



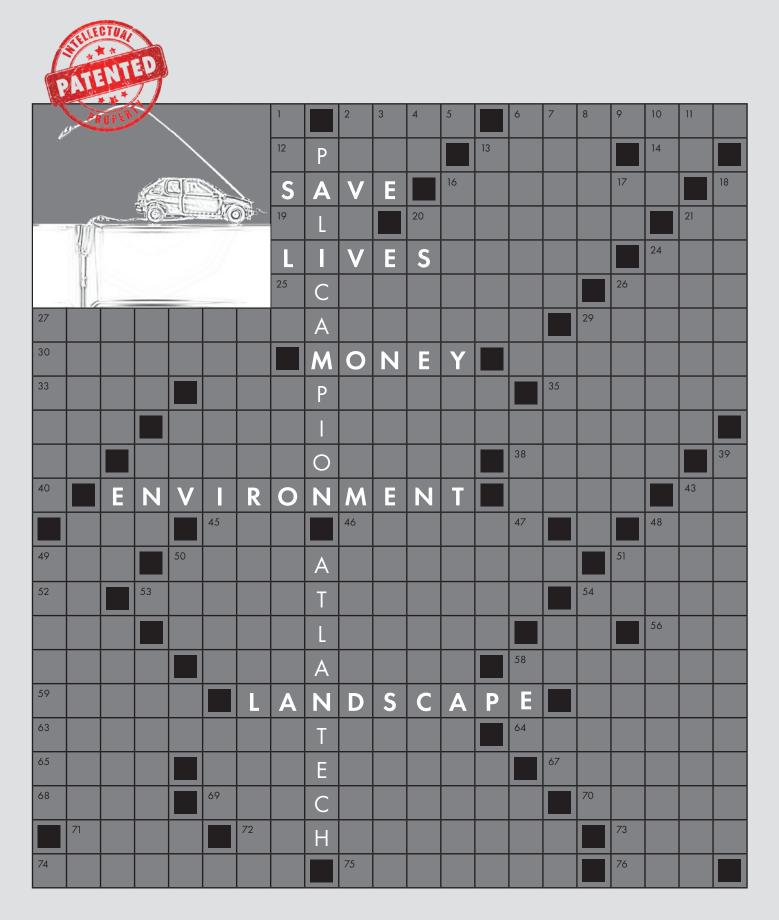
SAVE

Passive safety post and foundation system

IN ACCORDANCE WITH EN 12767



AN INNOVATIVE AND CORPORATE SOCIALLY RESPONSIBLE PRODUCT UNIQUE ON THE MARKET





PASSIVE SAFETY

Passive safety devices aim to decrease the negative consequences of road accidents, absorbing part of the kinetic energy created during the impact.

A lighting passive safety post is a post certified in accordance with legislation UNI EN 12767 which is classified according to the pre-established classes of energy absorption and security levels for passengers following specific crash tests.

THE CONTEXT

The Roadside Infrastructure for Safer European Roads (RISER) is a project financed by the European Commission to develop a knowledge base that can provide better roadside design tools and strategies. The objective of the project is to provide a technical foundation upon which the implementation and operation requirements for European roadside areas and infrastructure could be based.

RISER reports that in Europe, each year, about 1.5 million people are hurt in road accidents, and more than 8% of road accidents take place against post/poles.

The Rigid lighting columns and the utility poles are very common and represent severe hazards in the roadside. Thanks to the introduction of the European Standard EN 12767 on new roads all poles should be located beyond the safety zone. Inside the safety zones only passively safe columns have to be used.

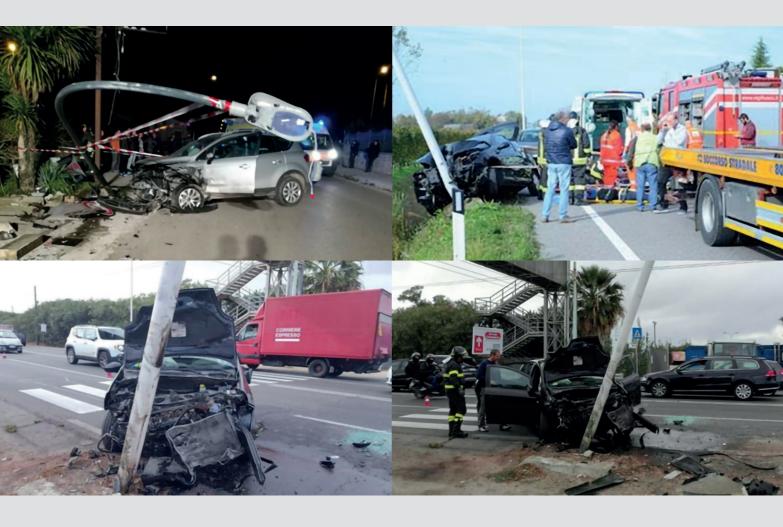
OUR INVOLVEMENT IN RESEARCH AND DEVELOPMENT

The legislation UNI EN 12767 has led to the development of much more expensive lighting passive safety post as compared to the traditional posts, which is why in an ever-limited public resource context, their diffusion on the market has been reduced, to the detriment of road safety.

The **SAVE** range is the result of two years of activity in Research and Development constantly aimed at developing **an integrated "post + foundation" system** which was passive safety **certified** and economic at the same time. This latter characteristic, is fundamental in order for system to be adaptable **on a larger scale** and to have a **relevant social impact in terms of saved lives, relieving public or private Entities from the responsibilities**, civil or penal, in the case of an accident.

Marking authorization CE: 1608 CPR P029 Certifying body: IGQ Istituto Italiano Garanzia della Qualità				Wind zone 0-25 m/s		m/s	Wind zone 0-27 m/s	Wind zone 0-29 m/s	Wind zone 0-31 m/s	
	Resistance to horizontal stress: EN 40-3-1 EN 40-3-3				II (~140)	III (~120)	IV (~110)	II (~150)	II (~160)	II (~170)
Model	EN 12767 Classe	Overall height	Configuration	Bracket		Structural suitability control with LED street lighting fixture (0.05sqm -10kg), mounted on top				d on top
SAVE50		5m	Pole-top	-	*	*	*	✓	✓	✓
SAVE51		5m	Bracket	lm	*	*	*	✓	✓	✓
SAVE52		5m	Bracket	2m	*	*	*	✓	✓	✓
SAVE60		6m	Pole-top	-	*	*	*	✓	✓	✓
SAVE61	LE3	6m	Bracket	lm	*	~	~	✓	✓	✓
SAVE62		6m	Bracket	2m	~	~	~	✓	✓	✓
SAVE70		7m	Pole-top	-	*	~	~	✓	✓	✓
SAVE71		7m	Bracket	lm	*	~	~	✓	✓	✓
SAVE72		7m	Bracket	2m	*	~	~	✓	✓	✓
SAVE80		8m	Pole-top	-	*	~	*	✓	✓	✓
SAVE81		8m	Bracket	lm	*	*	~	✓	✓	✓
SAVE82		8m	Bracket	2m	*	•	•	✓	×	×
SAVE90		9m	Pole-top	-	~	*	*	✓	✓	✓
SAVE91	HE3	9m	Bracket	l m	~	*	*	✓	✓	✓
SAVE92		9m	Bracket	2m	*	*	•	×	×	×
SAVE100		10m	Pole-top	-	~	*	*	✓	✓	✓
SAVE101		10m	Bracket	lm	~	*	*	✓	×	×
SAVE102		10m	Bracket	2m	×	*	*	×	×	×

THE PAST - RIGID POSTS AND CEMENT FOUNDATIONS



THE FUTURE - SAVE TECHNOLOGY





Certificate of constancy of performance

1608 CPR P029

Steel lighting columns

Pali Campion Srl

Via Alcide De Gasperi, 45/B 45025 Fratta Polesine RO-IT

Fratta Polesine RO-IT

EN 40-5:2002

e applied and that the product fulfils all the prescribed requirements set out above





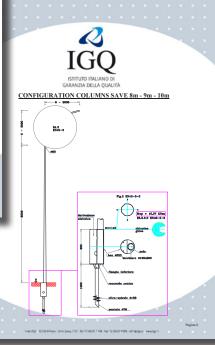
APPENDIX 2 TO CERTIFICATE 1608 CPR P029

Characteristics for

Steel lightning columns according to EN 40-5
sclared performance under vehicle impact according to EN 12767

Name	Design condition (according to EN 40-3-3)	Total Height (m)	Configuration (position of the lantern)
Conical columns with foundation: SAVE80	Tubular columns with $M_{\rm up}\!<\!10,07kNm$	8 m	Post top
Conical columns with foundation: SAVE81	Tubular columns with $M_{\rm up} \le 10,07 kNm$	8 m	With bracket 1 m
Conical columns with foundation: SAVE82	Tubular columns with $M_{\rm up} \le 10,07 kNm$	8 m	With bracket 2 m
Conical columns with foundation: SAVE90	Tubular columns with $M_{\rm up} \le 10,07 kNm$	9 m	Post top extended 1 m
Conical columns with foundation: SAVE91	Tubular columns with $M_{\rm up} \le 10,07 kNm$	9 m	With bracket 1x1 m
Conical columns with foundation: SAVE92	Tubular columns with $M_{\rm up} \le 10,07 kNm$	9 m	With bracket 1x2 m
Conical columns with foundation: SAVE100	Tubular columns with $M_{\rm sp}{<}10,07kNm$	10 m	Post top extended 2 m
Conical columns with foundation: SAVE101	Tubular columns with M _{sp} ≤10,07kNm	10 m	With bracket 2x1 m
Conical columns with foundation: SAVE102	Tubular columns with M _{up} ≤10,07kNm	10 m	With bracket 2x2 m

Characteristic				
Prestazione in caso di impatto da veicolo secondo EN 12767, di cui ai rapporti Rapporto 0027_ME_HRB_18 Rapporto 0030_ME_HRB_18	Speed class: 70 Km/h Energy absorption class: HE Safety class: 3			
Foundation	Device ATLANTECH Lux Plus In conformity to the Installation Manual: Manuals installations ATLANTECH LUX			





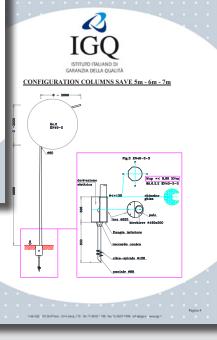
APPENDIX 2 TO CERTIFICATE 1608 CPR P029

Name	Design condition (according to EN 40-3-3)	Total Height (m)	Configuration (position of the lantern)
Conical columns with foundation: SAVE50	Tubular columns with M _{sp} ≤8,89kNm	5 m	Post top
Conical columns with foundation: SAVE51	Tubular columns with M _{sp} ≤8,89kNm	5 m	With bracket 1 m
Conical columns with foundation: SAVE52	Tubular columns with M _{up} ≤8,89kNm	5 m	With bracket 2 m
Conical columns with foundation: SAVE60	Tubular columns with M _{up} ≤8,89kNm	6 m	Post top extended 1 m
Conical columns with foundation: SAVE61	Tubular columns with M _{up} ≤8,89kNm	6 m	With bracket 1x1 m
Conical columns with foundation: SAVE62	Tubular columns with M _{up} ≤8,89kNm	6 m	With bracket 1x2 m
Conical columns with foundation: SAVE70	Tubular columns with M _{up} ≤8,89kNm	7 m	Post top extended 2 m
Conical columns with foundation: SAVE71	Tubular columns with M _{up} ≤8,89kNm	7 m	With bracket 2x1 m
Conical columns with foundation: SAVE72	Tubular columns with M _{sp} ≤8,89kNm	7 m	With bracket 2x2 m

Characteristic			
Performance under vehicle impact according to EN 12767, as reported in: Report 0028_ME_HRB_18 Report 0030_ME_HRB_18	Speed class: 70 Km/h Energy absorbtion class: LE Safety Class: 3		
Foundation	Device ATLANTECH Lux Small In conformity to the Installation Manual:		

18/03/2005 14/05/2018

II Direttore ing. Dario Agalbato



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