

# Contents at a Glance

<b><i>Introduction</i></b> .....	<b>1</b>
<b><i>Part I: Preparing to Create the Perfect Home</i></b> .....	<b>7</b>
Chapter 1: The Basics of Self-Build .....	9
Chapter 2: Forging Out the Finances .....	15
Chapter 3: Finding and Assessing the Building Plot .....	25
Chapter 4: The Legal Stuff .....	39
<b><i>Part II: Before the Build: Getting Everything into Place</i></b> .....	<b>47</b>
Chapter 5: Designing Your Home.....	49
Chapter 6: The Green Light: Getting Permissions and Approvals .....	59
Chapter 7: Construction Management, Builders, and Subcontractors .....	77
Chapter 8: Buying Materials.....	99
Chapter 9: Getting Connected to Services .....	111
<b><i>Part III: Structurally Speaking: Understanding Construction</i></b> .....	<b>123</b>
Chapter 10: Preparing the Ground .....	125
Chapter 11: Holding up the House: Walls and Structures .....	139
Chapter 12: An Open and Shut Case: Windows, Doors, Insulation, and Partitions .....	157
Chapter 13: Floors and Stairs.....	177
Chapter 14: Raising the Roof.....	187
<b><i>Part IV: The Inside Story</i></b> .....	<b>207</b>
Chapter 15: Forming the Landscape .....	209
Chapter 16: Putting in the Pipes and Wrapping Up Warm .....	229
Chapter 17: Let There Be Light (And Power and Communications) .....	249
Chapter 18: Kitchens and Bathrooms.....	263
<b><i>Part V: Renovating, Extending, and Converting</i></b> .....	<b>275</b>
Chapter 19: Internal Finishes .....	277
Chapter 20: Upgrading Old Houses.....	289
Chapter 21: Adding Space .....	305
Chapter 22: Buying a Property for Conversion or Replacement – the Opportunities and Dangers.....	317

<b><i>Part VI: The Part of Tens</i></b> .....	<b>327</b>
Chapter 23: Ten Good Reasons for Building Your Own Home.....	329
Chapter 24: Ten Good Reasons to Renovate.....	337
Chapter 25: Ten Things You Must Do Before Starting to Build.....	343
<b><i>Appendix: Directory of Directories</i></b> .....	<b>351</b>
<b><i>Index</i></b> .....	<b>359</b>

# Table of Contents

---

<b><i>Introduction</i></b> .....	<b>1</b>
About This Book.....	1
Conventions Used in This Book .....	1
What You Don't Have to Read .....	2
Foolish Assumptions .....	2
How This Book Is Organised.....	3
Part I: Preparing to Create the Perfect Home .....	3
Part II: Before the Build: Getting Everything into Place .....	3
Part III: Structurally Speaking: Understanding Construction .....	4
Part IV: The Inside Story .....	4
Part V: Renovating, Extending, and Converting .....	4
Part VI: The Part of Tens .....	4
Appendix: Directory of Directories .....	4
Icons Used in This Book.....	5
Where to Go from Here.....	5
<b><i>Part 1: Preparing to Create the Perfect Home</i></b> .....	<b>7</b>
<b>Chapter 1: The Basics of Self-Build</b> .....	<b>9</b>
Seizing the Opportunities and Avoiding the Pitfalls .....	9
Opportunities.....	10
Pitfalls .....	10
Renovating or Converting Instead of Starting from Scratch .....	11
Preparing and Organising: The Keys to a Successful Project.....	12
Financing your dream home .....	13
Deciding on style and content .....	13
Managing the Work Yourself .....	14
<b>Chapter 2: Forking Out the Finances</b> .....	<b>15</b>
Working Out How Much You're Going to Need .....	15
The costs and what they depend on.....	16
The government's cut .....	17
Raising the Money.....	20
Impressing the building societies and banks.....	21
Understanding stage payments .....	22
Getting cover: insurances and warranties .....	22

<b>Chapter 3: Finding and Assessing the Building Plot</b> . . . . .	<b>25</b>
Finding the Plot . . . . .	26
Searching the open market . . . . .	26
Doing your own detective work . . . . .	28
Considering the alternatives . . . . .	30
Assessing the Plot: Is It the Right One? . . . . .	31
First impressions of surroundings . . . . .	32
Area property values . . . . .	32
Local amenities . . . . .	33
Future value . . . . .	33
Planning paperwork . . . . .	33
Border and boundary issues . . . . .	34
Access to roads . . . . .	34
Unregistered land . . . . .	35
Rights and covenants . . . . .	35
Services and underground conditions . . . . .	36
Knowing How Much to Pay . . . . .	36
Buying a Plot Without Planning Permission . . . . .	37
<b>Chapter 4: The Legal Stuff</b> . . . . .	<b>39</b>
Buying the Plot or Property . . . . .	39
Freehold and leasehold . . . . .	40
Conveyancing and Legal Stuff . . . . .	41
Registers . . . . .	41
Conveyancing . . . . .	42
Buying at Auction . . . . .	45
<b><i>Part II: Before the Build: Getting Everything into Place</i></b> . . . . .	<b>47</b>
<b>Chapter 5: Designing Your Home</b> . . . . .	<b>49</b>
Looking at Different Approaches to Designing a Home . . . . .	49
Analysing your needs and wants . . . . .	50
Setting up a design brief . . . . .	51
Discovering Basic Design Principles . . . . .	52
Hiring Design Help . . . . .	54
Employing an architect . . . . .	54
Engaging a draftsman . . . . .	55
Working with kit house and package dealers . . . . .	55
Agreeing on a Design . . . . .	56
Getting Your Architect to Manage the Project . . . . .	57
<b>Chapter 6: The Green Light: Getting Permissions and Approvals</b> . . . . .	<b>59</b>
Mastering the Ins and Outs of Planning Permission . . . . .	59
The legislation . . . . .	60
How to apply . . . . .	61
Who decides? . . . . .	63

Working the System – Getting the Best Out of the Approval Process .....65  
 Consulting your planning officer .....65  
 Consulting everyone else .....66  
 Refused? The next steps.....67  
 Dealing with Listed Buildings and Other Special Planning Features .....68  
 Listed buildings .....68  
 Conservation areas .....69  
 National Parks and Areas of Outstanding Natural Beauty .....69  
 Tree preservation orders .....70  
 Navigating Building Regulations .....70  
 The legislation .....70  
 The routes to compliance .....72  
 Building inspectors and inspections .....73  
 Health and safety .....74

**Chapter 7: Construction Management, Builders, and Subcontractors .....77**

Getting to Grips with Construction Management .....77  
 Doing It Yourself .....82  
 Using a main contractor .....83  
 Employing a package design/build company .....84  
 Going it alone .....84  
 Mixing and matching .....85  
 Working with Builders and Subcontractors .....86  
 Knowing who does what .....86  
 Finding builders and subcontractors .....88  
 Obtaining Estimates and Arranging Contracts .....90  
 Defining what needs to be done .....90  
 Finding out how much the work costs .....91  
 Selecting someone to do the work .....92  
 The need for contracts, big and small .....92  
 Protecting Yourself When Things Go Wrong .....95  
 Deciding on insurance .....95  
 Checking into warranties .....97  
 Planning for Safety and Security .....97

**Chapter 8: Buying Materials .....99**

Buying Material Yourself .....99  
 Making Decisions on Materials .....101  
 Shopping for What You Need .....102  
 Getting the help of builders merchants .....103  
 Delving into DIY stores .....103  
 Going directly to the manufacturers .....104  
 Buying from specialist suppliers .....105  
 Buying material abroad (the Continent) .....108  
 Hiring Tools and Plant .....109



**Chapter 9: Getting Connected to Services .....111**

- Thinking about Your Water Supply .....111
  - Getting connected to the mains .....112
  - Using a private water supply: springs, wells, and boreholes .....113
  - Harvesting rainwater .....113
- Installing Drainage and Sewage Disposal Systems .....114
  - Connecting to the mains drains .....114
  - Disposing of rainwater on site .....115
  - Considering on-site treatment systems .....115
  - Recycling grey water .....117
- Switching on the Electricity .....118
  - Going green with generating your own electricity .....119
- Choosing Your Fuel: Gas, LPG, Oil, or Solid Fuel .....120
  - Mains gas connection .....120
  - Fuel from your own storage – LPG, oil, and solid fuel .....121
- Is Anyone There? Telecoms and Cables .....122

***Part III: Structurally Speaking:  
Understanding Construction ..... 123***

**Chapter 10: Preparing the Ground .....125**

- Starting from the Ground Up .....125
- Thinking about Foundations .....126
  - Concrete strip foundations and trench-fill .....127
  - Concrete pad foundations .....127
  - Raft foundations .....127
  - Piled foundations .....128
- Clearing the Site .....128
  - Demolishing unwanted buildings .....129
  - Reducing levels .....130
  - Setting out .....131
- Digging the Excavations .....131
- Pouring the Foundations .....133
- Waterproofing a Basement .....134
- Dealing with Difficult Sites .....135
  - Soft and made-up ground .....135
  - Contaminated ground .....136
  - Radon .....136
  - Coping with slopes .....137
  - Building on a flood plain .....138

**Chapter 11: Holding up the House: Walls and Structures . . . . .139**

Clarifying the Meaning of ‘Traditional Construction’ .....	139
Examining Masonry Construction .....	140
Choosing and buying bricks .....	142
Getting the scoop on blockwork .....	143
Building with stone .....	144
Choosing the mortar .....	145
Delving into Timber Framing .....	146
Stick construction .....	147
Platform construction.....	148
Structural insulated panels (SIPs).....	149
Oak frame .....	149
Walter Segal system .....	150
Looking into Alternative Wall Construction .....	150
Building with light steel framing .....	150
Building with rolled steel framing and cladding.....	151
Building with permanent insulated formwork (PIF) .....	151
Building with glass .....	152
Building with earth.....	152
Building with straw bale walls .....	153
Applying the Makeup: External Wall Finishes and Appearance.....	153
Rendering .....	154
Vertical tiling .....	154
Weatherboarding .....	155
Façade panelling .....	155

**Chapter 12: An Open and Shut Case: Windows, Doors, Insulation, and Partitions . . . . .157**

Choosing the Windows .....	158
Position.....	159
Size .....	159
Shape.....	160
Opening type.....	160
Frame material.....	161
Glass choice .....	163
Regulatory compliance.....	164
Making an Entrance: Doors .....	165
Door surrounds, canopies, and porches .....	166
Opening out – folding and sliding doors .....	166
Insulating Your Walls: Thermal Insulation .....	167
Quilts .....	168
Rigid foam boards .....	170
Loose-fill and blown-in foam insulation.....	171
Foils and films .....	173

Thinking about Internal Walls.....	173
Stopping That Noise! Insulation Against Sound .....	175

### **Chapter 13: Floors and Stairs . . . . .177**

Supporting Floor Needs .....	177
Solid slab concrete.....	178
Concrete beam and block.....	178
Precast concrete units .....	179
Timber .....	180
Getting Floored by Fire, Thermal, and Sound Insulation .....	181
Providing Balconies and Covered Spaces .....	182
Stepping up the Stairs .....	182
Geometry: Doglegs and Spirals.....	183
Materials .....	184
Handrails and balustrades .....	185

### **Chapter 14: Raising the Roof . . . . .187**

Deciding Between a Pitched or Flat Roof.....	188
Constructing a Pitched Roof.....	189
Roof geometry .....	189
Prefabricated rafter trusses .....	190
Gaining speed with a cut roof .....	191
Making curves.....	193
Adding fancy roof features .....	193
Finishing Pitched Roofs.....	194
Slate.....	194
Stone .....	195
Tiles.....	195
Thatch.....	196
Metal sheeting.....	196
Glass.....	197
Constructing a Flat Roof.....	198
Waterproofing membranes.....	198
Flat roofs, the neglected asset .....	199
Insulating and Ventilating Your Roof .....	199
Eco-Roofs: Energy Collecting and Greening.....	200
Collecting energy .....	201
Nature on your roof: the green option.....	203
Dealing with Rainwater.....	204
Gutters and downpipes .....	204
Rainwater harvesting.....	206

**Part IV: The Inside Story .....207****Chapter 15: Forming the Landscape .....209**

Knowing the Difference between Hard and Soft Landscaping .....	209
Digging into Things: Earthworks .....	210
Moving the topsoil .....	210
Landforming .....	211
Slopes and embankments .....	212
Securing embankments .....	212
Going Down Under: Making Holes in the Ground .....	213
Soakaways .....	213
Ponds and water features .....	214
Swimming pools .....	215
Retaining Your Soil with Walls .....	216
Concrete .....	216
Natural stone and rocks .....	217
Brick and block .....	218
Wood .....	218
Other materials .....	219
Creating Drives .....	220
Adding Patios and Terraces .....	221
Leading the Way: Paths .....	222
Gaining Privacy with Garden Walls, Fences, Railings, and Gates .....	223
Walls .....	223
Fences, railings, and gates .....	224
Constructing Buildings in the Garden .....	225
Making Your Garden Grow .....	227

**Chapter 16: Putting in the Pipes and Wrapping Up Warm .....229**

Moderating Interior Conditions: The Basics .....	230
Trapping Heat with Insulation and Thermal Mass .....	231
Keeping Wind Out with Airtightness .....	232
Ventilating Your Living Space .....	233
Thinking about Central Heating .....	234
Choosing the boiler .....	235
Venting gases through flues .....	237
Positioning the boiler .....	238
Firing away with heating controls .....	238
Distributing the heat .....	239
Using open fires and stoves .....	242
Supplying hot and cold water .....	244
Using the sun and the earth for heating and hot water .....	245
Exploiting the ground or watercourse using heat pumps .....	246
Remembering Internal Drainage .....	247

**Chapter 17: Let There Be Light (And Power and Communications) . . . 249**

Having the Power: Electricity .....	250
Fusing and earthing.....	250
The circuitry .....	251
Extending and rewiring.....	252
Going the do-it-yourself route.....	252
Saving electricity .....	253
Finding Alternative Power Sources.....	254
The sun .....	254
Wind and water.....	255
Planning Your Lighting .....	255
Setting the mood .....	256
Using outside lighting .....	257
Putting Safety First: Security and Fire Alarms .....	258
Burglar alarms .....	258
Fire and smoke alarms.....	259
Going High-Tech .....	260
Computers.....	260
Telephone .....	261
Entertainment .....	261
Lighting.....	262

**Chapter 18: Kitchens and Bathrooms . . . . . 263**

Choosing a Style .....	263
Cooking Up a Kitchen: Your Home's Heart and Soul .....	264
Layout and design .....	265
Cookers and appliances .....	266
Cabinets, islands, and more .....	268
Worktops .....	269
DIY or not?.....	270
Dipping into Bathrooms: Functional and Recuperative .....	271
Layout and design .....	272
Finishing touches .....	274

**Part V: Renovating, Extending, and Converting..... 275****Chapter 19: Internal Finishes . . . . . 277**

Working on Second-Fix Carpentry and Joinery.....	277
Doors, architraves, and linings.....	278
Skirtings, dados, and picture rails.....	281
Joinery around the house .....	281
Getting into the loft .....	282
Painting and Decorating.....	283
Walls .....	283
Ceilings .....	284
Joinery .....	284

Finishing Your Floor .....285  
 Timber laminates and traditional wood floors .....285  
 Carpets and rugs .....285  
 Tiles .....286  
 Sheeting .....287  
 Choosing Eco-Friendly Finishes .....287  
 Walls .....287  
 Floors .....287  
 Paints .....288

**Chapter 20: Upgrading Old Houses . . . . .289**

‘Doing Up’ an Old House to Modern Standards .....289  
 Thinking about design .....290  
 Working with historic and Listed Buildings .....291  
 Adding value to your home – don’t move, improve!.....292  
 Dealing with Structural Problems .....292  
 Cracked walls .....293  
 Sagging roofs .....294  
 Sagging floors .....295  
 Dampness .....295  
 Making It Good as New .....296  
 Updating services.....296  
 Improving the interiors.....297  
 Upgrading Energy Efficiency.....298  
 Improving wall insulation .....298  
 Insulating the loft .....299  
 Changing windows .....299  
 Discovering other good tips .....300  
 Planning and Managing Your Renovation Project.....300  
 Assessing the condition of the building and planning the work ...301  
 Deciding whether to go ahead or ditch the project .....301  
 Maintaining and repairing a period property .....302  
 Getting quotations and commissioning the work .....302  
 Thinking about site operations .....303

**Chapter 21: Adding Space . . . . .305**

Building an Extension and Exploiting the Existing Volume .....306  
 Reviewing the options .....306  
 Considering practical issues .....307  
 Adding a Conservatory .....308  
 Creating Separate Accommodation – Building in the Garden .....310  
 Exploiting the Roof with a Loft Conversion .....310  
 Checking the headroom.....310  
 Checking for obstructions.....311  
 Planning the layout and access .....311  
 Coping with the Building Regulations .....312  
 Going Down – Changing a Cellar into a Basement .....313  
 Taking Advantage of Permitted Planning .....314

## **Chapter 22: Buying a Property for Conversion or Replacement – the Opportunities and Dangers . . . . . 317**

Converting or Demolishing .....	318
Spotting the Best Opportunities .....	318
Building potential .....	320
Good or bad buy? Assessing the opportunities .....	320
Converting from Other Uses .....	320
Barns .....	321
Shops and pubs .....	323
Churches and chapels .....	323
Industrial and other buildings .....	324
Demolishing and Rebuilding from Scratch .....	325
Advantages .....	325
Warning signs .....	326

## ***Part VI: The Part of Tens* . . . . . 327**

### **Chapter 23: Ten Good Reasons for Building Your Own Home . . . . . 329**

Express Yourself .....	329
Design Spaces for Yourself .....	330
Get More for Your Money .....	330
Discover New Skills .....	331
Go Green .....	331
Make All Your Own Choices .....	332
Build Better .....	333
Build in Flexibility .....	333
Build in a Like-Minded Group .....	334
Incorporate the Garden .....	335

### **Chapter 24: Ten Good Reasons to Renovate . . . . . 337**

Less Uncertainty .....	337
Established Existence and Use .....	338
Connected Services .....	338
Possible Cost Savings .....	339
Instant History .....	339
Established Neighbourhood .....	340
More Availability and Choice .....	340
Viable Living Space .....	341
Make Use of Permitted Development Rights .....	341
Conversion and Change of Use .....	342

**Chapter 25: Ten Things You Must Do Before Starting to Build . . . . 343**

Checking the Legalities.....	343
Finalising the Design.....	344
Ensuring Insurances and Warranties are in Place.....	345
Sorting Out Your Financial System .....	346
Getting Prices and Contracts Finalised .....	346
Ensuring That You're Connected .....	347
Planning the Site.....	347
Notifying Building Control and Subcontractors.....	348
Obtaining the Project Plan and Setting Up a Paperwork System.....	348
Letting Your Neighbours Know .....	349

***Appendix: Directory of Directories .....351***

Self-Build Magazines and Books .....	351
Self-Build Organisations .....	352
Self-Build Information Web Sites and Forums .....	352
Exhibitions and Roadshows .....	353
Plot-Finding Directories.....	353
Professional and Advisor Organisations .....	354
Self-Build Architects and Consultants .....	355
Self-Build Mortgage Providers .....	355
Self-Build Insurance and Warranty Providers.....	356
Builders Organisations .....	356
Timber Frame and Kit House and Package Suppliers .....	357
Building Cost Calculators.....	357
Materials Directories .....	357
Basements and Loft Conversions.....	358
Eco-building and Alternative Construction Methods .....	358

***Index.....359***

