



MINISTRY OF DEVELOPMENT
NEGARA BRUNEI DARUSSALAM

GUIDANCE DOCUMENT

TIMBER

TIMBER SCAFFOLD BOARDS

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Construction Planning and Research Unit
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Timber

Timber Scaffold Boards

Guidance Document

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First Edition

Timber Standards (PBD), Guidance Documents (GD) and Guidance Specifications (GS) published:

PBD

- PBD 7 : 1993 - Nomenclature of common timber in BD
- PBD 8 : 1993 - Specification for treated timber products
- PBD 11 : 1994 - Sawn timber foundation piles
- PBD 16 : 1994 - Determination of moisture content of timber
- PBD 21 : 1997 - Timber: Design of Timber Columns
- PBD 22 : 1998 - Timber: Design of Timber Beams

GD

- GD 11 - Timber: Essential Data for Designers

GS

- GS 3 - General specification for carpentry and joinery

This Code of Practice was prepared by the Technical Committee on Timber Standards under the authority of the Standards Committee, Ministry of Development.

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The purpose of this Code of Practice is to provide design parameters and other information for the design and construction of timber structures to be used in buildings and other structures. The Code is intended to be used in conjunction with the relevant parts of the Code of Practice on Timber Structures.

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FOREWORD

This Guidance Document was prepared by the Technical Committee on Timber Standards under the authority of the Standards Committee, Ministry of Development.

The purpose of this Guidance Document is to collate common design parameters such that in the long term a Standard on Scaffold Boards can be developed. The main objectives of this Guidance Document are to:

- **Promote greater demands for use of local hardwood timbers;**
- **Generate more revenues from local resources and**
- **Enhance safety in the construction industry with regards to scaffold boards.**

This Document also presents essential design data and information, not readily available elsewhere that may be useful for designers and users of scaffold boards.

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Construction Planning and Research Unit, Ministry of Development

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INTRODUCTION

Brunei Darussalam is a country rich in timber and forest resources. Eighty percent (80%) of its land area is still forested. Most of the timbers available in Brunei Darussalam are of the hardwood types. This Guidance Document is intended to encourage users of scaffold boards to adopt local hardwoods in lieu of imported softwoods.

The scope of this Document is mainly on the use of timber boards in Brunei Darussalam for scaffolding structures. It does not cover the design and use of the scaffolding itself. The construction and use of aluminium, steel, timber or other types of scaffolds are excluded from the Document. However, this Document assumes that the *boards* and *decks* in use are supported by a correctly designed and erected scaffolding system.

This Guidance Document contains three parts and an appendix:

Part 1: Information on Imported Scaffold Board. It provides references, terminologies, general information on imported scaffold boards, and relevant extracts from British Standard 2482: Specifications for Timber Scaffold Boards.

Part 2: Selection Criteria for Using Local Timbers. This part looks at the various criteria with a view to substitute imported softwood scaffold boards with local hardwood timbers. The unique features and characteristics of hardwood timbers for scaffold boards are weighed against those of the imported softwood scaffold boards in terms of strength, loading conditions, quality (defects), density, and practicality.

Part 3: Equivalent Hardwood Scaffold Boards. It recommends the species of local hardwood for scaffold boards to replace the softwood boards as presented in BS2482 and other imported boards of similar sizes. These boards are primarily designed for Tube-&-Coupler types of scaffolds, but are also widely applicable to other types of scaffolding systems.

Appendix A. Cautionary Notes on Defective Timber and Timber Defects. Timber is a biological material and as such, may contain defects. These defects can be growth defects or can be developed in response to physical or environmental factors. The strength data provided in this Guidance Document are based on research results obtained from defect-free timbers. Since the presence of defects will automatically reduce the strength of a piece of timber, the strength data provided will have to be correspondingly modified. Due to the difficulty in determining the loss in strength as a result of defects, it is recommended that scaffold boards should be reasonably free from defects.

The use of this Guidance Document will help to discourage the haphazard use of *casual boards* for scaffolding purposes. Randomly picked boards cannot be properly standardised, assessed and managed. In due time, this practice may need to be eliminated completely, especially with reference to scaffolding structures supporting critical and heavy loadings.

We encourage feedback and suggestions from users, the industry and the public on how to further improve this Guidance Document in terms of its contents and applicability.