

**Professional Services
And Publications by
Edgar (Ted) Stubbersfield**

Timber Design Consultancy

Building a weather exposed timber structure that ages gracefully and safely does not happen by accident. Often, the art of timber design proves more important than the science when dealing with such structures. Decks and boardwalks normally do not fail because of incorrect member size calculations, but because a myriad of small points of detail are not taken care of at the design stage.

As a timber design consultant I offer:

- The provision of high quality technical guides on timber design.
- The review of professional drawings to identify potential timber design issues that may impact service life
- The preparation of proposed AutoCad cross sections of structures
- To be a sounding board for ideas
- Lectures and presentations
- The assessment of best practice in construction.

As a grader I can assist with grading for confirmation to a nominated grade but more importantly I can assess whether timber is graded to an appropriate grade. Often these are not the same thing.

Contact me on 9414 770 261 or by email edgarstubbbersfield@gmail.com to discuss how I can be of assistance to your organisation.



**SHEEHY &
PARTNERS**
PTY LIMITED
CONSULTING ENGINEERS
STRUCTURAL AND CIVIL

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TO WHOM IT MAY CONCERN

CPD Seminars by Ted Stubbersfield

Sheehy and Partners have purchased a full set of technical guides on weather exposed timber design published by Ted Stubbersfield. Recently we followed this up with his Continuing Professional Development Sessions delivered in house to our engineering and drafting staff. These sessions, delivered monthly, covered different aspects of timber design and had an emphasis on weather exposed applications, an area unforgiving of any design omissions.

Mr Stubbersfield's input has been beneficial to our practice and has given us increased certainty in how to design long lived timber structures that age gracefully.

I recommend these CPD sessions to other professional offices wanting to excel in timber design.

Yours faithfully

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Timber Technology Seminars by Ted Stubbersfield

Architectus advocate the use of Timber in the built environment in South East Queensland as a highly available and traditional material. New and recycled timbers used appropriately offer highly efficient, highly durable, low carbon, and truly sustainable solutions for a wide variety of building components.

Well-designed Timber components are rarely matched by other materials for their natural beauty and warmth that age gracefully with little maintenance if designed within the parameters of the species.

Current Australian design standards fail to fully inform designers of these parameters as well as the most effective tried and tested milling and construction techniques to ensure the best “whole of life” outcomes.

Ted Stubbersfield’s technical guideliness and seminars underscored by many years of practical experience has filled the gaps in the design standards and imparted his extensive knowledge and know how to our designers and specifiers.

Ted delivered a series of talks that were highly valued by our practice.

Topic 1. The Seven Deadly Sins of timber design.

Topic 2. Timber Preservation.

Topic 3. Hardwood Grading.

Topic 4: Timber Decks – Designing for Durability.

Topic 5. Utilising small diameter hardwood.

Topic 6: Joints.

Topic 7: Timber Batten Screens.

For any design practice utilising timber we recommend Ted Stubbersfield technical guidelines and his seminars.

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Shanghai
Sydney

Continuing Professional Development

Topics Available and CPD Points

Topics already available are listed below and. From the guidelines laid out by the Board of Architects Queensland and by Engineers Australia each presentation will be eligible for one hour of CPD.

Topic 1. *Timber Preservation.* This presentation teaches, in the context of AS1601.1, how to achieve a long service life by combining natural wood durability with timber treatments. *Time 45 minutes plus question time*



Learning Outcome. The participant will

- Understand the limitations of timber preservation
- Understand the difference between *sapwood stabilization* and *preservation*
- Understand aspects of the Standards that cannot be achieved
- Recognize areas of the Standard that could be in error
- Be able to specify natural durability

Topic 2. *Hardwood Grading.* This presentation explains stress grades in the context of AS2082 and case histories. *Time 40 minutes plus questions*

Learning Outcome. The participant will

- Understand the strengths of stress graded hardwood
- Understand what the grades of timber specified look like
- Understand the deficiencies of stress graded hardwood
- Identify and name and assess different natural features
- Think critically about performance criteria for products

Topic 3: *Timber Decks – Designing for Durability,* Careful specification of commercial decking means that deck failure is now frequently related to the substructure design. This presentation teaches how to design to avoid common problems. *Time 55 minutes plus questions*

Learning Outcome. The participant will:

- Recognise the difference between a domestic and a commercial deck
- Recognise the importance of protecting the joist from fastener damage
- Recognise the importance of designing for set length decking, not lineal
- Learn how to design for set length decking
- Recognise the importance of stainless fasteners

Topic 4. Utilising small diameter hardwood. The Queensland Forests Agreements have seen the average log stem size and quality drop dramatically. This presentation teaches how to adjust expectations and work with the available resource. *Time 53 minutes plus question time*

Learning Outcome. The participant will:

- Understand the significance of SE Qld Forests Agreement
- Understand how the available resource is changing
- Recognise heart in timber and understand its consequence
- Learn how to detail to accommodate heart in timber
- Examine cases of good use of heart in timber.

Topic 5. The Seven Deadly Sins of timber design. Successful external timber design required that many small points of detail be attended to. The same main problems keep occurring. This presentation highlights these and reinforces important points made in Topic 3 and 4. *Time 48 minutes plus question time*

Learning Outcome. The participant will:

- Learn how to design to give a self cleaning deck
- Understand the importance of joist width and screw patterns
- Understand the problems associated with 150x150
- Learn how to set hardwood posts in the ground
- Learn the pitfalls in specifying natural durability
- Learn how to designing with heart in hardwood
- Learn the importance of not specifying “sleepers”

Topic 6. Joints. Timber joints have been known for 7000 years but in the last century they have changed and improved dramatically. This presentation will look particularly at weather exposed joints

Learning Outcome. The participant will:

- Learn the difference between new and old joints
- Learn why joints have to be durable
- Examine whether to use galvanized or stainless fasteners
- Examine different ways to engage with the ground
- Learn the correct use of nail plates and grips
- Learn good detailing in handrail connections
- Examine the use of shear rings and plates

Topic 7. Architectural Timber Battens. While timber battens can look very good on contemporary buildings they can be a maintenance nightmare. This presentation explains how to design to avoid this possibility.

Learning Outcome. The participant will:

- Learn why would we use Architectural Timber Battens
- Understand the critical factors for internal battens
- Understand the critical factors for external battens
- Understand the importance of a weather shedding profile
- Understand the need for caution with recycled timber battens
- Learn correct fastener selection and support design

Topic 8. Timber 101. The basics of external timber are discussed (best run in conjunction with Topic 9). The presentation will allow you to:

- Know the resources you need
- Understand the difference between pine, cypress and hardwood
- Understand the importance of selecting the right species
- Understand the importance of selecting the right part of the tree.
- Understand the importance of preservation
- Understand why natural feature must be limited
- Understand why small points of detail are important

Topic 9. Boardwalk Design. For a boardwalk to succeed many small points of detail must be attended to at the design stage (best run in conjunction with Topic 8). This presentation will allow you to.

- Understand best practice for termination and piers
- Understand best practice with bearers and Joists
- Understand how timber requirements differ to house framing
- Control your gap
- Understand best practice with fasteners
- Detail your handrail for durability, and

Understand the danger/importance of coatings

Costs

I charge for travelling and the presentation. For example a single presentation in Brisbane would be 3 – 4 hours at \$80.00 per hour for travelling and \$140 per hour for presenting. Parking at cost is charged if free onsite parking is not available. Travelling further afield can be quoted as it may involve airfares and accommodation

Full day seminars can be quoted and costs will vary depending on whether I have to hire a venue and cater.

Technical Guides on Weather Exposed Timber and Timber Products

From Edgar (Ted) Stubbersfield

Special Price – All Guides for \$440 inc GST

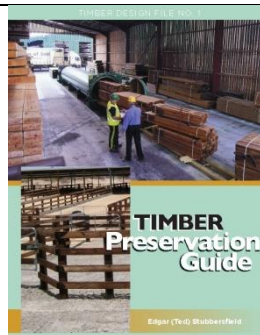
Architectural Timber Battens NEW!

Timber battens are becoming increasingly popular on architectural projects around the country. They can be used with stunning effect and allow the designer to play with light as no other material can. But, if done badly, they can also be a maintenance nightmare. This book explores best practice in design, specification, detailing and finishing. *Architectural Timber Battens* concludes with a number of stunning case histories that will encourage you to use timber battens also. **Price \$44.**



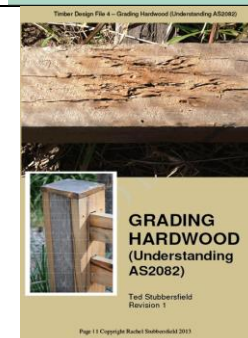
Timber Preservation Guide

This informative guide explains the place of preservation in good timber design in the context of Natural Durability and preservative safety, standards and effectiveness in various weathered timber applications. **Price \$33.**



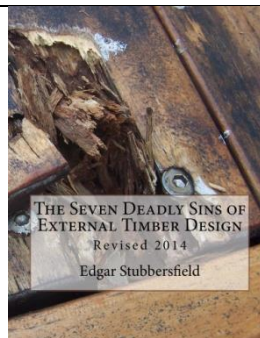
Grading Hardwood - Understanding AS2082

If an engineer specified black steel so badly rusted that it only had 40% of its strength remaining and expected it to be durable when used in a coastal environment we would think that strange. Yet this is exactly what is being done with hardwood. This informative hardwood timber guide explains what the F ratings actually mean and reinforces the need to highly qualify your specification when using AS2082. **Price \$33.**



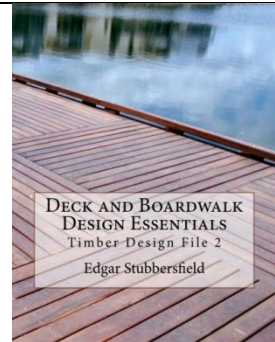
Seven 'Deadly Sins' of External Timber Design

The Seven 'deadly sins' of external timber design identifies the most common mistakes that lead to premature life of weather exposed timber structures. These are also very easy to fix on paper before anything has been constructed. **Price \$22.**



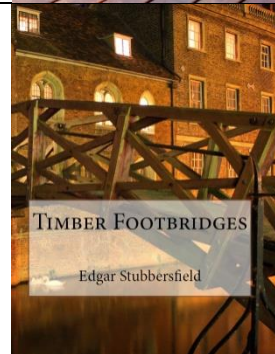
Deck & Boardwalk Design Essentials

The 'why' and 'how' of designing decks and boardwalks for safety and durability. This guide includes countless deck design and construction tips, advice and common, but potentially very costly, mistakes to avoid. **Price \$55.**



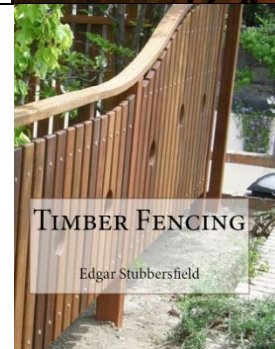
Timber Footbridges

The Light Bridge Manual –See below, deals with what has to be built but this book covers how to build a timber footbridge and draws the designer's attention the many small points of detail that must be attended to for a bridge to succeed. The book also contains valuable specifications and checklists if you are purchasing a bridge,. There are over 140 images in this book. **Price \$50.**



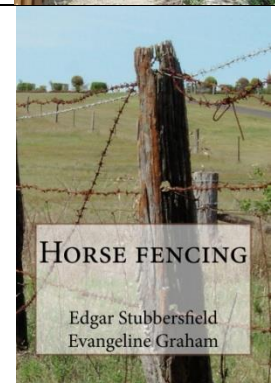
Timber Fences

This book is presently being written. **Price \$33**



Timber Horse Fencing

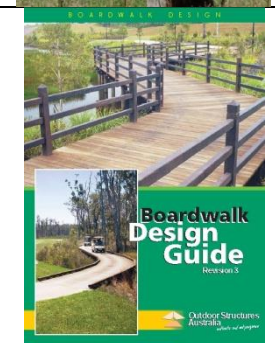
Designing a fence for horses that will not injure them is very difficult. This small book guides you through the decision making process of designing your horse fence. **Price \$22.**



Timber Boardwalk Design Guide

The Timber Boardwalks Design Guide is a 40 page step by step instruction booklet with practical instruction and information on issues such as hazards, connectors, types of boardwalk to fit the local environment, and much more...

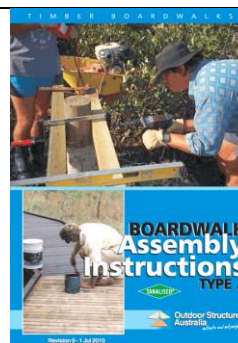
Now incorporates engineering instruction and information on issues such as hazards, connectors and types of boardwalk to fit the local environment. **Price \$22.**



Construction Guide for Boardwalk Built on Bearers

A companion document to the Boardwalk Design Guide, this manual outlines best construction practice for a timber boardwalk built on piles/posts and using bearers.

When designing a boardwalks using Outdoor Structures' system it is important to specify "Built in accordance with Outdoor Structures boardwalk construction guide". This is a reference by which to determine whether a structure has been built in a workmanlike manner. **Price \$22.**



Construction Guide for Boardwalk Built on Bedlogs

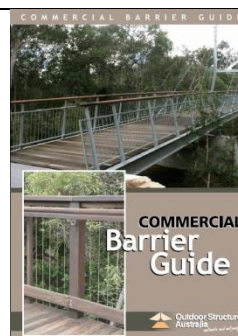
Also a companion document to the Boardwalk Design Guide, this manual outlines best construction practice for a boardwalk built on bedlogs.

When designing a bedlog boardwalk using Outdoor Structures system it is important to specify "Built in accordance with Outdoor Structures boardwalk construction guide". This is a reference by which to determine whether a structure has been built in a workmanlike manner. **Price \$22.**



Commercial Timber Barrier Guide

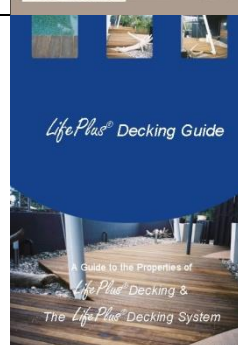
Outdoor Structures has prepared an extensive new publication "Commercial Barrier Guide". Overflowing with information, engineering and designs, together with many years of distilled experience, this 34 page guide is now available as an advanced draft. **Price \$22.**



LifePlus® Timber Decking Guide

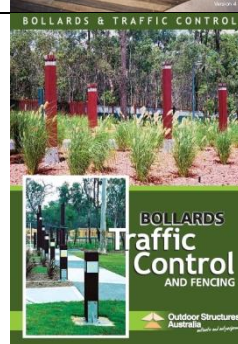
This is an information-filled 24 page guide to the properties of LifePlus® Timber Decking & The LifePlus® Timber Decking System.

The contents cover the critical steps in constructing and maintaining your timber deck: Concept Stage, Design Stage, Prior To Construction, Construction Stage, Care Of Your Deck, Safety. **Price \$22.**



Timber Bollards for Traffic Control

The Timber Bollards Design Guide has over 25 pages full of information covering the place of bollards in landscape design, Outdoor Structures bollard ranges including posts and bollard caps, the Installation of bollards, treatment of timber and the maintenance of exterior timber. **Price \$22.**



<p><i>Deckwood Selection Guide</i></p> <p>This 12 page guide to commercial decking (Revision 3a) covers Deckwood profile and specifications, span, loadings for a number of applications, fixings, timber finishes, and maintenance as well as engineering data.</p> <p>Price \$22.</p>	
<p><i>Light Timber Bridge Manual</i></p> <p>This stunningly presented 22 page manual provides invaluable information covering; bridge structures & types, bridging, forces and load distribution, stiffness, hydraulics, design process, location, site survey, geotechnical investigation, covered timber bridges and much more!</p> <p>Price \$22.</p>	
<p><i>Newsletters 2010 to 2013</i></p> <p>Four years of very useful newsletters are put together in the one publication. Each one contains useful information on aspects of timber design that you will not find in a textbook. Price \$33.00.</p>	
<p><i>Newsletters 20104 to 2017</i></p> <p>Three years of very useful newsletters are put together in the one publication. Each one contains useful information on aspects of timber design that you will not find in a textbook. Price \$33.00.</p>	
<p><i>Timber Fences</i></p> <p>The book is intended to assist professional designers that require a higher standard product than a domestic fence. It will allow them to design and specify a product which will perform well and be repeatable each time.</p> <p>Price \$33.</p>	

Timber Joints

This book looks at the past, present and future of timber joints. It contains a particularly useful discussion on whether to use galvanised or stainless fasteners.

