

# Warning and Protective Bumper Guards



**INFINITE SAFETY**

Made in Germany by





# Infinite Safety with Warning and Protective Bumper Guard

## Bumper Guard Protection Against Heavy Impacts

SHG bumper guards are made of polyurethane foam. Due to its positive characteristics polyurethane foam is used in many industry branches (such as the automobile industry) as an effective protection against concussion damage. The abrasion-proof surface is extremely durable, despite heavy load. Polyurethane foam is temperature-resistant and complies with the flame tests according to DIN 4102 B2. Due to a protective foil layer the colors will remain abrasion-resistant even under heavy load. Additionally, polyurethane foam is recyclable. Their flexible characteristics show during installation: If needed the length of the profile can simply be cut with an utility cutter.



## Bumpers for Warnings and Protective Issues

The warning and protective bumpers act as a personal crumple zone for people, for machines and fixtures that absorb hard impacts and thus prevent injuries and damages. The highly effective warning capability of the black and yellow markings highlights sources of danger at edges, gaps and obstacles making them easy to recognize and thus reducing accidents. Bumpers are resistant to temperature from  $-40^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$ ) to  $100^{\circ}\text{C}$  ( $212^{\circ}\text{F}$ ) and are also for use indoor and outdoor, e.g. on transport routes within a company's premises, on machinery, on walls and thoroughfares, shelves, gates and more.

## Key Benefits

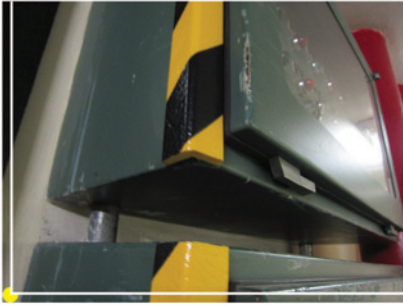
- Warning and protection against hazards
- Minimises staff absences
- Reduce costs due to damages
- For indoor and outdoor use
- UV Protection, long lasting color
- Highly effective warning capacity
- Simple installation, robust and durable
- Fire test compliance to DIN 4102 B2



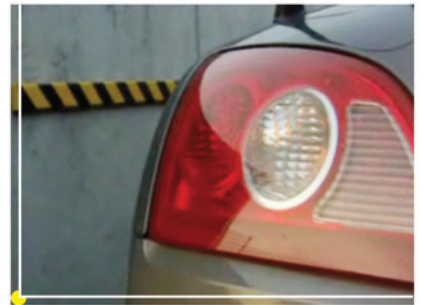


# Fit for Various Applications

## Engineering and Industrial



## Parking Area and Vehicle



## Warehouse



## Laboratory and Hospital



and more...





# Product Feature

## Photoluminescent (Glow in Dark) Model

Photoluminescent is a process in which substance absorb light energy and then release that energy in the form of light. Photoluminescent safety product therefore absorbs surrounding ambient lightings to provide an environmental friendly and reliable emergency lighting system with no need for power.

Under sudden blackout situations, the photoluminescent products immediately appears very bright and is conspicuous at a distance, providing an effective, bright contrast for warning and ensuring that safety messages are quickly recognized. This assists people to orientate themselves so that they can react effectively and evacuate efficiently.

The SHG photoluminescent bumper guards are designed specifically to maximize both high initial brightness and persistence. Furthermore it can be charged quickly at low illumination giving additional safety assurance to reduce injuries and damages in both light and dark environment.



Photoluminescent Properties	DIN67510 Luminance class C
after 10 min after 60 min	150 m cd/m <sup>2</sup> 22 m cd/m <sup>2</sup>
operation time	approx. 35 h

## Fluorescent Model

UV light is a short wave light that is not recognized by the human eye. Fluorescent pigments however can make the 'invisible' short wave light visible by turning it into longer wavelengths. Therefore the eye recognizes fluorescent colors much brighter than others at the same lighting conditions. Fluorescent colors are recognized especially well and rich in contrast at bad lighting conditions such as dusk or cloudy weather because there is a higher blue ratio in that lighting.

That is the reason why in practice fluorescent colors are often used as signal colors, e.g. on work clothing, emergency vehicles or to mark construction sites or hazardous places.

### Take advantage of SHG fluorescent products:

The fluorescent effect increases the visibility of your markings during daylight many times over. This way you are protecting your employees and inventory even more effectively.



## 16 Profiles for Individual Applications

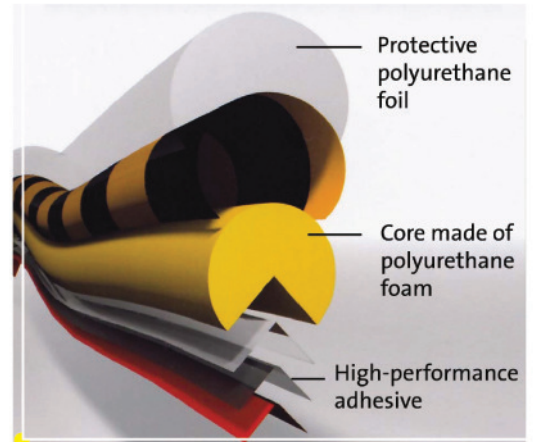
<b>Corner protection</b> self-adhesive, drilling possible	type A 	type AA 	type A+ 	type E 	type H 	type H+ 
	<b>Plane protection</b> self-adhesive drilling possible	type C 	type CC 	type D 	type F 	type S 
<b>Edge protection</b> For fitting, special glue can be used type B), drilling possible		type B 	type BB 	type G 	<b>Pipe protection</b> Self-adhesive, Mounting with clips possible	type R1 

# Manufacturing Technique

## Bumper Guard-Protection Against Heavy Impacts

The special, patent manufacturing technique makes the warning and protective bumper guards particularly flexible so that they absorb the forces of impact and also allow for easy attachment to curved objects. Another advantage is that the surfaces of the profiles are protected against losing their color due to abrasion even under rough conditions. The secret is the design of the profile body: In the middle of the profile is a core made of polyurethane foam. This is sheathed in polyurethane foil, which is fixed in place by forming during production.

The key is in the application of the colours. By using so-called reverse printing on the inward-facing side of the foil, the foil itself protects the paint so that the warning colours remain in place even if heavy abrasion takes place. A light- and ageing-resistant, high-performance adhesive is applied to the inside or the back of the profiles.



## Technical Data

### Profile body:

Recyclable polyurethane foam, completely free of CFCs

### Surface:

Polyurethane foam coloured by reverse printing and fixed in place by foaming so that no paint appears on the outside

### Adhesive:

All types except B and BB are affixed using light- and ageing-resistant modified acrylic glue

### Adhesion:

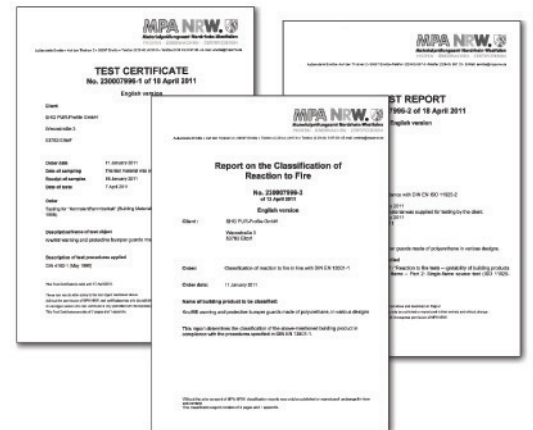
21 N/25 mm

### Resistant to temperatures:

Between -40 °C and +100 °C

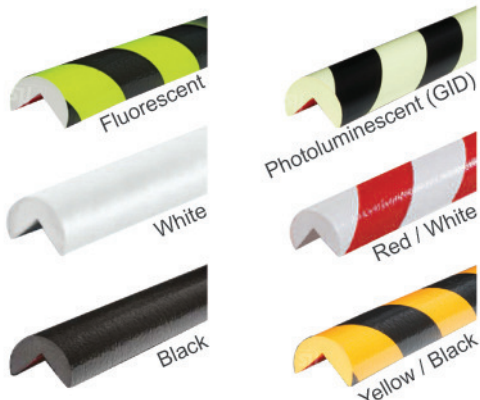
## Approval & Compliance

Fire classification: B2 according to DIN 4102



## Color & Pattern

Bright yellow and black hatching as per BGV A 8, red and white hatching as per BGV A 8, black, white, fluorescent hatching, phosphorescent hatching



## Length & Packaging



### Standard lengths:

1 m, 5 m and up to 50 m (in cardboard)



# Products Selection Guide

## Bumper Guards



3/4 Cornier Protection/TYP A		Length	Yellow/Black	Red/White	White	Black	Fluor/Black	GID
1		Product Code 1 Meter	PA-10010	PA-10110	PA-10310	PA-10210	PA-10710	PA-10910
		Product Code 5 Meter	PA-10020	PA-10120	PA-10320	PA-10220		
		Product Code 50 Meter	PA-10040	PA-10140	PA-10340	PA-10240		
3/4 Cornier Protection/TYP A+		Length	Yellow/Black	Red/White	White	Black		
2		Product Code 1 Meter	PA-11010	PA-11110	PA-11310	PA-11210		
Trapez/TYP AA		Length	Yellow/Black	Red/White	White	Black		
3		Product Code 1 Meter	PA-14010	PA-14110	PA-14310	PA-14210		
		Product Code 5 Meter	PA-14020	PA-14120	PA-14320	PA-14220		
		Product Code 50 Meter	PA-14040	PA-14140	PA-14340	PA-14240		
Pipes 30 - 50 mm/TYP R30		Length	Yellow/Black	Red/White	White	Black		
4		Product Code 1 Meter	PR-10018	PR-10118	PR-10318	PR-10218		
		Product Code 5 Meter	PR-10027	PR-10128	PR-10328	PR-10228		
		Product Code 50 Meter	PR-10048	PR-10148	PR-10348	PR-10248		
Pipes 50 - 70 mm/R50		Length	Yellow/Black	Red/White	White	Black		
5		Product Code 1 Meter	PR-10019	PR-10119	PR-10319	PR-10219		
Edge Protection/TYP B		Length	Yellow/Black	Red/White	White	Black	Fluor/Black	GID
6		Product Code 1 Meter	PB-10011	PB-10111	PB-10311	PB-10211	PB-10711	PB-10911
		Product Code 5 Meter	PB-10021	PB-10121	PB-10321	PB-10221		
		Product Code 50 Meter	PB-10041	PB-10141	PB-10341	PB-10241		
Edge Protection small/TYP BB		Length	Yellow/Black	Red/White	White	Black		
7		Product Code 1 Meter	PB-14011	PB-14111	PB-14311	PB-14211		
		Product Code 5 Meter	PB-14021	PB-14121	PB-14321	PB-14221		
		Product Code 50 Meter	PB-14041	PB-14141	PB-14341	PB-14241		
Surface Protection semi Corner Protection/TYP C		Length	Yellow/Black	Red/White	White	Black	Fluor/Black	GID
8		Product Code 1 Meter	PC-10012	PC-10112	PC-10312	PC-10212	PC-10712	PC-10912
		Product Code 5 Meter	PC-10022	PC-10122	PC-10322	PC-10222		
		Product Code 50 Meter	PC-10042	PC-10142	PC-10342	PC-10242		
Surface Protection Trapez/ TYP CC		Length	Yellow/Black	Red/White	White	Black		
9		Product Code 1 Meter	PC-14012	PC-14112	PC-14312	PC-14212		
		Product Code 5 Meter	PC-14022	PC-14122	PC-14322	PC-14222		
		Product Code 50 Meter	PC-14042	PC-14142	PC-14342	PC-14242		
Surface protection adhesive/ TYP D		Length	Yellow/Black	Red/White	White	Black		
10		Product Code 1 Meter	PD-10013	PD-10113	PD-10313	PD-10213		
		Product Code 5 Meter	PD-10023	PD-10123	PD-10323	PD-10223		
		Product Code 50 Meter	PD-10043	PD-10143	PD-10343	PD-10243		

# Products Selection Guide

## Bumper Guards



Corner Protection/Typ E		Length	Yellow/Black	Red/White	White	Black
<b>11</b>	Product Code	1 Meter	PE-10014	PE-10114	PA-10314	PE-10214
	Product Code	5 Meter	PE-10024	PE-10124	PE-10324	PE-10224
	Product Code	50 Meter	PE-10044	PE-10144	PE-10344	PE-10244
3/4 Corner Protection/ TYP H		Length	Yellow/Black	Red/White	White	Black
<b>12</b>	Product Code	1 Meter	PH-10017	PH-10117	PH-10317	PH-10217
	Product Code	5 Meter	PH-10027	PH-10127	PH-10327	PH-10227
	Product Code	50 Meter	PH-10047	PH-10147	PH-10347	PH-10247
3/4 Corner Protection/TYP H+		Length	Yellow/Black	Red/White	White	Black
<b>13</b>	Product Code	1 Meter	PH-11017	PH-11117	PH-11317	PH-11217
Flat protha/Typ F		Length	Yellow/Black	Red/White	White	Black
<b>14</b>	Product Code	1 Meter	PF-10015	PF-10115	PF-10315	PF-10215
	Product Code	5 Meter	PF-10025	PF-10125	PF-10325	PF-10225
	Product Code	50 Meter	PF-10045	PF-10145	PF-10345	PF-10245
Surface protection/Typ S		Length	Yellow/Black	Red/White	White	Black
<b>15</b>	Product Code	1 Meter	PS-10009	PS-10109	PS-10309	PS-10209
Profile/Typ G		Length	Yellow/Black	Red/White	White	Black
<b>16</b>	Product Code	1 Meter	PG-10016	PG-10116	PG-10316	PG-10216
	Product Code	5 Meter	PG-10026	PG-10126	PG-10326	PG-10226
	Product Code	50 Meter	PG-10046	PG-10146	PG-10346	PG-10246

## Protective Corners

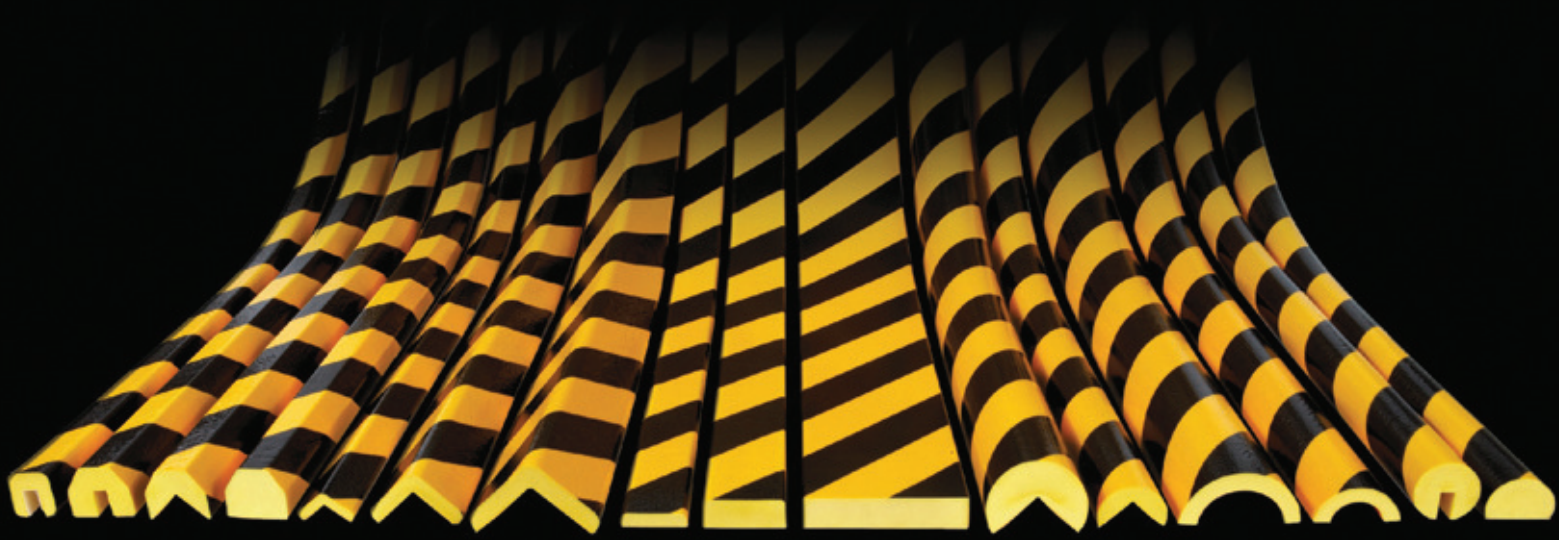
2 Dimensional Corner Typ A		White	Black	3 Dimensional Corner Typ A		White	Black
<b>A</b>	Product Code	PEA-10816	PEA-10810		Product Code	PEA-10817	PEA-10811
Corner Typ H		White	Black	Corner Typ H		White	Black
<b>H</b>	Product Code	PEH-10820	PEH-10814		Product Code	PEH-10821	PEH-10815
Corner Inside Typ E		White	Black	Corner Inside Typ E		White	Black
<b>E</b>	Product Code	PEE-10818	PEE-10812		Product Code	PEE-10819	PEE-10813

## Wall Protection Kit Corners

Yellow		Fluo / Black	Yellow		Fluo / Black		
	Product Code	PSE-15717	PSE-16717		Product Code	PS-15716	PS-16716



Warning and Protective  
Bumper Guards  
**INFINITE SAFETY**



Made in Germany by

