



**NSAI**  
Standards

Irish Standard  
I.S. 391:2020

# Fire mains for buildings - Installation, commissioning, maintenance and testing

## I.S. 391:2020

*Relationship with other documents and/or  
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I.S. xxx:      Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx:      Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx:      A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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Údarás um Chaighdeáin Náisiúnta na hÉireann

**DECLARATION**

OF

SPECIFICATION

ENTITLED

FIRE MAINS FOR BUILDINGS - INSTALLATION, COMMISSIONING, MAINTENANCE AND TESTING

AS

THE IRISH STANDARD SPECIFICATION FOR

FIRE MAINS FOR BUILDINGS - INSTALLATION, COMMISSIONING, MAINTENANCE AND TESTING

NSAI in exercise of the power conferred by section 16 (3) of the National Standards Authority of Ireland Act, 1996 (No. 28 of 1996) and with the consent of the Minister for Business, Enterprise and Innovation, hereby declare as follows:

1. This instrument may be cited as the Standard Specification (Fire mains for buildings - Installation, commissioning, maintenance and testing :2020) Declaration, 2020.
2. (1) The Specification set forth in the Schedule to this declaration is hereby declared to be the standard specification for Fire mains for buildings - Installation, commissioning, maintenance and testing:2020.  
(2) The said Standard Specification may be cited as Irish Standard 391:2020 or as I.S. 391:2020.

## Contents

	Page
<b>DECLARATION.....</b>	<b>1</b>
<b>Foreword.....</b>	<b>4</b>
<b>Schedule.....</b>	<b>5</b>
<b>1 Scope.....</b>	<b>5</b>
<b>2 Normative references.....</b>	<b>5</b>
<b>3 Terms and definitions .....</b>	<b>5</b>
<b>4 Fire mains .....</b>	<b>7</b>
<b>4.1 Design considerations .....</b>	<b>7</b>
<b>4.1.1 General.....</b>	<b>7</b>
<b>4.1.2 Materials.....</b>	<b>7</b>
<b>4.1.3 Dry fire mains.....</b>	<b>8</b>
<b>4.1.4 Wet fire mains .....</b>	<b>8</b>
<b>4.1.5 Landing valves.....</b>	<b>8</b>
<b>4.2 Provision and siting.....</b>	<b>9</b>
<b>4.2.1 General.....</b>	<b>9</b>
<b>4.2.2 Position of inlets.....</b>	<b>9</b>
<b>4.2.3 Number of rising/falling mains.....</b>	<b>10</b>
<b>4.3 Electrical earthing.....</b>	<b>10</b>
<b>5 Private fire hydrants.....</b>	<b>10</b>
<b>5.1 Design considerations .....</b>	<b>10</b>
<b>5.2 Siting .....</b>	<b>10</b>
<b>5.3 Selection .....</b>	<b>10</b>
<b>6 Water supplies and pumping arrangements.....</b>	<b>11</b>
<b>6.1 General.....</b>	<b>11</b>
<b>6.2 Adequacy of basic supply .....</b>	<b>11</b>
<b>6.3 Supplementing the basic supply for wet fire mains .....</b>	<b>11</b>
<b>6.4 Pumps for wet fire mains .....</b>	<b>12</b>
<b>6.4.1 General.....</b>	<b>12</b>
<b>6.4.2 Flow tests .....</b>	<b>12</b>
<b>6.4.3 Electrical supplies.....</b>	<b>12</b>
<b>6.5 Additional precautions for wet fire mains.....</b>	<b>13</b>
<b>6.6 Emergency arrangements for filling suction tanks.....</b>	<b>13</b>
<b>6.7 Ring main supply .....</b>	<b>14</b>
<b>7 Installation, commissioning and maintenance .....</b>	<b>14</b>
<b>7.1 Work on site .....</b>	<b>14</b>
<b>7.2 Protection of buildings under construction .....</b>	<b>14</b>
<b>7.3 Installation .....</b>	<b>14</b>
<b>7.3.1 Visual inspection .....</b>	<b>14</b>
<b>7.3.2 Indemnities .....</b>	<b>15</b>
<b>7.3.3 Air test.....</b>	<b>15</b>
<b>7.3.4 Hydrostatic pressure test.....</b>	<b>15</b>
<b>7.3.5 Tests on private fire hydrants.....</b>	<b>16</b>

<b>7.4</b>	<b>Commissioning .....</b>	<b>17</b>
<b>7.4.1</b>	<b>General .....</b>	<b>17</b>
<b>7.4.2</b>	<b>Tests on pumps and landing valves .....</b>	<b>17</b>
<b>7.4.3</b>	<b>Test records.....</b>	<b>17</b>
<b>7.4.4</b>	<b>Commissioning completion certificate .....</b>	<b>18</b>
<b>7.5</b>	<b>Maintenance/Serviceing .....</b>	<b>18</b>
<b>7.5.1</b>	<b>General .....</b>	<b>18</b>
<b>7.5.2</b>	<b>Competence of maintenance personnel .....</b>	<b>18</b>
<b>7.5.3</b>	<b>Fire mains.....</b>	<b>18</b>
<b>7.5.4</b>	<b>Procedures for defective non-automatic fire-fighting systems .....</b>	<b>19</b>
<b>7.5.5</b>	<b>Inspection/test records.....</b>	<b>19</b>
<b>7.5.6</b>	<b>Service labels.....</b>	<b>19</b>
<b>8</b>	<b>Signage.....</b>	<b>19</b>
<b>8.1</b>	<b>Identification of equipment.....</b>	<b>19</b>
<b>8.2</b>	<b>System information.....</b>	<b>20</b>
<b>Annex A (informative)</b>	<b>Protecting installed equipment from theft and vandalism.....</b>	<b>21</b>
<b>A.1</b>	<b>General .....</b>	<b>21</b>
<b>A.2</b>	<b>Inspections.....</b>	<b>21</b>
<b>A.3</b>	<b>Materials .....</b>	<b>21</b>
<b>Annex B (informative)</b>	<b>Example of fire mains system – Certificate of Installation (Page 1 of 2).....</b>	<b>22</b>
<b>Annex B (informative)</b>	<b>Example of fire mains system – Certificate of Installation (Page 2 of 2).....</b>	<b>23</b>
<b>Annex C (informative)</b>	<b>Example of fire mains system – Certificate of Commissioning.....</b>	<b>24</b>
<b>Annex D (informative)</b>	<b>Example of fire mains system – Certificate of inspection/testing....</b>	<b>25</b>
<b>Bibliography .....</b>		<b>26</b>

## I.S. 391:2020

### Foreword

This document, I.S. 391 has been prepared by the National Standards Authority of Ireland technical committee 16: *Fire Safety Standards Committee*, Working Group WG3, *Fire Services Equipment*.

In preparing this document the assumption has been made that the reader has suitable knowledge and understanding of the subject. When it has been determined that a fire mains system is required, then this Standard is suitable.

The National Standards Authority of Ireland (NSAI) wishes to acknowledge the adaptation of the general provisions of BS 9990:2015, prepared by the British Standards Institution (BSI) Technical Committee FSH/14, that were incorporated into clauses of this Irish Standard.

Compliance with an Irish Standard does not of itself confer immunity from legal obligations.

This document does not purport to include all the necessary provisions of a contract and the user is responsible for its correct application.

In line with international standards practice the following representation of numbers and numerical values apply:

- The decimal point is shown as a comma ( , ) throughout this Irish Standard.
- Each group of three digits reading to the left or to the right of a decimal sign are separated by a space from the preceding digits or following digits respectively.

The following verbal forms are used:

- “shall” indicates a requirement;
- “should” indicates a recommendation;
- “may” indicates a permission;
- “can” indicates a possibility or a capability.

Information marked as “NOTE” is for guidance in understanding or clarifying the associated recommendation.

## Schedule

### Fire mains for buildings – Installation, commissioning, maintenance and testing

#### 1 Scope

This document gives requirements and recommendations for non-automatic fire-fighting systems in buildings.

It covers good practice in matters affecting the design, installation, commissioning, testing and maintenance of such systems including wet and dry fire-fighting mains.

This document excludes hose reels, foam inlets, automatic foam systems and portable fire-fighting equipment.

NOTE These systems are covered in I.S. EN 671-1, BS 5306-1, BS 5306-3, BS 5306-8 and I.S. 291.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

BS 5041 (all parts), *Fire hydrant systems equipment*

I.S. 10101, *National Rules for Electrical Installations*

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

##### **competent person**

person having regard to the task they are required to perform and taking account of the size or hazards of the undertaking or establishment in which they undertake the work, possessing sufficient training, experience and knowledge appropriate to the nature of the work to be undertaken

##### **coupling**

device for connecting lengths of hose to secure continuity from the source of a water supply to the delivery point

##### **dry fire main**

water supply pipe installed in a building for fire-fighting purposes, fitted with inlet connections at fire service access level and landing valves at specified points, which is normally dry but is capable of being charged with water

Note 1 to entry: Charging is usually by pumping from fire service appliances.

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