Getting your plans right first time

When you submit plans and applications, for Building Regulation consent, it is important that the information we receive is in sufficient detail. This guidance note should be read in conjunction with the LABC guidance note on 'Submitting a building regulation application'.

Even if you choose to use the Building Notice procedure, which may not require the submission of full working plans and details, you are advised to use this guidance note to help you understand the requirements of the Building Regulations.

The guidance is primarily for **up to two storey domestic** buildings only.

To help you with the preparation of your plans and applications please consider the following:

Plans, Drawings and supporting information

This is the way that you are presenting your proposals to us. Clear, concise and relevant information is important. Please consider the following when preparing your submission:

- Providing plans to a suitable metric scale - 1:100, 1:50 or 1:20 etc
- Providing location plans, elevations, plan views and sections
- Providing a specification of work detailing how you are to construct your proposal
- Providing specialist design information such as structural calculations, heat loss details etc
- Providing references to appropriate design standards
- Providing manufacturer's details and reports
- Providing evidence of independent testing and certification.

Site Location Plans

These should be provided for all applications involving the erection or extension of a building.

They are particularly important for Building Notices as this is the only way we can check the description of work, and if a public sewer is affected that you have indicated how you intend to drain the building.

Boundaries

Treatment of foundations, overhanging gutters/ soffits and connection to adjoining properties can create problems. Care in design can prevent disputes arising.

Under the Party Wall Act 1996 you are obliged to consult with neighbours' where you affect the boundary, party wall or have deep foundations close to the boundary.

Public Sewers

It is vital that you check the public sewer sheets at the start of plan preparation. We have to consult The Water Authority where sewers are affected and they can impose building conditions or refuse to allow your work.

Building Notices **cannot** be used where public sewers are affected.

Trees

Trees close to your proposals should be shown on your plans. Foundation design and depth can be affected. Recently planted or removed trees and hedges should also be marked.

Foundation Design

Ground conditions are very variable. You may not be able to use traditional strip or trench fill foundations due to site conditions left by former uses.

You should research this thoroughly. We may be able to help if you give us enough time to search our

archives. We do not have all records, and you may need to employ a specialist to help you.

Plans should show:
- The type of foundation you wish to use for the ground conditions likely to be present on site
- The construction of the foundation.

If it is a traditional strip or trench fill foundation:
- Width
- Depth
- Concrete mix and thickness.

If it is a specialist foundation:
- Structural calculations
- Size/dimensions
- Concrete mix and other materials
- Reinforcement
- Protection to be provided to drains
- The affect of other below ground services and obstructions
- The affect of trees and shrubs etc.

Ground Floors

Plans should show:
- The type of floor you wish to use for the ground conditions likely to be present on site
- The construction of the floor.

If it is ground bearing:
- Ground preparation
- Hardcore, compaction and thickness
- Concrete mix and thickness
- Screed finishes.

If it is suspended:
- Structural calculations
- Support walls
- Size/dimensions
- Materials
- Reinforcement
- Ventilation of any voids beneath floor
- Screed finishes
- Damp Proof Membrane details
- Floor Insulation details.

Walls

Plans should show:
- The type of wall you wish to use for the climatic conditions likely to be present on site
- Whether the wall is loadbearing and if so what does it support and how it will do it

The construction of the wall:
- Type and strength of bricks and blocks to be used or frame details if it is a partition,
- Thickness of wall
- Width of any cavity
- Cavity wall ties – type and spacings
- Mortar mix
- Pointing details
- Bonding
- Connection to existing buildings
- Details of buttressing/piers
- Details of lateral restraint straps at all levels
- Details of external weather proofing such as render, boarding
- Details of damp proof courses – horizontal and vertical
- Details of wall insulation
- Details of how sound will be reduced if it is a party wall or a wall to a bathroom or toilet
- Details of internal wall linings and finishes such as plasterboard and plaster.

Supporting beams and lintels

Plans should show:
- Opening size
- Span of beam/lintel
- Loads that beam/lintel is required to carry
- Any supporting calculations required to justify the beam/lintels structural stability
- Size or manufacturers code number of the beam/lintel
- Beam bearings and padstone details
- How beam/lintel will be made fire resistant.

Timber Upper Floors

Plans should show:
- Span of floor joists,
- Position of supporting walls,
- Grade of timber to be used,
- Size of floor joists,
- Spacing of floor joists,
- Type, thickness and mass of decking,
- Type, thickness and mass of ceiling lining and finish
- Sound proofing details.

Roofs

Plans should show:
- Whether roof is flat or pitched,
- Whether you have chosen to use a warm or cold deck construction,
- How external fire rating is to be achieved,
- The weatherproof coverings to be used – tiles,

felts
- That type of covering is suitable for pitch and how it is fixed,
- Type and thickness of any decking,
- Battens and type of underlay
- Whether it is to be a traditional cut roof or prefabricated, such as trusses.

The construction of the roof:
- Grade of timber used
- Size and centres of rafters, purlins, ceiling joists, ceiling binders, flat roof joists
- How roof will be triangulated to prevent roof spread
- If prefabricated manufacturer's design and calculations
- Wind bracing details
- Hip and valley details
- Soffit and Fascia details
- Wallplates and how they are fixed to prevent uplift
- Supporting walls etc
- Roof ventilation, if required, details
- Roof insulation details
- Ceiling linings and finishes.

Drainage

Plans should show:
- The layout, sizes and depths of all existing and proposed drains and manholes
- The affect of drains on adjacent foundation depths
- Protection of drains where they are close too or beneath the building
- Bedding and surround to drains
- Protection of shallow drains or those in heavily trafficked areas
- How access to drains is to be provided – manholes, inspection chambers and rodding eyes
- How the condition of existing drains will be established if they are to be re-used
- That the layout does not place drains in places that will restrict future extensions
- That the first option for storm water disposal, to a soakaway, has been assessed before opting to use a storm drain. If a soakaway is to be used its design is required
- Separate systems for Foul and Storm water. Storm water cannot discharge to existing foul or combined drains
- Size and position of gutters and downpipes etc.

Ventilation

Plans should show:
- That rooms are provided with background ventilation. This can be achieved by vents built into your window frames or by dual action secure casement furniture at upper levels. Size of vent will vary with room type
- That rooms are provided with rapid ventilation. This can be achieved by opening parts of the window
- That rooms, such as showers, bathrooms, kitchens and utilities, are provided with mechanical ventilation. This can be achieved by extract fans of an appropriate rating.

Conserving fuel and power

Plans should show:
- The type and thickness of floor, wall and roof insulation to be used. Standards have increased tremendously. Please ensure you use the correct materials and products in your design
- The type and heat loss efficiency of windows, rooflights and doors. Large areas may not be acceptable
- How cold bridging and air leakage will be limited
- The efficiency of the lighting system
- The efficiency of the heating and hot water systems.

Heating the building

Plans should show:
- The type of heating system to be used
- How combustion air will be provided for safe operation
- How products of combustion are to be discharged safely
- How the building will be protected from damage by heat.

Fire Safety in Dwellings

Plans should show:
- All first floor and ground floor habitable rooms, where you have to pass through another room, to access the stairs or protected exit route must have an opening window to allow escape
- Size when open to be not less than 0.33 square metres with no dimension less than 450mm and sited so that the bottom of the opening is
- between 800mm and 1100mm above floor level.
- Position and type of smoke alarms

Please note that additional, and sometimes difficult to achieve, fire safety measures are required

when a loft conversion is carried out in a two storey house, (see the LABC guide on loft conversions to two storey houses).

Planning your work well in advance will help to reduce the chance of mistakes, which can result in costly remedial work. Please contact your local authority building control team for advice on the above and the application of the Regulations to other buildings.

Please note that these guidance notes are for advice only and may not cover all situations. It is your responsibility to ensure that they are appropriate for use in your particular circumstance.