BROXTOWE BOROUGH COUNCIL

12 LINDLEY STREET, NEWTHORPE, NOTTINGHAMSHIRE, NG16 3PW

PROPOSED DISABLED ADAPTATION



PRICED SCHEDULE OF WORKS

February 2018

PRICED SCHEDULE OF WORKS

12 LINDLEY STREET, NEWTHORPE, NOTTINGHAMSHIRE

ADAPTATION AND EXTENSION

1:00 **DEMOLITION and ALTERATION**:

1:01 <u>GENERAL</u>

All work is to be carried out in accordance with all relevant building regulations, planning approval and building control instructions and to the satisfaction of the Contracts Administrator. Please note Building Regulations will apply for this development (to be obtained by the Council). If, in the opinion of the contractor, any detail or part of the specification does not conform to current Building Regulations, they should contact the Contract Administrator before submitting a tender. All work should be based upon drawing Nos. CW18:001:001 – 007

1:02 SITE PREPARATION

The Contractor will need to allow for all site preparation to facilitate the works; including but not limited to: Removal of all debris arising from demolition in a timely manner. Retaining safe access to the house and parking for the tenant and their family throughout the works. Protection and security of the site. Protection of existing structures and landscaping. Area must be left clean and tidy upon completion. Provision of onsite welfare facilities, including a WC. Provide protection from dust and debris, including but not limited to sealing of doors and protection when chopping out plaster form walls.

1:03 DEMOLITION

- 1:03:01 Demolish out building to rear of property. Please note this is a semi-detached structure. Care must be taken to ensure the neighbour's outbuilding is not damaged. The structure is single skin brickwork, with a tiled pitched roof, timber door, and a small timber window. Allow to make good the roof and walls to the neighbouring structure after demolition to ensure the structure is water tight. As shown on drawing CW18.001.002, a half brick pier must be left of the removed walls to support the neighbouring structure.
- 1:03:02 Breakout and remove concrete slab to rear of property to extent of new extension and as necessary to allow formation of foundations and for new concreting according to the area shown on drawing CW18.001.002.
- 1:03:03 Drain down and remove radiator ExRAD02 and set aside for reuse.

- 1:03:04 Disconnect and remove all existing services and remove redundant light fittings, as indicated on drawing CW18.001.002.
- 1:03:05 Temporary cap of water supplies and remove existing sink, wc and bath from bathroom. Do not leave dead legs in pipework.
- 1:03:06 Remove vinyl flooring, skirting, timber boxing to rear of sink & WC, full height tiling from walls around bath, tiled splashback, and shower curtain rail, from bathroom.
- 1:03:07 Remove Window EXW01and cart away from site. Allow to temporary prop structure.
- 1:03:08 Form opening in external wall between dining area and new extension. Allow to temporary prop structure as necessary. NOTE: Opening to be secured throughout works.
- 1:03:09 Form opening for doorway into new bedroom. Allow to temporary prop structure.
- 1:03:10 Chop out plaster to full height of all walls within the existing lounge and dining area, and to hall including walls to side of stairs to the ground floor only. (Note: This forms part of remedial works for damp related issues at the property)
- 1:03:11 Cart away from site all debris arising from the demolitions.

2:00 GROUNDWORKS:

2:01 EXISTING DRAINS

- 2:01:01 Protect all drains, manholes, gullies, vent pipes, rainwater pipes and fittings that are retained for use and ensure that they are kept free of debris at all times.
- 2:01:02 Make good any damage to existing drains arising from demolition work and leave clean and in working order on completion.

2:02 FOUNDATIONS

- 2:02:01 Excavate and prepare ground for strip foundations, provide CA with specialist design and calculations prior to commencement. Actual size and depth to be agreed with the Building Control officer. <u>Note:</u> Due to the close proximity to the boundary wall and neighbouring outhouse, excavations must be filled as soon as possible.
- 2:02:02 Prepare level base and sand blind ready to cast C35 reinforced concrete strip foundation. Allow for chasing out existing foundations and incorporating starter bars, tying new foundation to existing as required.
- 2:02:03 Remove all organic materials to full extent of extension, excavate to reduced levels and prepare ready for ground floor. Apply weed killer to full extent of excavations.
- 2:02:04 Brickwork below ground level to be Class A BLUE engineering bricks in 1:3 cement: sand mortar.
- 2:02:05 Blockwork below dpc level to be underground quality blocks in 1:3 cement:sand mortar as recommended by the manufacturer.
- 2:02:06 2no. air bricks to the existing house will fall within the new extension. Allow to duct 1 of these to new air brick in the extension, using periscopic under floor ventilator and ducting.
- 2:02:07 Cavity below ground level to be filled with weak mix concrete sloped to the outside.

2:03 GROUND FLOOR

- 2:03:01 Lay a min. 200mm graded, well compacted hardcore to extent of floor, as indicated on drawing CW18.001.003/005. Hardcore to receive 25mm sand blinding.
- 2:03:02 Cast 100 mm reinforced concrete slab to full extent

of excavations, concrete to be C35 grade tamped and vibrated.

- 2:03:03 Lay 1200g DPM above concrete slab and run up external wall to lap into and be jointed continuously with the polymer DPC within the external walls.
- 2:03:04 Lay 100 mm Celotex FR5000 (or similar approved) rigid floor insulation slab to full extent of excavations.

Allow for min 25mm thick perimeter edge insulation cut and placed to full depth of screed as 'edge-ofscreed' insulation.

- 2:03:05 Lay a 500g polythene separating/vapour control layer over the insulation to prevent risk of condensation.
- 2:03:06 Lay a 65 mm self-levelling screed, with D49 fabric mesh reinforcement as necessary.
- 2:03:07 Screed finish to extension to be trowelled smooth and sealed ready to receive tenant-supplied floor finish. Floor finish to provide level access to existing house.

3:00 SUPERSTRUCTURE:

3:01 <u>BEAM:</u>

3:01:01 Supply and install beam to opening formed in external wall, according to engineer's details provided in Appendix 3.

3:02 EXTERNAL WALL CONSTRUCTION:

- 3:02:01 OUTER SKIN:
 - 102mm facing brickwork to be Ibstock Commercial Red or similar approved, laid in approved 1:3 cement: sand mortar in accordance with manufacturer's instructions.
 - Laid with recessed joints in approved mortar to manufacturer's instructions, including all necessary expansion joints where appropriate.
 - Allow for soldier courses above new window and door openings.
- 3:02:02 INSULATION:

97mm CELOTEX CF5000 insulation batts (or equal approved) in 100mm cavity, held in position with manufacturer approved stainless steel wall ties.

- 3:02:03 INNER SKIN: 100mm Thermalite Shield close textured load bearing lightweight block work laid with recessed joints in approved mortar according to manufacturer's guidelines, including all necessary joints where appropriate.
- 3:02:04 Cavity to be closed with slate bedded on 1:3 cement sand mortar.
- 3:02:05 Allow for Ancon Staifix universal wall starter system or equal approved, fixed to existing external wall as necessary. Mastic sealant to joint.
- 3:02:06 WALL TIES:

First run of wall ties to be fixed at 600mm spacing horizontally, and then at max 900 centres, and maximum 450mm centres vertically (300mm within 225mm of all jambs). Wall ties to slope down to outer leaf to prevent water ingress.

- 3:02:07 LINTELS
 - Lintels to windows and doors to be a mixture of Catnic (or equal approved) steel lintels.
 - a) Ext D01 & W01 Catnic ref CG90/100 2250mm

b) Window W02 Catnic ref CG90/100 2400mm

Lintels must have at least 150mm bearing on each side.

3:03 <u>ROOF</u>

Workmanship of the structural members should comply with the relevant requirements in BS 5268-2:2002.

- 3:03:01 Supply and fit class C16 47×175mm timber joists at maximum 450mm centres. Joist spacing shown on drawing CW18.001.005. Joists to be securely fixed with truss clips to 100×65mm sw wall plate bedded on 1:3 sand mortar. Wall plate fixed with Galvanised wallplate straps. Galvanised wall hangers to be used to fix joists to existing wall structure. Allow for noggins between joists.
- 3:03:02 Supply and fit timber firrings, according to drawing CW18.001.005, to create a fall of 1:40 to gutter.
- 3:03:03 Supply and fit 25mm external grade WBP plywood to top side of timber firrings.
- 3:03:04 Supply and install 120mm Celotex Crown up or similar approved fully bonded insulation onto plywood.
- 3:03:05 Supply and install single ply membrane roofing system, laid to manufacturer's recommendations. Roofing system to have a third party guarantee of minimum 15 years.
- 3:03:06 Insert self-supporting cavity tray in sections to be linked with lead flashings to seal around joint with existing building. Allow for builder's work in connection. Provide weepholes at maximum 450mm centres. Flashings to overlap and be sealed with roofing system, and have a minimum upstand of 150mm. Allow for 25mm insulation upstand behind lead flashing to prevent cold bridging.
- 3:03:07 Supply and install 18mm white UPVC fascias, and white UPVC soffits with supporting sw framework and for all necessary joints, angle corners and fixings. Allow to pack out void behind fascia with flexible insulation to prevent cold bridging as indicated.
- 3:03:08 Supply and install black 100mm UPVC guttering to fascia as indicated on drawing CW18.001.005. Include for 75mm black UPVC downpipe as indicated on drawing CW18.001.004. Rainwater goods to be securely fixed strictly according to manufacturer's instructions.

3:04. CEILING

Underside of roof joists to be lined with 12.5mm Gyproc wallboard securely fixed to roof joists. Allow to box around the beam.

3:05 INTERNAL WALL CONSTRUCTION

3:05:01 Construct metal stud partition to extent shown on drawing CW18.001.003.

Construction to be Gypframe 70mm Metal studs at maximum 600mm centres, fixed according to manufacturer's recommendation with Gypframe floor and ceiling channels.

Allow to fix 2no. layers 12.5mm Gyproc Wallboard to both sides of metal stud with 25mm Isover Acoustic partition insulation.

- 3:05:02 Allow for all necessary skirting boards, architraves, beading, etc. throughout (<u>Inc. new external walls, and</u> <u>all existing walls bounding the lounge, dining area and</u> <u>newly formed bedroom</u>), all to be pressure treated.
- 3:05:03 LINTEL

- Lintel to for D01 to be Catnic BSD100 750-2100mm(or equal approved) steel lintels. Lintel must have at least 150mm bearing on each side.

3:06 <u>WET ROOM:</u>

3:06:01 Shower Area: Supply and install AKW 'Tuff Form' level access shower former, 1400 x 900, fitted into joists as per fitting instructions.

3:07 FLOOR COVERINGS

3:07:01 Supply and lay POLYFLOR Polysafe Hydro 2.5 slip resistant vinyl sheet floor covering; with edges dressed up wall to form continuous cove skirting with POLYFLOR cove formers and Ejecta CT strip to junction with wall. Colour to be chosen by tenant from list supplied by Broxtowe Borough Council to link with standard modernisation schemes.

4:00 <u>WINDOWS AND DOORS</u>:

4:01 WINDOWS

Allow for fitting of 2 no. PVCU windows in accordance with the attached specification – see Appendix 1 attached – PVCU windows. Windows configuration to be as indicated on drawing CW18.001.007.

W:01 900 x 1200(w x h) (Safety glass required) W:02 2100 x 1200(w x h)

The windows to be complete with insulated DACATIE ref: TF1000 (or equal approved) cavity closer/plastic vertical dpc to both sides of each new window opening.

Supply and install bullnose sw timber window sill to internal of window openings.

4:02 <u>DOORS</u>

4:02:01 Fit 1no. (ExtD01) GRP composite door in accordance to the attached specification – see Appendix 2 – Exterior Composite Door. Minimum clear width 850mm

Door to be complete with insulated DACATIE ref: TF 1000 (or equal approved) cavity closer/plastic vertical dpc to both sides of each new door opening.

4:02:02 DOOR D:01 Two-Way Swing Double Door

D:01 to provide min clear opening width of 1200 mm.

4 No helical double action hinges, sprung.4 No D handles for easy operation.Suitable latching mechanism.

Supply and fit SW door lining and architraves to door. Door panels to be hollowcore and lightweight for ease of use. Allow for new threshold to suit tenants choice of flooring and avoid any wheelchair obstruction.

4:02:04 <u>DOOR D:02</u>

Fit new door to D02. Door to be Jeld wen moulded standard core Oakfield, or similar approved. Size 762 x 1981.

4:02:03 <u>DOOR D:03</u>

Replace Kitchen door - Supply and fit Jeld Wen moulded 44mm 30 minute fire door, Oakfield FD30 style, or similar approved. Adjust door frame, linings and architrave and add intumescent strip to provide $\frac{1}{2}$ hour fire rating. Size 762 x 1981.

•	Supply and fit Ironmongery for Doors D02 & 3. To each door:	
	1½ pairs 98 mm support hinges 1 no. Union lever handle set – 1000RRS01 - BRS01	
	1 no. Union Mortice latch 2C2 72mm lock set	

5.00 SANITARY FITTINGS:

GENERAL

Provide and fit new WC and washbasin. General fitting heights have been suggested however where possible it is suggested that heights are agreed with users on site.

- 5:01 <u>NEW WC</u> (including WC pan and cistern)
 - Supply and install new Armitage Shanks "WHITE" 'Contour 21' close coupled WC pan, seat and cistern; complete with all cold water connections, overflow and connections to stack. Include for all new pipework back to the existing cold water system and waste discharge pipework to adjacent stack.
 - WC to be set 500mm from wall to centre line, with waste pipework adjusted accordingly.

5:02 WASH BASIN (No Pedestal)

- Supply and install new Armitage Shanks "WHITE" 'Portman 21' 60cm washbasin REF S2256 with one taphole; complete with all hot and cold water connections, 75mm deep seal trap and waste connections to existing waste stack; include for all new hot and cold water pipework and waste discharge pipework.
- Supply and install Armitage Shanks Contour 21 1 hole thermostatic basin mixer REFA6697, or similar approved, to wash basin.

Wall mounted wash hand basin set at approx. 800mm from floor.

5:03 <u>SHOWER</u>

5:03:01

Supply and install new aluminium rail shower rail fixed to the walls in accordance with the manufacturer's. Minimum dimensions to be 900x1500mm. Include for electric bonding

Complete with "WHITE" 2200 mm extra long shower curtain.

5:03:02

Supply and install new AKW iCare electric care shower, white, 9.5kW unit securely fixed to tiled wall at a height to be agreed with the tenant, with an extended hose and sidebar. Allow for all electrical connection from the shower unit as specified; and including new circuit back to the consumer unit together with new Fuse/circuit breaker; include for bonding as necessary; allow for all exposed plumbing connections including installation pipework in chromium plated copper and all cold water connections to the shower unit and existing cold water system.

6:00 PLASTERER

6:01 <u>GENERAL</u>

6:01:01 New plasterboard walls to be tape jointed prior to receiving a 2 mm plastered skim finish using Gypsum Thistle Multi-Finish to manufacturer's recommendations.

6:01:02 All exposed brick or blockwork and plaster patching (including new walls and existing walls stripped of plaster) to receive a plastered finish comprising of not less than 2mm thick British Gypsum Thistle MULTI-FINISH plaster on not less than 11mm thick Thistle Bonding coat plaster undercoat in accordance with BS 5492: 1977 and manufacturer's recommendations.

6:01:03 New plasterboard ceilings to be tape jointed prior to receiving 10 mm coat of Gypsum Thistle Universal One Coat all in accordance with manufacturer's recommendations.

6:02 BACKING TO WALL TILES

Prepare walls as necessary and apply 1:3 cement:sand backing as specified to same overall thickness as the adjacent plaster; apply 2 coats 'Unibond' or similar approved bonding agent, to full height tiled walls, window opening and sink splashback, to receive new ceramic wall tiles as specified in Wet Room.

7:00 WALL TILING

7:01 <u>GENERAL</u>

Wall tiling generally to be British Ceramic Tile Compendium range wall tiles on prepared walls. Colour to be either Beige Satin or White Satin 148x148 wall tile. Colour to be agreed between Contracts Administrator and Tenant.

Allow for all making good of plaster prior to fixing of all trims; "WHITE" grout, approved WATERPROOF ADHESIVES, ARBO mastic to <u>ALL</u> internal corners, and the like to be included.

All edges will be formed by a white plastic trim.

7:02 WALL TILING TO WET ROOM

- Apply full height tiling above top of coved skirting to the full extent of the shower area and 8 no. tiles (2 rows) to sink splash back.
- Make good tiling around all appliances, pipework, etc.

8:00 HEATING AND PLUMBING INSTALLATION

8:01 EXISTING INSTALLATION

The existing plumbing installations must be tested prior to any alterations in the presence of the Clients' representative. Any defects which affect the operation of the system, which become apparent, to be rectified by the contractor at the Clients expense or the Client may at his discretion employ others to carry out the work. On completion of work to the existing system it shall be fully operational to the satisfaction of the Clients' representative.

8:02 GENERAL

The whole of the work shall be carried out by experienced plumbers under the direction of a registered Master Plumber.

8:03 HOT AND COLD WATER SYSTEM

Modify existing hot and cold water system as necessary to supply facilities to the new bathroom. Allow for all pipework and installation together with insulation of all pipework within unheated roof voids. No dead legs are to left in the pipework.

8:04 SANITARY INSTALLATION

- The whole of the sanitary installation and cold water and hot water installation shall be executed in accordance with the Regulations and Bye-Laws of the Water Authority, and all pipes shall be of the weights and gauges required by them.
- All valves, including any valves supplied by a Nominated Supplier, shall be submitted to, tested approved and stamped by such Authority before being used in the work.
- Immediately upon completion of the installations, the Authority shall be notified and all requisite tests carried out, including tests to ensure that the water is uncontaminated and suitable for drinking.
- All plastic overflow pipes to have plastic 'T' piece solvent welded onto external end as it passes through fascia or walling to prevent wind ingress and hence freezing.

8:05 CENTRAL HEATING

- It is essential that heating and hot water to the dwelling is maintained at all times. The tenant must be notified when it is proposed to carry out the work.
- Allow for removal of all unused materials and rubbish appertaining to the installation.

- Allow for new distribution pipework, drain cocks, vents, pipework, etc. required for extending existing system, together with the replacement of any ports and/or equipment due to the increase in the existing system.
- Allow for all builders' work commissioning and testing in connection with the below installation.
- 8:05:01 The plumbing sub-contractor is to install a new Stelrad Elite range radiator, length 1200mm, height 600mm where indicated on drawing CW18.001.004: a.) Lounge – New RAD:03

Relocate existing RAD:02 to location shown on drawing CW18.001.004

Allow for Danfoss (Randall) Thermostatic Radiator valves to all new/relocated radiators.

8:05:02 Supply and install plinth heater in kitchen linked to central heating system. Heater to be Smith's Space Saver SS3 hydronic fan convector, with chrome grill. Installation to be according to manufacturer's requirements, with Smith's Wall Mounted Control Switch RSCH

8:06 GAS SAFETY REGULATIONS

- The whole of this contract must be carried out in accordance with Statutory Instrument 1998 No. 2451 Health and Safety The Gas Safety (Installations and Use) Regulations 1998 and any subsequent amendments.
- This will include certifying that the appliance is checked for electrical or gas supply safety.
- A certificate will be completed on the completion of any servicing or pipe work alterations and submitted to the employer on a daily basis. In addition any work carried out during a breakdown visit will be recorded and a copy of the report submitted to the employer at the end of each day.
- Each person employed to carry out this work will be competent to carry out such work. Broxtowe Borough Council defines competence as that detailed in the Health and Safety Commission Approved Code of Practice Standards of Training in Safe Gas Installation (ISBN 07176 06031). The criteria for qualification, training and experience of gas fitting operatives will be employed to carry out repairs and maintenance of the Council's gas appliances. Furthermore they shall have reached the Health and Safety Commission Approved Code of Practice and Standards of Training in Safe Gas Installation or Nationally Accredited Certification

Scheme Assessment courses in the following elements (if relevant):

Safety Legislation and Basic Safety Combustion and Control Flues and Ventilation Pressure and Flow Domestic Pipework Installation Electricity and Its Control Control System Central Heating Wet Systems Domestic Cookers Domestic Space Heaters Domestic Hot Water Heaters Fault Diagnosis, Service and Maintenance

- Evidence will be required that all operatives employed on the works are qualified prior to the contract commencing.
 - Note: Any work carried out during the out of hours service will be carried out by staff who reach the qualification criteria described above.

a) Appliances and Services

All appliances and services must be installed in strict accordance with the manufacturer's instructions and Gas Safety Regulations. On completion of the final checks to ensure the system is fully commissioned the contractor will submit to the employer a completion certificate.

b) <u>Registration of Gas Safe.</u>

- All contractors who submit tenders must be or use a subcontractor who is a member of Gas Safe, the Council for registered gas installers and be approved for the type of work relating and described in this document.
- As part of the tender the contractor will be required to submit details of his membership, and/or the details of any sub contractors who are to be employed.

c) <u>Attendance by other trades</u>

- Should any other trades be employed on the works the contractor must make them aware of the Gas Safety (Installations and Use) Regulations 1998 and any subsequent amendments.
- On completion of works by other trades appliances must not be used, until this installation has been checked for correct operation and installation together with safety checks which must be carried out by a person qualified as described in the Gas Safety Regulations.

In completing the proposed works the following statutory documents must be complied with (This is not an exhaustive list):-

Health & safety At Work Etc Act 1974 Gas Act 1986 Latest Edition of Building Regulations Gas Safety (Installation and Use) Regulations 1998

9.00 ELECTRICAL INSTALLATION

Please note, the contractor is <u>not</u> required to rewire the whole dwelling. This specification is given to the quality and type of equipment expected to the new extension.

9:01 <u>GENERALLY</u>

Regulations

The work must be carried out by a member of the National Inspection Council for Electrical Installation Contracting and shall comply with the latest edition of the Regulations for the Electrical Equipment of Buildings issued by the Institution of Electrical Engineers including all current amendments, the 17th Edition of the IEE Wiring Regulations, Building Regulations, Regulations of the local electricity supply authority, British Standards Code of Practice, Health and Safety at Work Act, Electrical Equipment (Safety) Regulations, Plug and Socket (Safety) Regulations and the Gas Safety (Installation and Use) Regulations 1998.

9:02 Testing

- The contractor will supply all notices upon the supply Authority for testing, pay all fees in connection therein and any additional fees required for re-testing.
- The Contract Administrator shall have the authority to require any material or work to be tested at the contractor's expense, in order to prove both soundness and good practice.
- The installation shall be tested for insulation and continuity in accordance with the I.E.E. Regulations as the work proceeds and before any connection is made to the switch or consumer unit terminals.
- In the event of either materials or work, with or without being tested, be considered defective, such materials or work at the contractor's own expense, shall be amended immediately in a proper and satisfactory manner, upon notification by the Contract Adminstrator.

9:03 Earthing and Bonding

- The whole of the Electrical Installation and all other equipment and apparatus connected thereto, shall be earthed in accordance with the I.E.E. Regulations and the Supply Authority. P.M.E. earthing shall be used if the local supply authority will make it available. All installations must be fitted with R.C.D. Protection.
- The contractor shall include for bonding all services and ascertain from the supply authority that they will supply an earthing terminal or allow earthing to their incoming cables.

• If the Supply Authority will not accept the above methods, for earthings, the Contract Administrator must be informed forthwith.

9:04 Position of Points

• The position of switches and sockets will nominally be as follows,

Exact locations and heights etc will be agreed with tenants prior to fixing to suit disabled tenants needs.

Light Switches	1350mm	
Switched Socket Outlets	900mm	
Spur switches	2180mm	
Luminaire	2400mm (Min)	To the underside.
Ceiling switch pull cords	600- 800mm	To the end of cord.
Shower pull switch	1000mm	To the end of cord.

9:05 Description of Work

9:05:01 Supply and install new Wylex NM 10 way Metal consumer unit (or similar approved) to suit. Consumer unit to meet the current regulation, including but not limited to the latest editions of BS 7671 IET Wiring Regs, and BS EN 61439-3, and their subsequent amendments. Consumer unit located in Kitchen.

9:05:02 All wiring to run from the new consumer unit and will include provision for cutting chases, cutting holes capping and making good of plaster. Location of fittings indicated on drawing CW18.001.004

Bedroom	2 new Double sockets with outboard rockers
	1 light switch for bedroom lighting

- Hall 1no. wired smoke detector Aico Ei166e Optical detector with built in rechargeable battery. Relocated light switch
- Landing 1no. wired smoke detector Aico Ei166e Optical detector with built in rechargeable battery.
- WC/ Shower 1 50 Amp pull switch for elec. shower
 1 AKW iCare Electric Care Shower (White, 9.5 kw)
 1 ceiling switch pull cord for bathroom lighting
- Lounge 2 new Double sockets with outboard rockers

		1 double light switch for tenant's existing and new light fittings. 1 fused spur for relocated electric fire.	
	Kitchen	1 Smith's hydronic SS3 plintl 1 wired heat detector Aico Ei rechargeable battery.	
	Smoke dete	ctors/heat detector to be inter	linked
9:06	Lighting		
	<u>Wetroom</u>	1 no. Tamlite CIRCLIGHT Circular	CLD36017LEDNW
	<u>Lounge</u>	domed profile bulkhead 1 no. Tamlite Elegance Plus Circular Bulkhead, colour Polished Chrome. Light fitting to be switched to same switch as existing fitting	PEL17LED2LNW
9:07	Electric Sho	wer Unit	

9:07 <u>Electric Shower Unit</u>

See Sanitary Fittings

10:00 DRAINAGE

10:01 <u>GENERAL</u>

- Before starting work, check flow, levels and positions of existing drains, inspection chambers and manholes against the assumed positions on drawings and report any discrepancies.
- The whole of the drainage shall be carried out in accordance with the rules and regulations of the Local Authority and no trenches shall be filled until the drains have been tested and passed by the Authority.
- All pipework will be suitable for purpose, i.e. for installation above ground and underground.

10:02 EXISTING DRAINAGE

10.02.01 Break out redundant drain pipes as necessary; seal off with concrete to prevent vermin gaining access to the drainage system as required (Indicated on drawing CW18.001.002)

10:03 NEW DRAINAGE

10:03:01 All new sanitary fittings to be provided with necessary waste pipework to connect to existing drainage system.

10.03.02 Supply and lay new 100mm sgw flexible jointed drain pipe from rainwater down pipe and Aco Stepdrain (see external works), and connect to existing inspection chamber as indicated in drawing CW18.001.004. Joints to be clean and smooth.

NOTE: All pipes to be laid with care to true and even falls, perfectly straight both in line and gradient and the inside of each pipe to be wiped clean so that the full bore is truly concentric and unobstructed.

10.03.08 Allow for all associated work e.g. excavation, jointing, haunching, backfilling, and reinstatement of concrete pathways.

10:04 LATERAL DRAIN

A lateral drain runs under the proposed extension. Permission to build over the sewer is to be obtained by the Council. Work must be undertaken according the building regulations part H, note particularly section 4.

10:04:01 lay new section of sewer under proposed extension, according to drawings CW18.001.004 and CW18.001.006. Specification of sewer, bedding and backfilling to meet relevant building regulations.

11:00 EXTERNAL WORKS

11:01 Form concrete patio area to rear of property to extents indicated on drawing CW18.001.003. Concrete to be laid to a minimum depth of 150mm, on bed of sand blinded hardcore min. 100mm deep. Concrete to be C10 mix with steel reinforcements as required. Surface to be tamped to provide non-slip surface.

> Concrete to provide level access to rear door ExtD01. Aco StepDrain with Anthracite grating to be fitted on building threshold as shown on drawings CW18.001.003/4. Concrete to provide level access to existing concrete to side of property. Concrete to be laid to falls to grass, but with minimum gradient possible.

11:02 Allow to make good lawn following excavations for foundations and concrete.

12:00 FITTINGS

12:01 Allow to fit of four number client supplied grab rails, locations to be specified at the end of the job with the input of the OT and tenant.

66 CENTRAL AVENUE, BEESTON, NOTTINGHAM

COLLECTION

1.0	Demolition and Alterations	£
2.0	Groundworks	
3.0	Superstructure	£
4.0	Windows and Doors 4.01 Windows 4.02 Doors (Internal and External)	£
5.0	Sanitary Fittings	£
6.0	Plasterer	£
7.0	Wall Tiling	£
8.0	Heating and Plumbing Installation	£
9.0	Electrical Installation	£
10.0	Drainage	£
11.0	External Works	£
12.0	Fittings	£

TOTAL CARRIED FORWARD TO PRICE BREAKDOWN

APPENDICES

Appendix 1 – Window Specification

Appendix 2 – Exterior Door Specification

Appendix 3 – Engineer's Beam Calculations (Separate)

APPENDIX 1

STANDARD SPECIFICATION FOR HIGH IMPACT PVCU WINDOW SYSTEMS

PLEASE NOTE: Latest editions of all regulations and standards to be adhered to, with any subsequent amendments.

Profile and Material

1.1

(All profiles shall be impact modified PVCU (polyvinyl chloride unplasticised).

The profile shall be multi-chambered with an external wall thickness of 3mm minimum. The external thickness of the frame front to back shall be no less than 70mm.

1.2

The material from which the profiles are made shall consist of white polyvinyl chloride. Only those additives and pigments may be used that are needed for the manufacturer of the compound and its subsequent conversion into sound, durable extrusions of good surface finish and mechanical strength, as assessed by the requirement of the trade standard for PVCU windows published jointly by the British Plastics Federation, 6 Bath Place, Rivington Street, London, EC2 3JE, and The Glass and Glazing Federation, 44 -48 Borough High Street, London, SE1 1XB.

1.3

PVCU extruder shall operate under a quality management system complying with the requirements of the National Standard for Quality Assurance, BS EN ISO 9001:2000 or latest equivalent. The extrusion shall also comply with the requirements of, and be extruded in accordance with BS EN ISO 9001:2000 and QAS4834/18 1987 or latest equivalent.

1.4

The windows shall not contain materials which by direct contact or otherwise be detrimental to the comfort and safety of the users, or which are liable to emit abnormally toxic products. There shall be no detrimental reactions from contact between the windows and their fixings or adjoining materials - COSHH Regulations shall apply throughout.

1.5

The finish of the profile as extruded shall be white in colour.

1.6

The cross section of the profile shall conform in shape and dimensions to the manufacturers specification. Surface dimension shall deviate by no more than +/-1.5mm.

1.7

The colour of the profile shall be uniform and free from foreign bodies, cracks, scratches and sink marks.

1.8

The profiles shall be straight so that the longitudinal axis of the profile as measured on the base surfaces shall deviate from the straight line by no more than 1mm per metre.

1.9

The main frame and sash profiles of each window shall be permanently marked approximately 1m intervals with an identifying mark which will enable the manufacturers name, date of manufacture and extruder to be identified without extraction of the window.

1.10

The profile shall show no bubbles, cracks or de lamination when subjected to ageing as defined by BPF/GGF Trade Standards.

1.11

The main frame and sash profile shall resist impact at low temperature and no sample, when tested, shall exhibit cracking through the entire wall thickness of the profile.

1.12

Profile material shall be tested in accordance with BS EN 20105-A03: 1994 for colour fastness and the maximum colour change shall not be more than 3 on the grey scale. It shall be tested in accordance with BS2782: 1976 (ISOR/182 Method A), and shall be stable for not less than 85 minutes. **The system shall be through coloured**

1.13

All frames shall meet the regulations of BS 6375-1:2004 for air and water tightness with a minimum wind loading of 1,500 Pascals.

1.14

No profile shall contain or be produced from reformed material or reworked material of any kind.

1.15

The system shall be resistant to chemicals and be fungal and vermin proof. Profiles must also be resistant to attack by cement mortars and other materials used in building construction and refurbishment.

1.16

PVCU shall be classed as self-extinguishing to prevent support or enhancement of accidental fires to class 1, i.e., most resistant as defined in BS476 Part 1.

1.17

Combination Windows and Screens

Where combination windows or screen are specified the frame shall be manufactured complete and shall incorporate panels manufactured from the colour coat HP200 range with an insulated panel to an overall thickness of 24mm. The contractor must allow for a choice of colours.

1.18

New PVCU window boards **shall** be incorporated except for kitchen and bathroom windows. The window boards will be a minimum thickness of 8mm, and be fitted with all end caps, trims and the like. Take care to ensure they do not protrude too far from the wall. Fit on top of existing timber boards unless otherwise agreed.

1.19

Bathroom Windows

The contractor must check and allow for an appropriate profile to allow for internal beading where ceramic tiling has been carried out on internal reveals.

Reinforcement

2.1

Length and Fitment

Window design calculations require that the reinforcement is continuous within the profile and that it does not move relative to the profile under load, reinforcing shall meet 1,500 pascals wind pressure loading.

2.2

The system suppliers reinforcement should be designed to fill the reinforcing space provided within the profile after allowance for extrusion tolerances. In order to achieve the maximum rigidity from the reinforcement, it should be fixed to the PVCU profile at a maximum distance of 100mm from either end and at the maximum of 400mm centre thereafter.

2.3

Definitions

The definitions given in BS6100 and the Codes of Practice for installation apply, together with the following.

Design Wind Loading

That load, determine by calculation, which the window is designed to withstand.

Load Span

The effective length of the member upon which the design acts.

Loaded Area

The expanse of the designed wind load which acts upon the member under design.

2.4

Selection of Reinforcement Materials

Reinforcement for PVCU windows are to be either cold rolled, mild steel suitably protected against corrosion, mill finish aluminium or stainless steel.

Where curved or radius profiles are mechanically jointed, aluminium reinforcement shall be incorporated. It shall be used:-

- b. to hold and clamp the joint
- c. to provide reinforcement and rigidity.

Mild Steel

Mild steel sheet hot dip zinc coated upgrade Z2G275N complying with BS EN 10143:1993. Alternatively, reinforcement shall be manufactured from mild steel of a similar grade which is subsequently given a corrosion resistant coating to equal the above. Reinforcement of this quality shall be used only in profiles or systems so designed and sealed so that no exterior moisture can come into contact with the reinforcement. All cut ends of Reinforcement must be recoated with zinc to prevent atmospheric attack.

<u>Note</u>: In practice this means that the reinforcement must be in fully welded frames, and that the reinforcement cavity is not breached on the weather side of the windows.

Stainless Steel

Austenitic stainless steel sheet or strip of grade 304, or ferritic stainless steel grade 403 complying with BS EN 10095:1999. Reinforcement of this quality can be used in any type of profile or system.

<u>Aluminium</u>

Extruded aluminium alloy 6063 condition TB, TE or TF or 6082 conditioned TB, TE or TF

complying with British Standards BS4174. Reinforcement to this quality can be used in

any type of profile or system.

Use of Reinforcement Materials

Design

All PVCU windows should be manufactured to resist the designed wind loads. Methods of calculation, these are given in CP3 Chapter V Part 2, the abbreviated version given in BS 6375-1:204 can be used when buildings are of simple rectangular shape and up to 10M high to the eaves from ground level, unless there are special conditions see notes 1 and 2 to 83, BS 6375-1:2004. The components of the window that will deflect under wind loads are transoms including door sides and rails, mullions including composites. Reinforcement shall be installed so that it does not move or rattle when the window is in use and so that it makes an immediate and consistent contribution to the stiffness of the profile during bending.

Frames, Transoms, mullions and casements exceeding 750-800mm to be fully reinforced. Reinforcements shall be fitted to receive fixings at all hinges, fasteners and stays.

Deflection

The calculation of deflection for mullions, transoms and sashes at the right angles to the window pane must not exceed 1/200 of the support width for the most unfavourable loading of support widths of up to 3.00M and must not exceed 1/300 of the supported widths over 3.00M. When insulating glass panes are used data supplied by the manufacturer must be taken into consideration when calculating the permissible deflection.

Horizontal members of windows which support the dead weight of the glass or infill panels will deflect under the loads. To maintain the proper functioning of the hardware, glazing gaskets and weather seals, to prevent excessive strain on sash joints, and to avoid unsightly visual distortion, deflection under dead load shall be limited to a maximum of 3mm.

Structural Design

It must be ensured by appropriate structural measures, that the maximum variation in a position of structural elements deflection, thermal movement etc, to which the window frame is secured, is such that forces do not act upon the panes either in plans or at right angles to it.

Anchorage at the Window Frame to the Building Structure

The type and installation of the anchorages must be established when planning the assembly. The anchorages must not in any way impair the load carrying capacity of the structural element of the surrounding structure to which they are fixed.

Because of the maximum deflection of 8mm permissible for insulation glass, pane lengths will be restricted to a maximum of 2.4M.

Wind Loading

The system shall be so designed to suffer no permanent distortion or other damage when subject to positive and negative pressure as determined by in accordance with BS Code of Practice CHV Part 2.

Thermal Movement

The PVCU frame work and glazing assemblies shall be constructed and installed in the prepared location with sufficient tolerance and where necessary expansion incorporated within the couplings, to provide for expansion and contraction as will be caused by the climatic conditions and temperature changes, winter to summer, day to night, without buckling, distortion of joints, ability of fit, damage to sealants or other detrimental effects over the temperature range of $-20 \,^{\circ}$ C to $+45 \,^{\circ}$ C (surface temperature). The design shall accommodate noiselessly, thermal movement within the combination units and the curtain wall without distortion. Details shall be prepared based upon dimensions at 20 $^{\circ}$ C and take account of the ambient temperatures at the time of the assembly and installation. Details and joint positions of expansion joints to be shown on the contractor's submission drawings.

Fabrication

3.1

All corners, mullions and transoms shall be heat welded and finished with a groove, the weld factor to conform to the requirements of BS 2782, method 320C. They are not to less than 0.7. The strength of the corner weld to comply with appendix N and the BPF/GGF standards. <u>All glazing beads to be internal</u>. Reinforcing shall meet 1,500 pascals wind pressure loading.

3.2

In all cases, it must not be possible for any opening light to become accidentally disengaged from the outer frame.

3.3

The seam on the outer edge of the frame shall be milled off and the seam on the inner edge be removed.

3.4

Under no circumstances will adhesive bonding be permitted.

3.5

A corner weld test shall be carried out daily during the manufacture using a calibrated machine capable of carrying out such test.

Welds should be capable of withstanding a deflection of a minimum of 4mm as defined by the BFP/GGF Trade Standards without fracturing. Testing can continue to destruction of the weld and records kept of all tests and findings. The corner when fractured shall not split more than 70% along the line of the weld.

3.6

All frames shall incorporate internal drainage, this shall be isolated from chambers into which reinforcement can be placed or through which frame fixings pass, and drainage shall be through the base.

3.7

Pressure equalization holes shall be drilled in accordance with the system extruder recommendations to ensure efficient drainage in adverse conditions.

3.8

Handling and Transport

Windows may be transported either glazed or unglazed.

All windows or prefabricated units shall be transported and stacked in a vertical position and properly anchored to prevent movement in transit, windows shall be separated from each other by adequate packing pieces during transit. All frames shall be delivered to site protected by self adhesive tape which shall be left on the frames for as long as possible before removing.

4.0

Furniture and Ironmongery

4.1 Handles (to be the "Virage" Espagnolette range or similar approved)

Ground Floor - All windows to have Satin Anodised Aluminium (SAA) or white plastic coated key locking handles (offset style). Except dedicated egress openings in conjunction with ground floor flats and bungalows.

First Floor – All windows to have SAA or white plastic coated push button handles. <u>Dedicated fire eqress window to be identified by green push button handle (offset style).</u>

Second Floor – All windows to have SAA or white plastic coated push button handles (offset style).

The locking mechanism is to be the Vector Excluder high security locking mechanism, to satisfy BS 7950 (see also item 9.1) operated by a single handle using securing corner keeps. Window casements above the height of 900mm to be fitted with a central locking bolt. All to meet BS 7479:1991, ISO 9227:1990, 500 hr neutral salt spray test and to comply with BS 7412:2002 accreditation. (BS EN 1670:1998 Class 4 corrosion resistance)

Two handles to casements exceeding 800mm on any side. Also careful consideration needs to be given to handle positions to allow easy access i.e. such as over kitchen units, and also for cleaning to BS 8213-1:2004 Code of Practice.

The locking system should operate normally at ambient air temperatures within the range of

 -20° C to $+35^{\circ}$ C.

4.2

<u>Hinges</u>

Ground Floor -	Stainless steel friction type hinge with integral button operated child
	restriction mechanism to meet BS EN 12046-1:2003. In Ground
	Floor Flats and Bungalows, dedicated fire egress windows will be
	used in accordance with the First floor recommendations.

- First Floor Stainless steel friction type hinge with integral button operated child restriction mechanism to meet BS EN 12046-1:2003. Dedicated fire egress window to be provided to each habitable room and to be stainless steel friction type hinge to allow a clear unobstructed opening of at least 0.33m² and being at least 450mm high and 450mm wide. The bottom of the operable area should not be more than 1100mm above finished floor level. The above all in accordance with the Building Regulations Approved Document B or BS 5588.
 N.B. In some instances it may be permissible to utilise a hinge that both provides child restriction and gives unobstructed opening in line with the above fire egress requirements.
- **Second Floor** Stainless steel friction type hinge with integral button operated child restriction mechanism to meet BS EN 12046-1:2003.

All hinges to be austenitic 304 stainless steel friction type to withstand corrosion to BS

7479:1991, ISO 9227:1990 and should be the right size to suit window size and weight.

All windows to be fitted with the "Vector excluder" anti wrenching fixing fitted to hinged

cavity.

Manufacturers recommendations for hinges in respect of size and weight limitations must be strictly observed. It is the responsibility of the Fabricator to ensure the correct size of hinge is chosen for the weight of each opening casement or sash. For further information contact the manufacturer's Customer Help Desk.

Tenants are to be instructed on how to operate the windows including restrictors and designated fire egress window.

Note: Some design changes may be needed if existing window designs are unsuitable to meet this requirement.

4.3

<u>Keys</u>

Keys should be supplied for each window where required and one key should fit all

windows or all windows in one property.

4.4

All screws, nuts, bolts or other fastenings or fixings to be austenitic 304 stainless steel to

BS EN ISO 3506-1:1998. Coatings shall either be sheradised according to B.S.

4921:1998, diacromate, zinc coated, or bright zinc plated and recommended for the use

in the fabrication of PVCU windows. Pop riveting shall not be permitted.

4.5

Metals that are in contact with each other shall be compatible so as to prevent galvanic corrosion of electronic metals by electrolytic action.

4.6

Coated steel shall be resistant to corrosion such that when subjected to 95 hours of exposure in a natural salt spray test, as defined in BS 7479:1991, ISO 9227:1990, there is no corrosion exceeding one spot per 600mm² of significant surface visible to the unaided eye, and no spot shall be larger than 1.6 in diameter.

4.7

Where external butt hinges are used they must be of the security pin types that do not allow removal of the hinge pin from outside.

4.8

Top and side hung opening lights shall have 2 No. stainless steel (see previous grade type) friction stays per light sized and fixed in accordance with the system manufacturers instructions.

4.9

The size of the stay shall not be less half the height of the vent. The stay shall be carefully positioned to ensure good sealing and shall be fixed using non-ferrous self-tapping screws with countersunk heads.

4.10

Hardware with provision for adjustment shall be accessible for adjustment after the window has been installed. Hardware used to open/close the window shall have the facility to be replaced without removing the outer frame from the structure.

4.11

Strength and Safety of Moving Parts

The moving parts of the window shall have sufficient strength and robustness to withstand incidental static and dynamic loads occurring during use, without any permanent deflection or breakage.

4.12

All openable windows to have night vent facility.

4.13

All furniture and ironmongery should be clearly marked so as to identify manufacturer.

4.14

All furniture and ironmongery can be supplied by:-

Securistyle Limited Kingsmead Industrial Estate Princess Elizabeth Way Cheltenham Glos. GL51 7RE Tel: (01242) 221200 Fax: (01242) 234034

Or equally approved.

5.0

Glazing

All glazing shall be at the required thickness to meet wind load safety requirements of BS 6262-4:1994 Code of Practice for Glazing of Buildings. All glass shall comply with BS 952-1:1995. All windows and doors shall be glazed using dry glazing within <u>internal</u> <u>snap in PVCU beads</u> with black internal EPDM gasket. Double glazed units are to be a minimum of 26mm over all manufactured and approved under BS kite mark scheme, to BS 5713:1979, with Pilkington K glass to the inner leaf.

The spacer bar is to be marked with the manufacturers name and BS 5713:1979. Glazing shall be in accordance with BS 6262-4:1994 and BS8000 Part 7 1990, Workmanship on Building Sites, Code of Practice for Glazing. Safety glass shall conform to BS 6262-4:1994 where specified or required by the relevant British Standard. Safety glass shall be 6.4mm laminated/toughened. All toughened or laminated glass should be marked as such. Windows to bathroom, W C's, pantry walls and (landings where appropriate) shall be glazed in obscure glass (Cotswold) or other as identified. All glazing to windows, doors and screens to comply with the Building Regulations Approved Document N – "Glazing – Safety in relation to impact, opening and cleaning."

5.1

For the gaskets to be extruded from non-migratory EPDM based material which has compounded to comply with BS4255 Part 12 Class A 1986. The gaskets are to be

supplied via the systems extruder and may be subjected to random testing. Glazing gaskets to be co-extruded. **5.2**

No opening light (or glass within a fixed light) shall be openable or removable from the outside when it is fastened in the closed position.

5.3

Fixed panes or opening sashes shall have glazing beads fitted internally.

5.4

Weather seals shall consist of a double sealing system. Seals shall be a continuous length; all joints must be at the top.

5.5

Weather seals shall consist of a double sealing system. Seals shall be a continuous length, all joints must be at the top of the opening centrally located and glued together. The glue must be approved by the PVCU extrusion manufacturer.

5.6

Composite panels must be beaded in, as specified for glass. Where aggregate panels are required they will require fixing so that an adequate seal is made with a gasket.

5.7

The windows shall be constructed in such a manner that the glazing or de-glazing can take place internally without removal of the sash or frame.

6.0

<u>Couplings</u>

6.1

Projecting sills are to be incorporated wherever practical

6.2

Where couplings and extrusion profiles, i.e. sills or flanges are used, these shall be through fixed into the outer frame ensuring that all the fixing has penetrated into the reinforcement. All visible fittings must suit the profile colour.

6.3

Projecting sub-sills shall be manufactured by the window extrusion manufacturer so as to attain a perfect colour and technical performance match. The sills and main profiles shall be manufactured from CPE modified PVCU (to minimise the risk of impact damage by ladders etc). Sills should be of multi-chambered design.

6.4

Expansion shall be allowed for where necessary and couplings shall be sealed with silicone to produce a weather seal.

6.5

Sills, etc. are to incorporate end caps where necessary and fixed/sealed securely.

7.0

Ventilation

7.1

All window frames shall have adjustable trickle ventilators providing not less than 8,000mm² of ventilation without loss of security. It this is not possible, the area must be maximised. The contractor must check and ensure that the ventilators have enough clearance from the window head reveal to allow satisfactory operation. The preferred method of installation is through the top of opening sashes. Kitchen and Bathroom window to be permanently vented.

7.2

The Contractor must ensure that any permanent ventilation is not removed for gas appliances.

Where an existing circular fixed vent is installed allow for a "Titon" permanent ventilator

(or similar approved) conforming with the current Gas Regulations.

8.0

Security

8.1

The latest security standard PAS 11 now BS 7950:1997 (ISO 9000) as produced by the GGF and BSI November 1997 shall apply, window contractors are required to supply windows that will pass the specification. Evidence of compliance will be required. Windows will be tested to the standard and paid for by the employer, but if a window fails, the testing shall be paid for by the contractor. Locking handles are required to all ground floor windows Except egress openings (push button above ground floor) and all glazing beads are to be internal. Window contractors shall furnish proof that the security standard can be met by their window suppliers.

On completion the frame shall be washed down using general household detergents to remove building residue. The use of solvent based cleaners shall be kept to an absolute minimum and specific advice on types and approved brands may be obtained by the systems manufacturers.

9.0 <u>Standard</u>

All windows are to be designed, manufactured, supplied and installed in accordance with

the latest edition of BS 8213-1:2004, Windows, doors and roof lights.

APPENDIX 2

Broxtowe Borough Council Exterior Composite Door Specification

PLEASE NOTE: Latest editions of all regulations and standards to be adhered to, with any subsequent amendments.

- 1. Provide the client/employers with a door selection of up to five front doors.
- 2. Provide the client/employers with a selection of up to 5 door skin colours (front doors only).
- 3. Rear doors will be half glazed, 2XG type in white.

The contractor/supplier will be responsible for site surveys and the installation of the door units in conjunction with council staff. All manufactured units will be manufactured and installed to all the components manufacturers' requirements. Under no circumstances must any damaged unit be installed. All units must be capable of climatic changes and will tolerate expansion or shrinkage as conditions dictate without compromising the security or operation of the door.

All units must comply with the relevant British Standard secured by design principles and PAS023 and 024 integrity test. Parts E, L and M Building Regulations must be achieved. All units installed must be certified that the specification and installation has been achieved.

- 1.1 Door Frame
- 1.1.1 Doorframes will comprise of aluminium composite frames with PVCU facings which can be replaced in the event of damage.
- 1.1.2 Where fire doors are specified, frames will incorporate intumescent strips which comply with BS476.
- 1.2 Door Construction
- 1.2.1 Door sub frames shall be manufactured from laminated hardwood timber jointed appropriately to eliminate warping or twisting and to ensure the surface remains square during manufacture.
- 1.2.2 The case of the door will comprise of polystyrene materials or a similar approved which will fill all internal cavities and achieve the highest U Value possible. Doors specified as fire doors will meet the requirement of BS476 Part 22.
- 1.2.3 Door skin will be manufactured from high impact GRP which shall be through coloured. The skin must be capable of withstanding climate changes and be resistant to every day heavy use.
- 1.2.4 All doors will have edge detailing which will protect the door skin and aesthetic values. The colour of the edge detail will match the outer skin if possible.
- 1.2.5 Glazing systems will be laminated and double glazed in Cotswold glass. The units shall be capable of quick, easy replacement via fixed internal beads. Glazing shall meet the requirement of BS6262. All external-glazing beads will be bonded to the surface of the door unless otherwise agreed.

- 1.2.6 Threshold sills will not exceed 15mm complying with Part M of the building regulations. The unit must provide an efficient weather seal and thermal breaks and will have chamfered or pencil rounded edges. Care must be taken to meet the requirements of the Disabled Discrimination Act (DDA) for disabled residents.
- 1.2.7 Doors will be provided with 4 No stainless steel fully adjustable hinges securely fixed through the aluminium sub frame. Outward opening doors will be provided with hinge bolts. Difference to this must be approved prior to commencement.
- 1.2.8 All Outward opening doors shall be fitted with a 90 degree friction stay to head of door/frame to protect any future damage to the door/frame/handles etc.
- 1.2.9 Locking systems will comprise of a latch plus three locking points. Mortice locks must incorporate <u>oval lock cylinders where specified</u>. Doors to be key-locked both sides unless specified. Three keys shall be provided for each door unless otherwise specified. The locking system is to be lever / lever and <u>NOT</u> split cylinder type.
- 1.2.10 All front doors must be provided with a 360° spy hole fixed at 1500mm from floor level. Type to be agreed prior to installation.
- 1.2.11 All door handles will be S.A.A. to meet the British Standard for the disabled (see also part 6.0).
- 1.2.12 Letter plates (with draft brush) and devices for prevention of access to unlock doors from the outside will be fitted. All units finish in S.A.A.
- 1.2.13 All doors will be provided with S.A.A. door chains.
- 1.2.14 All front doors will be provided with S.A.A. door numerals.
- 1.2.15 All doors will be provided with replaceable brush seals on all door sides.
- 1.2.16 All doorframe fixings will be capped with white PVC caps.
- 1.2.17 All door frames are to be made to measure without the use of PVC knock-on. Should knock-on's be used these should be positioned equally to each side of the frame.
- 1.2.18 Mastic sealing externally to edges of brickwork will be in brown mastic sealant. Internal joints will be in white.

2.0 Internal Making Good

After removal of the existing door frames, carefully cut back plaster to heads and reveals to minimum extent required to accommodate the fixing of new frames in the specified position.

The contractor shall allow for re-plastering reveals as required up to the full width of the reveal. The contractor must allow for any making good to associated areas and the like.

The contractor will also provide for supplying and installing white PVCU cover strips fixed to all internal reveals using silicone adhesive.

Where fitted, all water bars are to be carefully removed and any damage to the step, floor screed or surrounding areas made good at the contractors own expense prior to the installation of the new door and frame.

All of the tenant's fixtures and fittings should be carefully removed and if required, re-fixed as part of this contract including curtain rails and blinds.

3.0 External Making Good

In addition to the provisions made, the contractor will allow for all making good to disturbed brickwork, rendering or vertical tiling and the like. This allowance will include any reinstatement of brick soldier courses/arches above doors.

Allow for touching up with two coats exterior masonry paint all patch render areas in a matching colour.

The contractor's attention is drawn to the possibility of some openings not having lintels, therefore all necessary supporting, wedging, pinning and re-pointing of any insecure brickwork is to be allowed for.

All doors and frames to be designed, manufactured, supplied and installed in accordance with the latest edition of BS 8213 Part 1, Windows, doors and roof lights. All sills will be fully supported and bedded in cement mortar.