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# 1997

## **Foundation of Sicurpal**

The important aims of the entrepreneurial idea induces an immediate market response, opening the way for the birth of Sicurpal S.r.l., whose range of products aims to deal with one of the primary causes of death at work: falls from a height.

# 1999

# Sicurpal creates the first testing structure to certify its own products

Aware of the need to test every new product put onto the market according to standard UNI EN 795, Sicurpal creates its own test structure to verify the strength of devices and their fixing to the roof, and to create products that will reduce structural loads to a minimum.

# 2013

## Sicurpal gets a new face and Sicurform is born

Sicurpal confirms itself positive and hopeful: in spite of the crisis that hits, among others, the building and safety sectors, the company presents itself on the market with a renewed trademark, new products and new ranges, in order to be ever closer to customer needs.

The year 2013 also sees the birth of the new training company Sicurform Srl, the fruit of Sicurpal's experience, which confirms the commitment to pursuing and spreading a culture of safety.

# 2014

# Growth continues: Sicurpal changes its headquarters and acquires a state-of-the-art test structure

Sicurpal inaugurates its new company headquarters in Bastiglia, 1800 m2 at the service of safety with a newly equipped workshop, an extensive warehouse and an increasingly organised team.

The company also equips itself with a new test area capable of reproducing an actual lifeline with a length of up to 80m and simulating the effects of an operator falling, by dropping a weight from a height of over 6m. In this installation, which is one of the most advanced in Italy, all products have been subjected to new tests pursuant to UNI 11578, EN 795:2012, CEN/TS 16415 standards.

# 2006

# The company expands to cover the whole of Italy

After having absorbed the carpentry unit in 2004, so as to give themselves an in-house production department, in 2006 Sicurpal opened its new headquarters at Villavara di Bomporto. With a covered area of 850 m2 and an expanding sales network, the company is able to reach customers throughout Italy with a "turnkey" service that goes from site inspection to estimate, from design to installation and, finally, post sales servicing. During this period the family nature of the company was completed by the arrival of wife Francesca and son Gabriele, to followed, in 2011, by arrival of daughter Giulia.

# 2007

# Sicurpal gets ISO 9001 certification

In 2007, having made a name in the safety field, it was decided to contact the certification body TÜV SÜD Italia to attest the quality of its manufacturing processes by obtaining ISO 9001 certification, which still enables the company to stand out on the Italian market.

# 2016

# Sicurpal goes international

In 2016, to adapt to new market trends, Sicurpal takes a brave decision: to go international and expand its presence on foreign markets as well, while still maintaining its current family style working environment that remains close to its customers.

# 2017

# Sicurpal celebrates twenty years in operation

In 2017 Sicurpal proudly celebrates its twentieth year in operation, a long period that has seen great levels of product evolution and a constant commitment to promoting safety from falls from a height.

**Ø** 2 3 **Ø** 

Every day we stand alongside workers operating at a height to protect their most precious possession: **life**.







# Mission

Since 1997 we have been safeguarding workers by creating high quality products to protect against falls from a height. Backed by consolidated experience, we are continually looking for state-of-the-art solutions for safety at height.

Our **search for manufacturing excellence** goes hand in hand with our commitment to training internal staff and professionals in the field of work at height, and in 2013 this took concrete form with the birth of SICURFORM, the training company that aims to solve the problem of SAFETY.

# Added value

Our added value lies in **teamwork** and sharing of knowledge: we are manufacturers, designers, installers and verifiers, with know-how gained in the field that is essential to offer made-to-measure solutions that satisfy all our customers' requests

# Choice of associations

Our choices of association mirror our commitment to spread the safety culture:

- We are members of UNI to give our contribution to the main Italian regulatory body.
- We are members of AIAS (Associazione Italiana Ambiente e Sicurezza Italian Association for the Environment and Safety), Italy's main safety association.
- We are members of AIPAA (Associazione Italiana Per l'Anticaduta e l'Antinfortunistica
   Italian association for fall and accident prevention) to spread the culture of safety, working with top stakeholders in this sector.
- We are members of P.I.L.E. (Produttori Installatori Lattoneria Edile - Manufacturers and Installers of Tin Work for Buildings) to compare notes and receive information directly from those in the business.







# Reference standards

The standards for safety at work are set by The main reference standards for fall Legislative Decree N° 81 of 9 April 2008, also known as the Consolidation Law because it united and harmonised all previous regulations relating to safety.

The aim of this decree is to provide indications for those taking action to ensure risk-free working, and these recommend above all that the operator be provided with proper information on risks, when necessary also providing him with training on use of the safety systems.

Great attention has been given, above all, to the risk of falls from a height, which has for years been one of the main causes of death at work. requiring that the risks inherent in the operations to be carried out be analytically analysed and that suitable protective systems then be adopted.

protection systems are:

- Legislative Decree n° 81 of 9 April 2008 and subsequent modifications and additions
- Reference technical standards (art 115 Leg. Dec. 81/2008)

UNI EN 341 - Descender devices UNI EN 353-1 - Vertical lines involving a rigid cable

UNI EN 353-2 - Vertical lines involving a flexible cable

UNI EN 354 - Lanyards

UNI EN 355 - Energy absorbers

UNI EN 358 - Belts for work positioning

UNI EN 360 - Retractable type fall arresters

UNI EN 361 - Harnesses

UNI EN 362 - Connectors (shackles)

UNI EN 363 - Fall protection systems

UNI EN 364 - Test methods

UNI EN 365 - Marking / labelling

UNI EN 516 - Work surfaces, ladders on steeply pitched roofs

UNI EN 517 - Anchors for steeply pitched

UNI EN 795:2012 - Anchor devices

UNI 11158:2015 - Fall protection systems UNI 11560:2014 - Permanent roof anchor systems

CEN/TS 16415:2013 - Use of the anchor system by several people simultaneously

Among other things, the Consolidation Law requires that the risk of falling from a height be analysed, according to attachment XVI, and a solution be proposed to eliminate, or at any rate reduce to a minimum, the expected risk (articles 15, 17, 22, 90, 91, 110, 115, etc., Leg. Dec. 81/2008); those carrying out the work are also required to provide detailed information on the risks present and on the protective measures adopted (art. 26 Leg. Dec. 81/2008). The Consolidation Law requests conformity with the technical standard (art. 115 Leg. Dec. 81/2008). For anchors compliant with UNI 11560:2014, this standard requires verification of whether the structure to which it is fixed and the method used to fix it to that structure is sufficiently strong to stop the fall of a person. This verification calculation must be carried out by a qualified engineer. Also for compliance with the technical regulations, installers are required to carry out a resistance test on the fixing point after assembly, for Type C and D anchors (flexible and rigid anchor lines); this test consists in subjecting the end and intermediate anchors in flexible lines (type C) and rigid lines (type D) to a traction force of 5 kN (500 Kg) per individual anchor point. In line with these regulations, different regional authorities have issued

laws that regulate the safeguarding of roofs during building or maintenance, entering in the R.U.E. (Town planning and construction regulation) the clause authorising the start of work or habitability, with respect to those requirements.

Article 15, paragraph Z of Leg. Dec. 81/2008 and subsequent modifications and additions requires that periodic inspection of the equipment be carried out, with particular attention to safety equipment, according to the manufacturer's indications. Technical Standard UNI 11560 has the aim of providing guidelines for periodic inspection of safety systems to protect against falls from a height; more specifically, it defines that the systems be inspected every two years, if frequently used, or before use, if they have not been used for long periods. This is not to be confused with the warranty provided by the manufacturer on its own product.

During periodic inspections, SICURPAL has identified repeating the test on the fixing strength as a suitable means of checking integrity. The test is not destructive or harmful for the anchors, but is sufficient to discover whether there are faults or deterioration in the quality of the fixing.

To facilitate the fixing strength test operations,

Sicurpal has created specific equipment to carry out and record the tests, with printout of the force diagram and application time.

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# A dream is merely a bigger goal.

# When work makes the difference

# Sicurpal is safety when working at a height.

Experience and attention to quality are what makes our products unique, because the life of the worker who relies on them is unique.



# Free inspections and quotes

Specialist technicians are available to analyse and assess the needs of the customer, creating made-to-measure solutions.



# Design and technical assistance

Specialist engineers capable of producing the documents required by law or of providing technical support to draw them up. This documentation comprises the technical drawings of the roof and the structural verification of the anchor devices and the support structure.



# Supply of materials

Materials certified under EN 795:2012, UNI CEN/TS 16415:2013 and UNI 11578:2015.



# Installation and inspection on assembly

A staff of qualified, trained operators carries out workmanlike installation and testing of the system, which is supplied with a declaration of proper installation.



# Recovery of installed systems without documentation

Professionals capable of providing the necessary documentation even for previously installed systems with no project, subject to assessment of the state of the system and the conformity requirements.



# Periodic review

Carried out by qualified in-house staff with electronic equipment capable of documenting every test in graph form to guarantee the quality of the service.



# Installation with inspection on assembly

Legislative decree 81/08 and subsequent modifications and additions imposes compulsory training and experience for those carrying out installation of the fall protection systems, as these devices are connected to the use of class 3 P.P.E.s (risk of life). In the same way the technical standards require the intervention of skilled, trained personnel. This means it is compulsory for a lifeline installation technician to follow training courses on the assembly of the anchor systems, with a certificate being issued to prove the skills acquired.

Assembly of a fall protection system must be carried out according to the project requirements and the technical manual, to guarantee hold under standard UNI EN 795. At the end of the assembly operation, performance of an assembly inspection

and verification of the anchor devices is compulsory.

By filling in the declaration of proper installation, the installation technician takes full responsibility for workmanlike completion of the operation.

Sicurpal uses highly qualified internal installation technicians for assembly and assembly inspection operations. They are equipped with instruments capable of producing the loads required by technical standards (UNI EN 795) on the fixing devices and of detecting, reading and recording the tests. Sicurpal's equipment makes it possible to draw up and issue full official documentation on the results and performance of the various inspection tests.

# Periodic inspection

Legislative decree 81/08 and subsequent modifications and additions envisages, among the general safeguarding measures, the need to check the "regular maintenance of environments, equipment, systems, with particular reference to the safety devices, in conformity with the manufacturers' indications" (art. 15, paragraph 1, letter z) and the technical regulations (UNI EN 11560).

The responsibility for planning periodic inspections is acknowledged by Legislative decree 81/08 to be assigned to the customer or owner of the building.

If the system arrests a fall, a special inspection is compulsory before it can be used again.

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# POSTS SERIES PBS - PBSC

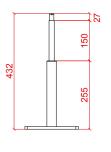


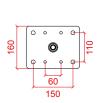


# PBS stainless steel base Post 200x160 mm

- Fixing plate 200x160 mm thickness 10 mm with 8 bores of which 4 Ø15 mm and 4 Ø10 mm;
- Pipe element Ø 36 mm thickness 8 mm, H 255
- Round bar Ø 20 mm, H 150 mm;
- Made of pickled AISI 304 Type Stainless Steel;
- For flat support bases.

## Cod. 000004



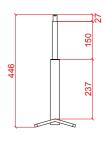


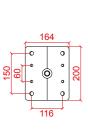


# PBSC stainless steel base Post 160x2150 mm

- Fixing plate 160x215 mm thickness 10 mm with 8 bores of which 4 Ø15 mm and 4 Ø10 mm;
- Pipe element Ø 36 mm thickness 8 mm, H 237
- Round bar Ø 20 mm, H 150 mm;
- Made of pickled AISI 304 Type Stainless Steel;
- For double pitched support bases.

Cod. 000137





# Stainless steel devices

PBS and PBSC posts are the solution to ensure the safety of roofs with low structural strength.





# **GENERAL CHARACTERISTICS:**

- Anchor device compliant with and certified under standards UNI EN 795:2012, CEN/TS 16415:2013 and UNI 11578:2015 type A and type C;
- Structure made entirely of AISI 304 stainless steel, pickled to prevent rusting;
- Post height H 43cm;
- Form of construction designed to guarantee a low visual impact;
- Devices with anchor plate both for flat support bases (PBS) and for ridge beam support
- Controlled deformation structure that allows maximum reduction of the loads on the Lifeline end posts (up to 6 Kn);
- Thanks to the use of the safety glider, which allows the lifeline to be bypassed, the operator can work without having to disconnect himself, stop or slow down his
- The bolting kit used to fix it varies according to the type of bearing structure.

Further information on our products is available on our website: www.sicurpal.it

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# ACCESSORIES PBS - PBSC









Turnbuckle J/J - J/P Short turnbuckle for cable tensioning

Cod. 002493 FFC Cod. 002494 FCC



Seal Turnbuckle locking seal

Cod. 000290 CAL



Lifeline ID

Lifeline identification code

Cod. 000291 ID



Lifeline sign

Warning sign for lifeline

Cod. 000296 CRT



Eyebolt Eyebolt and Split pin

Cod. 000058 SUP-T



Energy absorber

Stainless steel Lifeline energy absorber

Cod. 000033 ABS Cod. 001518 MRPD1 Cod. 001758 MRPD2



Cable Ø8

Cable Ø8-49 strands in 316 Stainless steel

Cod. 000055



Turnbuckle support

Turnbuckle/pipe support

Cod. 000194 SUP-G



Fixing kit, Ø8 cable

Fixing kit, Ø8 cable

Cod. 001513



Jaw terminal

Fixed or jointed jaw terminal

Cod. 000292 TFIX Cod. 000293 TFM



End of travel Ø8

End of travel device for Ø8 cable

Cod. 000636 BLOCK



Turnbuckle FFL - FCL - CAN

Turnbuckle for cable tensioning

Cod. 000032 FFL Cod. 000294 FCL Cod. 002477 CAN

# BYPASS LINE ACCESSORIES



Stainless steel cable support Pipe 180°-90°-135°

Intermediate 304 stainless steel cable support

Cod. 000501 BPX



90°-135° support pipe for turnbuckle support

Cod. 000307 T01 Cod. 000308 T02 Cod. 000309 T03



PBS-ST8 bracket

PBS-ST8 Anchoring bracket

Cod. 000298 PST8

# GLIDER LINE ACCESSORIES



Cable support Vrt Glider

Fixed vertical cable support for glider

Cod. 00192 VRTFIX



Cable support Vrt Adj.

0-45 adj. vertical cable support for glider

Cod. 001344 VRTREG



Cable support Vrt 90

Fixed 90 vertical cable support for glider

Cod. 001327 VRT90



L.L. Glider

Safety glider for lifeline

# CASES PBS - PBSC

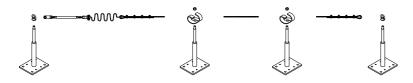
## PBS TYPE A SERIES SPECIFICATIONS

Supply and installation of UNI EN 795:2012, CEN/TS 16415:2013 type A certified controlled deformation post consisting of Aisi 304 stainless steel anchor post such as "Sicurpal PBS" or the like. The device plate must be 160x200 mm with a thickness of 10mm and 8 bores for fixing. The post height 44 cm consists of two different types of material, that allow high deformability to reduce the loads on the structure and give low visibility thanks to the reduced size. The operator must be hooked up using an eyebolt, likewise made of stainless steel. The system is certified and can be used by a maximum of 2 operators at the same time. The loads to be applied to the system for verification of the support structure by an authorised structural technician are indicated in the product manual.

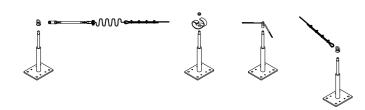
# PBS TYPE C SERIES SPECIFICATIONS

Supply and installation of UNI EN 795:2012, CENT/TS 16415:2013 and UNI 11578:2015 certified Lifeline consisting of Aisi 316 stainless steel cable Ø8 mm with 49 strands, controlled deformation AISI 304 stainless steel anchor posts such as "Sicurpal PBS or PBSC". The device plate must be 200x160 mm (PBS) or 160x215 mm (PBSC) with a thickness of 10mm and 8 bores for fixing. The post height approximately 40 cm consists of two different types of material, that allow high deformability to reduce the loads on the structure and give low visibility thanks to the reduced size. Hooking up of the lifeline must be using an eyebolt, turnbuckle, "Sicurpal energy absorber 000644" or the like; to guarantee certification of the system, all the devices must be made of Aisi 304 stainless steel. The system is certified and can be used by a maximum of 4 operators at the same time. The loads to be applied to the system for verification of the support structure by an authorised structural technician are indicated in the product manual.

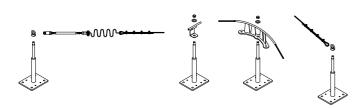
# COMPOSITION A LINE THAT CAN BE BYPASSED BY A SHACKLE



# COMPOSITION B LINE THAT CAN BE BYPASSED BY A SHACKLE OR DOUBLE LANYARD



# COMPOSITION C LINE THAT CAN BE BYPASSED BY THE GLIDER







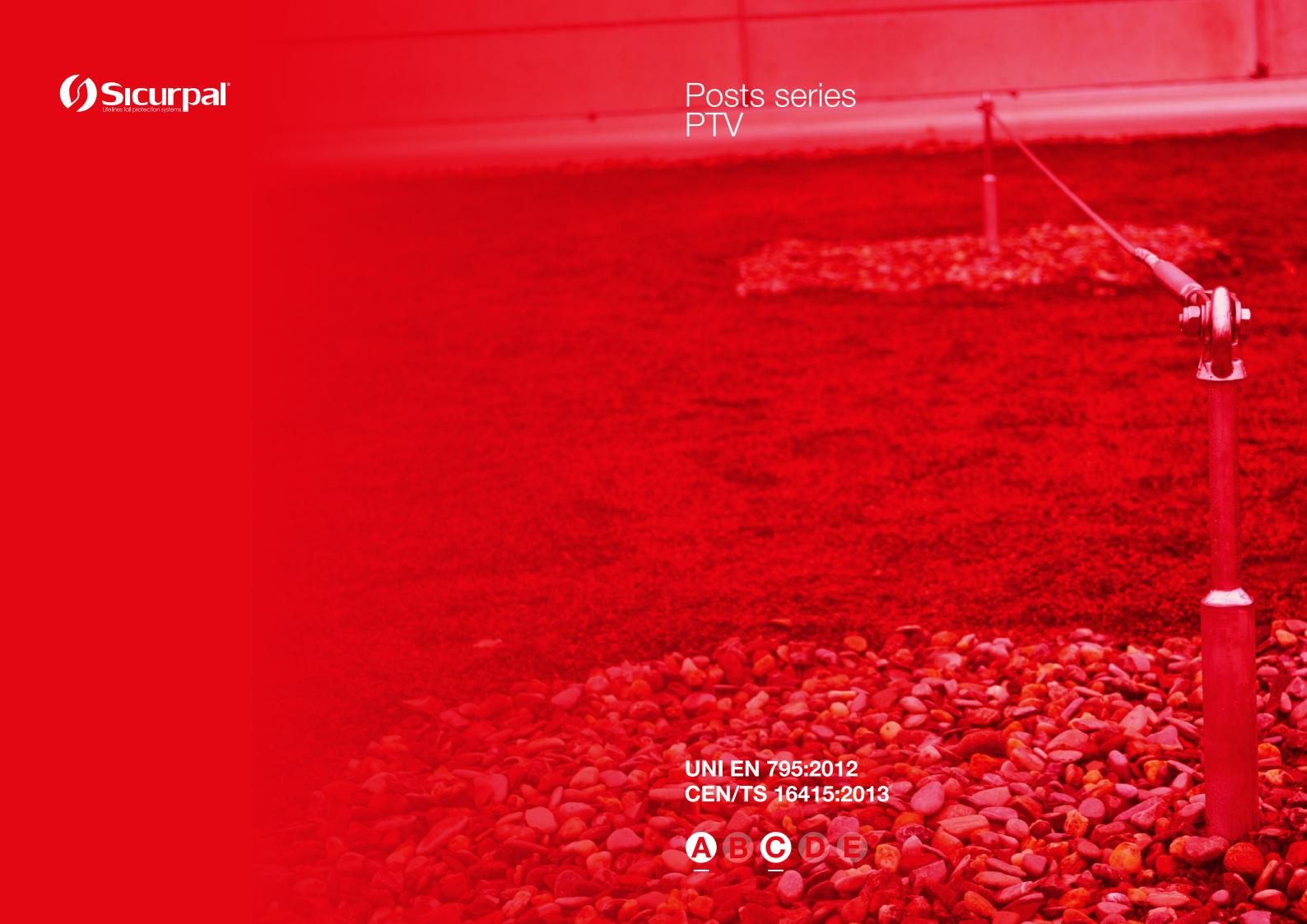








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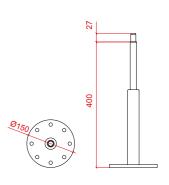




# PTV Post

- Post in AISI 304 Stainless steel
- Post height 40 cm

Cod. 001774





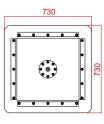
# PTV Type A post fixing kit

- Bearing structure for PTV post suitable for fixing of a type A and C anchor
- Allows fixing of the geo-mesh and the unwoven
- Suitable for type C intermediate anchors

PTV Type C post fixing kit • Suitable for fixing of a Type C anchor

• Additional reinforcement structure to be installed in the direction in which the force is applied







SICURPAL PTV, a lifeline system fitted in just 8 cm of topsoil and without perforating the roof



Max 3

# **GENERAL CHARACTERISTICS:**

- UNI EN 795:2012 and CEN/TS 16415:2013 type A and type C anchor device, with CE mark N° I/ISET0865/E1183, for installation on green roofs.
- The type A anchor can be used by max. two users at the same time, while the type C can be used by max. three users at the same time
- Structure made entirely of AISI 304 stainless steel, pickled to prevent rusting
- The special construction characteristics enable it to be used on any type of roof with a maximum slope of 5° without the use of structural fixing to the roof (the PVC or roofing felt waterproofing is not perforated)
- The device is equipped with all the nuts and bolts necessary for fixing to the bearing structure (mesh+layer of earth and/or gravel)
- Device created to make the maintenance of green roofs safer

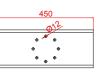


# Black geo-mesh

Black polypropylene geo-mesh to stabilise and reinforce the terrain, with a height of 4 m and thickness of 7 mm at the mesh join

Cod. 001989





# Cod. 001815



# White geo-textile

White, felted and thermally stabilised polypropylene geo-textile, height 2 m and thickness 1.3

Cod. 001988



Further information on our products is available on our website: www.sicurpal.it

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# ACCESSORIES DEVICES







Seal

Turnbuckle locking seal

Cod. 000290 CAL



Lifeline ID

Lifeline identification code

Cod. 000291 ID



Lifeline sign

Warning sign for lifeline

Cod. 000296 CRT

Eyebolt Eyebolt and Split pin

Cod. 000058 SUP-T



Jaw terminal

Jointed jaw terminal

Cod. 000293 TFM



Cable Ø8

Cable Ø8-49 strands in 316 Stainless steel

Turnbuckle FFL - FCL

Turnbuckle for cable

Cod. 000032 FFL Cod. 000294 FCL

tensioning



Cod. 000055



End of travel Ø8

End of travel device for Ø8 cable

Cod. 000636 BLOCK

Turnbuckle J/J - J/P

Short turnbuckle for

Cod. 002493 FFC Cod. 002494 FCC

cable tensioning



Jaw terminal

Fixed jaw terminal

Cod. 000292 TFIX





Pipe 135°- 90°-180° PTV-ST8 bracket

90°-135° support pipe for turnbuckle support PTV-ST8 Anchoring bracket

Cod. 000298 PST8

# GLIDER LINE ACCESSORIES

BYPASS LINE ACCESSORIES



Cable support Vrt Glider

Stainless steel cable support

Intermediate 304 stainless

steel cable support

Cod. 000501 BPX

Fixed vertical cable support for glider

Cod. 00192 VRTFIX



Cable support Vrt Adj.

0-45 adj. vertical cable support for glider

Cod. 001344 VRTREG



L.L. Glider

Safety glider for lifeline

Cod. 001512 NAV



**()** 22

# CASES PTV

## PTV TYPE A SERIES SPECIFICATIONS

Supply and installation of "Sicurpal PTV" individual Anchor Device for flat green roofs, European CE certified under EU Regulation 425/2016 and standard UNI EN 795:2012 type A for use by 1 operator and additional tests pursuant to TS 16415:2013 for simultaneous use by max. 2 operators. Consisting of an AISI 304 stainless steel post and device base plate diameter 150 mm, thickness 10 mm with 8 bores for fixing to the 730x730 mm support plate using 8 M10 bolts. Support plate 730x730 mm, thickness 3 mm, reinforced by 4 L stops each fixed with 5 M10 bolts. The 43 cm high post is made with two different round sections to allow controlled deformability during the user fall time. Operators must be hooked up to the AISI 316 stainless steel eyebolt using a shackle.

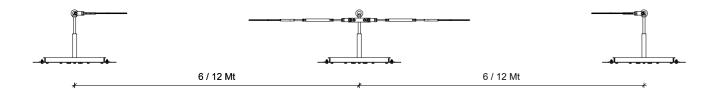
# PTV TYPE C SERIES SPECIFICATIONS

Supply and installation of "Sicurpal PTV" Lifeline Anchor Device for flat green roofs, European CE certified under EU Regulation 425/2016 and standard UNI EN 795:2012 type C and additional tests pursuant to TS 16415:2013 for simultaneous use by max. 3 operators. Consisting of two AISI 304 stainless steel posts diameter 150 mm and device base plates diameter 150 mm, thickness 10 mm with 8 bores for fixing to the 730x730 mm support plates using 8 M10 bolts. Support plates 730x730 mm, thickness 3 mm, reinforced by 4 L stops each fixed with 5 M10 bolts. The support is further reinforced by an AISI 304 stainless steel C plate with 8 bores, to be installed between the post base plate and the 730x730 mm support plate. The 43 cm high posts are made with two different round sections to allow controlled deformability during the user fall time. The Lifeline consists of posts with AISI 316 stainless steel eyebolt, jaw turnbuckle 000294, jointed jaw turnbuckle 000293, AISI 316 stainless steel cable. Operators must be hooked up either to the AISI 316 stainless steel eyebolt or to the steel cable using a shackle.

# COMPOSITION A LINE THAT CAN BE BYPASSED BY A SHACKLE



# COMPOSITION B LINE THAT CAN BE BYPASSED BY A SHACKLE OR DOUBLE LANYARD















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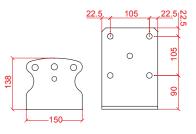




# **()** LVB Plate

- 4 bores for fixing with 4 threaded bars ø 10/12 mm with nut and counternut;
- 3 bores to be used as an anchor or to fix Lifeline accessories;
- Fixing at an offset of up to a maximum of 20 cm with respect to the floor/fixing surface is recommended (see
- Made of pickled AISI 304 Type Stainless Steel



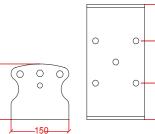




# **()** LVB Plate for double pitch

- 4 bores for fixing with 4 threaded bars ø 10/12 mm with nut and counternut;
- Double coupling plate to allow installation of the lifelines on both pitches and improve the use of the PPE.
- 6 bores to be used as an anchor or to fix Lifeline
- Fixing at an offset of up to a maximum of 20 cm with respect to the floor/fixing surface is recommended (see
- Made of pickled AISI 304 Type Stainless Steel

# Cod. 001516



# Stainless steel devices

The LVB plates are the ideal anchor for a low visibility lifeline.





# **GENERAL CHARACTERISTICS:**

- The ideal anchor system for a low visual impact on the roofs of historic buildings;
- Product compliant with and certified under UNI EN 795:2012, CEN/TS 16415:2013, UNI 11578:2015 type A and type C;
- Structure made entirely of AISI 304 stainless steel to prevent rusting;
- Fixing with 4 threaded bars with a diameter less than or equal to 12 mm, nut and
- Fixing on reinforced concrete, wood and steel beams;
- Suitable for ridge beams with ventilation;
- Can be fitted on both sides of the ridge beam;
- The elasticity and deformability of the system makes it possible to have low loads on
- Ideal for historic town centres and listed buildings, as its positioning at ridge beam level makes it low visibility;
- Simple, fast installation without complete opening up of the roof;
- Ideal as continuous anchor:
- The product's strong points are its economy and the reduced system installation

Further information on our products is available on our website: www.sicurpal.it

# ACCESSORIES









Turnbuckle J/J - J/P Short turnbuckle for cable tensioning

Cod. 002493 FFC Cod. 002494 FCC



Seal Turnbuckle locking seal

Cod. 000290 CAL



Lifeline ID

Lifeline identification code

Cod. 000291 ID



Lifeline sign

Warning sign for lifeline

Cod. 000296 CRT



Mini Turnbuckle Support

Mini jaw or pipe Turnbuckle Support

Cod. 000765 SUP-M



Energy absorber

Stainless steel Lifeline energy absorber

Cod. 000033 ABS Cod. 001518 MRPD1 Cod. 001758 MRPD2



Cable Ø8

Cable Ø8-49 strands in 316 Stainless steel

Cod. 000055



Turnbuckle support

Turnbuckle/pipe support

Cod. 000194 SUP-G



Fixing kit, Ø8 cable

Fixing kit, Ø8 cable

Cod. 001513



Jaw terminal

Fixed or jointed jaw terminal

Cod. 000292 TFIX Cod. 000293 TFM



End of travel Ø8

End of travel device for Ø8 cable

Cod. 000636 BLOCK



Turnbuckle FFL - FCL - CAN

Turnbuckle for cable tensioning

Cod. 000032 FFL Cod. 000294 FCL Cod. 002477 CAN

# BYPASS LINE ACCESSORIES



Alu cable support

By-passable aluminium cable support

Cod. 001094 BPA



# Straight pipe

Straight support pipe for turnbuckle support

Cod. 000309 T03



# Support pipe 90°

90° support pipe for turnbuckle support

Cod. 000308 T02



Support pipe 135°

135° support pipe for turnbuckle support

Cod. 000307 T01

# GLIDER LINE ACCESSORIES



Cable support Straight Glider Str. Adj. Cable support

Fixed straight cable support for glider

Cod. 001346 DRTFIX



0-45 adj. straight cable support for glider

Cod. 001347 DRTREG



L.L. Glider

Safety glider for lifeline

# CASES LVB

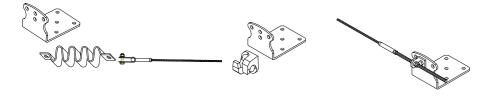
## LVB TYPE A SERIES SPECIFICATIONS

Supply and installation of UNI EN 795:2012, CEN/TS 16415:2013 and UNI 11578:2015 type A certified ultra-low impact anchor consisting of pickled Aisi 304 stainless steel anchor plate such as "Sicurpal VLB" or the like. It is fixed using 4 threaded bars  $\leq$  Ø12 in A2 stainless steel. Reduction of loads on the load-bearing structure is guaranteed by the elastoplastic properties of the LVB-threaded bar system, which is capable of reducing transmitted values. This "plate-bar" system has been tested and is guaranteed by the manufacturer. The loads to be applied to the system for verification of the support structure by an authorised structural technician are indicated in the product manual.

# LVB TYPE C SERIES SPECIFICATIONS

Supply and installation of UNI EN 795:2012, CEN/TS 16415:2013 and UNI 11578:2015 type C certified ultra-low impact Lifeline consisting of Aisi 316 stainless steel cable Ø8 mm with 49 strands, pickled Aisi 304 stainless steel anchor plate such as "Sicurpal VLB" or the like. It is fixed using 4 threaded bars ≤ Ø12 in A2 stainless steel. Reduction of loads on the load-bearing structure is guaranteed by the elastoplastic properties of the LVB-threaded bar system, which is capable of reducing the values to it. This "plate-bar" system has been tested and is guaranteed by the manufacturer. As regards the lifeline components, these are in stainless steel with the following specifications: mini Pipe Turnbuckle Support, Pipe turnbuckle with 250 mm or 150 mm tensioning, "Sicurpal Energy Absorber cod. 000033" or the like. The system must be certified and used by max. 1 operator according to standard EN 795:2012 and by max. 4 operators at the same time according to standards CEN/TS 16415:2013 and UNI 11578:2015. The loads to be applied to the system for verification of the support structure by an authorised structural technician are indicated in the product manual.

# COMPOSITION A CAN BE BYPASSED BY A SHACKLE



# COMPOSITION B CAN BE BYPASSED BY THE GLIDER























**GENERAL CHARACTERISTICS:** 

quality to price ratio;

structures:



# Sicurslim h 350

- Height of the lifeline 35 cm from the support surface
- Fixing of the central plate with two 16 mm bolts to damp the
- 8 mm bolts to maintain and guarantee the verticality of the central plate.
- Flat base plate for beams with maximum size 15cm
- Stainless steel and hot galvanized steel products to give a full range with the right quality to price ratio.

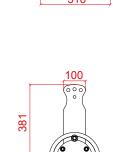
Code: 001566 PX35 Inox Code: 001568 PZ35 Galvanized

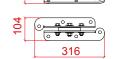


# Sicurslim h 500

- Height of the lifeline 50 cm from the support surface
- Fixing of the central plate with two 16 mm bolts to damp the fall.
- 8 mm bolts to maintain and guarantee the verticality of the central plate.
- Flat base plate for beams with maximum size 15cm
- Stainless steel and hot galvanized steel products to give a full range with the right quality to price ratio.

Code: 001529 PX50 Inox Code: 001567 PZ50 Galvanized







# Sicurslim ridge tile h350

- Height of the lifeline 35 cm from the support surface
- Fixing of the central plate with two 16 mm bolts to damp the fall.
- 8 mm bolts to maintain and guarantee the verticality of the
- V shaped base plate for ridge beams with minimum size 15cm
- Stainless steel and hot galvanized steel products to give a full range with the right quality to price ratio.

Code: 001570 CX35 Inox Code: 001572 CZ35 Galvanized



# Sicurslim ridge tile h 500

- Height of the lifeline 50 cm from the support surface
- Fixing of the central plate with two 16 mm bolts to damp the fall.
- 8 mm bolts to maintain and guarantee the verticality of the
- V shaped base plate for ridge beams with minimum size 15 cm
- Stainless steel and hot galvanized steel products to give a full range with the right quality to price ratio.

Code: 001569 CX50 Inox Code: 001571 CZ50 Galvanized

# Hot galvanised steel and stainless steel devices

Lifeline with mobile supports to reduce loads on the anchors to a minimum.



Further information on our products is available on our website: www.sicurpal.it

• Fixing of the central plate with two 16 mm bolts to damp the fall;

• 8 mm bolts to maintain and guarantee the verticality of the central plate;

• Can be fixed with structural wood screws to beams with 15 cm base;

001346 and 001347 can be used in the intermediate positions;

• Product compliant with UNI EN 795/2012.

• Full line of products with fixing both to flat beam and to ridge beam with 16°

• Stainless steel and hot galvanized steel products to give a full range with the right

• Thanks to the low loads it can be fixed using 10 mm threaded bars to reinforced

• The cable support art. 001094 or the stainless steel cable support for glider art.

• Product is guick and simple to install both on reinforced concrete and wooden

concrete beams with 17 cm base and with 12 mm bars to beams with 19 cm base;

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# ACCESSORIES SICURSLIM









Seal

Turnbuckle locking seal

Cod. 000290 CAL



Lifeline ID

Lifeline identification code

Cod. 000291 ID



Lifeline sign

Warning sign for lifeline

Cod. 000296 CRT



Cable Ø8

Cable Ø8-49 strands in 316 Stainless steel

Cod. 000055



End of travel Ø8

End of travel device for Ø8 cable

Cod. 000636 BLOCK



Fixing kit, Ø8 cable

Fixing kit, Ø8 cable

Cod. 001513



Jaw terminal

Fixed or jointed jaw terminal

Cod. 000292 TFIX Cod. 000293 TFM



Energy absorber

Stainless steel Lifeline energy absorber

Cod. 000033 ABS



# Quick link

Quick link for connection of energy absorber

Cod. 001518 MRPD1



Turnbuckle FFL - FCL

Turnbuckle for cable tensioning

Cod. 000032 FFL Cod. 000294 FCL



Turnbuckle J/J - J/P

Short turnbuckle for cable tensioning

Cod. 002493 FFC Cod. 002494 FCC

# BYPASS LINE ACCESSORIES



# Alu cable support

By-passable aluminium cable support

Cod. 001094 BPA

# GLIDER LINE ACCESSORIES



Cable support Straight Glider Str. Adj. Cable support

Fixed straight cable support for glider

Cod. 001346 DRTFIX



0-45 adj. straight cable support for glider

Cod. 001347 DRTREG



L.L. Glider

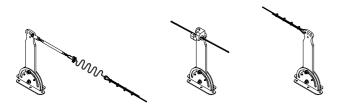
Safety glider for lifeline

# CASES SICURSLIM

## SICURSLIM CLASS C SERIES SPECIFICATIONS

Supply and installation of UNI EN 795:2012, CEN TS 16415:2013, UNI 11578:2014 type C certified Lifelines consisting of hot galvanized steel/stainless steel end and intermediate supports such as "Sicurpal Sicurslim" or the like. The posts are made up of a series of plates assembled together using two M16 bolts that guarantee the rigidity of the support device. The centre plate height 350mm or 500mm and with a thickness of 15mm makes up the central body of the device, at the top of which the lifeline must be anchored. The verticality of this plate is guaranteed by two bolts that only break in the event of a fall. The base with its 6 bores can guarantee fixing using M10 threaded bars to a reinforced concrete beam with minimum dimensions 17cm/using M12 threaded bars to a reinforced concrete beam with minimum dimensions of 15cm. The lifeline consists of an Aisi 316 stainless steel cable Ø8 mm with 49 strands, and it can be hooked up using a locking kit consisting of thimble and rope clips or using the terminal to be crimped directly on the cable. The accessories connected to the lifeline must be: Turnbuckle, "Sicurpal energy absorber cod. 000033", aluminium alloy cable support or steel cable support that can be bypassed by the glider; all the devices in the lifeline necessary to guarantee validity of the certification for 4 operators at the same time must be manufactured by Sicurpal. The loads to be applied to the system for verification of the support structure by an authorised structural technician are indicated in the product manual.

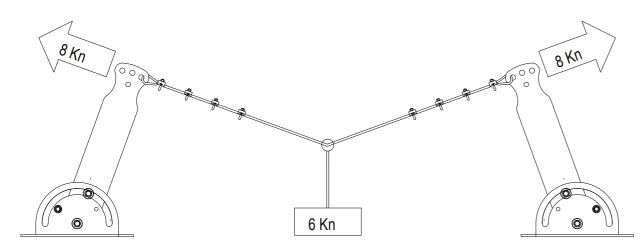
COMPOSITION A LINE THAT CAN BE BYPASSED BY A SHACKLE



COMPOSITION B
CAN BE BYPASSED BY THE GLIDER



# LOAD ON THE ENDS IS REDUCED TO A MINIMUM THANKS TO SICURSLIM'S GREAT DAMPING EFFECT

















# ECONOMY Line & SHED LINE

UNI EN 795:2012 CEN/TS 16415:2013 UNI 11578:2015









# POSTS ECONOMY LINE

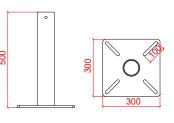




- For flat roofs and flat support structures;
- Ideal for fixing to wooden beams with counterplate or galvanized slotted plates 300x60x10 mm or 400x60x10 mm;
- Ideal for brick and cement, wooden, steel, concrete roofs.

Cod. 000036 h 50

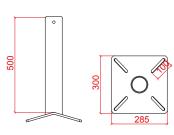
Cod. 000263 h 30





# Galvanized PZC post h50-h30 base 300x300

- Fixing plate 300x300 mm thickness 10 mm with double 16° slope for ridge beam installation;
- Slots 10 cm in length to facilitate fixing;
- Ideal for fixing on reinforced concrete ridge beams with 4 threaded bars  $\leq \emptyset$  12 mm and two-component resins and/ or counterplate;
- $^{\bullet}$  Ideal for brick and cement, wooden, steel, concrete roofs. Cod. 000186  $\,h\,50\,$  Cod. 000265  $\,h\,30\,$





# Galvanized PZI post h50-h30 base 300x300

- Fixing plate 300x300 mm thickness 10 mm with 16° slope for pitched roof installation;
- Slots 10 cm in length to facilitate fixing;
- Ideal for fixing on pitched roof with 16° slope;
- Ideal for fixing to wooden beams with counterplate or galvanized slotted plates 300x60x10 mm or 400x60x10 mm;
- Ideal for brick and cement, wooden, steel, concrete roofs.

Galvanized PZL post h50-h30 base 400x160

• Fixing with structural screws or threaded bars ≤ Ø 12 mm

• Ideal for brick and cement, wooden, steel, concrete roofs.

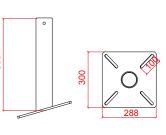
Cod. 000266 h 30

• Ideal for fixing to wooden beams with counterplate

or slotted plates 400x60x10 mm, 300x60x10 mm or

Cod. 000185 h 50 Cod. 000264 h 30

• Fixing plate 400x160 mm thickness 10 mm;





The posts in the Economy Line series are an excellent compromise between economy and quality.



# **GENERAL CHARACTERISTICS:**

- Thanks to its rigidity it is the optimum product for anchoring of cables for suspended
- Product compliant with and certified under standards UNI EN 795:2012, CEN/TS 16415:2013, UNI 11578:2015 type A and type C;
- Structure made entirely of S235 hot galvanized steel (Fe 360);
- Vertical post, also fully galvanized internally to guarantee long term durability (10 years);
- Vertical post H 50-30 cm without reinforcements, thanks to the external and internal base
- Post with 4 fixing bores that allow 90° rotation of the closing terminal;
- Open base post with double weld, for perfect internal galvanization;
- Terminal closing plug designed to avoid infiltration into the post;
- Intermediate Lifeline posts that can be inspected without removing the cable;
- Base plates with slots to facilitate fixing and increase the system elasticity;

Further information on our products is available on our website: www.sicurpal.it

• Full range of base plates for anchoring to any type of structure.



# Intermediate or end

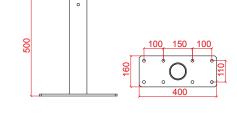
and two-component resin;

200x60x10 mm;

Cod. 000187 h 50

Intermediate or accessory terminal with drip guard

Cod. 000038 C3F







# End terminal

End terminal with drip

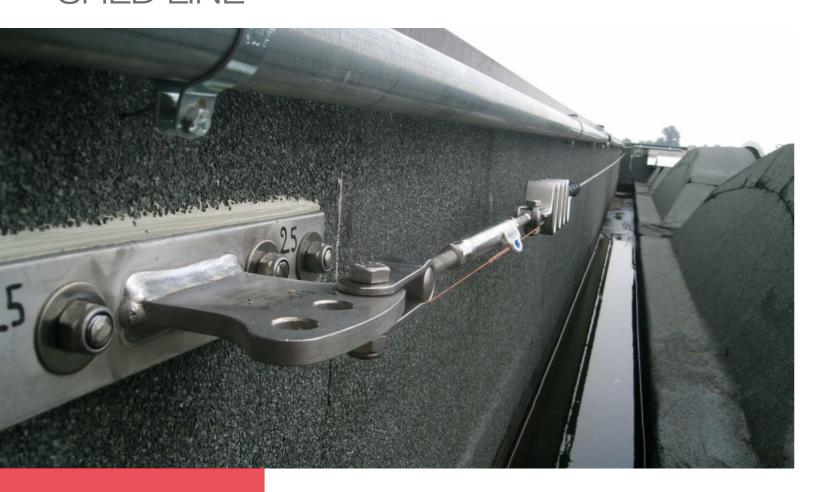
Cod. 000305 C2F



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# PLATES SHED LINE







Shed Line plates allow a lifeline to be installed on the wall with intermediate points that can be by-passed without disconnecting.





# **GENERAL CHARACTERISTICS:**

- Product compliant with and certified under standards UNI EN 795:2012, CEN/TS 16415:2013, UNI 11578:2015 type A and type C;
- Ability to select products both with S235 hot galvanized steel (Fe360), and with pickled AISI 304 stainless steel structure;
- Cable supports and lifeline accessories made entirely of stainless steel;
- Base plates with slots to facilitate fixing and increase the system elasticity;
- Plates 300x300 mm for fixing to masonry;
- Plates 180x180 mm for fixing to reinforced concrete;
- Plates 300x60 mm for fixing to prefabricated reinforced concrete roof curbs.



Further information on our products is available on our website: www.sicurpal.it



# SZG wall plate

- Fixing plate 300x300 mm thickness 10 mm;
- Slots 10 cm in length to facilitate fixing;
- Ideal for Lifelines on masonry walls (min. thickness 20 cm);
- No. 3 Lifeline fixing bores.

Cod. 000037 Galvanized Cod. 001509 - Inox



# SZP wall plate

- Fixing plate 180x180 mm thickness 10 mm;
- Slots 6 cm in length to facilitate fixing;
- Ideal for Lifelines on reinforced concrete walls;
- No. 3 Lifeline fixing bores.

Cod. 000188 Galvanized

Cod. 000262 - Inox



# SZS wall plate

- Fixing plate 300x60 mm thickness 10 mm;
- Ideal for Lifelines on the reinforced concrete roof curbs of prefabricated elements;
- No. 3 Lifeline fixing bores;
- Not to be used with Pulley art. 000306;



# PZFG wall plate

- Hot galvanized steel slotted fixing plate 300x300 with countersunk central bore Ø17 mm;
- To be used to fix accessories or as counterplate;



Cod. 000230 Galvanized Cod. 001510 - Inox



# PZFP wall plate

- Hot galvanized steel slotted fixing plate 180x180 with countersunk central bore Ø17 mm;
- To be used to fix accessories or as counterplate;







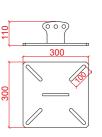
Cod. 001236 - Inox



# Cod. 000233

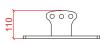
# Int. Curve - Ext. Curve

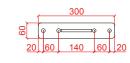
- By-passable cable support bracket with AISI 304 stainless
- Set up to be fixed on the wall to provide continuity for the lifeline at the corner of the building (technical rooms, stairwells)

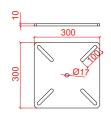


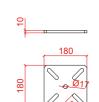


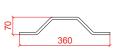




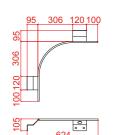












Cod. 001373 Int. Angle

Cod. 001374 Ext. Angle

# ACCESSORIES ECONOMY & SHED LINE









Turnbuckle J/J - J/P Short turnbuckle for cable tensioning

Cod. 002493 FFC Cod. 002494 FCC



Seal
Turnbuckle locking seal

Cod. 000290 CAL



Lifeline ID

Lifeline identification code

Cod. 000291 ID



Lifeline sign

Warning sign for lifeline

Cod. 000296 CRT

# 

## Cable Ø8

Cable Ø8-49 strands in 316 Stainless steel

Cod. 000055



Two-way

Two-way bracket

Cod. 000184 SBD



Fixing kit, Ø8 cable

Fixing kit, Ø8 cable

Cod. 001513



# Turnbuckle support

Turnbuckle/pipe support

Cod. 000194 SUP-G



# Energy absorber

Stainless steel Lifeline energy absorber

Cod. 000033 ABS Cod. 001518 MRPD1 Cod. 001758 MRPD2



# Jaw terminal

Fixed or jointed jaw terminal

Cod. 000292 TFIX Cod. 000293 TFM



# End of travel Ø8

End of travel device for Ø8 cable

Cod. 000636 BLOCK



# Turnbuckle FFL - FCL - CAN

Turnbuckle for cable tensioning

Cod. 000032 FFL Cod. 000294 FCL Cod. 002477 CAN

# BYPASS LINE ACCESSORIES



# Alu cable support

By-passable aluminium cable support

Cod. 001094 BPA



# Pipe 135°-90°-180°

90°-135° support pipe for turnbuckle support

Cod. 000307 T01 Cod. 000308 T02 Cod. 000309 T03



# Pulley

Pulley corner cable support

Cod. 000306 BP9



# Spacer

Spacer 60x60

Cod. 000195 DST

# GLIDER LINE ACCESSORIES



# Cable support Vrt Inc-Glider

Vertical fixed and inclined cable support for glider

Cod. 000192 VRTFIX Cod. 000193 INCFIX



# Cable support Vrt 90

Fixed 90 vertical cable support for glider

Cod. 001327 VRT90



# Cable support Vrt Inc - Adj.

Adj. and Inclined adj, 0-45 vertical cable support for glider Cod. 001344 VRTREG Cod. 001345 INCREG



c - Adj. L.L. Glider

Safety glider for lifeline

# SPECIFICATION ITEMS

# ECONOMY LINE TYPE A SERIES SPECIFICATIONS

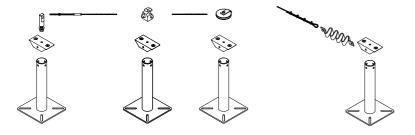
Supply and installation of UNI EN 795:2012, CEN/TS 16415:2013, UNI 11578:2015 type A certified Anchor Posts consisting of hot galvanized s235 steel anchor posts such as "Sicurpal ECONOMY LINE" or the like. The posts are made up of a plate 300x300 mm or 300x300 mm on ridge beam or 300x300 mm inclined by 16° or 400x160 mm thickness 10mm with 4 slots for fixing and a pipe with double welding internally and externally.

The personal protection equipment is hooked up by means of a special cover known as an INTERMEDIATE TERMINAL or END TERMINAL which becomes an integral part of the device. This device is able to create 2 UNI EN 795:2012, CEN/TS 16415:2013, UNI11578:2015 type A certified anchor points. The loads to be applied to the system for verification of the support structure by an authorised structural technician are indicated in the product manual.

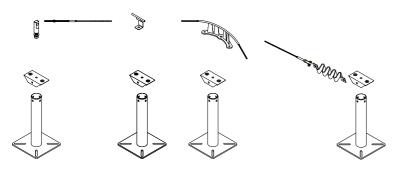
# ECONOMY LINE TYPE C SERIES SPECIFICATIONS

Supply and installation of UNI EN 795:2012, CEN/TS 16415:2013, UNI 11578:2015 type C certified Lifeline consisting of Aisi 316 stainless steel cable Ø8 mm with 49 strands, hot galvanized s235 steel anchor posts such as "Sicurpal ECONOMY LINE" or the like. The posts are made up of a plate 300x300 mm or 300x300 mm on ridge beam or 300x300 mm inclined by 16° or 400x160 mm thickness 10mm with 4 slots for fixing and a pipe with double welding internally and externally. The lifeline can be hooked up by means of a special cover known as an INTERMEDIATE TERMINAL or END TERMINAL which becomes an integral part of the device. This device serves to fix the lifeline accessories or as a UNI EN 795:2012, CEN/TS 16415:2013, UNI 11578:2015 certified anchor. The accessories connected to the lifeline must be: turnbuckle, "Sicurpal energy absorber cod. 000033", aluminium alloy cable support or steel cable support that can be bypassed by the glider; all the devices in the lifeline necessary to guarantee validity of the certification for max. 4 operators at the same time must be manufactured by Sicurpal. The loads to be applied to the system for verification of the support structure by an authorised structural technician are indicated in the product manual.

# COMPOSITION A LINE THAT CAN BE BYPASSED BY A SHACKLE OR DOUBLE LANYARD



# COMPOSITION B LINE THAT CAN BE BYPASSED BY THE GLIDER















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# SPECIFICATION ITEMS

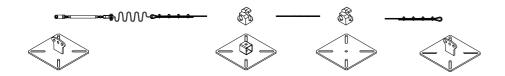
# SHED LINE TYPE A SERIES SPECIFICATIONS

Supply and installation of "Sicurpal SHED LINE" type or similar UNI EN 795:2012, CEN/TS 16415:2013, UNI 11578:2015 type A Plates. The device plates can be of various sizes: 300x300 mm, 180x180 mm, 300x60 mm and must all be 10 mm thick with 2 or 4 slots for fixing. The operator can be hooked up by means of one of the three bores located inside the welded lug at the centre of the base fixing plate. The loads to be applied to the system for verification of the support structure by an authorised structural technician are indicated in the product manual.

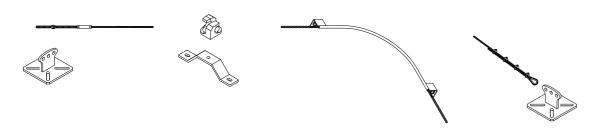
# SHED LINE TYPE C SERIES SPECIFICATIONS

Supply and installation of UNI EN 795:2012, CEN/TS 16415:2013, UNI 11578:2015 type C certified Lifeline consisting of Aisi 316 stainless steel cable Ø8 mm with 49 strands, AISI 304 stainless steel or hot galvanized steel anchor plates such as "Sicurpal SHED LINE" or the like. The device plates may be of various dimensions: 300x300 mm, 180x180 mm, 300x60 mm and must all be 10 mm thick with 4 slots for fixing. The lifeline can be hooked up by means of one of the three bores located inside the welded lug at the centre of the base fixing plate. The accessories connected to the lifeline must be: turnbuckle, "Sicurpal energy absorber cod. 000033" or the like; all the devices in the lifeline necessary to guarantee validit of the certification must be made of Aisi 304/316 stainless steel. The system is certified and can be used by a maximum of 4 operators at the same time. The loads to be applied to the system for verification of the support structure by an authorised structural technician are indicated in the product manual.

# COMPOSITION A LINE THAT CAN BE BYPASSED BY A SHACKLE OR DOUBLE LANYARD



# COMPOSITION B LINE THAT CAN BE BYPASSED BY THE GLIDER















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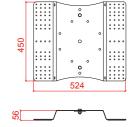








- Plate in pickled AISI 304 Stainless steel
- Plate that can be fixed to corrugations with any type of spacing
- Plate 524x450 to distribute the loads over a wide surface area.
- Economic, quick and simple to install
- 8 Bores for fixing of the Xlam plate
- Aluminium rivet kit included



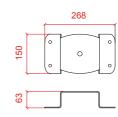
## Cod. 001517



# Xlam

- Aluminium intermediate support fixing plate
- Essential to prevent the lifeline from touching the sheeting
- Its form reduces the load on the plate, bending in the case
- It is not recommended that this product be used with the cable support for glider, due to the excessive height of the lifeline







# **Multilam**

The "MULTILAM" lifeline system has been designed and built to be fixed on metal sheeting without the need for boring, thus eliminating any risk of water infiltration. The fixing system varies according to the type of roof selected (Alugraf, etc)

Cod. 000784 - L40

Cod. 000785 - L50

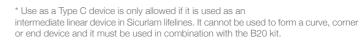
Cod. 000786 - L60





# Plam

- Anchor plate for sheet metal roofs Type A and C\* or Rail Lifeline
- Fixing with aluminium rivet kit, included
- Waterproofing guaranteed thanks to the neoprene sheeting glued to the underneath
- Central bore diameter 17mm for fixing of the accessories
  UNI EN 795:2012 and UNI 11578:2015 Type A and C\* certified product



## Cod. 001439



# Pair of metal sheets

Pair of Stainless steel Reinforcement sheets with rivets

Cod. 002648 - Inox Cod. 002647 - Prepainted



# Reinforcement sheeting 100x67

Metal sheet with rivets to be used for double reinforcement

Cod. 000632 - Inox Cod. 000631 - Prepainted

# Lifelines for sheeting

Anchor system in AISI 304 stainless steel for fixing on corrugated sheeting.



Max 4

Type C

• Reduced thickness plate in electropolished AISI 304 stainless steel;

• Intermediate devices in aluminium for use with a simple shackle;

• Reduced height plate to reduce actions on fixing points;

• Waterproofing guaranteed by a layer of neoprene;

• Can be used on all corrugated metal roofs with a joint spacing of up to 420

• Installation facilitated by the use of aluminium flower-head rivets with seal for

• Product compliant with and certified under standards UNI EN 795:2012 and

• Intermediate devices in AISI 304 stainless steel to use the sliding GLIDER;

**GENERAL CHARACTERISTICS:** 

perfect waterproofing;

UNI 11578:2015 Type C;

• Good quality/price ratio.

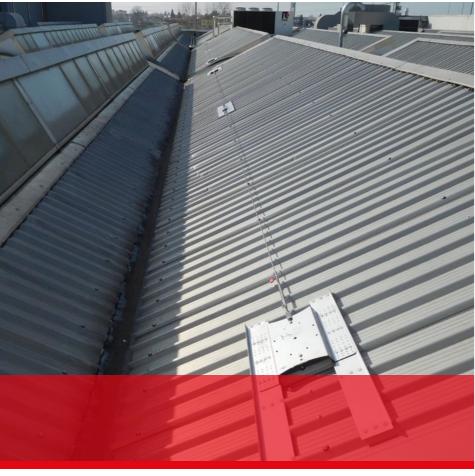
Simple, quick to fit accessories;

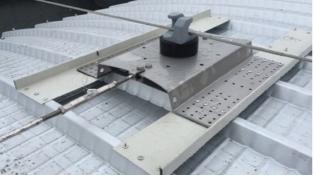


Further information on our products is available on our website: www.sicurpal.it

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# ACCESSORIES SICURLAM









Turnbuckle J/J - J/P Short turnbuckle for cable tensioning

Cod. 002493 FFC Cod. 002494 FCC



Seal Turnbuckle locking seal

Cod. 000290 CAL



Lifeline ID

Lifeline identification code

Cod. 000291 ID



Lifeline sign

Warning sign for lifeline

Cod. 000296 CRT

# TITE

## Cable Ø8

Cable Ø8-49 strands in 316 Stainless steel

Cod. 000055



Energy absorber

Stainless steel Lifeline energy absorber

Cod. 000033 ABS Cod. 001518 MRPD1 Cod. 001758 MRPD2



Fixing kit, Ø8 cable

Fixing kit, Ø8 cable

Cod. 001513



Turnbuckle support

Turnbuckle/pipe support

Cod. 000194-SUP-G



End of travel Ø8

End of travel device for Ø8 cable

Cod. 000636 BLOCK



# LL Connector

Plate-lifeline hooking device

Cod. 001459



# Jaw terminal

Fixed or jointed jaw terminal

Cod. 000292 TFIX Cod. 000293 TFM



Turnbuckle FFL - FCL - CAN

Turnbuckle for cable tensioning

Cod. 000032 FFL Cod. 000294 FCL Cod. 002477 CAN

# BYPASS LINE ACCESSORIES



Alu cable support

By-passable aluminium cable support

Cod. 001094



# Pulley

Pulley corner cable support

Cod. 000306



# Pipe 135°- 90°-180°

90°-135° support pipe for turnbuckle support

Cod. 000307 T01 Cod. 000308 T02 Cod. 000309 T03

# GLIDER LINE ACCESSORIES



Cable support Vrt Glider

Vertical cable support for fixed glider

Cod. 000192



# Cable support Vrt 90

Fixed 90 vertical cable support for glider

Cod. 001327



# Cable support Vrt Adj.

0-45 adj. vertical cable support for glider

Cod. 001344 Vrt Reg



L.L. Glider

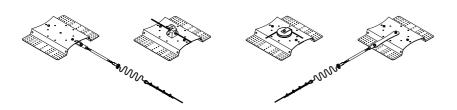
Safety glider for lifeline

# CASES SICURLAM

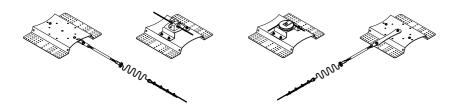
# SICURLAM SPECIFICATIONS

Supply and installation of UNI EN 795:2012 and UNI 11578:2015 Type C certified anchor plates. The system consists of "Sicurpal SICURLAM" type stainless steel anchor plates or the like, anchored to the metal sheeting with 16 aluminium flower-head rivets. UNI EN 795 Type C product certification guarantees and certifies both the plate and connection of the rivet to the sheeting. The sheeting must have the following minimum characteristics: 5/10 for painted or galvanized iron roofs and 7/10 for aluminium roofs. The hold of the sheeting to the bearing structure must be verified by an authorised structural engineer. Connection of the lifeline at the ends must be using the "Sicurpal LV Connector". This will be followed by double jaw turnbuckle, "Sicurpal energy absorber cod. 000033" or the like; all the devices in the lifeline necessary to guarantee validity of the certification must be made of Aisi 304 stainless steel. The system must be certified and usable by 3 operators at the same time. The loads to be applied to the system for verification of the support structure by an authorised structural technician are indicated in the product manual.

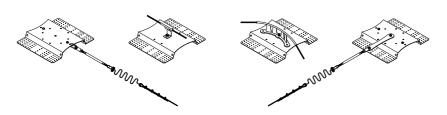
# COMPOSITION A LINE THAT CAN BE BYPASSED BY A SHACKLE OR DOUBLE LANYARD



# COMPOSITION B RAISED LINE THAT CAN BE BYPASSED BY A SHACKLE OR DOUBLE LANYARD



# COMPOSITION C LINE THAT CAN BE BYPASSED BY THE GLIDER

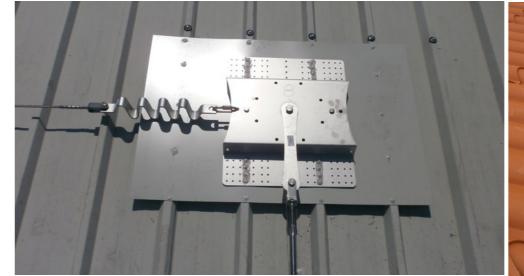














# SPECIAL ALUGRAF APPLICATIONS

## **INTRODUCTION**

Fixing solution in collaboration with Alubel to optimise the Lifeline product and its fixing.

- AISI 304 stainless steel plate in 3 sizes 40-50-60, prepared for fixing with 4 specially made aluminium clips
- The clips allow fixing to the metal sheeting without holes, guaranteeing hold and waterproofing. All products are made of stainless steel and aluminium



Alugraf FixKit

Kit of 4 clips for Alugraf

Cod. 001519



Alugraf Support
Aluminium support for
Alugraf fixing

Cod. 001324



Alugraf Reinforcement

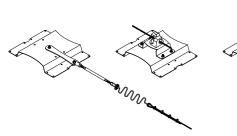
Alugraf reinforcement profile

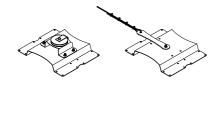
Cod. 001325



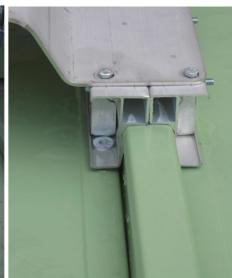
Supply and installation of UNI EN 795:2012 Type C certified anchor plates. The system consists of "Sicurpal MULTILAM-ALUGRAF" type stainless steel anchor plates or the like, anchored to the metal sheeting with a special clip called Alugraf FixKit. The manufacturer guarantees compliance with standard UNI EN795 type C provided that installation is carried out exactly according to the indications in the use and maintenance manual; verification of the strength of the structure to which the Alugraf roof is applied is the responsibility of an authorised technician. Connection of the lifeline at the ends must be using the "Sicurpal LV Connector", followed by a double jaw turnbuckle, a "Sicurpal energy absorber cod. 000033" or the like. To guarantee certification of the system all the devices must be made of Aisi 304 stainless steel. The system must be certified and usable by 3 operators at the same time. The loads to be applied to the system for verification of the support structure by an authorised structural technician are indicated in the product manual.













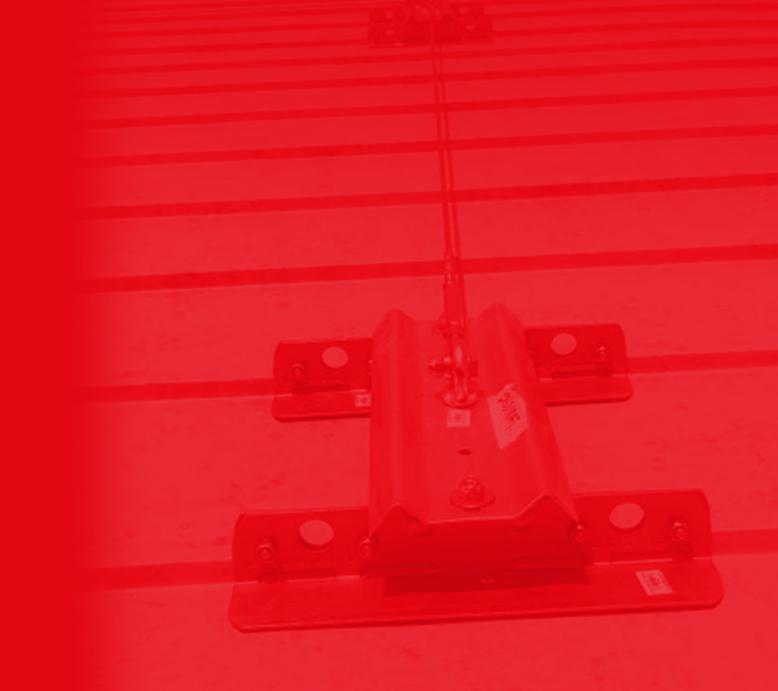








# Anchor devices SICURGRAF



**UNI EN 795:2012** CEN/TS 16415:2013 UNI 11578:2015







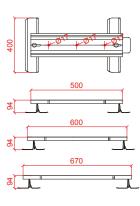
# SICURGRAF





- Type C anchor that can be used with all the lifeline accessories
- Suitable for use by 4 people at the same time
- AISI 304 stainless steel device consisting of two angle irons size 400x70mm and two Z brackets
- Adaptable to fit differently spaced roof joints
- Z brackets with central bore Ø17 mm for fixing of accessories
- Device provided with bores for insertion of snow guard accessories.

Cod. 002798 - sheeting 500mm Cod. 002809 - sheeting 600mm Cod. 002810 - sheeting 670mm





- Type C anchor that can be used with all the lifeline accessories
- Suitable for use by 2 people at the same time
- AISI 304 stainless steel device consisting of an angle iron size 400x70mm and a Z bracket
- Z brackets with central bore Ø17 mm for fixing of accessories
- Device provided with bores for insertion of snow guard accessories.



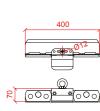


# 5 3 60

# SGF2A

- Type A anchor
- Suitable for use by 2 people at the same time
- AISI 304 stainless steel device consisting of an angle iron size 400x70mm, a Z bracket and an eyebolt
- Z brackets with central bore Ø12 mm for fixing of accessories
- Device provided with bores for insertion of snow guard accessories.

Cod. 002797



# GENERA

Sicurgraf devices are the ideal solution for roofs with double fold joints

**Stainless steel** 

devices

Single



# GENERAL CHARACTERISTICS:

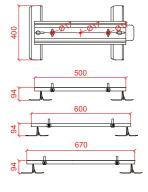
- Anchor device compliant with and certified under standards UNI EN 795:2012, CEN/TS 16415:2013 and UNI 11578:2015 type A and type C;
- Structure made entirely of AISI 304 Stainless steel;
- Can be used on all sheet metal roofs with double fold joints;
- Installation of the device does not require boring;
- Type A certified for 2/4 people, Type C certified for 4 people.



# () SGF4

- Type A anchor to be installed together with two eyebolts Cod. 002832
- Suitable for use by 4 people at the same time
- AISI 304 stainless steel device consisting of two angle irons size 400x70mm and two Z brackets
- Adaptable to fit differently spaced roof joints (from 380 to 625mm)
- Z brackets with central bore Ø17 mm for fixing of accessories
- Device provided with bores for insertion of snow guard accessories.

Cod. 002798 + Cod. 002832 - sheeting 500mm Cod. 002809 + Cod. 002832 - sheeting 600mm Cod. 002810 + Cod. 002832 - sheeting 670mm



10 YEARS WARRANTY

Further information on our products is available on our website: www.sicurpal.it

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# ACCESSORIES SICURGRAF









Turnbuckle FFL - FCL - CAN

Turnbuckle for cable tensioning

Cod. 000032 FFL Cod. 000294 FCL Cod. 002477 CAN



Turnbuckle J/J - J/P

Short turnbuckle for cable tensioning

Cod. 002493 FFC Cod. 002494 FCC



Seal

Turnbuckle locking seal

Cod. 000290 CAL



Lifeline ID

Lifeline identification

Cod. 000291 ID



Lifeline sign

Warning sign for lifeline

Cod. 000296 CRT



Cable Ø8

Cable Ø8-49 strands in 316 Stainless steel

Cod. 000055



L bracket

Bracket to support accessories size 65x65

Cod. 003013



Fixing kit, Ø8 cable

Fixing kit, Ø8 cable

Energy absorber

Stainless steel Lifeline energy absorber

Cod. 000033 ABS Cod. 001518 MRPD1 Cod. 001758 MRPD2

Cod. 001513



End of travel device



# End of travel Ø8

for Ø8 cable

Cod. 000636 BLOCK



# Eyebolt

Male eyebolt, 316 stainless steel, M16 + bolt

Cod. 000789 Cod. 002832



# Turnbuckle support

Turnbuckle/pipe support

Cod. 000194-SUP-G



Jaw terminal

Fixed or jointed jaw terminal

Cod. 000292 TFIX Cod. 000293 TFM

# BYPASS LINE



# Stainless steel cable support

Intermediate 304 stainless steel cable support Cod. 000501 BPX

**GLIDER LINE** 



Cable support Vrt Glider

Vertical cable support for fixed glider

Cod. 000192



Cable support Vrt Adj.

0-45 adj. vertical cable support for glider

Cod. 001344 Vrt Reg



L.L. Glider

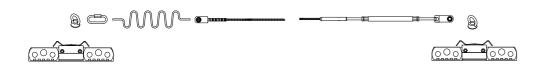
Safety glider for lifeline

# CASES SICURGRAF

#### SICURGRAF SPECIFICATIONS

Supply and installation of UNI EN 795, CEN/TS 16415 and UNI 11578 Type A and Type C certified anchor devices. The system consists of "Sicurpal SICURGRAF" type stainless steel anchor devices anchored to the folded joint sheeting by means of toothed jaws. Product certification guarantees and certifies both the device and the connection of the jaws to the folded joint sheeting. The sheeting must have the following minimum characteristics: 5.5/10 for painted or galvanized iron roofs, 6/10 for copper roofs and 7/10 for aluminium roofs. The system must be certified and usable by a maximum of 4 operators at the same time. The loads and sheet metal fixing systems must be designed and verified by an approved, experienced structural technician. The loads to be applied are indicated in the product manual.

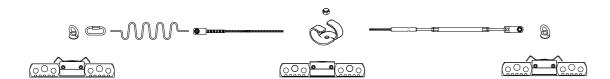
COMPOSITION A SINGLE SPAN, ASSEMBLY WITH CRIMPING



COMPOSITION B TWO OR MORE SPANS, ASSEMBLY WITH CRIMPING

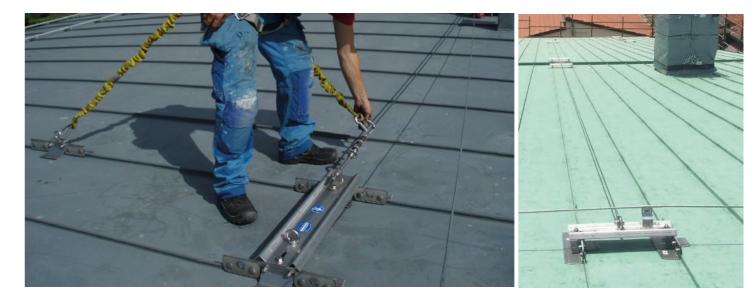


COMPOSITION C TWO OR MORE SPANS, ASSEMBLY WITH ROPE CLIPS













# POSTS SICURTERM



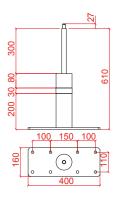




# PTS Post

- Height of the device 65 cm
- Base plate 400x160 mm thickness 10mm with 8 fixing holes Ø15mm.
- Ideal for roofs with certified Class A energy rating and insulation package H 20/25 cm
- Fastening designed to be using structural screws or threaded bars and two-component resin
- Suitable for wooden and brick/cement roofs
- Not visible from the inside of the roof
- Pin with non-deformable eyebolt for loads of up to 200 kg

#### Cod. 001477

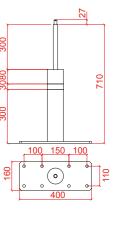




# PTM Post

- Height of the device 75 cm
- Base plate 400x160 mm thickness 10mm with 8 fixing
- Ideal for roofs with certified Class A energy rating and insulation package H 25/30 cm
- Fastening designed to be using structural screws or threaded bars and two-component resin
- Suitable for wooden and brick/cement roofs
- Not visible from the inside of the roof
- Pin with non-deformable eyebolt for loads of up to 200 kg.

#### Cod. 001478

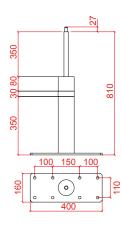




# **9** PTL Post

- Height of the device 80 cm
- Base plate 400x160 mm thickness 10mm with 8 fixing holes Ø15mm.
- Ideal for roofs with certified Class A energy rating and insulation package H 30/35 cm
- Fastening designed to be using structural screws or threaded bars and two-component resin
- Suitable for wooden and brick/cement roofs
- Not visible from the inside of the roof
- Pin with non-deformable eyebolt for loads of up to 200 kg.

#### Cod. 001479



# The only original Post with thermal bridge interruption

Sicurterm is the post designed for roofs with a Class A energy rating



Max 2



# **GENERAL CHARACTERISTICS:**

- Product compliant with and certified under standards UNI EN 795:2012, CEN/TS 16415:2013, UNI 11578:2015 type A and type C;
- Product designed to eliminate the problem of thermal bridges in roofs with a high level of thermal insulation;
- For a good quality/price ratio the inside of the post is in hot galvanized steel and the outside is in stainless steel;
- Different heights to adapt to different roof thickness;
- Eliminates the problem of condensation during winter months;
- Outside constructed with a thinner diameter to reduce the irradiation surface, be less visible, be able to deform to reduce loads on the structure;
- Removable end eyebolt to optimise waterproofing tin work;
- It is essential that it be inserted during the design phase, as the post must be installed on the bearing structure of the unfinished roof.



Further information on our products is available on our website: www.sicurpal.it

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# ACCESSORIES SICURTERM









Turnbuckle J/J - J/P Short turnbuckle for cable tensioning

Cod. 002493 FFC Cod. 002494 FCC



Seal Turnbuckle locking seal

Cod. 000290 CAL



Lifeline ID

Lifeline identification code

Cod. 000291 ID



Lifeline sign

Warning sign for lifeline

Cod. 000296 CRT



Eyebolt Eyebolt and Split pin

Cod. 000058 SUP-T



Energy absorber

Stainless steel Lifeline energy absorber

Cod. 000033 ABS Cod. 001518 MRPD1 Cod. 001758 MRPD2



Cable Ø8

Cable Ø8-49 strands in 316 Stainless steel

Cod. 000055



Turnbuckle support

Turnbuckle/pipe support

Cod. 000194 SUP-G



Fixing kit, Ø8 cable

Fixing kit, Ø8 cable

Cod. 001513



Jaw terminal

Fixed or jointed jaw terminal

Cod. 000292 TFIX Cod. 000293 TFM



End of travel Ø8

End of travel device for Ø8 cable

Cod. 000636 BLOCK



Turnbuckle FFL - FCL - CAN01

Turnbuckle for cable tensioning

Cod. 000032 FFL Cod. 000294 FCL Cod. 002477 CAN01

# BYPASS LINE ACCESSORIES



Stainless steel cable support

Intermediate 304 stainless steel cable support

Cod. 000501 BPX



Pipe 135°-90°-180°

90°-135° support pipe for turnbuckle support

Cod. 000307 T01 Cod. 000308 T02 Cod. 000309 T03



Pulley

Pulley corner cable support

Cod. 000306 BP9



PG bracket

PG Anchor bracket

Cod. 000300

# **GLIDER LINE ACCESSORIES**



Cable support Vrt Glider

Fixed vertical cable support for glider

Cod. 000192 VRTFIX



Cable support Vrt Adj.

0-45 adj. vertical cable support for glider

Cod. 001344 VRTREG



Cable support Vrt 90

Fixed 90 vertical cable support for glider

Cod. 001327 VRT90



L.L. Glider

Safety glider for lifeline

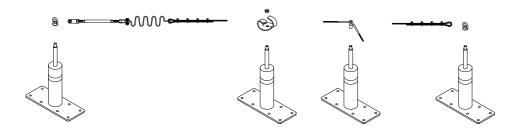
Cod. 001512 NAV

# CASES SICURTERM

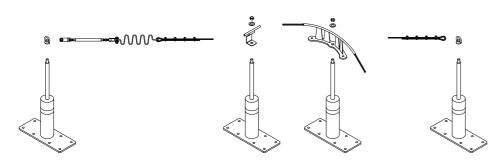
#### SICURTERM SERIES SPECIFICATIONS

Supply and installation of UNI EN 795:2012, CEN/TS 16415:2013, UNI 11578:2015 type C certified Lifeline consisting of Aisi 316 stainless steel cable Ø8 mm with 49 strands, "Sicurpal SICURTERM" or similar type anchor posts consisting of pickled AISI 304 stainless steel post with eyebolt and hot galvanized steel support base for a good quality/price ratio. The device plate must be 40x16 mm with a thickness of 10mm and 8 bores for fixing. The post with a height from the support surface of 65/75/80 cm allows great levels of adaptability, guaranteeing maximum energy efficiency for all types of insulation packages. Furthermore, as it consists of various layers of insulating material, it guarantees reduction of the thermal bridge that causes condensation. The lifeline must be connected using eyebolt, Turnbuckle, "Sicurpal energy absorber cod. 000033" or the like; all the devices in the lifeline necessary to guarantee validity of the certification must be made of Aisi 304 stainless steel. The system must be certified and usable by 3 operators at the same time. For certified Class A roofs the customer can apply for the tax rebate applicable for the whole system installed. The loads that this system has to discharge on the end devices, according to verification of the anchors performed by an authorised structural technician, are indicated in the product manual.

# COMPOSITION A LINE THAT CAN BE BYPASSED BY A SHACKLE



# COMPOSITION B LINE THAT CAN BE BYPASSED BY THE GLIDER















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# PORTABLE ANCHOR DEVICES





- Provisional anchor point designed to be fitted on a door
- Can be used by two operators simultaneously
- Maximum adaptability of use thanks to the ability to adjust it from 60cm to 125cm
- Can be installed on doors, windows, skylights
- Made of aluminium and steel
- Certified UNI EN 795 type B
- Breakage load 13kN

#### Cod. 001554



# Wall Point

- Provisional anchor point to be fixed to load bearing walls or roof
- It can be fitted on roof curbs with a size of from 60mm to 360mm
- Locked using 2 easy-to-use screw shackles
- Certified UNI EN 795 type B
- Maximum load capacity 25 kN

#### Cod. 001556



# Beam Anchor

- Provisional anchor point for metal T, H and I beam.
- Can be fitted on structures with variable base
- Can be used by a single operator
- Made of aluminium and brass
- Compliant with standard UNI EN 795 type B

Cod. 001555 - from 70 to 150 mm Cod. 001720 - from 150 to 290 mm



# **()** Extractable anchor A1

- Extractable anchor point with release button. Can be used by two people simultaneously
- Made of stainless steel
- Can withstand a load of 10 kN
- Certified UNI EN 795 type B

Cod. 001588 - eyebolt Cod. 001589 - female bar

# Portable anchor devices

Products designed to create a safe provisional anchor in any working situation

#### **GENERAL CHARACTERISTICS:**

Portable anchor devices to guarantee maximum security working conditions in all those operations where no fixed anchor is present.

- Lightness of materials;
- Product functionality and speed of use;
- With proper training on use of the products it is possible to work in perfect SAFETY even without the presence of fixed anchors;
- They allow you to work in SAFETY by positioning just a few anchors;
- Adaptable for use on walls, doors, windows, warehouses, residential and industrial buildings, beams, machinery.



Further information on our products is available on our website: www.sicurpal.it

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# INDIVIDUAL FIXED ANCHOR





- () Infinity
- Stainless steel anchor point for one person
- Fixed using a single threaded bar ø ≤12mm
- Integrated sign.

#### Cod. 001160



# O Double Infinity

- Double stainless steel anchor point for one person
- Fixed using two threaded bars ø ≤12mm
- Integrated sign

#### Cod. 001161



# ST8

- Post with AISI 304 stainless steel eyebolt ST8 height 30 and 50 cm with two-hole plate;
- Fixing with two bars ø ≤12mm or with wood screws or with counterplate;
- Ideal to prevent swing falls on double pitched roofs;
- Ideal as a fixing point for the hoisting line alongside the skylight.

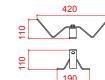
Cod. 001483 - h30

Cod. 001575 - h50



# (1) STR

- Fixing with two bars Ø ≤12mm with nut and counternut;
- Ideal to prevent swing falls on four-way pitched roofs;
- It must be positioned at the tile resting level.



# **Anchor devices** type A

The fixed, omni-directional type A anchor designed to optimise your work

#### **GENERAL CHARACTERISTICS:**

- Product compliant with and certified under standards UNI EN 795:2012, CEN/TS 16415:2013, UNI 11578:2015 Type A;
- Structure made entirely of AISI 304 stainless steel to prevent rusting;
- Reduced installation costs;
- Designed to optimise working SAFETY and functionality;
- Fastener designed to provide long-term guarantee and to reduce loads on the
- Designed not to create rainwater infiltration problems;
- Product with a 10 year guarantee.



Cod. 000182

- Fixing with two bars ø ≤12mm with nut and counternut;
- Ideal to prevent swing falls on double pitched roofs; • To be positioned at roofing tile support level.

Cod. 000183 - stc Cod. 001033 - stc slate Cod. 002525 - stc galvanized



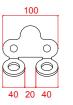
# STC Offset

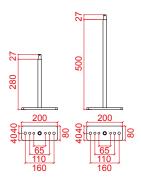
- Fixed with two bolts ø 12x30 mm with nut and selflocking washer:
- Designed to facilitate alignment between STC device (Art. 000183) and roof tile.

Cod. 000074 - OFFSET Cod. 002614 - OFFSET galvanized

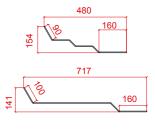
















Further information on our products is available on our website: www.sicurpal.it

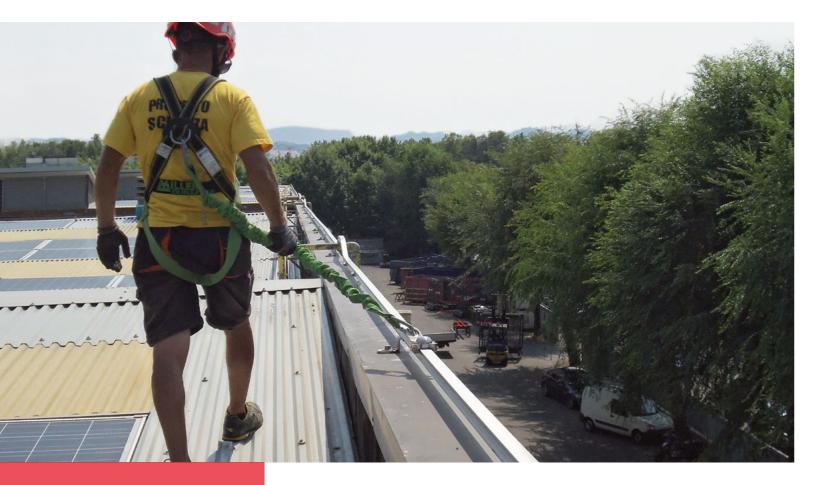




UNI EN 795:2012 CEN/TS 16415:2013



# FALL PROTECTION SYSTEM WITH RAIL

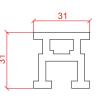






- Extruded anodized aluminium T rail (aluminium for maritime use) available in 3 and 6 m bars
- Option to adapt the length of the rail to needs during installation, restoring the fixing holes;
- The surface is smooth and free from protruding edges;
- The rail can be positioned so that the trolley is facing upwards, downwards or to the side;

Cod. 000553 - 3 mt Cod. 000554 - 6 mt





# Fall protection rail reinforcement

- Aluminium reinforcement pipe, 50x150 mm, thickness 4 mm;
- Housing substructure required in the case of spans between 5 and 11 metres;
- Rail fixed directly on the pipe using M10 stainless steel hardware elements;
- Available in 6 m bars

Cod. 001590



# Fall protection system with rail

Safety on the roof with extremely low visual impact

#### **GENERAL CHARACTERISTICS:**

- Device compliant with and certified under standards UNI EN 795:2012, CEN/TS 16415:2013 Type D;
- Extremely low visual impact;
- Minimum dimensions of rail (just 3x3 cm);
- Rigid structure that allows the load to be distributed over the whole roof, rather than putting stress on the anchor points only;
- Ability to fix directly to the bearing structure of solar panels;
- Ability to adapt completely to the shape of the roof;
- Easy for the operator to use, above all thanks to the absence of posts to be by-
- Able to be used by up to 6 operators together;
- Greater safety for the operator: in the event of a fall the rail produces an insignificant deflection of the fall clearance.



Type D

Max 6

Further information on our products is available on our website: www.sicurpal.it

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# ACCESSORIES RAIL SYSTEM









HST1 Trolley

HST1 trolley type A-B-C for horizontal rail

Cod. 000526 - Type A Cod. 000527 - Type B Cod. 000528 - Type C



## HST2 Trolley

HST2 trolley with eyebolt for horizontal rail

Cod. 000551



## **HST0** Trolley

HST0 opening trolley for horizontal rail

Cod. 000552



### Rail trolley

Warning sign for rail type lifeline

Cod. 000705

# RAIL FIXING BRACKETS



### L brackets

Stainless steel L brackets for roof curbs

Cod. 000754 - L 110x150 Cod. 000755 - L 110x80



# C bracket, length 80

Stainless steel C bracket length 80

Cod. 000756



### S bracket

Stainless steel S bracket for rail

Cod. 000757



#### Sheet metal bracket

Rail bracket on corrugated sheeting

Cod. 001455-SBX



## Junction jaw

Stainless steel junction

Cod. 000559



#### Horizontal curve

Anodized horizontal 90° curve

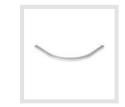
Cod. 000555



### Fixed stop

Aluminium limit switch stop

Cod. 000562



#### Vertical curve

Vertical curve 90° anodized

Cod. 000557 ext Cod. 000556 int



## External opening stop

External opening limit switch stop

Cod. 000560



#### Special curve

Special curve made to drawing

On request



### Internal opening stop

Internal opening limit switch stop

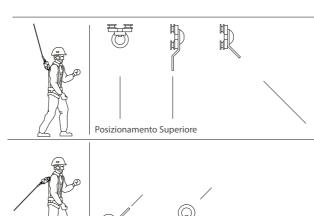
Cod. 000561



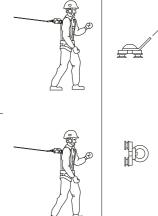
#### Fixing plate

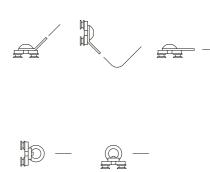
Fixing stop with M10 screw

Cod. 001442 Cod. 001973



Posizionamento Inferiore





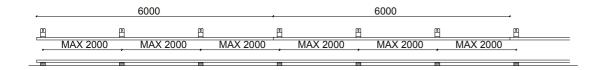
Posizionamento Centrale

# EXAMPLE CASES RAIL SYSTEM

#### **RAIL SYSTEM SPECIFICATIONS**

Rigid rail lifeline compliant with standard UNI EN 795:2012, CEN/TS 16415:2013 type D consisting of an anodized aluminium rail size 31x31 mm. Its patented form means that, in case of need, the system can be made more rigid by inserting a special plate inside it. The rail is certified to support up to 6 operators at the same time; it can be fixed with a maximum spacing of 3 m or using the reinforcement profile or pipe to reach a maximum span of 11 metres. All the elements making up this fall protection system must be made of aluminium and stainless steel and must be installed according to the specifications indicated in the product assembly manual. Support of the fall protection system is provided by stainless steel brackets cod. 000754/000755/000756/000757/001455 positioned, for this fall protection system, at a distance of \_\_\_\_\_\_\_m as indicated in the project drawn up by an authorised structural engineer who has verified the fixing system.

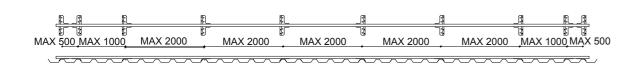
# COMPOSITION A RAIL SYSTEM FIXED DIRECTLY TO THE STRUCTURE



# COMPOSITION B - RAIL SYSTEM FIXED TO THE REINFORCEMENT STRUCTURE FOR SPANS OF OVER 2MT

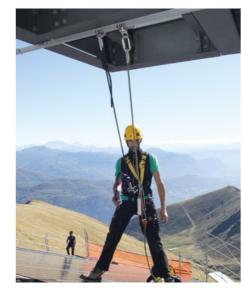


# COMPOSITION C RAIL SYSTEM FIXED DIRECTLY TO SHEET METAL ROOFING





























#### Counterplate 1 hole

Stainless steel counterplate with 1 hole

Cod. 000174 - P00



Plates for load distribution on beams for ST8 and STC installations

Cod. 000211-P30 - 66cm Cod. 000212-P40 - 100cm



## Counterplate 2 slots

Stainless steel

Cod. 000173



counterplate with 2 slots L.240 mm



## Counterplate 2 holes

Stainless steel counterplate with 2 holes for BF-PF-Aerial

Cod. 000177-P10 - 30cm Cod. 000178-P11 - 35cm



#### Counterplate with slots

Slotted hot-galvanized counterplate

Cod. 000196-P02 - 200mm Cod. 000039-P01 - 300mm Cod. 000203-P03 - 400mm



Plates for load distribution on beams for ridge beam installations

Cod. 000213-P50 - 66cm Cod. 000218-P60 - 100cm



#### Pair of plates

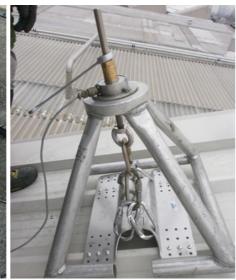
Pair of plates for load distribution on beams

Cod. 000224-P80 - 66cm Cod. 000220-P70 - 100cm

#### Identification Kit Use Contents Kit B1 Cod. 000885 1 x Self-locking nut ø12, 1x washer ø12x36 Infinity eyebolt, etc... Cod. 000886 Kit B2 4 x Self-lock ø12, 8x Washer ø12x36, 4x Nut ø12 LVB Cod. 000887 PG, PB, PZL, etc. Kit B3 8 x Self-lock ø12, 8x Washer ø12x36 Cod. 000888 Kit B4 2 x Self-lock ø12, 2x Washer ø12x36 Double Infinity, ST8, PZFS, Counterplates, etc... Cod. 000889 Kit B5 2 x Self-lock ø12, 4x Washer ø12x36, 2x Nut ø12 STC, STR Cod. 000890 Kit B6 4 x Self-lock ø12, 4x Washer ø12x36 PZP, PZC, PBS, SZP, etc. Cod. 000891 Kit B7 BF-PN-PBC Counterplates etc... 2 x Self-lock ø16, 2x Washer ø16 Cod. 000892 Kit B8 4 x Self-lock ø16, 4x Washer ø16 BF, PN, PBC, etc. Cod. 000893 Kit B9 2 x Self-lock ø12, 2x Washer ø12x36, 2x 12x40 Plates for load distribution on beams Kit B10 PLAM, etc... Cod. 000894 12 x Long rivets with seal Cod. 000895 Kit B11 LAM INOX, LAM VERN, etc... 18 x Short rivets with seal Cod. 000896 Kit B12 1 x Self ø14, 1x Wash ø14, 1x 14x40 Energy absorber, Mini turnbuckle supp., etc. Cod. 000897 Kit B13 1 x Washer ø12x36, 2x Nut ø12 Pipe turnbuckle Kit B14 Cod. 000898 1 x Bolt 12x25 PLAM Kit B15 Cod. 001025 2 x Self-lock ø10, 2x Washer ø10 FA10, FX10, etc. Cod. 001610 Kit B16 24 x long rivets Sicurlam Cod. 002035 Kit B17 2 x Self-lock ø10, 4x Washer ø10x30, 2 x Nut ø10 FA10, FX10, etc. Cod. 003014 Kit B18 1 x Bolt 16x35 Sicurgraf Cod. 003015 Kit B19 1 x Self-lock ø12, 1 Bolt 12x35, 1 Washer 12x36, 1 seal Sicurgraf Cod. 003069 Kit B20 TS stainless steel Bolt 16x30 Plam

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FIXING AND WATERPROOFING ACCESSORIES



#### Threaded bars

1 m. threaded bars in Stainless steel A2-70

Cod. 000275 - m10 Cod. 000014 - m12 Cod. 000278 - m16



# Threaded bars

Machined threaded bars

000035 - 18cm 000092 - hook



#### FlashBand

Graphite FlashBand, width 10cm in 10 m rolls

Cod. 000369



#### Structural screws

Struct. screws with washer for wood

Cod. 000061 - 9x160 Cod. 000063 - 9x200 Cod. 000065 - 9x280 Cod. 000071 - 11x100



#### Net for Anchor

Net for chemical anchoring agent, length 1 m.

Cod. 000272 - m12 Cod. 000013 - m16



## Reinforced bushing

Assemblable reinforced bushing Ø22 for m12 bars

Cod. 000012 L.50mm Cod. 000251 L.85mm

Stainless steel gutter

and hardware element

Ø 90mm with seals

Cod. 000018



#### **Epoxy Resin**

Economic two-component resin for concrete and wood.

Cod. 000021 - standard Cod. 002124 - nordica



### Bituminous sheeting

Bituminous sheeting thickness 4mm

Cod. 001760



#### Bored flashing

Lead flashing 50x50 cm with hole

Cod. 000279 - Ø40 Cod. 000017 - Ø90



### Silicon

Waterproofing silicon available in: clear, grey, white, dark brown Cod. 000022



#### Cable tensioning hoist

Ratchet hoist for cable tensioning

Cod. 000420



## Tensioning rope clips

Rope clips for use with cable tensioning hoist

Cod. 000044



#### Vacuum cleaner

Portable vacuum cleaner to clean holes in concrete

Cod. 001597



#### Dispenser

Dispenser for soft cartridges complete with cartridge holder

Cod. 000371



#### Hoist 1500

1.5 m ratchet hoist to test devices up to 1500 Kg

Cod. 001285



#### **Template**

Template for rail boring

Cod. 001673



# Omplete test kit

Composition:

- Kit A
- Case B
- Case C
- Kit D

Cod. 000091



# (1) Kit A

- Kit containing measurement and capture instruments to carry out verification tests on the cable
- Software designed by Sicurpal's IT Technicians to prevent modification of any test reports
- Guaranteed traceability and quality of the report

Cod. 001723 - Kit A

Cod. 001724 - Kit A economy version



# () Case B

- Equipment for the installation and removal of Sicurpal devices
- Load application instruments
- Consumables to restore the waterproofing of devices

Cod. 001647



# O Case C

- Hardware kit for fixing
- Material to replace any faulty components

Cod. 000661



# **()** Kit D

- Stainless steel four leg stand to carry out extraction tests
- Maximum load 1500 Kg

Cod. 000662

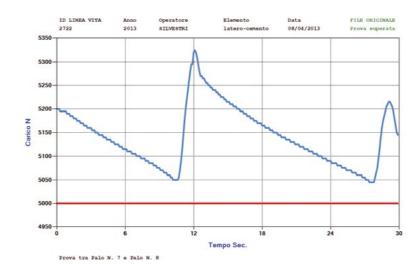
# TEST INSTRUMENTS

Periodic testing and review must be carried out by trained staff using equipment that will guarantee a quality service in compliance with current regulations.

All SICURPAL devices comply with the guidelines set by current regulations and the Sicurpal Test Kit has been designed to provide concrete evidence that the tests have been carried out, producing charts and test certificates and thus guaranteeing proper execution of the tests.

The kit has been created and developed in co-operation with its users, so as to optimise the time required to carry out the testing and/or review and facilitate transportation of the instruments, which are of limited size and weight.

The Test Kit comprises all the equipment necessary to carry out testing, along with certain consumables necessary in the case of small maintenance operations on the lifelines (fixing kit, seals and rope clip clamps) or on waterproofing of the anchoring devices.



# COMPOSITION OF THE TESTING AND REVIEW KIT

The complete equipment consists of 4 cases and/or rucksacks. This division makes the equipment easier to use, based on the type of operation to be carried out.

The value of the Testing and Review Kit lies in the system for acquisition and recording of the tests, which has been designed and is constantly updated and improved by Sicurpal; this system consists of a hand-held device with aluminium casing, to guarantee sufficient strength, and a software designed to follow the user step by step during all phases of the test. To guarantee greater certainty of the test reports, the software has been designed to record every operation carried out; the resulting report cannot be modified by the user in any way, but can only be printed out.

The following are the main articles contained in the "TEST KIT"

- PCSIC hand held device with relevant software for installation on PC or Mac
- 3 load cells to be connected to the hand held device to carry out all the tests required on the devices sold
- Chain load generator, 1500Kg
- Standard four leg stand for extraction testing of the anchor devices or anchoring agents
- Anchoring clamps to connect the anchor devices during testing
- Torque wrench
- Various Fixing And Waterproofing materials





# () APU

H crimping tool for pressing of the stainless steel terminals dn. 12.5 mm with pressing operation storage memory and daily report printout option. The pressed terminals comply with the requirements of the new standard UNI EN 795/2012 and UNI EN 16415.

The case contains:

- 1 battery operated hydraulic press
- 1 battery
- 1 battery charger
- 1 pair of C dies

Cod. 001177 - Sicurcrimp kit



# Spare battery

Option to purchase a spare lithium battery 18 v - 3Ah

Cod. 001801



# MPU

Manual H crimping tool for pressing of the stainless steel terminals dn. 12.5 mm with a force of 130 kN. The pressed terminals comply with the requirements of the new standard UNI EN 795/2012 and UNI EN 16415.

The case contains:

- 1 manual hydraulic tool (up to 130 kN)
- 1 pair of dies

Cod. 001800 - Sicurcrimp manual kit















# Parapets and Walkways



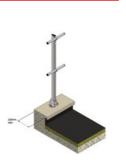




# Self-supporting parapet upright

- The self-supporting parapet is designed simply to rest on the
- The parapet has easy-to-remove counterweights
- The counterweights have a plastic external guard to protect against the weather
- The uprights can be vertical, inclined (approx. 20°) or folding inwards.
- Can be installed with skirting
- Product made entirely of aluminium

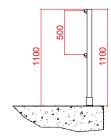
Cod. 000699 - vertical Cod. 001361 - inclined



# Fixed ground mounted parapet upright

- The fixed parapet is designed simply to be fixed to horizontal
- Type of fixing depends on the support
- For fixing to cement
- The uprights can be vertical, inclined (approx. 20°).
- Can be installed with skirting
- Product made entirely of aluminium

Cod. 000700 - vertical Cod. 001360 - inclined

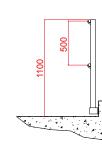


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# Fixed wall mounted parapet upright

- The fixed parapet is designed simply to be fixed to horizontal structures
- Type of fixing depends on the support
- For fixing to cement
- The uprights can be vertical, inclined (approx. 20°).
- Can be installed with skirting
- Product made entirely of aluminium

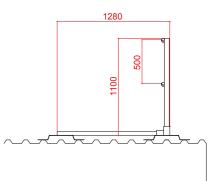
Cod. 000702 - vertical int Cod. 001599 - vertical ext Cod. 001363 - inclined



# Sheeting mounted parapet upright

- The parapet is designed to be fixed on metal roofs (e.g.: sandwich panels, corrugated panels, etc.)
- Hot galvanised steel uprights
- Fixing with self-boring screws.
- Can be installed with skirting
- Can be supplied with skirting

Cod. 001598



# Collective **Protection Device**

The SICURPAL parapet has been designed to protect those moving about or performing work at a height from falls. Thanks to its aluminium structure it is extremely light-weight, and its triangular shape has a low visual impact.

#### **GENERAL CHARACTERISTICS:**

- Parapet compliant with standard UNI EN ISO 14122-3;
- Load (external thrust) foreseen on horizontal pipes 30 Kg/metre;
- Structure made entirely of anodized aluminium;
- It is available with epoxy paint in RAL colour shades;
- Triangular shaped upright for lower visual impact;
- System for simultaneous adjustment of both horizontal handrails and each individual upright;
- Continuous curve adjustment;
- Ends fixed to the wall;
- Option of vertical, folding or inclined parapet;
- Available with various accessories.

Further information on our products is available on our website: www.sicurpal.it

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# ACCESSORIES GMS PARAPETS

















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# Handrail

Anodized aluminium parapet handrail in 3 m sections

Cod. 000692



Cap

Parapet handrail end cap

Cod. 000696



# Skirting

Anodized aluminium parapet skirting in 3 m sections

Cod. 000693



#### Counterweight

Counterweight for self-bearing parapet

Cod. 000698



# Straight Connector

Connection for straight jointing of parapet handrails

Cod. 000695



Cod. 000697

## Skirting joint

Joints to connect the skirting sections

Cod. 001348-Straight type 1 Cod. 001350-Straight type 2 Cod. 001349-Angle



Angle Connector

Connection for angle jointing of parapet handrails

# Gate

Anodized aluminium parapet gate

Cod. 000753

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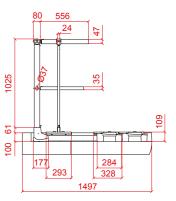


# Self-supporting parapet upright

- The self-supporting parapet is designed to rest on the roof
- The parapet has easy-to-remove counterweights
- The counterweights have a plastic external guard to protect against the weather
- The uprights can be vertical, inclined (30°) or folding inwards.
- Can be installed with skirting
- Product made entirely of aluminium

Cod. 002840 - vertical Cod. 002867 - inclined

Cod. 002892 - fold-down

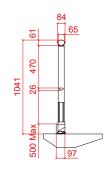


# Fixed floor mounted parapet upright

- The fixed parapet is designed to be fixed to horizontal structures
- Type of fixing depends on the support
- For fixing to cement
- The uprights can be vertical, inclined (30°) or folding.
- Can be installed with skirting
- Product made entirely of aluminium

Cod. 002838 - vertical

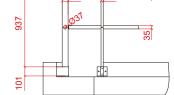
Cod. 002865 - inclined Cod. 002890 - fold-down



# Fixed wall mounted parapet upright

- The fixed parapet is designed to be fixed to horizontal structures
- Type of fixing depends on the support
- For fixing to cement
- The uprights can be vertical, inclined (30°) or folding.
- Can be installed with skirting
- Product made entirely of aluminium

Cod. 002866 - inclined int



Cod. 002839 - vertical int Cod. 002841 - vertical ext

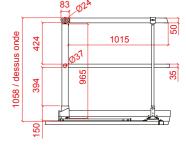
Cod. 002891 - folding int



# Sheeting mounted parapet upright

- The parapet is designed to be fixed on metal roofs (e.g.: sandwich panels, corrugated panels, etc.)
- The uprights can be vertical or folding
- Fixing with self-boring screws
- Can be installed with skirting
- Product made entirely of aluminium.

Cod. 002871 - vert. for 250 corrugated sheeting Cod. 002872 - vert. for 333 corrugated sheeting Cod. 002887 - folding for 250 corrugated sheeting Cod. 002888 - folding for 333 corrugated sheeting



# Collective **Protection Device**

The VKC parapet is a collective protection device to prevent falls from a height, ideal to make terraces safe. The particular care given to structural aspects make it ergonomic and aesthetically pleasing.

### **GENERAL CHARACTERISTICS:**

- Parapet compliant with standard UNI EN ISO 14122-3;
- Structure made entirely of anodized aluminium:
- Option to request powder paint finish (indicating the RAL number) on the aluminium parts, guaranteed resistance to UV radiation, rust and colour facing;
- Ergonomic shape of the product;
- Simple installation and movement of the parts;
- Option of vertical, inclined or folding parapet.



Further information on our products is available on our website: www.sicurpal.it

**()** 110 111 () VKC WALKWAYS VKC WALKWAYS





Walkways are a means to pass over obstacles safely. Suitable for any type of need, they are modular and easy to install.

### **GENERAL CHARACTERISTICS:**

- Walkways compliant with standard UNI EN ISO 14122-2;
- Structure made entirely of aluminium;
- Choice of fixing device based on the roof configuration;Available in different lengths and widths to adapt to various needs.



# Overpass walkway

- Can be used to pass over pipelines, plant or areas at risk
- Structure made entirely of aluminium
- Perforated walkway surface option
- Various types of fixing device
- Common sizes available, made-to-measure option available

#### Code on request



# Movement walkway

- Suitable for safe movement on fragile or slippery roofs
- Can be fixed at the side, on one or two sides
- Structure made entirely of aluminium
- Various types of fixing device
- Available dimensions: 600 mm and 800 mm in width; lengths of from 810 mm to 3010 mm

#### Code on request



# Overpass ladder

- Used to pass over obstacles on roofs and terraces
- Structure made entirely of aluminium
- Available in a self-supporting version or fixed to the roof
- Various sizes of walkway available to plan on request

Code on request



Further information on our products is available on our website: www.sicurpal.it

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# ACCESSORIES VKC PARAPETS AND WALKWAYS

















## Handrail kit

Parapet handrail and bar,

Cod. 002844



End plugs for handrail and bar

Cod. 002516



# Skirting

Aluminium parapet skirting, 3m

Cod. 002399



## Skirting bracket

Bracket fixing skirting to upright

Cod. 002847 Cod. 002902 - corrugated sheeting



#### Wall kit

Wall fixing kit for handrail and bar

Cod. 002517



## Angle Connector

Angle kit for handrail and bar

Cod. 002350



# Skirting joint

Joints to connect the skirting sections

Cod. 002848 - straight Cod. 002849 - angle Cod. 002850 - straight adj.



# Gate

Anodized aluminium parapet gate

Cod. 002349 Cod. 002851 - self-supporting vert. Cod. 002884 - self-supporting incl.





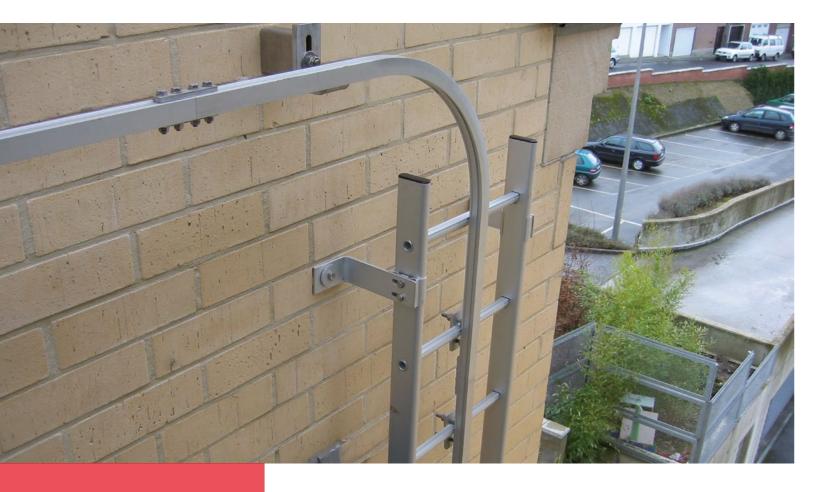


Vertical fall protection ladders

Leg. Dec. 81/2008 and subsequent modifications and additions Uni 14122-4 fixed ladders

# FALL PROTECTION LADDERS







# Full step ladders

Safety ladder with Y step, spacing 28 cm, UNI EN 353.1 certified

Cod. 000563 - h 84 cm Cod. 000565 - h 168 cm Cod. 000566 - h 224 cm Cod. 000564 - h 112 cm



# Staggered step ladders

Safety ladder with alternating step, spacing 28 cm, UNI EN 353.1 certified

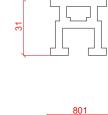
Cod. 001593 - h 84 cm Cod. 001595 - h 168 cm Cod. 001594 - h 112 cm Cod. 001596 - h 224 cm



# Fall Protection Rail

Fall protection rail to make an existing ladder safe

Cod. 000553 - h 3 m Cod. 000554 - h 6 m



# Self bearing landing

Self bearing landing for rail ladder to be fixed to the vertical wall using brackets Cod. 000756

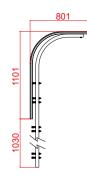
Cod. 000519

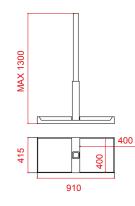


# Landing with support foot

Adjustable supported landing with supporting and locking counterweight. Ability to fix the landing directly without using the counterweights.

Cod. 001600





# **Vertical** fall protection ladders

The fall protection ladder that allows you to work safely

# **GENERAL CHARACTERISTICS:**

- Ladder with low visual impact;
- Structure made of anodized aluminium;
- Electropolished stainless steel non-slip steps;
- Steps installed directly on fall protection rail;
- High quality materials at reduced costs;
- Maximum adaptability to existing structures;
- Optimum for use on telephone masts and repeaters;
- Maximum safety from falls for users;
- Extractable fall protection trolley that can be re-used on other ladders of the same type.



Further information on our products is available on our website: www.sicurpal.it

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# ACCESSORIES VERTICAL SYSTEMS









**VST Trolley** Fixed trolley for vertical rail

plus shackle

Cod. 000513



**VST0** Trolley

Opening trolley for vertical rail plus shackle

Cod. 000048



Anti-intrusion cover

Anti-intrusion cover for vertical rail ladder

Cod. 001284



Ladder Sign

Warning sign Vertical rail and ladder

Cod. 001156



Resting platform

Swinging aluminium resting platform

Cod. 000525



## Junction jaw

Junction jaw in stainless steel

Cod. 000559



Rail crossing

Rotating crossing for rail

Cod. 000523 - 90° Cod. 000524 - 180°



#### Type 1 End of travel Stop

End of travel stop external opening

Cod. 000520 Upper Cod. 000521 Lower



Rail exit

Trolley entry/exit on rail

Cod. 000522



Type 2 End of travel Stop

End of travel stop fitted opening

Cod. 000517 Upper Cod. 000518 Lower



#### Vertical connector jaw

Junction jaw vertical rail

Cod. 000516



## Fixed stop

Fixed end of travel stop

Cod. 000562



#### Fixing plate

Fixing stop with M10 screw

Cod. 001442

# RAIL FIXING BRACKETS



Type 1 bracket

Ladder fixing bracket width 30 mm length 180 mm

Cod. 000759



Type 3 bracket

Galvanized steel rail

Cod. 001606



#### Type 2 bracket

Ladder fixing bracket width 60 mm length 180 mm

Cod. 000758



#### Type 4 bracket

Adjustable rail fixing bracket

Cod. 001607



#### C bracket, length 80

Stainless steel C bracket, Length 80 cm

Cod. 000756



#### Type 5 bracket

Removable galvanized rail collar

Cod. 001608



#### Special brackets

Special bracket made to measure for customer's structure

On request



Type 6 bracket

Removable rail fixing bracket

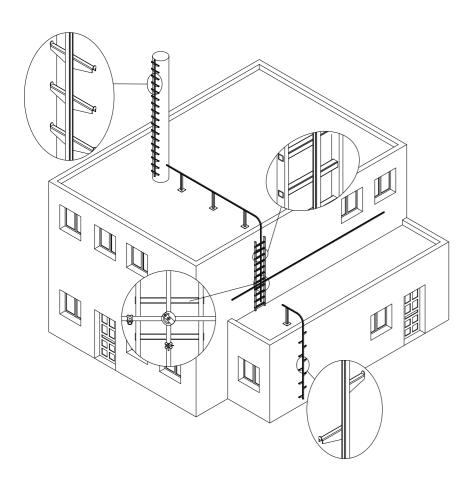
Cod. 001609

# VERTICAL LIFELINE CASES

#### VERTICAL LIFELINE SERIES SPECIFICATIONS

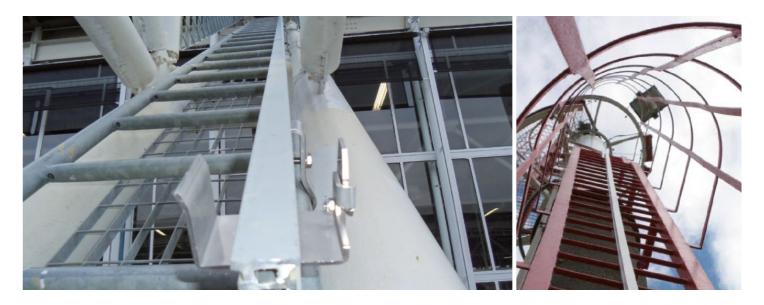
Fall protection ladders compliant with standard UNI EN 353.1 with safety system integrated into its bearing structure. Structure entirely made of stainless steel and anodized aluminium for long-lasting quality. The central body of the ladder (fall protection rail), dimensions 31x31mm with customised section for sliding of a trolley. Thanks to its robustness it acts as the load bearing structure of the ladder. To guarantee the safety and conformity of the ladder and consequently the safety of the operator it is necessary to use a self-locking trolley that in the event of the operator falling or fainting is able to stop within a few centimetres and hold him. The system provides for fixing using brackets designed to suit the type of bearing structure (masts, masonry walls, tubular elements, etc...) with a maximum spacing of 1.5m; with the exception of special cases with wider spacing, which must be specifically assessed by the designer. The AISI 316 stainless steel trolley is certified for one operator and bears the CE mark, as required by standard UNI EN 353.1.

# GENERAL TYPES OF USE





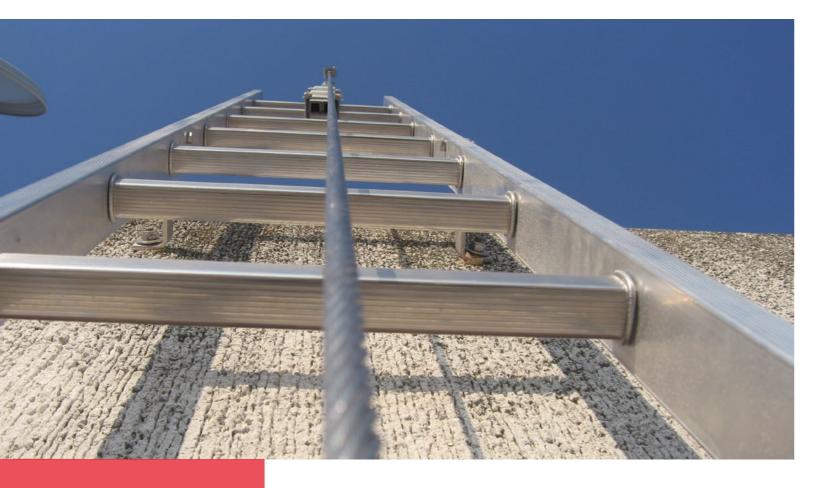








# IGENA VERTICAL LIFELINE







- Vertical lifeline with the option of being fixed alongside a ladder
- Customised dimensions available on request

Cod. 000390 - 5m Cod. 000394 - 20m Cod. 000392 - 10m Cod. 000395 - 25m

Cod. 000393 - 15m



- Vertical lifeline with the option of being fixed at the centre of a
- Customised dimensions available on request

Cod. 000385 - 5m Cod. 000388 - 20m Cod. 000386 - 10m Cod. 000389 - 25m

Cod. 000387 - 15m

# V.I.A

- Lifeline at centre of ladder with extension to facilitate disembarking beyond the ladder terminal itself.
- Customised dimensions available on request

Cod. 000042 - 5m Cod. 000383 - 20m Cod. 000384 - 25m Cod. 000381 - 10m

Cod. 000382 - 15m



**ACCESSORIES** 

# Intermediate Crisbie

Prevents the cable from moving away from the ladder. Product already included for kits over 6 metres in length

Cod. 000363



# Vrb Vrb

UNI EN 353/1 safety carriage for cable Ø8 made entirely of EU produced stainless steel with shackle

Cod. 000090

# Igena vertical lifeline

To make caged ladders, fixed ladders, trellises and cranes safe

# **GENERAL CHARACTERISTICS:**

- The vertical fall protection system complies with standard UNI EN 353-1.
- The vertical lifeline consists of: cable, cable supports, tensioner, shock absorber and anchors that must be fixed to the ladder steps.
- The system is completed by a trolley that allows the operator to climb the ladder safely.





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# Martin PSA Safety systems

UNI EN 795:2012



# MARTIN PSA SAFETY SYSTEMS





The ideal products for access and recovery in restricted spaces

### **GENERAL CHARACTERISTICS:**

Tripods and lifting arms to safeguard operators working in restricted spaces. Careful assessment of risks allows identification of the best product to carry out timely recovery of the person in the event of accident or illness. These devices, when associated with specific accessories, also allow movement of materials weighing up to a maximum of 500 Kg.



Further information on our products is available on our website: www.sicurpal.it



# PRO II mobile tripod

- Fall protection tripod for restricted spaces
- Structure made entirely of aluminium
- Feet with wheels (included) to facilitate movement
- Ability to adjust the height comfortably
- Return pulleys incorporated in the tripod structure
- Anchor device with recovery unit equipped with quick fastening and release system (HSRG)
- Hoist for lifting of materials up to 5 kN
- Compact to facilitate transport

#### Cod. 001956



# **()** ECO II fixed tripod

- Fall protection tripod for restricted spaces
- Structure made entirely of aluminium
- Feet that do not require cords to connect them
- Ability to adjust the height comfortablyReturn pulleys incorporated in the tripod structure
- Anchor device with recovery unit equipped with quick fastening and release system (HSRG)
- Hoist for lifting of materials up to 5 kN
- Lighter weight that the Pro II version
- Compact to facilitate transport
- Includes "Easy" connectors for jack and HSRG
- Includes anchor points for people and loads

#### Cod. 001957



# PHK II-S lifting hoist

- Device consisting of various anchor points
- Used as anchor point for the safety of persons according to EN 795 and CEN/TS 16415
- Anchor device with recovery unit equipped with quick fastening and release system (HSRG)
- The jack applied allows lifting of loads (manhole covers, pumps, pipe scrapers, etc.) with a maximum weight of 500 Kg
- Height adjustable arm that can be completely removed to facilitate transport
- The crane can be turned freely by 360°
- Equipment can be fixed to the ground or to the wall

#### Cod. 000508



# PHK II-E lifting hoist

- Device consisting of various anchor points
- Used as anchor point for the safety of operators according to EN 795 and CEN/TS 16415
- Anchor device with recovery unit equipped with quick fastening and release system (HSRG)
- The jack applied allows lifting of loads (manhole covers, pumps, pipe scrapers, etc.) with a maximum weight of 500 Kg
- Height adjustable arm that can be completely removed to facilitate transport
- The crane can rotate in two ways: freely by 360° or fixed in 12 positions in intervals of 30° thanks to the use of a stop pin

#### Cod. 002681

# ACCESSORIES MARTIN SYSTEMS











Cod. 000871 - Case for HSRG 10 mt. Cod. 001958 - Case for HSRG 20/30 mt.



Manual hoist, 16 m

Hoist with EASY quick connector for load lifting

# Cod. 000511 Tripods+PHK Cod. 000512 Tripods+PHK Cod. 000838 PHK II-S



Easy connector

Easy connector for HSRG

Cod. 000849 - PHK II-S Cod. 000848 - PHK II-E



Manual hoist, 30 m

Hoist with EASY quick connector for load lifting

# Cod. 000510 PHK II-S



Base for PHK II-S

Hot galvanized steel base for PHK-II-S

Cod. 000850 ground Cod. 000851 wall Cod. 000856 casting



### Hook cable

Cold galvanized steel cable with hook incorporated

Cod. 000863 - 12 mt Cod. 000865 - 20 mt Cod. 000866 - 30 mt



Base for PHK II-E

Stainless steel base for PHK-II-E

Cod. 000854 ground Cod. 000855 wall Cod. 001648 casting



## Pre-loading spring

Pre-loading spring for cable

Cod. 001959



#### Recovery unit

20 m recovery unit for aluminium tripod to recover up to 125 Kg

Cod. 001963

# Safety systems **HSRG**

HSRB emergency and safety lifting equipment for operation at a height

### **GENERAL CHARACTERISTICS:**

- Extremely resistant to corrosion thanks to the double chamber seal system and the special surface treatment:
- Fast, safe assembly thanks to the EASY system;
- Can be used in various applications, such as: Tripod, PHK Crane, Anchored directly to reinforced concrete or metal structures, industrial vehicles and gully
- High lifting speed thanks to the modern planetary gear boxes;
- Ergonomic aluminium box with additional functions;
- Very high quality (level AI) brake and fall protection technique;
- Variable cable length 10 30 m;

The most modern and innovative system present on the market that combines in a single product the retractable fall protection device and the emergency lifting and safety equipment for operation at a height (HSRG). Equipped with a gravity braking method and a double chamber system to protect the device from water spray and dirt penetration, the HSRG system has been manufactured and tested based on the strictest quality directives to guarantee safety and comfort during use.

Further information on our products is available on our website: www.sicurpal.it

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# HSRG

# **APPLICATIONS**



# Tripod and weight lifting arm

Installation on tripod or Akrobat crane as a fall protection system and recovery point that can be fitted and removed in just a few seconds thanks to the EASY connector.



# Direct fixing to structures

Thanks to the EASY system it is possible to create a combined anchor that can simplify the working procedure using a single safe anchor system.

Code on request for HSRG Code on request for Jack



# O Commercial vehicles and Gully Suckers

Installation on commercial vehicles used for maintenance in restricted spaces, for example Gully Suckers.

Code on request for HSRG Code on request for Jack

# ADVANTAGES OF THE SYSTEM



#### **EASY** connector

Thanks to this quick connector the HSRG device can be installed very quickly and easily by a single operator.



## Anti-torsion rotating hook

The rotating anti-torsion hook avoids torsion of the cable, giving the operator great freedom of movement.



## Series of toothed satellite wheels

The series of toothed satellite wheels offers the best combination of transmitted force and absorbed power, with a minimum loss due to friction. The mechanical components are also in stainless steel or aluminium, to guarantee maximum strength and durability.





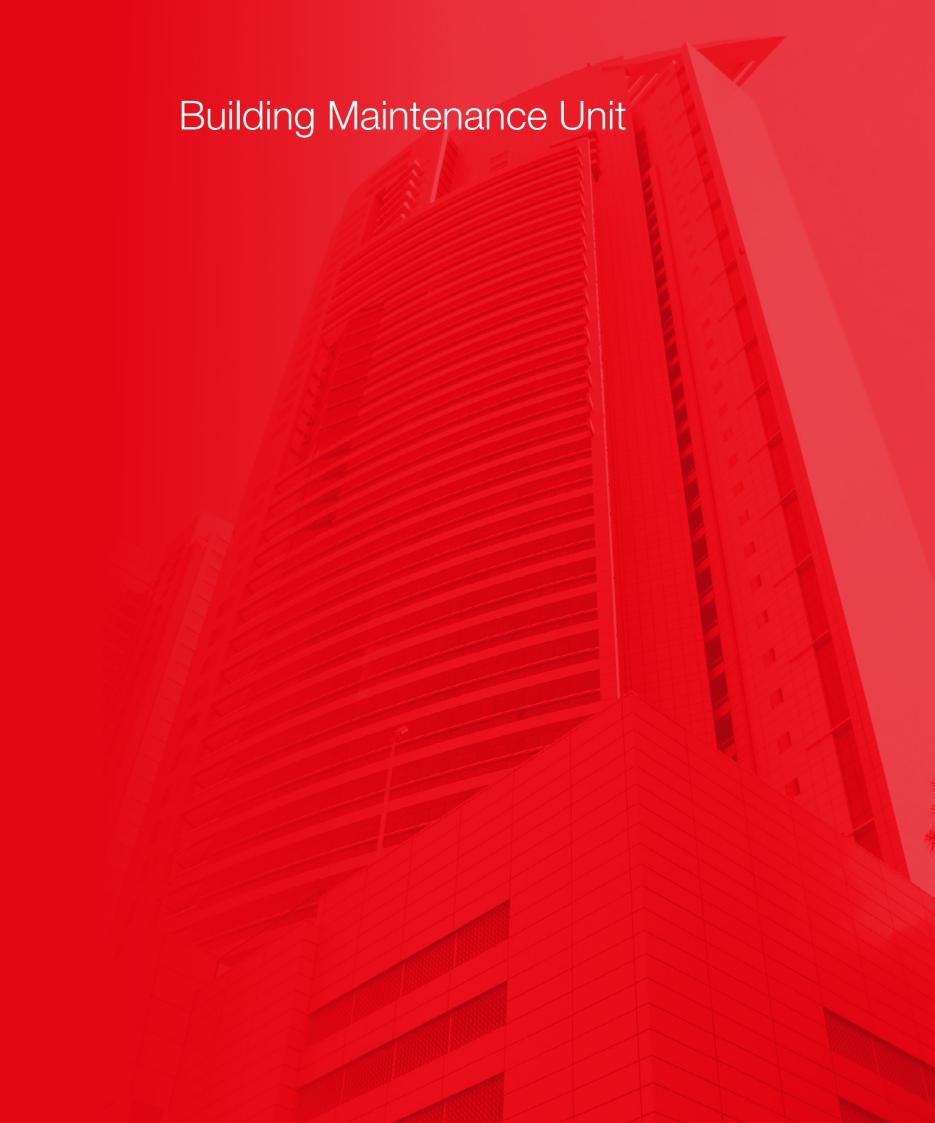












# BUILDING MAINTENANCE UNIT





There is no surface that cannot be cleaned... we always find a solution

### **GENERAL CHARACTERISTICS:**

Buildings with glass façades are increasingly widespread, and the problem of maintaining them at a limited cost is more and more widely felt. Today, Sicurpal offers a range of shuttles complete with safety devices, to guarantee safe, fast work at any height; staff must be trained on use of the equipment and the system must be designed in advance based on the structure of the building.

- Flexible and functional access to all vertical façades;
- Optimum solution for buildings from 15 m to over 200 m tall;
- Does not prejudice the aesthetics of the façades;
- Simple rail systems hanging externally to the façades;
- Completely retractable systems fixed inside the roof;
- Double tower and shuttle controls;
- Horizontal movements performed comfortably without leaving the shuttle;
- Ergonomic and spacious platform for two people or more.



Further information on our products is available on our website: www.sicurpal.it



# Static roof cars

Compact, fixed position cars for movement of a shuttle.

#### On request



# Static pneumatic roof cars

Extending column, fixed position cars for movement of a shuttle

#### On request



# Binary roof cars

Compact, self-propelled cars for movement of a shuttle.

#### On request



# Binary pneumatic roof cars

Extending column, self-propelled cars for movement of a shuttle.

#### On request



# **M**onorail

Shuttle suspended on a monorail for perimeter and vertical movement

# On request

# BUILDING MAINTENANCE UNIT





# Abu Dhabi, United Arab Emirates

Units installed: 4 mobile roof units, 1 monorail system,

# NATIONS TOWER

The two towers are directly at the Abu Dhabi Cornihiche and are 51 and 64 floors high, respectively. The towers will house residential areas, commercial areas and a hotel. Both buildings are connected by a covered bridge, at a height of 202.5 metres.

## SPECIFICATIONS

Fixed and telescopic roof cars; 1 telescopic horizontal mobile car (17 m); 3 fixed cars with a working radius of 22.5 m; Tilting by 14°, 40° and 47°; Replacement of panes of glass with a maximum weight of 300 kg; Adjustable 2.2 m pod pantograph;

Further information about our products is available on our website: www.sicurpal.it

# DUBAI JEWEL TOWERS

The Dubai Jewel Towers is 41 floors and a total of 190 metres high, consisting of a sales outlet on the ground and mezzanine floor, 12 floors of commercial space and 28 floors of residential space, consisting of 1, 2, 3 and 4 bedroom apartments and 2 high range attic flats

#### **SPECIFICATIONS**

Total working radius of 47 metres; 1.5 metre lifting; Mobile counterweight; Heavy pantograph with 4.5 meter capacity;

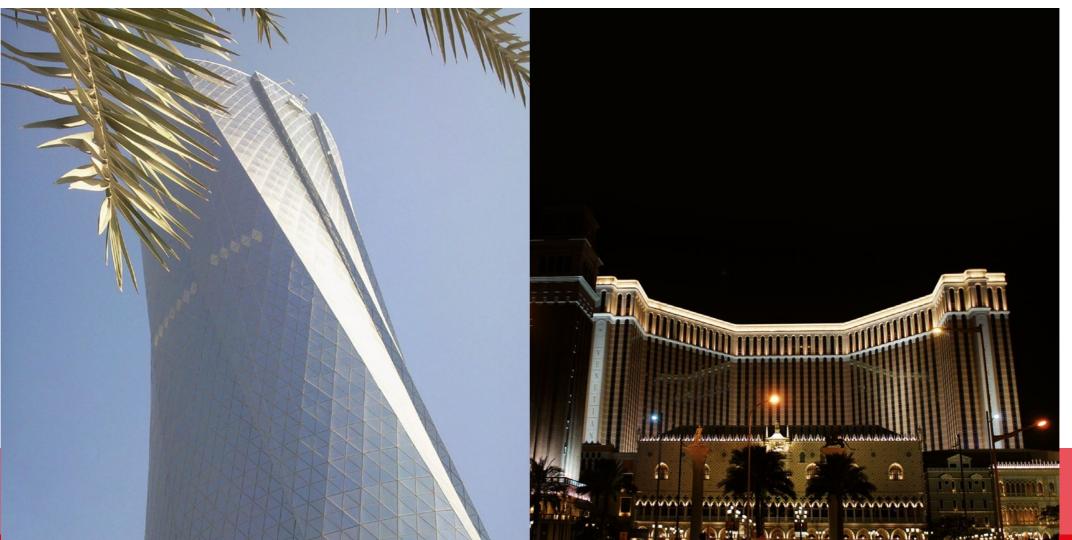
Further information about our products is available on our website: www.sicurpal.it

# Abu Dhabi, United Arab Emirates

Units installed: 1 fixed roof car

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# BUILDING MAINTENANCE UNIT





# Doha Qatar

Number of units: 1 roof car to descend along the walls.

#### **AL BIDDA TOWER**

Forty-three floor, 215 meter tower in the heart of Doha with an innovative diagonal profile inspired by the idea of a tornado, with a lettable surface area of 41,500 m2.

#### **SPECIFICATIONS**

Fixed arm extending by up to 7 metres; Angle of swing max 25°; Angle of retraction 20.5°; Fitting panes of glass with a maximum weight of 160 Kg; Pod with pantograph extending by up to 1.5 metres; Soft Rope system to adapt to the profile of the building;

Further information about our products is available on our website: www.sicurpal.it

# THE VENETIAN

The Venetian Macau is a resort hotel and casino owned by the Las Vegas Sands Corporation. The Venetian is 225 m high, cost 2.4 billion \$ to build, and forms part of a chain of 7 hotels owned by the Cotai Strip of Macao. An area of 980,000 m2 is modelled in a similar way to the Las Vegas Venetian, and it is the largest hotel structure to have been built in Asia, the sixth largest in the world in terms of surface area and the largest casino in the world.

#### SPECIFICATIONS

Fixed arm extending by up to 21.5 metres
Angle of swing max 14°
Pod with pantograph extending by up to 2 metres
Rotating 25 m walkway
Through walkway, 11.6 metres in length

Further information about our products is available on our website: www.sicurpal.it

## Macau

Number of units: 3 mobile roof cars.

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LUCAL DEALERS: