

INTERNATIONAL CODE OF PRACTICE - PERIMETER

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Declaration

This edition of the Code of Practice (INTCOP:7.2) has been approved for use by Gallagher Certified Channel Partners.

8 April 2026



Josh Arnold
Chief Product Officer

Effective Dates

The INTCOP:7.2 supersedes ALL previous versions of the Code of Practice from Gallagher.

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Effective date: 08/APR/2026

Review: This Code of Practice will be revised as occasions arise. Please forward any comments and suggestions to your local Gallagher Representative. Any amendments must be approved by Gallagher Security and a new reference will be published;

- Any installation commissioned after Effective Date shall comply with the INTCOP:7.0 as identified in the Gallagher Channel Partner and Distribution Agreements, in order to be certified by Gallagher:
- Any installation commissioned prior to Effective Date need only conform to the previously relevant Code of Practice.
- Any new additions on existing installations made after Effective Date shall comply with the INTCOP:7.2

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1 Explanation of Terms

The interpretation of terms in this document are:

Shall:	Mandatory. Not open to compromise.
Should:	The requirement is deemed the most acceptable method and is strongly recommended to be followed.
Recommended:	This indicates the generally accepted standard however different methods can be used to achieve the same outcome.
May:	The requirement is optional.

2 Scope

The Gallagher Perimeter Security Energized Fence System (hence forth referred to as the 'Gallagher energized security fence') provides reliable deterrent against, and detection of, attacks on a perimeter.

This Code of Practice and the Reference Standards ('Reference Documents' section below) outline the minimum acceptable standard **for certification** by Gallagher of a Gallagher energized security fence.

The energized security fence certification assessment will be a result of an on-site system inspection and documentation review by Gallagher with the Channel Partner. Inspection, assessment, and subsequent certification is to this Code of Practice. The inspection is not only for safety aspects of the system but includes application of product and workmanship practices relating to the energized security fence. It **does not** include any review of compliance to any other regulation, code, standard, construction, application, or specification requirement(s) of the installation.

3 Reference Documents

The following are references regarding the governance of energized security fence installations:

Australia/New Zealand	AS/NZS 3016
British Standard	BS1722-17
South Africa Standard	SANS10222-3
China Standard	GB/T 7946
European Standard	EN60335-2-76
International Standard	IEC60335.2.76
Recommended Installation Scenarios	Gallagher Doc 3E6188

These standards define the minimum requirement for installation of an energized security fence in those markets. Other regulations, codes, or standards may exist for markets not listed, and these must be followed as applicable. Compliance of the installation to any standard is the responsibility of the channel partner.

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Gallagher Security Fence Controllers are designed and manufactured in compliance with the following standards:

IEC 60335-1	Household and similar electrical appliances - Safety - Part 1: General requirements
IEC 60335-2-76	Household and similar electrical appliances - Safety - Part 2-76: Particular requirements for electric fence energizers

4 Safety Requirements

An installed energized security fence shall comply with this Code of Practice, as well as any associated local regulations and standards.

If there is a conflict, the requirements in this Code of Practice are supplementary to the governing standards of the country of installation and should be considered as a Manufacturer's Minimum Installation Criteria.

It is the responsibility of the Channel Partner to ensure all appropriate requirements and related regulations of the installation are met.

Energized security fences and their ancillary equipment shall be installed, operated and maintained in a manner that minimises danger to persons, and reduces the risk of persons receiving a pulse shock unless they attempt to penetrate the physical barrier.

4.1 Separation Distances

An energized security fence wire shall be supplied by a single energizer only. Under no circumstances shall it be supplied by multiple energizers.

Energized security fence constructions that are likely to lead to the entrapment of persons between two fences or entrapment points shall be avoided at all times.

4.2 Horizontal Separation

A minimum distance of 2.5m (8ft 2in) shall be maintained between uninsulated pulsed conductors or uninsulated connecting leads that are fed from independent non-synchronised energizers. This spacing may be less where conductors or connecting leads are covered by insulating sleeving or consist of insulated cables rated to at least 10kV.

This requirement need not apply where the separately energized conductors are separated by a physical barrier that does not have any openings greater than 50mm (2in).

For any separate energized security fences, each supplied from a separate energizer independently timed, the distance between the wires of the two energized security fences shall be at least 2.5m (8ft 2in). If this gap is to be closed, this shall be affected by means of electrically non-conductive material or an isolated metal barrier.

4.3 Vertical Separation

A minimum vertical separation of 2m (6ft 6in) shall be maintained between uninsulated pulsed conductors fed from independent non-synchronised energizers.

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4.4 Earthing, Connecting leads and Ancillary equipment

4.4.1 Earthing

All exposed conductive parts of the physical barrier shall be effectively earthed.

Follow the Gallagher energizer recommendations with regarding to earthing. Refer to 'Gallagher Technical Reference Manual' for guidance.

The distance between any energized security fence earth electrode and other earth systems shall be a minimum of 2m (6ft 6in), except when associated with a graded earth mat. Where possible the distance between any energized security fence earth electrode and other earth systems is recommended to be a minimum of 10m (30ft).

See also 'Power and Comms lines' section (Para 4.5.1)

4.4.2 Connecting leads

Connecting leads that are run inside buildings shall be effectively insulated from the earthed structural parts of the building. This shall be achieved by using insulated high voltage cable.

Connecting leads shall not be installed in the same conduit as the mains supply wiring, communication cables or data cables. Refer to the 'Gallagher Technical Reference Manual' for guidelines.

Connecting leads and energized security fence wires shall not cross above overhead power or communication lines.

4.4.3 Ancillary equipment

Ensure that all mains operated, ancillary equipment connected to the energized security fence circuit provides a degree of isolation between the fence circuit and the supply mains equivalent to that provided by the energizer.

4.5 Public Access

The energized security fence shall be protected from public access by means of a physical barrier. Under normal operating conditions, persons on the public access side shall be protected against inadvertent contact with active pulsed conductors.

Where an energized security fence is installed in an elevated position, such as on the inner side of a window or skylight, the physical barrier may be less than 1.5m (5ft) high where it covers the whole of the energized security fence. If the bottom of the window or skylight is within a distance of 1.5m (5ft) from the floor or access level, then the physical barrier need only extend up to a height of 1.5m (5ft) above the floor or access level.

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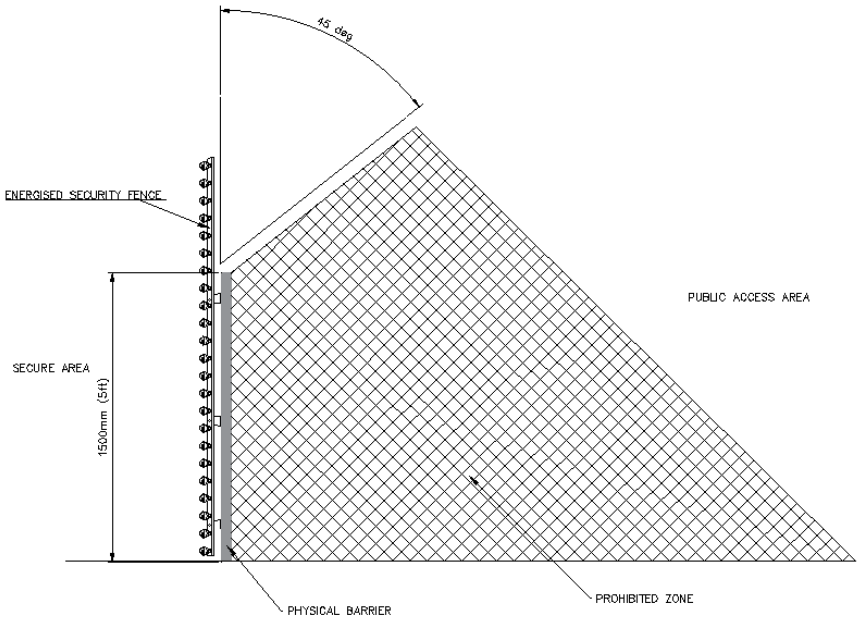


FIGURE 1 – PROHIBITED ZONE

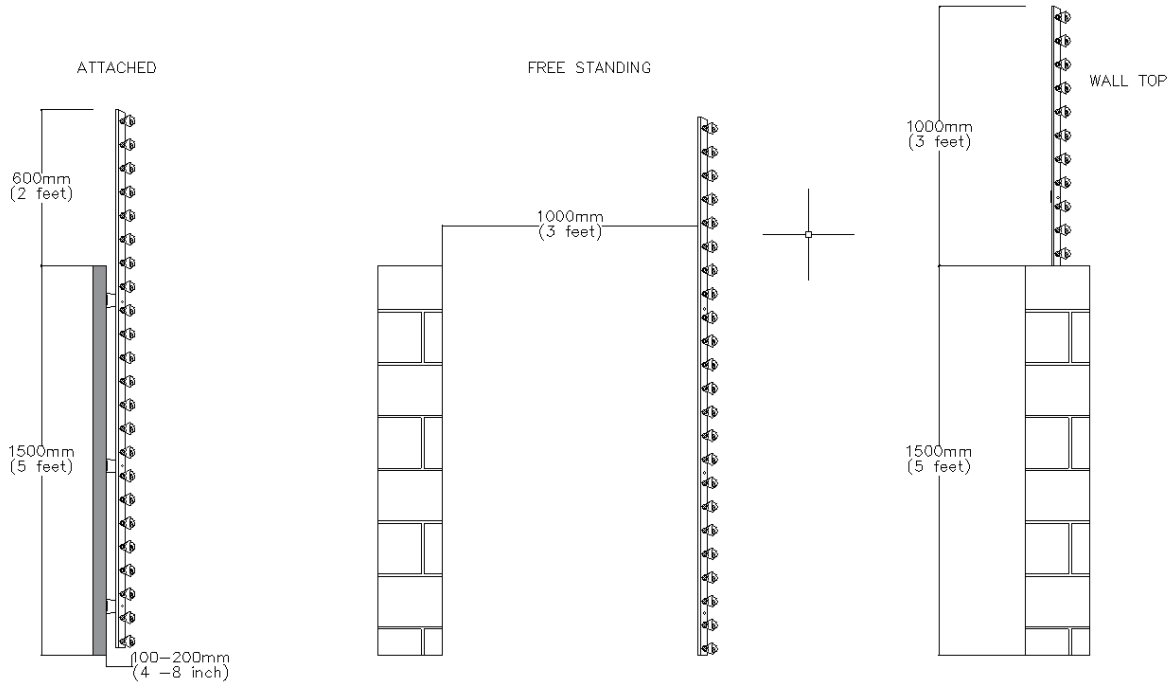


FIGURE 2 – CRITICAL DISTANCES

This requirement is primarily intended to establish that a desirable level of safety is present or is being maintained in the physical barrier. When selecting the type of physical barrier, the likely presence of young children should be a factor in considering the size of any openings.

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Where a physical barrier is installed in compliance with the Figure 1, at least one dimension in an opening should be a maximum of 130mm (5in) and the minimum separation between the energized security fence and the physical barrier should be;

- (UK Region: Palisade) in accordance with BS1722-17. Between the range of 100mm (4in) to 200mm (8in), or a minimum of 1000mm (39in) where at least one dimension in each opening in the physical barrier is a maximum of 130mm (5in).
- (NZ, Australia: Chain mesh) in accordance with AS/NZ3016. A minimum of 1000mm (39in) where any opening in the physical barrier has all dimensions greater than 54mm (approx. 2in).
- (Physical Barrier) Non – specified standard. Between the range of 100mm (4in) to 200mm (8in) or a minimum of 1000mm (39in).
- A maximum of 200mm (8in) or a minimum of 1000mm (39in) where an attached or free-standing physical barrier does not have any openings.

Prohibited zone for pulse conductors;

- Energized conductors shall not be installed within the prohibited zone shown in Figure 1.

This restriction is intended to reduce the possibility of persons making inadvertent contact with the energized conductors and to prevent them becoming wedged between the energized fence and the physical barrier, thereby being exposed to multiple shocks from the energizer.

4.5.1 Power and Communication Lines

Energized security fence conductors should not be mounted on a support used for any overhead power line (in accordance with IEC 60335-2-76).

Where crossing overhead uninsulated electricity lines cannot be avoided, it shall be made underneath the electricity lines and as close as possible at right angles to the lines, the minimum separation distance between the energized fence and electricity lines is shown in the following table:

Power Line Voltage	Minimum Separation
≤ 1000V	3m (9ft 8in)
> 1000V ≤ 33000V	4m (13ft 1in)
> 33000V	8m (26ft 2in)

If connecting leads and energized security fence wires are installed near an overhead power line, their height above ground shall not exceed 3m (9ft 8in).

This height applies either side of the orthogonal projection of the outermost conductors of the power line on the ground surface, for a distance of (in accordance with IEC 60335-2-76);

- 2m (6ft 6in) for power lines operating at a nominal voltage not exceeding 1000V.
- 15m (49ft 2in) for the power lines operating at a nominal voltage exceeding 1000V.

Where an energized security fence passes below bare power conductors, the highest metallic element shall be effectively earthed for a distance of not less than 5m (16ft 4in) on either side of the crossing point (in accordance with IEC 60335-2-76).

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4.5.2 Warning Signs

The energized security fence shall be identified by prominently placed Gallagher Warning Signs (G602xxx). The warning signs shall be:

- Visible from both sides of the energized security fence
- On and beside each gate/access point
- At every change of direction
- At horizontal intervals not exceeding 10m (30ft)
- At a height that ensures unobstructed view, (e.g. eye level - 1.8m (6ft) or above)
- On hazard notification boards as necessary for site health and safety requirements

Warning signs shall remain clearly legible or replaced as required through operational life of the energized security fence.

Warning signs should be fastened to the fence posts or fence wires.

4.6 Personnel Access and Gates

The conductors of an energized security fence should not be energized, unless authorized representative person(s) have been informed of its function and its purpose.

The energized security fence shall be applied in a manner to minimise potential injury of persons and loss or damage to property. It shall be designed, installed, operated and maintained so that, under normal conditions of operation, the public is separated from inadvertent contact with energized conductors and the structure is not an entrapment or entanglement risk (mantrap).

Gates and access ways through an energized security fence shall be capable of being secured and opened without the operator receiving an energized pulse. If the gate or access way is used for personnel access, a method to eliminate conductors being energized should be included to prevent inadvertent contact with the energized conductors.

4.7 Barbed Wire and Razor Wire

The energized security fence and any associated structure should not contain barbed wire, or razor wire, unless it is constructed so simultaneous contact is prevented by a horizontal reach distance of at least 1m (3ft 3in).

The installation shall not use energized barbed wire or razor wire.

4.8 Hazardous Areas

The energized security fence shall not be installed within a combustible atmosphere (hazardous area). Definition of such areas is the responsibility of the site Health and Safety Authority.

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5 Installation Requirements

The Gallagher Channel Partner shall be responsible for the installation of the Gallagher energised security fence. Multiple levels of training and certification are available to fence installer personnel and definitions of these are contained within the "Gallagher Certified Channel Partner Enablement" folder.

Detailed instructions and requirements for installation of Gallagher perimeter products are contained in the following reference material:

- Technical Reference Manual - Perimeter Security Energized Fencing (3E0901)
- Permitted Installation Scenarios F5 and F6 Fence Controllers (3E6188)
- Product Documentation - provided with purchased components from Gallagher
- Commissioning Document Set - Perimeter Security Monitored Pulse Fencing (3E2391)
- Security Product List - Perimeter Systems (3E0655)
- Training Material Support Infrastructure (Online Support and Technical Phone Support)

5.1 System Commissioning

Every energized security fence installation shall be formally **commissioned**, and the System User(s) trained to use and maintain the system in a safe and secure manner. The commissioning represents a full check and record of system safety and performance at handover to the System User(s). The Channel Partner shall maintain auditable records of commissioning, the recommended commissioning requirements are provided by Gallagher and are available to Gallagher Certified Channel Partners. All commissioning documentation including product manuals, testing reports, and maintenance instructions should be provided to the System User(s) as part of the sign-off process.

5.2 Maintenance

Every energized security fence installation shall have a **maintenance program** offered to the System User. The maintenance programme offered should take into consideration environmental issues that may be related to the site location. There should be a documented program defined to ensure an installation remains compliant to this Code of Practice INTCOP:7.1 and associated product documentation as applicable.

5.3 Certification

Certification of a Gallagher security energized fence system installation can be provided by an authorized Gallagher Staff Member only. The installation will be inspected for compliance to this Code of Practice and the installation practices detailed in the Installer Reference Guide - Perimeter Security Energized Fencing (3E0901) using the Commissioning Document Set - Perimeter Security Monitored Pulse Fencing (3E2391).

The inspection does not cover commercial aspects, the requirements of local regulations, standards or local authority requirements.

An inspection rating will be given, and any remedial work identified is to be completed before certification is given. The subsequent certificate will be issued in the name of the User, identifying the site address and date of certification.

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To maintain certification, a new certification test shall be applied for annually.

Grade	Description of grade
A	EXCELLENT – Best practice used
B	GOOD – some best practices used, minor improvements possible but not required
C	FAIR – complies with code of practice but better ways to implement
D	FAILURE – minor remedial work required to meet code of practice compliance (Functional error)
E	FAILURE – major remedial work required to meet code of practice compliance (Safety error)

6 Definitions

For the purposes of this Code of Practice and the reference material defining the installation of a Gallagher security energized fence system, the following definitions apply:

Associated Structure - Relating to fence construction - A structure in close proximity (within 1m) that can be touched while in contact with the Gallagher security energized fence.

Connecting Lead - An electric conductor which is not part of the fence, used to connect the energizer to the energized fence. Also referred to as lead-out cable.

Channel Partner - A trained and certified installer of the Gallagher energised security fence system.

Deterrent Pulse - Safe shock deterrent impulse voltage burst producing a current into a load over a very short period. Separated by more than one second interval and produced by a Gallagher Security Fence Controller or Energizer.

Earth - Is defined as the ambient electrical reference potential of the physical surrounding terra firma. In some regions the terms Ground or 0V is used.

Energizer - An appliance intended to regulate and control the supply of electric energy to energized fences. Also known as “Security Fence Controller”.

Energized Security Fence - An energized fence used for security purposes. Also used to refer to the Gallagher Perimeter Security Energized Fence System, the Gallagher Energized Security Fencing, and the Gallagher Security Fence.

Hazardous Area - Area in which an explosive atmosphere is present or may be expected to be present, in such quantities as to require special precautions for the construction, installation and use of electrical equipment.

Inadvertent Contact - Contact with the pulsed conductor other than those that occur as a conscious and deliberate effort to penetrate the energized security fence.

Mantrap - A construction that can entrap or tangle a person preventing them from withdrawing from repeated shocks from an energized security fence.

Perimeter - Outer boundary that surrounds a secure area.

Physical Barrier - A barrier intended to prevent inadvertent contact with the pulsed conductors of the energized security fence, (e.g. vertical sheeting, rigid vertical bars, rigid mesh or rods, or chain wire mesh, etc).

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Public Access Area - Any area where persons are protected from inadvertent contact with pulsed conductors by a physical barrier.

Pulsed Conductors - Conductors which are subjected to high voltage pulses by the energizer. Also known as energized conductors.

Pulse Synchronisation - Two or more Security Fence Controllers are connected together so that when one Fence Controller produces a pulse, the other(s) pulse in time. This creates a coordinated dependent pulse that maintains the safe time interval between pulses allowing a person to release should they come in to contact with more than one energized fence at the same time.

Secure Area - An area where a person is not separated from pulsed conductors by a physical barrier.

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