

STVS MODULAR

2024

HANDRAIL - FENCE - GATE SYSTEMS



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STV'

MODULAR



M O D U L A R

HANDRAIL – FENCE – GATE

ABOUT STVS MODULAR

STVS Modular is Vietnam leading manufacturing of innovative modular handrail, Modular railing fence and Gate systems.

At STVS Modular, we do things differently! We're always on the lookout for better ways to solve the unique obstacles construction projects face, so that our customers can focus on doing what they do best.

Our various range of handrails, guardrail systems for commercial and industry are specifically designed for a wide range of industrial, commercial and civil applications. All our modular handrail systems comply with OSHA, or AS or TCVN standard, so you know you're always covered.

Our range of proprietary modular designs are manufactured in house and designed to save our customers time and money, and our personalised approach to customer service ensures you're looked after from concept to installation. Our barrier systems are fit for purpose, simple to use, and able to be modified to cater for any unique requirements, and our streamlined ordering and installation process is designed with customer convenience in mind.



© STVS MODUAR



The sliding gate and swing gate boasts the latest technology and such smooth and stable operation. Our know-how about coating and connection technology give beautiful finishing and high corrosion resistant ability for products. This give a great quality and good looking for the products in long term.

The Modular railing fence system with elegant design for high profile locations, Easily combined with entrance gates and detection systems. Secure and suitable for all terrains. Moisture and dirt resistant surfaces. This attractive fence is ideal for office buildings, schools, and other high-visibility location

From initial design to final quality assurance processes, we make sure our goods are reliable and exceptional.



PRODUCTS RANGE

Sliding gate



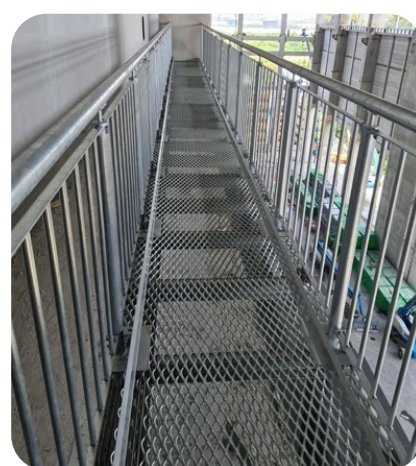
Swing gate



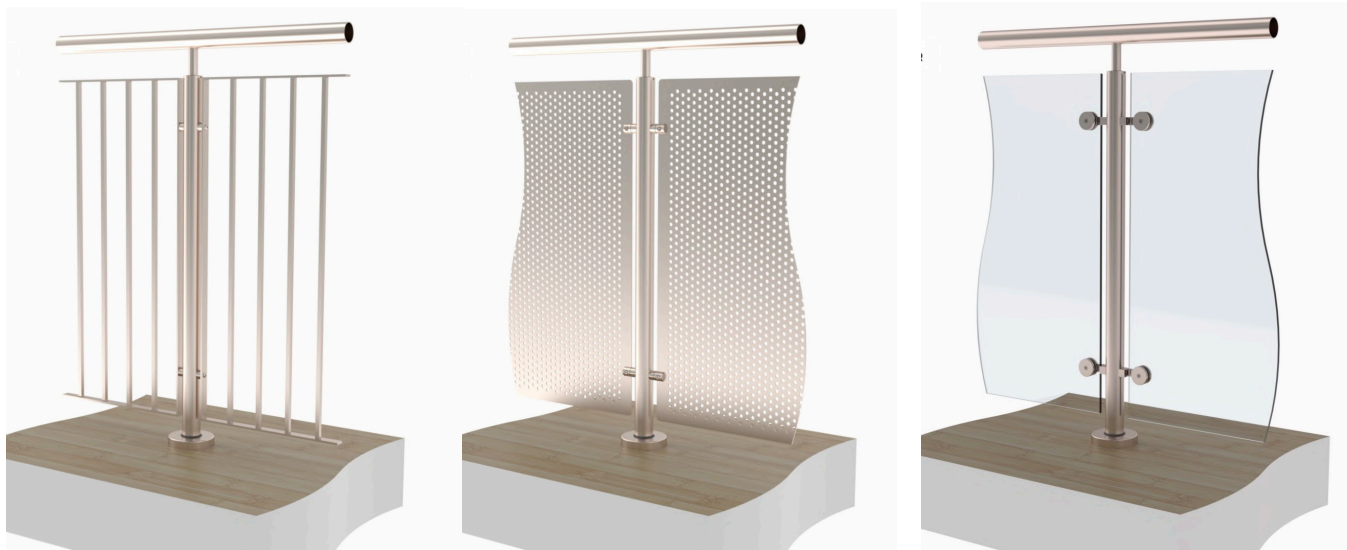
Modular railing fence



Modular handrail



Architecture balustrade



REFERENCE IN THE MARKET



HEINEKEN BEER FACTORY



MERIDIEN FACTORY



MARUBENI KRAFT FACTORY



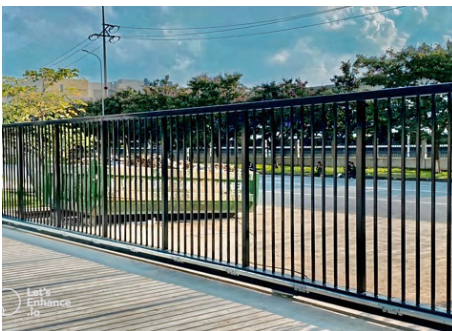
BW LOGISTIC SYSTEM



VREC FACTORY



SPECTRE FACTORY



LOGOS FACTORY



PANASONIC FACTORY



CAMSO FACTORY



OTSUKA TECHNO FACTORY



TTI FACTORY



PROJECT IN NEWZEALAND



PROJECT IN SINGAPORE



PROJECT SINGAPORE



MARUBENI FACTORY



TUNAL FISH



BEKAERT FACTORY



PEPPERL + FUCHS

TYPICAL CUSTOMER



A photograph of an industrial facility, likely a coating plant. In the foreground, a long, curved conveyor system holds numerous white, cylindrical pipes or tubes. The background shows a complex network of blue and orange structural beams, overhead cranes, and other industrial equipment. The floor is a light-colored concrete. The overall scene depicts a large-scale manufacturing or processing environment.

COATING TECHNOLOGY

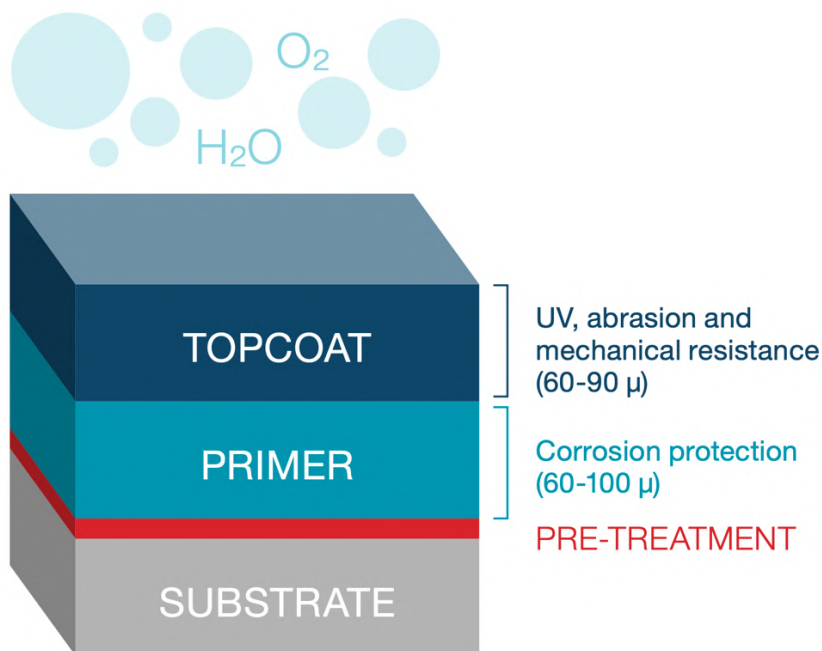
THE RIGHT PROTECTION SOLUTION FOR EVERY PROJECT

The speed of corrosion are different base on the paint process technology, material used and environment in which it is located. STVS Coating systems with 3 types of coating, each have their own characteristics that answer to these variables. They cover substrates in multiple levels of corrosivity, for different lifetime expectations, allowing us to perfectly meet each product's specific protection requirements and application limitations

Weather conditions / Atmospheric corrosivity according EN ISO 12944-2 standard

Category	Exterior	Interior
C1		Heated building with a clean atmosphere such as office, shop, school, hotel...
C2	Mainly rural regions, >20 Km from Sea side	Buildings which are not heated (storage facilities, halls)
C3	Industrial areas and inshore areas of low salinity, > 20 Km from Sea side	Production halls to facilities (laundries, breweries, dairies)
C4	Industrial areas and inshore areas of medium salinity, From 3-20 Km to the Sea side	Chemical plants (swimming pools, ship yards)
C5	Industrial areas of high humidity and aggressive atmosphere, From 500m-3Km to the Sea side	Areas of almost constant condensation and high contamination.
CX	Offshore areas of high salinity or industrial areas of extremely high humidity, Less 500m to the Sea side	Buildings and areas of almost constant condensation and aggressive contamination

STVS POWDER COATING SYSTEMS



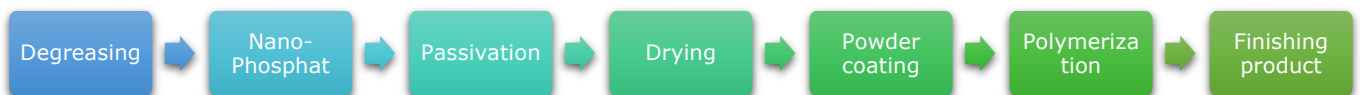
In the corrosive environment, products need to perform safely and reliably, you need to protect both their function and their exterior. We are convinced that the best solution to do so is a powder system comprising of a primer plus topcoat. The system warranted 10 years corrosion protection in level C2, C3, and 5 years up to level C5

COATING PROCESS:

❖ G1 – Single layer coating

STVS Modular standard with InterPon Polyester powder coating, exhibits a tougher cured film which provides superior damage resistance to packaging materials. It is designed to give excellent long term exterior durability and colour retenti.

Film thickness: 70-120 micromet thickness

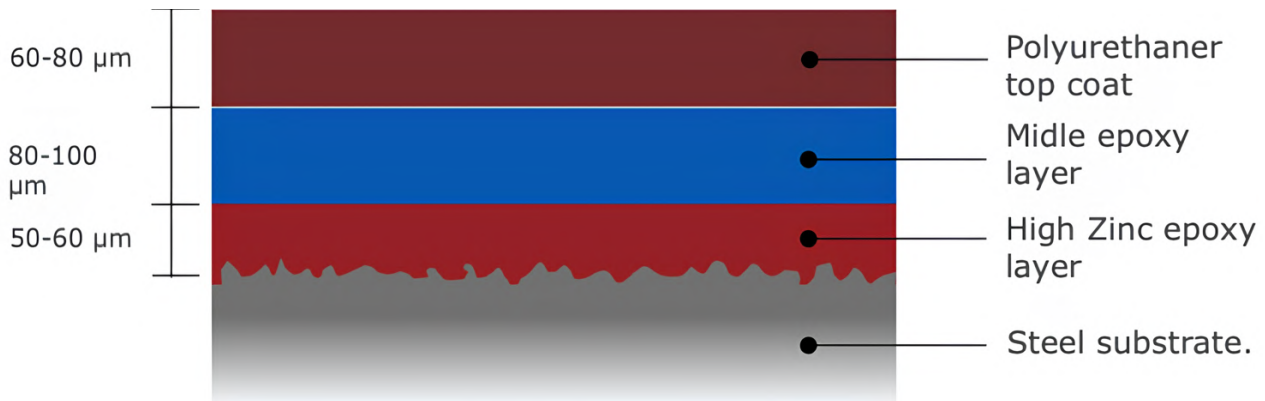


❖ G1 PLUS – Double layer coating

For highly corrosion environment as C5, C5X, an Epoxy primer or Zinc epoxy primer layer need to be applied under the top coat layer to enhance corrosion protection ability of the coating. The primer layer provides a non-porous barrier between the corrosive elements (salt, pollutants etc.) and the metal surface. Total 2 layer film thickness: 120-190 micromet



STVS MARINE COATING SYSTEMS – LIQUID PAINT



For oversize and high thickness products, liquid paint would perfectly fit demand. The STVS Marine coating system from STVS Modular applies material from PPG Marine coating, which is easy to apply with excellent corrosion, chemical, and abrasion resistance greater than that of a traditional epoxy. The high-gloss coating also has exceptional color and gloss retention, outperforming the best polyurethane in the market. Its low surface energy feature limits the accumulation of stains and dirt, and enhances the ability of the surface to self-clean. Moreover, its high solids, low VOC, and isocyanate-free composition minimizes impact to the environment.

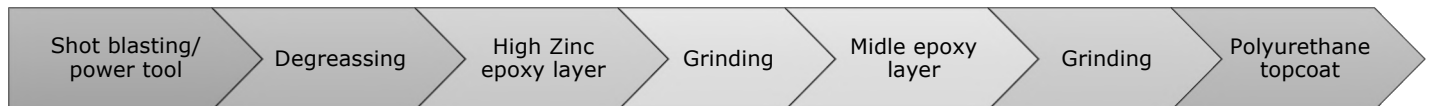


Our coatings were selected because of their proven abrasion, corrosion, seawater, and impact resistance in challenging high corrosion environments. STVS Marine coating maintains the aesthetic appearance of the products as it retains its color and gloss. It also delays the chalking and yellowing that will occur due to weathering and exposure to UV-light.

Benefits of STVS MARINE COATING:

- Extended color and gloss retention
- Excellent corrosion protection for ISO 12944 C5 environments
- Reduced ongoing maintenance frequency and costs
- Lead-free
- High solids (90% \pm 2)
- Low VOC (84 g/L) and isocyanate-free
- Unlimited recoat window
- 10-years corrosion protection warranty up to C4

COATING PROCESS:



- Steel; shot blast cleaned to ISO-Sa21/2, blasting profile 40 – 70 μ m (1.6 – 2.8 mils)
- Steel with approved zinc silicate shop primer; pretreated according to SPSS or power tool cleaned to SSPC SP3 (SPSS- Pt3)

COLORS

Standard colors:



Popular colors:



Other color upon request



THE BENEFITS OF STVS COATING SYSTEMS

❖ **High-end and Elegant appearance for the site in long term**

❖ **Low cost maintenance**

❖ **UV resistance**

❖ **Superior longevity**

Our durable coating systems are environmentally friendly and can deliver superior longevity for C4/5 environments compared to other coating solutions.

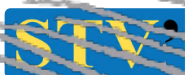
❖ **Sustainable Development:**

Powder coating is the ecological answer, the essential coating of Sustainable Development: it's VOC-free and contains no solvents or toxic components.

❖ **Robust corrosion protection performance up to 5 years in corrosivity level C5 and 10 years in corrosivity level C2, C3**

HANDRAIL

- Architecture handrail
- Modular handrail



MODULAR

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S-LUX ARCHITECTURE HANDRAIL

For a clean and graceful architecture handrail system, the S-LUX system is your first choice. Crafted from stainless steel or mild steel tubing, this system is ideal for a huge variety of applications, wherever low maintenance and high functionality is required.

The S-LUX range is produced in 3 different designs to accommodate any situation:

50 Series:

50mm diameter tubing suitable for medium loading applications.

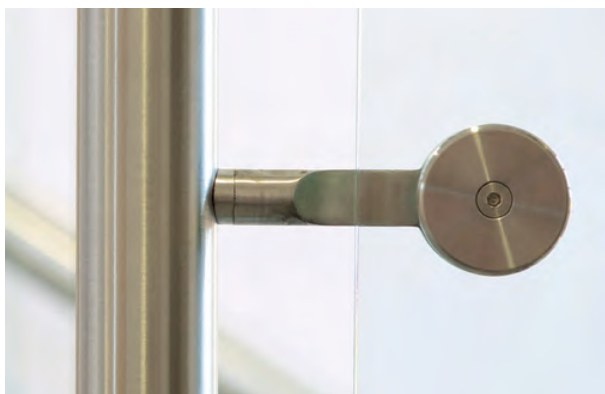
60 Series:

60mm diameter tubing suitable for high loading applications.

70 Series:

70mm diameter tubing suitable for high loading applications, such as crowd control.

The S-LUX are design and fully compliant to BS6180 standard.



INFILL



Glass



Vertical bars



Perforated panel

GLASS:

10mm tempered glass is proposed as standard. However, tempered glass should be specified only when its inherent characteristics are understood and accepted.

In high risk areas, tempered glass panels laminated glass should be considered.

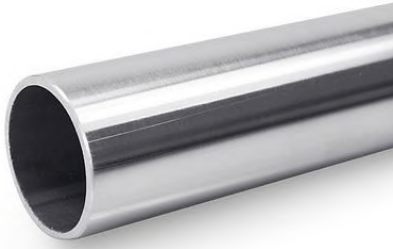
This is normally two pieces of glass bonded together by a special interlayer. If broken, the glass is retained by the interlayer and as well supported in the S-LUX balustrade it has an increased likelihood of staying in place



VERTICAL BAR PANELS

The popular vertical bar panel system provides a cost effective and robust option designed for utility areas and rear stairs. The vertical bar panel is a maintenance free and fully compliant infill well suited to all public buildings.

FINISHING



HAIRLINE POLISH STAINLESS STEEL



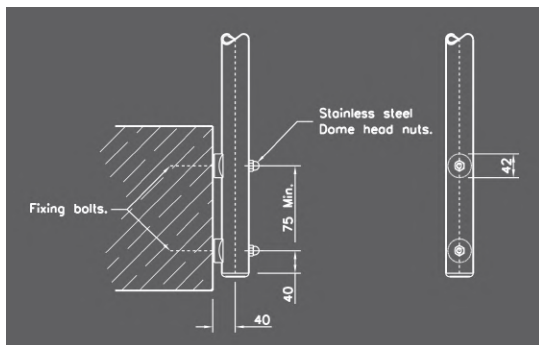
BRIGHT POLISH STAINLESS STEEL



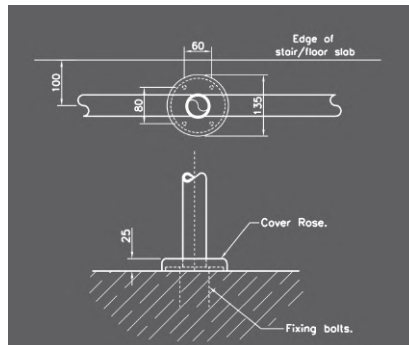
POWDER COATING COLOUR

High-end architecture coating with 10 years corrosion protection warranty

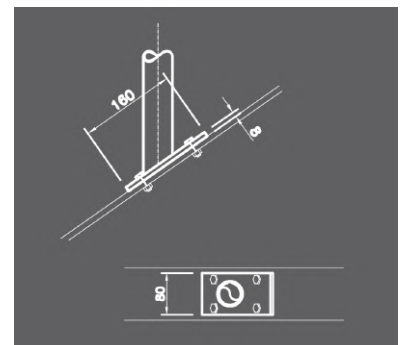
FIXING



SIDE MOUNT



TOP MOUNT



ANGLE MOUNT



STVS MODULAR HANDRAIL SYSTEMS

COST EFFICIENT AND EASY MAINTENANCE

- ❖ Easy maintenance, no site shutdown require for maintenance.
- ❖ Offering the lowest cost of product in lifetime.
- ❖ Compact packing.
- ❖ High quality finishing inside factory, reducing risk of corrosion.



SAFETY AND COMPLIANCE

- ❖ Quality standalize
- ❖ No dependence on welder skill on site.
- ❖ STVS Modular is tested systems.



LESS TIME ON SITE

- ❖ Simple, no-weld, no site hot work.
- ❖ Modular assembly and rapid, streamlined onsite installation.
- ❖ Absorb the tolerance on site condition



APPLICATION



STAIRCASE HANDRAIL



WATER TREATMENT AREAS



ROOF HANDRAIL



PARKING AREAS



WALK WAY



PLATFORM & MEZANINE

TESTED HANDRAIL SYSTEMS

DESIGN & TESTED EXCEEDS BS ISO 14122-3 STANDARD



FOCUS PULL 200 KG INTO MIDDLE OF TOP RAIL WITHIN 2 MINUTES



**PULL 150 KG INTO MIDDLE POST
RESULT NO CHANGE SHAPE**



Test Report No. VNHL1907012485HG Date: August 23, 2019 Page 1 of 6

STVS CO., LTD

37 HOA MAI, WARD 2, PHU NHUAN DISTRICT, HO CHI MINH CITY, VIETNAM

The following sample(s) was/were submitted and identified by the client as:

SGS Job No. : VNHL1907012485HG

Sample Description : ASSEMBLY HANDRAIL " (LAN CAN LAP RAP) "

Color : "MA KEM" (GALVANIZED)

Characteristic : "THEP MA KEM NHUNG NONG"

Style / Item No. : CP32HB3P0G0

Date of Production : 06/2019

Manufacturer : STVS CO., LTD

Buyer : STVS CO., LTD

Country of Origin : VIET NAM

Country of Destination : WORLD WIDE

Other Information : ASSEMBLY HANDRAIL
PIPE DIMENSION: 42.2x3.2mm
POST CENTRE DISTANT: 1500mm
HEIGHT: 1050mm
HORIZONTAL BARS QUANTITY: 2 BARS
ANCHOR BOLT: M12-100
FINISHING: HOT DIP GALVANIZED
MANUFACTURE: STVS CO., LTD

Sample Receiving Date : JULY 29, 2019

Final confirmed Date : JULY 29, 2019

Testing Period : JULY 29, 2019 TO AUGUST 05, 2019

Test Requested : SELECTED TEST (S) AS REQUESTED BY CLIENT.

Test Results : PLEASE REFER TO NEXT PAGE(S).

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Lab: Lot III/21, 19/5A St, Industrial Group III, Tan Binh IZ, Tan Phu District, HCMC, S.R. Vietnam t (84-28) 3816 0999 f (84-28) 3816 0996

Member of the SGS Group (SGS SA)



Test Report No. VNHL1907012485HG Date: August 23, 2019 Page 2 of 6

Signed for and on behalf of
SGS Vietnam LTD



Wong Cho Wing
Hardline and E&E Lab Manager

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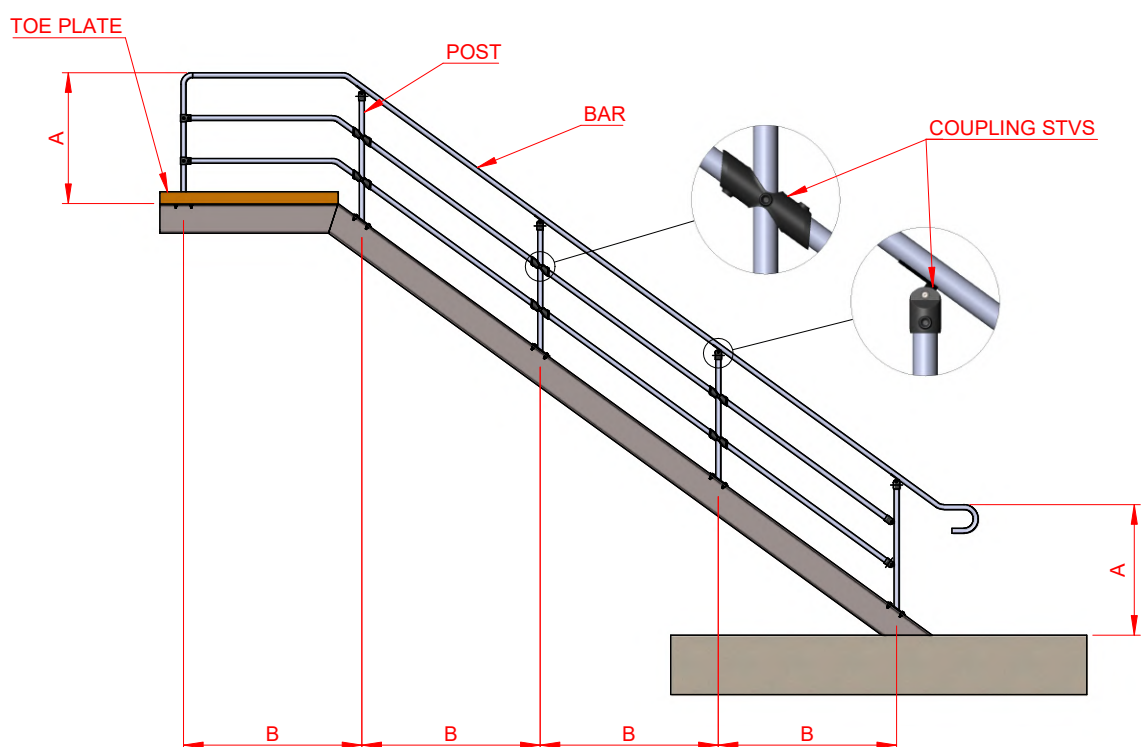
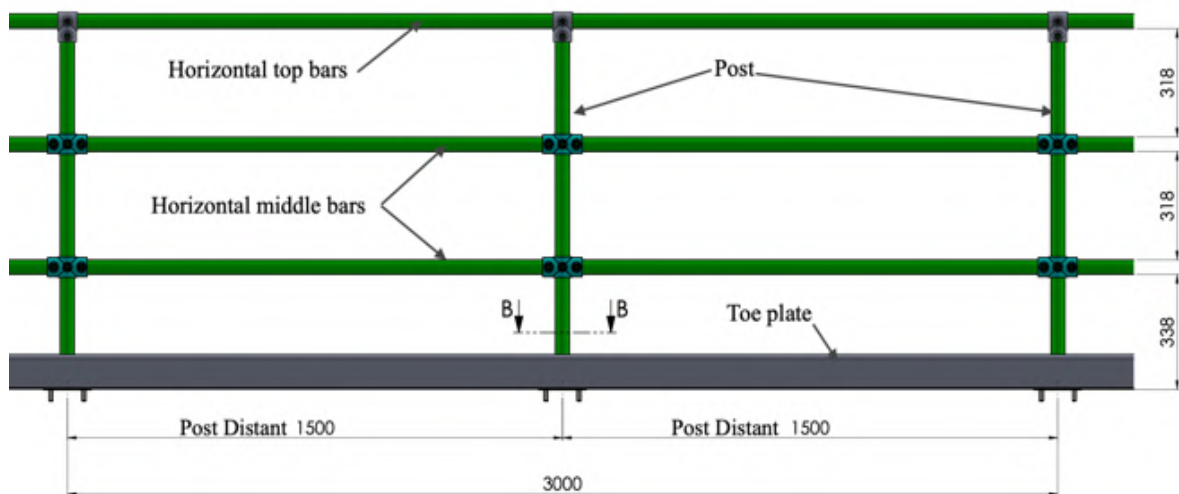
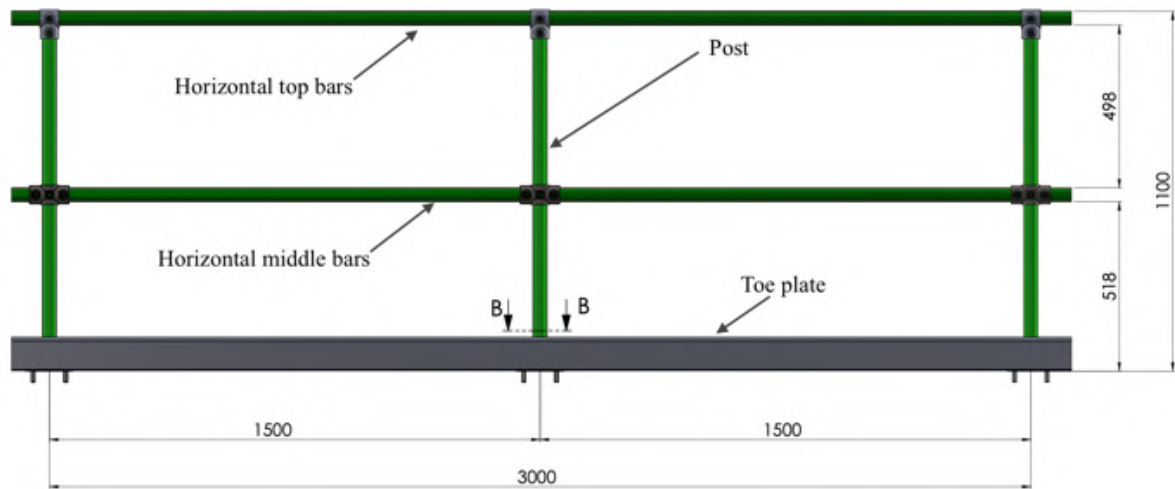
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MODULAR

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TECHNICAL SPECIFICATION



Material:

- Clamp fitting: Duction iron
- Tube: Steel tube according to ASTM A500 standard

Dimension:

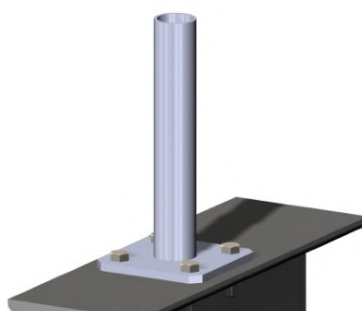
- Height: 1100mm
- Post distant: Max 1500mm
- Post section: D42.2x3.2mm
- Vertical bar section: D42.2x3.2 mm/ D42.2x2.0mm
Quantity: 1/2/3/4 bars
- Flange: 75x145x8mm
75x180x8 mm (Apply for slope mount)
120x120x8mm
- Clamp fitting: Average thickness 5mm
- Clamp locking set screw: M16-12
- Connection bolts: On steel mount: Bolt set M12-40-8.8
On concrete mount: Wedge anchor bolt M12-100
- Toe plate: Aluminum - 104mm height x 14mm

Finishing options:

- G1: Single layer Polyester powder coating - For indoor, Out door C2, C3 environment
 G1 Plus: Double layer Epoxy primer powder coating + Polyester powder coating.
 For out door C4, C5, CX environment
 G2: Hot dip galvanized – For indoor or outdoor environment
 G2 Plus: Hot dip galvanized finishing + Polyester powder coating - Recommend for C5, CX environment

Configuration:**TOP MOUNT 1 (TM1)**

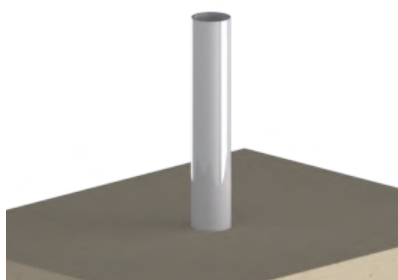
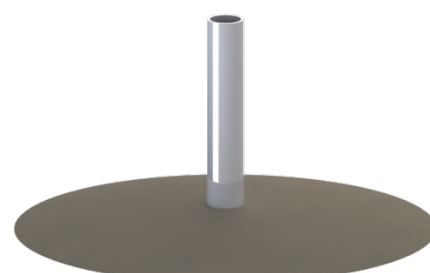
Flange 75x145mm

**TOP MOUNT 2 (TM2)**

Flange 120x120mm

**SIDE MOUNT 1 (SM1)**

Connect to the side

**ANGLE MOUNT 1 (AM1)**Flange 75x145mm to the top
slope mount**BURIED MOUNT 1 (BM1)**Buried in to concrete with the
deep 200mm**BURIED MOUNT 2 (BM2)**Buried in to the ground with
deep 500mm.

BANANA STEM TOE PLATE® SYSTEMS

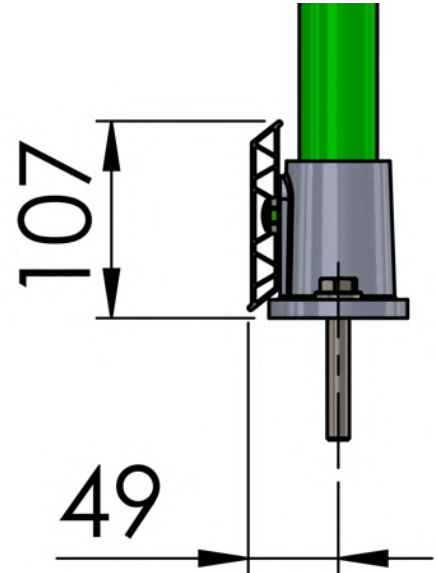
STVS unique aluminum toeplate design. This design follow BS-EN ISO 14122 standard.

Extract: 7.1.7 A toe-plate with a minimum up stand of 100 mm shall be placed 10 mm maximum from the walking level and the edge of the platform.

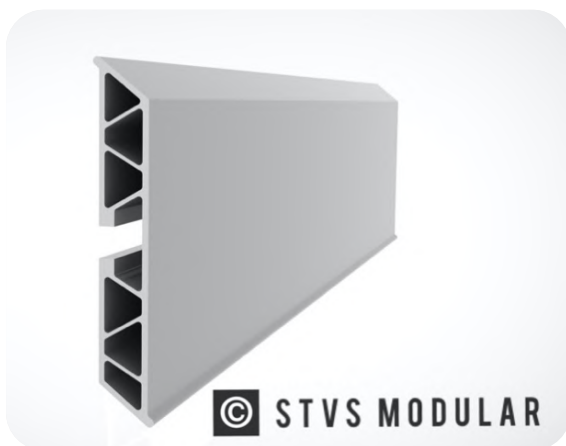
The idea from banana stem structure give super strong toeplate also allows quick and easy installation. No drilling or welding, the structure allows for secure attachment with no exposed fasteners. Banana stem structure provides rigid non-buckling performance with the benefit of light weight, easy handling.

PRODUCT SPECIFICATION:

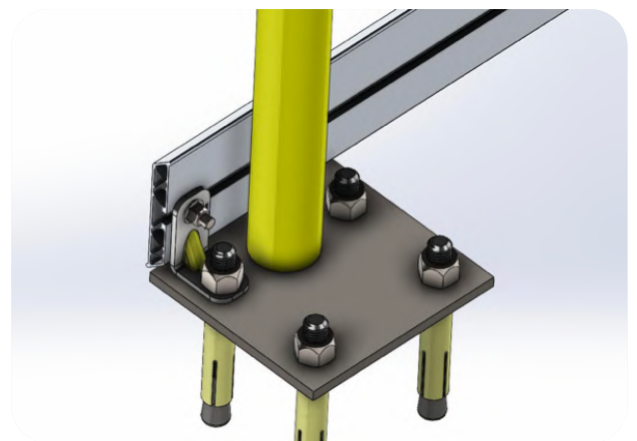
Dimension:	14mm thickness x 102mm height
Material:	Aluminum alloy 6063
Finishing:	Powder coating in silver color (Yellow color available onn request)



DURABLE - STRONGER – LIGHTER – EASY TO INSTALL



Lighter, stronger, much more beautiful and corrosion resistant compare to steel



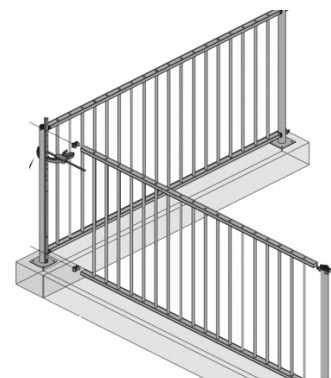
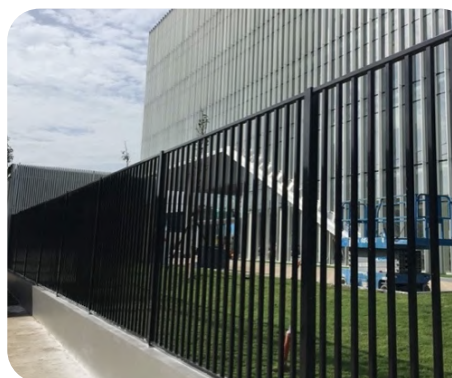
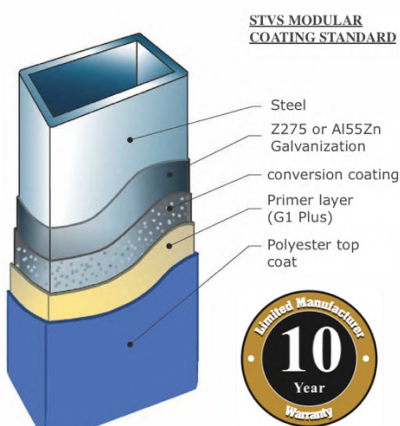
**Flexible to install at site.
Hot dip galvanized finishing for accesories**

FENCE

- Railing fence
 - ASTRA PLUS railing fence
 - ASTRA railing fence
- Mesh fence
- Chain-link fence
- Fence accesories



ASTRA PLUS RAILING FENCE



DURABLE

- STVS Modular with professional coating know-how give 10 years corrosion warranty.
- Almost no maintenance needed. At least double lower cost using compare traditional welding products.
- Impossible to remove the panel once installed.

BEAUTIFUL

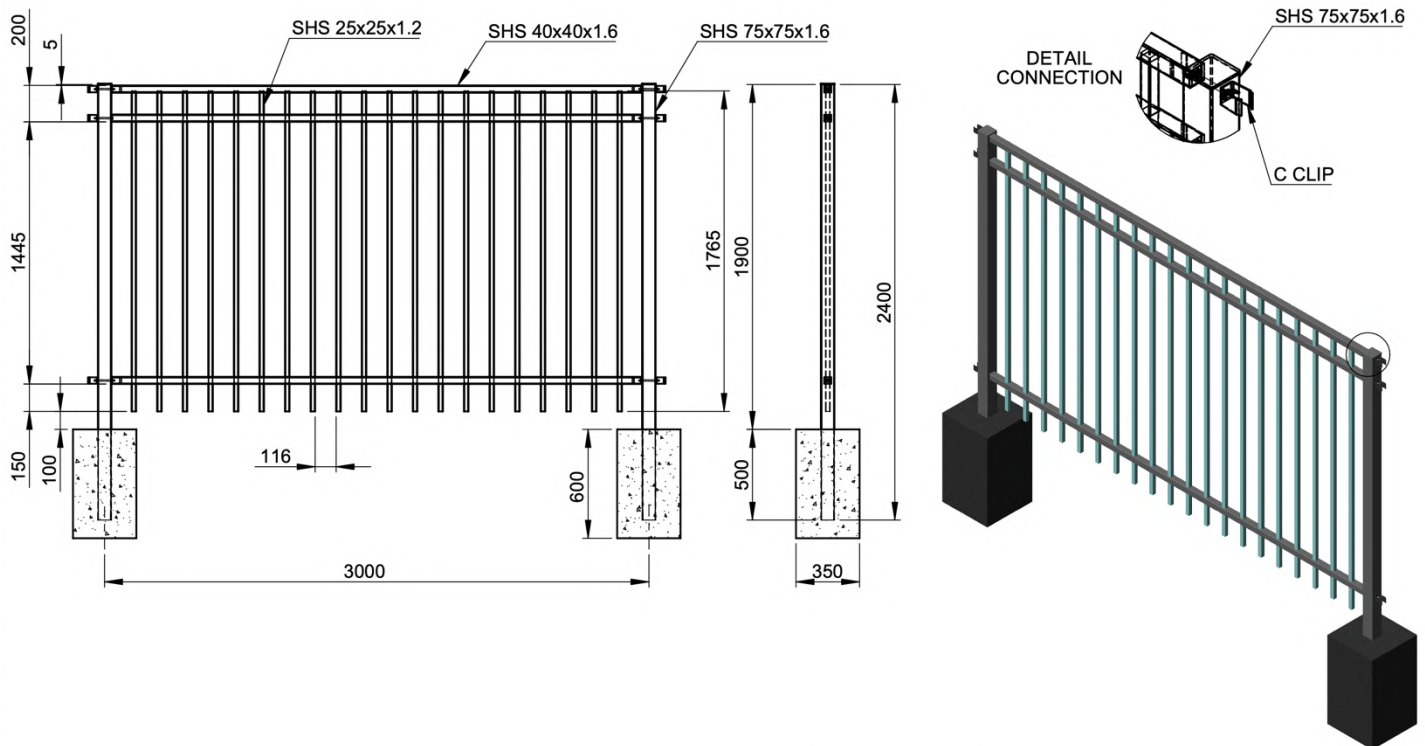
- High-end and elegant appearance that enhance the beauty of the site.
- UV resistant keep color.
- Hidden connector option give strong and smooth appearance .

EASY TO INSTALL

- Modular design that allow easy & quick installation
- Applicable for all types of configurations: Curves, Corners, Slopes, on walls... with the same standard products.

TECHNICAL SPECIFICATION:

TYPICAL DRAWING:



MATERIAL SURFACE:

WELDING TYPE:

PAINTING PROCESS:

FINISHING:

Pregalvanized steel Z275 (120g/m²/side) or Al55Zn Silicon Bronze.

Full automatic coating process

- STVS Modular standard with InterPon Polyester powder coating, exhibits a tougher cured film which provides superior damage resistance to packaging materials. It is designed to give excellent long term exterior durability and colour retenti. (G1)

Film thickness: 80-120 micromet thickness


- For highly corrosion environment as C5, C5X, an epoxy primer layer need to be appllied under the top coat layer to enhance corrosion protection ability of the coating. (G1 Plus)

PANEL:

- Panel height: 1800mm or 1440mm as standard
Other dimension made to order
- Panel width: 2925 mm as standard
2100 mm incase panel height > 2100mm
- Vertical bars section: 25x25x1.2 mm or D26x1.2 mm as standard
- Vertical bar distant: 114 mm
- Horizontal bar section: 40x40x1.6 mm
- Horizontal bar quantity: 2 or 3 bars

POST:

- Post section: 75x75x1.6 mm
- Post spacing: 3000 mm as standard
2175 mm incase panel height > 2100mm
- Post connection: Inner connection or Outer connection type

INNER TYPE		
OUTER TYPE		

- Flange (if need): 150x150x6 mm, flange use 4 wedge anchor bolt M12-100 with black pastic cap protect the top of the bolt.
In case use flange, the flanger must be hot dip galvanized before welding, and the welding technical use broze silicon to protect corrosion

❖ ASTRA PLUS RAILING WARRANTY MATRIX:

PAINTING SPECIFICATION		C2	C3	C4	C5	CX
ASTRA PLUS FENCE <i>Tolerances for the anti-corrosion guarantee are defined based on ISO 4628-3 for the degree of rusting grade and ISO 4628-2 for the degree of blistering.</i>	G1	10	10	10	N/A	N/A
	G1 Plus	10	10	10	10	2

Noted:

*The anti-corrosion guarantee covers rust-related faults. It is based on the European standard ISO 12944, which defines precise corrosivity categories



ASTRA RAILINNG FENCE

ECONOMIC & FLEXIBLE

- Low maintenance with 5 years warranty as standard
- Low cost using and investment
- Flexible of dimension options

ELEGANT

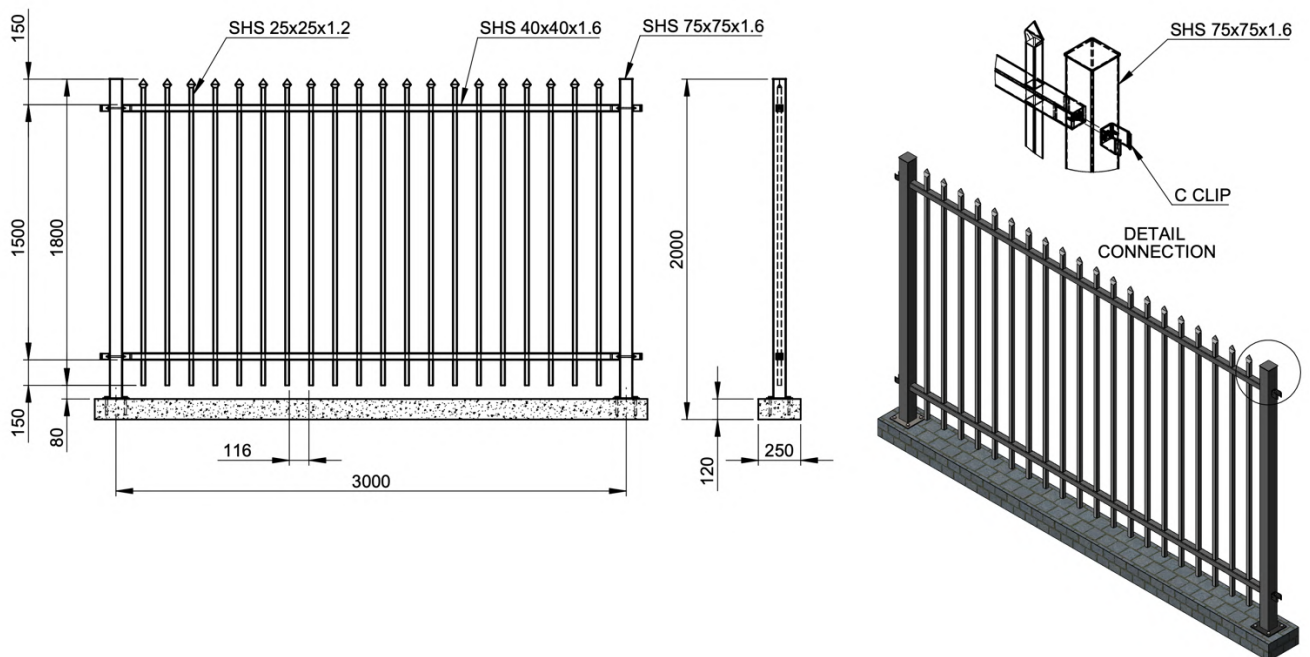
- High-end and elegant appearnace that enhance the beauty of the site.
- UV resistant keep color.
- Hiden connector and welding give strong and smooth appearance.

EASY TO INSTALL

- Modular design that allow easy & quick installation
- Applicable for all types of configurations: Curves, Corners, Slopes, on walls...
- Impossible to remove the panel once installed.

○ TECHNICAL SPECIFICATION:

TYPICAL DRAWING:



MATERIAL SURFACE:

Pregalvanized steel Z275 (120g/m²/side) for horizontal bars
Pregalvanized steel Z90 (40g/m²/side) for vertical bars and post

WELDING TYPE:

Steel

PAINTING PROCESS:

Full automatic coating process

FINISHING:

- STVS Modular standard with InterPon Polyester powder coating, exhibits a tougher cured film which provides superior damage resistance to packaging materials. It is designed to give excellent long term exterior durability and colour retenti. (G1)

Film thickness: 80-120 micromet thickness




- For highly corrosion environment as C5, C5X, a epoxy primer layer need to be applied under the top coat layer to enhance corrosion protection ability of the coating (G1 Plus)

PANEL:

- Panel height: 1180mm or 1480mm or 1980mm as standard
Other dimension made to order
- Panel width: 2925 mm as standard
- Vertical bars section: 2100 mm incase panel height > 2100mm
25x25x1.2 mm/ 20x20x1.2/ 16x16x1.2mm
25x25x1.0 mm/ 20x20x1.0
D27x1.2 mm / D21.2x1.2mm/ D16x1.2mm
D27x1.0 mm / D21.2x1.0mm
- Vertical bar distant: ~115 mm
- Horizontal bar section: 40x40x1.6 mm
- Horizontal bar quantity: 2 or 3 bars

POST:

- Post section: 75x75x1.6 mm
- Post spacing: 3000 mm as standard
2175 mm incase panel height > 2100mm
- Post connection: Inner connection or Outer connection type

INNER TYPE		
OUTER TYPE		

- Flange (if need): 150x150x6 mm, flange use 4 wedge anchor bolt M12-100 with black pastic cap protect the top of the bolt.

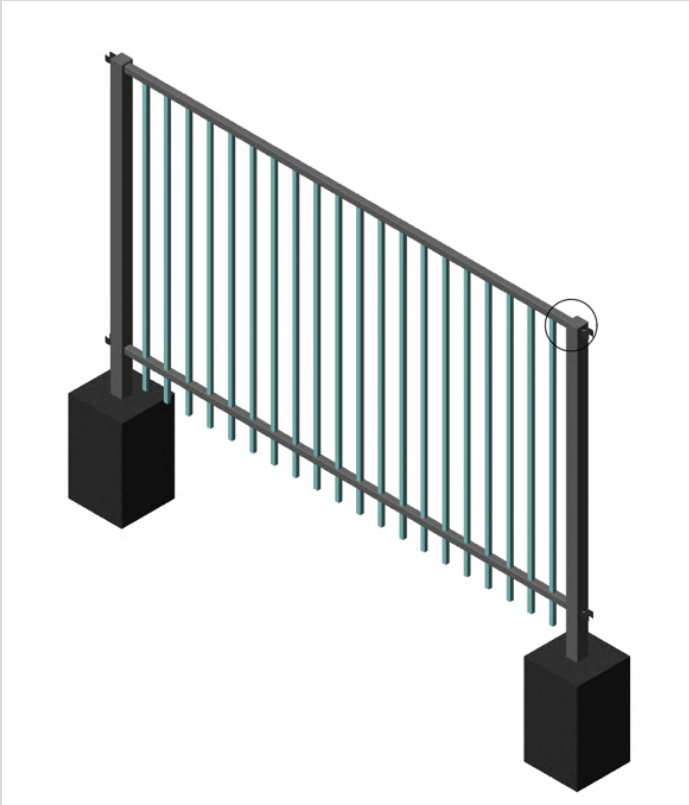
❖ ASTRA RAILING WARRANTY MATRIX:

PAINTING SPECIFICATION		C2	C3	C4	C5	CX
ASTRA PLUS FENCE <i>Tolerances for the anti-corrosion guarantee are defined based on ISO 4628-3 for the degree of rusting grade and ISO 4628-2 for the degree of blistering.</i>	G1	5	5	5	N/A	N/A
	G1 Plus	10	10	10	5	2

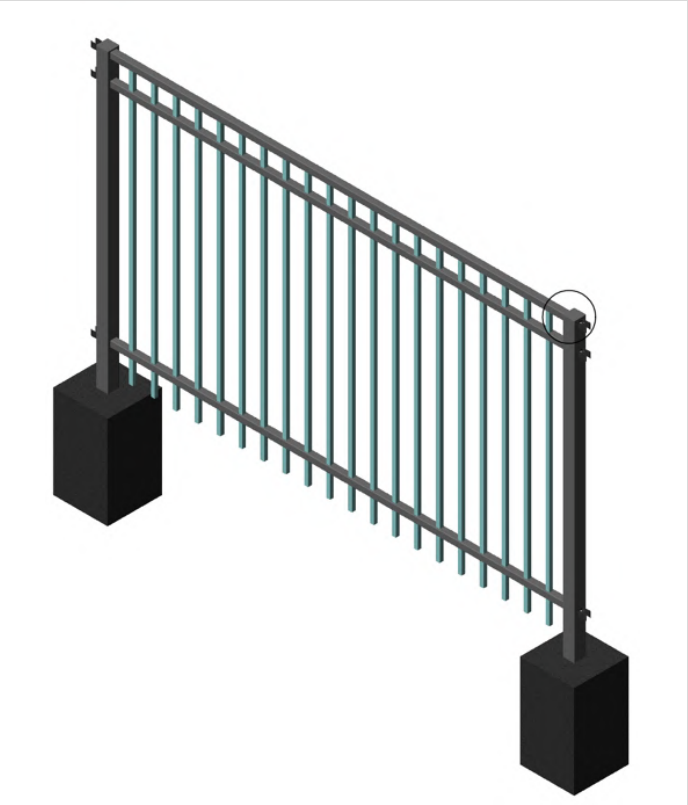
Noted:

*The anti-corrosion guarantee covers rust-related faults. It is based on the European standard ISO 12944, which defines precise corrosivity categories

DESIGN OPTION



2 HORIZONTAL BAR - FLAT TOP



3 HORIZONTAL BAR - FLAT TOP



2 HORIZONTAL BAR – OVER STANDING



3 HORIZONTAL BAR – OVER STANDING

TABLE OF SPECIFICATION

ASTRA & ASTRA PLUS RAILING FENCE

PRODUCT	ASTRA	ASTRA PLUS
Warranty	<ul style="list-style-type: none"> 05 years up to C4 as standard 	<ul style="list-style-type: none"> 10 years up to C4 as standard
Material surface	<ul style="list-style-type: none"> Z80 for post and vertical bars Z275 for horizontal bars 	<ul style="list-style-type: none"> Z275 Al55Zn
Standard dimension height of panel	<ul style="list-style-type: none"> 1180 mm 1480 mm 1980 mm Other dimension made on request 	<ul style="list-style-type: none"> 1800 mm 1440 mm Other dimension made on request
Horizontal bars	<ul style="list-style-type: none"> 40x40x1.6 mm 	<ul style="list-style-type: none"> 40x40x1.6 mm
Vertical bar	<ul style="list-style-type: none"> D27x1.2 mm/ D27x1.0 mm D21x1.2 mm/ D21x1.0 mm D16x1.2 mm SHS 25x25x1.2 mm/ SHS 25x25x1.0 mm/ SHS 20x20x1.2 mm/ SHS 20x20x1.0 mm SHS 16x16x1.2 mm 	<ul style="list-style-type: none"> SHS 25x25x1.2mm D27x1.2mm
Post	<ul style="list-style-type: none"> Square 75x75x1.6 mm 	<ul style="list-style-type: none"> Square 75x75x1.6 mm
Welding	<ul style="list-style-type: none"> Steel 	<ul style="list-style-type: none"> Bronze silicon
Finishing	<ul style="list-style-type: none"> Recommend G1 for C2, C3, C4 environment Recommend G1 Plus for C5, not apply for CX environment 	<ul style="list-style-type: none"> Recommend G1 for C2, C3, C4 environment Recommend G1 Plus for C5, CX environment

MESH FENCE

DOUBLE WIRE MESH FENCE



Post:	Square post 75x75x1.6mm, spacing : 2500mm
Mesh:	Double wire 6x5x6mm, Mesh 80x250 mm
Standard panel:	Width 2500mm x Height 1800mm
Finishing:	Hot dip galvanized or PE powder coating finish



ANTI-CLIMB MESH 365 FENCE

Mesh:	Mesh 12.4x75mm, Wire 4mm. Post 75x75x1.6mm
Finishing:	Hot dip galvanized or PE powder coating finish

CHAINLINK FENCE



Suitable for larger area like airport, solar farm, farm
Hot dip galvanized finish average 30 micromet thickness (Zinc ~200-220g/m2)

FENCE ACCESSORIES



BABBER WIRE – Hot dip galvanized
finish average 30 micromet thickness



CONCERTINA – Hot dip galvanized
finish average 30 micromet thickness

GATE

- Sliding gate on rail

- Jupiter slidding gate
- Jupiter plus sliding gate
- The Sun sliding gate
- Telescopic sliding gate

- Cantilever sliding gate

- Jupiter cantilever sliding gate
- Athena cantilever sliding gate

- Swing gate

- Manual swing gate
- Auto swing gate



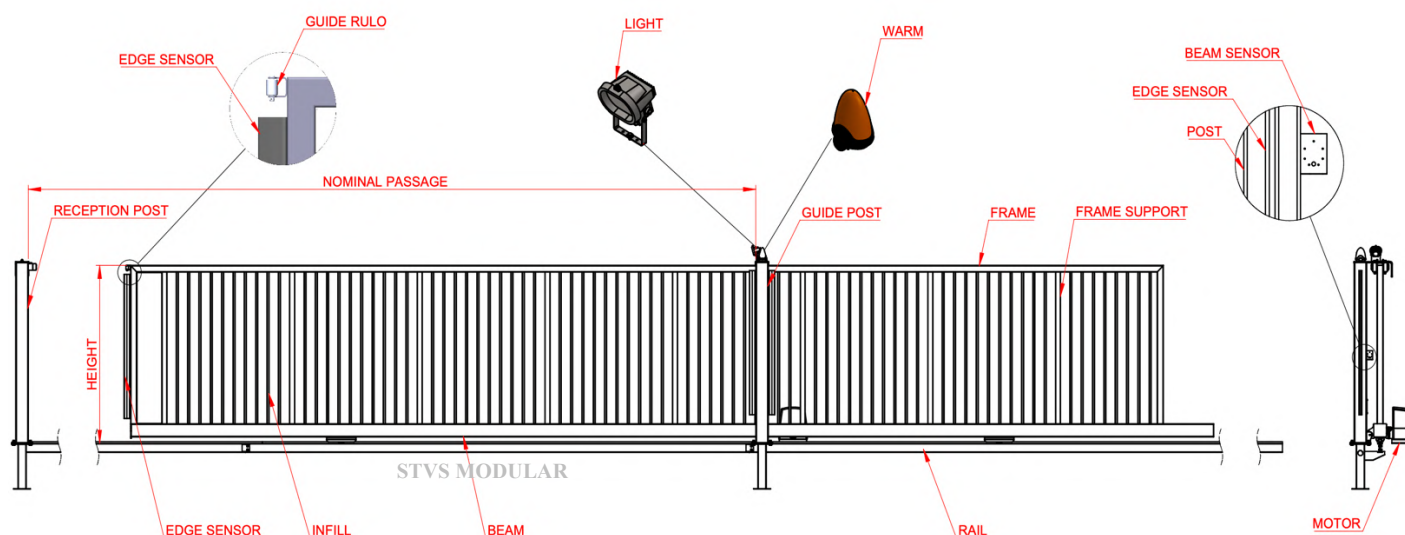
JUPITER® SLIDING GATE

KEY FEATURES:

- ❖ Luxury appearance enhances the beauty of the site.
- ❖ Strong gate structure, high security.
- ❖ Silence and very smooth operation.
- ❖ Top class quality made accessories.
- ❖ Stable, low maintenance cost.
- ❖ Up to 10 years corrosion protection warranty and long last color. No repaint needed
- ❖ 2 years or 100.000 cycles warranty for motor



TECHNICAL SPECIFICATION



Nominal Passage (mm)	3000	4000	5000	6000	7000	8000	9000	10000	11000	12000
Beam	100x150								150x150	
Frame	75x75									
Frame support	60x60 for gate height =< 2200mm 75x75 for gate height > 2200mm									
Assembly leaf	No					Yes				
Guiding post	100x100								150x150	
	Double post 150x150 for gate height >= 2400mm									
Operation	Motorized/ Manual									
Max. Cycles/day	150									
Max. Opening	12m for single leaf 20m for double leaves									
Finishing	Option 1: Polyester powder coating 2 layer - G1 Plus (Max. NH =2.1m) Option 2: Liquid paint: STVS Marine coating									
Control	Wall transmitter as standard Optional: Remote, push bottom									
Safety	Optional safety standard according to EN 60950-1 including: Infrared sensor: 1 pairs, touch sensor: 3 sets, alarm light: 1 set									
Warranty	10 years corrosion protection for structure(refer warranty table for details) 2 years or 100.000 cycles for motor									



JUPITER PLUS® SLIDING GATE

KEY FEATURES:

This single or double leaf sliding gate boasts the latest technology and such smooth and stable operation.

The gate frame is square hollow section steel with a choice of square, mesh or round vertical bar infill. The main gate beam and post is heavy duty steel that give to the gate a strong structure. Available in a wide range of widths from **3 -15m** and heights from 1-2.2m.

The STVS Modular sliding gate design has strong rail system with I structure and under ground base supporter that suitable for even heavy duty truck areas. The wheels are designed for heavy duty operate give a very smooth and long last operation.

The accessories was made in Euro with designed much more than the loading of the gate weight

give a perfection in operation and allow easy manual or motor-driven operation. This guarantees trouble-free open/close movements and reduces maintenance.

Gate surfaces are extremely robust with high quality galvanized or high quality architecture grade finish.

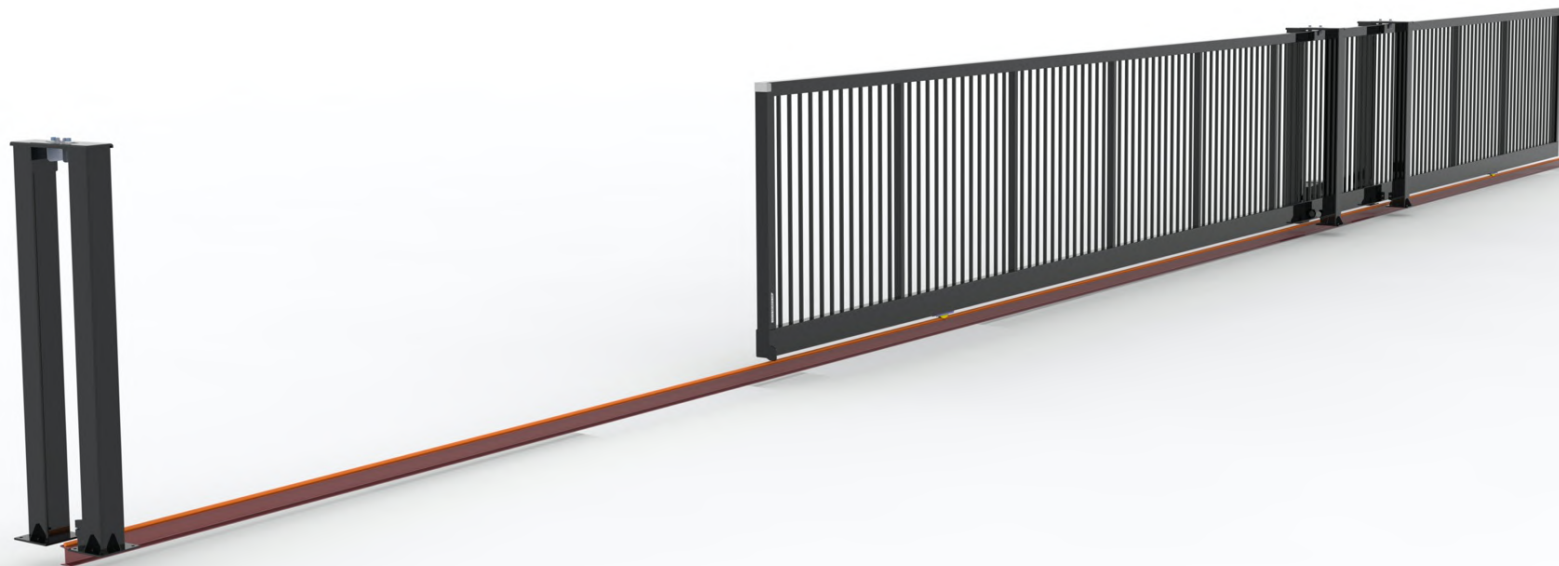
- ❖ **Strong gate structure, high security.**
- ❖ **Euro design with elegant looks that enhance the beauty of the site.**
- ❖ **Wide nominal opening up to 15m.**
- ❖ **Top class quality accessories.**
- ❖ **Silence and very smoothly operation.**
- ❖ **Stable operation, low maintenance cost.**
- ❖ **Stable color keep the beauty of the site**
- ❖ **10 years corrosion protection warranty**

TECHNICAL SPECIFICATION

Dimension:

Nominal Passage (mm)	12500	13000	14000	15000
Beam	150x150			
Frame	75x75			
Frame support	60x60 for gate height =< 2200mm 75x75 for gate height > 2200mm			
Assembly leaf	Yes			
Guiding post	2x Double 100x100		2x Double 150x150	
Operation	Motorized/ Manual			
Max. Cycles/day	80			
Max. Opening	15m for single leaf 25m for double leaves			
Finishing	Option 1: Polyester powder coating 2 layer - G1 Plus (Max. NH =2.1m) Option 2: Liquid paint: STVS Marine coating			
Control	Wall transmitter as standard Optional: Remote, push bottom			
Safety	Optional safety standard according to EN 60950-1 including: Infrared sensor, touch sensor, alarm light			
Warranty	10 years corrosion protection for structure (refer warranty table for details) 2 years or 58.000 cycles for motor			

STVS reserves the right to make product changes without prior notice. We do not accept any responsibility for mistakes, inaccuracies and/or printing errors.



THE SUN® SLIDING GATE

KEY FEATURES:

This single leaf sliding gate boasts the latest technology, such smooth and stable operation.

The Sun sliding gate design for UNIQUE and LARGER opening require with stable operation purpose. The gate structure is heavy duly that allow the opening up to **18m** and heights from 1-2.4m.

The STVS Modular sliding gate design has strong rail system with I structure and under ground base supporter that suitable for even heavy duty truck areas. The wheels are designed for heavy duty operate give a very smooth and long last operation.

The accessories was made in Euro with designed much more than the loading of the gate weight give a perfection in operation and allow smooth operation on motor-driven.

This guarantees trouble-free open/close movements and reduces maintenance.

Gate surfaces are extremely robust with high quality galvanized or high quality architecture grade finish.

- ❖ **Strong gate structure give high security.**
- ❖ **Euro design with elegant looks that enhance the beauty of the site.**
- ❖ **Wide nominal opening up to 18m meters.**
- ❖ **Top quality Euro made accessories give stable commissioning.**
- ❖ **Silence and very smoothly operation.**
- ❖ **Stable operation, low maintenance cost.**
- ❖ **STVS coating that give a long corrosion protection warranty and long last color.**
- ❖ **2 years motor warranty for manufacturing failure.**

TECHNICAL SPECIFICATION

Dimension:

Nominal Passage (mm)	15000	15000	17000	18000
Beam	200x200			
Frame	100x100			
Frame support	75x75 for gate height = < 2200mm 100x100 for gate height > 2200mm			
Assembly leaf	Yes			
Guiding post	2x Double 150x150			
Operation	Motorized			
Max. Cycles/day	20			
Max. Opening	18m for single leaf 32m for double leaves			
Finishing	Option 1: Polyester powder coating 2 layer - G1 Plus (Max. NH =2.1m) Option 2: Liquid paint: STVS Marine coating			
Control	Wall transmitter as standard Optional: Remote, push bottom			
Safety	Optional safety standard according to EN 60950-1 including: Infrared sensor, touch sensor, alarm light			
Warranty	10 years corrosion protection for structure (refer warranty table for details) 2 years or 15.000 cycles for motor			

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JUPITER CANTILEVER SLIDING GATE

KEY FEATURES:

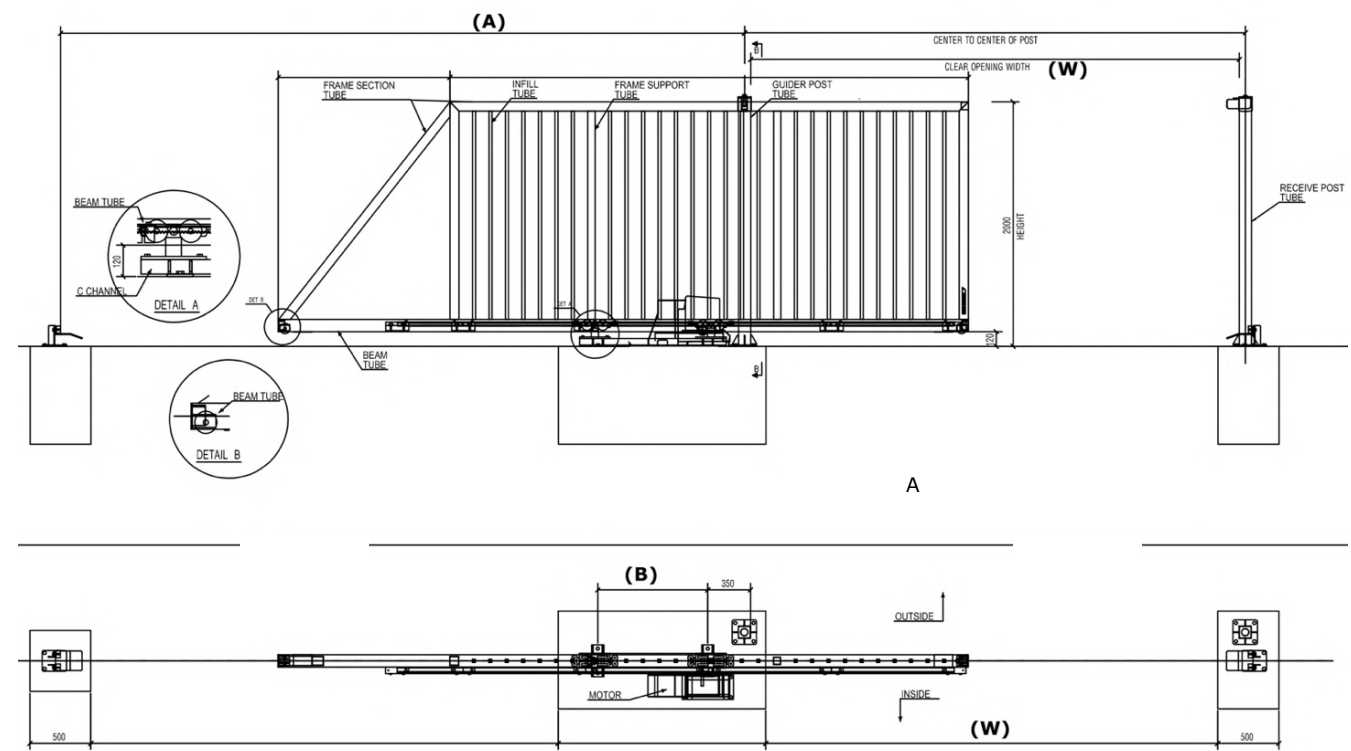
- Modern and luxury design that enhances the beauty of the site.
- Heavy and strong gate structure makes the gate strong and stable commissioning in long term.
- Extremely smooth, low noise and durability.
- Gate surfaces are extremely robust with high quality galvanized or high quality architecture grade finish.
- Pre-wiring and tests performed in-factory.



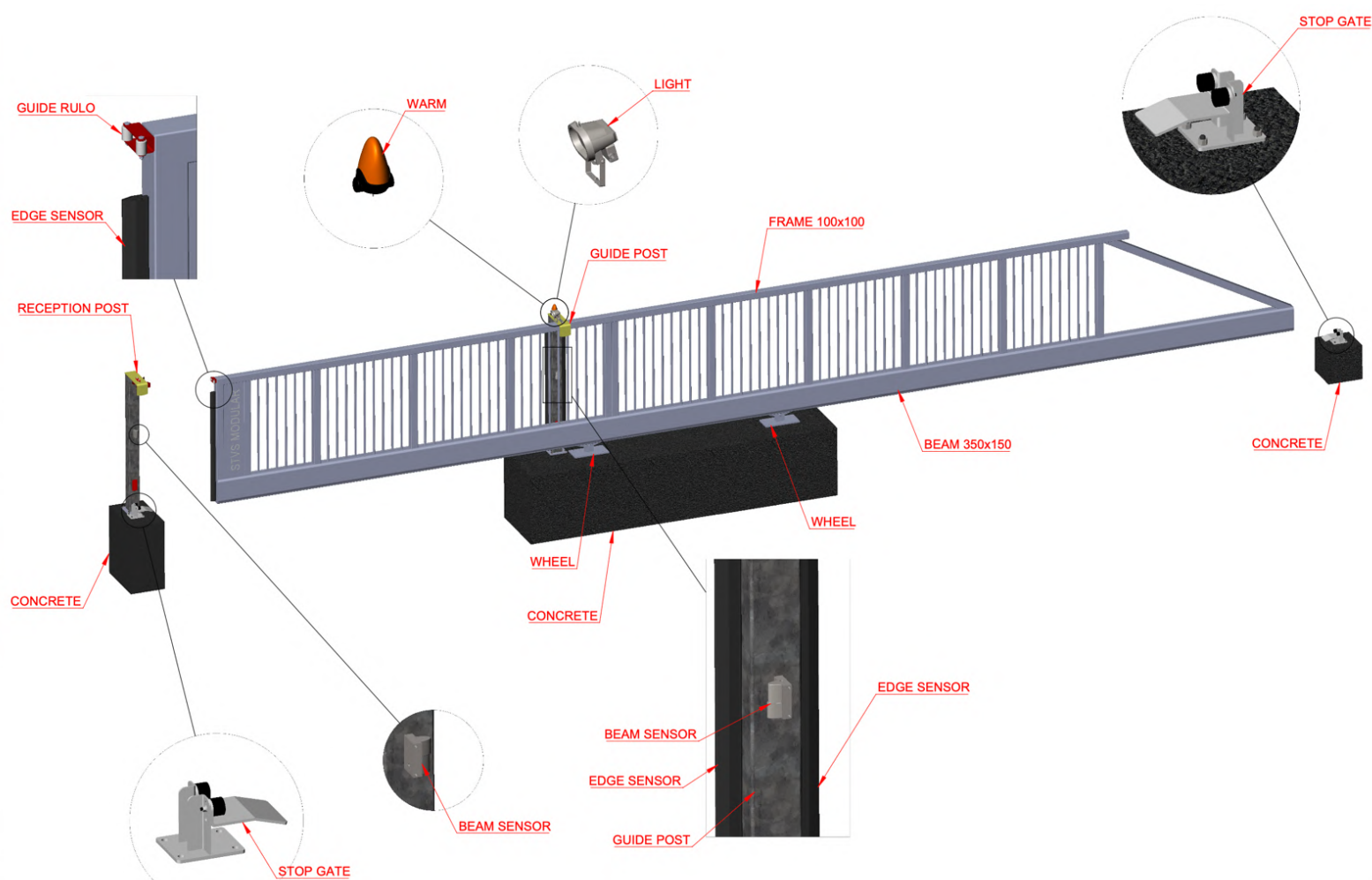
TECHNICAL SPECIFICATION

RANGE: JUPITER CANTILEVER SLIDING GATE

Dimension:



Nominal Passage (mm)	3000	4000	5000	6000
Leaf length (mm)	5200	6000	7400	95000
Beam (mm)	150x150			
Frame (mm)	75x75			
Guiding post (mm)	Single steel post - 100x100			
Max. Cycles/day	150			
Material	Steel			
Finishing	Option 1: Polyester powder coating 2 layer - G1 Plus (Max. NH =2.2m) Option 2: Liquid paint: STVS Marine coating			
Control	Wall transmitter as standard Optional: Remote, push bottom			
Safety:	Optional safety standard according to EN 60950-1 including: Infrared sensor, touch sensor, alarm light			
Warranty:	10 years corrosion protection for structure (refer warranty table for details) 2 years or 100.000 cycles for motor			



ATHENA CANTILEVER SLIDING GATE

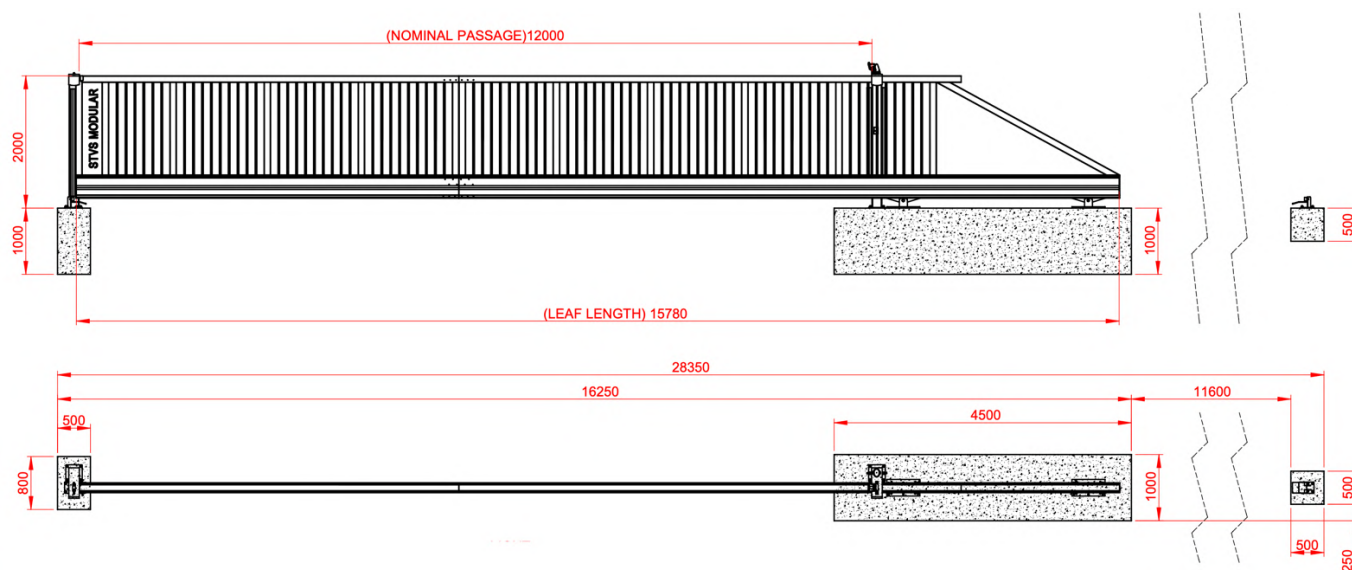
This single or double leaf sliding gate boasts the latest technology with such smooth and stable operation. The gate frame is the combination between steel and high quality aluminum alloy by Japan technology enhance both the gate strength and durability . Available in a wide range of widths from 3 -14m and heights from 1-2.2m.

The gate with Key features:

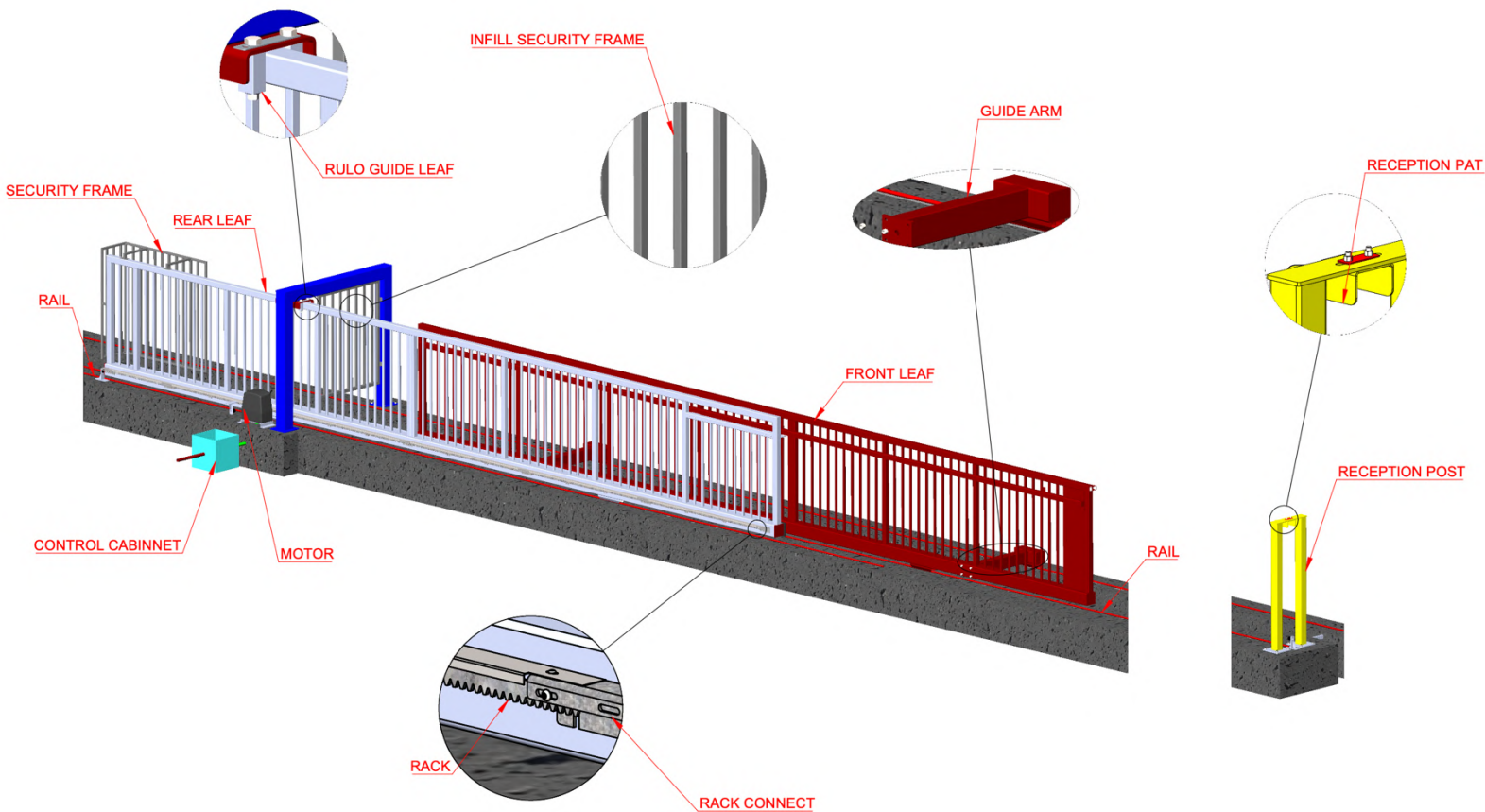
- ❖ Modern and luxury design. High quality finishing that enhance the beauty of the site.
- ❖ STVS Modular with high quality aluminum alloy material for the gate frame with mechanical characteristic same as steel (the tensile strength 240 N/m2),
- ❖ The aluminum alloy material with the same mechanical characteristic as steel, but the weight is lighter 300%, .As a result, track rollers and support rollers as well as the motor drive are exposed to a significantly lower load. This lead to the gate more durable over the time.
- ❖ Smooth, clean surface structure of aluminium facilitates a high-quality powder coat finish.
- ❖ Gate surfaces are extremely robust with high quality architecture coating.
- ❖ 10 years corosion warranty for coating on aluminum.
- ❖ 2 Years or 100.000 cycles for motor at 12mW, 58.000 circles for opening from 12-14mW
- ❖ Pre-wiring and tests performed in-factory.
- ❖ Average speed 12m/minute

TECHNICAL SPECIFICATION

RANGE: ATHENA CANTILEVER SLIDING GATE



Nominal Passage (mm)	7000	8000	9000	10000	11000	12000	13000	14000
Leaf length (mm)	9000	10500	11600	13500	15000	16000	16800	18500
Beam section (mm)	150x250						150x350	
Frame section (mm)	100x100							
Diagonal bracer	No						Yes	
Guiding post section (mm)	Single steel post - 150x150						2x Double steel post - 100x100	
Max. Cycles/day	150						80	
Finishing	Option 1: Polyester powder coating 2 layer - G1 Plus (Max. NH =2.2m) Option 2: Liquid paint: Epoxy primer + Polyurethan topcoat							
Control	Wall transmitter as standard Optional: Remote, push bottom							
WARRANTY	10 years corrosion protection for structure							
	2 years or 100.000 cycles for motor						2 years or 58.000 cycles for motor	



TELESCOPIC SLIDING GATE

KEY FEATURES:

The telescopic sliding gate design for small sliding back space and stable purpose. The gate structure and accessories is unique and know how design by STVS Modular.

The STVS Modular sliding gate design has strong rail system with I structure and under ground base supporter that suitable for even heavy duty truck areas. The wheels are designed for heavy duty operate give a very smooth and long last operation.

The accessories was made in Euro with designed much more than the loading of the gate weight

give a perfection in operation and allow smooth operation on motor-driven.

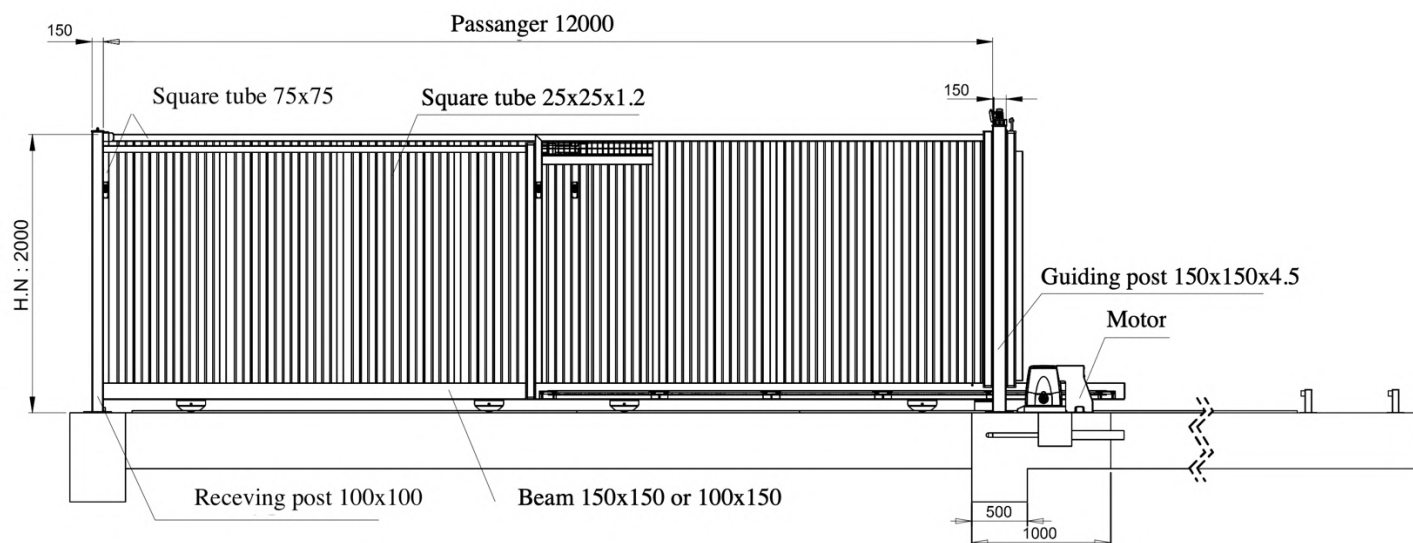
This guarantees trouble-free open/close movements and reduces maintenance.

Gate surfaces are extremely robust with high quality galvanized or high quality architecture grade finish.

- ❖ **Small sliding back space needed**
- ❖ **Opening width up to 20 meters**
- ❖ **Easily integrated with security options (Sensor, alarm light, intercom or phone)**
- ❖ **STVS coating that give a long corrosion protection warranty and long last color.**

TECHNICAL SPECIFICATION

RANGE: TELESCOPIC SLIDING GATE



Nominal Passage (mm)	2.000-12.000	13.000 – 20.000
Beam section (mm)	100x150mm	150x150mm
Frame section (mm)	75x75mm	
Frame support section (mm)	60x60 mm	
Infill	SHS 25x25mm (Industrial only, not apply for residential application) Perforated sheet/ Mesh 50x50x5mm (Resdential, office relative application)	
Guiding post section (mm)	Double steel post - 100x100	Double steel post - 150x150
Arm guide	No	Yes from 14mNW
Finishing	Option 1: Polyester powder coating 2 layer - G1 Plus (Max. NH =2.1m) Option 2: Liquid paint: STVS Marine coating	
Control	Wall transmitter as standard Optional: Remote, push bottom	
Safety:	Infrared sensor, touch sensor, alarm light	
Max. Cycles/day	80	20
Warranty	10 years corrosion protection for structure (refer warranty table for details)	
	2 years or 58.000 cycles for motor	2 years or 14.600 cycles for motor

MOTOR DRIVEN

- **Motor controlled by magnetic encoder**
- **Graphic LCD display**
- **Motor speed average 8-12m/min for gate size up to 12mW**
- **Load 1500 Kg or 3000 Kg**
- **Slows at the start and end of the cycle (smooth jolt-free operation) enhance safety**
- **Not affected by adverse weather conditions**
- **24 VDC backup battery ensures continued operation in the event of a supply failure**
- **Lifetime lubrication**
- **Includes set of cells for lightweight vehicles**



The automation is made up of a self-locking gear motor controlled by magnetic encoder with an in-built:

- Electronic programmer;
- 433MHz FM receiver;
- slot-in battery charger;
- NiMH batteries.



MANUAL RELEASE SLX3024CB



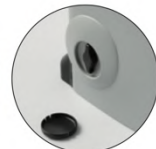
SELF-PROGRAMMING MONITORED BY AN LCD GRAPHICS DISPLAY



MANUAL RELEASE SLX1524CB



MANUAL RELEASE SLX24DRACO



MANUAL RELEASE SL524

The electronic programmer is factory fitted with a graphic LCD display (128 x 128 pixels) with backlighting in six different languages. The menu allows you to rapidly set the system parameters including: the sequential button mode, automatic reclosing, warning lamp pre-flashing, intermittent warning lamp activation, indicator light and photoelectric cell function setting etc.

The electronics card, thanks to the presence of the real-time clock, allows you to set 10 events (shown on the display) and these events permit you to regulate the opening and closing of the motor at different times during the day within 3 weekly time bands (Mon- Fri, Sat-Sun, Mon-Sun); the events can be enabled or disabled (during holiday periods) either from the menu or by means of a radio channel. The appliance is fitted with a safe and secure manual release system activated by a personalised key.



SWING GATE

RANGE:

MANUAL SWING GATE

Material:	Steel
Nominal height:	1000-3000mm
Nominal width:	900-10000mm
Leaf:	Single/ Double
Operation:	Manual
Warranty:	10 years anti corrosion
Lock:	Level handle type

Finishing:	Option 1: Polyester powder coating 2 layer - G1 Plus
	Option 2: Liquid paint: STVS Marine coating

Nominal Passage (mm)		1000	1200	1500	2000	2500	3000	3500	4000	4500	5000
Frame section (mm)		50x50x2		50x50x3			75x75x3			100x100x2.5	
Infill section (mm)		25x25 Customized									
Space under gate leaf (mm)		80									
Nominal height	Post length	Post section (mm)									
1000	1500	75x75x3	100x100x3				150x150x4.5				
1200	1700										
1500	2000										
1800	2500		100x100x3				150x150x4.5				
2000	3000	150x150x4.5				200x200x12					
2200	3000										
2400	3000	150x150x4.5				200x200x12 with Wheel under leaves					
3000	3000										



SAFETY DEVICE



Alarm light



Edge sensor



Beam sensor

CONTROL DEVICE



Wall transmitter



Remote

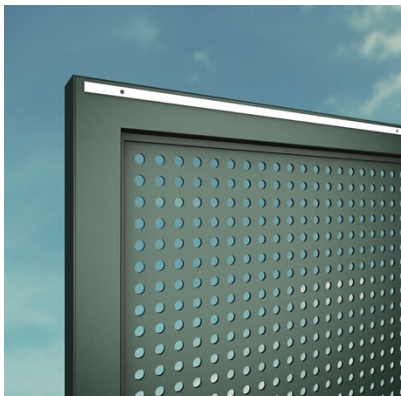


Push bottom

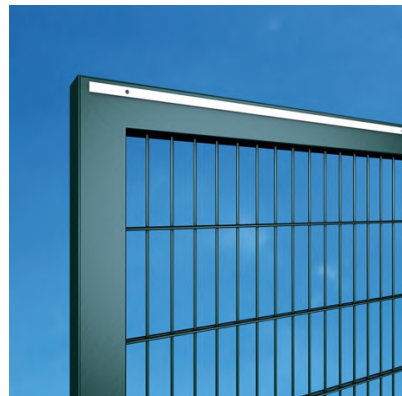
INFILL OPTION



*Square 25x25 (STD)
Square 30x30*



Perforated sheet



*Wire mesh
Mesh 80x250
Wire 6x5x6*

** Other infill request made to order*

STVS RECOMMENDS REGULAR MAINTENANCE OF ITS PRODUCTS

- Frequency: all surfaces require 6-monthly maintenance. Coated surfaces that are exposed to dust, mud, sand or salt require meticulous cleaning.
- Cleaning: this involves washing with water and a mild detergent (pH 5 to 8) followed by careful rinsing with clean water and drying. The use of an abrasive cleaner is prohibited.
- Special maintenance for motor-driven gates: maintenance is compulsory and must be performed once every 6 months. STVS offers installation services as well as maintenance and servicing agreements. Contact STVS or our subsidiary.

GATE WARRANTY MATRIX

The anti-corrosion guarantee only covers rust-related faults. It is based on the European standard ISO 12944, which defines precise corrosivity categories.

PAINTING SPECIFICATION		C2	C3	C4	C5	CX
GATE <i>Tolerances for the anti-corrosion guarantee are defined based on ISO 4628-3 for the degree of rusting grade and ISO 4628-2 for the degree of blistering.</i>	G1	5	5	N/A	N/A	N/A
	G1 Plus	10	10	10	5	2
	G1 for Aluminum	10	10	10	5	NA
	STVS Marine coating	10	10	10	5	2

CONDITION OF WARRANTY

- STVS grants a 2-year operation warranty that is activated upon the actual start-up of the product or within a maximum of 2 years of delivery of the product.
- The warranty applies to the initial installation site subject to products being maintained each 6 months as maintenance recommendations.
- Wear parts (pinions, racks, batteries, rollers, etc.) are not covered by the warranty.
- Corrosion warranty are not applied for accessories parts.
- Minimum distant to the sea site 100m for CX environment

SUMMARY TABLE OF GATE SPECIFICATION

SLIDING GATE ON RAIL

SPEC \ GATE	JUPITER	JUPITER PLUS	TELESCOPIC	SUN
Material	Steel	Steel	Steel	Steel
Max. Opening (m)	12	15	20	18
Max. Cycles/day	150	80	80 or 20	20
Post	Single	2x Double	1x Double	2x Double
Assembly leaf	>7m Nominal opening	Always	>14m Nominal Opening	Always
Finishing	Option 1: Polyester powder coating 2 layer - G1 Plus (Max. Nominal Height =2.1m) Option 2: Liquid paint: STVS Marine coating			
Operation	Motorized/ Manual			Motorized

CANTILEVER SLIDING GATE

SPEC \ GATE	JUPITER CANTILEVER	ATHENA CANTILEVER
Material	Steel	Aluminum Alloy
Max. Opening (m)	6	14
Max. Cycles/day	150 Cycles for Max. Opening 6m	150 Cycles for Max. Opening 12m 80 Cycles for Max. Opening 15m
Assembly leaf	No	Yes
Finishing	Option 1: Polyester powder coating 2 layer - G1 Plus (Max. Nominal Height =2.2m) Option 2: Liquid paint: STVS Marine coating	
Operation	Motorized Manual	

* Polyester powder coating 2 layer - G1 Plus finishing apply for product size with Max. height 2.1m.



BOLLARDS



STEEL BOLLARDS

- ❖ Strong and beautiful appearance
- ❖ Super round top
- ❖ Very smooth and shine



STAINLESS STEEL BOLLARDS

- ❖ Hairline finish
- ❖ Flat top design
- ❖ Inner flange or burried

NOTED:

Blank lined paper for writing.

Handrail, fence and gate systems

PREMIUM QUALITY



STV'

M O D U L A R