clips Code 6

- 2.6.5 Sheeting felt laid under new valley or parapet metal gutter linings, asphalt roofing or zinc flat roofing, shall be brown sheeting felt to BS 747:2000, class SA (2 Inodorous), laid continuously in gutter linings and with minimum 150 laps at joints elsewhere.
- 2.6.6 Batons and counter batons shall be 38mm x 19mm treated SW firmly secured with aluminium nails to each rafter.
- 2.6.7 Mastic asphalt shall comply with BS 8218:1998.
- 2.6.8 Reflective paint shall be applied to the top surface of asphalt roofs where specified to substitute the mineral chippings top layer and shall be Blue Circle reflective roof paint for asphalt applied in strict accordance with the manufacturer's instructions. Where mineral chippings are specified these shall be 6mm white spar.
- 2.6.9 The price for each type of roofing material shall include where relevant roofing felt, batons, angle or tilting fillets, gutter boards, soakers, cover and stepped flashings, cutting and dressing at the abutments, verges and eaves.
- 2.6.10 Insulation is to be approved by the C.A.

2.7 CARPENTRY AND JOINERY

- 2.7.1 Timber for carpentry and joinery shall be best quality properly seasoned, sound, square edged and free from large, loose and dead knots and other defects which would render it unsuitable for the particular purpose for which it is to be used.
- 2.7.2 Timber should have a moisture content between 15% and 20% at the time of fixing and shall for structural and carcassing use comply with BS 4978:2007 and be used in accordance with BS EN 338:2003 (AMD 8597:1995) & Part 3:1985 (AMD 5391:1988 & AMD 8101:1994).
- 2.7.3 For joinery/wrot timber it shall have a moisture content between 12% and 15% and shall comply with BS 1186 -3:1990 and be used in accordance with Part 2:2002.
- 2.7.4 Unless specified otherwise joinery timber is to be "European Redwood".
- 2.7.5 Cills to door frames shall be well seasoned oak, teak, or utile and laid on a bituminous damp proof course.
- 2.7.6 Plywood shall comply with BS EN 636:2003 Grade 2 bonded with WBP adhesive and faced with birch veneer unless otherwise specified.
- 2.7.8 Blockboard and laminboard shall be bonded with Urea Resin moisture resistant adhesive.
- 2.7.9 Chipboard shall be tongue and grooved pre-treated (if necessary) Resin bonded chipboard complying with BS EN 312:2003 shall be stored flat in a dry store area.
- 2.7.10 Fibreboard shall be low density acoustic quality bitumen impregnated fibreboard complying with BS EN 316:2009 stored flat in a cool dry store area.
- 2.7.11 Hardboard shall be high density tempered high hardboard stored flat in a dry store area.
- 2.7.12 Glue for joinery shall be "Cascamite" by Borden (UK Limited) or equivalent, or synthetic resin adhesive complying with BS 1203:2001 for plywood and BS 1204 1993 for wood.
- 2.7.13 Joist hangers, timber connectors, frame ties and straps shall be galvanised of proprietary manufacturer and suitable for the load being carried as recommended by the manufacturer.
- 2.7.14 All items of joinery and carpentry are to be firmly and securely fixed in position so to be able to withstand reasonable twisting, loadings etc. All exposed nail heads are to be punched below the surface of the wood in preparation for stopping/filling.
- 2.7.15 External window and door frames in preformed openings are to be secured by counter sunk MS gauge 12 wood screws 75mm long and staggered at 225mm centres along the vertical stops.

- 2.7.16 External window and door frames in new brickwork or blockwork are to be secured with 3 N° equally spaced hot dipped galvanised steel lugs/cramps built into each stop and screwed into the frame using counter MS gauge 8 wood screws 32mm long.
- 2.7.17 Internal door and hatch linings in preformed openings in brickwork and blockwork are to be secured with counter sunk MS gauge 10 wood screws 50mm long at 225mm centres staggered along stops.
- 2.7.18 Internal door linings in preformed openings to new or existing stub works are to be secured with wire nails 63mm long at 150mm centres.
- 2.7.19 Fire door stops to plain faced linings and stops to roof space access hatches are to be secured with glue and counter sunk MS gauge 10 wood screws 15mm long and 150mm centres.
- 2.7.20 Stops to fire doors are to be secured with 32mm MS panel pins at 150mm centres.
- 2.7.21 Skirting applied to walls which are not to be damp proofed are to be fixed using "obo" or similar tempered blue steel masonry nails 63mm long staggered at 150mm centres using appropriate timber ground spacers. Where timber grounds have been fixed to the wall or a splayed ground used as a stop bead for plaster, skirtings shall be fixed to the said ground using 32mm MS panel pins at 150mm centres.
- 2.7.22 Skirting which are to be applied to walls which are damp proofed are to be secured using counter sunk MS gauge 10 wood screws 50mm long staggered at 225mm centres using all necessary timber ground spacers in plugs liberally dipped in araldite or epoxy other similar approved adhesive in strict accordance with the manufacturer's instructions.
- 2.7.23 Fixings to stud partitions built of a suspended timber floor are to be as follows:
 - (a) Solid plate spiked to floor using 100mm wire nails at 225mm centres;
 - (b) Head spiked to ceiling using 100mm wire nails at 225mm centres;
 - (c) Vertical studs spiked in position screw nails using 100mm wire nails;
 - (d) Noggins where necessary spiked in position using 100mm wire nails;
 - (e) End studs abutting a brick or block wall (not damp proofed) secured in position using blue steel masonry nails at 100mm long at 225mm centres;
 - (f) End studs abutting a brick wall which has been damp proofed screwed in position using counter sunk MS gauge 12 wood screws 87mm long with plugs liberally dipped in araldite, epoxy adhesive or similar approved in strict accordance with the manufacturer's instructions at 225mm centres;
 - (g) Sole plates fixed directly to a sub floor using counter sunk stainless steel screws gauge 10 87 mm long at 225mm centres.
- 2.7.24 Architraves, cover plates, copings, etc. are to be secured using 32mm Ms panel pins at 150mm. centres.
- 2.7.25 Ducts are to be securely fixed using MS panel pins at 150mm centres of suitable depth.
- 2.7.26 Kitchen fittings unless otherwise specified by the manufacturer are to be secured at suitable points on the carcassing using counter sunk MS screws at 225mm centres 50mm long into noggins and studs or brickwork including plugs dipped in araldite epoxy adhesive or similar in strict accordance with the manufacturer's instructions if into a damp proof wall or screeded solid concrete floor.
- 2.7.26 Lippings to door, hatches, shelves, worktops, etc. shall be secured using 32mm MS panel pins at 100mm centres.
- 2.7.27 Worktops are to be secured in strict accordance with the kitchen fitting manufacturer's recommendations.
- 2.7.28 Roof decking is to be secured using hot dipped galvanised or copper nails of suitable length well driven home.
- 2.7.29 Roof structure and other structural carpentry work is to be fixed into position using wire nails of suitable length well driven home.
- 2.7.30 Floorboards are to be securely fixed using MS brads 75mm long at 50mm centres across the width of each floorboard to each joist.
- 2.7.31 Where joists are doubled up the abutting faces are to be secured together using 15mm diameter MS double sided toothed plate timber connectors to BS EN 912:2000 between the faces which are to be bolted together, together with 12mm diameter 4.6 Grade black bolts and washers at 300mm centres.
- 2.7.32 Access panels are to be secured using brass cups and Gauge 8 raised head brass screws 25mm long at 150mm centre.

- 2.7.33 Hardboard (where not part of a sound resistance floor covering detail) is to be fixed using copper hardboard pins 19mm long at 150mm centres.
- 2.7.34 Supalux is to be fixed using MS cups and counter sunk wood screws 32mm long at 225mm centres.
- 2.7.35 Other items of joinery or carpentry not specifically mentioned are to be fixed in accordance with the standard practice in a good workman like manner to the satisfaction of the C.A.
- 2.7.36 Structural timber and softwood carcassing should be "tanalised" or equal and approved by the C.A. The Contractors shall for each delivery produce a certificate of impregnation for verification. Cut ends shall be treated with coloured "Ensele" in accordance with the manufacturer's recommendations. (Tanalith C and Ensele by Hicksons Timber Impregnation Company GB Ltd).
- 2.7.37 Timber should be ordered and prepared as soon as practicable after the order to start and shall be carefully stacked undercover so that air may circulate around it.
- 2.7.38 Exposed faces of joinery shall be wrot. Except in the case of doors for which finished sizes are given, 3 mm will be allowed of the nominal size of timber specified for each wrot face.
- 2.7.39 Joinery shall be constructed as BS 1186 Part 2:1988 and the term "framed" shall imply cutting, morticing, tenoning, wedging, notching, halving, etc., as required.
- 2.7.40 All prices shall include for rebating, rounding, moulding, grooving, beading, etc. as required for mitres, short length ends, notching, etc. and for glue, nails, screws, dowels, grounds, plugs and fixings as required.
- 2.7.41 Joinery that is to be painted shall be knotted and primed before leaving the joiners shop and should be stored and protected from the weather immediately after delivery to the site. Back faces of linings, frames, skirtings, architraves, stair strings and bottoms of doors shall be primed before fixing. Paint for priming shall be obtained from the same manufacturers as that selected by the C.A. from a list of approved manufacturers. In cases where joinery items are supplied ready primed, they shall be re-primed with aluminium primer.
- 2.7.42 Ironmongery shall be fixed with screws to match and locks, latches, hinges, fastenings, etc. and shall be oiled adjusted and left in perfect working order on completion.
- 2.7.43 No new notching of joists will be permitted. Unauthorised notching must be made good by nailing in 2 N° 5mm plywood fishplates, 450mm x remaining depth of joist under the notch.
- 2.7.44 Drilling of joist for services must be through the neutral axis.
- 2.7.45 Rafters to pitch and roofs are to be birds mouthed over wall plate. Birds' mouthing is not to extend more than 1/3 of the depth of the rafter.
- 2.7.46 Architraves shall be ex 75mm x 25mm SW ogee architraves, unless otherwise specified and neatly mitred at corners. Any gaps between architraves and the face of plaster is to be infilled with a scribed fillet piece.
- 2.7.47 Skirting shall be ex 150mm x 25mm plain edged SW skirtings unless otherwise specified with mitred external corners and butted internal corners. Where the floor surface is irregular the Contractor is to plain the bottom edge of the skirting board to suit the profile of the floor. Skirtings are to be capped with staff bead, mitred at internal and external corners.
- 2.7.48 External panelled and glazed doors shall comply with BS 459:1988. Frame doors shall have 75mm x 25mm splayed and hollowed weather fillet housed to bottom rails and bottom rails should be rebated for water bar.
- 2.7.49 Internal doors shall be hollow cored and external doors shall be fully cored.
- 2.7.50 Flush doors shall be ply faced external quality where applicable or hardboard faced for internal doors and supplied lipped on long ledges.
- 2.7.51 Fire resisting doors whether one hour or half hour resistance shall comply with BS 476.
- 2.7.52 New softwood casement windows shall comply with BS 644:2009. New softwood double hung sash windows shall comply with BS 644:2009.
- 2.7.53 Door and hatch linings shall be ex 32mm stored SW lining x opening depth properly house together and stored in a cool dry store.
- 2.7.54 Planted stops shall be 25mm softwood for fire doors and 12mm softwood for non-fire doors.
- 2.7.55 Should any joinery or carpentry warp, cup, twist, crack or wind more than the C.A. considers is reasonable during the Defects Liability Period, the Contractor will be liable to replace the component (s) and make good all decorations disturbed.

2.8 GLAZING

- 2.8.1 Glass shall comply with BS 952:1995 & Part 2:1980 and be of British manufacture and free from defects. Generally, glass shall be ordinary quality (OQ) and clear except for bathrooms and WCs where it should be obscured with powers of obscuration and diffusion not less that 8:6 respectively e.g. "readlyte".
- 2.8.2 Glazing in fire doors, fire screens, external doors and the lower panel of fully glazed internal doors shall be 5mm Georgian wired cast and polished plate glass as specified.
- 2.8.3 Thickness of glass shall be as specified.
- 2.8.4 The putty for glazing to wooden rebates shall comply with BS 544:1969 (1994) (with AMD's) and metal rebates shall be an approved proprietary glazing compound.
- 2.8.5 Rebates shall be thoroughly cleaned and primed before glazing.
- 2.8.6 The glass shall be cut to size with a small clearance and fixed with putty or compound, well bedded, back putted, sprigged or clipped and front puttied to the full depth of the rebate and site lines of the glazing bars, neatly trimmed and cleaned off.
- 2.8.7 Where beads are specified for fixing the glass these shall be bedded in wash leather or proprietary glazing tape.
- 2.8.8 All stained glass repairs and works are to be carried out by specialists in accordance with traditional specialist techniques.

2.9 PAINTING & DECORATING

- 2.9.1 Paint should be obtained from an approved supplier. It should be delivered in the manufacturers sealed tins and used in strict accordance with the manufacturer's instructions. The name of the selected supplier shall be agreed with the C.A. at the commencement of the Contract and any change of supplier should be similarly agreed before materials are delivered to site.
- 2.9.2 On any one surface the priming and subsequent coats of paint shall be of one manufacture and in cases where joinery and other items are supplied already primed in a non-compatible primer they shall be reprimed with an aluminium primer. The backs of all items of joinery are to be primed before fixing.
- 2.9.3 No paint should be thinned, applied by spray or roller unless specifically agreed.
- 2.9.4 No painting or external preparation work shall be carried out in wet or foggy weather or upon surfaces that are not thoroughly dry, clean and free from dust.
- 2.9.5 Door and window furniture, electrical accessories and radiators shall be removed prior to decorating and properly refixed thereafter.
- 2.9.6 Surfaces usually decorated shall be deemed to be included in the price for decoration.
- 2.9.7 External stopping shall be "External Poly filler" or similar as approved by the C.A.
- 2.9.8 To existing woodwork remove unwanted nails and screws, stop in holes and cracks, and rub down with glass paper to smooth finish, wash down with sugar soap and clean water. Paint bare timber with one coat of pink primer, stop and knot and bring forward with one coat of undercoat.
- 2.9.9 To new woodwork sand down to smooth surface, knot, prime with pink primer and stop in imperfections ready to receive following coats of paint.
- 2.9.10 To metalwork wire brush, scrape and clean of loose and defective paint and rust, apply one coat of calcium plumbate primer to new metal work and to bare patches on existing metal work ready to receive oil paint. Prepare existing metal gutters and paint internally with one coat of bituminous paint.
- 2.9.11 Galvanised surfaces shall be thoroughly degreased, treated with a mordant solution washed off after it has dried before priming.
- 2.9.12 To stucco, rendering and stonework scrape down, brush and pumice to remove unsound paint and wash with sugar soap and water. Stop in small holes and cracks with external filler, cut out larger cracks and make good with 1:1:6 cement; lime; sand filler incorporating mortar bonding agent. Prime new work and where necessary make good with alkali resistant primer and bring forward making good with patch repairs with one undercoat oil paint.
- 2.9.13 Unless otherwise specified the following finishing coats shall be included in the price for decorations;
 - (a) Woodwork and metal work externally two undercoats and one coat finish gloss;
 - (b) Stonework, stucco and rendering externally two coats of stone paint as specified.

2.10 PLASTERING, RENDERING & TILING

- 2.10.1 Water and cement are described under 2.3 above.
- 2.10.2 Lime shall be hydrated lime complying with BS EN 459-1:2010 delivered and stored as cement.
- 2.10.3 Sand for external rendering, internal plastering with lime and Portland cement and floor screeds shall comply with BS 1199 and 1200:1976 table 1 (sharp washed) and be obtained from an approved source.
- 2.10.4 Plaster shall comply with BS EN 13279-1:2005, class "B" thistle multi finish or board finish. In no circumstance will the use of carlite plaster be permitted.
- 2.10.5 Plasterboard shall be 9.5mm Gypsum plasterboard complying with BS EN 520:2004+A1:2009 backed with aluminium foil where so described and shall be fixed with 32mm plasterboard nails at 150mm centres along edges and bearings with joints scrimmed with good quality hessian scrim tape 75mm wide. The prices for plasterboarding shall include for extra noggins between joints or studs to provide a solid bearing at edges and for firings or for packing out on existing studs or joists. Where two layers of plasters are specified, they should be fixed broken and staggered joints and with plasterboard nails 50mm long.
- 2.10.6 EML shall comply with BS EN 13658-2:2005 and weigh not less than 1.6kg per m³. They shall be fixed with galvanised staples and coated with black bituminous paint and shall be sealed at cut edges and any breaks in the coating.
- 2.10.7 Galvanised corner/angle beams shall be used in arises situations.
- 2.10.8 Mixing and application of internal plastering and external renderings shall be carried out strictly in accordance with the recommendations in BS 13914 Part 1 & 2:2005.
- 2.10.9 No additives or plastering agents shall be used other than those specified.
- 2.10.10 Surfaces of brickwork, blockwork, concrete, etc. that are to be plastered or rendered shall be thoroughly brushed, cleaned down and well wetted before plastering and undercoat should be properly scratched to afford a key for the next coat. Concrete surfaces should be thoroughly hacked, and existing brickwork should have the joints well raked out before plastering.
- 2.10.11 Plastering on brickwork, blockwork and concrete shall be two coat work comprising a 12mm render coat 1:1:6 cement; lime; sand and a finishing coat of thistle multi finish to a minimum of 3mm thick.
- 2.10.12 Plastering on EML shall be as for brickwork but with an additional pre-coat of cement; lime; sand (prickings up) render well trowelled into the lathing to provide adequate mechanical key.
- 2.10.13 Plastering on plasterboard shall be in one coat of Sirapite finish to a minimum of 3mm thick.
- 2.10.14 All wall plastering shall be terminated 50mm from finished floor level.
- 2.10.15 The prices for plastering on existing surfaces or in making good shall include for dubbing out and for finishing flush with adjacent retained surfaces.
- 2.10.16 The face of plastering shall be trowelled smooth ready to receive decoration and fully made good up to and around electrical conduit boxes, skirtings and frames.
- 2.10.17 Renewed plaster or plaster which is partially set must not be mixed or used with fresh plaster.
- 2.10.18 External render shall be two coat work comprising a scratch coat of cement/lime/sand 1:1:6 followed by a minimum 9.5mm render smooth 1:1:6 finishing coat which is to be wood floated with a minimum working and shall not be steel trowelled. Where monolithic surfaces are to have rendering applied the Contractor is to hack the monolithic surface as necessary apply a splatter dash coating or include a PVA based bonding agent. Apply in strict accordance with the manufacturers instructions in order to obtain a good key.
- 2.10.19 At the base of external rendering the rendering shall be stopped at DPC level and finished with a bell mould. Similarly rendered plinth shall not be continued above the DPC level and shall be finished with a neat weather struck top edge.
- 2.10.20 Floor screeds shall be composed of a semi dry mix of cement and sand 1:3 laid true and level with a minimum 50mm depth and ready to receive tile floor finish.
- 2.10.21 Where specialist damp course insertion is specified as a Sub-Contract item, all cutting away, removal of existing plaster, opening up fireplaces and making good defective brickwork internally and repointing externally or other masonry works shall be completed to walls to be treated before the commencement of Sub-Contracts works, in accordance with the specification of the Sub-Contractor and the C.A. Timber grounds and fixings shall be removed before treatment and existing air bricks solidly bricked in. Plastering shall be applied subsequent to damp coursing by the damp course Sub-Contractor.

- 2.10.22 Where fibrous plaster cornices are to be re-run or repaired, the Contractor is required to clean up and rake out crevices of any sound section of the existing cornice and take a wax mould of that section. The new cornice shall be fixed in position using an approved adhesive together with plugs and screws at 500mm centres. The abutment joints between the new and existing sections of cornice are to be made good using a suitable stopper worked and sculptured to the profile of the cornice.
- 2.10.23 Ceramic wall tiles are to be good quality 150 x 150mm white ceramic glazed unless otherwise specified. Revealed edges and corners are to be glazed or bull nosed and glazed.
- 2.10.24 Tile adhesive is to be "Nicobond" or similarly approved used in strict accordance with the manufacturer's instructions. Tile grout is to be "Nicogrout" or similar approved and white used in strict accordance with the manufacturer's instructions. On completion all tiling is to be buffed so that all surplus grout is removed.
- 2.10.25 Sealing mastic is to be "Dow Corning" silicon white mastic applied and wiped smooth using a white spirit soaked rag in strict accordance with the manufacturer's instructions. It is to be applied to all abutments between wall and fittings. The seal is to be in the form of a neat fillet not exceeding 6mm wide.
- 2.10.26 External quality ornamental ceramic tiles shall be frost resistant tiles as specified. Where existing sections of path or floor are to be demolished the Contractor is to set aside sound tiles for reuse.
- 2.10.27 Terrazzo and the repairing of Terrazzo shall comply strictly with the requirements of BS 5385-5:2009 and consists of marble or spar to match existing or as approved by the C.A. laid level packed to a density and designed to match existing in a 1:3 cement: sand bed.

2.11 DRAINAGE

- 2.11.1 The proposed drainage works shall be agreed on site with the Borough engineer and surveyor's drainage inspector prior to carrying out any drainage works other than established and existing drain runs. The Contractor is required to make all necessary arrangements with the local authority when making connections to the sewer.
- 2.11.2 Open ends of existing and new drains must be temporarily fitted with a drain stopper and manholes kept covered until the drainage installation is complete in order to prevent debris falling in to the system.
- 2.11.3 Excavations of drainage trenches shall be not less than 300mm wider than the external diameter of the pipes and should be laid to proper falls. Include for grading and ramming bottoms, returning, filling and clearing away surplus material, planking and strutting and inclusions as previously described in excavations and earth work in section 2.2 above.
- 2.11.4 Concrete and brickwork shall be as described in sections 2.3 and 2.5 above. Cement is to be sulphate resistant.
- 2.11.5 Concrete beds under pipes shall be a minimum 100mm thick and 300mm wider than the external diameter of the pipe. Haunching shall be packed in under and carried up from the extreme edge of the bed to the top of the pipes on both sides. Pipes under buildings shall be completely surrounded in concrete 150mm thick. Where new drains pass under walls there shall be a lintel or relieving arch of sufficient strength and with sufficient bearing installed to support the brickwork above.
- 2.11.6 Pipes and fittings for foul drains shall be British Standard quality complying with BS 65:1991. Pipes for rainwater only shall be BS EN 12056-3:2000.
- 2.11.7 Pipes and fittings shall comply with BS 437:2008. Only cast-iron fittings and pipes shall be used where a drain passes under or through an existing wall.
- 2.11.8 Pipes shall be laid in straight lines and regular gradients from point to point. 75mm pipes shall be laid to a minimum fall of 1:30, 100mm pipes shall be laid to a minimum fall of 1:40 and 150mm pipes to a minimum of 1:60. Prices shall include for all cutting and waste and extra joints at fittings.
- 2.11.9 Flexible jointed pipes shall be jointed in accordance with manufacturer's instructions. Other clayware pipes and fittings shall be jointed with plain yarn dipped in cement grout, well caulked into position and finished with a bold fillet of cement: sand 1:1. The inside of each joint shall be wiped clean with a damp cloth and a close fitting cork pad shall be drawn through each pipe as it is laid. Cast-iron pipe fittings shall be jointed with tarred yarn and molten lead well caulked.
- 2.11.10 Gullies shall be the necessary side or back inlets for the pipes discharging into same and shall be bedded on and surrounded with 150mm concrete and connected to the drain. They shall be provided with raising pieces and access plates as necessary to suit.
- 2.11.11 Welding eyes shall be formed by extending the drain with an easy bend terminating at ground level fitted with a galvanised sealing plate and frame. Bends shall be surrounded in 150mm of concrete.
- 2.11.12 Manhole covers and frames unless otherwise specified shall be cast iron complying with BS EN 124:1994 grade 0 single seal. Covers shall be set in manhole grease and sand. Covers and frames shall be painted with two coats of bituminous paint including the underside of the cover.

2.11.13 Drainage works shall be fully tested as the work proceeds to the satisfaction of the drainage inspector before any back filling is carried out. The whole drainage system shall be further tested and rodded through on completion of the works and immediately prior to handover. It is the Contractors responsibility to obtain a "drain test certificate" from the drainage inspector for verification prior to practical completion.

2.12 SOIL AND SURFACE WATER PLUMBING

- 2.12.1 Cast iron rainwater gutters and downpipes together with fittings and accessories shall comply with BS EN 460:1964 (1981), be medium weight and have joints left open, fixed to walls with galvanised pipe nails in hardwood plugs.
- 2.12.2 uPVC rainwater goods and downpipes shall comply with BS EN 1462:2004 and be unpainted goods as manufactured by Key Terrain and be series 2100 or similar approved by the C.A. Installation shall be in strict accordance with the manufacturer's instructions. Screws for fixing shall be "bright zinc".
- 2.12.3 Cast iron soil and vent pipes and fittings shall comply with BS 416:1990 "medium grade" and shall be jointed with tarred yarn and corked with molten lead. Pipes shall be fixed through ears and distance pieces with galvanised pipe nails and hardwood plugs in brickwork.
- 2.12.4 The Contractor is to ensure that all flashings, aprons and rainwater outlet linings are well dressed down into the rainwater disposal units in accordance with Good Building Practice.
- 2.12.5 uPVC soil pipes and wastes and fittings shall comply with BS 4514:2001 and shall be unpainted goods as manufactured by Key Terrain series 100 soil systems and series 200 for high temperature PVC waste systems or similar as approved by the C.A. Pipes and fittings shall be installed strictly in accordance with manufacturer's instructions with special attention given and allowance made for thermal movement. Screws for fixing shall be "bright zinc".
- 2.12.6 The whole of the sanitary system shall be installed to "Single Stack" principals to BS EN 12056-2:2000 unless otherwise specified. The system shall be tested to the satisfaction of the C.A. and by the engineer and surveyor's drainage inspector.
- 2.12.7 Where soil or rainwater pipes are situated in positions externally where damage can occur the bottom 2m be in cast iron with appropriate adapters to connect to uPVC as necessary.
- 2.12.8 Access points must be provided at the base of stacks at branches on the main stack and at such other points that are necessary to enable testing and rodding of all pipe work.

2.13 WATER SERVICES PLUMBING

- 2.13.1 The whole of the water services installation shall be carried our in accordance with BS 6700:+A1:2009 and the regulations and bye-laws of the local Water Authority.
- 2.13.2 Copper pipes shall be "Kite" marked and comply with BS EN 1057:2006+A1:2010 table X and shall be jointed with capillary fittings complying with BS 864 Part 2:1983.
- 2.13.3 Flux shall be as supplied or recommended by the fittings manufacturer, but no self-cleaning fluxes will be permitted. Excess flux and solder shall be cleaned off pipework.
- 2.13.4 Copper pipework shall be run neatly in ducts where provided for or within floor voids. No new notching of joists will be permitted but existing notches may be re-used.
- 2.13.5 Pipes shall be adequately supported by SCH nylon saddles as manufactured by Arthur Fisher (UK) Ltd or equal and approved. Pipework laid within floor screeds shall be without joints.
- 2.13.6 Underground supply pipes shall be fully annealed copper complying with BS EN 1057:2006+A1:2010 Table Y. Pipes passing through solid walls shall be properly sleeved.
- 2.13.7 Storage cisterns shall be plastic complete with manufactures lids and comply with BS 4213:2004 (AMD 6797:1991). They shall be fully supported on a solid base and be fitted with 15mm clearance over to facilitate adjustment and renewal of ball valve.
- 2.13.8 Ball valves shall be Diaphragm type in plastic and comply with BS 1212 Part 3 1990.
- 2.13.9 Hot water cylinders shall be pre-lagged copper cylinders complying with BS 1566-1:2002+A1:2011 for direct cylinders BS 1566-1:2002+A1:2011 for indirect cylinders. The use of "Primatic" self compensating indirect cylinders is not permitted.
- 2.13.10 Stop valves shall comply with BS 1010 Part 2: 1973 (with AMD's) and be provided on rising mains and before storage cisterns.
- 2.13.11 Gate valves shall comply with BS 5154:1991 and shall be provided immediately after storage cisterns on down services in readily accessible positions.

- 2.13.12 Stop valves shall be labelled to indicate their use. Labels shall be plastic cards with embossed or engraved lettering and wired on to the valve head.
- 2.13.13 Pipework in unheated areas shall be lagged with "Armaflex" performed sections with adhesive as manufacturers' instructions. Storage cisterns in roof spaces shall be insulated with a plastic covered fibreglass quilted sectional jacket to the latest Building Regulation Standards.
- 2.13.14 Overflow pipes are to be uPVC and should fall evenly either to an external wall or overflow manifold. Overflow pipes are to be terminated 150 mm from the face of the external wall. Where possible overflow pipes should be positioned vertically above gullies and, in any case, must not be discharged onto any roof or past any door or window opening.
- 2.13.15 Pipework shall be pressure tested by the Contractor before being covered up by lagging, dust covers, screeds, floorboards, etc.
- 2.13.16 Immediately prior to the handing over of the premises unless otherwise instructed in writing by the C.A., the Contractor shall turn off the main water supply and drain down hot and cold water supply pipes and cisterns including WWP's and central heating systems complete. Failure to comply will render the Contractor liable for damage resulting from burst pipes or fittings or overflowing cisterns.

3.0 SCHEDULE OF WORKS

3.1 DAYWORKS AND CONTINGENCIES

- 3.1.1 The following sums and amounts to be deducted in whole or in part if not required.
- 3.1.2 No daywork will be allowed that can be measured and valued. Weekly day sheets giving details of labour and materials for all daywork must be submitted in triplicate to the C.A. by the end of the week following that in which the work was executed and shall be signed by the foreman in charge of the work and the C.A. as a record of the time actually worked on site (exclusive of travelling time) and materials and shall be subject to the approval of the C.A. DAYWORK SHEETS NOT SUBMITTED WITHIN SEVEN DAYS TO THE C.A. SHALL BE REJECTED.
- 3.1.3 All accepted dayworks will be priced at the rates of labour quoted below by the Contractor and such rates shall include for all supervisions, overheads, travelling time and expenses, time lost through inclement weather, guaranteed weekly minimum subsistence, bonuses, tool money, holidays with pay and public holidays, National Insurance contributions, graduated pension, industrial training scheme, third party and Employers' insurance, absence due to sickness or injury and all other charges whatsoever which the Contractor may require, as no other adjustment to the rates below will be allowed.
- 3.1.4 The time of gangers or charge hands (i.e. men actually working with their hands) will be paid at the plain time rates quoted hereunder but the time of foreman and working gangers will be deemed to be included in the site supervision.
- 3.1.5 Apprentices and labourer's rates of labour will be allowed in the proportion of the craftsmen of labourer's rates as shown in the Federation of Building Trades Employers' wages rates current at the date of the dayworks.
- 3.1.6 Materials will be priced at cost delivered to site excluding all trade discounts and invoices shall be submitted to substantiate any claim.
- 3.1.7 Profit will be allowed on material costs at the rate quoted by the Contractor which is to include for Establishment charges, etc.
- 3.1.8 The plant hire charges shall be those contained in the current schedule of charges published by the Royal Institution of Chartered Surveyors and profit will be allowed at the rates quoted below.
- 3.1.9 The Contractor shall show below his daywork rates and shall extend into the money column the cost of his dayworks at the provision number of hours shown. The Contractor should carefully note that the all-in rates or percentage additions stated below will apply to all work executed by himself and his Sub-Contractors irrespective of any special arrangements which he may have with his Sub-Contractors. The Contractor must make due allowance for this in his all-in rate over percentage.

		Unit Rate	£
3.1.10	Dayworks Before Practical Completion		
(a)	Craftsmen hours 8h		
(b)	Labourers hours 8h		
(c)	Include a provisional sum for materials to be used in daywork.		
(d)	Add for profit and overheads to be allowed on the net cost of materials used in dayworks.		
(e)	Include a Provisional sum for plant, etc., to be used in dayworks.		
(f)	Add profit and overheads.		
3.1.11	Dayworks During Defects Liability Period		
(a)	Craftsmen hours 8h		
(b)	Labourers hours 8h		
3.1.12	Contingencies		
	Include a Provisional sum for contingencies	PS	2,500.00
	DAYWORKS & CONTINGENCIES TO	COLLECTION	£

Item		Unit	Rate	Cost (£)
3.2	GENERAL ITEMS			
3.2.1	Hours of Working Works to be undertaken only during normal working hours, unless otherwise agreed by C.A. (Monday – Saturday 8:00am – 5:30pm).	Item		
3.2.2	Programme of Works The Contractor will be required to provide a programme of works before works commence to ensure minimal disruption to the Client.	Item		
3.2.3	Site Protection and Tidiness Contractor to allow for keeping the site clean tidy at all times, and for the disposal of all waste material both during and on completion of the works.	Item		
3.2.4	All works to be adequately weatherproofed at all times.	Item		
3.2.5	If skips are required for waste then positions are to be agreed prior to commencement of the works. Note: that the rear yard is not demised to Tring Town Council and it may be necessary to locate skips on the highway if they are required. Any required licences will be the responsibility of the Contractor.	Item		
3.2.6	Access Equipment Include for all scaffolding, access towers and safety netting, etc. required to safely undertake the works.			
	All standards and poles lower than 3m are to be provided with alternative red and white coloured tape.			
	All ladders to lower lifts are to be removed and secured overnight. Scaffold alarm to be provided and to include an alarm monitoring system.			
	Full toe boards and safety netting to all lifts.	ltem		
3.2.7	Allow for obtaining necessary scaffold licences, as required.	Item		
3.2.8	Noise and Disturbance The use of noisy plant or machinery is to be kept to a minimum and site radios will not be allowed.	Item		

Item		Unit	Rate	Cost (£)
3.2.9	Site Safety Include for all protective and other safety equipment such as barriers, safety signage, and a designated safe place to leave ladders and materials while the site is unattended.	Item		
3.2.10	Lighting & Power Contractor to allow for providing all temporary lighting and power as required to safely complete works.	ltem		
3.2.11	Welfare Facilities Provide temporary latrines and welfare facilities for site staff, if required.	ltem		
3.2.12	Personal Protective Equipment All operatives should be properly trained for their duties and provided with all necessary PPE.	ltem		
3.2.13	<u>CDM Regulations</u> The Contractor shall be required to submit the usual construction plan and maintain site visitors' procedures and records, and accident books, etc. ALL accidents are to be reported to the C.A. immediately.	ltem		
3.2.14	<u>Health and Safety File</u> The Contractor is to provide a list of all products and materials used on site, retain all manufacturers' literature and contact details, to be handed over to the C.A. throughout the project, including commissioning certificates for services, etc.			
	The C.A. reserves the right to delay final payment or agreement of the final account until this is completed.	ltem		
3.2.15	Asbestos The Contractor is to notify the C.A. immediately if any suspected asbestos containing materials are identified.	ltem		

Item		Unit	Rate	Cost (£)
3.3	ROOFS			
3.3.1	<u>Tiled Pitched Roofs</u> Carefully clean down all tiled finishes to pitched roofs removing all moss and lichen growth.	ltem		
3.3.2	Provide and install reclaimed roof tiles to match existing where tiles are missing, damaged or slipped			
	 4No tiles adjacent to ridge on lower rear pitched roof facing Akeman Street. 			
	 2No tiles adjacent to ridge and chimney on roof slope facing Akeman Street. 	Item		
3.3.3	Contractor to allow for close inspection of roof slopes with C.A. once scaffolding is in place to assess condition of roof tiles and confirm if further tile replacement is required. For tendering purposes Contractor to allow for replacement of 10No further tiles with reclaimed roof tiles to match existing.	10No		
3.3.4	Take up and re-bed all uneven and loose ridge tiles to rear of lower pitched roof with a lime based mortar (1:1:6 cement lime sand).	ltem		
3.3.5	Carefully clean and remove lichen to verge pointing where present on all elevations.	Item		
3.3.6	Rake out all defective and cracked pointing to rear and front verges and renew with a lime based mortar (1:1:6 cement lime sand).	ltem		
3.3.7	Front Entrance Flat Roof Thoroughly clean down lead covered flat roof over front right hand entrance to stairwell.	ltem		
3.3.8	Allow for removal of existing defective pigeon deterrent netting and replacement with new to match existing.	Item		
3.3.9	<u>Rear Flat Roof</u> Thoroughly clean down mineral felt covered flat roof and gutters to rear of property, removing all moss, lichen and any other vegetation and debris.			
		ltem		

Item		Unit	Rate	Cost (£)
3.4	RAINWATER GOODS			
3.4.1	Overhaul & Clear Rainwater Goods Overhaul and thoroughly clean through all rainwater gutters and downpipes ensuring they are free from blockages and provided with sufficient falls to outlets, re-seal joints, re-fix/ renew brackets and re-align, as necessary.			
	North Elevation (Front / High Street).			
	East Elevation (Akeman Street).			
	South Elevation (Rear).			
	• West Elevation (Right rear return inclusive of gutter over flat roof).	ltem		
3.4.2	Replace corner/bend section of uPVC rainwater downpipe to western return elevation where temporary repair has been undertaken. Ensure downpipe is watertight and surface water flows adequately to ground gulley.	Item		
3.4.3	Reconnect joint in rainwater downpipe to rear elevation where separated or replace as required.	ltem		
3.4.4	Remove dirt and debris from rainwater gulley to right hand side of front entrance door.	ltem		
3.4.5	Remove dirt and debris from rainwater gulley to south-western corner of building and install gulley grating to prevent future blockages.	ltem		
3.4.6	Allow to lift covers to 2No rainwater channels in pavement to eastern side (Akeman Street pavement) and thoroughly clean through ensuring they are free from blockages, then re-fix covers.	Item		
3.4.7	Redecorate Rainwater Goods & Soil & Vent Pipes Prepare and redecorate all previously painted metal rainwater goods and soil and vent pipes in finish and colour to match existing. Contractor to use Dulux Metalshield and must prepare and redecorate as noted in section 3.8 and described in greater detail in Dulux specification in Appendix.	Item		

ltem		Unit	Rate	Cost (£)
3.5	WALLS			
3.5.1	Brickwork Repairs & Repointing Cut out frost damaged brickwork at low level beneath paving and tooth in new bricks matching existing and repoint, as necessary, using a lime based mortar (1:1:6 cement lime sand).			
	4No bricks to North Elevation.			
	8No bricks East Elevation.	ltem		
3.5.2	Rake out loose and defective pointing to low level brickwork on east elevation adjacent to information centre entrance and repoint with a lime based mortar (1:1:6 cement lime sand).	Item		
3.5.3	Rake out damaged pointing to brickwork at low level to south elevation and repoint with a lime based mortar (1:1:6 cement lime sand).	Item		
3.5.4	Rake out weathered pointing to brickwork at high level to south elevation and repoint with a lime based mortar (1:1:6 cement lime sand).	Item		
3.5.5	Allow for raking out and repointing isolated areas of missing and defective pointing to brickwork on south and western elevations with a lime based mortar (1:1:6 cement lime sand).	Item		
3.5.6	Render Repairs to Walls Allow for localised render repairs to north and east elevation walls if defective or hollow render discovered on closer inspection from scaffolding, using a lime base to match existing texture.			
	For tendering purposes Contractor to allow 3m ² repair / replacement.			
	Inspection to be undertaken with C.A. and extent of render repairs agreed before commencing repairs.			
	North Elevation.			
	East Elevation.	3m ²		

ltem		Unit	Rate	Cost (£)
3.5.7	 Render Redecoration to Walls Following any required render repairs, prepare and redecorate rendered wall finishes with Zinsser AllWeather Exterior Paint (Tel: 0191 410 6611 / www.zinsseruk.com) (solvent based) in colour to match existing, as noted in section 3.8 and described in greater detail in Zinsser specification in Appendix. North Elevation. 			
	East Elevation.	ltem		
3.5.8	<u>Repair Exposed Timbers to Walls</u> Allow a provisional sum for the repair of any damaged or rotten timbers to the elevations, allowing to splice in new seasoned oak where necessary, leaving ready for redecoration. Extent of works to be determined on site by C.A.	PS		1,000.00
3.5.9	Redecorate Exposed Timbers to Walls Following any necessary repairs to wall timbers, prepare and redecorate all exposed timbers Dulux Trade Weathershield Ultimate Woodstain in colour to match existing, as noted in section 3.8 and described in greater detail in Dulux specification in Appendix.			
	• North Elevation (including timber posts).			
	• East Elevation (including timber posts).			
	South Elevation (Part).	ltem		
3.5.10	Fixtures & Fittings to Walls Contractor is to allow for the temporary removal of any fixtures and fittings if required to enable repair or redecoration of walls, and reinstatement of items upon completion.	ltem		

Item		Unit	Rate	Cost (£)
3.6	EXTERNAL JOINERY			
3.6.1	Redecorate Fascias, Soffits & Barge Boards Prepare and redecorate all timber fascias, soffits and barge boards including exposed rafter feet in finish and colour to match existing. Note: that current finishes are a combination of wood stain and gloss paint and redecoration is to match existing.			
	Allow for removal and re-fixing of signage, rainwater goods or any fittings, as necessary, to accommodate decoration.			
	Contractor to use Dulux Weathershield and to prepare and redecorate as noted in section 3.8 and described in greater detail in Dulux specification in Appendix.			
	North Elevation.			
	East Elevation.			
	South Elevation.			
	West Elevation.	ltem		
3.6.2	 Redecorate Soffits to Entrance, Shop Front & Information Centre Prepare and redecorate soffits including supporting timbers to underside of projecting first floor adjacent to full height shop glazing to north and eastern elevations, to information centre and entrance to first floor offices, in finish and colour to match existing. Contractor to use Dulux Weathershield and to prepare and redecorate as noted in section 3.8 and described in greater detail in Dulux specification in Appendix. North Elevation. 			
	East Elevation.	Item		

Item		Unit	Rate	Cost (£)
3.6.3	<u>Redecorate Timber Windows</u> Prepare and redecorate all previously painted timber windows, cills, etc. with oil based gloss paint in colour to match existing, clean glazing and leave in good working order.			
	Allow for temporarily removing and re-fixing any window furniture or fixings, as necessary, and ensure that all opening windows remain operational following redecoration.			
	Contractor to use Dulux Weathershield and must prepare and redecorate as noted in section 3.8 and described in greater detail in Dulux specification in Appendix.			
	East Elevation.			
	South Elevation.			
	West Elevation.	ltem		
3.6.4	Contractor is to allow for temporary removal of pigeon deterrent spikes or wiring where present and reinstatement upon completion of cleaning and redecoration works.	ltem		
3.6.5	Allow for replacement of any defective or missing sections of pigeon deterrent spikes/wiring.	ltem		
3.6.6	Clean uPVC Windows Contractor to clean all uPVC windows including all associated frames, cills, glazing, etc.			
	West Elevation.	ltem		
3.6.7	<u>Clean Shop Front Windows</u> Thoroughly clean down full height glazing to ground floor shop.			
	North Elevation.			
	East Elevation.	ltem		
3.6.8	Item Deleted from Specification.	Item		

Item		Unit	Rate	Cost (£)
3.6.9	Entrance Door (North Elevation) Prepare and redecorate entrance door to north elevation including associated frames and windows in finish and colour to match existing and clean glazing. Contractor to allow for the removal and re-fixing of any fittings, as necessary.			
	Contractor to use Dulux Weathershield and to prepare and redecorate as noted in section 3.8 and described in greater detail in Dulux specification in Appendix.	Item		
3.6.10	Replace internal security grille to top light of entrance door with new to match existing.	ltem		
3.6.11	Information Centre Doors & Windows Prepare and redecorate doors, associated frames and adjacent windows to information centre opening on eastern elevation in finish and colour to match existing and clean glazing. Contractor to allow for the removal and re-fixing of any fittings, as necessary.			
	Contractor to use Dulux Weathershield and to prepare and redecorate as noted in section 3.8 and described in greater detail in Dulux specification in Appendix.	Item		
3.6.12	<u>Rear Fire Exit Door Replacement</u> Replace rear fire exit door and weather bar with new to match existing style and specification. Door to be Howdens or similar approved. Replace or retain and make good existing door frame as required.	Item		
3.6.13	Contractor to supply and install new ironmongery inclusive of hinges, closer, panic push bar and latch, etc	Item		
3.6.14	Prepare and decorate replacement rear door and frames in finish and colour to match existing. Contractor to use Dulux Weathershield and must prepare and redecorate as noted in section 3.8 and described in greater detail in Dulux specification in Appendix.	Item		

	Unit	Rate	Cost (£)
Other External Joinery Prepare and redecorate notice boards in finish and colour to match existing and clean glazing. Contractor to allow for temporary removal of signage, plaques, etc. to enable redecoration and reinstatement upon completion.			
North Elevation.			
East Elevation.	Item		
Contractor to allow for picking out and renewal of lettering to notice board on north elevation and if required appointing specialist signwriter.	ltem		
Contractor to allow for refurbishment/ redecoration of crest to notice board on north elevation and if required appointing specialist signwriter.	ltem		
Contractor to refurbish and redecorate "Market House" signage over entrance door to north elevation and "Akeman Street" signage to eastern elevation picking out lettering. Specialist signwriter to be appointed if required.	Item		
EXTERNAL AREAS & OTHER ITEMS			
<u>Clean Stonework & Paving</u> Pressure wash external paving adjacent to glazed shop front on north side removing all dirt and staining and repoint, as necessary.	ltem		
Carefully clean down stone footings to timber columns. Contractor to use non-damaging cleaning system such as DOFF cleaning by See Brilliance or similar approved.			
See Brilliance www.seebrilliance.com info@seebrilliance.com Tel: 01635 230 888	ltem		
Flagpole Repair Take down existing flag pole pulley mechanism to north elevation and supply and install a new mechanism and ropes fixed to the window recess for safe operation.	Item		
	Prepare and redecorate notice boards in finish and colour to match existing and clean glazing. Contractor to allow for temporary removal of signage, plaques, etc. to enable redecoration and reinstatement upon completion. • North Elevation. • East Elevation. Contractor to allow for picking out and renewal of lettering to notice board on north elevation and if required appointing specialist signwriter. Contractor to allow for refurbishment/redecoration of crest to notice board on north elevation and if required appointing specialist signwriter. Contractor to refurbish and redecorate "Market House" signage over entrance door to north elevation and "Akeman Street" signage to eastern elevation picking out lettering. Specialist signwriter to be appointed if required. EXTERNAL AREAS & OTHER ITEMS Clean Stonework & Paving Pressure wash external paving adjacent to glazed shop front on north side removing all dirt and staining and repoint, as necessary. Carefully clean down stone footings to timber columns. Contractor to use non-damaging cleaning system such as DOFF cleaning by See Brilliance com Tel: 01635 230 888 Flagpole Repair Take down existing flag pole pulley mechanism to north elevation and supply and install a new mechanism and ropes fixed to the window recess	Prepare and redecorate notice boards in finish and colour to match existing and clean glazing. Contractor to allow for temporary removal of signage, plaques, etc. to enable redecoration and reinstatement upon completion. • North Elevation. Item Contractor to allow for picking out and renewal of lettering to notice board on north elevation and if required appointing specialist signwriter. Item Contractor to allow for refurbishment/ redecoration of crest to notice board on north elevation and if required appointing specialist signwriter. Item Contractor to refurbish and redecorate "Market House" signage over entrance door to north elevation and "Akeman Street" signage to eastern elevation picking out lettering. Specialist signwriter to be appointed if required. Item EXTERNAL AREAS & OTHER ITEMS Clean Stonework & Paving Pressure wash external paving adjacent to glazed shop front on north side removing all dirt and staining and repoint, as necessary. Item Carefully clean down stone footings to timber columns. Contractor to use non-damaging cleaning system such as DOFF cleaning by See Brilliance com info@seebrilliance.com Tel: 01635 230 888 Item	Prepare and redecorate notice boards in finish and colour to match existing and clean glazing. Contractor to allow for temporary removal of signage, plaques, etc. to enable redecoration and reinstatement upon completion. • North Elevation. Item • East Elevation. Item Contractor to allow for picking out and renewal of lettering to notice board on north elevation and if required appointing specialist signwriter. Item Contractor to allow for refurbishment/ redecoration of crest to notice board on north elevation and if required appointing specialist signwriter. Item Contractor to refurbish and redecorate "Market House" signage over entrance door to north elevation and "Akeman Street" signage to eastern elevation picking out lettering. Specialist signwriter to be appointed if required. Item EXTERNAL AREAS & OTHER ITEMS Item Carefully clean down stone footings to timber columns. Contractor to use non-damaging cleaning system such as DOFF cleaning by See Brilliance or similar approved. Item See Brilliance www.seebrilliance.com Tei: 01635 230 888 Item Flagpole Repair Take down existing flag pole pulley mechanism to north elevation and supply and install a new mechanism and ropes fixed to the window recess Item

ltem		Unit	Rate	Cost (£)
3.7.4	<u>Clock</u> Thoroughly clean projecting clock above door to stairwell and prepare and redecorate supporting bracket in finish and colour to match existing. Redecoration to be in accordance with section 3.8 and as described in greater detail in Dulux specification in Appendix.	Item		
3.7.5	Carefully prepare and redecorate hands to clock in finish and <u>two colours</u> to match existing. Redecoration to be in accordance with section 3.8 and as described in greater detail in Dulux specification in Appendix. Ensure clock hands are carefully reinstated upon completion of redecoration and left in working order.	Item		
3.7.6	Extractor Grilles Replace 2No damaged extractor grilles with new to match existing on western elevation.	ltem		
3.8	REDECORATION SPECIFICATIONS			
3.8.1	The following redecoration specifications apply to the items in sections 3.4 to 3.7. Contractor to provide costings for items in the relevant sections in 3.4 to 3.7, not against paint specifications beneath.	Note		
3.8.2	AllWeather Exterior Masonry Paint to Rendered Walls Clean down rendered wall surfaces and allow to dry out.			
	Scrape back all areas of poorly adhering or defective coatings and rub down thoroughly to key and feather any broken edges of existing coatings.			
	Following any required render repairs, prepare and redecorate rendered wall finishes as set out in Zinsser specification in Appendix.			

Item		Unit	Rate	Cost (£)
3.8.2 Cont'd	Surfaces should be clean, dry, sound and free of any contamination that may interfere with adhesion. Remove all loose or peeling paint and chalky paint residue. Sand edges of any remaining paint film until smooth. Special precautions should be taken during surface preparation of pre-1960 paint surfaces as they may contain harmful lead. Avoid the inhalation of dust. Wear a suitable face mask if dry sanding. New concrete, masonry and other related surfaces must be cured for at least 30 days before priming. Remove all existing mould and mildew before painting. To effectively remove mould and mildew, use Blackfriar® Fungicidal Wash. Before painting, fill all nail holes and gouges. The moisture content of the substrate should be less than 16%. For bare or porous surfaces it is advisable to apply a 'mist coat' of AllWeather Exterior Masonry Paint, thinned 10% with white spirit.			
	Finish prepared rendered walls with 2No coats Zinsser AllWeather Exterior Masonry Paint (solvent based) in colour to match existing as described in greater detail in Zinsser specification in Appendix.			
	Zinsser manufacture and marketed in the UK by: Tor Coatings Ltd, Portobello Industrial Estate, Shadon Way, Birtley, County Durham, DH3 2RE Tel: 0191 410 6611 Email: enquiries@tor-coatings.com Web: www.zinsseruk.com	Note		
3.8.3	Dulux Trade Weathershield Ultimate Wood Stain to Previously Stained External Joinery To previously stained external joinery and following any necessary repairs to timbers, remove any loose and defective coatings if necessary stripping back to bare wood if coatings are in poor condition.			
	Remove and treat any mould, algae, lichen or moss with Weathershield Multi-Surface Fungicidal Wash.			
	Thoroughly rub down all surfaces in the direction of the grain to remove any grey, weathered wood and surface sheen from remaining coatings and then dust off.			

ltem		Unit	Rate	Cost (£)
3.8.3 Cont'd	Prime all bare wood and areas exposed by removal of coatings with 2No coats Dulux Weathershield Aquatech Preservative Basecoat. Excess base coat to be wiped off surrounding paintwork.			
	Fill any surface defects and open joints, etc.			
	Finish all prepared new and previously stained timbers with 2No coats Dulux Trade Weathershield Ultimate Woodstain in colour to match existing, as described in greater detail in Dulux specification in Appendix.			
	AkzoNobel, Wexham Road, Slough, Berkshire, SL2 5DS Tel: 08444 817 818 Email: duluxtrade.advice@akzonobel.com Web: www.duluxtrade.co.uk	Note		
3.8.4	Dulux Trade Weathershield Exterior High Gloss to Previously Painted External Joinery To previously painted external joinery and following any necessary repairs to timbers, remove any loose and defective coatings if necessary stripping back to bare wood if coatings are in poor condition			
	Remove and treat any mould, algae, lichen or moss with Weathershield Multi-Surface Fungicidal Wash.			
	Thoroughly rub down all surfaces in the direction of the grain to remove any grey, weathered wood and surface sheen from remaining coatings and then dust off.			
	Apply 1 or 2No coats of an appropriate knotting solution to any remaining knots in the wood.			
	Prime all bare wood with 1No coat of Weathershield Preservative Primer including any new or bare replacement beading. Excess primer should be wiped off surrounding paintwork.			
	Prime any bare metal with 1No coat of Dulux Trade Metal Primer.			
	Fill any surface defects, open joints, etc.			

Item		Unit	Rate	Cost (£)
3.8.4 Cont'd	Finish all prepared new and previously painted timbers with 2No coats Dulux Trade Weathershield Exterior Flexible Undercoat , followed by 1No coat Dulux Trade Weathershield Ultimate in colour to match existing, as described in greater detail in Dulux specification in Appendix. AkzoNobel, Wexham Road, Slough, Berkshire, SL2 5DS Tel: 08444 817 818 Email: duluxtrade.advice@akzonobel.com			
	Web: www.duluxtrade.co.uk	Note		
3.8.5	Dulux Trade Metalshield Gloss to External Metalwork To previously painted metalwork, thoroughly clean down to remove all surface contamination. Carefully scrape back to a firm edge all areas of defective paint coatings and rub down to 'feather' the broken edges.			
	Scrape and wire brush any corroded metal to produce a clean metal surface.			
	Prime all bare metal with 1No coat Dulux Trade Metalshield Zinc Phosphate Primer.			
	Finish prepared and primed metalwork with 2No coats Dulux Trade Metalshield Gloss in colour to match existing, as described in greater detail in Dulux specification in Appendix.			
	AkzoNobel, Wexham Road, Slough, Berkshire, SL2 5DS Tel: 08444 817 818 Email: duluxtrade.advice@akzonobel.com Web: www.duluxtrade.co.uk	Note		

3.9 CONTRACTOR'S OWN ADDITIONS

Item		£
	Items that the Contractor feels have been omitted from this Specification of Works but in his opinion are deemed necessary for inclusion to adequately and satisfactorily complete the works. Please specify and price below. Use an additional sheet if necessary.	
3.9.1		
3.9.2		
3.9.3		
3.9.4		
3.9.5		
	TOTAL TO COLLECTION	£

4.0 FINAL COLLECTION PAGE

		£
1.0	Preliminaries and General Conditions	
2.0	Materials and Workmanship	
3.0	Schedule of Works	
3.1	Dayworks and Contingencies	
3.2	General Items	
3.3	Roofs	
3.4	Rainwater Goods	
3.5	Walls	
3.6	External Joinery	
3.7	External Areas & Other Items	
3.8	Redecoration Specifications	
3.9	Contractors' Own Additions	
	TOTAL (excluding VAT)	£

5.0 FORM OF TENDER

The Market House
61 High Street
Tring
Hertfordshire
HP23 4AB

exclusive of VAT.

I/We can commence the works on and require weeks to complete the works.

This Tender remains open for consideration for 12 weeks from the date fixed for submission.

I/We understand that the Employer is not bound to accept the lowest or any Tender.

I/we understand that Tenderers are prohibited from contacting Councillors or Staff to encourage or support their tender outside of the prescribed process and note that the Bribery Act 2010 applies to this tender.

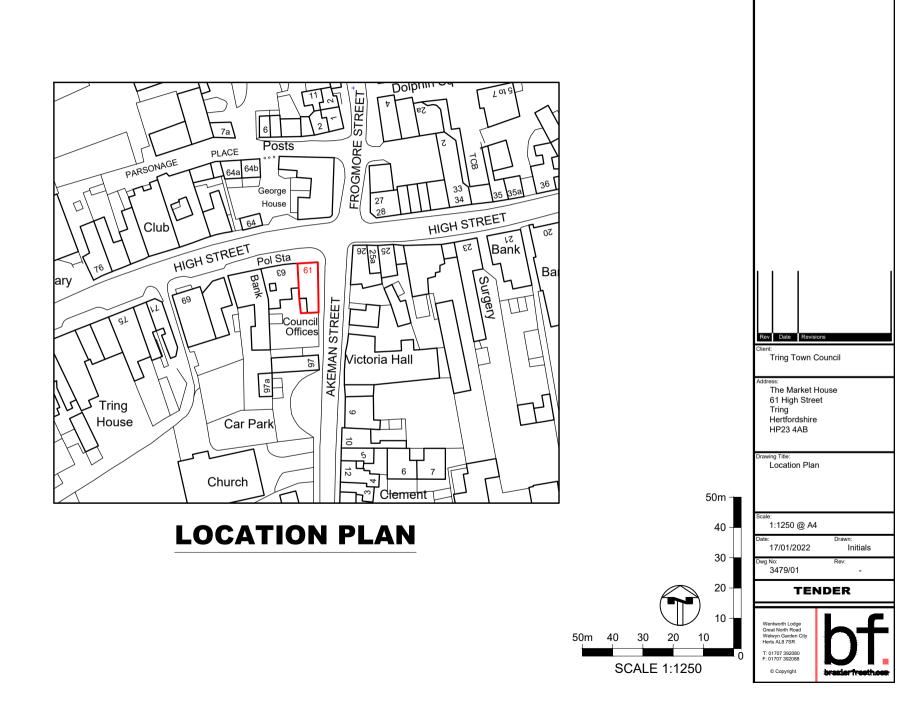
Dated this......day of...... 2022

Name.....

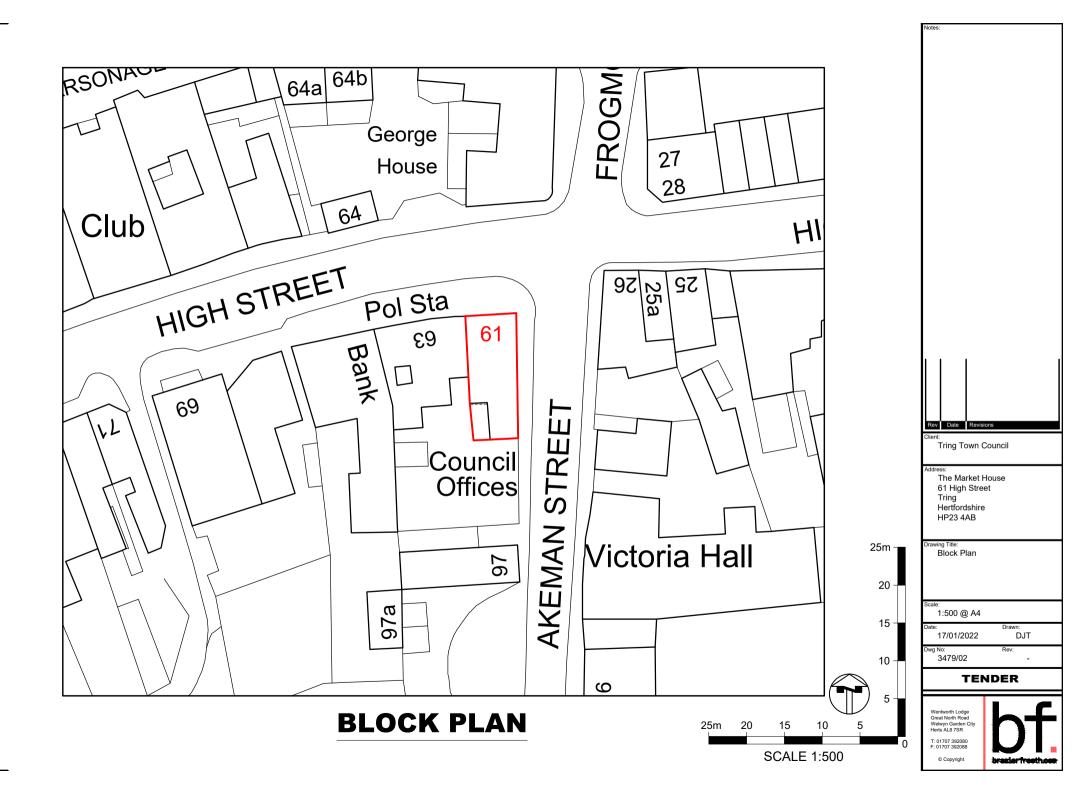
Signature.....

This completed 'Form of Tender' and priced Specification of Works are to be returned in hard copy by post or delivered by hand in an envelope clearly labelled 'Private and Confidential Tender – supply and maintenance of the Market House, addressed to Lydia Housden, Town Clerk, Tring Town Council, The Market House, 61 High Street, Tring, Hertfordshire HP23 4AB, no later than noon on **8th July 2022.**

APPENDIX I - Drawings



Notes:



APPENDIX II – Dulux Specifications



Issued 04/21

METALSHIELD GLOSS

Metalshield Gloss from **Dulux Trade** is specially formulated for metal with a quick drying formulation that can be overcoated within 4-8 hours. It provides lasting protection against corrosion on metal substrates such as railings, garage doors, lift shafts, staircases and emergency exit routes.

*Applying our straightforward, single-pack system: an appropriate **Metalshield** primer from **Dulux Trade** + 2 coats of **Metalshield** Gloss from **Dulux Trade** will deliver up to 8 years metal protection.

KEY BENEFITS

- 8 Year Protection*
- High Performance Protection for Metal
- For Ferrous & Non-Ferrous Metals

PRODUCT INFORMATION

Typical Use

Suitable for use on interior and exterior ferrous & non-ferrous metals.

Not suitable for use in high traffic areas such as floors and stair treads.

Pack Size

1L, 2.5L and 5L.

Colour Range

See appropriate **Dulux Trade** colour literature, or visit *duluxtrade.co.uk.*

Film Thickness

Film thickness will be dependent on the coverage achieved.

Wet: 80 microns.

Dry: 40 microns.

Composition (nominal)

Pigment: Lightfast Pigments. *Binder:* Alkyd. *Solvent:* White Spirit and Low Odour Aliphatic Hydrocarbons.

Volume Solids

White: 49% (nominal). Other colours will vary.

SURFACE PREPARATION

To get the best results, ensure surfaces to be painted are sound, clean and dry (new surfaces particularly must be fully dry) and free from all defective or poorly adhering material such as dirt, grease or wax.

New or bare surfaces should be primed with an appropriate **Metalshield** primer from **Dulux Trade.**

Thoroughly rub down previously painted surfaces, using 'wet flatting' methods where possible, then wipe off with a damp, lint free cloth. Special precautions should be taken during surface preparation of pre-1960s paint surfaces over wood and metal as they may contain harmful lead.





METALSHIELD GLOSS

SYSTEMS INFORMATION

STIR THOROUGHLY BEFORE USE. Apply 1 coat of the appropriate **Metalshield** primer from **Dulux Trade** followed by 2 coats of **Metalshield** Gloss from **Dulux Trade**. Where a special process colour is to be used, or where a strong colour change is required, additional coats will be required (see appropriate **Dulux Trade** colour card).

For best colour consistency, purchase sufficient tinted paint for each job including touch-in at one time from the same source.

APPLICATION METHOD

Brush or roller only. For Health & Safety reasons related to all solvent-based paints, spray application is not recommended.

As with other solvent-based paints, do not apply in temperatures below 5°C (as recommended by British Standard BS 6150).

Practical Coverage

A guide to the practical coverage which can be achieved under normal conditions is up to $13m^2$ per litre.

Spray Recommendations

This product should not be sprayed.

FURTHER SUPPORT

Drying Times

Single coat at standard thickness: Touch Dry: 1-2 hours. Recoat: 4-6 hours.

Cleaning Up

After use, remove as much product as possible from equipment before cleaning with brush cleaner.

When this paint container is empty please ask your stockist about recycling. If you have leftover paint, please dispose of it responsibly and consider donating it to **Community RePaint.** Find out more at *duluxtrade.co.uk/pp.*

Transportation & Storage

Do not use or store in extremes of temperature and protect from frost. To prevent spillage, please store and transport upright.

VOC

EU limit value for this product (cat.: A/i): 500g/l (2010). This product contains max. 430g/l VOC. VOC content: High (25-50%).

If you need further support, please contact the **AkzoNobel** Technical Advice Centre on <u>0333 222 70 70.</u> *Always read full Health, Safety & Environmental Information on can before use.* <u>Safety datasheet (SDS 512) is available free on request</u> by telephoning the **AkzoNobel** Technical Advice Centre or by visiting *duluxtrade.co.uk.* AkzoNobel, the AkzoNobel logo, the Flourish logo, Dulux Trade, Metalshield, Community RePaint and the Planet Possi

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Issued 04/21

METALSHIELD GLOSS

AkzoNobel



Issued O4/14

ULTIMATE WOODSTAIN

Dulux Trade Ultimate Woodstain is a high performance solvent-based exterior woodstain which produces a water-repellent satin finish. Unique Ultimate wood protection technology from **Dulux Trade** means exterior joinery is protected from extreme weather for up to 10 years if used in accordance with instructions, and so looks better for longer. Suitable for hardwoods and softwoods.

KEY BENEFITS

- 10 Year Weathershield Protection
- Doors, Windows & Other Joinery
- Solvent-Based

PRODUCT INFORMATION

Typical Use

Suitable for use on exterior hardwoods and softwoods.

Pack Size

1L, 2.5 and 5L.

Colour Range

See appropriate **Dulux Trade** colour literature or visit *duluxtrade.co.uk.*

Film Thickness

Film thickness will be dependent upon the coverage achieved. A nominal figure at 20m² per litre will give a wet film thickness of 50 microns.

Composition (nominal)

Pigment: Special Transparent Iron Oxide Micro Pigments and Organic Pigments. **Binder:** Flexible alkyd resin and a fungicide, for the purpose of protecting the film. **Solvent:** Low Odour Aliphatic Hydrocarbons.

Volume Solids

53% (nominal).

SURFACE PREPARATION

To get the best results, ensure surfaces to be treated are sound, clean and dry. Remove all loose and defective coatings, if necessary stripping back to bare wood. Where the surface has been previously painted, it will be necessary to strip back to bare wood if the coating is in poor condition. Special precautions should be taken during surface preparation of pre-1960s paint surfaces over wood and metal as they may contain harmful lead.

Remove and treat any mould, algae, lichen or moss with **Weathershield** Multi-Surface Fungicidal Wash*. Remove defective glazing material, clean the rebates and any loose or open joints. Replace any rotten wood and troublesome knots with preservative treated timber.

Thoroughly rub down all surfaces in the direction of the grain to remove any grey, weathered wood and surface sheen from remaining coatings, and then dust off (refer to COSHH Assessment).

Prime all bare wood with 2 coats of **Aquatech** Preservative Basecoat^{+ (BP)} from **Dulux Trade**^{**} including any new or bare replacement beading. Excess basecoat should be wiped off surrounding paintwork.

Fill any surface defects, open joints, etc. and replace any missing glazing material. Do not use linseed oil putty for glazing (or making good) with natural wood finishes, use external beads set in an appropriate non-setting mastic or a special glazing compound.

New joinery is often factory primed using a stain basecoat (also called a dual-purpose primer). These materials quickly erode when left exposed and may need to be re-primed.

SYSTEMS INFORMATION

STIR THOROUGHLY BEFORE USE. Apply 2 coats of **Aquatech** Preservative Basecoat^{+ (BP)} from

Dulux Trade^{**} to all bare wood. The normal finishing process is 2 or 3 coats of **Dulux Trade** Ultimate Woodstain.

Do not use on resinous wood or woodwork with a history of blistering. The maximum benefits of this system will only be realised when used as directed above on good quality timber that conforms to BS EN 942: 2007, in conjunction with good component design.

This system is not suitable for use on exterior timber where there is severe checking and splitting of the wood caused by long-term exposure.

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ULTIMATE WOODSTAIN

For best colour consistency, purchase sufficient tinted paint for each job including touch-in at one time from the same source.

APPLICATION METHOD

Brush only. For Health & Safety reasons relating to all solvent-based paints, spray application is not recommended.

As with all solvent-based paints, this product should not be applied in temperatures below 5°C (as recommended by British Standard BS 6150),

Practical Coverage

On smooth surfaces of average porosity, a guide to the practical coverage which can be achieved under normal conditions is up to 20m² per litre.

Thinning

This product should not be thinned.

Spray Recommendations

This product is not suitable for spray application.

Drying Times

Single coat at standard thickness: Touch Dry: 4-6 hours. Recoat: 16 hours.

Cleaning Up

After use, remove as much product as possible from brushes before cleaning with brush cleaner.

When this paint container is empty please ask your stockist about recycling. If you have leftover paint, please dispose of it responsibly and consider donating it to **Community RePaint.** Find out more at *duluxtrade.co.uk/pp.*

Transportation & Storage

Do not use or store in extremes of temperature and protect from frost. To prevent spillage, please store and transport upright.

VOC

EU limit value for this product (cat.: A/e): 400g/l (2010). This product contains max. 399g/l VOC. VOC content: High (25-50%).

FURTHER SUPPORT

If you need further support, please contact the AkzoNobel Technical Advice Centre on 0333 222 70 70.

* Weathershield Multi-Surface Fungicidal Wash contains: Benzalkonium Chloride. **Aquatech Preservative Basecoat^{+ (BP)} contains Dichlofulanid. Use biocides safely. Always read the label and product information before use.

Always read full Health, Safety & Environmental Information on can before use.

Safety datasheet (SDS 623) is available free on request by telephoning the **AkzoNobel** Technical Advice Centre or by visiting **duluxtrade.co.uk**.

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At **Dulux Trade**, we believe by working with our customers we can reduce waste and do more with the resources we have. Together we can create a better future for our planet. Join us at *duluxtrade.co.uk/pp*



623



Issued 05/15 401 WEATHERSHIELD EXTERIOR HIGH GLOSS

Weathershield Exterior High Gloss is part 3, of a 3 part weather resistant and flexible paint system from **Dulux Trade**, specifically developed to give long-lasting, high gloss protection for exterior woodwork. Contains a fungicide to inhibit mould growth on the paint film and help it stay cleaner for longer.

KEY BENEFITS

- 8 Year All Weather Protection
- Tough & Durable Protection
- Coverage up to 18m² per litre

PRODUCT INFORMATION

Typical Use

Ideal for use on exterior wood and primed metal and plastic.

Pack Size

1L, 2.5L and 5L.

Colour Range

See appropriate **Dulux Trade** colour literature or visit *duluxtrade.co.uk.*

Film Thickness

Film thickness will be dependent on the coverage achieved. Wet: 55 microns. *Dry:* 34 microns.

Composition (nominal)

Pigment: Lightfast Pigments. *Binder:* Alkyd and a Fungicide. *Solvent:* White Spirit and Low Odour Aliphatic Hydrocarbons.

Volume Solids

White: 62% (nominal). Other colours will vary.

SURFACE PREPARATION

To get the best results, ensure surfaces to be painted are sound, clean and dry (new surfaces particularly must be fully dry).

Remove all loose and defective coatings, if necessary stripping back to bare wood. Special precautions should be taken during surface preparation of pre-1960s paint surfaces over wood and metal as they may contain harmful lead.

Remove and treat any mould, algae, lichen or moss with **Weathershield** Multi-Surface Fungicidal Wash*. Remove defective glazing material, clean the rebates and any loose or open joints. Replace any rotten wood and troublesome knots with new timber.

Thoroughly rub down all surfaces to remove any grey, weathered wood and surface sheen from remaining coatings, and then dust off (refer to your COSHH Assessment). Avoid the inhalation of dust. Wear a suitable face mask if dry sanding. Apply 1 or 2 coats of an appropriate knotting solution to any remaining knots in the wood.

Prime all bare wood with 1 coat of **Weathershield** Preservative Primer^{+ (BP)}**, including any new or bare replacement beading. Excess primer should be wiped off surrounding paintwork. Prime any





WEATHERSHIELD EXTERIOR 401 HIGH GLOSS

bare metal with 1 coat of **Dulux Trade** Metal Primer.

Fill any surface defects, open joints etc. and replace any missing glazing material. New joinery is often factory primed using a stain basecoat (also called a dual-purpose primer). These materials quickly erode when left exposed and may need to be re-primed.

SYSTEMS INFORMATION

STIR THOROUGHLY BEFORE USE. Apply 2 coats of the appropriate coloured **Weathershield** Exterior Flexible Undercoat to all primed wood, followed by 1 coat of **Weathershield** Exterior High Gloss. Where a special process colour is to be used, or where a strong colour change is required, additional coats will be required (see appropriate **Dulux Trade** colour card).

When painting resinous wood or woodwork with a history of blistering, it is advisable to use light colours only, particularly on south facing elevations. The maximum benefits of this system will only be realised when used as directed above on good quality timber that conforms to BS EN 942: 1996, in conjunction with good component design.

For best colour consistency, purchase sufficient tinted paint for each job including touch-in at one time from the same source.

APPLICATION METHOD

Brush only. For Health & Safety reasons relating to all solvent-based paints, spray application is not recommended. As with other solvent-based paints, do not use in temperatures below 5°C (as recommended by British Standard BS 6150).

Practical Coverage

A guide to the practical coverage which can be achieved under normal conditions is up to $18m^2$ per litre.

Spray Recommendations

This product should not be sprayed.

Drying Times

Single coat at standard thickness: Touch Dry: 4-6 hours. *Recoat:* 16-24 hours.

Cleaning Up

After use, remove as much product as possible from equipment before cleaning with brush cleaner.

When this paint container is empty please ask your stockist about recycling. If you have leftover paint, please dispose of it responsibly and consider donating it to **Community RePaint**. Find out more at *duluxtrade.co.uk/pp*.

Transportation & Storage

Do not use or store in extremes of temperature and protect from frost. To prevent spillage, please store and transport upright.

voc

EU limit value for this product (cat.: A/d): 300g/l (2010). This product contains max. 300g/l VOC. VOC content: High (25-50%).





Issued 05/15 401 WEATHERSHIELD EXTERIOR HIGH GLOSS

FURTHER SUPPORT

If you need further support, please contact the AkzoNobel Technical Advice Centre on 0333 222 70 70.

*Weathershield Multi-Surface Fungicidal Wash contains: Benzalkonium Chloride.
 **Weathershield Preservative Primer^{+ (BP)} contains 3-iodo-2-propynyl-n-butyl carbamate and propiconazole.
 Use biocides safely. Always read the label and product information before use.

Always read full Health, Safety & Environmental Information on can before use.

<u>Safety datasheet (SDS 401) is available free on request</u> by telephoning the **AkzoNobel** Technical Advice Centre or by visiting *duluxtrade.co.uk.*

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APPENDIX III – Zinsser Specification



Technical Data Sheet

AllWeather Exterior Masonry Paint (Solvent Based)

Zinsser AllWeather Exterior Masonry Paint is an ultimate performance, exterior masonry paint that can be used on bare or previously painted masonry at low temperatures. Designed for the long term decoration of bare or previously painted concrete, render, stone and brickwork. Self-priming. Contains a biocide to protect the dried coating against fungal degradation. AllWeather Exterior Masonry Paint gives excellent resistance against cracking, blistering and flaking and protects against rain and severe weather. AllWeather Exterior Masonry Paint provides a long lasting finish, is easy to apply and has excellent colour retention. It dries even in low temperatures so can be used all year round. **RECOMMENDED USES** – Designed for all exterior masonry surfaces, AllWeather Exterior Masonry Paint is ideal for new or previously painted render, stucco, brick, stone, cured concrete and more. In many instances AllWeather Exterior Masonry Paint is self-priming and will bond to existing paints without sanding so for many refurbishing jobs there is no need to purchase a separate primer. After removing existing mould and mildew, two coats of AllWeather Exterior Masonry Paint will ensure that any exterior looks bright and beautiful for years.

PERFORMANCE CHARACTERISTICS –

- Flat matt breathable finish
- · Resists attack by alkalis and acid
- Resists dirt accumulation
- Can be applied down to -5°C
- Showerproof in 20 minutes
- 3 hour recoat

SURFACE PREPARATION – Surfaces should be clean, dry, sound and free of any contamination that may interfere with adhesion. Remove all loose or peeling paint and chalky paint residue. Sand edges of any remaining paint film until smooth. Special precautions should be taken during surface preparation of pre - 1960 paint surfaces as they may contain harmful lead. Avoid the inhalation of dust. Wear a suitable face mask if dry sanding. New concrete, masonry and other related surfaces must be cured for at least 30 days before priming. Remove all existing mould and mildew before painting. To effectively remove mould and mildew, use Blackfriar® Fungicidal Wash. Before painting, fill all nail holes and gouges. The moisture content of the substrate should be less than 16%. For bare or porous surfaces it is advisable to apply a 'mist coat' of AllWeather Exterior Masonry Paint, thinned 10% with white spirit.

APPLICATION – Two coats are normally applied. Shake or stir well before using. Apply with synthetic bristle brush, roller or sprayer. For airless spraying, use a .017" tip and high-medium (2000-2500 PSI) pressure. Apply when air and surface temperatures are between -5° and +32°C and humidity is less than 85%. Avoid painting in direct sunlight and maintain a "wet edge" to avoid lapping.

DRY TIME – At normal temperatures i.e. 21°C, Zinsser **AllWeather Exterior Masonry Paint** dries to recoat in 3 hours. Full adhesion and hardness develop in 7 days. In cooler temperatures drying time and recoat times will be extended.

Zinsser manufactured and marketed in the UK by:

COVERAGE – Up to 12m² per litre on non-porous (previously painted) surfaces. On porous surfaces coverage will be reduced. Normal application is 2 coats.

CLEANUP – Clean application tools, spatters and spills immediately with White Spirit; rinse with water. Follow equipment manufacturer's directions to clean spray equipment. Do not allow paint to dry on application equipment.

LIMITATIONS – AllWeather Exterior Masonry Paint is not intended for application to exterior floors, decks or any surface subject to water immersion or prolonged contact with water.

UK LIMITED WARRANTY by Zinsser (UK) Ltd: The contents of this container are warranted to be free of defects for two years from date of manufacture. This limited warranty is limited to replacement of refunded value of product actually used when supported by proof of purchase. If you wish to make a warranty claim, please contact Zinsser (UK) Ltd. If you are a consumer, this warranty does not affect your statutory rights.

Drying: At normal temperatures i.e. 21°C, AllWeather Exterior Masonry Paint dries to recoat in 3 hours. Full adhesion & hardness develop in 7 days. **Note:** Drying and recoat times will be extended at a lower temperature.

Spread Rate: 12m² per litre per coat.

Colour Range: Full Colour Range*

Gloss Level: <2% at 60° and <3% at 85°

Volume Solids: 50%

Typical film thickness per coat: 50 microns dry from 100 microns wet.

VOC: Cat: IIA/c. Limit: 430g/I (2010). < 430g/I VOC.

Product Weight: 1.5kg per litre.

Shelf life: 3 years in unopened containers

Method of Application: Brush, Roller or Spray.

Thinner: For bare or porous surfaces it is advisable

to apply a 'mist coat' of AllWeather Exterior Masonry

Paint, thinned 10% with white spirit.

Cleaner: White spirits for cleaning equipment.

* AllWeather Exterior Masonry Paint is available in a full range of BS4800, RAL and NCS colours. Multiple containers of tinted paint should be intermixed (boxed) to ensure colour uniformity. Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2015/830



SAFETY DATA SHEET

ALLWeather Exterior Masonry Paint

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier

Product name

: ALLWeather Exterior Masonry Paint

Product description Product type

: Paint. : Liquid.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses			
Consumer use Industrial use Professional use			
	Uses advised against		Reason
None identified.		-	

1.3 Details of the supplier of the safety data sheet

Manufactured under license in the UK by Tor Coatings Limited Portobello Industrial Estate Birtley County Durham United Kingdom DH3 2RE Telephone no.: +44 (0) 191 4106611 Fax no.: +44 (0) 191 4920125 enquiries@tor-coatings.com

e-mail address of person : rpmeurohas@ro-m.com responsible for this SDS

1.4 Emergency telephone number

<u>Supplier</u>	
Telephone number	: +44 (0) 207 858
Hours of operation	: 24/7

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture **Product definition** : Mixture Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] Flam. Liq. 3, H226 Skin Sens. 1, H317 STOT SE 3, H336 Aquatic Chronic 3, H412 The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended. See Section 16 for the full text of the H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

1228

SECTION 2: Hazards identification

2.2 Label elements		
Hazard pictograms		
······		
Signal word	:	Warning
Hazard statements	:	Flammable liquid and vapour. May cause an allergic skin reaction. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.
Precautionary statements		
General	:	P102 - Keep out of reach of children. P103 - Read label before use. P101 - If medical advice is needed, have product container or label at hand.
Prevention	:	 P210 - Keep away from heat, sparks, open flames and hot surfaces No smoking. P280 - Wear protective gloves and eye protection: gloves: nitrile rubber - Safety glasses with side shields. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment.
Response	:	P303 - IF ON SKIN (or hair): P361 - Take off immediately all contaminated clothing. P353 - Rinse skin with water or shower. P312 - Call a doctor if you feel unwell.
Storage	:	P403 - Store in a well-ventilated place. P235 - Keep cool. P405 - Store locked up.
Disposal	:	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	:	hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics hydrocarbons, aromatic, C9 4,5-dichloro-2-octyl-2H-isothiazol-3-one
Supplemental label elements	:	Repeated exposure may cause skin dryness or cracking.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Special packaging requirem	en	<u>ts</u>
Containers to be fitted with child-resistant fastenings	:	Not applicable.
Tactile warning of danger	:	Not applicable.
2.3 Other hazards		
Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII	:	Not applicable.
Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	Not applicable.

SECTION 2: Hazards identification

Other hazards which do : None known. not result in classification

SECTION 3: Composition/information on ingredients

3.1 Substances

: Mixture

		Classification	
Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
REACH #: 01-2119463258-33 EC: 919-857-5 Index: 649-327-00-6	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066	[1] [2]
REACH #: 01-2119455851-35 EC: 918-668-5 Index: 649-356-00-4	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
CAS: 106232-86-4	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	[1]
EC: 264-843-8 CAS: 64359-81-5	≤0,1	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10) See Section 16 for the full text of the	[1]
	REACH #: 01-2119463258-33 EC: 919-857-5 Index: 649-327-00-6 REACH #: 01-2119455851-35 EC: 918-668-5 Index: 649-356-00-4 CAS: 106232-86-4 EC: 264-843-8	REACH #: 01-2119463258-33 EC: 919-857-5 Index: 649-327-00-6 REACH #: 01-2119455851-35 EC: 918-668-5 Index: 649-356-00-4 $\geq 10 - \leq 25$ CAS: 106232-86-4 ≤ 3 EC: 264-843-8 $\leq 0,1$	Identifiers%Regulation (EC) No. 1272/2008 [CLP]REACH #: 01-2119463258-33 EC: 919-857-5 Index: $649-327-00-6$ REACH #: 01-2119455851-35 EC: 918-668-5 Index: $649-356-00-4$ $\geq 10 - \leq 25$ Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066 Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066 CAS: 106232-86-4 $\geq 10 - \leq 25$ CAS: 106232-86-4 CAS: 64359-81-5 ≤ 3 $\leq 0,1$ Stor SE 3, H335 CAS: 64359-81-5 $\leq 0,1$ $Acute Tox. 4, H302Acute Tox. 3, H331Skin Corr. 1B, H314Eye Dam. 1, H318Skin Sens. 1, H317Aquatic Chronic 1, H410 (M=10)$

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid m	easures
General	: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
Eye contact	 Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Inhalation	: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin contact	 Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
Ingestion	: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

SECTION 4: First aid measures

Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	thoroughly with water before removing it, or wear groves.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 4,5-dichloro-2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

Over-exposure signs/symptoms

Eye contact	: No specific data.
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: irritation redness dryness cracking
Ingestion	: No specific data.
4.3 Indication of any imm	nediate medical attention and special treatment needed
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

See toxicological information (Section 11)

SECTION 5: Firefighting measures 5.1 Extinguishing media Suitable extinguishing media Unsuitable extinguishing media Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures

	5
Hazards from the substance or mixture	: Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds carbonyl halides metal oxide/oxides
5.3 Advice for firefighters	
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
Additional information	: No unusual hazard if involved in a fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	ote	ctive equipment and emergency procedures
For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	:	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
6.3 Methods and material for	со	ntainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a

same hazard as the spilt product.

licensed waste disposal contractor. Contaminated absorbent material may pose the

SECTION 6: Accidental release measures

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

7.1 Precautions for safe : Prevent the creation of flammable or explosive concentrations of vapours in air and handling avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraving process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Danger criteria

	Notification and MAPP threshold	Safety report threshold
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b	5000	50000

7.3 Specific end use(s)

Date of issue/Date of revision

Recommendations Industrial sector specific solutions

: Not available. : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values	
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	EH40/2005 WELs (United Kingdom (UK), 8/2007). STEL: 850 mg/m³, (as turpentine) 15 minutes. Form: Vapour TWA: 566 mg/m³, (as turpentine (100 ppm)) 8 hours. Form: Vapour	
procedures atmosphere or to of the ventilation protective equip the following: E the assessment limit values and atmospheres - C of exposure to c (Workplace atm for the measure	ontains ingredients with exposure limits, personal, workplace biological monitoring may be required to determine the effectiveness in or other control measures and/or the necessity to use respiratory ment. Reference should be made to monitoring standards, such as suropean Standard EN 689 (Workplace atmospheres - Guidance for a of exposure by inhalation to chemical agents for comparison with measurement strategy) European Standard EN 14042 (Workplace Guide for the application and use of procedures for the assessment chemical and biological agents) European Standard EN 482 mospheres - General requirements for the performance of procedures ment of chemical agents) Reference to national guidance methods for the determination of hazardous substances will also be	

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	DNEL	Long term Dermal	208 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	871 mg/m³	Workers	Systemic
	DNEL	Long term Oral, Dermal	125 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	185 mg/m³	Consumers	Systemic

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls	 Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.
Individual protection measured	<u>ures</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: safety glasses with side-shields. (EN 166)
Skin protection	
Hand protection	

7/16

SECTION 8: Exposure controls/personal protection

•	· · ·				
There is no one glove mat combination of chemicals.	rial or combination of materials that will give unlimited resistance to any individual or				
The breakthrough time must be greater than the end use time of the product.					
	ation provided by the glove manufacturer on use, storage, maintenance and				
replacement must be follo					
	regularly and if there is any sign of damage to the glove material.				
	re free from defects and that they are stored and used correctly.				
maintenance.	eness of the glove may be reduced by physical/chemical damage and poor				
	protect the exposed areas of the skin but should not be applied once exposure has				
occurred.					
Gloves	For prolonged or repeated handling, use the following type of gloves:				
	Recommended: > 8 hours (breakthrough time): nitrile rubber (0.5mm)				
	The recommendation for the type or types of glove to use when handling this product is based on information from the following source:				
	EN 374-3 : 2003				
	The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.				
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods. Recommended: Wear overalls or long sleeved shirt. (EN 1149-1)				
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.				
Respiratory protection	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour (Type A) and particulate filter (EN 140)				
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.				

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Colour	: Various
Odour	: Hydrocarbon.
Odour threshold	: Not available.
рН	: Not available.
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: Not available.
Flash point	: Closed cup: 40°C
Evaporation rate	: Not available.
Flammability (solid, gas)	: Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.

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SECTION 9: Physical and chemical properties

Upper/lower flammability or explosive limits	:	Not available.
Vapour pressure	:	Not available.
Vapour density	1	Not available.
Relative density	1	Not available.
Solubility(ies)	:	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	;	Not available.
Auto-ignition temperature	1	Not available.
Decomposition temperature	:	Not available.
Viscosity	:	Dynamic (room temperature): 500 mPa·s Kinematic (40°C): >0,205 cm²/s
Explosive properties	1	Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.
Oxidising properties	:	Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredie	ents.
10.2 Chemical stability	Stable under recommended storage and handling conditions (see Section 7).	
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur	
10.4 Conditions to avoid	When exposed to high temperatures may produce hazardous decomposition products.	
10.5 Incompatible materials	Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.	
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition product should not be produced. If involved in a fire, toxic gases including CO, CO2 and smoke can be generated.	

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Oral	Mouse	0.400	
Oral	Rat	8400 mg/kg 8400 mg/kg	-
Inhalation Dusts and	Rat	290 mg/m ³	4 hours
Oral	Rat	756 mg/kg	-
	Inhalation Dusts and Oral	Inhalation Dusts and Rat Oral Rat	Inhalation Dusts and Rat 290 mg/m ³

Irritation/Corrosion

SECTION 11: Toxicological information

	0				
Product/ingredient name	Result	Species	Score	Exposure	Observation
hydrocarbons, aromatic, C9	Eyes - Mild irritant	Rabbit		24 hours 100 microliters	-

Conclusion/Summary	
Skin	: Based on available data, the classification criteria are not met.
Eyes	: Based on available data, the classification criteria are not met.
Respiratory	: May cause drowsiness or dizziness.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	skin	Rabbit	Not sensitizing

Conclusion/Summary

: Ma	v cause	an	allergic	skin	reaction.
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Skin Respiratory

: Based on available data, the classification criteria are not met.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
hydrocarbons, aromatic, C9	OECD 471	Subject: Bacteria	Negative

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
hydrocarbons, aromatic, C9	-	-	•	unspecified	Route of exposure unreported	-

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	Category 3	Not applicable.	Narcotic effects
hydrocarbons, aromatic, C9	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Alkanes, C22-40, chloro	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

hudra carbona, CO, CAA, m / isa / subla allegada, 1,20% anamatica.	
	TION HAZARD - Category 1 TION HAZARD - Category 1

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SECTION 11: Toxicological information

		-
Short term exposure		
Potential immediate	1	Not available.
effects		
Potential delayed effects	4	Not available.
<u>Long term exposure</u>		
Potential immediate	4	Not available.
effects		
Potential delayed effects	4	Not available.
Potential chronic health eff	ect	<u>s</u>
Not available.		
Conclusion/Summary	:	Based on available data, the classification criteria are not met.
General	:	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/ or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	1	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Teratogenicity	1	No known significant effects or critical hazards.
Developmental effects	:	No known significant effects or critical hazards.
Fertility effects	:	No known significant effects or critical hazards.
Other information	:	Not available.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself. Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	Acute NOEC 100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC 0,23 mg/l	Daphnia spec.	-
	Chronic NOEC 0,131 mg/l	Fish	-
4,5-dichloro-2-octyl-2H- isothiazol-3-one	Acute EC50 18 ppb Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 30,1 ppb Fresh water	Daphnia spec Daphnia magna	48 hours
	Acute LC50 19,8 ppb Fresh water	Fish - Lepomis macrochirus	96 hours

Conclusion/Summary : Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	OECD 301B	>80 % - Readily - 28 days	-	-
	OECD 301F	>80 % - Readily - 28 days	-	-
Conclusion/Summary	: This product ha	as not been tested for biodegrada	ation. Based on ava	ailable data, the

classification criteria are not met.

SECTION 12: Ecological information				
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability	
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	-	100%; < 28 day(s)	Readily	
hydrocarbons, aromatic, C9	-	-	Readily	

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	5 to 6.5	-	high
hydrocarbons, aromatic, C9 4,5-dichloro-2-octyl-2H- isothiazol-3-one	3.7 to 4.5 3,59	-	high Iow

12.4 Mobility in soil	
Soil/water partition	: Not available.
coefficient (Koc)	
Mobility	: Volatile.

12.5 Results of PBT and vPvB assessment

PBT	: Not applicable.
	P: Not available. B: Not available. T: Not available.
vPvB	: Not applicable.
	vP: Not available. vB: Not available.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

13.1 Waste treatment methods

Product		
Methods of disposal	:	The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	:	Yes.
Disposal considerations	:	Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

	Waste code	Waste designation	
	08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	
<u>P</u>	ackaging		

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SECTION 13: Disposal considerations

Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Disposal considerations	 Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.
Special precautions	: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number	Not regulated.	Not regulated.	UN1263	UN1263
14.2 UN proper shipping name	-	-	Paint.	Paint.
14.3 Transport hazard class(es)	-	-	3	3
14.4 Packing group	-	-		111
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	Viscous substance exemption This class 3 material is not subject to regulation in packagings up to 450 L. Exempted according to 2.2.3.1.5 (Viscous substance exemption)		Emergency schedules (EmS): F-E + <u>S-E</u> Viscous substance exemption This class 3 material can be considered non hazardous in packagings up to 30 L. Exempted according to 2.3.2.5 (Viscous substance exemption)	Passenger and Cargo Aircraft Quantity limitation: 60 L Packaging instructions: 355 Cargo Aircraft Only Quantity limitation: 220 L Packaging instructions: 366 Limited Quantities - Passenger Aircraft Quantity limitation: 10 L Packaging instructions: Y 344

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: Regulatory information

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals Not listed.

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SECTION 15: Regulatory information

: 3208 90 91 **CN code**

International lists

National inventory

Australia	: Not determined.
Canada	: Not determined.
China	: Not determined.
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines Republic of Korea	Not determined.Not determined.
Taiwan	: Not determined.
Turkey	: Not determined.
United States	: Not determined.

15.2 Chemical safety

: No Chemical Safety Assessment has been carried out.

assessment

SECTION 16: Other information

_ Indicates information that has changed from previously issued version.

	5 1 5
Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.
	1272/2008]
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = CLP-specific Hazard statement
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Sens. 1, H317	Calculation method
STOT SE 3, H336	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full text of H-phrases referred to in sections 2 and 3

Full text of abbreviated H statements	H226 H302 H304 H314 H315	Flammable liquid and vapour. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes severe skin burns and eye damage. Causes skin irritation.
	H317 H318 H319 H331	May cause an allergic skin reaction. Causes serious eye damage. Causes serious eye irritation. Toxic if inhaled.
	H335 H336 H400	May cause respiratory irritation. May cause drowsiness or dizziness. Very toxic to aquatic life.
	H410 H411 H412	Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.

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SECTION 16: Other information

	ormation	
[CLP/GHS] Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Aquatic Chronic 2, H411 Aquatic Chronic 3, H412 Asp. Tox. 1, H304 EUH066 Eye Dam. 1, H318 Eye Irrit. 2, H319 Flam. Liq. 3, H226 Skin Corr. 1B, H314 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H336		H302ACUTE TOXICITY (oral) - Category 41, H400ACUTE AQUATIC HAZARD - Category 1ic 1, H410LONG-TERM AQUATIC HAZARD - Category 1ic 2, H411LONG-TERM AQUATIC HAZARD - Category 2ic 3, H412LONG-TERM AQUATIC HAZARD - Category 3304ASPIRATION HAZARD - Category 1Repeated exposure may cause skin dryness or cracking.I318SERIOUS EYE DAMAGE/EYE IRRITATION - Category 119SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2I226FLAMMABLE LIQUIDS - Category 3H314SKIN CORROSION/IRRITATION - Category 1B315SKIN CORROSION/IRRITATION - Category 2H317SKIN SENSITISATION - Category 1335SPECIFIC TARGET ORGAN TOXICITY - SINGLEEXPOSURE (Respiratory tract irritation) - Category 3
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Notice to reader		

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.



London. Kings Langley. Welwyn Garden City.

