

The innovative

GUARDIAN



With the GUARDIAN, Nissen is striking out in a new direction. Its innovative design requires less material, thus saving on weight and costs. In addition, this system is even more compact in use.

The Nissen GUARDIAN is a solid steel design which, in the event of a collision, absorbs kinetic energy through structural deformation. Specifically, this means that if a vehicle collides with the GUARDIAN, the square tubes are pushed into each other and are spliced apart. This system, developed exclusively by Nissen, features numerous advantages:

- Cost-saving design that is economic on material and ensures excellent safety
- Cost savings thanks to replaceable components after a collision
- Easy to handle, as no tools are needed for fitting and removal
- Reduction in clearance height thanks to compact folding design



PREPARED FOR EVERY EVENTUALITY

Nissen's mobile crash protection systems can be configured to suit your exact requirements. You can choose conventional warning panels with light arrows, variable message signs from Nissen's VarioSign LED System, or a combination of both. In addition, designs incorporating sliders or lift functions are also possible. For vehicles with trailers that will not use the universal coupling, Nissen offers you practical adapters.

TMA with slider

- Vertically extending warning panel
- Chevron patterned plates and directional arrow with microprismatic retro-reflective foil, type RA2C
- Luminous arrow system with two LED-TL advance warning beacons (WL5) and 25 separately monitored LED-TL warning beacons (WL6)
- Directional arrow with motor revolution, mechanical emergency adjustment and automatic luminous arrow adjustment



TMA with light arrows

- Light arrow device
- Chevron patterned plates and directional arrow with microprismatic retro-reflective foil, type RA2C
- Luminous arrow system with two LED-TL advance warning beacons (WL5) and 25 separately monitored LED-TL warning beacons (WL6)
- Directional arrow with motor revolution, mechanical emergency adjustment and automatic luminous arrow adjustment



TMA with LED variable message signs

- Powder-coated aluminium profile housing (AlMg3)
- Full matrix for displaying freely programmable static or dynamic texts and symbols to animations
- Good recognizability of the signs from almost every perspective and even from long distances
- Certified in compliance with EN 2966:2005+A1:2009 CE
- Grid dimension 20 mm
- Optionally classic (4 colours) or RGB (256 colours)
- Premium quality light-emitting diodes with a long service life
- Continuous brightness adjustment, automatic or manual
- Available in different display sizes



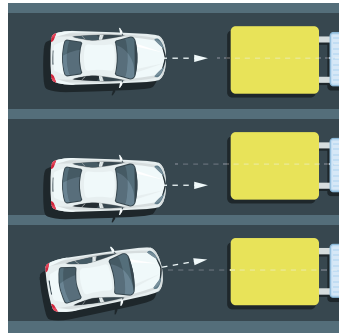
SAFETY TO A STANDARD

Nissan's mobile crash protection systems are tested using one of the strictest standards for this type of protective device: NCHRP 350. This standard was devised in the USA, which is where most mobile crash protection systems in the world are currently used. According to current estimates of the Institute of Highway Engineering, RWTH Aachen University, this adds up to more than 10,000 individual units.



Tested in all conditions

Our mobile crash protection systems meet and exceed the requirements of the four most common crash tests up to 100 km/h:
 Head-on crash with vehicles of 900 and 2,000 kg in weight, respectively, offset crash and crash at an angle.
 In all tests, our mobile crash protection systems achieve top scores.



Test designation	Crash conditions		
	Vehicle	Nominal speed of vehicle (km/h)	Nominal angle (degrees)
3-50	900P	100	0
3-51	2000P	100	0
3-52 ^h	2000P	100	0
3-53 ^h	2000P	100	10

