BETAFENCE

Technical Data Sheet
Cantilever Sliding Gate Robusta®

1 Scope

This specification specifies requirements for cantilever sliding gates with Robusta® infill (see figure 1).
The gate consists of different components:

- Wing with optional dental strip and integrated tension system
- Gate posts (guiding post and lock post)
- Guiding wheels and guiding rolls

Wing and posts are made out of continuously hot dip galvanized steel sheet (Sendzimir) and subsequently coated with epoxy and polyester to assure an excellent corrosion resistance.

Cantilever sliding gates Robusta® are CE labelled, in accordance with EN 13241-1.

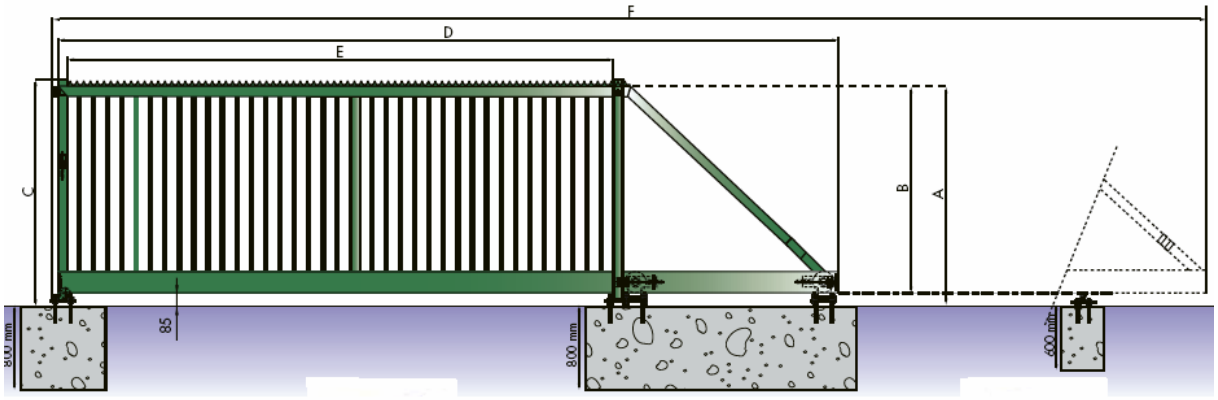


Figure 1

1.1 Normative References

- EN 10326:Continuously hot-dip coated strip and sheet of structural steels – Technical delivery conditions
- EN 10327: Continuously hot-dip coated strip and sheet of low carbon steels for cold forming - Technical delivery conditions
- EN 13241-1: Industrial, commercial and garage doors and gates - Product standard - Part 1: Products without fire resistance or smoke control characteristics
- EN 13438: Powder organic coatings for galvanized steel products for construction purposes
- ISO 9227: Corrosion tests in artificial atmospheres; salt spray tests.

2 Raw materials

2.1 Sendzimir

Used for wing and gate posts:
In accordance with EN 10326, yield strength minimum 235 N/mm².
Coating: 275 g/m² (both sides), designation Z275.

2.2 Epoxy and Polyester

Free from Lead and Cadmium. The standard colour of the polyester is green Ral 6005. Other colours are available on request.

3 Properties

3.1 Construction

3.1.1 The wing

Completely welded construction with an under beam of a specific C-profile.
The welded gate frame consists of a square horizontal tube and vertical rectangular tubes. The infill consists of welded vertical square tubes with a maximum distance between the bars of 110 mm.
Dimensions: See table 1.
A dental strip welded on top of the frame is optional for all heights.
The tension system is integrated in the rear end of the gate frame, to ensure the gate wing is kept horizontal during its movements.

3.1.2 The guiding post and lock post

The standard lock post inside and outside is made out of tubes and is equipped with a catcher and base to guide and support the wing when the gate closed.
The standard guiding post inside and outside is made out of square tubes.
Dimensions: See table 1.

3.1.3 Guiding wheels and guiding rolls:

The wing is supported and guided by 2 roller sets with ball bearings, integrated in the under beam. One roller set is mounted on the base plate of the guiding post and the second independent roller set is installed at the rear end of the wing (see figure .)
Both roller sets are fitted with rubber stoppers to guarantee a smooth and soft end running and blocking of the gate wing in manual mode.

The lateral guiding of the wing is done by 2 horizontal guiding rolls with ball bearings; guiding on the top of the guiding post.

For perfect guiding of the wing in the lock post, 2 guiding rolls are installed on the upper part of the wing and a supporting roll in the under beam of the wing.

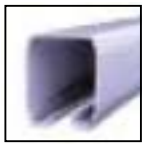
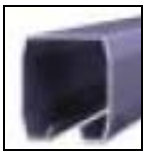
A roll is used to support the wing in the open position for gates with free passage ≥ 6 meter.

All rolls are made out of hard wearing and humidity resistant Polyacetale. The material guarantees a longevity and silent running of the gate wing. All supports are made out of stainless steel or are hot dip galvanised to assure a good corrosion resistance.

3.2 Dimensions

See table 1.

Table 1: main dimensions Cantilever Sliding Gate Robusta®

Type	*Robusta 1650*	*Robusta 2000*	*Robusta 2800*
Opening	3 to 7 m	6 to 9 m	8 to 12 m
Underbeam	163 x 150 x 4 mm 	200 x 160 x 5 mm 	280 x 200 x 5 mm 
Frame	60 x 60 x 2 mm	80 x 60 x 2 mm 80 x 60 x 3 mm (7,5-9 m)	100 x 100 x 3 mm Upper side 100 x 80 x 3 mm Vertical
Frame infill	25 x 25 x 1,5 mm	25 x 25 x 1,5 mm	30 x 30 x 1,5 mm
Distance between bars	110 mm	110 mm	110 mm
Guiding Post	80 x 80 x 3 mm	80 x 80 x 3 mm	100 x 100 x 3 mm
End Post	80 x 80 x 3 mm	80 x 80 x 3 mm	100 x 100 x 3 mm
Support Roll (in open position)	6 & 7 m	All types	All types

All other dimensions are specified in the corresponding technical drawings (available on request).
Standard types: see Betafence product brochure "Access Control".

3.3 Coating

Posts and wing are coated with zinc, and subsequently plastic coated with a double layer system: epoxy + polyester.

3.3.1 Metallic coating

Min 275 g/m² Zinc, both sides (designation Z275 in accordance with EN 10326)

3.3.2 Organic coating

Posts and wing are coated with a 2 – layer coating system (epoxy + polyester). The total layer-thickness is minimum 100 µm.

Adhesion: make two scratches by means of a hard metal pointed graving tool, penetrating through the metal and intersecting at an angle of 30° ± 5°. Lift a 30° peak with the point of a knife. The coating shall not be able to be lifted from the metal by more than 5 mm.

Resistance of the polyester to salt spray: make a rectangular diagonal cross by means of a hard metal pointed graving tool, penetrating through the metal. Test in accordance with ISO 9227 (neutral salt spray). After 720 h there shall be no corrosion beneath the polyester or loss of adhesion in excess of 5 mm from the diagonals and no signs of blistering, cracking or crazing on any part of the specimen.