

Data sheet: V2.1

Special Profiles

Fencing profiles specifications

General description

ArcelorMittal South Africa, Vereeniging Steel produces a range of hot-rolled fencing profiles. Fencing profiles are rolled to the approximate dimensions shown.

The SP mill in Pretoria is ideal for the rolling of complex steel profiles. It is equipped with a re-heating furnace, in line roughing mill, cross-country finishing mill and cooling bank. The finishing area is equipped with cold saws, straightening machines and painting facilities.

Chemical composition

Fencing profiles are hot-rolled from a grade of steel suitable for the intended end use.

Corrosion protection

In order to supply a cost effective product a low cost paint (coal tar - naphthalene solution) is applied to fencing standards only to render a presentable product without guarantee that it will last for a prolonged period, especially when used in corrosive conditions such as damp areas. The process and paint quality cannot guarantee that surface rust and scratch marks will not occur during handling, installation and use.

Quality assurance

Quality assurance systems in use at the works are based on the requirements of SANS ISO 9001: 2008.

Supply conditions

Fencing posts and droppers are supplied in terms of ArcelorMittal South Africa's price list number S04 and the general conditions of sale.

Dimensions

The following fencing profiles are available from ArcelorMittal South Africa. Dimensions are in mm.

"Y"-profile fencing posts (light gauge)

Pattern

"Y"-section with ribs on the front two legs and holes in the back so as to accommodate wire spacing as per SANS 280: 1970 – "*Hole location in fencing posts and droppers*". 3.0mm - 5.0mm diameter holes are roughly formed at 50mm to 60mm intervals forming apertures of approximately 5mm per side.

Mass (average)

2.0 kg/m

For further information, contact:

ArcelorMittal South Africa Limited, Vereeniging Works, PO Box 48, Vereeniging 1930. Tel (016) 440 3691 Fax (016) 440 3743
e-mail address: enquiries.vereeniging@arcelormittal.com

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“Y”-profile fencing posts (heavy gauge)

Pattern

“Y”-section with ribs on the front no holes in order to accommodate wire spacing as per ASTM 702: 1989. This section is recommended for high game fences of 2,4 m and above.

Mass (average)

2.3 kg/m

Refer to SPE 45. Other lengths are available on request.

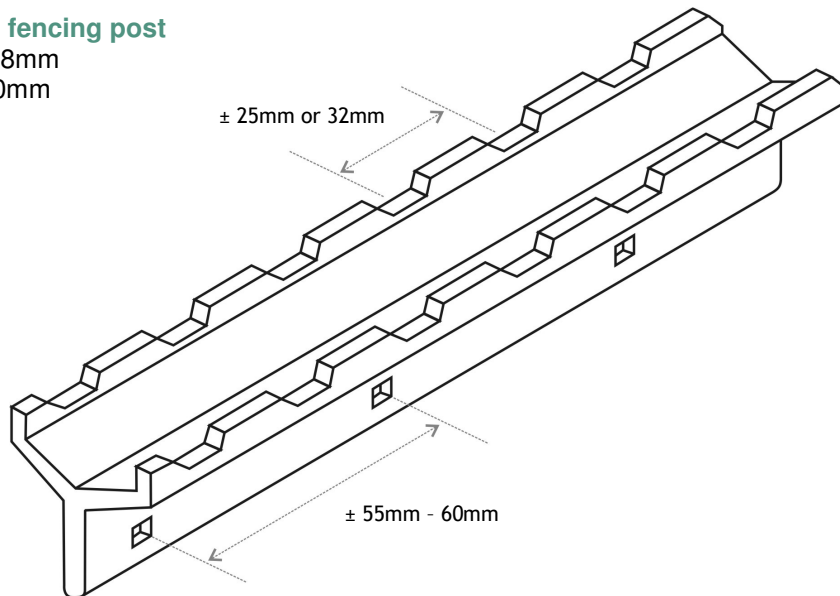
Bundle size

Approximate 100 units/pack. Packs consist of 10 x 10 sub-bundles and are wire bound by hand.

Y profile fencing post

Height: 38mm

Width: 40mm



“Y” post (light gauge)

“Y” post (heavy gauge) – no holes

Area	3,835 cm ²
I _{xx}	9,173 cm ⁴
I _{yy}	1,129 cm ⁴
Z _{xx}	4,475 cm ³
Z _{yy}	0,903 cm ²
Nominal mass	3,00 kg/m

I = Second moment of area

Z = Section modulus

Note: all dimensions are approximate

Use

“Y” post (light gauge)

Support and secure line wires between anchor posts/ poles. Recommended for:

1. Small stock and domestic fences
2. Jackal proof fences
3. Railway line fencing
4. Highway fences

“Y” post (heavy gauge)

Support and secure line wires between anchor posts/ poles. Recommended for:

1. Game fencing
2. Large stock

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This is the only “Y” standard where material will be guaranteed against failure.

Installation method

1. Installation, following the contour as per Fig 4.1(p11) in: *Heinings, Hoofstuk 16.1 - Plaasheinings, Nasionale Grondbewaringshandleiding.*
2. These fencing posts are not recommended when the lacing/stringing installation method (wire through the holes) is used. Due to the hot rolling process, burrs are formed in and around the holes resulting in the galvanising being stripped from the wires. Due to the design of the posts, failure of the fence will result in extensive replacement work if a post should fail. Thus no guarantee will be given should the light gauge Y-posts be used for other than their intended use as specified and/or if the fence is stringed.
3. In order to counteract induced vibration on the Y-posts, it is recommended that every fifth post be supported by means of a 50mm steel/wooden pole. Due to the height and the amount of wires on these fences when used as high fences, wind causes the fence to vibrate, resulting in fatigue and breakage the post when not supported.
4. Not suitable for use as anchor or straining posts.

Straightness

Material will be supplied un-straightened with straight cut ends on both ends. A commercial straightness tolerance of 5mm maximum deviation over 1 metre will apply.

“I” Profile fencing posts

Pattern

“I”-profile with no ribs on the two legs and holes in the centre section so as to accommodate wire spacing as per SANS 280: 1970 – “*Hole location in fencing posts and droppers*”. 5.0mm-10.0mm diameter holes are roughly formed at 50mm to 60mm intervals forming apertures of approximately 5mm per side.

Mass (average)

3.0 kg/m

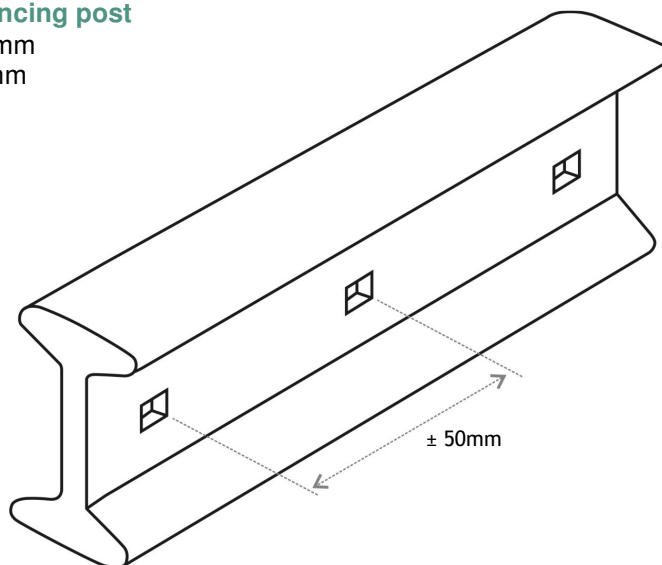
Bundle size

Approximate 100 units/pack. Packs consist of 10 x 10 sub-bundles and are wire bound by hand.

I profile fencing post

Height: 41mm

Width: 25mm



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Area	3,835 cm ²
Ixx	9,173 cm ⁴
Iyy	1,129 cm ⁴
Zxx	4,475 cm ³
Zyy	0,903 cm ³
Nominal mass	3,00 kg/m

I = Second moment of area

Z = Section modulus

Note: all dimensions are approximate

Use

Support and secure line wires between anchor posts/ poles. Recommended for:

1. Small stock and domestic fences
2. Jackal proof fences
3. Railway line fences
4. Highway fences

Installation method

1. Installation, following the contour as per Fig 4.1(p11) in: *Heinings, Hoofstuk 16.1- Plaasheinings, Nasionale Grondbewaringshandleiding.*
2. Due to the hot rolling process, burrs are formed in and around the holes resulting in the galvanising being stripped from the wires when the lacing/stringing installation method (wire through the holes) is used.
3. Not suitable for use as anchor or straining posts.

Straightness

Material will be supplied un-straightened with one end sharpened for easy installation. A commercial straightness tolerance of 5mm maximum deviation over 1 metre will apply.

Ridgeback droppers

Pattern

"T"-profile with ridges rolled into the top section.

(To accommodate wire spacing as per SANS 280: 1970 "Hole location in fencing posts and droppers")

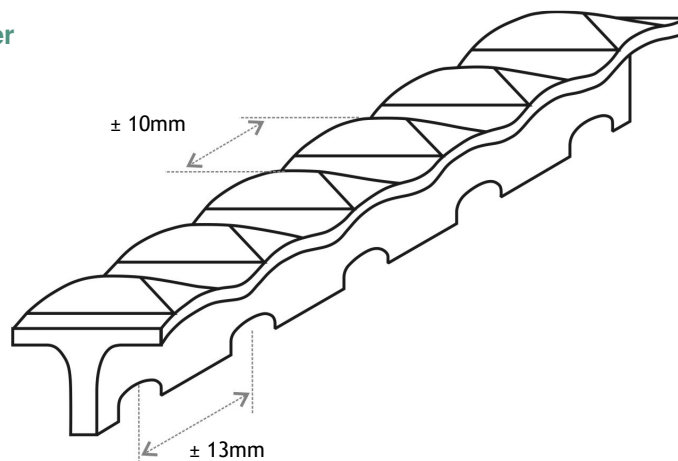
Mass (Average)

0.58 kg/m

Bundle size

Approximate 500 units/pack. Packs consist of 10x50sub-bundles and are wire bound by hand.

Ridgeback dropper



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Use

Support and secure spacing of line wires between line posts.

Installation method

Above ground, "hanging" on line wires. Fig.4.1, (p11) in: *Heinings, Hoofstuk 16.1-Plaasheinings, Nasionale Grondbewaringshandleiding.*

Straightness

Material will be supplied un-straightened with straight cut ends on both ends. A commercial straightness tolerance of 5mm maximum deviation over 1 metre will apply.

Units per 1 000 kg

Length mm	Y-profile 2,0 kg/m	Y-profile 2,3 kg/m	I-profile 3,0 kg/m	Ridgeback droppers 0,58 kg/m
950	-	-	-	1,815
1100	-	-	-	1,567
1250	-	-	-	1,379
1400	357	-	238	1,232
1550	323	-	215	1,112
1700	294	-	196	1,014
1850	270	235	180	932
2450	204	177	-	704
3050	164	142	-	-

Available Sizes and Lengths

Profile	Fencing Posts		Droppers
	Y profile 2,0 & 2,3 kg/m	I profile 3,0 kg/m	Ridgeback droppers 0,58 kg/m
Holes	With or without	Yes	No
Standard lengths (mm)	1,400	-	0,950
	1,550	-	1,100
	1,700	1,400	1,250
	1,850	1,550	1,400
	2,450	1,700	1,550
	3,050	1,850	1,850
	-	-	2,450

* Unpainted products on enquiry

* Other lengths on enquiry

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