On the bright side of the road

UNIPROMET

ROAD SAFETY CATALOGUE

Offices

SERBIA

Unipromet doo

ČAČAK

Bulevar oslobodilaca Čačka 92A
32 103 Konjevići, Čačak – Serbia
T: +381 32 357 040
E: office@unipromet.co.rs

KRALJEVO

Ibarska 83
36 000 Kraljevo
T: +381 36 821 843
E: officekv@unipromet.co.rs

NORTH MACEDONIA

Unipromet NM dooel
Maksim Gorki 14-6
1000 Skopje - N. Macedonia
E: unimak@unipromet.co.rs

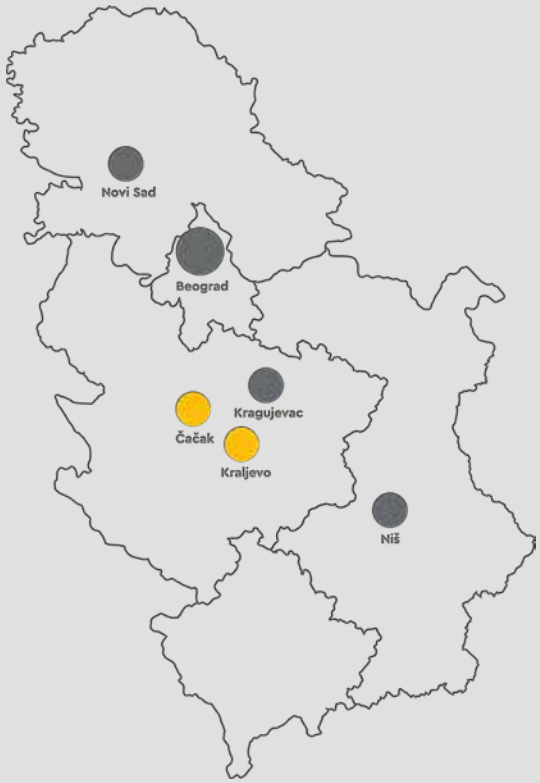
FRANCE

Solosar Sàrl
Parc industriel Sud
3 rue Dr. Guillaume Schoettke
57200 SARREGUEMINES - France
T: +33 3 87 98 56 04
E: info@solosar.fr

WELCOME TO UNIPROMET

„Safety as a gift“ is the driving idea that founded our company, with the goal of making the world a safer place for our children and future generations.

Today, thirty years later, we have the same goal and we are proud that the name Unipromet has become synonymous with safety.



Content

ABOUT US

WHAT WE DO

THIS IS OUR STORY

It all began with one man's vision...

Back in 1989, the idea and determination of one man laid the foundations for a company built on hard work, quality, and trust. His vision was not only a business idea but also a life mission, to create something lasting, strong, and worthy of respect through dedication and perseverance.

Three generations, one legacy

Over the decades, Unipromet has grown together with the family. The first generation laid the foundations, the second strengthened and expanded them, while the third brings fresh energy and a modern outlook on the future. This union of generations, bound by the same values, makes the story of Unipromet not just a business story, but one of family, tradition, and trust that has endured for more than three decades.

UNIPROMET

Today, Unipromet is an internationally recognized company with **more than 650 skilled and dedicated employees.**

Our production facilities in Čačak and Kraljevo, Serbia, cover **over 60,000 m² of working space and 220,000 m² of land, where we manufacture steel safety systems, noise protection panels, welded tubes, vertical traffic signage, solar systems, and vineyard posts.** Our **in-house R&D center** ensures continuous product improvement and the development of innovative solutions, while our engineers, in cooperation with European experts, advance safety systems and technologies for roads and traffic.

Membership in prestigious associations such as Gütegemeinschaft Stahlschutzplanken eV and Studiengesellschaft Stahlschutzplanken eV (**RAL**), as well as regular quality control at **TÜV and BASt laboratories in Germany and DTC in Switzerland**, guarantees that our products meet the highest standards. This opens access to global markets operating in accordance with **the EN 1317 standard**.

Beyond Serbia, Unipromet strengthens its regional and international presence through **representative offices in North Macedonia and France**, making cooperation with partners and access to foreign markets even easier.

Our fleet for international transport and 10 mobile installation teams ensure fast and reliable delivery and assembly of products worldwide. With ISO 9001, CE, and NF certifications, more than 55% of our production is exported to over 30 countries worldwide, from Germany, Switzerland, Italy, the Czech Republic, France, Greece, Estonia, Sweden, Austria, and Portugal, across the Balkans, all the way to Turkey, Cameroon, and Kuwait.

In **2012, Unipromet founded it's subsidiary Noleko**, specialized in solar solutions and the development of innovative technologies in renewable energy. Today, through this partnership, Unipromet not only manufactures steel structures for solar panels, solar carports, and agro-solar systems but also provides its partners with complete, end-to-end solutions, from concept and design, through production, to final realization and implementation. In this way, the company actively contributes to environmental sustainability, combining innovation with responsible production and long-term solutions.

Unipromet has always been, and remains, a symbol of stability, innovation, and trust. A company that builds the future while relying on tradition, family, and the values that define us, with a focus on people, technology, and sustainable development.

Mission

Our mission is to create products that improve quality and safety of life in our society. Always on the bright side of the road.

Vision

Our vision is to be a synonym for a reliable company that creates and respects values.

Values

- Open communication and mutual trust
- Human welfare
- Reliability
- Integrity
- Persistence
- Innovation

660
employees

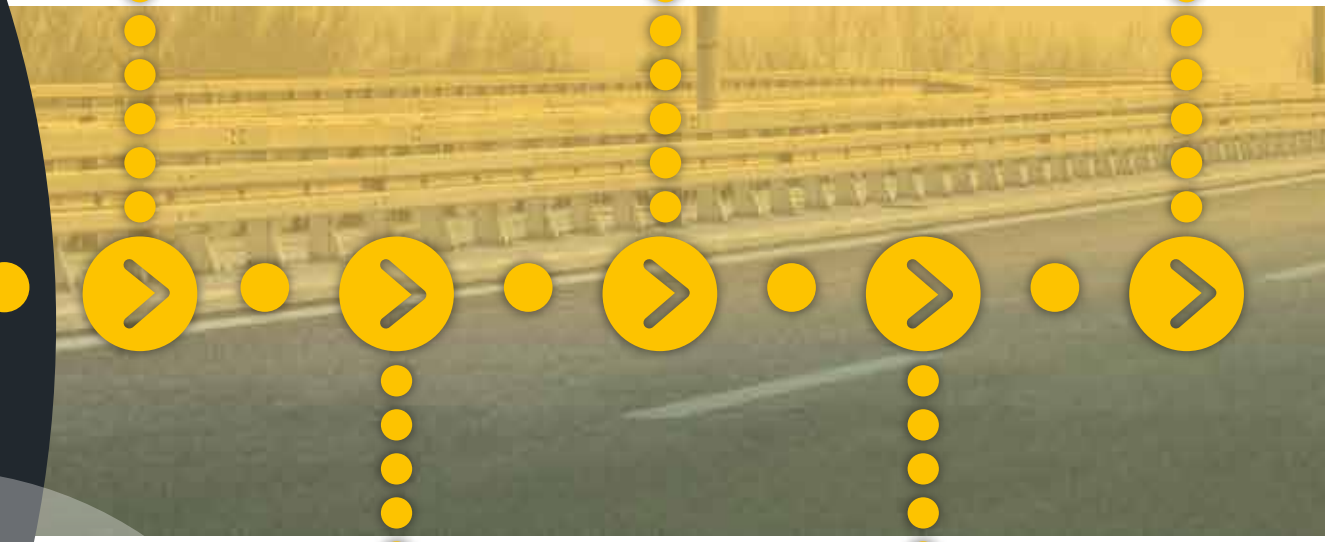
20%


Export to 30 countries
with high education
48%
employees younger than
40
years

HISTORY

1989.

Unipromet was founded as a **trading** company.



1992.

Idea of the manufacturing of steel guard rails was born.

1996.

Line for **profiling, longitudinal cutting** and **press brakes** was purchased.

2004.

Unipromet beacme a member of the **"RAL"** society from **Germany**.

2007.

Hot galvanizing plant was bought.

2012.

Factory of **steel seam pipes** was purchased in Kraljevo.

2016.

The production of **three way beam** began.

2022.

Implementation of **WCM**

2025.

Acquisition of the French company 'Solosar'

New, **Integrated Information System** was implemented.

2010.

Production of **noise protection panels** began.

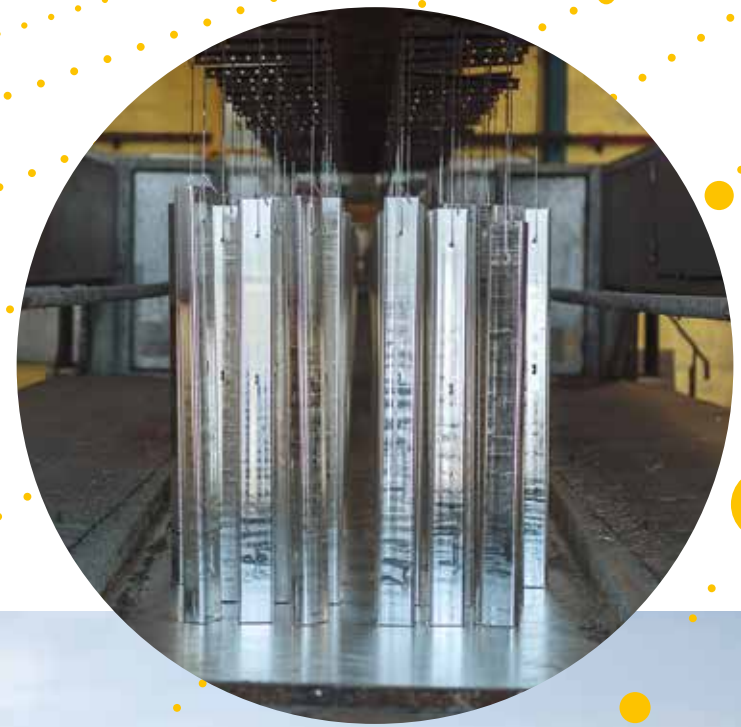
2015.

New plant for **noise panels and plastification**

2019.

Establishment of the subsidiary "Unipromet NM" LLC in North Macedonia

2023.



WHAT WE DO

- Safety Guardrails
- Noise Protection Panels
- Pedestrian Fences
- Wire Fences
- Protective Wire
- Hot dip Galvanizing
- Transport
- Installation

SAFETY GUARD RAILS

Working width category	Working width degree
W1	W ≤ 0,6m
W2	W ≤ 0,8m
W3	W ≤ 1,0m
W4	W ≤ 1,3m
W5	W ≤ 1,7m
W6	W ≤ 2,1m
W7	W ≤ 2,5m
W8	W ≤ 3,5m

Beam A

Beam B

Beam A1

Three wave beam

Safety guardrails are necessary for the safe traffic flow and protection of all traffic participants. Unipromet safety guard rails are made of high quality steel, with a hot-dip galvanizing coat.

We have over 60 tested and certified systems that fully comply with all European (EN 1317) and world standards (GOST R, SWISS and NF).

Vehicle intrusion category	Normalized vehicle intrusion
VI1	$V_{IN} \leq$ 0,6m
VI2	$V_{IN} \leq$ 0,8m
VI3	$V_{IN} \leq$ 1,0m
VI4	$V_{IN} \leq$ 1,3m
VI5	$V_{IN} \leq$ 1,7m
VI6	$V_{IN} \leq$ 2,1m
VI7	$V_{IN} \leq$ 2,5m
VI8	$V_{IN} \leq$ 3,5m
VI9	$V_{IN} >$ 3,5m

Levels of containment

Levels of containment	Appropriate testing
Normal containment potential	
N1	**TB 31**
N2	**TB 32 & TB 11**
High containment potential	
H1	**TB 42 & TB11**
L1	**TB 42 & TB 32 & TB 11**
H2	**TB 51 & TB 11**
L2	**TB 51 & TB 32 & TB 11**
H3	**TB 61 & TB 11**
L3	**TB 61 & TB 32 & TB 11**
Very high containment potential	
H4a	**TB 71 & TB11**
L4a	**TB 71 & TB 32 & TB 11**
H4b	**TB 81 & TB 11**
L4b	**TB 81 & TB 32 & TB 11**

N2
ESP 4.0

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**N2**
ASI	**A**
Working Width	**W5 (WN = 1,7 m)**
Dynamic Deflection	**1,60m**
Vehicle Intrusion (VI)	**/**
Tested Length	**60m**
System Width	**0,18m**

N2
ESP 2.0

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**N2**
ASI	**A**
Working Width	**W4 (WN = 1,3 m)**
Dynamic Deflection	**1,20m**
Vehicle Intrusion (VI)	**/**
Tested Length	**60m**
System Width	**0,18m**

N2
ESP PLUS 2.0

*tested on a narrow road shoulder

Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**N2**
ASI	**A**
Working Width	**W4 (WN = 1,2 m) ***
Dynamic Deflection	**1,10m**
Vehicle Intrusion (VI)	**/**
Tested Length	**60m**
System Width	**0,18m**

N2
ESP PLUS W1

Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**N2**
ASI	**B**
Working Width	**W1 (WN = 0,6 m)**
Dynamic Deflection	**0,50m**
Vehicle Intrusion (VI)	**/**
Tested Length	**40m**
System Width	**0,18m**

N2
ECO-SAFE 4.0

* tested with MPS

Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**N2**
ASI	**A**
Working Width	**W5 (WN = 1,7 m)**
Dynamic Deflection	**1,60m**
Vehicle Intrusion (VI)	**/**
Tested Length	**48m**
System Width	**0,14m**

N2
ESP 4.0 UFS

Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**N2**
ASI	**A**
Working Width	**W5 (WN = 1,6 m)**
Dynamic Deflection	**1,40m**
Vehicle Intrusion (VI)	**/**
Tested Length	**60m**
System Width	**0,18m**

N2
ESP BOS

* tested with MPS

Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**N2**
ASI	**B**
Working Width	**W3 (WN = 0,9 m)**
Dynamic Deflection	**0,20m**
Vehicle Intrusion (VI)	**/**
Tested Length	**/**
System Width	**0.86m**

N2
UNI SAFE 2.66

Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**N2**
ASI	**A**
Working Width	**W3 (WN = 1,0 m)**
Dynamic Deflection	**1,00m**
Vehicle Intrusion (VI)	**/**
Tested Length	**64m**
System Width	**0,21m**

N2
UNI SAFE LIGHT 4.0

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**N2**
ASI	**A**
Working Width	**W5 (WN = 1,4 m)**
Dynamic Deflection	**1,40m**
Vehicle Intrusion (VI)	**/**
Tested Length	**84m**
System Width	**0.21m**

N2
UNI SAFE EASY 4.0

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**N2**
ASI	**A**
Working Width	**W5 (WN = 1,6 m)**
Dynamic Deflection	**1,50m**
Vehicle Intrusion (VI)	**/**
Tested Length	**64m**
System Width	**0,21m**

H1
EDSP 2.0

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**H1**
ASI	**A**
Working Width	**W5 (WN = 1,7 m)**
Dynamic Deflection	**1,30m**
Vehicle Intrusion (VI)	**VI7 (VIN = 2,3 m)**
Tested Length	**60m**
System Width	**0,50m**

H1
EDSP 1.33

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**H1**
ASI	**A**
Working Width	**W4 (WN = 1,2 m)**
Dynamic Deflection	**1,10m**
Vehicle Intrusion (VI)	**VI6 (VIN = 2,0 m)**
Tested Length	**60m**
System Width	**0,50m**

H1
DDSP 4.0

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**H1**
ASI	**A**
Working Width	**W6 (WN = 1,9 m)**
Dynamic Deflection	**Type A 1,6 m** **Type B 1,8 m**
Vehicle Intrusion (VI)	**VI6 (VIN = 2,1 m)**
Tested Length	**60m**
System Width	**0,80m**

H1
UNI RAIL 3.0 H1W3

Safety Beam Type	**Safety Beam B**
Containment Level	**H1**
ASI	**A**
Working Width	**W3 (WN=1,0m)**
Dynamic Deflection	**0,90m**
Vehicle Intrusion (VI)	**VI4 (VIN=1,2m)**
Tested Length	**49m**
System Width	**0,21m**

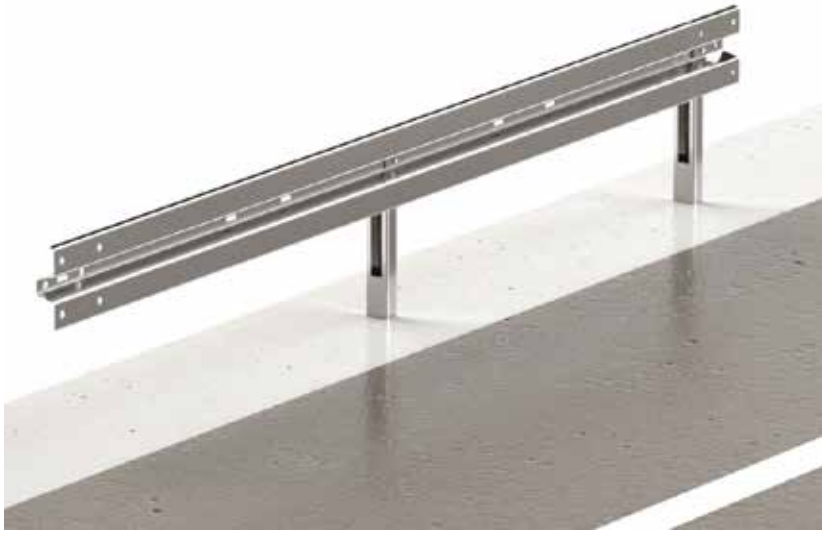
H1
UNI RAIL 2.66

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**H1**
ASI	**A**
Working Width	**W4 (WN=1,2m)**
Dynamic Deflection	**1,00m**
Vehicle Intrusion (VI)	**VI6 (VIN=2,0m)**
Tested Length	**64,0m**
System Width	**0,21m**

H1
UNI SAFE 1.33

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**H1**
ASI	**A**
Working Width	**W3 (WN = 1,0 m)**
Dynamic Deflection	**0,90m**
Vehicle Intrusion (VI)	**VI3 (VIN = 1,0 m)**
Tested Length	**80m**
System Width	**0,21m**

H1
UNI SAFE 2.0



Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**H1**
ASI	**A**
Working Width	**W3 (WN = 1,0 m)**
Dynamic Deflection	**0,90m**
Vehicle Intrusion (VI)	**VI8 (VIN = 3,1 m)**
Tested Length	**64m**
System Width	**0,21**

L1
UNI SAFE 4.0

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L1**
ASI	**A**
Working Width	**W4 (WN = 1,2 m)**
Dynamic Deflection	**1,20m**
Vehicle Intrusion (VI)	**VI8 (VIN = 2,7m)**
Tested Length	**84m**
System Width	**0,21m**

L1
SUPER RAIL ES 1.0

*modification for TB32

Safety Beam Type	**Safety Beam A Safety Beam B**	**Safety Beam A Safety Beam B**
Containment Level	**L1**	**N2**
ASI	**A**	**A**
Working Width	**W2 (WN = 0,8 m)**	**W2 (WN=0,7 m)**
Dynamic Deflection	**0,70m**	**0,50m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,4 m)**	**/**
Tested Length	**40m***	**40m***
System Width	**0,21m**	**0,21m**

L1
SUPER RAIL ES 1.33

* tested on a narrow road shoulder

Safety Beam Type	**Safety Beam A Safety Beam B**	**Safety Beam A Safety Beam B**
Containment Level	**L1**	**N2**
ASI	**A**	**A**
Working Width	**W4 (WN = 1,1 m)**	**W2 (WN = 0,8 m)**
Dynamic Deflection	**1,00m**	**0,70m**
Vehicle Intrusion (VI)	**VI4 (VIN = 1,3 m)**	**/**
Tested Length	**60m**	**60m**
System Width	**0,21m**	**0,21m**

L1
ECO-SAFE 2.0 MPS

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L1**
ASI	**A**
Working Width	**W4 (WN = 1,3 m)** **W5 (Wn = 1,4 m) ***
Dynamic Deflection	**1,20m** **1,30m**
Vehicle Intrusion (VI)	**VI6 (VIN = 2,1 m)** **VI7 (VIn = 2,4 m) ***
Tested Length	**48m**
System Width	**0,14m**

L1
ECO-SAFE 1.33 MPS

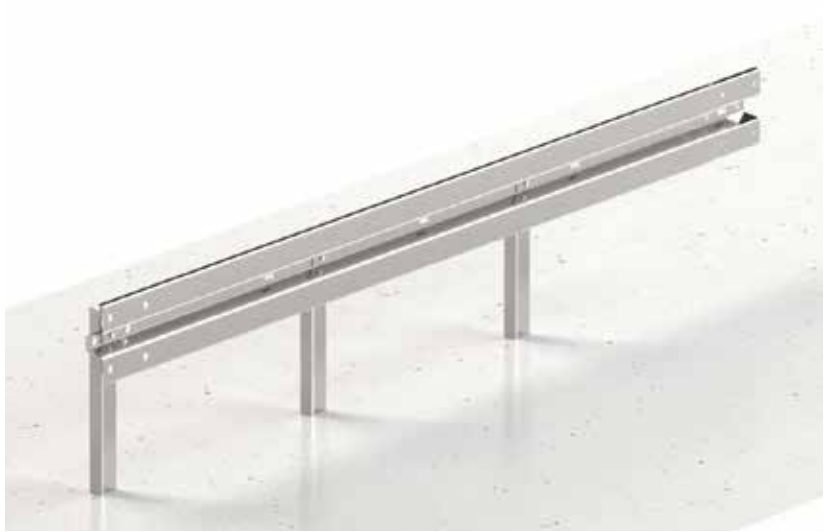
Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L1**
ASI	**A**
Working Width	**W3 (WN = 1,0 m)**
Dynamic Deflection	**0,80m**
Vehicle Intrusion (VI)	**VI7 (VIN = 2,2 m)**
Tested Length	**48m**
System Width	**0,14**

L1
ECO-SAFE 2.0

* tested on a narrow road shoulder

Safety Beam Type	**Safety Beam A Safety Beam B**	**Safety Beam A Safety Beam B**
Containment Level	**H1/L1**	**N2**
ASI	**A**	**A**
Working Width	**W4 (WN = 1,3 m) W5 (WN = 1,4 m) ***	**W3 (WN = 1,0 m)**
Dynamic Deflection	**1,20m 1,30m ***	**0,90m**
Vehicle Intrusion (VI)	**VI6 (VIN = 2,1 m) VI7 (VIN = 2,4 m) ***	**/**
Tested Length	**48m**	**48m**
System Width	**0,14m**	**0,14m**

L1
ECO-SAFE 1.33

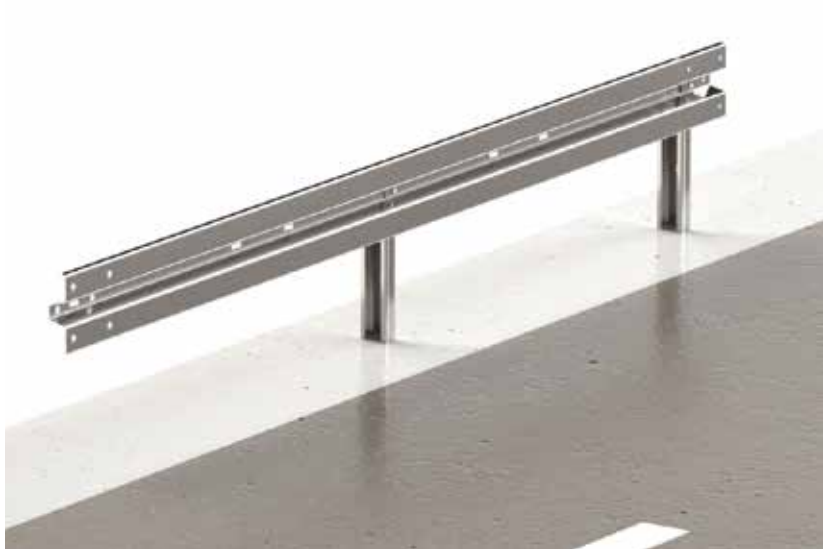


* tested on a narrow road shoulder

Safety Beam Type	**Safety Beam A Safety Beam B**	**Safety Beam A Safety Beam B**
Containment Level	**H1/L1**	**N2**
ASI	**A**	**A**
Working Width	**W3 (WN = 1,0 m)**	**W3 (WN = 0,9 m)**
Dynamic Deflection	**0,80m**	**0,80m**
Vehicle Intrusion (VI)	**VI7 (VIN = 2,2 m)**	**/**
Tested Length	**48m**	**48m**
System Width	**0,14m**	**0,14m**

L1

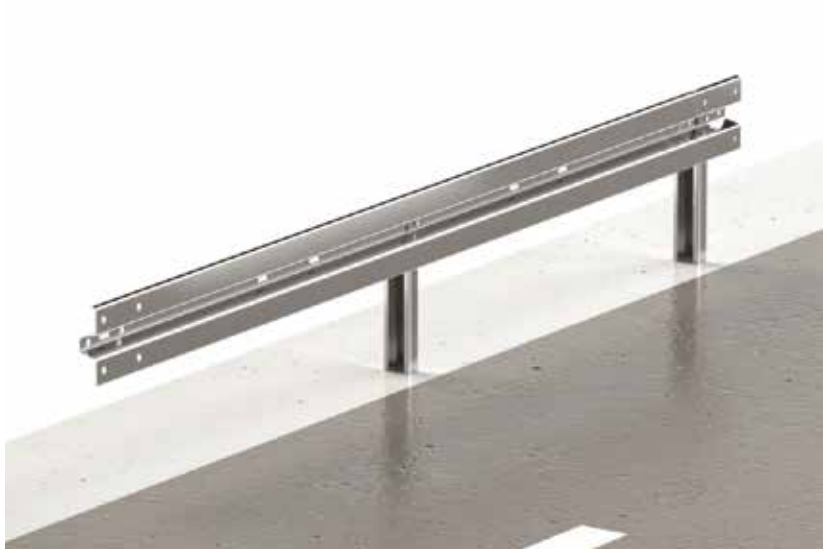
UNI SAFE EASY 2.0



Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L1**
ASI	**A**
Working Width	**W4 (WN = 1,3 m)**
Dynamic Deflection	**Type A 1,2 m** **Type B 1,1 m**
Vehicle Intrusion (VI)	**Type A VI7 (VIN = 2,2 m)** **Type B VI6 (VIN = 1,8 m)**
Tested Length	**80m**
System Width	**0,21m**

L1

UNI SAFE LIGHT 2.0



Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L1**
ASI	**A**
Working Width	**W4 (WN = 1,0 m)**
Dynamic Deflection	**1,00m**
Vehicle Intrusion (VI)	**VI6 (VIN = 1,8 m)**
Tested Length	**80m**
System Width	**0,21m**

L1
UNI SAFE LIGHT 2.66

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L1**
ASI	**A**
Working Width	**W3 (WN = 0,9 m)**
Dynamic Deflection	**0,90m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,6m)**
Tested Length	**88m**
System Width	**0,21m**

H2
DDSP ++ 2.0

Safety Beam Type	**Safety Beam A**
Containment Level	**H2**
ASI	**A**
Working Width	**W6 (WN = 1,9 m)**
Dynamic Deflection	**1,70m**
Vehicle Intrusion (VI)	**VI6 (VIN = 2,1 m)**
Tested Length	**80m**
System Width	**0,80m**

H2
UNI RAIL 3W 2.0

Safety Beam Type	**Triple beam**
Containment Level	**H2**
ASI	**A**
Working Width	**W5 (WN = 1,7 m)**
Dynamic Deflection	**1,60m**
Vehicle Intrusion (VI)	**VI6 (VIN = 2,1 m)**
Tested Length	**52m**
System Width	**0,35m**

H2
UNI RAIL 1.33 Type A

Safety Beam Type	**Safety Beam A**
Containment Level	**H2**
ASI	**A**
Working Width	**W5 (WN = 1,7 m)**
Dynamic Deflection	**1,60m**
Vehicle Intrusion (VI)	**VI7 (VIN = 2,2m)**
Tested Length	**48m**
System Width	**0,21m**

H2
UNI RAIL PLUS 1.33

Safety Beam Type	**Safety Beam A** **Safety Beam B** **Safety Beam A1**
Containment Level	**H2**
ASI	**B**
Working Width	**W3 (WN = 1,0 m)**
Dynamic Deflection	**0,90m**
Vehicle Intrusion (VI)	**Type A VI4 (VIN = 1,3 m)** **Type B VI5 (VIN = 1,5 m)**
Tested Length	**44m**
System Width	**0,21m**

H2
UNI RAIL ULTRA 3W 1.5

Safety Beam Type	**Triple beam**
Containment Level	**H2**
ASI	**B**
Working Width	**W2 (WN = 0,8 m)**
Dynamic Deflection	**0,70m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,4 m)**
Tested Length	**72m**
System Width	**0,29m**

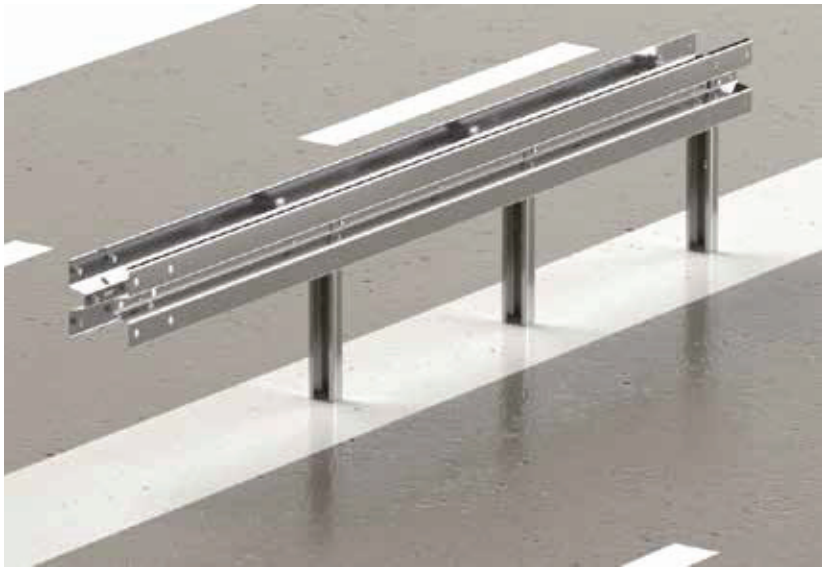
H2
UNI SAFE 3W 2.66

Safety Beam Type	**Triple beam**
Containment Level	**H2**
ASI	**A**
Working Width	**W4 (WN = 1,2 m)**
Dynamic Deflection	**1,10m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,5m)**
Tested Length	**80m**
System Width	**0,21m**

H2
UNI SAFE SM 3W 2.00

Safety Beam Type	**Triple beam**
Containment Level	**H2**
ASI	**A**
Working Width	**W3 (WN = 0,9 m)**
Dynamic Deflection	**0,50m**
Vehicle Intrusion (VI)	**VI4 (VIN = 1,2 m)**
Tested Length	**84m**
System Width	**0,3m**

H2
UNI SAFE double 1.33

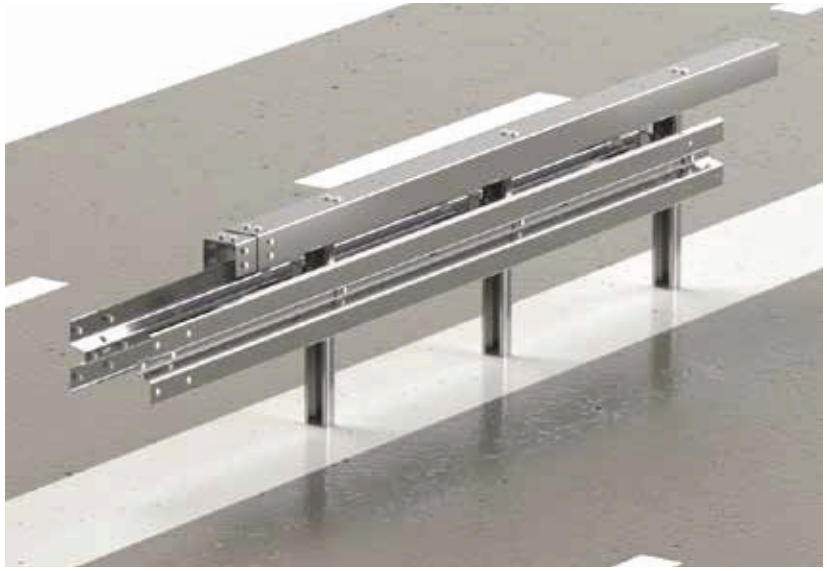


Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**H2**
ASI	**B**
Working Width	**W3 (WN = 1,0 m)**
Dynamic Deflection	**0,90m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,4 m)**
Tested Length	**80m**
System Width	**0,28m**

H2
UNI SAFE double 2.0

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**H2**
ASI	**A**
Working Width	**W5 (WN = 1,7 m)**
Dynamic Deflection	**1,60m**
Vehicle Intrusion (VI)	**VI6 (VIN = 2,0m)**
Tested Length	**80m**
System Width	**0,28m**

H2
UNI SAFE M double 1.33



Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**H2**
ASI	**B**
Working Width	**W2 (WN = 0,8 m)**
Dynamic Deflection	**0,50m**
Vehicle Intrusion (VI)	**VI3 (VIN = 1,0m)**
Tested Length	**52m**
System Width	**0,41m**

H2
UNI SAFE LIGHT double 2.0

Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**H2**
ASI	**A**
Working Width	**W4 (WN = 1,3 m)**
Dynamic Deflection	**1,20m**
Vehicle Intrusion (VI)	**VI6 (VIN = 1,9 m)**
Tested Length	**52m**
System Width	**0,26m**

H2
UNI RAIL 3W 1.5

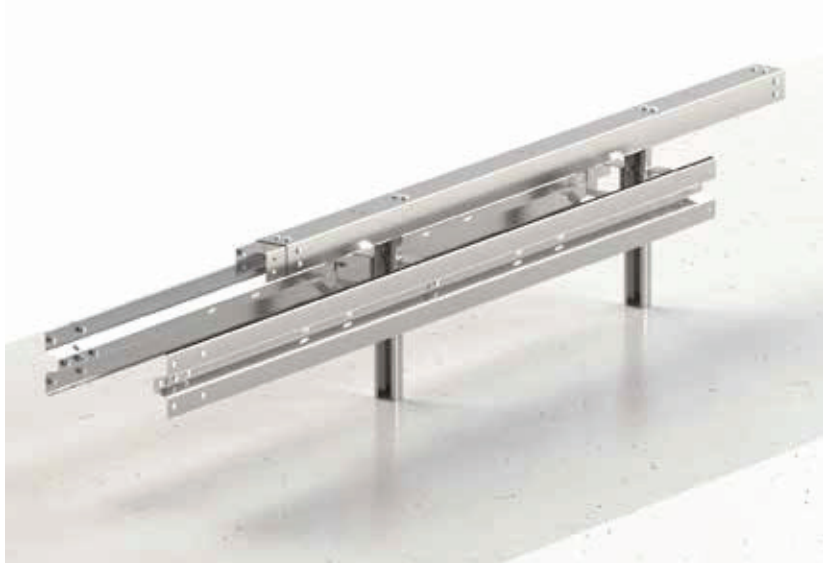
Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**H2**
ASI	**B**
Working Width	**W3(WN = 1,0 m)**
Dynamic Deflection	**0,90m**
Vehicle Intrusion (VI)	**VI3(VIN = 1,0m)**
Tested Length	**45m**
System Width	**0,29m**

L2
SUPER RAIL Eco

*tested on a narrow road shoulder

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L2**
ASI	**A**
Working Width	**W4 (WN = 1,3 m)** **W5 (Wn = 1,5 m) ***
Dynamic Deflection	**0,70m** **1,20m ***
Vehicle Intrusion (VI)	**VI4 (VIN = 1,3 m)** **VI5 (VIN = 1,5 m) ***
Tested Length	**52m**
System Width	**0,45m**

L2
SUPER RAIL Eco double



Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**L2**
ASI	**B**
Working Width	**W4 (WN = 1,2 m)**
Dynamic Deflection	**0,70m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,4m)**
Tested Length	**52m**
System Width	**0,70m**

L2
SUPER RAIL Eco 1A/MÜF

Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**L2**
ASI	**A**
Working Width	**W4 (WN = 1,3 m)**
Dynamic Deflection	**1,10m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,4m)**
Tested Length	**52m**
System Width	**0,45m**

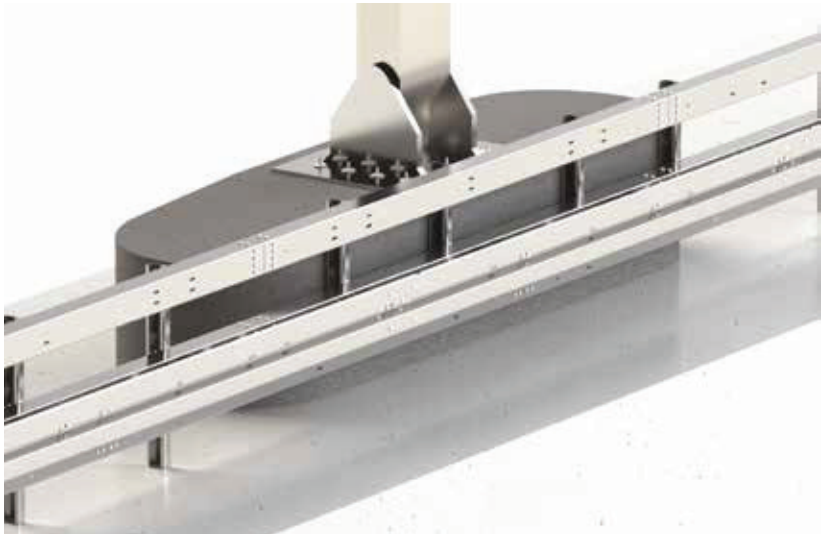
L2
UNI RAIL 1.33 Type B

Safety Beam Type	**Safety Beam B**
Containment Level	**L2**
ASI	**A**
Working Width	**W5 (WN = 1,6 m)**
Dynamic Deflection	**1,50m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,6 m)**
Tested Length	**44m**
System Width	**0,21m**

L2
UNI RAIL PLUS 1.00

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L2**
ASI	**A**
Working Width	**W2 (WN = 0,8 m)**
Dynamic Deflection	**0,60m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,40 m)**
Tested Length	**60m**
System Width	**0,34m**

L2
SUPER RAIL VZB



*Super Rail VZB is integrated into the Super Rail transition

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L2**
ASI	**A**
Working Width	**W3 (WN = 0,9m)**
Dynamic Deflection	**0,50m**
Vehicle Intrusion (VI)	**VI3 (VIN = 0,9m)**
Tested Length	**/***
System Width	**0,50m**

H3
UNI SAFE PRO 3W 2.0

Safety Beam Type	**Triple beam**
Containment Level	**H3**
ASI	**A**
Working Width	**W5 (WN = 1,4 m)**
Dynamic Deflection	**1,30m**
Vehicle Intrusion (VI)	**VI8 (VIN = 2,8m)**
Tested Length	**81m**
System Width	**0,55m**

H4b
UNI SAFE PRO 3W 2.0 double

Safety Beam Type	**Triple beam**
Containment Level	**H4b**
ASI	**A**
Working Width	**W5 (WN = 1,5m)**
Dynamic Deflection	**1,10m**
Vehicle Intrusion (VI)	**VI7 (VIN = 2,5m)**
Tested Length	**64m**
System Width	**0,915m**

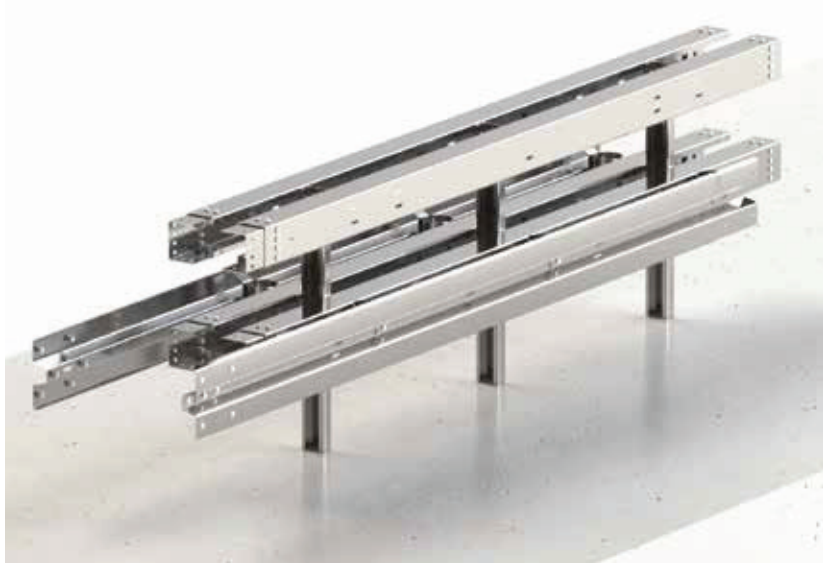
H4b
UNI SAFE PRO 3W 2.0

Safety Beam Type	**Triple beam**
Containment Level	**H4b**
ASI	**A**
Working Width	**W5 (WN = 1,7 m)**
Dynamic Deflection	**1,60m**
Vehicle Intrusion (VI)	**VI7 (VIN = 1,6m)**
Tested Length	**81m**
System Width	**0,55m**

L4b
SUPER RAIL

Safety Beam Type	**Safety Beam A Safety Beam B**	**Safety Beam A Safety Beam B**
Containment Level	**L4b**	**L2**
ASI	**A**	**A**
Working Width	**W7 (WN = 2,3 m)**	**W4 (WN = 1,3 m)**
Dynamic Deflection	**2m**	**0,80m**
Vehicle Intrusion (VI)	**VI7 (VIN = 2,5m)**	**VI4 (VIN = 1,3m)**
Tested Length	**76m**	**40m**
System Width	**0,50m**	**0,50m**

L4b
SUPER RAIL double



Safety Beam Type	**Safety Beam A Safety Beam B**	**Safety Beam A Safety Beam B**
Containment Level	**L4b**	**L2**
ASI	**B**	**B**
Working Width	**W5 (WN = 1,5 m)**	**W4 (WN = 1,2 m)**
Dynamic Deflection	**0,90m**	**0,60m**
Vehicle Intrusion (VI)	**VI8 (VIN = 3,4m)**	**VI3 (VIN = 1,0m)**
Tested Length	**76m**	**60m**
System Width	**0,86m**	**0,86m**

L4b
SUPER RAIL HS

Safety Beam Type	**Safety Beam A Safety Beam B**	**Safety Beam A Safety Beam B**
Containment Level	**L4b**	**L2**
ASI	**B**	**B**
Working Width	**W4 (WN = 1,2 m)**	**W3 (WN = 0,9 m)**
Dynamic Deflection	**0,90m**	**0,50m**
Vehicle Intrusion (VI)	**VI8 (VIN = 3,3m)**	**VI2 (VIN = 0,8m)**
Tested Length	**60m**	**60m**
System Width	**0,45m**	**0,45m**

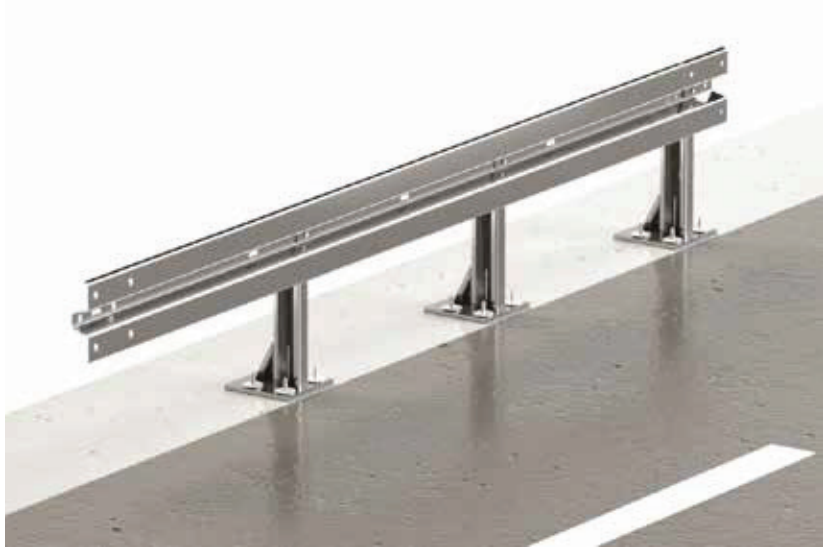
L4b
SUPER RAIL Eco HS

Safety Beam Type	**Safety Beam A Safety Beam B**	**Safety Beam A Safety Beam B**
Containment Level	**L4B**	**L2**
ASI	**B**	**B**
Working Width	**W4 (WN = 1,1m)**	**W2 (WN = 0,8 m)**
Dynamic Deflection	**0,90m**	**0,60m**
Vehicle Intrusion (VI)	**VI9 (VIN = 4,1m)**	**VI2 (VIN = 0,80m)**
Tested Length	**80m**	**36m**
System Width	**0,37m**	**0,37m**

H1 on object
UNI SAFE 2.0 Bw

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**H1**
ASI	**A**
Working Width	**W2 (WN = 0,8 m)**
Dynamic Deflection	**0,70m**
Vehicle Intrusion (VI)	**VI8 (VIN = 2,8m)**
Tested Length	**68m**
System Width	**0,21m**

H1 on object
UNI SAFE 1.33 Bw



Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**H1**
ASI	**A**
Working Width	**W1 (WN = 0,5 m)**
Dynamic Deflection	**0,30m**
Vehicle Intrusion (VI)	**VI4 (VIN = 1,2m)**
Tested Length	**68m**
System Width	**0,21m**

H1 on object
EDSP 1.33 Bw

* In participation with the railing according to RiZ Gel 3 (h=1.0m) with steel cable insert in the handrail, without this containment level is N2

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**H1***
ASI	**A**
Working Width	**W5 (WN = 1,6 m)**
Dynamic Deflection	**1,20m**
Vehicle Intrusion (VI)	**VI6 (VIN = 2,1m)**
Tested Length	**68m**
System Width	**0,50m**

L1 on object
ECO SAFE 1.33 Bw

Safety Beam Type	**Safety Beam A** **Safety Beam B**	**Safety Beam A** **Safety Beam B**
Containment Level	**H1/L1**	**N2**
ASI	**A**	**A**
Working Width	**W2 (WN = 0,8 m)**	**W1 (WN = 0,6 m)**
Dynamic Deflection	**0,60m**	**0,50m**
Vehicle Intrusion (VI)	**VI7 (VIN = 2,4m)**	**/**
Tested Length	**36m**	**36m**
System Width	**0,30m**	**0,30m**

H2 on object
UNI RAIL PLUS 1.33 Bw

Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**H2**
ASI	**B**
Working Width	**W3 (WN = 1,0 m)**
Dynamic Deflection	**0,70m**
Vehicle Intrusion (VI)	**VI4 (VIN = 1,3 m)**
Tested Length	**44m**
System Width	**0,34m**

H2 on object
UNI RAIL 3W 1.5 Bw

Safety Beam Type	**Triple beam**
Containment Level	**H2**
ASI	**B**
Working Width	**W4 (WN = 1,2 m)**
Dynamic Deflection	**1,10m**
Vehicle Intrusion (VI)	**VI4 (1,2m)**
Tested Length	**54m**
System Width	**0,34m**

H2 on object
UNI SAFE LIGHT 3W 2.00 Bw

Safety Beam Type	**Triple beam**
Containment Level	**H2**
ASI	**B**
Working Width	**W4 (WN = 1,20 m)**
Dynamic Deflection	**0,90m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,60 m)**
Tested Length	**56m**
System Width	**0,24m**

H2 on object
UNI SAFE 3W 2.00 Bw

Safety Beam Type	**Triple beam**
Containment Level	**H2**
ASI	**B**
Working Width	**W3 (WN = 1,0 m)**
Dynamic Deflection	**0,60m**
Vehicle Intrusion (VI)	**VI3 (VIN = 0,9 m)**
Tested Length	**52m**
System Width	**0,315m**

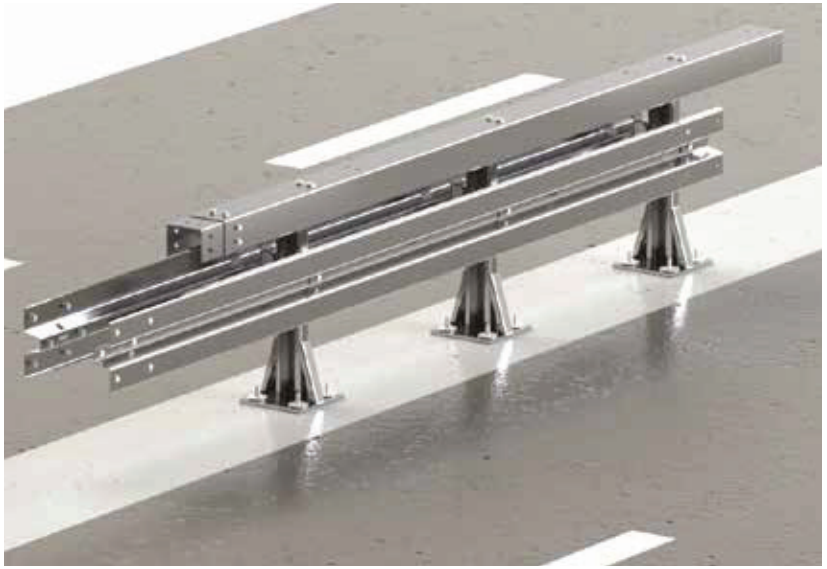
H2 on object
UNI SAFE SM 3W 2.00 Bw

Safety Beam Type	**Triple beam**
Containment Level	**H2**
ASI	**B**
Working Width	**W3 (WN = 1,0 m)**
Dynamic Deflection	**0,70m**
Vehicle Intrusion (VI)	**VI4 (VIN = 1,1m)**
Tested Length	**52m**
System Width	**0,315m**

H2 on object
UNI SAFE SM 3W 1.33 Bw

Safety Beam Type	**Triple beam**
Containment Level	**H2**
ASI	**B**
Working Width	**W3 (WN = 0,8 m)**
Dynamic Deflection	**0,60m**
Vehicle Intrusion (VI)	**VI4 (VIN = 1,1m)**
Tested Length	**48m**
System Width	**0,33m**

H2 on object
UNI SAFE double 1.33 Bw



Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**H2**
ASI	**B**
Working Width	**W2 (WN = 0,8 m)**
Dynamic Deflection	**0,40m**
Vehicle Intrusion (VI)	**VI3 (VIN = 0,9 m)**
Tested Length	**52m**
System Width	**0,41m**

L2 on object
SUPER RAIL Bw

Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**L2**
ASI	**B**
Working Width	**W4 (WN = 1,2 m)**
Dynamic Deflection	**0,60m**
Vehicle Intrusion (VI)	**VI4 (VIN = 1,2 m)**
Tested Length	**36m**
System Width	**0,50m**

L2 on object
SUPER RAIL double Bw

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L2**
ASI	**B**
Working Width	**W4 (WN = 1,2 m)**
Dynamic Deflection	**0,60m**
Vehicle Intrusion (VI)	**VI4 (VIN = 1,2 m)**
Tested Length	**36m**
System Width	**0,86m**

L2 on object
SUPER RAIL Eco Bw

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L2**
ASI	**A**
Working Width	**W4 (WN = 1,3 m)**
Dynamic Deflection	**0,90m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,4 m)**
Tested Length	**60m**
System Width	**0,45m**

L2 on object
SUPER RAIL Eco double Bw

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L2**
ASI	**B**
Working Width	**W4 (WN = 1,3 m)**
Dynamic Deflection	**0,90m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,4 m)**
Tested Length	**60m**
System Width	**0,70m**

L2 on object
SUPER RAIL Eco HS Bw

Safety Beam Type	**Safety Beam A** **Safety Beam B**
Containment Level	**L2**
ASI	**B**
Working Width	**W1 (WN = 0,5 m)**
Dynamic Deflection	**0,40m**
Vehicle Intrusion (VI)	**VI2 (VIN = 0,7 m)**
Tested Length	**36m**
System Width	**0,37m**

H4b on object

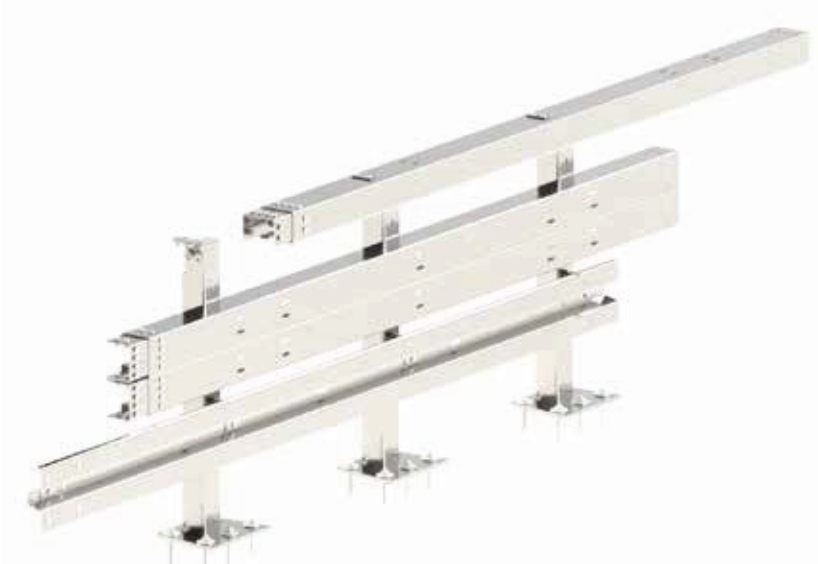
UNI SAFE Pro 3W 2.0 Bw

Safety Beam Type	**Triple beam**
Containment Level	**H4b**
ASI	**A**
Working Width	**W3 (WN = 1,0 m)**
Dynamic Deflection	**0,70m**
Vehicle Intrusion (VI)	**VI7 (VIN = 2,3 m)**
Tested Length	**81m**
System Width	**0,55m**

L4b on object
SUPER RAIL HS Bw

Safety Beam Type	**Safety Beam A Safety Beam B**
Containment Level	**L4b**
ASI	**B**
Working Width	**W2 (WN = 0,7 m)**
Dynamic Deflection	**0,30m**
Vehicle Intrusion (VI)	**VI5 (VIN = 1,7 m)**
Tested Length	**72m**
System Width	**0,32m**

L4b on object
SUPER RAIL Pro Bw



Safety Beam Type	**Safety Beam A Safety Beam B**	**Safety Beam A Safety Beam B**
Containment Level	**L4b**	**L2**
ASI	**B**	**B**
Working Width	**W4 (WN = 1,3 m)**	**W2 (WN = 0,8 m)**
Dynamic Deflection	**0,90m**	**0,40m**
Vehicle Intrusion (VI)	**VI9 (VIN = 4,2m)**	**VI2 (VIN = 0,8m)**
Tested Length	**60m**	**60m**
System Width	**0,45m**	**0,45m**

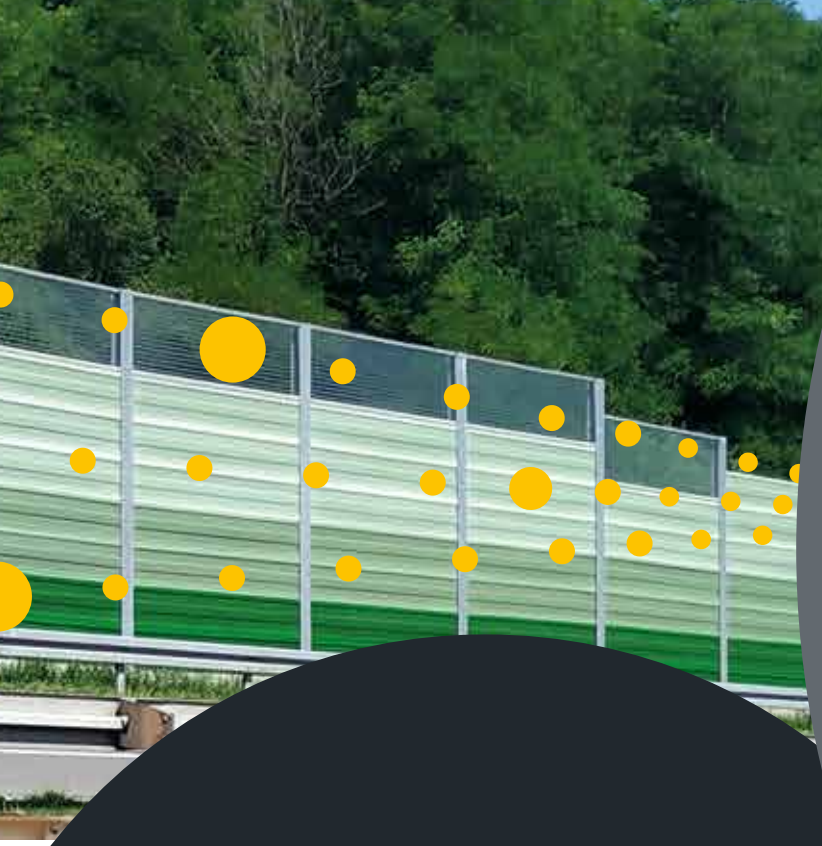
NOISE PROTECTION PANELS

Categories of absorptive performance

Category	*DLα* dB
A0	Not determined
A1	< 4
A2	4 to 7
A3	8 to 11
A4	11 to 15
A5	> 15

On the highway, vehicles create noise of 80 decibels per average. In residential areas, regulations prescribe noise reduction to below 65 decibels during day and below 55 during night so noise protection panels are a must in these road sections.

Aside from being used on the highways, aluminium noise protection panels are used on railroads, constructions, all urban areas and all other areas where noise reduction is necessary.



Limit values for outdoor noise indicators

Zone	Space	Limit noise values (dB(A))	
		Day & Evening	Night
1	Rest and recreation areas, hospital zones and convalescent homes, cultural and historical sites, large parks	50	40
2	Tourist areas, camps and school zones	50	45
3	Residental area	55	45
4	Business-residential areas, commercial-residential areas and children's playgrounds	60	50
5	City center, craft, trade, administrative zone with apartments, zone along highways, highways and city roads	65	55
6	Industrial, storage and service areas and transport terminals without residential buildings	At the border of this zone, the noise must not exceed the limit value for the zone w	

Categories of Airbome Sound Insulation

Category	DL_R dB
B0	Not determined
B1	DL_R□< 15
B2	15 to 24
B3	25 to 34
B4	> 34

Source: prEN 1793-2 (2011)

ABSORPTION PANELS

Their role is to partially absorb the sound waves and thus reduce noise. They are made of perforated aluminum sheet on the front (absorbent) side and profiled aluminum sheet from the rear (reflective) side, filled with bituminous stripes and stone wool. On the side, these panels are closed with aluminum covers.

TRANSPARENT PANELS

Unlike the standard panel types, these are specific as they do not block the view, however they provide the same protection.

They are made of polycarbonate or acrylic glass in the appropriate aluminum frame.

REFLECTIVE PANELS

Their role is to reflect part of the sound waves into the atmosphere.

They are made of profiled aluminum sheet on both front and back side , with stone filling wool. On the side, these panels are closed with aluminum covers.

PEDESTRIAN FENCES

We make pedestrian fences according to customer requirements, but we can also offer our standard solutions made of round or square pipes of different sizes, with appropriate fillings. Pedestrian fences can be protected by hot-dip galvanizing in accordance with the standard EN ISO 1461 or painting in color according to customer requirements. We also offer various options for installing pedestrian fences, through appropriate anchor bolts or direct concreting in the bridge cap.

WIRE FENCES

We can offer wires of different heights and types of knits. We also offer a solution with columns that are installed by directly driving the posts into the ground, without concreting. The standard solution is 1650mm high (with farmer's mesh height 1600mm). The elements of the wire fence are protected by hot-dip galvanizing in accordance with the standard EN ISO 1461 (mesh with a minimum zinc content of 200gr / m^2).

SAFETY NETS

They are made of griffin mesh built into a suitable L-profile frame. All elements of the net are protected with hot-dip galvanizing in accordance with the standard EN ISO 1461 and the nets are placed on the existing pedestrian / protective fences by means of appropriate stirrups without additional welding.

HOT DIP GALVANIZING

Hot-dip galvanizing is taking primacy over coating, primarily due to permanent and high quality anti-corosive protection but also expendable and ecological acceptability.

After we purchased the hot-dip galvanizing plant, the production lifecycle was completed and product quality was improved. We process 80.000t of metal per year.

Advantages

- Quality and durable anti-corosion protection
- High resistance to mechanical damage
- More profitable and durable than coating
- Environmentally friendly
- Protects the interior of hollow structures


UNIPROMET
IVECO
Na svetloj strani puta.

INTERNATIONAL TRANSPORT

In order to complete the story of full service for our clients, from the production of steel elements and their galvanizing for additional protection, we provide the service of international transport. We own a fleet of over 30 new trucks with experienced drivers who travel over 2,000,000 km per year.

Widely branched network and long-term partnerships with our associates enable us high quality and reliability of the international road transport services.

Strongest on the Road

- Fleet of 30 trucks of various load capacities
- Experienced drivers with over 2,000,000 km per year
- Meeting deadlines

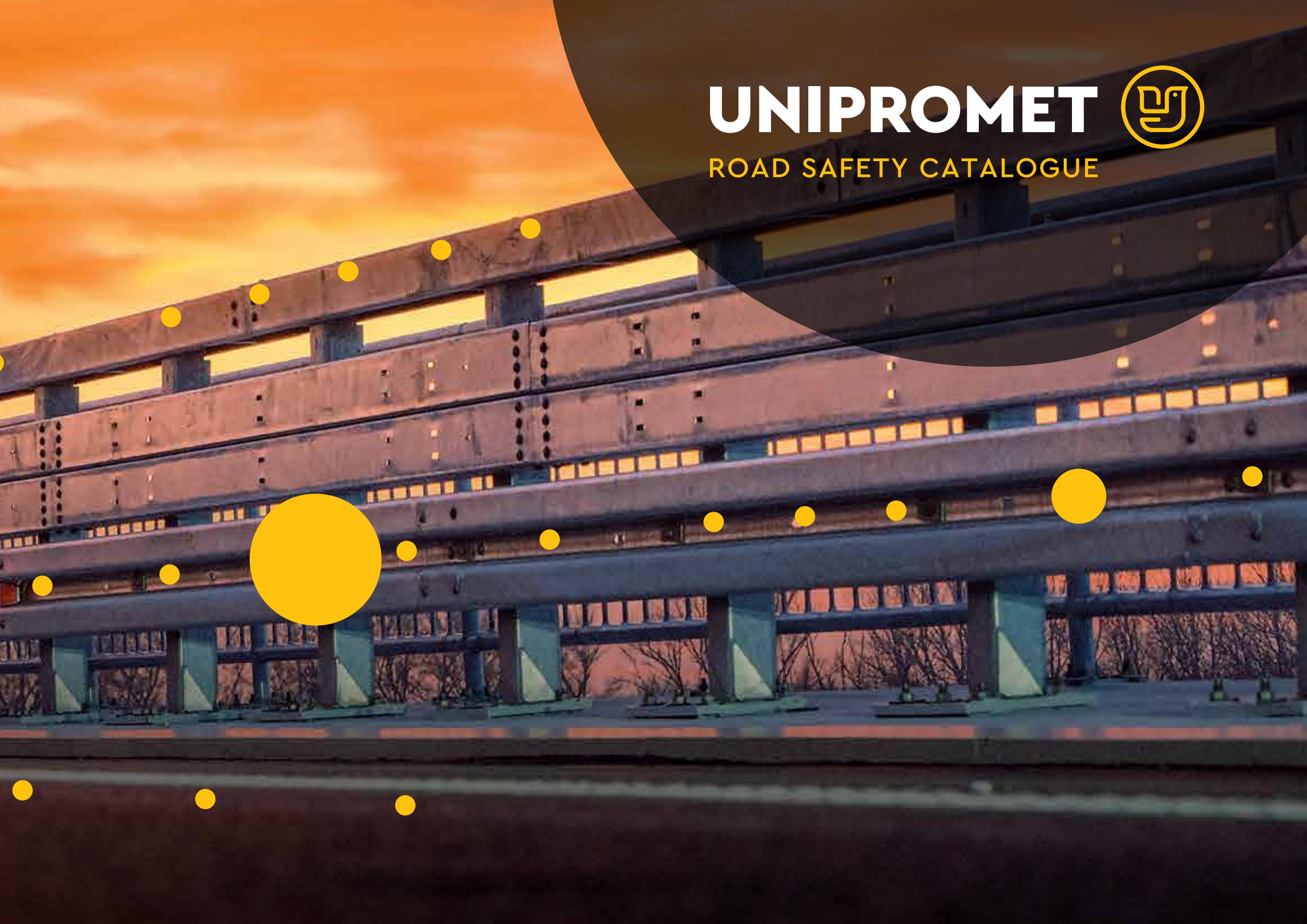
INSTALLATION

Professional and experienced team, combined with modern equipment and technology, allow us to perform the assembly service of all of our elements promptly and with great ease.

Years of experience and satisfied customers are the best proof of our quality and commitment.

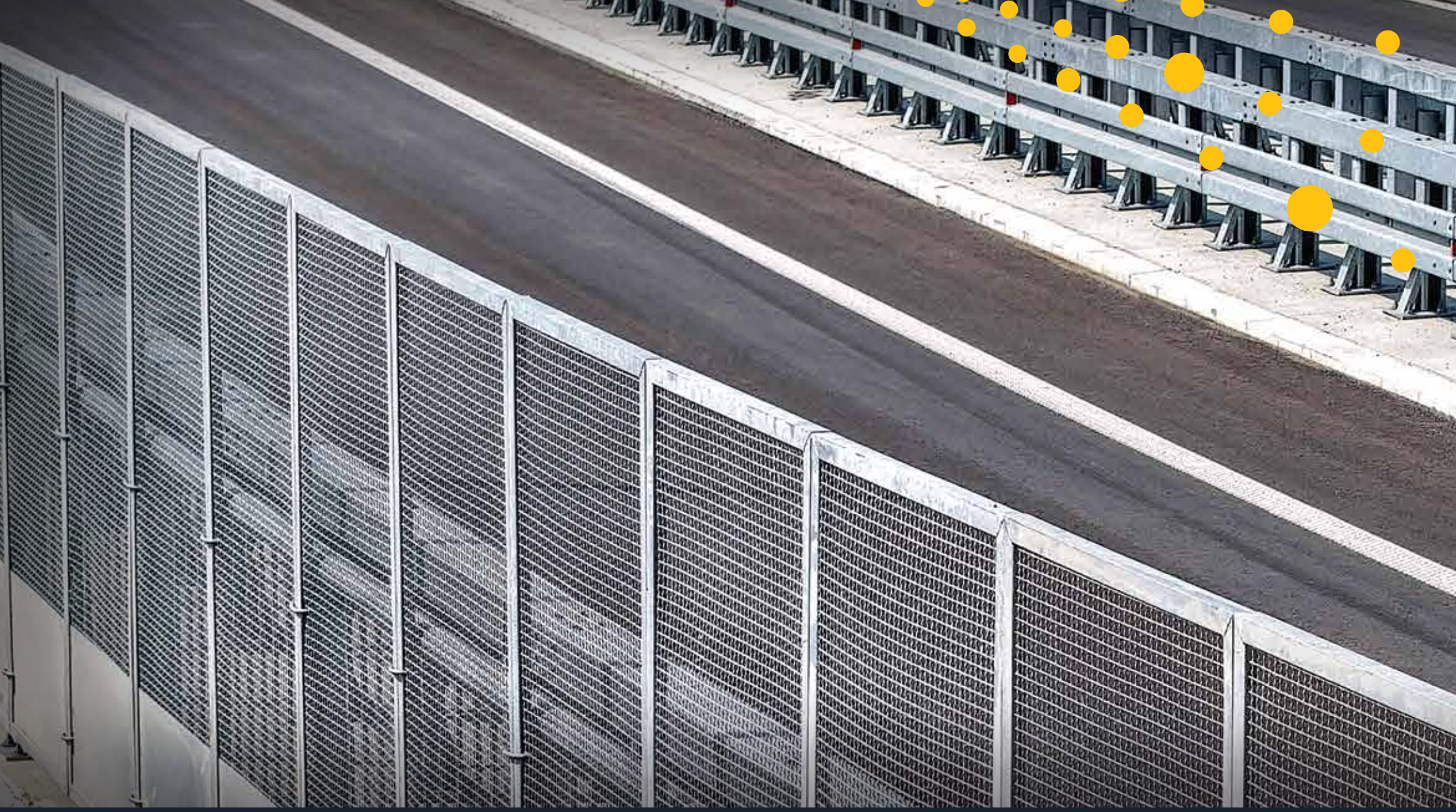
Efficient and Professional

- 9 highly-skilled installation teams
- Over 700 installed kilometers of safety guardrails per year
- Use of state-of-the-art equipment
- Meeting deadlines



UNIPROMET

ROAD SAFETY CATALOGUE



www.unipromet.co.rs