

BRITISH STANDARD

Fences –

Part 2: Specification for strained wire and wire mesh netting fences

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Foreword

Publishing information

This part of BS 1722 was published by BSI and came into effect on 30 November 2006. It was prepared by Technical Committee B/201, *Fences*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This part of BS 1722 supersedes BS 1722-2:2000, which is withdrawn.

Relationship with other publications

BS 1722 is published in the following parts:

- *Part 1: Specification for chain link fences;*
- *Part 2: Specification for strained wire and wire mesh netting fences;*
- *Part 4: Specification for cleft chestnut pale fences;*
- *Part 5: Specification for close-boarded and wooden palisade fences;*
- *Part 7: Specification for wooden post and rail fences;*
- *Part 8: Specification for mild steel (low carbon steel) continuous bar fences and hurdles;*
- *Part 9: Specification for mild steel (low carbon steel) fences with round or square verticals and flat horizontals;*
- *Part 10: Specification for anti-intruder fences in chain link and welded mesh;*
- *Part 11: Specification for woven wood and lap boarded panel fences;*
- *Part 12: Specification for steel palisade fences;*
- *Part 13: Chain link fences for tennis court surrounds;¹⁾*
- *Part 14: Specification for open mesh steel panel fences;*
- *Part 16: Specification for organic powder coatings for use as a plastics finish to components and mesh;*
- *Part 17: Specification for electric security fences – Design, installation and maintenance;*
- *Part 18: Specification for steel mesh site perimeter temporary fencing systems.²⁾*

Information about this document

The start and finish of text introduced or altered by Corrigendum No. 1 is indicated in the text by tags **[C1]** **[C1]**.

It should be noted that no attempt has been made to standardize fences or gates of a purely decorative nature, or those to suit special requirements; or to specify requirements for “patent” proprietary fencing systems. However, such fences or gates should be designed in accordance with the relevant clauses of this part of BS 1722.

¹⁾ Obsolescent.

²⁾ Part 18 is in development and will be published as a Draft for Development (DD).

This standard aims to establish minimum requirements for materials and workmanship for the more common types of fence in order to ensure satisfactory service for the purchaser, and to assist manufacturers and installers by eliminating unnecessary minor variations in the demands of purchasers. It specifies requirements for the components that make up a fence and the way in which the fence needs to be constructed.

The standard includes requirements for sizes of components, together with the permissible tolerances on size. These are minimum requirements and it is normally acceptable to use larger sizes, except if this could adversely affect the fitting of components or if replacement parts are required to match up with those already present.

Choosing a suitable fence is affected by factors such as intended purpose, desired service life, aesthetic considerations and availability of components. The specifier can match a suitable choice of fence to its intended purpose and also inform those installing the fence of the basic characteristics required. Premature failure of the fence can be avoided by taking care not to overstrain coated wire or to damage protective treatments during installation.

Ground conditions might indicate that a variation in the length of a post or strut, or the depth, to which it should be set, is desirable. The posts and struts and setting depths specified in this standard are intended for use in normal ground conditions, but if special conditions exist that warrant a change in the specification, e.g. the ground is softer or firmer than usual, such a change should be agreed with the specifier.

Annex A specifies requirements for concrete components.

Annex B specifies requirements for steel components.

Annex C provides details of the fence requirements and installation site that should be agreed between the fence supplier and purchaser.

NOTE Conditions vary from site to site. Annex B should not be assumed to be exhaustive.

Annex D specifies a method of measuring line wire tension.

Annex E provides guidance on the determination of water content.

Use of this document

It has been assumed in the drafting of this part of BS 1722 that the execution of its provision is entrusted to appropriately qualified and experienced people. Before installation commences the Lead Installer should hold a current FISS/CSCS registration card skilled level (blue card) or equivalent and all other operatives should hold the basic fence operative card (green card) or equivalent.

At the time of publication of this British Standard the registration cards are validated by the Joint Fencing Industry Skills Scheme (FISS) and Construction Scheme Skills Certification Scheme (CSCS). FISS/CSCS maintains a national register of fence installers and operatives. There might be other schemes available.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Requirements in this standard are drafted in accordance with *The BSI guide to standardization – Section 2: Rules for the structure, drafting and presentation of British Standards*, subclause **11.3.1**, which states, “Requirements should be expressed using wording such as: ‘When tested as described in Annex A, the product shall ...’”. This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

1 Scope

This part of BS 1722 specifies requirements for the construction and installation of general pattern and dropper pattern strained wire fences and rectangular wire mesh fences, including mild steel or high tensile woven wire fencing, welded mesh fencing, hexagonal wire netting fences of the general pattern, and spring steel wire pattern fences where the mesh is fixed onto spring steel line wires.

This standard includes requirements for protective treatments. However, maintenance requirements of the fence after installation are outside the scope of this standard.

NOTE Figure 1 illustrates the general characteristics of strained wire fences. It is not intended to illustrate any particular requirements of this standard but provides guidance as to the general layout of a typical fence, and on the terminology associated with this form of fencing.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 1202-1, *Specification for nails – Part 1: Steel nails*

BS 1722, *Fences*

BS 1722-4, *Fences – Part 4: Specification for cleft chestnut pale fences*

BS 1722-7, *Fences – Part 7: Specification for wooden post and rail fences*

BS 1722-16, *Fences – Part 16: Specification for organic powder coatings to be used as a plastics finish to components and mesh*

BS 3892, *Pulverized-fuel ash*

BS 4027, *Specification for sulfate-resisting Portland cement*

BS 4102, *Specification for steel wire for general fencing purposes*

BS 4320, *Specification for metal washers for general engineering purposes – Metric series*

BS 4449, *Steel for the reinforcement of concrete – Weldable reinforcing steel – Bar, coil and decoiled product – Specification*

BS 4482, *Steel wire for the reinforcement of concrete products – Specification*

BS 4483, *Steel fabric for the reinforcement of concrete – Specification*

BS 4652, *Specification for zinc-rich priming paint (organic media)*

BS 8500-1:2002, *Concrete – Complementary British Standard to BS EN 206-1 – Part 1: Method of specifying and guidance for the specifier*

BS 8500-2:2002, *Concrete – Complementary British Standard to BS EN 206-1 – Part 2: Specification for constituent materials and concrete*

BS EN 197-1, *Cement – Part 1: Composition, specifications and conformity criteria for common cements*

BS EN 206-1:2000, *Concrete – Part 1: Specification, performance, production and conformity*

BS EN 212, *Wood preservatives – General guidance on sampling and preparation for analysis of wood preservatives and treated timber*

BS EN 287-1, *Qualification test of welders – Fusion welding – Part 1: Steels*

BS EN 480, *Admixtures for concrete, mortar and grout – Test methods*

BS EN 844-9, *Round and sawn timber – Terminology – Part 9: Terms relating to features of sawn timber*

BS EN 934, *Admixtures for concrete, mortar and grout*

BS EN 10025-2, *Hot rolled products of structural steels – Part 2: Technical delivery conditions for non-alloy structural steels*

BS EN 10056-1, *Specification for structural steel equal and unequal angles – Part 1: Dimensions*

BS EN 1011-1, *Welding – Recommendations for welding of metallic materials – Part 1: General guidance for arc welding*

BS EN 1011-2, *Welding – Recommendations for welding of metallic materials – Part 2: Arc welding of ferritic steels*

BS EN 10210-1, *Hot finished structural hollow sections of non-alloy and fine grain steels – Part 1: Technical delivery requirements*

BS EN 10210-2, *Hot finished structural hollow sections of non-alloy and fine grain steels – Part 2: Tolerances, dimensions and sectional properties*

BS EN 10219-1, *Cold formed welded structural hollow sections of non-alloy and fine grain steels – Part 1: Technical delivery requirements*

BS EN 10219-2, *Cold formed welded structural hollow sections of non-alloy and fine grain steels – Part 2: Tolerances, dimensions and sectional properties*

BS EN 10223, *Steel wire and wire products for fences*

BS EN 10223-1, *Steel wire and wire products for fences – Part 1: Zinc and zinc alloy coated steel barbed wire*

BS EN 10223-2, *Steel wire and wire products for fences – Part 2: Hexagonal steel wire netting for agricultural, insulation and fencing purposes*

BS EN 10223-5, *Steel wire and wire products for fences – Part 5: Steel wire woven hinged joint and knotted mesh fencing*

BS EN 10240, *Internal and/or external protective coatings for steel tubes – Specification for hot dip galvanized coatings applied in automatic plants*

BS EN 10244-2, *Steel wire and wire products – Non-ferrous metallic coatings on steel wire – Part 2: Zinc or zinc alloy coatings*

BS EN 10255, *Non-alloy steel tubes suitable for welding or threading – Technical delivery conditions*

BS EN 10296-1, *Welded circular steel tubes for mechanical and general engineering purposes – Technical delivery conditions – Part 1: Non-alloy and alloy steel tubes*

BS EN 12620, *Aggregates for concrete*

BS EN 12839:2001, *Precast concrete products – Elements for fences*

BS EN 12878, *Pigments for the colouring of building materials based on cement and/or lime – Specifications and methods of test*

BS EN ISO 12944, *Paints and varnishes*

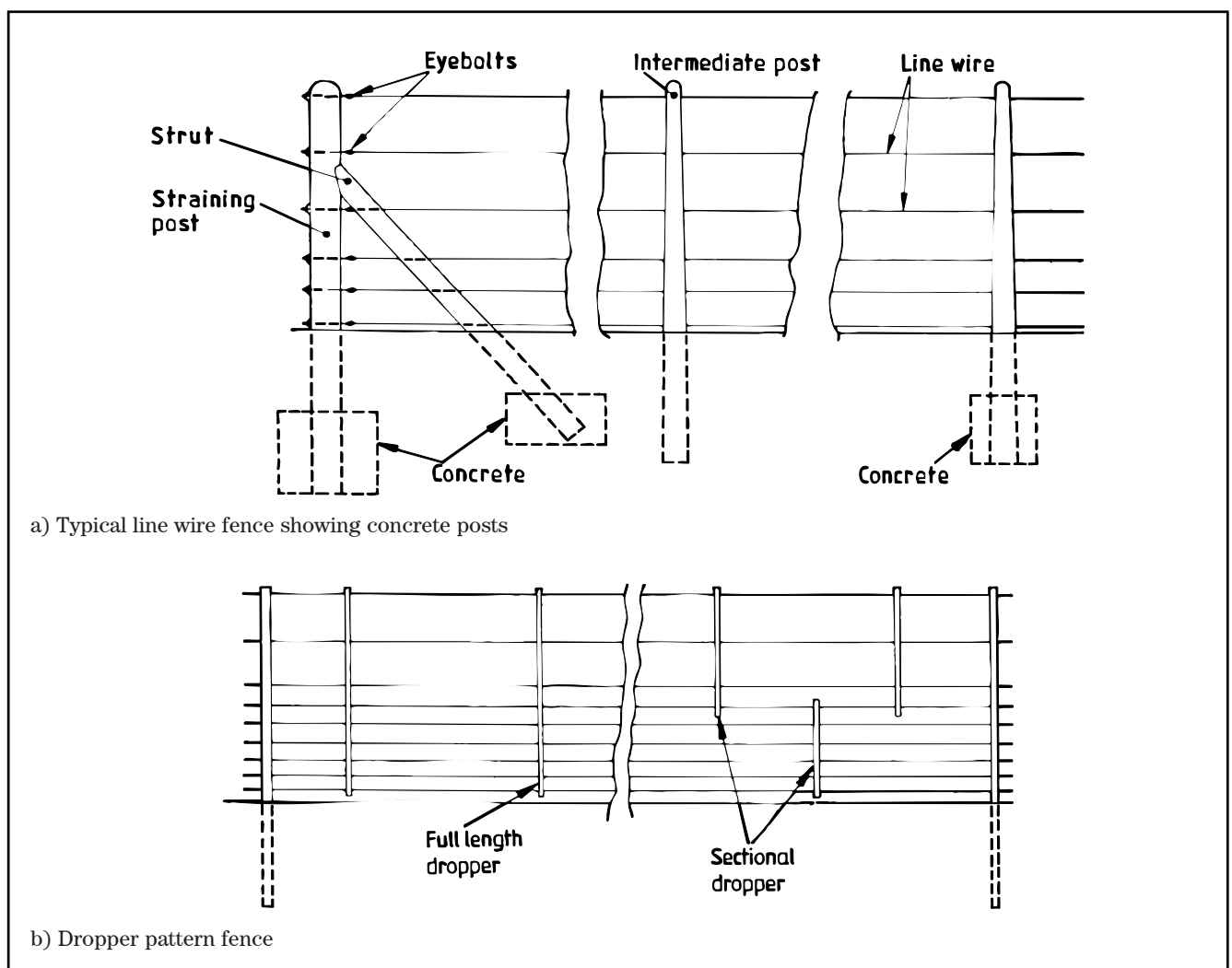
BS EN ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods*

DIN 1615, *Welded circular unalloyed steel tubes not subject to special requirements – technical delivery conditions*

3 Terms and definitions

For the purposes of this part of BS 1722, the terms and definitions given in BS EN 844-9 and Figure 1 apply.

Figure 1 General characteristics of strained wire fences



4 Materials for general pattern strained wire fences

4.1 General

Strained wire fences shall conform to the general requirements of Table 1.

NOTE The sizes specified are minimum requirements. Larger sizes can be used, except if this could adversely affect the fitting of components or if replacement parts are required to match with those already present.

Table 1 General requirements for strained wire fences

Type of fence						Application ^{A)}	Height of top wire	No. of horizontal wires	Spacings between horizontal wires, from the top wires H ^{B)}
Concrete posts		Steel posts		Wooden posts					
General pattern	Dropper pattern	General pattern	Dropper pattern	General pattern	Dropper pattern				
SC 90	DC 90	SS 90	DS 90	SW 90	DW 90	Housing	m	mm	mm
SC 105A	DC 105A	SS 105A	DS 105A	SW 105A	DW 105A	General	1.05	5	250, 250, 230, 150
SC 105B	DC 105B	SS 105B	DS 105B	SW 105B	DW 105B		1.05	6	250, 250, 230, 150, 100
SC 120	DCC 120	SS 120	DS 120	SW 120	DW 120		1.20	6	250, 250, 230, 150, 150
SC 135A	DC 135A	SS 135A	DS 135A	SW 135A	DW 135A		1.35	7	250, 250, 230, 150, 150, 150
SC 135B	DC 135B	SS 135B	DS 135B	SW 135B	DW 135B		1.35	8	250, 250, 230, 150, 150, 150, 100
SC 135C	DC 135C	SS 135C	DS 135C	SW 135C	DW 135C	Special purposes	1.35	9	250, 225, 225, 150, 125, 125, 100, 75
—	DC 180	—	DS 180	—	DW 180		1.80	11	225, 225, 200, 175, 175, 175, 150, 125, 100
—	DC 210	—	DS 210	—	DW 210		2.10	16	100, 100, 100, 100, 100

NOTE To prevent damage to the fence by animals, additional lines of barbed wire should be attached to the face of the posts in a suitable position (see 5.4).

^{A)} The applicability of fences is dependent on many factors which cannot be standardized, and the selection of fence type should be made for particular circumstances.

^{B)} Top wire secured 75 mm below the top of concrete or wood posts, or 25 mm below the top of steel posts (see 5.3.1.1).

4.2 Wire

NOTE Wire fittings are described in 4.6.

Wire shall conform to BS EN 10223 or BS 4102 and shall be one of the following:

- a) zinc or zinc coated alloy wire with nominal wire diameter of 4.0 mm, 4.5 mm or 5.0 mm;
- b) zinc or zinc alloy coated high tensile wire with nominal wire diameter of 2.5 mm, 2.55 mm or 3.15 mm;
- c) organics coated high tensile wire with a zinc or zinc alloy coated core diameter of 3.15 mm and a 4.00 mm overall diameter.

Galvanized stirrup wire shall be of low carbon steel (mild steel) and shall have a nominal wire diameter of 2.5 mm. Organics coated stirrup wire shall have a nominal core diameter of 2.5 mm and a nominal outside diameter of 3.55 mm.

Barbed wire shall conform to BS EN 10223-1.

4.3 Concrete posts and struts

4.3.1 General

Concrete fence posts and struts shall conform to the dimensions specified in Table 2.

Straining posts and struts shall not be tapered. Straining posts with a firm bearing for struts, within the top third of the length above ground shall be used. Straining posts shall be holed for attaching straining fittings. Holes shall be offset from the face of the strut to prevent line wires snagging, unless the line wires are to be passed through the strut. If the line wires are to be passed through the strut, a strut with holes or slots shall be used.

Intermediate posts shall be tapered to 75 mm × 75 mm at the top and shall be holed for attaching line wires.

Spacing of horizontal line wires shall be as specified in Table 1.

4.3.2 Materials

Concrete posts and struts shall be of steel reinforced concrete conforming to BS EN 12839 and Annex A.

4.3.3 Tolerances on size

Concrete components shall conform to the sizes specified in Table 2 within the following tolerances:

- a) a demoulding draw allowance of up to 4 mm on each of two opposing sides;
- b) length of posts: $\pm 1\%$;
- c) cross-section: ± 3 mm;
- d) an allowance on the base dimensions of intermediate posts, if a mould base with dimensions conforming to Table 2 is used for shorter posts, using a stopping-off plate located not more than 300 mm from the base of the mould.

NOTE The cross-section should be measured about the centre lines.

4.3.4 General construction

Posts shall be holed to the appropriate size to allow the fixing of line wires, etc. of the dimensions specified in 4.2. The hole for the top line wire shall be approximately 75 mm below the top of the post (excluding any extension for barbed wire). Holes for bolts shall allow the bolt to be freely inserted. Holes for wire shall allow a nominal 6 mm diameter bolt to be freely inserted. All holes shall be free from obstructions and accurately positioned within ± 5 mm.

The long arrises formed in the base of the mould of the post shall either be rounded or all their sharp edges shall be removed. The arrises formed at the top of the mould shall be free from overfill.

The heads of posts shall be either weathered or half rounded in order to prevent lodgement of water.

Table 2 Dimensions of concrete fence posts and struts

Fence height type m	Intermediate posts		Straining posts		Struts ^{A)}	
	Length m	Base dimensions mm	Length m	Section mm	Length (approx) m	Section mm
0.90	1.57	100 × 100	1.57	100 × 100 or 125 × 125	1.50	75 × 75 or 100 × 75 ^{B)}
1.05	1.72	—	1.87	125 × 125	1.83	100 × 75
1.20	1.87	125 × 125	2.02	—	1.98	—
1.35A and B	2.02	—	2.17	—	2.13	—
1.35C	2.17	—	2.32	150 × 150	2.13	—
1.80	2.62	—	2.77	200 × 200	2.73	100 × 100
2.10	2.92	—	3.07	—	3.03	—

^{A)} These lengths are suitable for struts fixed at an angle of 45° on level ground. If site conditions make use of struts of these lengths unsuitable, the length should be specified.

^{B)} The larger section is for use with high tensile or spring steel line wires.

4.4 Steel posts and struts

NOTE See 4.6 for steel fittings.

4.4.1 Materials and protective treatment

Steel grades for posts, struts, base plates and caps, and requirements on corrosion protective treatments that can be applied, shall be in accordance with Annex B.

4.4.2 Tolerances on size

Steel components shall conform to the sizes specified, within the following tolerances:

- an allowance on length of ± 10 mm;
- an allowance on cross-section as specified in the applicable material standards (see Table B.1).

4.4.3 General construction

Steel components shall be free from sharp edges and burrs. The tops of all hollow steel posts shall be capped.

Posts shall be holed for the attachment of line wires, etc. as specified in 4.4.4. Holes for the top line wire shall be 25 mm below the top of the post. All holes shall be free from obstructions.

4.4.4 Fence posts and struts

NOTE 1 The recommended dimensions for steel posts and struts produced from rolled steel angle, round tube and rectangular or round hollow sections are given in Table 3.

NOTE 2 The use of thicker walls than those shown in the table for both posts and struts is permissible, if agreed between purchaser and supplier.

NOTE 3 Alternative section sizes to those shown given in Table 3, (e.g. 38 mm/44.5 mm or 51 mm OD circular) can be used in appropriate cases, if agreed between purchaser and supplier.

Straining posts and struts shall either be fitted with base plates (see 4.4.5) or have spragged ends. Straining posts and struts shall be holed for bolting together with an 8 mm bolt within the top third of the length of the straining post above the ground level. In addition, straining posts shall be holed to allow the attachment of straining fittings.

Intermediate posts shall have spragged or dowelled ends as appropriate or shall be fitted with base plates, or be pointed for driving into the ground. Intermediate posts shall be holed to allow the attachment of the top and bottom horizontal wires, and at least one intermediate horizontal wire.

4.4.5 Base plates and dowels

Base plates shall have a minimum specified thickness of 3 mm and shall be bolted or welded to posts. Welded base plates shall be welded in two places and for a length not less than 50% of the sum of the external faces of the posts or struts. Base plates for steel straining posts and struts shall project at least 50 mm all round the post. Base plates for steel intermediate posts shall project at least 40 mm from at least one external face of a post. Dowels shall be of steel and shall be of at least 10 mm in diameter.

Dowels shall be driven through the post within 250 mm of the base of the post and shall project at least 50 mm from either side of the post.

4.4.6 Welding

All welding operations shall be carried out in accordance with BS EN 1011-1 and BS EN 1011-2, by suitable personnel qualified in accordance with BS EN 287-1.

4.5 Timber posts and struts

4.5.1 Materials

Timber posts and struts shall be of square sawn timber or round timber conforming to BS 1722-7.

4.5.2 Tolerances on size

Timber components shall conform to the sizes specified in Tables 4 and 5 within the following tolerances:

- a) an allowance on size of 1% reduction for every 5% of moisture content below 28%;

NOTE The sizes specified in Tables 4 and 5 are for timber with a moisture content of 28% determined in accordance with Annex E.

- b) an allowance on length of posts of ± 50 mm;
- c) an allowance on other dimensions of:
 - 1) sawn timber (see Table 4): under 75 mm: ± 3 mm;
75 mm and over: ± 6 mm.
 - 2) round timber (see Table 5): ± 3 mm on diameters under 75 mm;
 ± 6 mm on diameters of 75 mm and over.

4.5.3 Timber fence posts and struts

Timber fence posts and struts shall conform to the dimensions specified in Tables 4 and 5. Sawn fence posts and struts shall have a single cross-section throughout. Round fence posts and struts shall be sufficiently straight to provide at least one face to which wires can be fixed.

Straining posts and struts shall be cut square across their base. Straining posts shall be notched for struts at a point within one half and two thirds up the straining post measured above the ground level. Intermediate posts shall either be cut square across or shall be pointed for driving.

4.6 Fittings

4.6.1 Eyebolt strainers

Eyebolt strainers shall consist of 250 mm long bolts of at least 9.5 mm diameter and with a welded eye at one end. They shall be threaded and fitted with nuts and washers. Two-way eye bolt strainers shall be fitted with ring nuts. Eyebolt strainers and cleats shall be hot dip galvanized in accordance with BS EN ISO 1461.

4.6.2 Winding brackets

Winding brackets intended for attachment to a post shall be of mild steel, flat and at least 25 mm × 3 mm. Winding brackets shall have a 12 mm minimum diameter winding bolt with a friction type ferrule or ratchet winder.

Each winding bracket shall have one fixing bolt, provided with two nuts and one washer, which can be either:

- a) an eye bolt of 9.5 mm minimum diameter with a welded eye; or
- b) a bolt of 10 mm diameter, with a ring nut when for use at intermediate straining posts; or
- c) a tubular bolt threaded at both ends.

Wire winding fittings for use in-line with line wires or barbed wire shall be manufactured from mild steel, flat, not less than 45 mm × 2 mm diameter and shall be fitted with a winder bolt of 2 mm diameter with a friction type ferrule or ratchet winder. One end of the winding bracket shall be provided with a hole for the attachment of a line of wire.

Winding brackets, fixing bolts and nuts shall be hot dip galvanized in accordance with BS EN ISO 1461.

Table 3 Dimensions of steel fence posts and struts

Fence height m	Intermediate posts					Straining posts					Struts ^{A)}			
	Length m		Section			Length m		Section			Length m		Section	
			Rolled steel angle mm	Circular hollow section mm	Rectangular hollow section mm			Rolled steel angle mm	Circular hollow section mm	Rectangular hollow section mm				
0.90	1.52		40 × 40 × 5	33.7 × 2.6	20 × 25 × 2.5	1.52	50 × 50 × 5	48.3 × 3.2	50 × 50 × 4	1.52	40 × 40 × 5	26.9 × 3.2	25 × 25 × 2.5	
1.05	1.67		45 × 45 × 5	42.4 × 2.6	40 × 40 × 3	1.82	60 × 60 × 8	76.1 × 3.2	60 × 60 × 34	1.67	45 × 45 × 5	42.4 × 3.2	40 × 40 × 3	
1.20	1.82					1.97				1.82				
1.35	1.97					2.27				1.97				
1.8	2.57		50 × 50 × 6	48.3 × 3.2	50 × 50 × 3		80 × 80 × 10	114.3 × 3.6	100 × 3 50 × 4	2.72 ^{B)}	50 × 50 × 6	60.3 × 3.2		
2.1	2.87					2.72				3.02 ^{C)}	60 × 60 × 6	60.3 × 3.2		

^{A)} These lengths are suitable for struts fixed at an angle of 45° on level ground. If site conditions make the use of struts of these lengths unsuitable, the length should be specified.

^{B)} Straining posts and struts not set in concrete shall be increased in length by 300 mm and posts shall be set 300 mm deeper in the ground.

^{C)} Doubled struts shall be used with dropper pattern fences.

A) These lengths are suitable for struts fixed at an angle of 45° on level ground. If site conditions make the use of struts of these lengths unsuitable, the length should be specified.

B) Straining posts and struts not set in concrete shall be increased in length by 300 mm and posts shall be set 300 mm deeper in the ground.

C) Doubled struts shall be used with dropper pattern fences.

Table 4 Sawn timber fence posts and struts

Fence height m	Intermediate posts		Straining posts		Struts ^{A)}	
	Length m	Section mm	Length m	Section mm	Length m	Section mm
C1 0.90	1.57	75 × 75	1.5 or 1.8 ^{C)}	100 × 100 or 125 × 125 ^{D)}	1.57	75 × 75
1.05	1.8		1.8		1.8	
1.20	1.8	100 × 100	2.1	125 × 125	2.1	100 × 100 or 100 × 50 (twin)
1.35 ^{A), B)}	2.1		2.1		2.1	
1.35 ^{C)}	2.1		2.4		2.1	
1.80	2.7		2.7	150 × 150	2.7	
2.10	3		3		3	

C1

A) These lengths are suitable for struts fixed at an angle of 45° on level ground. If site conditions make the use of struts of these lengths unsuitable, the length might need to be specified.
 B) When not set in concrete the lengths of straining posts and struts shall be increased by 300 mm and posts set 300 mm deeper in the ground.
 C) The longer length is for use with high tensile line wire.
 D) The larger section is for use with high tensile line wire.

Table 5 Round timber fence posts and struts

Fence height m	Intermediate posts		Straining posts		Struts ^{A)}	
	Length m	Top (min) mm	Length ^{B)} m	Top diameter (min) mm	Length ^{B)} (approx.) m	Top diameter ^{C)} (min) mm
C1 0.90	1.5	65	1.5 or 1.8 ^{D)}	100 or 125 ^{E)}	1.5	65
1.05	1.8		1.8		1.8	
1.20	1.8	75	2.1	125	2.1	
1.35 ^{A), B)}	2.1		2.1		2.1	75 or 100
1.35 ^{C)}	2.1		2.4		2.1	
1.80	2.7		2.7		2.7	
2.10	3		3	150	3	

C1

A) These lengths are suitable for struts fixed at an angle of 45° on level ground. If site conditions make the use of struts of these lengths unsuitable, the length should be specified.
 B) When not set in concrete the lengths of straining posts and struts shall be increased by 300 mm and posts set 300 mm deeper in the ground.
 C) Dimensions are under bark measurements. If cleft or quartered timber is used, this is the diameter of a circle that fits inside all parts of the perimeter of the top of the post or strut.
 D) The longer length is for use with high tensile line wire.
 E) The larger section is for use with high tensile line wire.

4.6.3 Staples

Hair-pin staples shall be of round wire at least 3 mm in diameter, or sectional wire with the same cross-sectional area, with a zinc coating conforming to BS EN 10244-2. Staples for timber posts shall be 40 mm × 4 mm of round or sectional wire with a zinc coating conforming to BS EN ISO 1461.