## **MOTO-SHIELD®**

guard-ra





Motorcyclists generally receive little consideration from other drivers. For years now the Motorcyclists Action Group (MAG) has been demanding a motorcyclist-friendly motorway guard-rail, and the discussion still continues. Guide-rails are designed for vehicles running into them. The fixing posts used in their design can however cause serious injury to motorcyclists when they fall off their machines and slide into the safety fence at high speed. MOTO-SHIELD® helps avoid serious injury to motorcyclists.



MOTO-SHIELD® has been successfully tested by the TNO and is designed in accordance to the European applicable general directive CCT RW 99.

MOTO-SHIELD®, forgiving.



## **MOTO-SHIELD®**

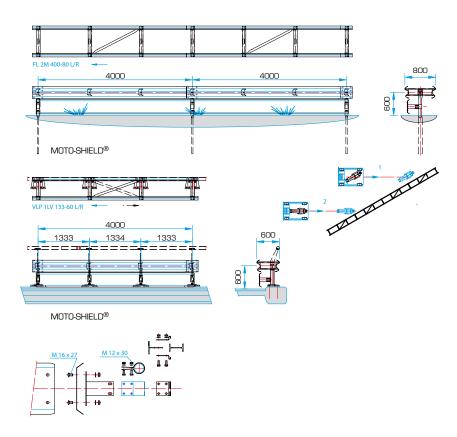
MOTO-SHIELD<sup>®</sup> ensures that a fallen motorbike rider is prevented from sliding or getting trapped under the guard rail construction, and simply slides in parallel along its length.

MOTO-SHIELD<sup>®</sup> consists of a standard flat board with inverted edges which can be mounted with the aid of brackets under any type of guard rail construction. The boards have a working length of 4 metres. MOTO-SHIELD<sup>®</sup> has a post distance mounting of 4 metres, centre to centre. On curves or bends the boards should be mounted 1.33 metres apart, centre to centre.

MOTO-SHIELD<sup>®</sup> is a light-weight construction which is simple to assemble and to align even on bends and curves. As the brackets come with slotted holes the actual differences in the distance between the posts can be easily adjusted. Repair after an accident is often not required owing the "forgiving" nature of its design.

Benefits and advantages of using MOTO-SHIELD®:

- prevents serious injury to fallen motorbike riders;
- especially suited for relatively sharp bends at access- and exit roads;
- better performance of the system and less danger of getting trapped as a result of the positioning of the bracket midway on the post;
- boards and distance pieces do not have to be loosened, thereby saving time;
- replacement of the fixing material therefore is unnecessary and
- possible re-use of parts after accident damage.



## MOTO-SHIELD®: tested safety levels

Test conditions					Collision test results	
TNO test no.	Collision speed	Angle of incidence	Position of dummy	Weight of dummy	Head <sup>1)</sup>	Neck <sup>2)</sup>
F044607	60 kph	30 º	in lenght- axis parallel with collision path	80,1 kg	HIC ≤ 380,5	Compression (FZ) ≤ 280 daN Sliding (Fx) ≤ 64 daN Lateral (Fy) ≤ 58 daN
F044608	60 kph	30 º	in lenght- axis parallel with collision path	80,1 kg	HIC ≤ 128,9	Compressie (FZ) ≤ 66 daN Afschuiving (Fx) ≤ 30 daN Lateraal (Fy) ≤ 67 daN

<sup>1)</sup> Criteria ≤1.000

Sliding (≤330daN)
Lateral (≤330daN)



<sup>&</sup>lt;sup>2)</sup> Criteria Compression (≤400daN)