

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 IK10 = 20 joules, with the possibility of extending the test up to 50 joules.

These values are insufficient for vandal-resistant luminaires: Securilite 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 10+ / 50 joules	10 kg: 500 mm
IK 10++ / 80 joules	10 kg: 800 mm
IK 10++ / 120 joules	15 kg: 800 mm
IK 10++ / 160 joules	20 kg: 800 mm
IK 10++ / 200 joules	25 kg: 800 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 182.

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	120 joules	rip-out-resistant + vandal-resistant fastenings	-
6	160 joules	anti-ligature + vandal-resistant fastenings	-
7	200 joules	-	-
8	-	-	-
9	-	-	-