60 CLOWES STREET, GORTON, MANCHESTER M12 5EG
PROPOSED SINGLE STOREY EXTENSION AT REAR

GENERAL AND BUILDING REGULATIONS NOTES (September 2024)

(To be read in conjunction with drawings numbered 224-105/01-04 inclusive)

GENERALLY:
All exact dimensions to be checked and verified on site and any discrepancies to be clarified before proceeding. All levels and setting out to be checked on site, any discrepancies between information shown on the drawings and information in a specification or site-specific matters are to be clarified prior to proceeding.
All component sizes and references are to be checked prior to ordering of materials.
Safe method of working, provision of necessary temporary supports to carry out demolition works on masonry structures and building-in of steelwork/lintels to be risk assessed prior to commencing the works.

WORKMANSHIP AND MATERIALS:
All workmanship and materials shall comply with current Building Regulations, British and European Standards, and Codes of Practice.
All materials shall be fixed, applied and mixed in accordance with manufacturers' instructions and specifications. All materials used shall be suitable for their purpose.
All timbers used shall be pressure-impregnated with preservatives.
All timbers used for structural purposes should be strength graded and stamped KD or DRY.

ELEMENTS OF STRUCTURE:
Compliance: Using materials of approved type to achieve a minimum of half-hour fire resistance. Construction: To be in accordance with parts of BS 476: Part 20, 21, 22 and 23: 1987.

DEMOLITIONS/ALTERATIONS/EXTENSIONS:
Rear extension: New single storey rear extension lean-to roof over constructed, all as nominally shown in the drawings.
New lintel inserted over for new rear window and door. Redundant French doors assembly removed, opening widened to form through opening into extension, new steel beam support over inserted.

FOUNDATIONS:
Locations: New masonry cavity walls of single storey rear extension.
Type: Concrete strip footings, size minimum 350mm thick and projecting minimum 150mm either side of supported walls.
Depth: Assume construction depth of 900mm below external ground.
Actual depth and size of foundations subject to ground conditions assessed from site investigation and agreed with the Building Control Officer and to suit site conditions.

DAMPPROOF COURSE:
Type: MARLEY Aquagard or other equal and approved, pitchpolymer type for horizontal dpc's. Locations: New masonry cavity walls of single storey rear extension.
Bricked up garage door opening.
Level: Dpc's to be installed at ground floor finish level to match those existing for house walls (minimum 150mm above external ground level).

NEW EXTERNAL CAVITY WALLS:

Locations: *Elevation walls of new single storey rear extension as nominally shown in the drawings. Construction: Traditional.*

Outer leaf: *102.5mm thickness facing brickwork to match house elevation walls, fair face finish, natural mortar and pointed joints*

Inner leaf: *100mm thickness CELCON Hi-Strength (7 N/mm^2) concrete blockwork, 12.5mm plasterboard on adhesive dabs (15mm air space) and 3mm skim finish.*

Below ground/ Dpc masonry: *102.5mm thickness common brickwork or Class B engineering brickwork upto dpc level. Lean mix concrete cavity infill upto 225mm below dpc or external ground level. Cavity weepholes at 450mm centres above cavity infill formed using Glidevale microvents or equal and approved.*

Cavity/insulation: *5mm cavity (mortar filled), 95mm Xtratherm Cavity Therm CT/PIR (100mm batt) full fill built-in insulation, or other equal and approved insulation material.*

Note:

Any deviation from type of insulation and method to be adopted as specified above to Contractor's choice and must be confirmed by insulation Manufacturer of suitability and appropriate calculations by insulation Manufacturer to be obtained by Contractor and submitted to Building Control for prior approval.

Wall-ties: *BBA approved and conform to BS 1243: 1978, stainless steel grade at 750mm horizontal and 450mm vertical centres to give a diamond pattern of not less than 5 nos ties per m^2, with additional ties at 300mm centres at opening reveals.*

Cavity closers: *Proprietary type of combined insulated cavity closer and frame former system, Dacatie 2000 or equal and approved for openings formed in external cavity walls.*

"U" value: *Overall construction to achieve maximum 0.18W/m^{2}K. Above construction specification achieving 0.17W/m^{2}K*

Lateral Restraints: *Locations:*

Gable walls both sides of extension at lean-to roof rafter level. Type:

Using 30 x 5mm galvanized mild steel straps at maximum 1000mm centres, straps fixed across 3 nos rafters, 75 x 50mm softwood blocking noggings underneath straps.

Bonding: *New work to bonded to existing structures using approved wall extension system example FURFIX or equal in accordance with manufacturer's instructions, site assessment and agreement with Building Control Officer.*

NEW STUD PARTITIONS:

Location: *Cupboard within study room as nominally shown in the drawings.*

Construction: *Timber studs system, 50 x 75mm softwood studs at 450mm centres on 50 x 75mm soleplate and 50 x 75mm softwood noggings at 900mm centres, Gyp 10 thickness plasterboard both sides and 2mm skim finish, except partitions at shower room, kitchen and utility room sides using 12.5mm Gyproc moisture resisting wallboards to receive wall tiling/paint finish.*

Fire resistance: Half hour standard.

Sound insulation: Not required.

SOLID FLOOR:

Locations: *Single storey rear extension.*

Construction: *New solid floor construction comprising 50mm sand cement screed on 100mm thick concrete slab on 500-gauge polythene separating layer on Celotex GA4000 100mm thickness on 1200 gauge polythene dpm taken up at edges and linked into dpc's, 30mm thickness insulation taken up edges of walls to prevent cold bridging, on 50mm sand blinding on minimum 150mm compacted MOT 1 hardcore, finished floor level to match the existing house floor level.*

Note:

Any deviation from type of insulation and method to be adopted as specified above to Contractor's choice and must be confirmed by insulation Manufacturer of suitability and appropriate calculations by insulation Manufacturer to be obtained by Contractor and submitted to Building Control for prior approval.

"U" value: *Overall construction to achieve maximum 0.18W/m^{2}K. Perimeter/Area ratio = 0.69*

Floor finishes: *Owner's choice.*

FRENCH DOORS ASSEMBLY:

Location: *Rear wall of new rear extension, as nominally shown in the drawings.*

Type/system: *Existing, upvc system French doors assembly removed from former dining room re-installed to new location (dining) of new extension.*

WINDOWS:

Location: *Lounge of new rear extension.*

Type: *Existing, upvc system window assembly removed from kitchen re-installed to new location (lounge) of new extension*

Cills: *Extruded upvc system.*

Cill height: *To match with living room window cill height.*

Glazing: *Double glazed units, "U" value equivalent to 1.4W/m^{2}K, or triple glazed units, "U" value equivalent to 1.0W/m^{2}K, selection of type of glazing units to Owner's choice and to Manufacturer's specifications.*

Note: Areas having low level glazing, i.e. below 800mm from floor finish level, to be fitted with toughened safety kite-marked type to BS 6206A.

STRUCTURAL STEELWORK:

Location: *Through opening formed in house rear wall supporting wall and roof of main house and lean-to roof of extension.*

Steel Beam: *Steel beams size to Structural Engineer's calculations.*

End bearings: *Steel beams to have end bearings minimum of 150mm or greater.*

Fire protection: *Steelwork to be encased with 1 layer 12mm Suplaux board or 2 layers of 15mm thickness Fireline plasterboard and 3mm skim to provide one hour fire resistance.*

Piers: *Condition of existing house masonry walls retained as piers supporting new steel beams to be checked and assessed on site by Building Control Officer for suitability. If found inadequate, masonry to be rebuilt using clay bricks of not less than 21N/mm^2 crushing strength laid in class III mortar fully bonded into existing structures.*

Deflection: *Allowing 20mm minimum gap between top of beam and underside of brickwork and to be thoroughly packed with 1:3 sand cement "semi-dry" mix and firmly wedged up using slate wedges.*

Torsional:

Restraint: *Using appropriate method(s) to be agreed with Building Control Officer and Builder from site assessments. Examples of methods consisting of either: Stiffeners at supports, or tightly.*

LEAN-TO ROOF:

Location: *Single storey rear extension, as nominally shown in the drawings. Construction:* *Traditional.*

Using 50 x 150mm Grade C24 softwood rafters at maximum 400mm centres, birdsmouthed to wallplate at eaves and wall bearer on house rear wall for lean-to roof.

Rafters secured in positions using truss clips system.

20mm thick ply to diaphragm roof secured to underside of rafters. Roof pitch approx 15^o (to be checked and assessed on site).

Roof coverings: *Using approved interlocking concrete roof tiles, example REDLAND Regent through colour with minimum 100mm headlap or other equal and suitable for roof pitch to roof tile Manufacturer's recommendations, on battens on Kingspan Nilvent.17 breathable sarking membrane.*

Thermal Insulation: *Required, using warm roof construction method comprising partially filled insulation between rafters method, 50mm air space, Kingspan Kooltherm K7 insulation 100mm thickness laid between cavity of roof rafters and 37.5mm thickness Kingspan Kooltherm K18 insulated plasterboard (50mm insulation and 12.5mm plasterboard) to underside of rafters to achieve a "U" value of 0.15 W/m^{2}K.*

Roof space Ventilation: *Not required, reason: using Kingspan Nilvent.17 breathable sarking membrane. If required by Building Control Officer, then use RedVent Eaves Ventilators system providing both continuous soffit ventilation and an insulation interrupter and abutment ventilators, installation in accordance with manufacturer's instructions.*

Others: *Rafters at both gable walls of rear extension fixed into masonry with M12 bolts at 600mm centres.*

Lateral Restraints: *Location:*

Gable walls both sides of lean-to roof level Type:

Using 30 x 5mm galvanized mild steel straps at maximum 1000mm centres, straps fixed across 3 nos roof rafters, 75 x 50mm softwood blocking noggings underneath straps.

ROOF WINDOWS:

Locations: *Rear extension lean-to roof as nominally shown in the drawings, exact positions determine on site.*

Apertures: *Apertures formed in roof rafters of size to suit roof windows by doubling up rafters and using same size timbers for trimmers at top and bottom.*

Type: *2 nos. VELUX GGL 2070Q enhanced security laminated inner and toughened outer pane U value of 1.3 W/m²K, MK08 white laminate centre pivot roof windows size 780 x 980mm, manual or electrically operated to owner's choice, complete with appropriate flashing kits.*

WALLPLATE AND WALLBEARER:

Wallplate: *Location:*
Eaves level of single storey rear extension.
75 x 100mm softwood strapped down using 30 x 5mm x 1200mm long galvanized mild steel straps and M12 bolts down to lintel at 600mm centres.

Wall bearer: *Location:*
Rear wall of house.
75 x 100mm softwood, M12 bolts to masonry at 750mm centres.

LEADWORK:

Location: *Single storey rear extension lean-to roof.*

Type: *Code 4 lead 150mm high upstand flashing/soakers detail at roof slope abutting house rear wall. Installations: To The Lead Association's recommendations.*

FASCIA:

Fascia: *Upvc system to suit at eaves of single storey rear extension lean-to roof.*

RAINWATER GOODS:

Gutter: *New, upvc system, half round section.*

Location: *Eaves level of single storey rear extension lean-to roof.*

Rainwater Pipe: *New rainwater pipe in upvc system, 68mm diameter round section at location as nominally shown.*

Back inlet gully: *Approved roddable access type.*

DRAINAGE BELOW GROUND:

Existing: *The existing drainage system and exact locations of drain lines and directions of flow must be prior determined on site. Any redundant drain lines to be grubbed up and sealed off at connections to the satisfaction of the Building Control Officer, to be confirmed on site.*

New drains: *Separate drainage system to be provided.*
New surface water drain line laid in 110mm dia uPVC pipelines with flexible couplings laid to 1 in 40 falls on 150mm stone chippings connecting from new back inlet gully to existing syrface water drainage system (determine on site).

Back inlet gully: *Approved roddable access type.*

TRIMS:

Skirtings and architraves: *Softwood, profile to match existing or to Owner's choice.*

FINISHES: *All finishes and decorations to Owner's choice.*
Existing house rear elevation within new extension to be plastered finish to receive new decorations.

SERVICES:

All work and installations to comply with the current Regulations and recommendations of the respective Board or Authority to the satisfaction of their respective inspectors.

ELECTRICAL INSTALLATION:

Installation: *Alterations and extension of the existing electrical system to be carried out by approved person and must fully comply with current I.E.E. Wiring Regulations to BS 7671:1992 and to be certified upon completion.*

Fittings: *Approved type and manufacture, quantities and locations all to Owner's choice. Internal lighting to incorporate energy efficient lighting by provision of approved type luminaires with class A lamps having a luminous efficacy greater than 40 lumens per circuit-watt, with a minimum of 75% per room. The actual type of fittings and locations to be prior agreed with the Building Control Officer on site.*

Building Regulations Part P: *All electrical work covered by Part P (Electrical Safety) must be designed, installed, inspected and tested by a person competent to do so. This person must be registered with an authorized self-certification scheme (eg BRE Certification, BSI, Elecsa, NICEIC or NAPIT Certification).*

Prior to completion, an appropriate BS7671 electrical installation certificate must be provided by the competent person.

CENTRAL HEATING:

Installation: *Alterations and extension of existing gas central heating system to be designed and installed by approved central heating company or Gas Safe registered person.*

FIRE DETECTION SYSTEM:

Installation: *An approved automatic smoke and heat detection system to BS5446 standards, mains operated with smoke detectors to be provided to the dwelling at landing and hall (if not already existing) and heat detector to kitchen, and/or other locations to be agreed on site with the Building Control Officer.*