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Edition 3

SOUTH AFRICAN NATIONAL STANDARD

The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial, and industrial installations

Part 2: Installation of LPG systems in mobile units, including but not limited to caravans, motor homes, park homes and mobile kitchens

SANS 10087-2:2011
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Table of changes

Change No.	Date	Scope

Foreword

This South African standard was approved by National Committee SABS TC 1019, *Gas supply, handling and control (Fuel and industrial gases)*, 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 2011.

This document supersedes SABS 087-2:1977 (edition 2, reprint 1991).

This document was written in order to support a specific South African Regulation and, of necessity, includes references to South African legislation. It therefore might not be suitable for direct application in other jurisdictions where conflicting legislation exists.

Reference is made in 3.2.1 to "relevant national legislation". In South Africa this means the Trade Metrology Act, 1973 (Act No. 77 of 1973).

Reference is made in 3.2.2 to "relevant national legislation". In South Africa this means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

Reference is made in 3.2.4 to "relevant national legislation". In South Africa this means the Mine Health and Safety Act, 1996 (Act No. 29 of 1996).

Reference is made in clause 5 to "relevant national legislation". In South Africa this means the Road Vehicles (Construction and Use) Regulations.

Reference is made in 10.2.1(b) to "relevant national legislation". In South Africa this means the Pressure Equipment Regulations of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

Reference is made in 15.5 to "national legislation". In South Africa this means current Electrical Regulations.

SANS 10087 consists of the following parts, under the general title, *The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial, and industrial installations*:

Part 1: Liquefied petroleum gas installations involving gas storage containers of individual water capacity not exceeding 500 L and a combined water capacity not exceeding 3 000 L per installation.

Part 2: Installation of LPG systems in mobile units, including but not limited to caravans, motor homes, park homes and mobile kitchens.

Part 3: Liquefied petroleum gas installations involving storage vessels of individual water capacity exceeding 500 L.

Foreword *(concluded)*

Part 4: The transportation of LP gas including the design, construction, inspection, fittings, filling, maintenance and repair of LP gas bulk vehicles and rail tank cars.

Part 6: The application of liquefied petroleum and compressed natural gases as engine fuels for internal combustion engines.

Part 7: Storage and filling premises for refillable liquefied petroleum gas (LPG) containers of gas capacity not exceeding 9 kg and the storage of individual gas containers not exceeding 48 kg.

Part 8: Filling containers for LP gas operated fork lift vehicles in-situ.

Part 10: Mobile filling stations for refillable liquefied petroleum gas (LPG) containers of capacity not exceeding 9 kg.

Annex C forms an integral part of this document. Annexes A and B are for information only.

SANS 10087-2:2011

Edition 3

Contents

	Page
Foreword	1
1 Scope	3
2 Normative references	3
3 Definitions	5
4 Properties of LPG	8
5 Vehicle design and construction	9
6 LPG containers and container valves	9
7 Inspection, testing, and instructions to users	17
8 Appliance installation	18
9 Instructions to users	20
10 Mobile kitchens	21
11 Gas installation pipework	22
12 Pressure regulators, automatic changeover devices and pigtails	23
13 Appliances	25
14 Ventilation and flues	26
15 Electric generators fuelled by LPG	27
16 Maintenance	27
17 Training and instruction	27
18 Fire precautions	27
19 Displayed safety instructions	28
20 Parking during use	29
Annex A (informative) Testing of the high-pressure stage of an installation	30
Annex B (informative) Testing of the low-pressure stage (as a whole) of an installation by U-gauge	31
Annex C (normative) Installations in mobile units	33

The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial, and industrial installations

Part 2:

Installation of LPG systems in mobile units, including but not limited to caravans, motor homes, park homes and mobile kitchens

1 Scope

1.1 This part of SANS 10087 gives the installation requirements, materials, method of construction and the installation of the equipment used in liquefied petroleum gas applications for mobile units, including but not limited to caravans, motor homes, park homes, mobile kitchens, trailers and semi-trailers. It also includes the safety requirements for gas on recreation vehicles and mobile ablution facilities.

1.2 It also covers the requirements for mobile field kitchens and any other mobile units operating on LPG liquid withdrawal systems.

1.3 It also covers the requirements for inspection, test and maintenance of the various components and equipment used.

1.4 Where the container installation does not form a part of the mobile unit and is placed on the ground outside of the unit, then the container placement requirements of SANS 10087-1 shall apply and the rest of the installation shall comply with this standard.

1.5 It excludes the requirements for motor vehicles powered by LP gas and mobile units used for filling purposes which can be found in SANS 10087-6 and SANS 10087-10 respectively.

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.

ANSI/CSA LC 1a, *Fuel gas piping systems using corrugated stainless steel tubing (CSST)*.

AS 4176, *Polyethylene/aluminium and cross-linked polyethylene/aluminium macro-composite pipe systems for pressure applications*.