

# HIGH SECURITY FIXED BOLLARD

Crash-tested  
according to



ASTM INTERNATIONAL



## ABSENCE OF H-BEAMS OR PRE-WELDED STRUCTURES, IN ORDER TO MINIMIZE SHIPPING VOLUME AND WEIGHT

High security fixed bollards were designed to protect the perimeter of the protected area. Following model can stop a truck 7 200 kg (7,2 t) mass driving at 80 kph (50 mph) speed. This confirmed by successfully passed tests ASTM F2656/2656M-20 and IWA 14-1:2013.

One of the greatest advantage of following model is absence of H-beams or pre-welded structures, in order to minimize shipping volume and weight.

Bollards are installed at a depth of 400 mm only. Minimal installation depth and maximum anti-ram protection - this is the ideal combination that our customers are looking for. This model can be installed at urban areas, because the installation depth of 400 mm ensures that the underground urban communications won't be affected.

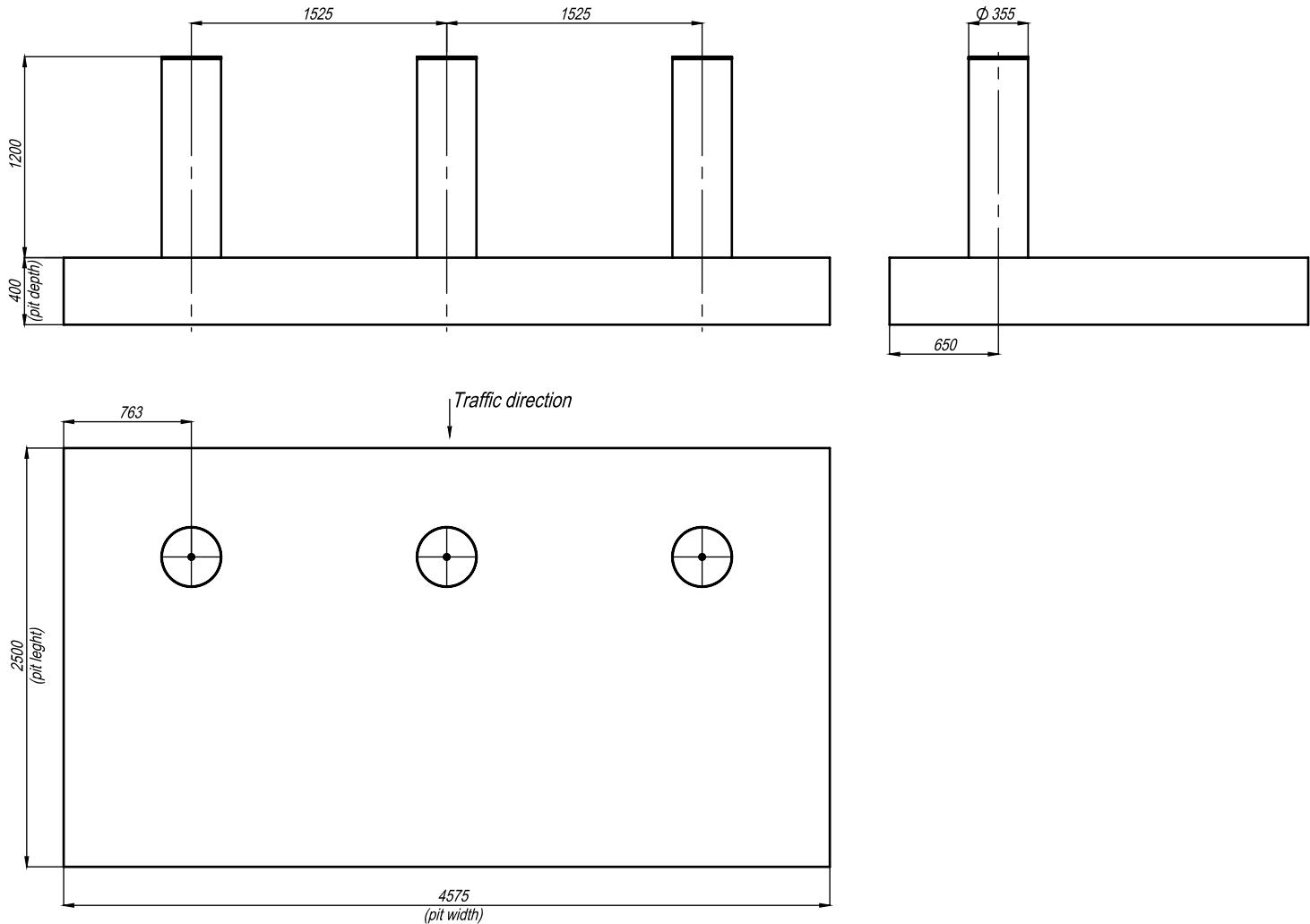
### INSTALLATION AREAS

- Governmental Institutions
- Military Bases
- Nuclear Power Plants
- Production sites (Industrial Plants)
- Commercial areas
- Financial institutions
- Airport Premises
- Business (Office) Center
- Hotels
- Sport Complexes
- Recreation areas
- Urban areas
- Education Institutions etc.



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#### TECHNICAL SPECS:

Model	RB345-09-S-035
Security class	ASTM F2656/2656M-20, M50 (K12), P1 IWA 14-1:2013, Bollard V/7200[N2B]/80/90:0.7 Crash-tested: triple bollards set
Impact resistance, J	1 789 000
Diameter, mm	355
Wall thickness, mm	30
Height, mm	1200
Installation depth, mm	400
Material	Epoxy polyurethane coating Stainless steel sleeve / casing up on request
Bollard top lighting (Optional)	LED; UFO-shaped; red, white or yellow



# Certificate

of passed Barrier Testing Programme



Certificate No.: TC-11523-3621-19412  
Date of certification: 17-JULY-2020

Contracting Client:  
TISO PRODUCTION LTD  
14 Promyslova str.  
02088 Kyiv  
Ukraine

Type of Product: Fixed triple Bollard "RB345-09-S-035"  
Test Standard: ASTM F2656/F2656M-20  
Test Standard Classification: IWA 14-1:2013  
ASTM F2656: C750  
IWA 14-1: N2B - 80 km/h

Test Date: 07-JULY-2020

Vehicle Restrained: Yes  No

Vehicle Immobilized: Yes  No

Vehicle advanced beyond Barrier: Yes  No

Test Vehicle Kinetic Energy at Impact: 1789 kJ

Penetration Rating ASTM F2656: P1 (0.7 m)

Performance Rating IWA 14-1: Bollard V/7200(N2B)/80/90:0.7

Only valid in connection with CTS-Test Report No.: 11523-3621-19412-EN

If completely changed this certificate will be replaced by certificate No.: TC-11523-3621-19412-2

Sincerely

  
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