

CONTENTS

Foreword	vii		
Acknowledgements	ix		
Preface	xi		
List of figures	xiii		
Chapter 1 Occupational health and safety	1	Chapter 3 Planning and organising work	118
OH&S introduction and responsibilities	1	Plan and organise your work	118
Safe work practices	7	Prepare a safe site	121
Housekeeping and workplace maintenance	13	Determine tools and materials	122
Personal protective equipment (PPE) and clothing	16	Carry out the task correctly	126
Guards for tools and equipment	21	Environmental protection requirements	129
Chemical hazards in the construction industry	21	Worksheets	131
Safety signs and tags	25	References and further reading	139
Risk assessment	29	Chapter 4 Workplace communication	140
Management of site hazards	33	What is communication?	140
Accident reporting	35	The communication process	142
Emergency procedures	40	Ensure you get the message	145
Worksheets	49	Workplace signage	148
References and further reading	68	The art of clear communication	152
Chapter 2 Working effectively in the general construction industry	70	On-site meeting processes	155
Historical industry background	71	Worksheets	159
The role of employers, employees and workplace committees	78	References and further reading	171
Workplace structure	86	Chapter 5 Basic measuring and calculations	172
Time management	89	Correct units of measure	172
Sequencing of major building activities	92	Basic measuring tools	173
Basic quality concepts	94	Quantities and costs	174
Work in a team	98	Measurement, calculations and quantities	175
Personal development needs	99	Calculation of various solid shapes	183
Workplace meetings	100	Calculation of percentages	185
Sustainability—resource efficiency and waste minimisation	102	Ratios	186
Sustainable housing	106	Worksheets	187
Worksheets	109	References and further reading	196
References and further reading	117	Chapter 6 Plan interpretation and specifications	197
		Introduction to plan and specification reading	198
		Key users of drawings	198
		Drawings and their functions	199

Plan and document reading	209
Issues for painters, tilers and plasterers	211
Residential building structure types	214
Paint, tile and plaster substrates	220
Environmental controls	220
Worksheets	225
References and further reading	233

Chapter 7 Levelling procedures **234**

Introduction to levelling procedures	235
The tool list	238
Basic levelling procedures	244
Laser line generators	248
Other levelling procedures	251
Checking your levelling equipment	269
Cleaning and storage	274
A closing word	274

Worksheets	275
References and further reading	287

Chapter 8 Hand tools, plant and equipment **288**

Introduction to tools	288
Basic hand tools	289
Trade-specific hand tools	302
Plant and equipment	316
Your hands, eyes and ears: The forgotten tools	331
Worksheets	333
References and further reading	345

Glossary	346
-----------------	------------

Index	351
--------------	------------

Appendix	361
-----------------	------------

PREFACE

Foundation Skills: Painting and decorating, and mortar trades is an acknowledgment of the need for a more targeted basic skills text for the wet area trades—specifically bricklaying, plastering, tiling, and painting and decorating. The book is adapted from *Basic Building and Construction Skills*, 4th edition. These four trades remain, however, a diverse group. As such, not all elements of the text will have relevance to each and every one of these skill areas. This is unavoidable. What we believe has been achieved, however, through the engaging of various technical experts and advisors, is a work that speaks the language of, and offers insights into, the basic skills of each of these trades. Working on the basis that there is seldom a skill not worth developing, there is then little in this text that will not be invaluable to the aspiring tradesperson, irrespective of their particular field of employment. The text is therefore offered as a significant resource for both teachers and students alike.

In adapting this work for the wet trades, the first four chapters have not significantly changed aside from providing more relevant examples and figures, or altering the text slightly to reflect currency for these particular industries. Chapters 5 and 6, however, have been altered significantly so as to better reflect each trade. In addition, a specific section has been added that deals with issues relevant to painters, tilers and plasterers in particular. Chapters

7 and 8 have been completely rewritten, offering not only more relevance (it is hoped), but more currency.

A work of this nature, covering as it does a raft of skill areas for which no one author could claim expertise, required the input of a number of technical specialists. In some cases this may have been a simple nod that the text was OK, but in others it involved a significant amount of time demonstrating the tools and/or explaining a particular technique. Thus the hands in the photographs are those of tradespeople, and I offer my heartfelt thanks to these individuals, particularly, in acknowledging the following:

Bricklaying	Andrew Tutt (NSW/Vic) Peter Gossi (WA) Glen Kilpatrick (NSW)
Painting and decorating	Neil Griffiths (NSW)
Plastering	Kevin Hartwig (NSW) Darren Johan (NSW/Vic)
Tiling	Llewellyn Biggar (NSW)

Dr Glenn P. Costin
Yackandandah
September 2010