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SOUTH AFRICAN NATIONAL STANDARD

Timber frame buildings

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Table of changes

Change No.	Date	Scope

Foreword

This South African standard was approved by National Committee StanSA SC 5120.61D, *Construction standards – Timber structures*, in accordance with procedures of Standards South Africa, in compliance with annex 3 of the WTO/TBT agreement.

This document was published in October 2007. This document supersedes SABS 082:1988 (second revision).

Introduction

The housing shortage in South Africa could be alleviated if alternative building materials and methods were more readily used. Timber frame buildings, the traditional construction method in North America and the Scandinavian countries, offer an economical and flexible solution to both residential and non-residential needs. Timber frame buildings that were originally erected in South Africa during the late 1800s prove the durability of timber as a building material.

Timber frame buildings are very suitable for all types of building sites, especially sloping sites and those with problematic soil conditions, for example, sloping dunes. The low mass of a timber frame building and its capacity to absorb substantial movements and shocks without damage to walls, allow the use of less costly foundations. A further advantage of a timber frame building is that it can easily be extended or altered at a later stage.

The ability to prefabricate wall frames and roof trusses off-site not only reduces on-site construction time, but leads to cost reductions and a shorter period between the signing of the building contract and final payments. The need for a smaller variety of materials and tools is also an advantage.

Cladding materials other than those covered by this document are available or being developed, but it was considered advisable to include only materials that have been tested and found suitable by a recognized testing body or have been found satisfactory in service under South African conditions.

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Timber frame buildings

1 Scope

This standard covers materials and practices used in the design and construction of single-storey and double-storey timber frame buildings and portions of such buildings.

NOTE 1 When higher buildings or alternative designs are required, SANS 10163-1 or SANS 10163-2 should be consulted.

NOTE 2 Unless otherwise stated, the dimensions of timber are the nominal sizes of rough-sawn timber.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies. Information on currently valid national and international standards can be obtained from Standards South Africa.

SANS 227, *Burnt clay masonry units.*

SANS 248 (SABS 248), *Bituminous damp-proof courses.*

SANS 266, *Gypsum plasterboard.*

SANS 298 (SABS 298), *Mastic asphalt for damp-proof courses and tanking.*

SANS 457-2 (SABS 457-2), *Wooden poles, droppers, guardrail posts and spacer blocks – Part 2: Softwood species.*

SANS 457-3 (SABS 457-3), *Wooden poles, droppers, guardrail posts and spacer blocks – Part 3: Hardwood species.*

SANS 540-2 (SABS 540-2), *Fibreboard products – Part 2: Coated fibreboard.*

SANS 678, *Primers for wood.*

SANS 681 (SABS 681), *Undercoats for paints.*

SANS 803, *Fibre-cement boards.*

SANS 820, *Mild steel nails.*

SANS 929, *Plywood and composite board.*