

Technologies

Vandal-resistance



A lighting installation subjected to vandalism or outdoor influences can have many consequences:

- Lack of security for people and property due to the interruption in lighting,
- Additional financial cost of additional maintenance and replacing capital assets,
- An environmental impact associated with the reduced life cycle for the products.

Since 1986, Securlite has been developing vandal-resistant luminaires and long-life lighting solutions in order to reduce the cost of maintenance in public spaces and buildings.

Because a luminaire is an investment, not a consumable.

The vandal-resistance of Securlite products is based on:

- Resistance to deliberate or accidental impacts,
- Resistance to ripping out (anti ligature),
- Secure closure (special screws).

As an option, Securlite luminaires can also offer increased flame-resistance, and resistance to graffiti, UV (tropical countries), and corrosion in a marine environment.

Materials used:

- Steel, aluminium, and stainless steel,
- Polycarbonate and Duroflam®.

Special tools:

The special tools, in the form of driver bits or special spanners, must be ordered separately. Bit-holder drivers and additional tools can also be ordered at current prices. Special fastenings can be designed on request.



Impact resistance
Vibration resistance



Ripping-out resistance
Anti ligature



Anti-vandal screws



Flame resistance



Graffiti resistance



Vandal resistance classifications.

IK rating for resistance to mechanical impacts (EN 62262).

The EN 62262 standard provides for a maximum resistance of IK11 = 50 joules.

These values are insufficient for vandal-resistant luminaires: Securlite luminaires have a minimum mechanical strength corresponding to IK10 = 20 joules.

Impact resistance	Mass / Drop height
IK 1 / 0,140 joule	0,25 kg : 56 mm
IK 2 / 0,20 joule	0,25 kg : 80 mm
IK 3 / 0,35 joule	0,25 kg : 140 mm
IK 4 / 0,50 joule	0,25 kg : 200 mm
IK 5 / 0,70 joule	0,25 kg : 280 mm
IK 6 / 1 joule	0,25 kg : 400 mm
IK 7 / 2 joules	0,50 kg : 400 mm
IK 8 / 5 joules	1,70 kg : 300 mm
IK 9 / 10 joules	5 kg : 200 mm
IK 10 / 20 joules	5 kg : 400 mm
IK 11 / 50 joules	10 kg : 500 mm
IK 11+ / 80 joules	10 kg : 800 mm
IK 11++ / 100 joules	10 kg : 1000 mm
IK 11++ / 120 joules	15 kg : 800 mm
IK 11++ / 150 joules	15 kg : 1000 mm

VK® vandal resistance rating.

The VK® rating allows better characterization of anti-vandal luminaires: it includes mechanical strength beyond IK10, as well as the other characteristics involved in vandal resistance.

For example, a luminaire that withstands 50 joules, resists ripping out, and is fitted with tamper-proof screws is VK35. Products classified by VK® rating: see page 184.

By virtue of their characteristics, anti-ligature luminaires also resist ripping out.

The figure in the 3rd position is optional.

** Standardized values as per EN 62262: see IK rating*

VK® rating	1 st position	2 nd position	(3 rd position)
0	< 10 joules	no protection	no protection
1	10 joules (*)	standard fastenings	flame resistance
2	20 joules (*)	vandal-resistant fastenings (or secure closure)	graffiti resistance
3	50 joules (*)	rip-out resistant	increased UV resistance (tropicalization)
4	80 joules	rip-out-resistant + standard fastenings	resistance to marine environment
5	100 joules	rip-out-resistant + vandal-resistant fastenings	-
6	120 joules	anti-ligature + vandal-resistant fastenings	-
7	150 joules	-	-