

ISBN 978-0-626-30383-9

SANS 1307:2014

Edition 5.1

SOUTH AFRICAN NATIONAL STANDARD

Domestic storage solar water heating systems

WARNING

**This document references other
documents normatively.**

SANS 1307:2014
Edition 5.1

Table of changes

Change No.	Date	Scope
Amdt 1	2014	Amended to add the definition of “local supplier” and renumber definitions accordingly, add requirements for components in contact with hot potable water, update referenced standards, modify a requirement for galvanic action, add new information on galvanic action and renumber a subclause accordingly, change requirements for frame and stand, correct cross references, and instruction booklet.

Foreword

This South African standard was approved by National Committee SABS/TC 1057, *Solar heating systems*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This document was published in July 2014.

This document supersedes SANS 1307:2012 (edition 5).

A vertical line in the margin shows where the text has been technically modified by amendment No. 1.

Reference is made in B.1 and B.2 to “relevant national legislation”. In South Africa this means the Regulations relating to Compulsory National Standards and Measures to Conserve Water (GN R509 in GG22355 dated 8th June 2001) under the Water Services Act, 1977 (Act No. 108 of 1977), and the National Building Regulations.

This document is referenced in the Local Government Municipal Systems Act, 2000 (Act No. 32 of 2000).

Annexes A and B form an integral part of this document. Annexes C, D and E are for information only.

Contents

	Page
Foreword	
1 Scope	3
2 Normative references	3
3 Definitions	4
4 Requirements	6
5 Methods of test	11
6 Marking and method of marking	12
Annex A (normative) Requirements for hot water storage containers	14
Annex B (normative) Installations, replacement and retrofit	22
Annex C (informative) Factors governing corrosion and internal scaling of solar water heating systems.....	23
Annex D (informative) Chloride content of water supplied to certain South African urban areas.....	24
Annex E (informative) Quality verification of domestic storage solar water heating systems ..	25
Bibliography	26

SANS 1307:2014
Edition 5.1

This page is intentionally left blank

Domestic storage solar water heating systems

1 Scope

1.1 This standard specifies the requirements for integral, close-coupled and split domestic storage solar water heating systems and includes specific requirements for solar collectors for solar water heating systems.

1.2 It is not applicable to solar water heating systems for swimming pools or to industrial and commercial solar water heating systems, or instantaneous type domestic solar water heating systems.

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 the SABS Standards Division.

ISO 10380, *Pipework – Corrugated metal hose and hose assemblies.*

Amdt 1 |

SANS 62-1, *Steel pipes – Part 1: Pipes suitable for threading and of nominal size not exceeding 150 mm.*

SANS 62-2, *Steel pipes – Part 2: Screwed pieces and pipe fittings of nominal size not exceeding 150 mm.*

SANS 151, *Fixed electric storage water heaters.*

SANS 181, *Thermostats for electric storage water heaters.*

SANS 241-1, *Drinking water – Part 1: Microbiological, physical, aesthetic and chemical determinands.*

SANS 460, *Plain-ended solid drawn copper tubes for potable water.*

SANS 514, *Immersion heaters for electric storage water heaters.*

SANS 752, *Float valves.*

SANS 1067-1, *Copper-based fittings for copper tubes – Part 1: Compression fittings.*

SANS 1067-2, *Copper-based fittings for copper tubes – Part 2: Capillary solder fittings.*