see also AS 2419 - 1980
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Australian Standard 1851, Part 4—1980

MAINTENANCE OF FIRE PROTECTION EQUIPMENT

Part 4—FIRE HYDRANT INSTALLATIONS

STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter

THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL ORGANIZATIONS and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Water and Sewerage Authorities

Board of Fire Commissioners of New South Wales

Building Owners and Managers Association of Australia Ltd

Commonwealth Fire Board

Confederation of Australian Industry

Department of Defence

Department of Housing and Construction

Insurance Council of Australia

Metropolitan Fire Brigade Board, Victoria

Metropolitan Water Sewerage and Drainage Board, N.S.W.

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AUSTRALIAN STANDARD

MAINTENANCE OF FIRE PROTECTION EQUIPMENT

Part 4
FIRE HYDRANT INSTALLATIONS

AS 1851, Part 4—1980

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PREFACE

This standard was prepared by the Association's Committee on Fire Hydrant Installations.

For effective operation of fire hydrants in an emergency, it is essential that regular testing and maintenance be carried out on fire hydrant installations. This standard sets out the precautions to be taken when installations are rendered inoperative and the necessary periodic tests and maintenance.

This standard requires reference to AS 2419, Fire Hydrant Installations.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
THE MAINTENANCE OF FIRE PROTECTION EQUIPMENT

PART 4—FIRE HYDRANT INSTALLATIONS

1 SCOPE. This standard sets out procedures for the maintenance of fire hydrant installations, including regular inspection and precautions to be taken when the installation is rendered inoperative.

NOTE: The procedures set out in this standard should be carried out, or supervised, by a person recognized by the authority having jurisdiction as being qualified for this class of work.

2 PRECAUTIONS TO BE TAKEN WHEN AN INSTALLATION IS TO BE RENDERED INOPERATIVE. The following precautions shall be taken by the owner or his agent before an installation is rendered inoperative:

(a) Permission shall be obtained from the authority having jurisdiction before a hydrant installation is rendered inoperative. The fire brigade to which any alarm is connected shall be notified, in addition to the nearest fire brigade.

(b) Before the water is turned off, a thorough examination of every part of the premises shall be made and all possible action taken to ensure that the risk of fire outbreak is minimized.

(c) Before an installation is rendered inoperative during working hours, foremen or sectional heads shall be notified so that, in the event of fire, the best possible use is made of hand extinguisher appliances.

NOTE: As far as practicable, alterations and repairs to the installation or its water supplies should be carried out quickly during normal working hours so that fire hydrants remain inoperative for as short a time as possible. As much of the installation as is practicable should be kept operative during the progress of the work. If the work cannot be completed in one day, particular attention should be paid to this point when the premises are left each day.

Smoking should be prohibited during the progress of the work.

(d) When an installation is rendered inoperative and likely to remain so outside working hours, the fire brigade shall be notified to this effect.

NOTE: As much as possible of the installation should be kept operative outside working hours by blanking off the inoperative section or sections.

(e) Where the alterations or repairs are extensive or it is necessary to 'break' a pipe or to overhaul, repair or remove a main stop valve or non-return valve, every effort should be made for the work to be carried out when machinery is stopped.

3 PERIODS OF CURTAILED SUPPLY. Where town main water supplies are curtailed for any protracted period, e.g. as in time of drought, special attention should be given to the maintenance of any alternative water supplies. All fire-extinguishing appliances shall be held in special readiness for immediate use and for large premises it is recommended that a watchman be on duty throughout the night.

4 PERIODIC TESTING AND MAINTENANCE REQUIREMENTS.

4.1 General. All hydrant installations shall be tested and inspected in accordance with Clauses 4.2 to 4.6, as applicable, at periodic intervals as specified, and in accordance with any additional requirements of the authority having jurisdiction. Any defects shall receive immediate attention.

Results of all tests and checks shall be recorded in a log-book kept for the purpose, located in a convenient place and under the control of a responsible person. Details of all emergency service calls shall also be recorded in the log-book.

Hose installed at hydrants shall not be used for test purposes.

Where a fire condition is to be tested, the fire brigade shall be contacted prior to the transmitting of any fire call to warn them. On completion of the test, the fire brigade shall be contacted to ensure that the fire call was received and to advise them that the installation was reset and left in an operative condition.

NOTE: Modifications to this procedure will be necessary where approved alarm receiving equipment is installed at the fire brigade to automatically carry out this function.

4.2 Weekly Tests. The following applicable tests shall be performed every week:

(a) Before, during and after testing, record the pressure at the water supply gauge(s). Where appropriate, record the pressure at the town main, and all alternative supplies.

(b) Check for correct operation of any direct brigade alarm.

(c) Check that all valves are in the open or closed position, as applicable, and secured in this position where appropriate.

(d) Check that required pump spares are on hand.

(e) Check water level and automatic filling facilities of all water supply tanks.

(f) Where batteries are installed, check the batteries and battery chargers for the following:

(i) Freedom from corrosion in battery cabinet or compartment and security of battery in its position.

(ii) Electrolyte level. Top up, if necessary.

(iii) Serviceability.

(iv) Voltage per cell. Over a 1-minute test at a 10-hour discharge rate, the voltage per cell shall remain at not less than 1.25 V for nickel-cadmium batteries or 2 V for lead-acid batteries.