

Typical Kitchen Fan



Vent Axia 454059
Silhouette 150X 6
Inch Kitchen
Extractor Fan

Very Powerful - 241m3/hr
Low Wattage
Extracts steam & odours
Slim, discreet profile
Wall or ceiling mounted
2 year guarantee

Typical Bathroom Fan



Achieved Extractor Fan World Five Star Rating
Most powerful 4 inch axial fan available - 97m3/hr
Quietest bathroom fan on the market - 25db(A)
IPX5 waterproof rated - Install in any bathroom zone
7.5w - Less energy than any equivalent axial fan
Integral back draught shutters

ST100PC Silent
Tornado Hi-Power
Bathroom Fan
OR, similar as
agreed with the
client.

EXTRACT FOR SHOWER ROOM

Provide mechanical extract ventilation to shower room ducted to external air capable of extracting at a rate of not less than 15 litres per second. Vent to be connected to light switch and to have 15 minute over run if no window in the room. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic ventilation compliance guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

IMPORTANT INSTALLATION NOTES.

- Fans to be positioned to be reasonably accessible for maintenance e.g. repairs /changing of filters and as high as possible (approx 400mm below ceiling level, other than cooker hoods which are to be 650 to 750mm above hob).
- Lay ducting straight with minimal shallow bends, fully supported avoiding kinks and sags (flexible ducts not to be flattened and are to be pulled taut).
- 15m Maximum duct runs - unless a centrifugal fan is used where 3.0m on 100mm dia duct with 1 number 90 degree bend is permitted.
- Condensation control - all ducts to be fully insulated / Vertical ducts to have proprietary condensation trap fitted with insulated discharge to external air and horizontal ducts to be laid slightly sloping away from fan.
- Ducts to be connected appropriate extract and discharge grilles (min 85% of the duct free area), with back draught device fitted to prevent draughts.

- SAFETY WARNING:** Mechanical extraction can cause the spillage of combustion products from open-flued heating appliances and from open fires, even if the fan is in a different room from the appliance. A competent person appropriate for the type of appliance or fire, must check for combustion products spillage to ensure that appliances are working safely (this should be both with the fans running and switched off).

EXTRACT TO KITCHEN

Kitchen to have mechanical ventilation with an extract rating of 60l/sec or 30l/sec if adjacent to hob to external air, sealed to prevent entry of moisture. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic ventilation compliance guide. Intermittent extract fans to BS EN 13141-4. Cooker hoods to BS EN 13141-3. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

SITE PREPARATION

Ground to be prepared for new works by removing all unsuitable material, vegetable matter and tree or shrub roots to a suitable depth to prevent future growth. Seal up, cap off, disconnect and remove existing redundant services as necessary. Reasonable precautions must also be taken to avoid danger to health and safety caused by contaminants and ground gases e.g. landfill gases, radon, vapours etc. on or in the ground covered, or to be covered by the building.

Please be advised that health and safety laws (CDM) changed in the year 2015. Prior to this change, homeowners (Domestic clients) requiring refurbishment/extension works were exempt from the majority of health and safety requirements.

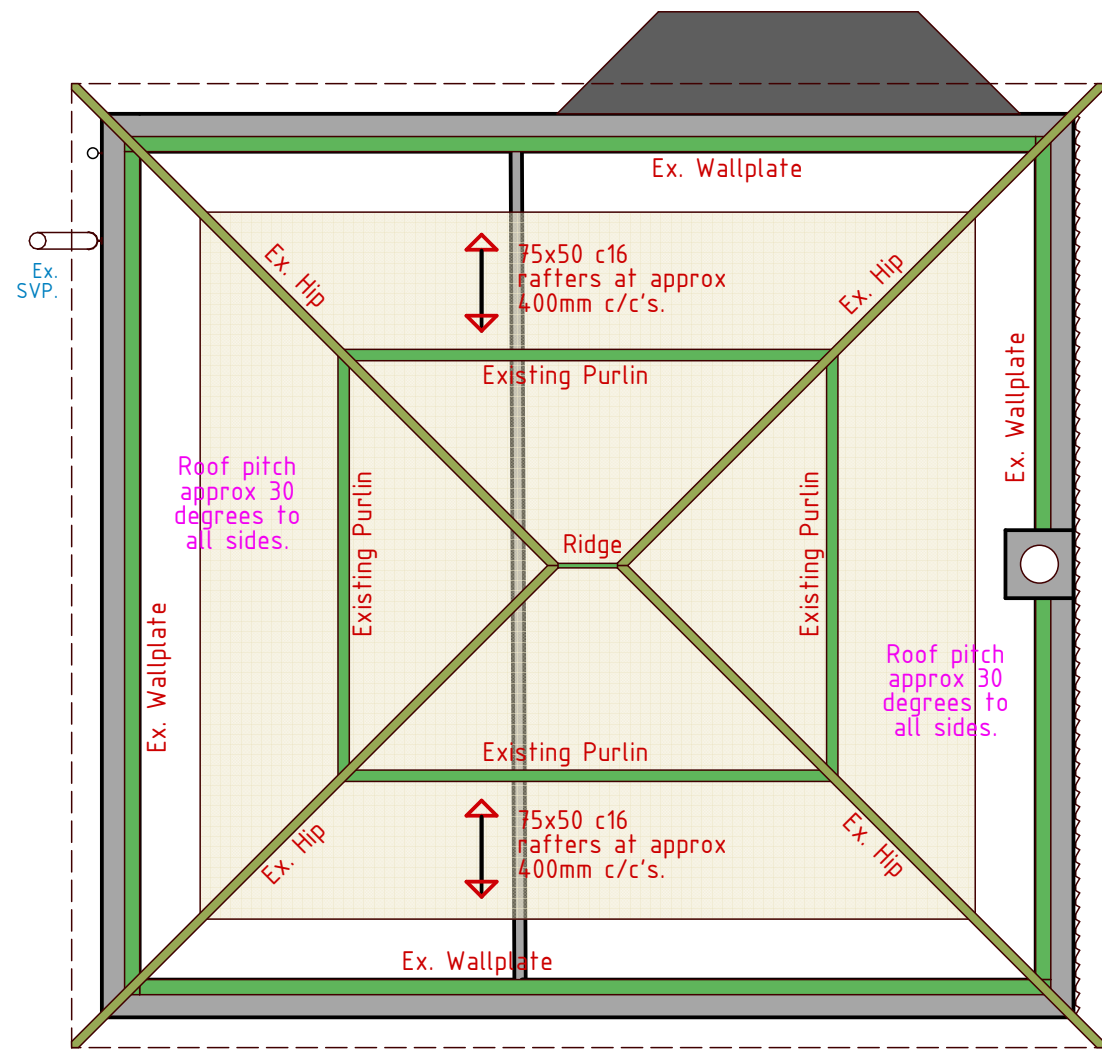
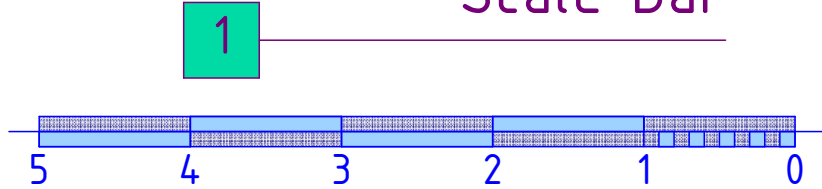
Following the implementation of CDM regulations 2015, this exemption was lifted meaning the domestic client is now responsible.

Now you the homeowner (Domestic client) have a number of duties and responsibilities to enforce health, safety and welfare throughout your project.

As the majority of domestic clients are not familiar or understand these laws, the client has the option to transfer this role. It is strongly recommended that the duties be transferred to an independent source to represent the domestic client. The main reason for this being the complexity and formality of construction administration, this will also minimise or prevent any bias decisions/actions being made in the interest of health and safety and in turn maintain a safe working environment.

Revision A
24/01/23

Scale Bar



Existing 2nd Floor/Roof Layout

1:50

50mm Celotex PL4050 Insulated Plasterboard
Celotex PL4000 is the Celotex insulation laminated plasterboard range. This is a PIR insulation board that is bonded to a standard tapered edge plasterboard. Celotex insulated plasterboard is an ideal option for insulating internal solid walls. It can also be used for eliminating thermal bridging on the inside pitch of the roof on loft conversion projects. PL4000 insulated plasterboard has a paper back that allows for installation using drywall adhesive dot and dabbing as well as the ability for mechanical fixing. The plasterboard finish can then either be taped and joined and then decorated or skimmed with plaster and decorated. Celotex PL4000 is manufactured as thin as 25 mm plus 12.5 mm plasterboard which is ideal for window and door reveals. All the thicker sizes of PL4000 are PIR insulation boards laminated to 12.5 mm tapered edge plasterboard.

Importantly PL4000 insulation board can help you to meet modern Building Regulations BREEM and Part L.

Being a one fix option rather than having to fix an insulation board and plasterboard separately it can be expensive to buy per sheet. This is compared to buying a sheet of standard insulation board and standard plasterboard but can save time and labour costs. In addition fixing the board separately only gives the option of mechanical fixing as you cannot dot and dab the standard foil faced boards to the wall.



Celotex PL4000

Celotex PL4000 Technical Data

Product Code	Thickness (mm)	Combined	
		R-value (m²K/W)	Weight (kg/m²)
PL4015	15 + 9.5	0.70	6.62
PL4025	25 + 12.5	1.20	9.06
PL4040	40 + 12.5	1.85	9.52
PL4045	45 + 12.5	2.10	9.67
PL4050	50 + 12.5	2.30	9.86
PL4055	55 + 12.5	2.55	10.01
PL4060	60 + 12.5	2.75	10.15
PL4065	65 + 12.5	3.00	10.30

3No new Velux GPU MK06 Velux rooflight and fit accordance with the manufacturers installation instructions.
BUILDER TO CONFIRM NUMBER/TYPE/COST WITH CLIENT PRIOR TO WORK COMMENCING ON SITE.

Provide insulated access panels to the remaining roof void to enable future maintenance and light storage.

Builder to construct the new stairs with 12 risers as determined on site with stair manufacturer and client to fit in the existing/proposed volume/space the most satisfactory.
Achieve min 2.000m headroom.

Provide 15 litres/sec mechanical extract fan to bathroom with 15 minute overrun facility ducted to vent tile on roof covering.

Proposed dormer walls to be infilled with 100mm thick Celotex insulation prior to multi-foil insulation, cross battend and 12.5mm plasterboard and skim.

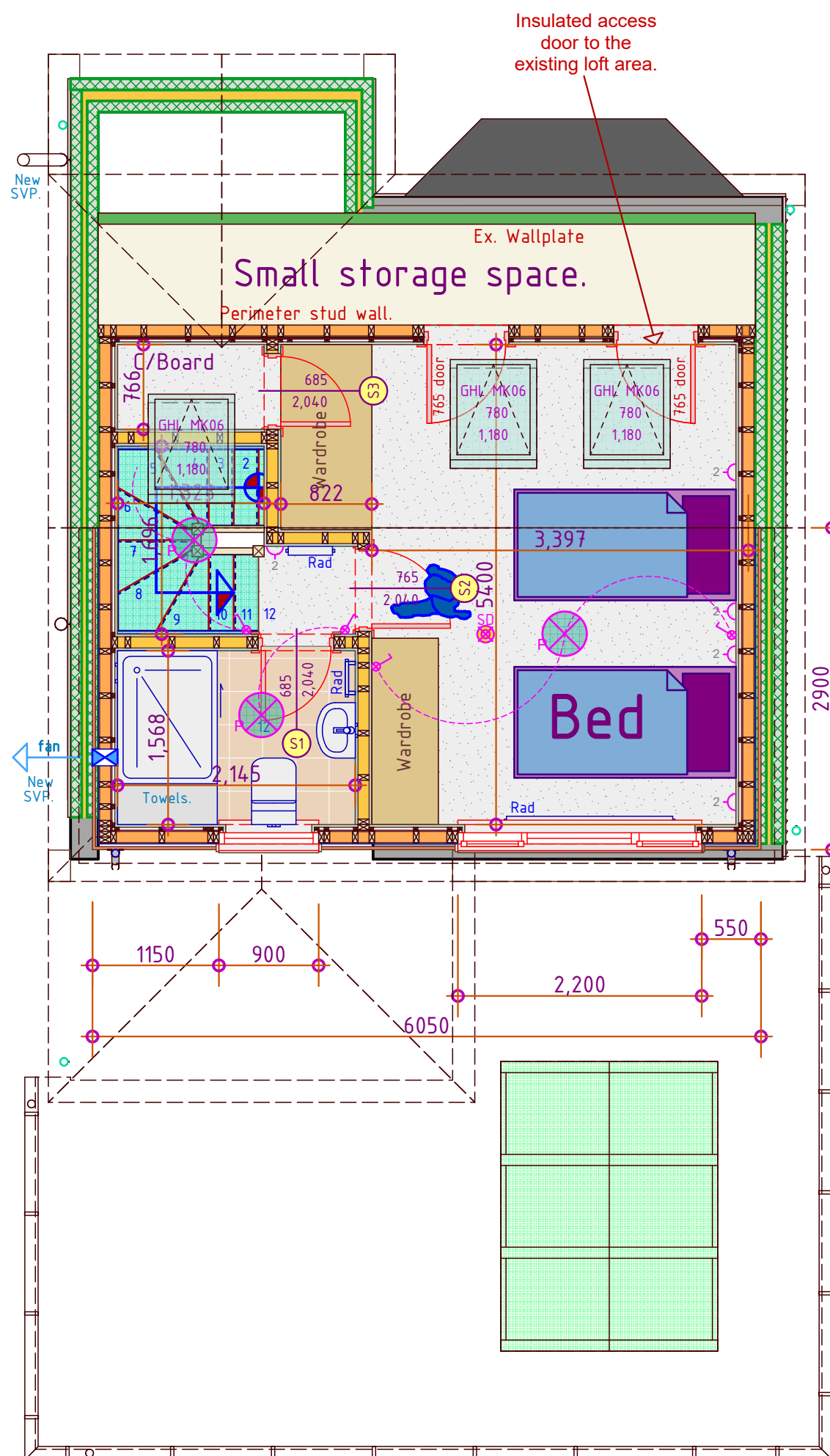
The headroom on landing to be min 2.000m measured from the centreline of the staircase in accordance with Approved Document K.

The amount/type of light fittings and electrical wall sockets is to be agreed with the owner before work commences on site.
(As agreed in quotation.)

'SD' indicates self contained smoke detector/alarm unit permanently wired to the existing electrical system with battery back up. All smoke detectors are to be interlinked.

Make good all disturbed surfaces to match existing, including skirting boards and architraves around door.

All dims are to be checked on site by the builder.



The amount/type of light fittings/sockets/switched etc.. is to be agreed between the client and the builder before work commences on site and be included in the quotation.

ALL WATER CONNECTIONS ARE TO FITTED WITH ISOLATION VALVES.

Build new cavity wall from 100mm rendered blockwork with cavity to match the existing with 100mm thick solid concrete block inner leaf.

Builder to fit softwood balusters positioned so as not to allow a 100mm dia sphere through at any point. Height of handrail to be 900mm above F.F.L.

Construct new double winder timber staircase in strict accordance with BS 585 pt 1: 1989. Width 700mm.

900mm high guarding with vertical balusters spaced at 100mm c/c's max.

Tiled floor & walls to the shower room as agreed with client.

Fit new appliances in accordance with BS 5572:1978 at to be connected to the ex svp. Extend existing svp min 900mm above any window within 3.000m. Provide rodding access at all changes of direction. Fit anti-siphon trap to whb. All pipework runs to be confirmed on site by the builder.

ALL HEATING AND HOT WATER PROVISION TO BE DESIGNED AND INSTALLED BY A 'GAS-SAFE' REGISTERED PLUMBER IN ACCORDANCE WITH ALL CURRENT REGULATIONS.

ALL WIRING FITTINGS ARE TO BE FROM THE 'MK LOGIC PLUS' RANGE OR AS AGREED WITH CLIENT. ALL IN WHITE OR AS AGREED WITH THE CLIENT.

ALL INTERNAL DIMENSIONS ARE TO THE INTERNAL FINISHED PLASTER DIMENSIONS. BUILDER TO CONFIRM ON SITE.

BEAMS

Supply and install new structural elements such as new beams, roof structure, floor structure, bearings, and padstones in accordance with the Structural Engineer's calculations and details. New steel beams to be encased in 12.5mm Gyproc FireLine board with staggered joints, Gyproc FireCase or painted in Nullifire S or similar intumescent paint to provide 1/2 hour fire resistance as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

EXISTING STRUCTURE

Existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer.

PITCHED ROOF VENTILATION

Maintain a 50mm air gap above insulation in the roof pitch to ventilate roof. Provide opening at eaves level at least equal to continuous strip 25mm wide and opening at ridge equal to continuous strip 5mm wide to promote ventilation.

FLAT ROOF VENTILATION

Cross-ventilation to be provided on opposing sides by a proprietary eaves ventilation strip equivalent to 25mm continuous with fly proof screen. Flat roof insulation is to be continuous with the wall insulation but stopped back to allow a 50mm air gap above the insulation for ventilation.

Proposed 2nd Floor Layout

1:50

INTERMEDIATE FLOORS

Intermediate floor to be 25mm t&g flooring grade chipboard or floorboards laid on 200x75 C24 joists at 400mm ctrs. Lay 100mm Rockwool mineral fibre quilt insulation min 10kg/m³ or equivalent between floor joists. Ceiling to be 12.5 FireLine plasterboard with skim plaster set and finish. Joist spans over 2.5m to be struttred at mid span using 38 x 38mm herringbone strutting or 38mm solid strutting (at least 2/3 of joist depth). In areas such as kitchens, utility rooms and bathrooms, flooring to be moisture resistant grade in accordance with BS EN 312.

Identification marking must be laid upper most to allow easy identification. Provide lateral restraint where joists run parallel to walls, floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m centres, straps to be taken across minimum 3 no. joists. Straps to be built into walls. Provide 38mm wide x ¾ depth solid nogginns between joists at strap positions.

ELECTRICAL

All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a competent person registered under a competent person self certification scheme such as BRE certification Ltd, BSI, NICEIC Certification Services or Zurich Ltd. An appropriate BS7671 Electrical Installation Certificate is to be issued for the work by a person competent to do so. A copy of a certificate will be given to Building Control on completion.

TIMBER SUSPENDED FLOOR

Ground preparation - Remove top soil & vegetation, apply total weed killer & 150mm min thick sand blinded hardcore and either -
(i) Provide concrete ground cover of at least 100mm thick or
(ii) Prepare the ground to an even surface and lay a ground cover of concrete at least 50mm thick, on a damp-proof membrane of at least 1200 gauge polyethylene, laid on a bed of fine blinding material.
Floor construction - min 25mm tongue and groove softwood boards or 25mm thick v313 moisture resistant particle/chipboard grade type C4 to BS5669 as required screwed with staggered joints to 75mm x 150mm C16 grade softwood timber joists spaced at maximum 400mm centres as shown on plans. Joists to be supported off 100mm brick/walls as shown on plans. All floor joists to have minimum 100mm end bearing and have their ends wrapped in dpc where built into wall. If required, floor joists also to be supported on 100mm x 50mm treated wall plates & DPC onto masonry honeycombed sleeper walls off suitable foundation. Space between joists to be infilled with 140mm Rockwool Flexi insulation on suitable plastic netting.
The top surface of the ground cover under the building shall be at least above the finished level of the adjoining external ground level. The underside of the floor joists are not to be less than 150mm above the top of the ground cover. The underside of any wall plate is to be not less than 75mm above the top of the ground cover.

Ventilation of Floor.
Provide cross-ventilation under floor to outside air by ventilators in at least 2 opposite external walls of the building. Ventilation openings having an opening area of 1500mm² per metre run of perimeter wall or 500mm² per square metre of floor area whichever gives the greater opening area. All sleeper walls or similar under floor obstructions shall be of honeycombed construction or have similar provision for distribution of ventilation. The under floor space shall be free from debris. Ducts to be sealed using gas proof tap if they pass through the radon barrier.

THERMAL BRIDGING

Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element, (i.e. around windows and door openings). Reasonable provision shall also be made to ensure the extension is constructed to minimise unwanted air leakage through the new building fabric.

SITE ADDRESS
174 HEYS ROAD, PRESTWICH,
MANCHESTER, M25 1QL.
THE CONSTRUCTION OF A
PART SINGLE STOREY PART
TWO STOREY EXTENSION AT
THE FRONT AND REAR OF
THE EXISTING DWELLING
HOUSE + DORMER LOFT
CONVERSION TO REAR WITH
GABLE BUILD-UP TO BOTH
SIDES + RAISING RIDGE BY
790mm + RENDERING ALL
EXTERNAL WALLS +
EXTERNAL & INTERNAL
ALTERATIONS.