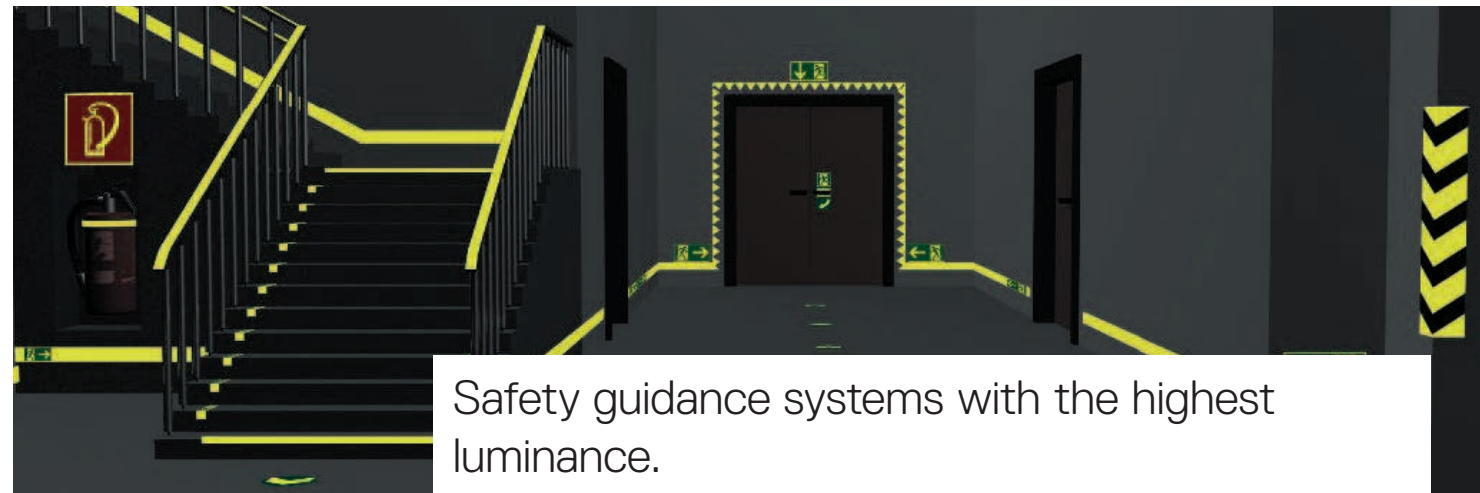




Guidance Lines for Walls:  
Best visibility in heavy smoke!



Safety guidance systems with the highest  
luminance.

### In an emergency every second counts!

Just imagine: a fire in the production plant. Smoke in your administration building. Unfortunately such emergencies occur more frequently than you might think. About 1,000 people die every year in Germany as a result of fires; more than 10,000 people suffer bad injuries.



What happens in a fire? Even a small damaging fire releases lots of hazardous smoke gases, which rise.

From a height of about 40 cm escape route signs are rapidly no longer visible. For this reason ASR A2.3 requires a low location guidance system for areas with particular risk potentials, e.g. storage of flammable materials or buildings with high occupancy levels.

Low location wall markings are an important component of the guidance system. In darkness they have the effect of emergency lighting and give escaping people a life-saving means of orientation even in thick smoke.

Without any technical effort you can enhance your existing escape route guidance of emergency lighting and egress route signs to make it an effective guidance system!

### Prevention through optical safety guidance systems

“The employer must make provisions for the employees to bring themselves to safety immediately when in danger and to enable them to be rescued quickly” (German Workplace Guidelines section 4, paragraph 4). On the basis of this statutory guideline the Federal Ministry for Work and Social Affairs (BMAS) has issued ASR A3.4/3 “Safety lighting, optical safety guidance systems”. The requirements for photoluminescent safety guidance systems are defined in the ASR.

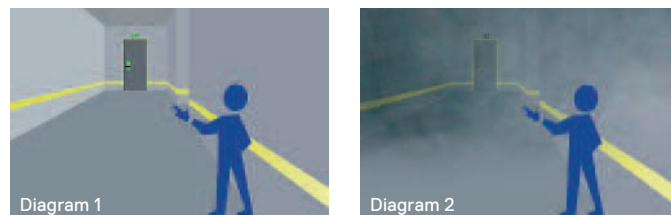
#### Requirements for Employers

The basis for the provision of photoluminescent safety guidance systems is the **risk assessment** (pursuant to section 6 of the German Labour Protection Act). By performing a risk assessment the risks are determined and assessed so that suitable protective measures can then be introduced. The installation of a photoluminescent low location safety guidance system is an important **protective measure in the event of an area being filled with smoke!**

#### How does smoke fill an area?

It is not the fire, but the toxic smoke from the fire that is the main cause of death in the event of building fires. If smoke penetrates the rescue route areas quick and clear orientation is important for survival:

1. In the event of a fire the billows of smoke initially spread in layers into the upper wall and ceiling areas.
2. Electrical emergency lights and individual escape route signs are however usually mounted at door and eye level. When smoke develops they are rapidly no longer clearly visible because of their position and become ineffective (see diagrams 1 and 2).



In the event of an area being filled with thick smoke visual orientation is focused on the direct environment. Self-rescue is promoted most effectively in such situations by a floor-level guidance system.

For this reason photoluminescent safety guidance systems pursuant to ASR A3.4/3 are installed **near the floor** and with directions on them in order to ensure life-saving orientation even when the area is filled with smoke.

The upper edge of the guidance marking must be fixed no higher than 40 cm above the floor.

**When is the installation of photoluminescent low location safety systems required?**  
In accordance with ASR A3.4/3 employers are required to install a photoluminescent low location safety guidance system with escape route markings as a protective measure when **the risk of an area filling with smoke cannot be ruled out completely!**

According to ASR A 2.3 point 7 a safety system must be provided if an increased risk exists as a result of the local or operational conditions, for example:

- » in large connected building complexes,
- » in large multi-storey buildings,
- » where there is a large proportion of people present who are unfamiliar with the location
- » where there is a large proportion of people present with restricted mobility.

The employer must take into account the highest possible number of people present, including those who do not work for the company (pursuant to the Protection at Work Act, section 10, paragraph 1).

SECUREMEN Safety Guidance System

### Product samples and orders: the SECUREMEN ordering service

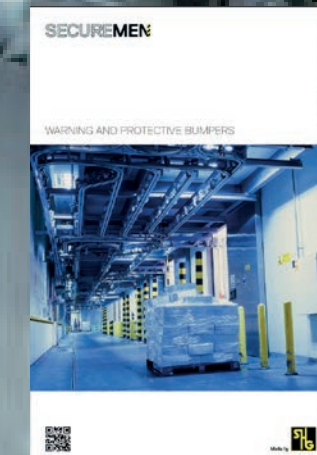
SECUREMEN is the right partner for operational safety. Talk to us when it comes to safety equipment and marking of warehouses, garages, retail space, hotels, hospitals and public buildings – we are pleased to help you.

Please direct your request at:

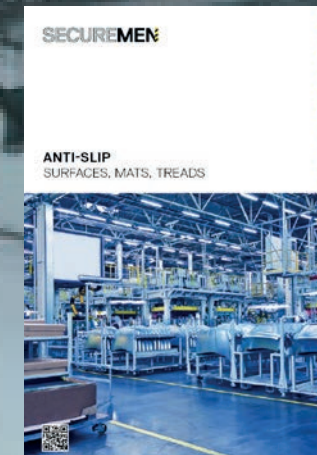
FLOW SOLUTIONS TRADING CO. L.L.C.  
Suite No. 303, Shaikh Tower, Building No. 2638  
Adh Dahran Street Al Khobar Ash Shamaliyah 6240  
Postal Code: 34429 Kingdom of Saudi Arabia

Tel: +966 13 8979368 | +966 13 8383018 | +966 13 8948312  
info@fstarabia.com | sales@fstarabia.com

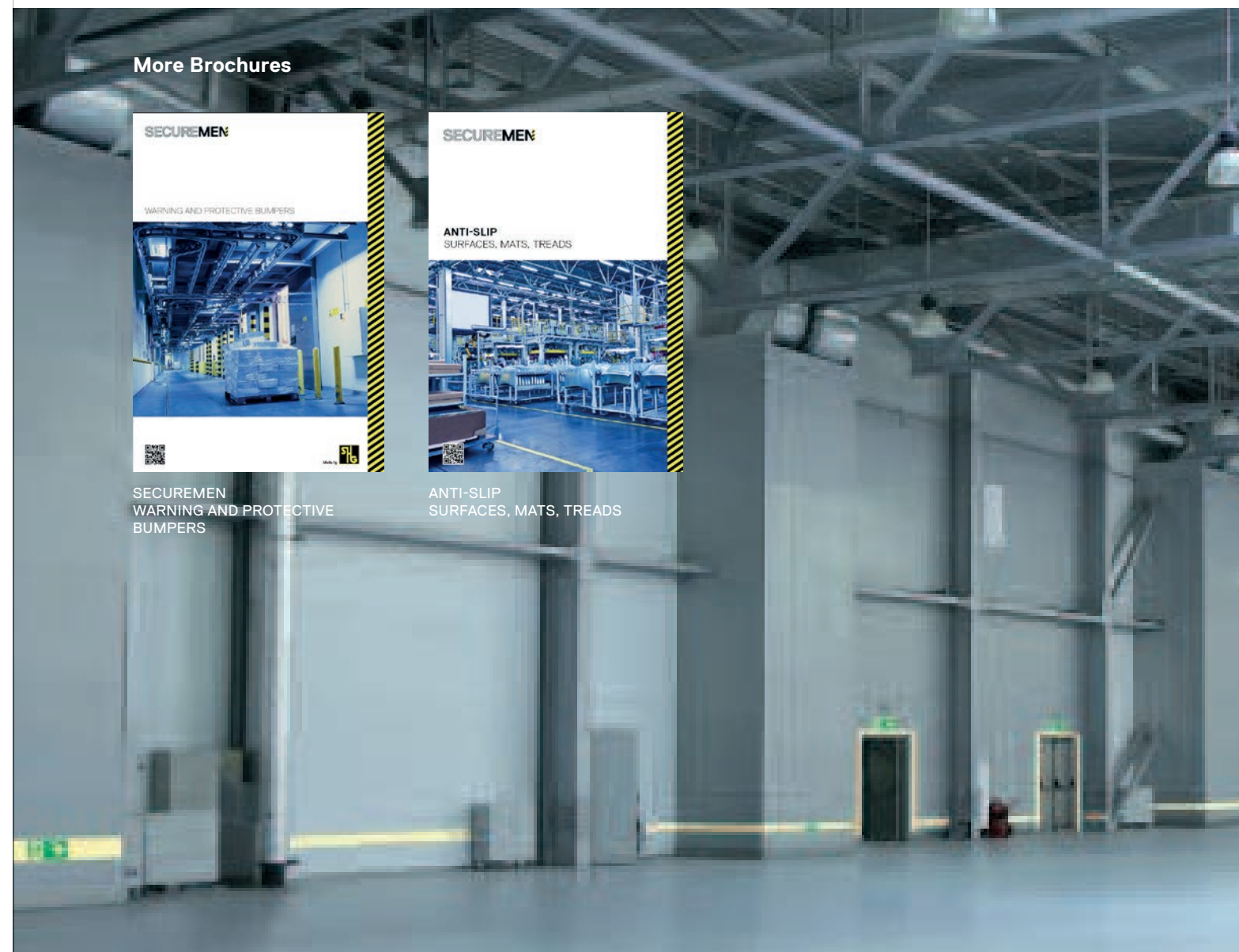
#### More Brochures



SECUREMEN  
WARNING AND PROTECTIVE  
BUMPERS



SECUREMEN  
ANTI-SLIP  
SURFACES, MATS, TREADS



SECUREMEN

SAFETY GUIDANCE SYSTEM



SECUREMEN Safety Guidance System

PERMALIGHT®



High warning effect –  
Save during day and night.



Provide reliable and safe orientation in  
emergencies!

## Our luminance qualities

### Not all light is equal!

We know that not every guidance system is suitable for every single building and every room! We can help you select the appropriate luminance class. We offer an extensive range of products with various luminance classes and materials.

### Our light-storing products are:

- non-toxic
- non-radioactive
- lead free
- highly flame retardant
- free from phosphorus

We have suitable markings for your requirement. For sure.

Luminance Quality	Lighting situation/Application area	Luminance 10 min./60 min.	Decay time	Specifications DIN 67510
<b>A</b> Permalight® standard	Bright areas with permanent lighting or daylight, e.g. office rooms with windows.	23/3 mcd/m <sup>2</sup>	340 min. = approx. 6 h	23/3 mcd/m <sup>2</sup>
<b>B</b> Permalight® plus	Areas with constant lighting during operation time: in such office rooms dangerous spots can be recognized without difficulty.	55/8 mcd/m <sup>2</sup>	950 min. = approx. 16 h	50/7 mcd/m <sup>2</sup>
<b>C</b> Permalight® power 150	Areas with damped or only temporary lighting. Required for all buildings that are subject to SR3.4/3: hospitals, nursing homes, airports, department stores, large hotels, power plants, event locations. Industry: factory halls, warehouses, production areas, hallways, machinery rooms etc. (according to ASR 7.3 min. 50 Lux constant lighting/4.000 K excitatory light during utilisation).	150/22 mcd/m <sup>2</sup>	2100 min. = approx. 35 h	140/20 mcd/m <sup>2</sup>
<b>D</b> Permalight® power 300	For areas with poor lighting and specific requirements on safety. Special solutions in accordance with ASR, ships, tunnels, abroad, etc. For internal demands of the client.	300/45 mcd/m <sup>2</sup>	3380 min. = approx. 56 h	260/35 mcd/m <sup>2</sup>
<b>E</b> Permalight® power 520	For special surroundings with very low lighting or only very short excitation intervals such as tunnels, underground crossing, subways, etc. For special solutions in cooperation with the client.	520/70 mcd/m <sup>2</sup>	5700 min. = approx. 95 h	520/70 mcd/m <sup>2</sup>
<b>S</b> Permalight® spezial	Individual solutions for all special cases.		– depending on requirement – Ask our specialists!	

## Viewing distances – Excerpt of the ASR A1.3

ASR A1.3 gives the following guidelines for sign viewing distances:

Size in mm	Ø 100	Ø 200	Ø 300	Ø 400
Viewing distance	4 m	8 m	12 m	16 m
Size in mm	100 x 100	200 x 200	300 x 300	400 x 400
Viewing distance	10 m	20 m	30 m	40 m



## Escape Route Signs

### Emergency route left

Luminance	Dimension (mm)	Material	Article No.	Luminance	Dimension (mm)	Material	Article No.
Class C	200 x 100	Aluminum	86-42107	Class C	400 x 200	Aluminum	86-42147
		Alu. self-adhesive	86-42117			Alu. self-adhesive	86-42157
Class C	300 x 150	Aluminum	86-42127	Class C	600 x 300	Aluminum	86-42167
		Alu. selbstklebend	86-42137			Aluminium	86-42177
					1200 x 600	Aluminium	86-42187

### Emergency route top right/Emergency exit right

Luminance	Dimension (mm)	Material	Article No.	Luminance	Dimension (mm)	Material	Article No.
Class C	200 x 100	Aluminum	86-42427	Class C	400 x 200	Aluminium	86-42467
		Alu. self-adhesive	86-42437			Alu. self-adhesive	86-42477
Klasse C	300 x 150	Aluminum	86-42447	Class C	600 x 300	Aluminium	86-42487
		Alu. self-adhesive	86-42457				

### Emergency route/Emergency exit right downwards inclined

Luminance	Dimension (mm)	Material	Article No.	Luminance	Dimension (mm)	Material	Article No.
Class C	200 x 100	Aluminum	86-42567	Class C	400 x 200	Aluminium	86-42607
		Alu. self-adhesive	86-42577			Alu. self-adhesive	86-42617
Class C	300 x 150	Aluminum	886-42587				
		Alu. self-adhesive	86-42597				

### Emergency route/Emergency exit left downwards inclined

Luminance	Dimension (mm)	Material	Article No.	Luminance	Dimension (mm)	Material	Article No.
Class C	200 x 100	Aluminum	86-42627	Class C	400 x 200	Aluminium	86-42667
		Alu. self-adhesive	86-42637			Alu. self-adhesive	86-42677
Class C	300 x 150	Aluminum	86-42647				
		Alu. self-adhesive	86-42657				

## Floor Markings

### Daylight-fluorescent anti-slip warning marking

Luminance	Version	Dimension (mm)	Article No.
Class C	R13	25 x 6000	83-3525
	R13	50 x 6000	83-3550
	for wet areas, R10	25 x 6000	83-3526
	for wet areas, R10	50 x 6000	83-3551

### Anti-slip tape on roll

Luminance	Dimension (mm)	Material	Article No.
Class C	50 x 16000	Vinyl Tape	83-10780

### Enameled metal disc

Luminance	Version	Ø in mm	Article No.
Class C	photoluminescent	60	83-40027
	photoluminescent	100	83-40047
	with arrow	60	83-40017
	with arrow	100	83-40037

### Anti-slip dots

Luminance	Version	Ø in mm	Article No.
Class C	photoluminescent	90	83-10788
	with arrow	90	83-10787

### Anti-slip aluminum discs for gratings

Luminance	Version	Ø in mm	Article No.
incl. hole			
Class C	unprinted	60	83-40227
	unprinted	100	83-40247
Class C	with arrow	60	83-40237
	with arrow	100	83-40257
ohne Mittelloch (zum Kleben)			
Class C	unprinted	60	83-40477
	unprinted	100	83-40487
Class C	with arrow	60	83-40497
	with arrow	100	83-40507

### Anti-slip dots

Luminance	Version	Ø in mm	Article No.
Class C	photoluminescent	60	83-40089
	photoluminescent	100	83-40109
	with arrow	60	83-40099
	with arrow	100	83-40119

## Guidance Lines for Walls

### Guidance line on rolls

Luminance	Dimension (mm)	Material	Article No.
Class C	25 x 25000	PVC-tape	82-40708
		PVC-tape	82-40709
		PVC-tape	82-40710
		on request	

### Guidance line with directional arrow

Luminance	Dimension (mm)	Material	Article No.
Class C	50 x 25000	PVC-tape	82-40706

### Guidance line with directional sign

Luminance	Version	Dimension (mm)	Article No.
Class C	pointing left	50 x 25000	82-40711
	pointing right	50 x 25000	82-40712

### Transparent stickers with directional sign

Version	Dimension (mm)	Article No.	Version	Dimension (mm)	Article No.
←	50 x 100	86-50011	→	50 x 100	86-50021
	75 x 150	86-50031		75 x 150	86-50041
	95 x 190	86-50051		95 x 190	86-50061

### End caps for aluminum profiles

Version	Farbe	Material	Article No.
End Cap A	grey	Plastic	83-8285
End Cap B	grey	Plastic	83-8295
End Cap C	grey	Plastic	83-8245
End Cap D	grey	Plastic	83-8235
End Cap E	grey	Plastic	83-8225

## Stair Markings

### Anti-slip aluminum stair edges

Luminance	Version	Dimension (mm)	Article No.
Class C	unprinted	50 x 25 x 200	83-40267
	downwards	50 x 25 x 200	83-40287
	upwards	50 x 25 x 200	83-40277

### L-marker for stairs

Luminance	Version	Dimension (mm)	Article No.
Class C	right	203 x 76 x 25	83-40427
	left	203 x 76 x 25	83-40437

### Anti-slip aluminum stair nosing

Luminance	Version	Dimension (mm)	Article No.
Class C	black-yellow	60 x 1000 x 30	83-3721
	black/photoluminescent/fluorescent-yellow	60 x 1000 x 30	83-3722

### Anti-slip stainless steel stair nosing

Luminance	Version	Dimension (mm)	Article No.
Class C	black-yellow	110 x 1000 x 30	83-3711
	black/photoluminescent/fluorescent-yellow	110 x 1000 x 30	83-3712

### Edge protection profile with 2 anti-slip strips

Luminance	Dimension (mm)	Article No.
Class C	66 x 30 x 1000	83-40447

### Handrail markings

Luminance	Version	Dimension (mm)	Material	Article No.
Class C	Strip	25 x 1.000	Photolum. Tape	83-40319
	Rolls	25 x 10.000	Photolum. Tape	83-40329