

Remedial Works to Hall Exterior & Demolition and Re- Build of New Hall Kitchen

Scope of Works

1. Repairs to Exterior of Village Hall
2. Demolition of existing kitchen and rebuilding in accordance with attached plans

REPAIRS TO EXTERIOR OF VILLAGE HALL

1. Stitch vertical joints between entrance hall walls and main hall building
2. Stitch open joints around south elevation entrance hall opening
3. Stitch open crack to east elevation chimney
4. Fill deep voids within existing north elevation using reclaimed stonework where possible
5. Rake out and repoint areas of masonry bees damage to east elevation
6. Areas of deep repointing are required throughout the elevations. These to be raked out to a depth of 40mm and repointed with a natural hydraulic lime such as NHL 3.5
7. Where in excess of 50mm of stonework faces have spalled, cut out and replaced with stonework of similar appearance and texture

KITCHEN EXTENSION

SITE PREPARATION

Preparation, protection, access, demolition & ground investigation:

Demolitions, existing structures to be supported & protected where necessary, any existing sub structures (e.g. foundations and slab etc.), taken up & removed off site to a licensed tipping site. Where the demolition of a structure or part of a structure exceeds 50m³, a notice of the proposed demolition should be sent to the Local Authority Building Control Department before works commence.

Provide all necessary health and safety requirements including; site security, scaffolding, access ladders, material hoists, temporary protection and working platforms etc. which are to be erected, maintained, certificated, dismantled and removed by suitably qualified and insured specialists.

All plumbing, drainage, heating, electrical services etc. to be carried out by suitably qualified & experience specialists or registered competent persons, tested & appropriate certification issued where required in this specification.

Any asbestos/contaminated soil/lead paint is to be inspected & removed by a specialist. Asbestos is to be removed and disposed off-site by a specialist licensed contractor as required under the Control of Asbestos Regulations 2006.

Ground to be prepared for new works as described including location and alteration/modifications to all existing services as necessary, including sealing up, capping off, disconnecting, removing redundant services as necessary.

Prior to and during works, the person carrying out the works is to liaise with and meet the requirements of the relevant Service Authorities, including the location and protection of all services as necessary.

External paths, drives, patios, walls, fences & gardens etc. to be taken up and relayed/extended as necessary to accommodate the new works as described.

All structural timber is to be grade C24, stress graded to BS 4978:2007+A1:2011 and sawn to BS EN 1313-1:2010. All timber is to be protected on site to minimize moisture content which must not exceed 22%.

An initial ground investigation assessment should be carried out including a desk study and walk over survey which should be recorded and evaluated by

a suitably qualified and experienced person, and where necessary, further basic geotechnical and contamination investigations should be carried out by a suitably qualified and experienced person.

Where the initial assessment and basic investigations identify suspected hazards, further detailed investigations and remedial reports are required from a specialist and copy sent to Building Control and approved before works commence on site.

FOUNDATIONS

Foundations to be as indicated on the drawings, with the following minimum requirements:

Trench foundations

675mm x 600mm trench fill foundations, concrete mix to conform to BS EN 206-2013 and BS 8500-2:2015+A1:2016. All foundations to be a minimum of 1000mm below ground level, exact depth to be agreed on site with Building Control Officer to suit site conditions. Stepped foundations should overlap by twice the height of the step, or 1m whichever is the greater. The height of the step should not be greater than the thickness of the foundation, all constructed in accordance with 2004 Building Regulations A1/2 and BS 8004:2015 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be min 600mm below ground level. Sulphate resistant cement to be used if required. Should any adverse soil conditions or difference in soil type be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.

SUBSTRUCTURE

Substructure to be as indicated on the drawings, with the following minimum requirements:

Ground bearing solid concrete floors:

Topsoil and vegetable matter to be cleared from site and floor to be in filled with minimum 150mm/maximum 600mm clean sand blinded compacted hardcore. A 300um (1200g) continuous polythene DPM/radon barrier is to be lapped & sealed at all joints, laid over sand blinded hardcore & linked to DPC's in walls.

Floor & external perimeter edges of floor slab to be insulated with 140mm Kingspan Kooltherm K103 insulation, under a minimum 100mm thick ST2, or Gen1 concrete floor slab with a trowel smooth surface with 25mm up stands to the external walls.

A 125um polythene separating layer is to be installed between the concrete slab and insulation.

Construction to achieve a 'U' value of 0.11 W/m²k

Insulation to be omitted and concrete thickness increased in areas where non-load bearing partitions are built off the floor slab.

Where area of fill exceeds 600mm the floor is to be suspended as detailed in this guidance.

Where necessary, proprietary plastic radon sumps to be installed in subfloor of ground bearing slab as manufacturer's details, www.visqueenbuilding.co.uk Sumps to be connected to 110mm diameter proprietary air sealed upvc pipes, and fitted with an access plug cap above ground level to allow connection to a radon fan and duct system- up to eaves level of the building.

A sign identifying radon pipe work is to be fixed to the wall above the capping. 1200g DPM radon barrier is to be taped and sealed at all joints, junctions, service entry points and sealed to a continuous cavity tray (using a proprietary tape) which is supported by the cavity infill at ground level and brought through the external wall leaf with weep-holes to the external skin.

Horizontal Damp Proof Courses and trays (DPC's):

Horizontal DPC's and DPC trays with weep holes at 1.0m centres to be provided 150mm above ground level continuous with and sealed to the floor DPM and radon DPC tray.

Vertical damp proof courses and trays etc.:

Stepped and horizontal DPC/cavity trays are to be provided over all openings, roof abutments/projections and over existing walls with different construction or materials. Install vertical DPC or proprietary insulated cavity closers at all closings, returns, abutments to cavity work and openings etc.

Tanking systems:

Tanking systems to be installed/applied by a tanking specialist in compliance with tanking manufacturer's details which must be approved by Building Control before works commence on site.

EXTERNAL WALLS

External wall construction to be as indicated on the drawings, with the following minimum requirements:

Cavity walls:

Walls to consist of

- 15mm timber cladding
- 50x50mm vertical treated softwood battens
- Tyvek Housewrap Breather Membrane
- 100mm dense concrete blockwork external skin
- 50mm clear cavity
- 75mm Kingspan Kooltherm K108 Insulation board
- 100mm Thermalite Aircrete Turbo Blockwork
- 12.5mm plasterboard & 3mm skim

Ensure all gaps & all voids are sealed to prevent any air leakage.

Walls to be built with 1:1:6 cement mortar and tied with BBA approved 250mm long Ancon ST1 stainless steel wall ties or other approved double dip type tie in compliance with BS EN 1996-1-1:2005+A1:2012 & BS EN 845-1:2013, built 75mm min into each wall at maximum spacing in compliance with wall tie to manufacturer's details and typically at 600mm max horizontal, 450mm max vertical and 225mm max at reveals, verges and closings for cavities up to 125mm wide.

Cavity width and insulation details to be constructed to achieve a 'U' value of 0.16 W/m²k.

Wall insulation to be continuous with roof insulation level and taken below floor insulation levels as manufacturer's details.

Wall abutments:

Vertical junctions of new and old walls to be secured with proprietary profiled stainless steel metal crocodile type system with a continuous cavity fixed with DPC and pointed with flexible mastic as manufacturer's details.

Lintels and weep holes:

Proprietary manufactured lintels to current British Standards/Euro codes (including specialist lintels supporting stone facings) are to be provided over all structural openings.

The positions, types, sizes, end bearings etc of lintels must be in compliance with the lintel manufacturer's standard tables suitable for the proposed loadings and clear spans.

Stop end and DPC trays to be provided above all externally located lintels in compliance with lintel manufacturer's details. Weep holes at 450mm centres with at least two per opening.

Expansion joints:

External walls should be provided with adequately spaced and sized expansion joints, in accordance with masonry manufactures details with adequate tying to each side of the joint and leaf of masonry using stainless steel wall ties (normally at each block height) and sealed externally with a proprietary flexible mastic sealant (normally expansion joints are 10-12mm wide and spaced vertically at max 12m centres in brick work and 6m centres in block work)

Strapping and restraint:

Walls to be restrained at intermediate floor, ceiling and gable walls by the provision of 30 x 5 x 1000mm lateral restraint straps or other approved in compliance with BS EN 845-1:2013, at maximum 2m centres carried across at least 3 joists or rafters, etc, with a minimum of 38mm wide x $\frac{3}{4}$ depth noggins.

Cavity Closers:

Proprietary acoustic/insulated fire stop cavity closers, or similar are to be provided to all cavity openings/closings, tops of walls and junctions with other properties.

PITCHED ROOFS

Pitched roof coverings:

Roof covering to consist of slate and associated capping, verge/eaves details fixed in accordance with manufacturer's details for pitch and exposure as detailed on the drawings.

Cladding to be fixed to a minimum 25 x 50mm treated timber batten or to manufacturer's directions and roof timbers to be overlaid with Kingspan Nilvent.17 Breathable Membrane

Roof to be formed from kiln-dried stress graded timbers sized, spacing, spans, bracing and fixings as detailed on the drawing. Alternatively, the roof may be formed from proprietary prefabricated manufactured trusses/attic trusses and bracing to BS EN 1995-1-1:2004+A2:2014 but both with a foil backed 12.5mm plasterboard and skim ceiling finish.

Cut roof construction:

Roof to be constructed using kiln dried –stress graded timber. Rafters, ceiling joists, purlin, hanger and binder sizes in accordance with TRADA Span Tables - suitable for the proposed clear spans and all properly fixed together using approved fixings.

Where the ceiling joists are raised above wall plate level they must be fixed within the bottom third of the rafter using 12mm diameter high tensile bolts and steel toothed connectors to connect each rafter and ceiling joist to prevent possible roof spread. Joists raised above this level are to be designed by a suitably qualified person and approved by building control before works commence.

Struts and braces to be 100 X 50mm, wall plates to be 100 x 50 fixed to inner skin of cavity wall using galvanized strapping as detailed below.

Soffits, fascias and barge boards etc. in upvc to BS EN 607:2004, fixed in compliance with manufacturer's details.

Allow for building in as work proceeds or insertion of proprietary stepped/cavity tray DPC to follow line of new roof 150mm above all roof/wall abutments as necessary using code 5 lead flashings.

Fix 12.5mm foil backed plasterboard (joints staggered) and 5mm skim coat of finishing plaster to the underside of all ceilings using galvanized plasterboard nails.

Roof restraint:

Roof and walls to be provided with lateral restraint straps across at least 3 timbers as noted in wall section at ceiling, wall plate and verge levels with 30 x 5mm x 1m galvanized metal straps or other approved to BS EN 845-1:2013 at maximum 2m centres.

Roof insulation:

Between rafters:

150mm Kooltherm K7 Insulation fitted between rafters with 62.5mm Kingspan Kooltherm K118 insulated plasterboard fixed to inside face of rafters finished with a 3mm skim coat.

Construction to achieve a 'U' value of 0.11 W/m²k

Ventilation to pitched roofs:

Roof insulation to be continuous with the wall insulation but stopped back at eaves or at junctions with rafters to allow a 50mm air gap. Cross ventilation to be provided by a proprietary eaves ventilation strip equivalent to a 25mm continuous gap at eaves level with insect grill.

Alternatively, where cross ventilation is not possible such as mono pitch, coved ceiling or room in the roof provide additional ridge/high level ventilation equivalent to a 5mm gap in the form of proprietary vent tiles spaced in accordance with manufacturer's details.

Ventilation to the roof space may be omitted, only if a proprietary BBA or similar approved breathable roof membrane, with minimum 25mm thick treated vertical counter battens and proprietary eaves carrier system is used. Breathable roof membranes and proprietary roof vents must always be installed as manufacturer's details (note: some breathable membranes may also require additional roof ventilation)

Valleys and lead work:

Lead work, flashing, soakers, valleys and gutters, etc., to be formed from Code 5 lead sheet and fully supported on treated valley boards, etc., and to have a minimum 150mm lap joints, dressed 200mm under tiles, etc., and not to be fixed in lengths exceeding 1.5m and to be fixed in accordance with the roof cladding manufacturers and the Lead Development Association recommendations.

FIRE SAFETY AND MEANS OF ESCAPE

Smoke /heat alarms:

Extension to be provided with mains operated fire detection and fire alarm system to BS 5446-3:2015 and installed in accordance with the relevant recommendations of BS 5839-6:2013 to at least a Grade D Category LD3 standard. Self-contained mains operated smoke alarms (additionally a heat alarm to be installed in kitchen) with battery back up to be fixed at ceiling level

INTERNAL WORKS

Windows:

New windows to be Jeld-Wen Stormsure casement double glazed with 16mm argon gap and soft coat low-E glass or similar approved. Window Energy Rating to be Band C or better **and to achieve U-value of 1.3 W/m²K**, and to be in accordance with British Standards publication PAS 24:2016.

Ventilation systems:

Purge (natural) ventilation to habitable rooms- general requirements:

Purge (natural) ventilation to be provided to the extension equal to 1/20th (5%) floor area where the external windows/doors open more than 30 degrees and increased to 1/10th (10%) of the floor area where the windows open between 15 - 30 degrees.

Purge (natural) ventilation openings to be typically 1.75m above floor level and all internal doors to have a 10mm gap under the door for air supply transfer.

The area of external windows, roof windows and doors should not exceed 25% of the usable internal floor area.

Mechanical extract ventilation to new dwellings:

Mechanical ventilation is to be provided directly ducted to the outside air equivalent to the following rates:

Kitchen 30 litres per second to hob extractor or 60 litres elsewhere

Energy efficient lighting:

Fixed internal lighting

Fixed internal energy efficient lighting fitted with lamps which must have a luminous efficiency greater than 40 lumens per circuit-watt and a total output

greater than 400 lamp lumens. (**Note:** light fittings with less than 5 circuit-watts are excluded)

Limiting thermal bridging around external openings:

Thermal bridging around external openings to be as accredited construction details – see drawings

Accessible switches, sockets, controls etc.

All switches and sockets including the consumer unit, ventilation and service controls to be fixed between 450-1200mm above floor level. Accessible consumer units should be fitted with a child proof cover or installed in a lockable cupboard.

Kitchen Fittings:

Kitchen layout drawings: See Howdens Kitchens drawings

ELECTRICAL INSTALLATIONS:

New electrical circuits or systems must be designed, installed, tested and certified to BS 7671:2008+A3:2015 or with the current editions of the IEE regulations by a competent person in compliance with Approved Document P of the Building Regulations.

A competent electrician or a member of a competent person scheme must test and certify all such works. The electrician must provide signed copies of an electrical installation certificate conforming to BS 7671:2008+A3:2015 for the owner of the property and a copy must be forwarded to the Building Control surveyor for approval at completion, so the Building Control completion certificate can be issued.

All switches and sockets including the consumer unit, ventilation and service controls etc. should be fixed between 450-1200mm above floor level. Accessible consumer units should be fitted with a child proof cover or installed in a lockable cupboard.

SANITATION, HOT WATER SAFETY AND WATER EFFICIENCY:

Sinks with hot and cold running water is to be provided in all food preparation areas

Hot and cold water taps to sinks to have water from a wholesome water supply. Outlets from domestic hot water storage vessels to be fitted with an in line hot water supply tempering valve to prevent water temperatures exceeding 60 °C.

Softened wholesome cold water should not be provided where drinking water is drawn off or to any sink where food is prepared.

Commissioning certificates for fixed building services are required on completion with copy sent to Building Control.

Waste pipes

Sinks etc. to be provided with 50mm diameter waste pipes laid to falls and 75mm deep seal traps. Where waste pipe runs exceed 4m BBA approved air admittance valves are to be fitted above appliance spill over level.

Waste pipes to either discharge below trapped gully grating. Internally all waste and drainage pipes to have rodding access/eyes at changes of direction.

COMBUSTION APPLIANCES AND FUEL STORAGE SYSTEMS:

Space and hot water heat producing appliances in general

Space and hot water heating method as detailed on the accompanying plans. Heating to be supplied from existing gas fired wall/floor mounted condensing balanced flue boiler with the flue discharging 600mm minimum away from openings into the building and protected with a proprietary wire basket to boiler manufacturer's specification.

Gas installations to be installed and comply with BS 5440 (relevant parts), BS 5546:2010, BS 5864:2010, BS 5871 (relevant parts), BS 6172:2010, BS 6173;2009 and BS 6798:2014.

All space and hot water systems must be installed, commissioned, calibrated and certified by a suitably qualified person or installer registered with an appropriate competent persons' scheme and details supplied to Building Control and the owner along with the operating manuals, etc. before the building is completed/occupied.

Provision of information- commissioning certificates (testing):

Copy of installers commissioning certificate is to be sent to building control on completion of the work.

EXTERNAL WORKS

Paths, drives, patio and gardens:

New external paths to be shuttered 100mm thick conc. Mix type PAV 1, max bay size 6m with bitumen impregnated fiber board isolated Joints to BS EN 1992-1-1:2004+A1:2014/BS EN 206:2013.

Tarmac damaged during construction to be made good with new tarmac, comprising a rolled 20mm base course of coated macadam with 6mm textured bitumen macadam wearing course with concrete edgings, to BS EN 13108-7:2006.

DRAINAGE:

Foul, rain and storm water drainage systems

Both storm and foul drainage to consist of 100mm diameter upvc proprietary underground drainage laid at a minimum gradient of 1:40 where serves up to one w.c. or 1:80 where serves two or more w.c.'s, surrounded in pea/single size gravel a minimum of 900mm deep in drives and roads and 400mm elsewhere, unless provided with a 100mm reinforced concrete slab with compressible material under and 300mm min bearing on original ground.

Proprietary upvc 450mm diameter inspection chambers to be provided at all changes of level and or direction and at 45m maximum spacing in straight runs up to 1.2m in depth.

Foul drainage to be ventilated at head of drain run by connecting soil & vent pipe to ridge tile ventilator

All gullies to be trapped and have rodding access where serving branches. Inspection chamber covers to be mechanically fixed and suitable for vehicular loads in drives and roads and proprietary bolt down double sealed covers and frames in buildings.

Foul and storm water to be discharged to existing facilities as shown on the accompanying plans.

Foul drainage systems to low lying buildings which carry storm water or other vulnerable drainage systems should be provided with anti-flood protection such as one way valves, etc., to prevent flooding and sewerage entering the building.

MATERIALS AND WORKMANSHIP

All materials must comply with the following:

1. British Standards or European Standards
2. Product Certification Schemes (Kite marks)
3. Quality Assurance Schemes
4. British Board of Agreement Certificates (BBA)
5. Construction Product Directives (CE Marks)
6. Local Authority National Type Approvals (System Approval Certification)

All materials must be fixed in strict accordance with manufacturers printed details and workmanship must be in strict accordance with BS 8000-0:2014. Where materials, products and workmanship are not fully specified or described, they are to be: Suitable for the purpose stated or inferred and In accordance with recognized good practice.