SOUTH AFRICAN NATIONAL STANDARD

The application of the National Building Regulations

Part W: Fire installation
Acknowledgement

The SABS Standards Division wishes to acknowledge the work of the South African Institution of Civil Engineering in reinterpretting functional regulations and updating the deemed-to-satisfy requirements that relate to fire installations in this document.

Foreword

This South African standard was approved by National Committee SABS SC 21E, Fire safety – Fire threat to the community and environment, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This document was published in March 2011.

This document supersedes the corresponding parts of SABS 0400:1990 (first revision).

Compliance with the requirements of this document will be deemed to be compliance with the requirements of part W of the National Building Regulations, issued in terms of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977).

SANS 10400 consists of the following parts, under the general title The application of the National Building Regulations:

Part A: General principles and requirements.
Part B: Structural design.
Part C: Dimensions.
Part D: Public safety.
Part F: Site operations.
Part G: Excavations.
Part J: Floors.
Part K: Walls.
Part L: Roofs.
Part M: Stairways.
Part N: Glazing.
Part O: Lighting and ventilation.
Foreword (concluded)

Part P: Drainage.

Part Q: Non-water-borne means of sanitary disposal.

Part R: Stormwater disposal.

Part S: Facilities for persons with disabilities.

Part T: Fire protection.

Part V: Space heating.

Part W: Fire installation.

This document should be read in conjunction with SANS 10400-A.

 Annex A forms an integral part of this document. Annex B is for information only.
# SANS 10400-W:2011

## Edition 3

### Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgement</td>
<td>2</td>
</tr>
<tr>
<td>Foreword</td>
<td>3</td>
</tr>
<tr>
<td>1 Scope</td>
<td>3</td>
</tr>
<tr>
<td>2 Normative references</td>
<td>3</td>
</tr>
<tr>
<td>3 Definitions</td>
<td>3</td>
</tr>
<tr>
<td>4 Requirements</td>
<td>5</td>
</tr>
<tr>
<td>4.1 General</td>
<td>5</td>
</tr>
<tr>
<td>4.2 Communication pipe</td>
<td>6</td>
</tr>
<tr>
<td>4.3 Water meter</td>
<td>6</td>
</tr>
<tr>
<td>4.4 Isolating valves</td>
<td>6</td>
</tr>
<tr>
<td>4.5 Fire pump connections</td>
<td>6</td>
</tr>
<tr>
<td>4.6 Pipework</td>
<td>7</td>
</tr>
<tr>
<td>Annex B (informative) Example of a calculation for sizing pipework</td>
<td>11</td>
</tr>
<tr>
<td>Bibliography</td>
<td>13</td>
</tr>
</tbody>
</table>
The application of the National Building Regulations

Part W: Fire installation

1 Scope

This part of SANS 10400 provides deemed-to-satisfy requirements for compliance with part W (Fire Installation) of the National Building Regulations.

NOTE Part W of the National Building Regulations, issued in terms of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), is reproduced in annex A.

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.

SANS 2001-DP2, Construction works – Part DP2: Medium pressure pipelines.


SANS 10287 (SABS 0287), Automatic sprinkler installations for fire-fighting purposes.

SANS 10400-A, The application of the National Building Regulations – Part A: General principles and requirements.

SANS 10400-T, The application of the National Building Regulations – Part T: Fire protection.

3 Definitions

For the purposes of this document, the definitions given in SANS 10400-A (some of which are repeated for convenience) and the following apply.

3.1 acceptable

acceptable

a) in the opinion of any local authority, or

b) in relation to any document issued by the council, in the opinion of the council