

Stargate

Removable Barrier Gate with Integrated Emergency Opening (Containment H2)

TECHNICAL FEATURES

Description

Stargate is an innovative, removable barrier gate system for safety and traffic management on road infrastructure. Two configurations are available: the W1 Standard (CE-certified per EN 1317-2, working width W1) and the Stargate PLUS (tested per ENV 1317-4, working width W3, with integrated emergency gate). The PLUS configuration enables emergency opening in approximately 30 seconds, while complete removal of the full installation takes about 10 minutes. The SMART system integration provides remote monitoring and rapid notification.

CE W1 Standard	EN 1317-2 Tested	H2 Containment
W1 / W3 Working width	30 sec Emergency open	SMART Integrated

KEY CHARACTERISTICS

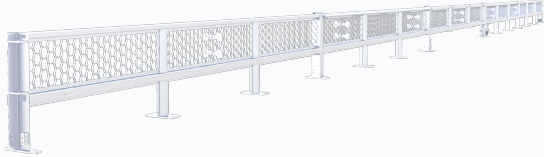
- **H2 containment level** across both Standard and PLUS configurations
- **30-second emergency opening** on the PLUS configuration
- **Easy to handle**, lightweight modular steel structure
- **Compact size**: only 170 mm cross-section, 1000 mm height
- **Minimum working width** for the gate category (W1 standard module)
- **10-minute full system opening** for complete site clearance
- **Integrated SMART system** for monitoring and notification
- **Reduced anchoring depth** (200 mm), simplifying installation



Stargate combines a slim cross-section with full H2 containment, and adds rapid emergency-opening capability in the PLUS configuration. The SMART system supports remote monitoring for proactive road management.

Configurations & Specifications

AVAILABLE CONFIGURATIONS

STARGATE W1 STANDARD	STARGATE PLUS
 Removable gate without emergency opening. Working width W1, minimum installation length 42 m. Tested per EN 1317-2, CE certified. Art. 1310000010.	 Removable gate with integrated emergency opening. Working width W3, minimum installation length 36 m. Tested per ENV 1317-4, not CE marked. Art. 1310010010.

SPECIFICATIONS BY CONFIGURATION		
Specification	W1 Standard	PLUS
Test standard	EN 1317-2	ENV 1317-4
Containment level (Aufhaltestufe)	H2	H2
Working width (Wirkungsbereich)	W1	W3
CE certified	Yes	No (tested)
Emergency opening	No	Yes (approx. 30 sec)
Minimum installation length	42 m	36 m
Module length	6000 mm	6000 mm
Width (cross-section)	170 mm	170 mm
Height from ground	1000 mm	1000 mm
Pillar spacing	2000 mm	2000 mm
Anchoring depth (Verankerungstiefe)	200 mm	200 mm
Full system opening time	Approx. 10 min	Approx. 10 min

INSTALLATION OPTIONS	
Base type	Prefabricated base or cast-in-place concrete
Construction	Lightweight modular steel structure
Transitions	Reinforced concrete barrier or guardrail
Smart integration	Integrated SMART system for monitoring and notification

Approvals, Crash Test & Positioning

CRASH TEST RESULTS

CRASH TEST RESULTS BY CONFIGURATION		
Test	W1 Standard	PLUS
TB11 (light vehicle, 900 kg)	100 km/h / 20° at 1/3 length of need (42 m)	100 km/h / 20° at 3/4 length of need (36 m)
TB51 (bus, 13000 kg)	70 km/h / 20° at 1/3 length of need (42 m)	70 km/h / 20° at 1/2 length of need (36 m)

COMPETITIVE POSITIONING

STARGATE VS COMMON COMPETITORS				
Specification	SMA Stargate	Varioguard MUF	S-A-B	Safe Star
Module length (mm)	6000	4000	4000	4500
Anchoring depth (mm)	200	800	500 / 1000	1000
Emergency opening time	30 sec	2 min	2 min	(not specified)
Working width (standard module)	W1	W5	W6	W4

Stargate combines the longest module length with the shallowest anchoring depth and the fastest emergency opening in its category, while delivering the lowest working width (W1) on the standard module. The PLUS configuration adds an integrated emergency gate that has itself been crash-tested.

CRASH-TEST VIDEOS

Crash Test TB51 (top view): vimeo.com/1098849287
 Crash Test TB51 (upstream): vimeo.com/752615684
 Crash Test TB51 (downstream): vimeo.com/752618210

INSTALLATION VIDEOS

Installation on concrete pad: vimeo.com/754795029
 Opening procedure: vimeo.com/1098849287
 Opening and installation: vimeo.com/1075321130

SMART Integration & Field Installations

SMART SYSTEM

Integrated SMART System

Stargate is delivered with an integrated SMART monitoring system that supports remote status checks, impact detection and rapid notification to road operators. The system enables proactive maintenance planning and faster response in case of impact or emergency-opening events. Designed to interface with the broader SMA App ecosystem.

FIELD INSTALLATION REFERENCES

SELECTED INSTALLATIONS

Varco Grosseto	Stargate barrier gate, motorway median emergency access
Varco Baronissi	Stargate barrier gate, motorway emergency access (multiple modules)
A14 motorway / Bologna ring road, North	Transition to reinforced concrete barrier
A14 motorway, Bologna Borgo Panigale · Casalecchio junction	Transition to reinforced concrete barrier
Milano Serravalle	Transition to guardrail

RELATED CASE STUDIES

Val d'Esino, SR 76

Installation of a crash cushion on an expansion joint. Reference project for crash-cushion siting in constrained-geometry locations.

Prapontin tunnel, A32 Turin–Bardonecchia

First SMA-brand tunnel project. Demonstrates installation approach in tunnel environments.

Eurasia Tunnel

Importance of crash-cushion design for tunnel portals. Reference project for design integration.



Stargate PLUS in field installation, showing the integrated emergency-gate module that opens in approximately 30 seconds.