A Practical Guide to Alterations and Extensions

Andrew R. Williams



INCORPORATE ANTS 1995 TO APPROVENTS FEL 1995 TO APPROVENTS FEL Also available as a printed book see title verso for ISBN details

INCORPORATES

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London and New York

First published 1995 by E&FN Spon

Reprinted 2000 by Spon Press

11 New Fetter Lane, London EC4P 4EE 29 West 35th Street, New York, NY1001

This edition published in the Taylor & Francis e-Library, 2005.

"To purchase your own copy of this or any of Taylor & Francis or Routledge's collection of thousands of eBooks please go to www.eBookstore.tandf.co.uk."

Spon Press is an imprint of the Taylor & Francis Group

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ISBN 0-203-69624-7 Master e-book ISBN

ISBN 0-203-69645-X (Adobe eReader Format) ISBN 0-419-20080-0 (Print Edition)

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A catalogue record for this book is available from the British Library

Library of Congress Catalog Card Number: 95-67605

For Geraldine, my wife and Thomas Grenville Williams, my late father

About the author

Andrew R.Williams is a Principal Surveyor in private practice. The practice was first established in 1977 and since then has provided a wide variety of quantity surveying and building surveying services.

By the same author:

Domestic Building Surveys, E & FN Spon, London. A Practical Guide to Single Storey House Extensions, Building Trades Magazine.

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Preface

In the UK, home ownership has traditionally been the ambition of a very large section of the population. The concept of the property-owning democracy is something that has been fostered by a large number of British politicians for years. Although tax concessions on housing are now being slowly eroded, there is no doubting that home improvements will continue to provide work for a large number of tradesmen builders, home improvement companies and professionals.

The basic skeleton of this book was created many years ago when I prepared an 'in-house' manual containing my standard specifications, standard details and standard letters for use in my office. Although produced long before the introduction of BS 5750, the reason for creating the manual was the same. I wanted to ensure that all drawings produced in my office were prepared to a uniform standard and that procedures could also be standardized. The first edition of this book was published by *Building Trades Journal* as part of their Practical Guide series and delighted under the snappy title of *A Practical Guide to Single Storey House Extensions*.

Although the basic principles described in the previous publication remain valid, major revisions to the Building Regulations have now made some of the technical information in the original very out of date. In addition, since the first edition was published, I have been pleasantly surprised to receive several telephone calls praising the original but asking if I ever intended to produce a more advanced version of the book. Thus motivated, I have taken the opportunity to expand the contents.

The book is still aimed at the same target audience, namely:

- (a) Smaller building companies/tradesman builders.
- (b) Draughtspersons/junior architectural technicians.
- (c) Surveyors/building consultants.
- (d) Students.
- (e) Householders considering altering their homes, who want to 'read around' the subject.
- (f) The keen DIY enthusiast.

Whilst the tradesman builder might be an expert in their own speciality, in my experience, most do not know a great deal about planning and building control procedures. The book should therefore provide them with a useful guide, especially concerning matters such as Permitted Development and the effects of modern Building Regulations.

Students, technicians and consultants will hopefully find the technical details of assistance when preparing their own plans.

For the householder, this book will hopefully explain the basics of the planning and building control system in England and Wales and give them an insight into simple building construction. Then, if and when they engage a building surveyor to design their extension, they will understand what work is being carried out on their behalf. I have stressed basics, because the book is only intended to cover simple domestic situations.

For the DIYer, a challenge is always a challenge and I have no doubt that this book will provide enough information for the avid DIYer to prepare his own plans for the simpler type of home extension and submit them to their Local Authority for planning and building control approvals. Naturally enough, a little knowledge can be a dangerous thing, and I would not envisage that a DIYer would attempt to design a major building.

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Acknowledgements

The author wishes to thank David Tierney (Principal Building Control Manager of Halton Borough Council), Ian Davis (NHBC Director of Technical Standards), Steve Le Guen and Leonard Fernley for their help and assistance whilst preparing the manuscript for this book.

As many of the technical illustrations were derived from manufacturers' technical catalogues, the author also wishes to thank Ibstock Building Products Ltd., Owens Corning (formerly Pilkington Insulations), Willan Building Services Ltd., Marley Building Materials Ltd., Alfred McAlpine Minerals (Penrhyn Slate Quarries) and WL Computer Services. Last but not least, the author wishes to thank Halton Borough Council and St. Helens Borough Council for permitting some of their standard forms and documents to be reproduced as examples.

The photograph on the front cover shows a typical extension under construction. The photograph was supplied by Mr M. and Mrs A.Aldridge (of Cheshire) and Mr D.Glover (Building Contractor), and has been reproduced with their permission.

PART ONE:

Introduction

A general guide to drawing the plan

GENERALLY

Figure 1.1 indicates the basic information that will be needed on most plans. The plan is not meant as a solution to all situations but to provide good grounding. If you produce a drawing something like this you are well on the way to getting approval to your scheme. For a typical house extension plan the following minimum details will probably be required by Planning and/or Building Control Departments (full details concerning Planning and Building Control are provided later):

- (a) Plan of the existing (for a ground floor extension probably a plan of the ground floor will suffice)—minimum scale 1:100 (1:50 is preferred) with drainage details.
- (b) Plan of proposed (ditto, showing existing house and extension)— minimum scale 1:100 (1:50 is preferred) with drainage details.
- (c) Section through building—minimum scale 1:100 (1:50 is preferred).
- (d) Existing rear, side and/or front elevation (as applicable)—minimum scale 1: 100 (1:50 is preferred).
- (e) Proposed rear side and/or front elevation (ditto)—minimum scale 1:100; (1: 50 is preferred).
- (f) Site location plan.
- (g) Block plan (sometimes the site location plan will suffice).
- (h) Full specification of materials to be used, cross-referenced to the drawing.

The plans should also show the following:

- (a) The position of the ground levels.
- (b) The position of the damp-proof courses and any other barriers to moisture.
- (c) The position, form and dimensions of the foundations, walls, windows, floors, roofs and chimneys.
- (d) The intended use of every room in the building(s).



Fig. 1.1 Plans of proposed rear extension.

- (e) The provision made in the structure for protection against fire and for insulation against the transmission of heat and sound.
- (f) The provision to be made for the drainage of the building or extension.
- (g) Brief specification of materials and workmanship.
- (h) The existing features of the site including any trees, outbuildings, those parts which will be demolished and be in sufficient detail to give a clear picture of any new building. Where existing and new works are shown on the same drawing, new work should be distinctively marked. In the past it was a common practice to colour wash drawings, but now this is not usually necessary as long as the intentions are clear and/or if hatching or some other device is used. The materials to be used in the external finish of walls and roofs and their colour should be indicated on the drawings (this is part of the specification on the drawing). On small works, the term 'to match' existing is normally sufficient when dealing with roofing and brickwork.

THE BLOCK PLAN/LOCATION PLAN

The location plan is normally drawn onto the main plan at a scale of 1:1250 and should include the north point. (Take a compass with you when you visit the property to be extended and note north.) The location plan should also show:

(a) The size and position of the building(s) and its (their) relationship to adjoining buildings.

- (b) The width and position of every street adjoining the premises.
- (c) The boundaries of the premises and the size and position of every other building and of every garden, yard and other open space within such boundaries.

At one time it was possible for anyone to trace this information from Ordnance Survey sheets at the council offices. The officials were quite happy to let you visit their offices armed with a small piece of tracing paper and a pencil and extract the information needed. However, the Ordnance Survey officials have now become far more strict regarding copyright. Except where the council concerned relaxes the rules for owner applicants, nowadays, you will either need to purchase a copy of the relevant sheet from an HMSO agent, or make an accurate sketch of the surrounding area whilst measuring the site and create your own location plan.

In addition to a location plan, you should also provide a block plan. (Sometimes the site location plan will suffice.)

SCALES GENERALLY

As indicated above, elevations and floor plans are normally to a scale of not less than 1:100. It is recommended that scales of 1:50 be used wherever possible as this makes the plans clearer, particularly when drawing sections.

LARGER PROJECTS

Obviously, the more ambitious the proposals, the larger number of plans, elevations and sections that will be required on each full drawing. If the extension or alterations affect two floors, then plans for both floors must be provided (proposed and existing). In theory, the plans should show every floor and roof of the building and a section of every storey of the building. In practice, for smaller projects, it is normally acceptable merely to show details of the floors being altered.

CHECKLIST OF ITEMS OFTEN MISSED OFF PLANS

In Appendix A I have included a short checklist of items that are often missed off plans or sometimes not addressed at all by the draughtsperson when preparing plans. The list is not intended to cover every eventuality and could doubtless be added to.

STANDARD SPECIFICATION

In Appendix B I have included a typical specification. It is very comprehensive and some might say it has an element of 'over-kill' about it. Because some items may not be applicable, it is usual to delete the inappropriate items when preparing a specific plan. As it would be extremely tedious to have to hand-print this document onto every drawing, the simplest way of reproducing the standard specification on the drawings is by:

- (a) Turning it into a booklet form and cross-referencing the main plan.
- (b) Creating a master specification plan. Using this approach there are two alternatives:
 - (i) You can make the master specification a full drawing in its own right, and copy it and send it in with the project drawing. This can be expensive as most systems of drawing reproduction are not cheap.
 - (ii) You can affix the specification to the main drawing. The best system that I have found is by using Transtext. Transtext is a plastic film that will adhere to master drawings. Once attached, the Transtext patch does not normally show up on a well-produced print, and because it becomes a permanent part of the drawing, the information that it contains will not be mislaid. In my experience, it is this factor that makes most Building Control Departments prefer the Transtext method because incorporating the specification on the main drawing means that the details are unlikely to be overlooked once the work commences on site. By way of contrast, A4 enclosures in a small booklet have a nasty habit of disappearing once they reach site level— out of sight means out of mind and so the builder 'does his own thing'.
- (c) Storing the text on a computer or dedicated word processor for 'fine tuning' on each and every job. Using this approach there are two alternatives:
 - (i) modify and print out details as (a) above;
 - (ii) modify and print out the details and then photocopy onto Transtext.

THINKING IT THROUGH

Generally

Although it may seem fairly obvious, whether you are the builder/home owner or the surveyor who has been called in to prepare plans, it is essential from the very outset to decide exactly what is wanted. Before visiting a client, I often suggest that they make rough sketches of what they want to do to their property so that it is possible to swiftly discuss the practicality of a proposal once I arrive.

It has to be borne in mind that even though most homes lend themselves to extension, you need to weigh up many factors before finalizing the design. I have listed a few for consideration.

Does the improvement justify the expenditure?

It is possible to enlarge a property so much that the money invested is unlikely to ever be recovered if and when it is finally sold (e.g. someone enlarging a threebedroom house into a six-bedroom house in an area that is principally composed of small properties is likely to be in this position.) I have actually been faced with situations where I have advised potential clients to move rather than extend, for exactly the reasons given above. Admittedly, I have had to forgo the odd commission, but I believe that honesty pays. I certainly would not wish to slip to the level of a high pressure salesperson and advise people to carry out a project that I believed to be foolhardy.

2. As well as the pluses are there minuses to the proposals?

Take as an example the family that want a dining room built onto their house. An extension of this nature that could only be reached via the existing kitchen is not as desirable as a dining room off a hallway. Kitchens can be untidy and smelly places whilst cooking is going on. Having to take guests through a working kitchen in order to reach the dining room might, in the long term, become an embarrassment. What if you wanted to impress your new boss or a highly critical relative? Having to drag them past pots and pans is far from ideal.

3. What will the effect be on the external appearance of the house?

If you drive around your home town for a short while, you will come across many examples of badly thought-out schemes. How about these for starters:

- (a) The two-storey side extension to a normal two-storey house. The original house has a tiled roof but the extension has a flat roof. Admittedly, most Planning Departments nowadays reject applications like these, but some have been built. Very few people would describe this type of extension as beautiful, but it is amazing how many were built this way just to save money. (My office has recently designed a series of new tiled roofs to replace leaking flat roofs in our area when the owners suddenly realized that the original flat roof had been a false economy.) No doubt one or two planners let out a cheer as they were replaced.
- (b) The loft conversion that is so dominant that it completely destroys the existing roof line.
- (c) The extension built of badly matched bricks. (It saved money but the owner now lives to regret the penny pinching.)

4. What will be the effect on adjoining properties?

I have known several situations where good neighbours fell out merely because one ignored the wishes of another.

5. Is the proposed extension oversized and badly sited?

Badly designed extensions can result in loss of sunlight/outlook both for the instigator of the extension and the adjoining owners.

As people do still ignore obvious design considerations, some sort of control is needed, and that is the subject of the next chapter.

2 The need for control

WHO CARES WHAT THE NEIGHBOURS THINK?

Do you remember the newspaper articles and TV reports about the man who decided that a house was not really a home unless it had a very large model fish on the roof and a secondhand armoured fighting vehicle in the front garden? I gather from the media reports that his neighbours are not exactly pleased with his 'follies'.

COMMON SENSE IS NOT ALL THAT COMMON

There is an old saying that common sense is not all that common. Do you remember the newspaper story about the man who decided that it might be nice to have a basement under his house? You know the one, he laboured away all summer and as he was digging, he came across some obstructions in the ground (in the trade, we call them foundations), so he dug them up and the house, naturally enough, collapsed.

Knowing newspapers it might have been an apocryphal story, but I have seen members of the public doing some extremely stupid things over the years, either because they did not know any better, or because they had decided that the rules did not apply to them. Then there is the person who is doing something as a 'matter of principle'. Solicitors love them because as they say 'principles cost money'.

Unfortunately, there will always be some members of the 'it's-my-property-I'lldo-what-I-want-with-it' brigade in every area, and that is why the various rules and regulations become more strict as the years go by.

At this point, I am going to toss in a personal anecdote as a further illustration. Many years ago I was asked to prepare a set of plans for an extension on a property. As the enquiry was generated by a tradesman builder that I knew reasonably well, we set off together to visit the house in question. Once under way, Tony, the builder, explained that he had given the owner a budget quotation for the work based on a cost per square foot of floor area, and wanted to come with me to ensure that he had a good look around before firming up his price.