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(Expires 15 August 1996)**

**Interim
Australian/New Zealand Standard**

**Fixed diagnostic X-ray equipment—
Design, construction and
installation—Safety requirements**

STANDARDS AUSTRALIA



STANDARDS NEW ZEALAND



AS/NZS 2398(Int):1994

This Interim Joint Australian/New Zealand Standard was prepared by Joint Technical Committee HT/23, Medical Diagnostic Imaging Equipment. It was approved on behalf of the Council of Standards Australia on 26 May 1994 and on behalf of the Council of Standards New Zealand on 27 June 1994. It was published on 15 August 1994.

The following interests are represented on Committee HT/23:

Australian Academy of Dento-Maxillo-Facial Radiologists
Australian and New Zealand Society of Nuclear Medicine
Australian Chamber of Commerce and Industry
Australian Dental Association
Australian Institute of Radiography
Australian Nursing Federation
Australian Radiation Laboratory
Australasian College of Physical Scientists and Engineers in Medicine
Department of Defence, Australia
Department of Veterans Affairs, Australia
Environment Protection Authority, N.S.W.
Health Department, W.A.
Health Industry Suppliers Association of New Zealand
Ministry of Commerce, New Zealand
Public Works Department, N.S.W.
Royal Australasian College of Radiologists
South Australian Health Commission
United Dental Hospital of Sydney
University of Sydney
University of Waikato

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Suggestions for improvements to Joint Standards, addressed to the head office of either Standards Australia or Standards New Zealand, are welcomed. Notification of any inaccuracy or ambiguity found in a Joint Australian/New Zealand Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

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**Fixed diagnostic X-ray equipment—
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PREFACE

This Interim Standard is a revision by the Joint Standards Australia/Standards New Zealand Standards Committee HT/23, Medical Diagnostic Imaging Equipment, of AS 2398—1980. It comprises very substantial changes to Sections 3 and 5 of that edition which were considered to be of an urgent nature. The Committee is aware that the Standard needs comprehensive revision but decided to concentrate on those topics which it considered to have a high priority. The Standard is therefore issued as an Interim Standard so as to allow for further comment on the changes made and suggestions for improvements to the rest of the Standard.

The Standard is one of a series of electromedical Standards covering safety matters and conditions necessary in environments where electromedical appliances are used for the purpose of diagnosis and for the treatment of patients.

This Standard is intended for use with fixed radiological installations with a rated output of 10 kV (peak) to 400 kV (peak) but does not apply to dental and mobile medical X-ray machines. X-ray machines used for therapeutic purposes are not covered in this Standard.

The Standard describes the design and construction requirements of X-ray equipment and associated equipment and sets out the measures to be taken to ensure the safety of the mechanical and electrical installations.

It details the necessary measures to be taken to protect patients and staff against excessive or harmful radiations.

This Standard also includes the safety requirements to be implemented by designers, manufacturers, suppliers and users of fixed diagnostic X-ray equipment by—

- (a) setting out specific requirements for the design, construction, installation and modus operandi of fixed diagnostic X-ray equipment; and
- (b) indicating the limits of leakage radiation.

In New Zealand the use of X-ray equipment is controlled by legislation which is administered by the National Radiation Laboratory and, information about this legislation should be obtained from the laboratory.

Each Australian state and territory has its own regulatory authority for radiation safety. Practitioners should ensure that they meet the requirements of their authority.

Standards Australia/Standards New Zealand invite comment on this Interim Standard from persons and organizations concerned with this subject. The date of expiry for comment is 24 months after publication, at which time this Interim Standard will either be confirmed, withdrawn or revised in the light of public comment.

During the life of this document the Committee will monitor all comment as it is received.

Attention is drawn to the fact that this document is an Interim Australian/New Zealand Standard and should be regarded as a developmental Standard and liable to future alteration.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

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