AS/NZS 4296:1995

Australian/New Zealand Standard

Cable trunking systems

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL/4, Electrical Accessories. It was approved on behalf of the Council of Standards Australia on 11 May 1995 and on behalf of the Council of Standards New Zealand on 29 May 1995. It was published on 5 September 1995.

The following interests are represented on Committee EL/4:

Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Australian Regulatory Authorities (Electrical)
Consumer Electronics Suppliers Association, Australia
Electrical Supply Association of Australia
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL/4 on Electrical Accessories. It is issued as a Joint Standard.

The object of this Standard is to provide requirements for a system of enclosures consisting of lengths of trunking, with covers and appropriate fittings, intended for the installation and protection of cables. The following types of trunking are covered:

(a) Solid wall.

(b) Open-slotted.

(c) Closed-slotted.

Flammability, electrical and mechanical tests are specified to determine fitness for purpose, and certain tests applicable to UPVC conduit are included as they are considered also to be applicable to trunking.

During the preparation of this Standard, reference was made to IEC 1084-1(1991), *Cable trunking and ducting systems for electrical installations*, Part 1: *General requirements*. However, as this Standard only applies to cable trunking, the format of IEC 1084-1 has not been followed.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

CONTENTS

Page

First published as AS/NZS 4296:1995.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

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1 SCOPE This Standard specifies requirements for cable trunking systems intended for the accommodation, protection and, if required, the segregation of cables in an electrical installation.

This Standard does not apply to cable trays, cable ladders or to conduits (including closed non-circular sections).

2 REFERENCED DOCUMENTS The documents below are referred to in this Standard:

AS
1660 Test methods for electrical cables, cords and conductors
1660.5 Fire tests
1660.5.3 Determination of the amount of halogen acid gas evolved during the combustion of polymeric materials taken from cables
1939 Degrees of protection provided by enclosures for electrical equipment (IP code)

AS/NZS
2053 Conduits and fittings for electrical installations (all Parts)
3350 Approval and test specification—Safety of General requirements for household and similar electrical appliances
Part 1: General requirements

3 DEFINITIONS For the purpose of this Standard, the following definitions apply.

3.1 Cable trunking system—a system of trunking lengths and components, used for the accommodation and protection of cables.

3.2 Composite components—a system component consisting of both conductive and insulating material.

3.3 External influence—the presence of oil, water, building materials, low or high temperatures, corrosive or polluting substances, solar radiation or mechanical stress.

3.4 Fitting—a system component used to connect, change direction or to terminate a trunking length.

3.5 Fixing device—a system component used to secure other system components to a supporting structure.

3.6 Floor access unit—a component used with an underfloor cable trunking system that provides access to cables.

3.7 Floor service unit—an apparatus mounting device used with an underfloor cable trunking system.

3.8 Halogen-free component—a component which produces a low level of acid gas emission during combustion.

3.9 Insulated components—a system component consisting only of insulating material and having no conductive parts.

3.10 Metal components—a system component consisting only of metal.

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