

Australian Standard[®]

Chain link fabric fencing

Part 1: Security fences and gates— General requirements



This Australian Standard® was prepared by Committee CE-008, Chain Link Fabric Security Fences and Gates. It was approved on behalf of the Council of Standards Australia on 4 June 2010.

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- Australasian Wire Industry Association
 - Australian Chain Link Fencing Association
 - Australian Chamber of Commerce and Industry
 - Australian Industry Group
 - Master Builders Association
 - Temporary Fencing Association of Australia
 - Water Services Association of Australia
-

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PREFACE

This Standard was prepared by the Standards Australia Committee CE-008, Chain Link Fabric Security Fences and Gates to supersede AS 1725—2003, *Chain link fabric security fencing and gates*.

The objective of this Standard is to establish minimum requirements for fence materials and workmanship for security fences, in order to ensure satisfactory service by the fence for the purchaser, and assist manufacturers and installation contractors by eliminating unnecessary minor variations in purchasers' requirements. Where alternatives are provided in this Standard, purchasers should nominate their preference.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

Statements expressed in mandatory terms in notes and footnotes to tables and figures are deemed to be requirements of this Standard.

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STANDARDS AUSTRALIA

Australian Standard Chain link fabric fencing

Part 1: Security fences and gates—General requirements

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements for chain link fabric security fencing and gates available in a range of alternatives and combinations, with options for fence height, fabric, wire coatings, wire service duty, pipe grades and tables, and types of security fencing design options, depending on agreement between purchaser and manufacture to suit the circumstances of site security. Purchasers need to carefully consider, select and nominate their preference for each component.

NOTES:

- 1 AS 1725 Parts 1 to 5 fencing solutions are not deemed to be structures as defined in AS 4100, therefore, are not intended to comply with AS 1170, AS 4100 and AS/NZS 4600. However, in applications of high wind loading, crowd control and safety barriers, which can be considered a risk to public safety or deemed to be a building structure, the specifier is required to comply with AS 1170, AS 4100 and AS/NZS 4600.
- 2 Appendix A provides purchasing guidelines which will assist the purchasers to establish the security fencing requirements suitable for their site application. Purchasers need to carefully consider, select and nominate their preference for each component.

1.2 APPLICATION

This Standard is applicable to the manufacture and installation of chain link fabric security fences and tubular gates, the normal uses for which include the following:

- (a) Security for industrial, commercial and public buildings that are in isolated locations or are surrounded by open space, examples being factories, offices and schools.
- (b) Security for, or restriction of access to, expansive open areas, such as residential developments, playing fields, open-air storage, defence bases, airports, water storages, freeways and hazardous areas such as quarries.
- (c) Security fences for government institutions and other open areas where restricted access is desirable.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1074	Steel tubes and tubulars for ordinary services
1170	Structural design actions
2423	Coated steel wire fencing products for terrestrial, aquatic and general use
2700S	Colour standards for general purposes
3972	Portland and blended cements
4100	Steel Structures

4506 Metal finishing—Thermoset powder coatings

AS/NZS

1163 Cold-formed structural steel hollow sections

2312 Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings

4600 Cold-formed steel structures

4680 Hot-dip galvanized (zinc) coatings on fabricated ferrous articles

4792 Hot-dip galvanized (zinc) coatings on ferrous hollow sections, applied by a continuous or a specialized process

EN

10255 Non-alloy steel tubes suitable for welding and threading—Technical delivery conditions

1.4 DEFINITIONS

For the purposes of this Standard, the definitions given in AS 2423, AS 4506, AS/NZS 4792 and those below apply.

1.4.1 Backstay

A diagonal tubular steel member supporting a post laterally and set into the ground.

1.4.2 Barbed wire

Conventional twist or reverse twist wire complying with AS 2423.

1.4.3 Baseplates

Metal plates welded to base of post to provide fitting and securing to concrete pavement, timber floors, steel floors or similar surfaces.

1.4.4 Braced panel

Two adjacent posts with connecting bracing rail and bracing cable.

1.4.5 Bracing cable

Twin-twisted wires with turnbuckle used in strainer assemblies as a tension member.

1.4.6 Bracing rail

The horizontal tubular steel compression member used in a braced panel.

1.4.7 Bracing diagonal stay

A diagonal tubular steel member fixed to end, strainer, corner and gate posts in the line of the fence behind the chain link fabric and set into the ground or alternatively clamped to the base of the adjoining post.

1.4.8 Cable support wires

Longitudinal wires supporting the chain link fabric between fence posts.

1.4.9 Chain link fabric

Diamond-pattern-woven fencing fabric manufactured from wire with a select range of wire diameters and coating options together with alternative design formed selvedge, in accordance with AS 2423.

1.4.10 Chain link fabric (service duty)

A grading to determine the durability and strength options of the fabric.

NOTE: The options in this Standard are heavy duty or light duty (refer to AS 2423).