

PATROL

HORIZONTAL LIFELINE

MODULAR, SIMPLE, SAFE SYSTEM.

With our PATROL LIFELINE system, horizontal, overhead or façade life-lines, both through and overhead, are child's play. Thanks to dedicated supports, the system can be quickly installed on timber, metal or concrete substrates. Furthermore, a wide range of specific accessories ensures all your design needs can be easily met.



SLIDING DEVICE

	SLIDE1	SLIDE1 A4	SLIDE2	SLIDE2 A4	OHSLIDE	OHSLIDE A4
material	A2 AISI 304	A4 AISI 316	A2 AISI 304	A4 AISI 316	A2 AISI 304	A4 AISI 316
certification	EN 795:2012 C UNI 11578:2015 C	EN 795:2012 C UNI 11578:2015 C	EN 795:2012 C UNI 11578:2015 C	EN 795:2012 C UNI 11578:2015 C	EN 795:2012 C UNI 11578:2015 C	EN 795:2012 C UNI 11578:2015 C
removable	✓	✓			✓	✓
overhead					✓	✓
on wall	✓	✓	✓	✓		
through	✓	✓	✓	✓	✓	✓

BENEFITS OF ASSEMBLY TOOLS

The design is simple and the components are easy to assemble. All parts can be installed using common, low-cost tools. There are no crimped fastenings, so no expensive crimping machines or crimp control tools are required.

✓

SOCKET
BUSHINGS AND BITS

 ▶ page 234

BEAR
TORQUE WRENCH

 ▶ page 235

CANARY
SINGLE-HANDED
SHEARS FOR WIRE
ROPES

 ▶ page 236

✗

CRIMPING
MACHINES

CRIMP TOOL TEST

■ KEY POINTS

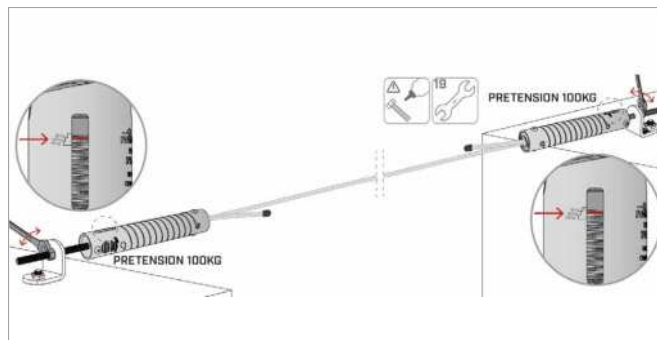
EASE OF ASSEMBLY

All PATROL components can be easily installed in just a few steps thanks to the convenient manual, available in 24 languages, and the assembly video available on our website.



CABLE TENSIONING

The double end element, which functions as both an absorber and a tensioner, facilitates cable assembly and well-distributed tensioning, even on long lines with multiple curves.



ENERGY ABSORPTION

Thanks to the SPEAREVO absorber-tensioner, it is possible to obtain maximum spans of up to 15 metres between supports, reducing stress on the end elements and, consequently, on the fastenings to the substructure.



EXPANSION CONTROL

The SPEAR and SPEAREVO end elements, featuring springs on both ends, ensure the system is able to compensate for cable expansion caused by fluctuating temperatures between summer and winter, protecting the supports from potential damage.



SYSTEM INSPECTION

All components of the PATROL system are visible. In just a few steps, the system can easily be serviced every 12 months after the initial installation.

Cable inspection and re-tensioning operations are just as simple to perform.



I PATROL + TOWER

LIFELINE ON SUPPORT FOR TIMBER, CONCRETE AND STEEL ROOFS

ADAPTABLE

Support height between 300 and 800 mm to adapt to different roofing thicknesses.

MINIMALIST DESIGN

Small-sized cylindrical support to minimise the visual impact on the roof.

EFFECTIVE

Controlled deformation device to reduce the load on the fastening systems and structure.

EN 795:2012 C	CEN/TS 18415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009
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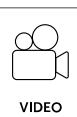
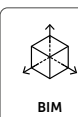
MAXIMUM NUMBER
OF USERS



LOAD DIRECTION



TYPES OF
APPLICATION





For versions in A4, see the page on components (see page 56).



users

* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

CODE

PATROL + TOWER A2

LIFELINE ON STAINLESS STEEL SUPPORT
FOR TIMBER, CONCRETE AND STEEL ROOFS

DURABLE

A2 stainless steel support that guarantees excellent resistance and durability in corrosive environments.

MINIMALIST DESIGN

Product that meets high aesthetic and functional requirements.

EFFECTIVE

Controlled deformation device to reduce the load on the fastening systems and structure.

EN 795:2012 C	CEN/TS 18415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009
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MAXIMUM NUMBER
OF USERS



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TYPES OF
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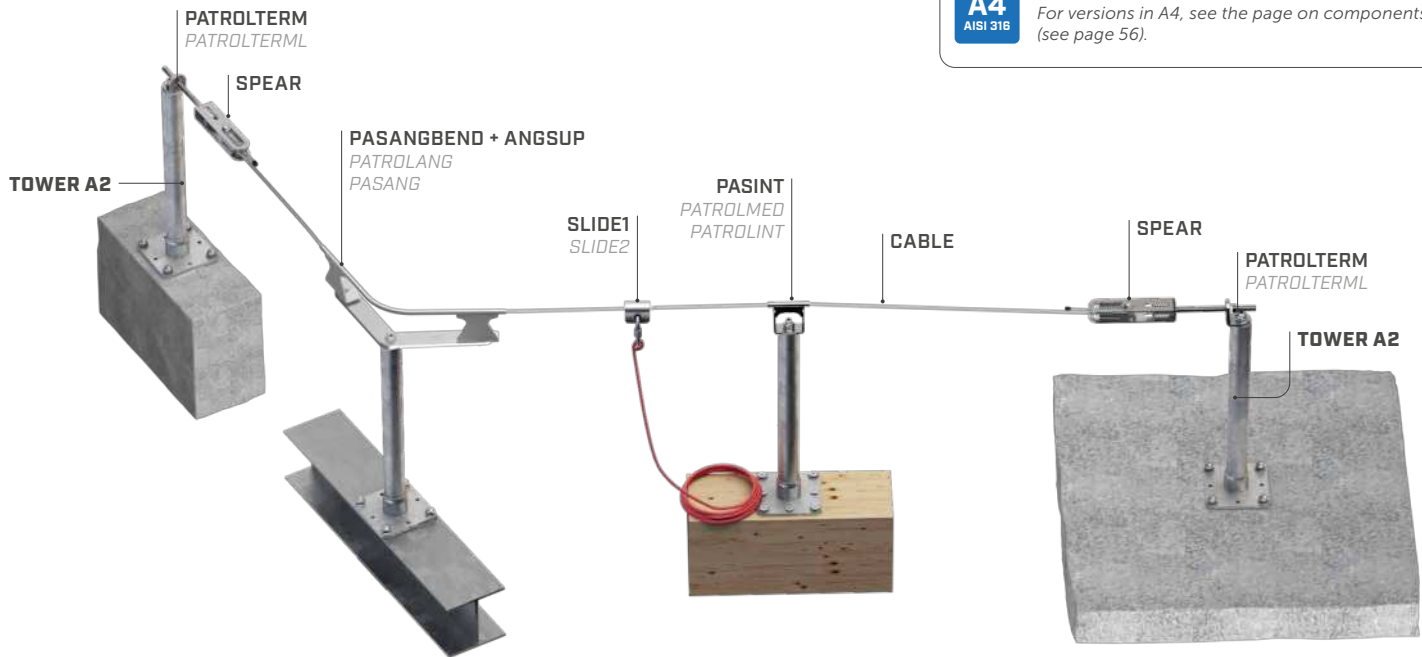


PATROL LIFELINE COMPONENTS

A4
AISI 316

NOTE:

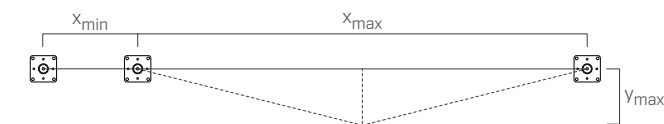
For versions in A4, see the page on components (see page 56).



TECHNICAL DATA*

substructure	minimum thickness	fasteners
GL24h	160 mm	VGS (EVO) Ø9 ULS Ø10
CLT	200 mm	VGS (EVO) Ø9 ULS Ø10
S235JR	6 mm	DIN 933 M12 DIN 125-1A M12 MUT AI 985 M12

substructure	minimum thickness	fasteners
C20/25	140 mm	AB1 M12 SKR Ø12 INA 5.8 M12 VIN-FIX HYB-FIX



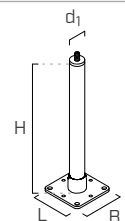
users	no.
minimum span	X_{min} [m]
maximum span	X_{max} [m]
maximum deflection	Y_{max} [m]

SPEAR			
EN 795:2012 C	CEN/TS 18415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001
2			2
15			15
3,60			3,60

* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

TOWER A2 | CODES AND DIMENSIONS

CODE	material		d_1 [mm] [in]	B [mm] [in]	H [mm] [in]	L [mm] [in]	pcs
TOWERA2300			48 1.89	150 6	300 11 3/4	150 6	1
TOWERA2400	AISI 304 stainless steel grade 1.4301	A2 AISI 304	48 1.89	150 6	400 15 3/4	150 6	1
TOWERA2500			48 1.89	150 6	500 19 3/4	150 6	1



For related TOWERPEAK, TOWERSLOPE, TOWLATEVO and TOPLATE products, see page 250.

I PATROL + TOWER XL

LIFELINE ON SUPPORT WITH INCREASED
BOTTOM PLATE FOR TIMBER, STEEL AND
CONCRETE ROOFS

VERSATILE

Compatible with different types of structures thanks to tested fastenings.

ADAPTABLE

Adjustable support height between 300 and 800 mm to adapt to different roofing thicknesses.

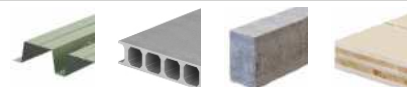
SAFE

The increased bottom plate distributes the actions arising from the anchoring devices over a larger area.

EN
795:2012
C

CEN/TS
18418:2013

UNI
11578:2015
C



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TYPES OF
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SOFTWARE



BIM



VIDEO



MANUALS





For versions in A4, see the page on components (see page 56).

SPEAR

EN
795:2012
C

CEN/TS
16415:2013

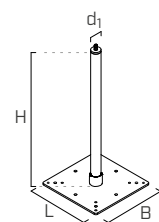
UNI
11578:2015
C



* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

CODE

S235
HDG



For related BEFTOWERXL, TRAPPO, MANEPDM, MANLEAD, MAN50, MANPOST1, MANPOST2, TOPLATE 2.0 products, see page 250.

I PATROL + SOLID

LIFELINE ON RIGID SUPPORT FOR ROPE ACCESS WORK

DESIGNED FOR ROPE ACCESS WORK

The high-rigidity and high-strength support, combined with the jaw-plate anchor system, enables comfortable and safe rope access work.

LIGHT

The aluminium alloy of the support facilitates handling and installation thanks to the lightweight components.

ADAPTABLE

Support height between 400 and 1000 mm to adapt to different roofing thicknesses.

EN 795:2012 C	CEN/TS 18415:2013	UNI 11578:2015 C	AS/NZS 1891.4:2009	AS/NZS 1891.2:2001	BS 8610:2017 A3/A5	AS/NZS 5532:2013
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ANSI* Z359.18 -2017 A

*The system has been developed and tested in accordance with the static, dynamic and residual strength requirements outlined in the relative ANSI standard.



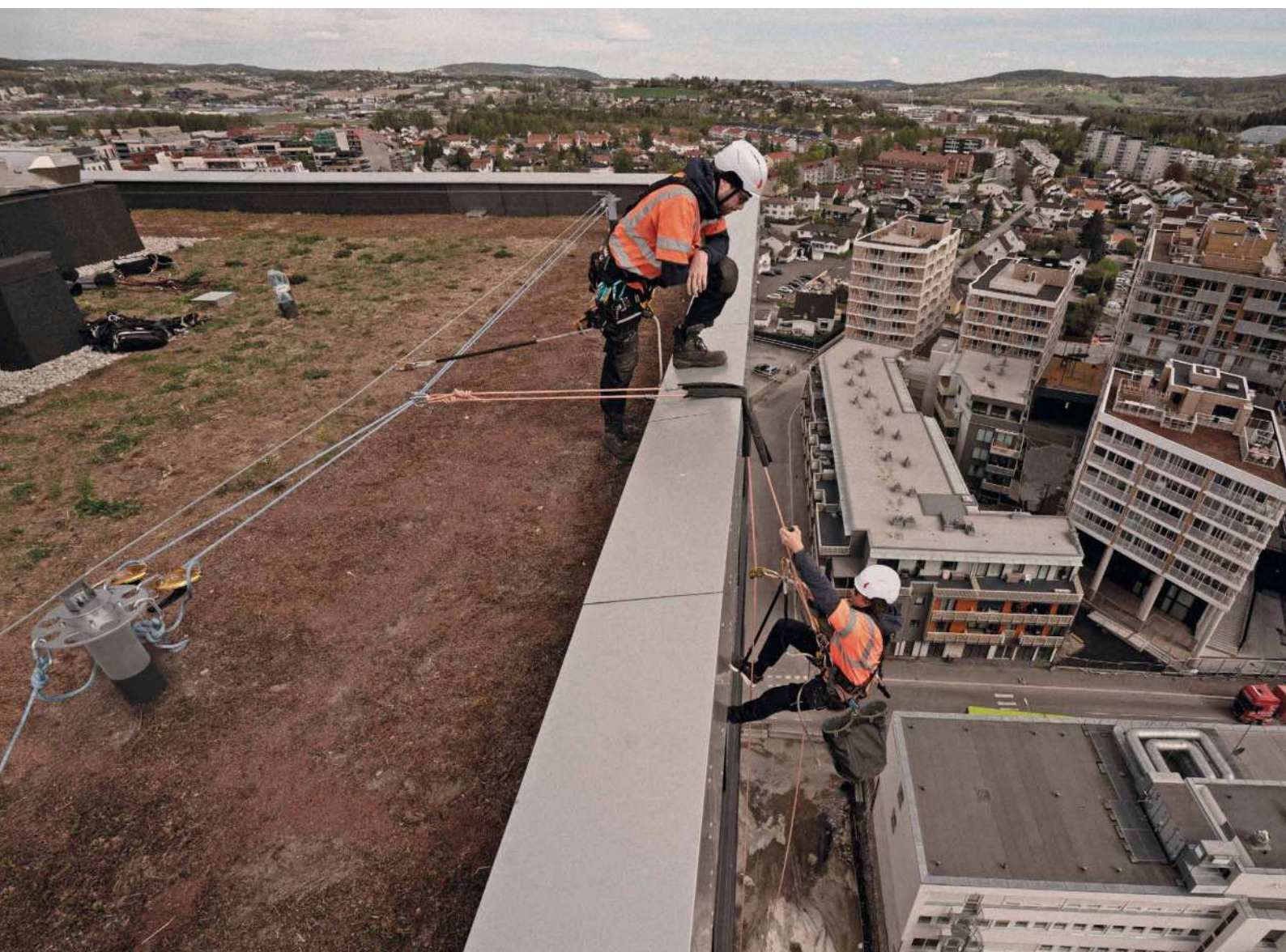
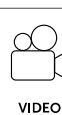
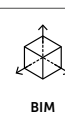
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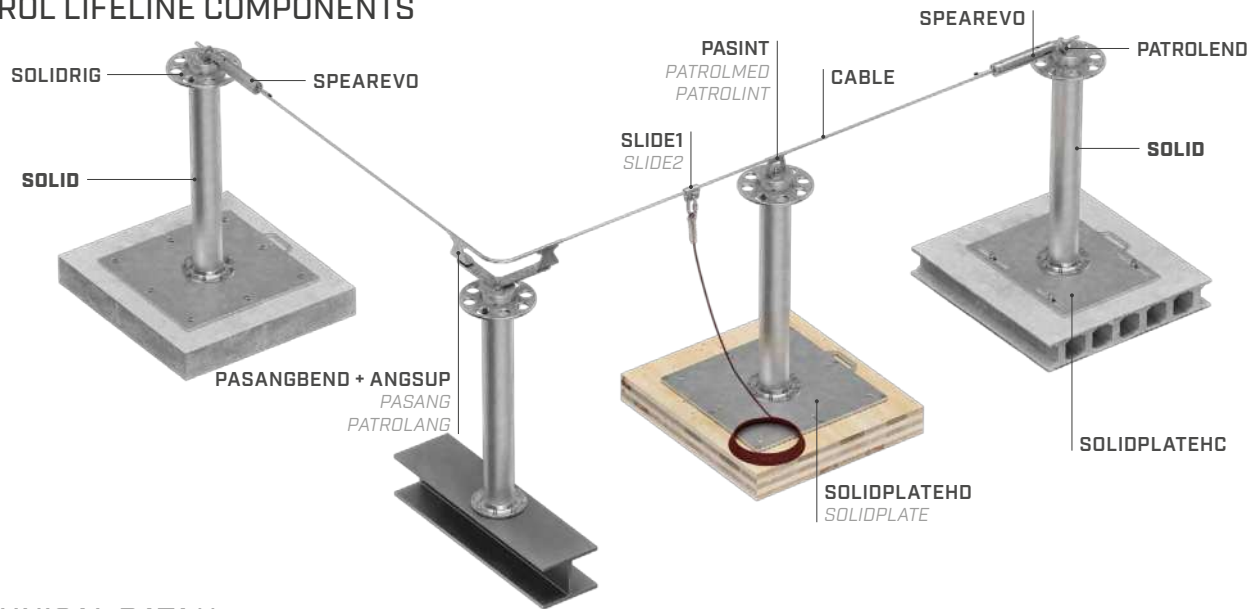
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**TYPES OF
APPLICATION**



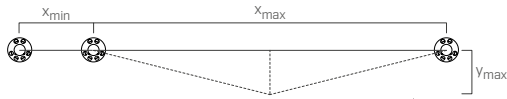
PATROL LIFELINE COMPONENTS

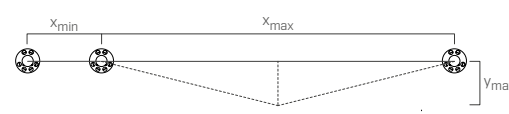


TECHNICAL DATA**

substructure	minimum thickness	fasteners
CLT	160 mm	VGS (EVO) Ø13 HUS12
C20/25	-	INA Ø16 8.8
S235	15 mm	bolt or rod M12 10.9

substructure	minimum thickness	fasteners
C20/25	140 mm	AB1 Ø12
		SKR (EVO) Ø12
		INA Ø12 8.8 VIN-FIX



		SPEAREVO						SOLIDRIG									
		EN 795:2012 C		CEN/TS 16415:2013		UNI 11578:2015 C		AS/NZS 1891.4:2009		AS/NZS 1891.2:2001		BS 8810:2017 A3/A5		AS/NZS 5532:2013		ANSI* Z359.19 - 2017 A	
users	no.																
work method		fall protection/restraint												suspension			
minimum span	$x_{\min}$ [m]	2												-		-	
maximum span	$x_{\max}$ [m]	15												-		-	
maximum deflection	$y_{\max}$ [m]	3,35												-		-	

**The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

SOLID | CODES AND DIMENSIONS

CODE	description	material	d ₁ [mm] [in]	B [mm] [in]	L [mm] [in]	H [mm] [in]	pcs	
SOLID400	rigid support for rope access work	EN AW-6082-T6	120 4.73	220,5 8 11/16	- -	400 15 3/4	1	
SOLID600			120 4.73	220,5 8 11/16	- -	600 23 5/8	1	
SOLID800			120 4.73	220,5 8 11/16	- -	800 31 1/2	1	
SOLID1000			120 4.73	220,5 8 11/16	- -	1000 39 3/8	1	
SOLIDRIG	jaw system for rope access work	EN AW-6082-T6	300 11.82	- -	- -	- -	1	
SOLIDPLATE	bottom plate for timber and concrete	EN AW-6082-T6	- -	550 21 5/8	595 23 7/16	- -	1	
SOLIDPLATEHD	bottom plate for timber and concrete for heavy-duty applications	EN AW-6082-T6	- -	650 25 9/16	695 27 3/8	- -	1	
SOLIDPLATEHC	bottom plate and counterplate for aerated concrete	EN AW-6082-T6	- -	650 25 9/16	545 21 7/16	- -	1	

I PATROL + T-CLAMP

LIFELINE ON SUPPORT FOR CONTINUOUS ROOFS

VERSATILE

A versatile system with special clamps allowing installation on various types of metal roofs.

ADAPTABLE

The universal plates, available in various sizes, guarantee a solution for the different spans between the seams.

MODULAR

The optional post allows the anchor point to be raised, thus overcoming obstacles on the roof.

EN 795:2012 C	CEN/TS 18415:2013	UNI 11578:2015 C	AS/NZS 1891.4:2009	AS/NZS 1891.2:2001
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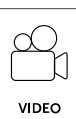
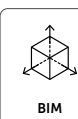
MAXIMUM NUMBER
OF USERS



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TYPES OF
APPLICATION





I PATROL + SHIELD | SHIELD 2

LIFELINE ON SUPPORT FOR TRAPEZOIDAL METAL ROOFS WITH AND WITHOUT INSULATION LAYER

COMPLETE

The package includes fasteners and cellular rubber gaskets, to ensure waterproofing.

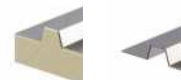
VERSATILE

Used on all trapezoidal metal roofs with and without insulation layer with a span between frets of up to 420 mm.

FUNCTIONAL

SHIELD can be used as a start, end or corner lifeline; SHIELD 2 is ideal as a straight intermediate point.

EN 795:2012 C	CEN/TS 18415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009
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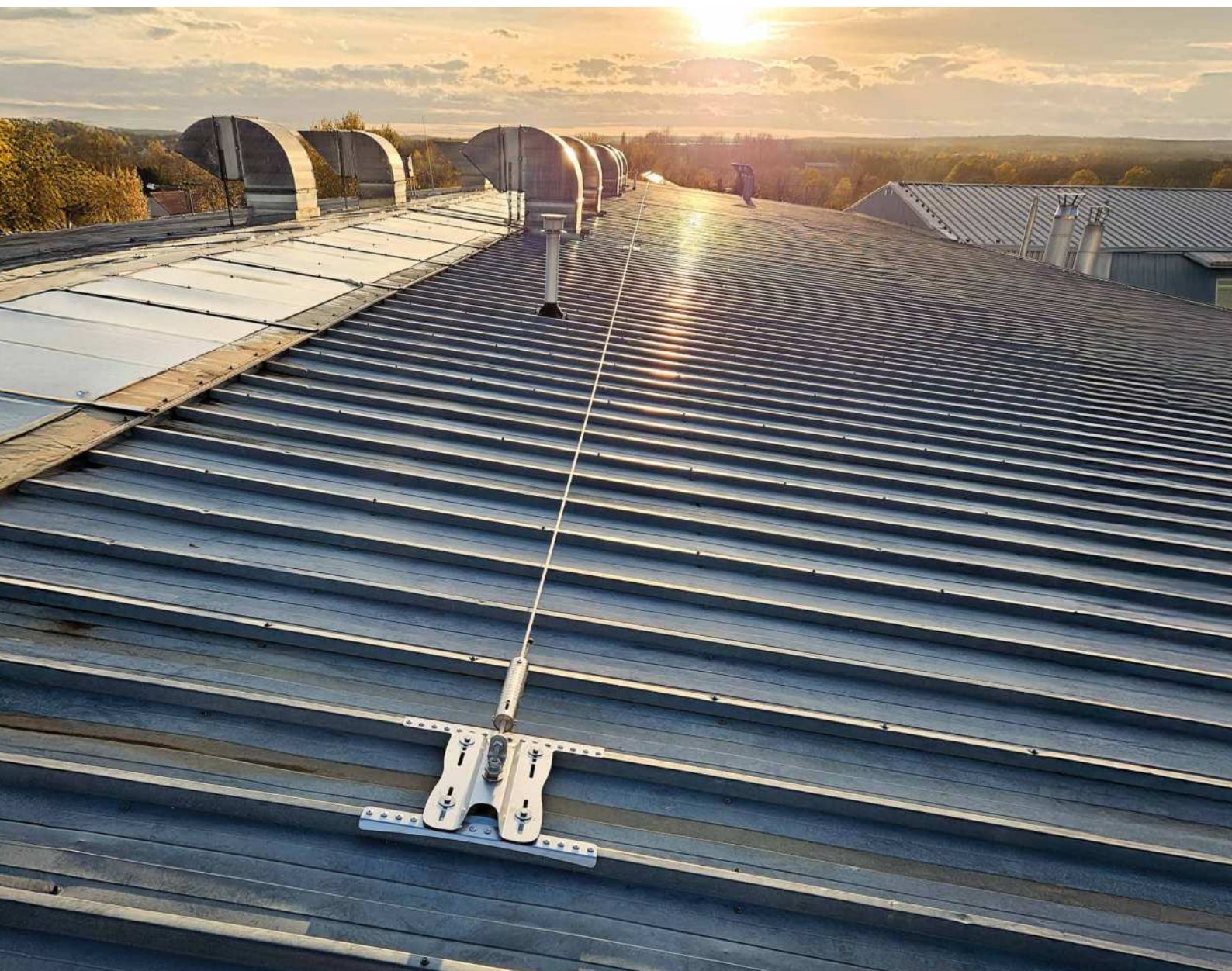
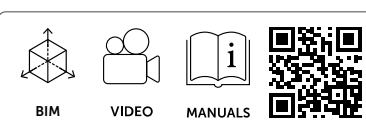
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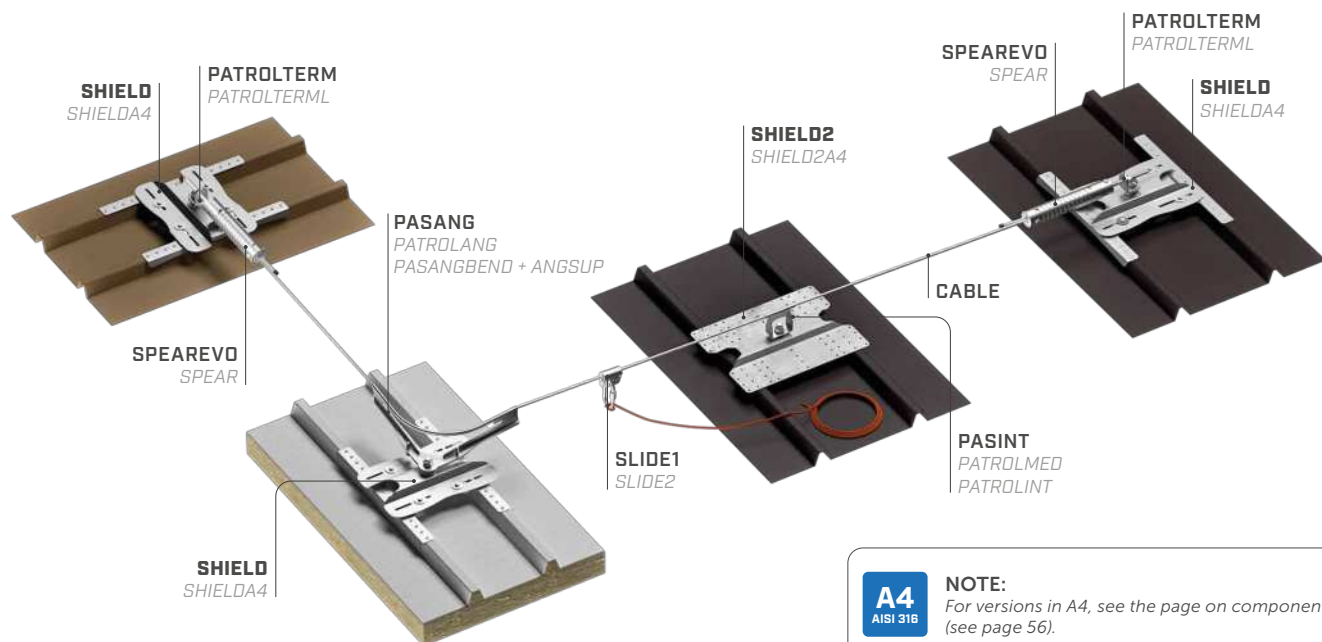
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TYPES OF
APPLICATION

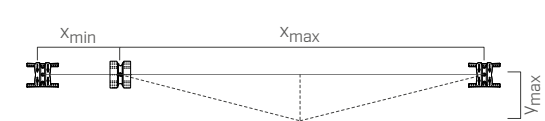


PATROL LIFELINE COMPONENTS



TECHNICAL DATA*

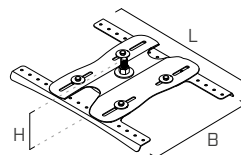
substructure	minimum thickness	fastening systems included	
Fe	0,5 mm	SHIELD: rivet 6,3 x 20,2 mm with EPDM washer (x 32) SHIELD2: rivet 6,3 x 20,2 mm with EPDM washer (x 16)	
Fe	0,5 mm		
Al	1 mm		
Al	1 mm		

			SPEAR					SPEAREVO					
			EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009	EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009	
users	no.												
minimum span	x_{min}	[m]	2			2		2				2	
maximum span	x_{max}	[m]	7,5			7,5		15				15	
maximum deflection	y_{max}	[m]	1,44			1,44		3,40				3,40	

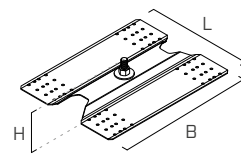
* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

SHIELD - SHIELD 2 | CODES AND DIMENSIONS

CODE	description	material		B [mm] [in]	H [mm] [in]	L [mm] [in]	pcs
SHIELD	lifeline support	AISI 304 stainless steel grade 1.4301	A2 AISI 304	180-420 7 1/8-16 9/16	85 3 3/8	476 18 3/4	1
SHIELD A4	lifeline support	AISI 316 stainless steel grade 1.4401	A4 AISI 316				



CODE	description	material		B [mm] [in]	H [mm] [in]	L [mm] [in]	pcs
SHIELD2	intermediate lifeline support	AISI 304 stainless steel grade 1.4301	A2 AISI 304	250 - 370 10-14 9/16	65 2 9/16	322 12 11/16	1
SHIELD2 A4	intermediate lifeline support	AISI 316 stainless steel grade 1.4401	A4 AISI 316				



PATROL + WAVE

LIFELINE ON SUPPORT FOR CORRUGATED SHEET METAL ROOFS

SIMPLE

Simple and quick installation, thanks to the shape obtained with a single plate.

COMPLETE

The package includes fasteners and cellular rubber gaskets, to ensure waterproofing.

FUNCTIONAL

WAVE can be used as either an end, intermediate or angular support for lifeline systems.

EN
795:2012
C

CEN/TS
18418:2013

UNI
11578:2015
C



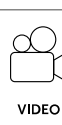
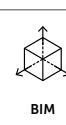
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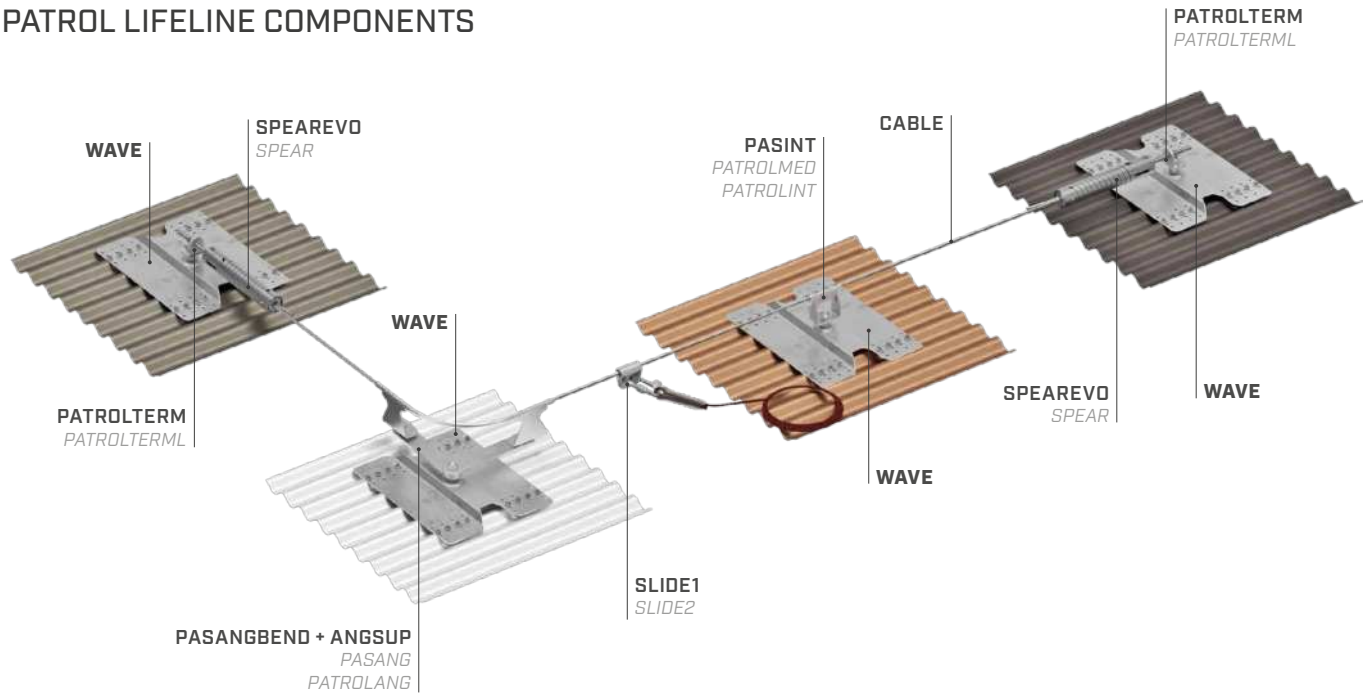
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TYPES OF
APPLICATION



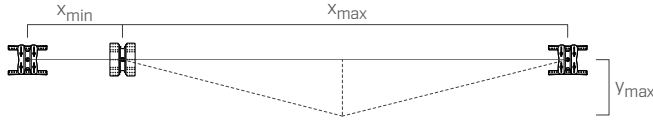
PATROL LIFELINE COMPONENTS



TECHNICAL DATA*

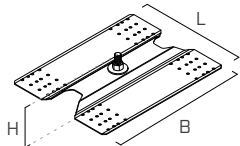
substructure	minimum thickness	fastening systems included
 Fe	0,63 mm	self-drilling screws 5,5 x 25 mm A2 with EPDM washer (x16) 4 EPDM gaskets

Wave pitch: 76 mm.

			SPEAREVO
			EN 795:2012 C CEN/TS 16415:2013 UNI 11578:2015 C
users		no.	
minimum span	x_{min}	[m]	2
maximum span	x_{max}	[m]	15
maximum deflection	y_{max}	[m]	3,40

* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

WAVE | CODES AND DIMENSIONS

CODE	description	material		B [mm] [in]	H [mm] [in]	L [mm] [in]	pcs	
WAVE	support for corrugated sheet metal	AISI 304 stainless steel grade 1.4301		420 16 9/16	65 2 9/16	322 12 11/16	1	

I PATROL + COPPO

LIFELINE ON SUPPORT FOR ROOFS WITH FAUX TILES

COMPLETE

The package includes fasteners and cellular rubber gaskets, to ensure roof waterproofing.

ADAPTABLE

Pre-drilled plate with holes at different distances to suit various types of sheet metal.

FAST

Quick assembly upon the completion of roofing with just a few tools.

EN
795:2012
C

CEN/TS
18415:2013

UNI
11578:2015
C



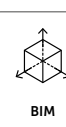
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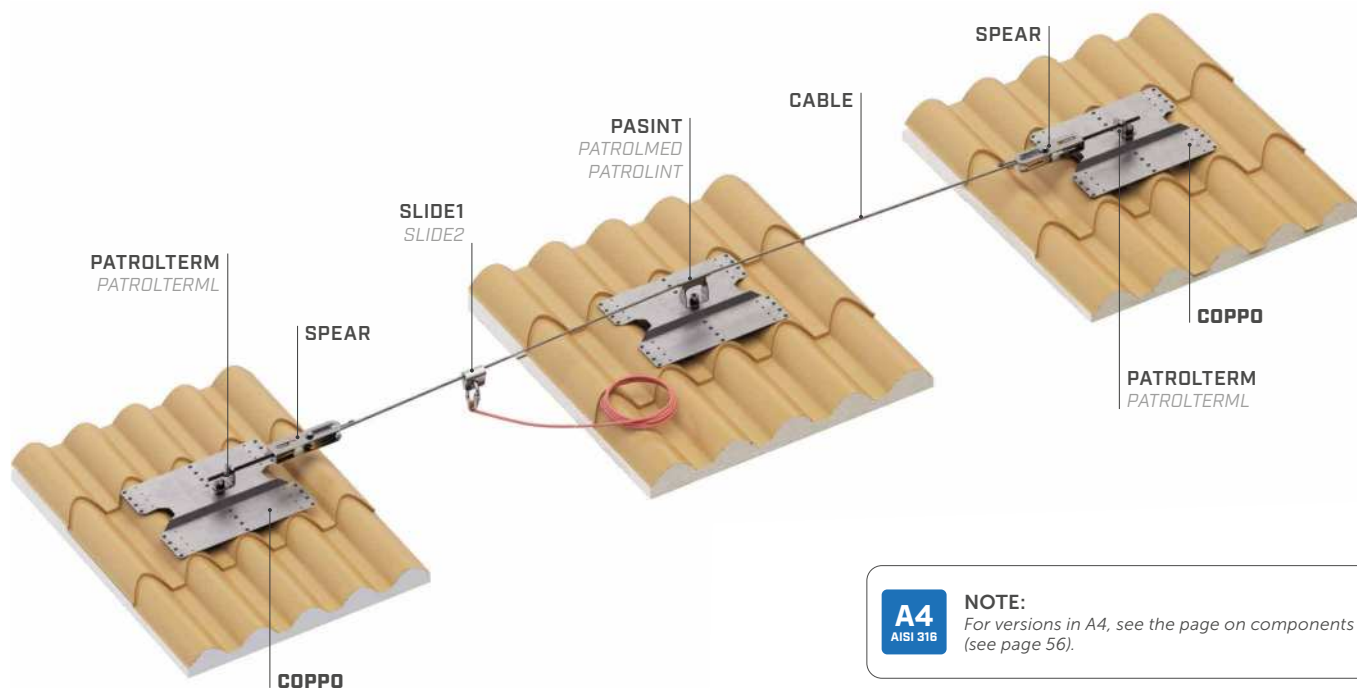
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TYPES OF
APPLICATION



PATROL LIFELINE COMPONENTS



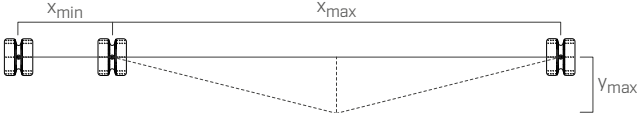
A4
AISI 316

NOTE:

For versions in A4, see the page on components (see page 56).

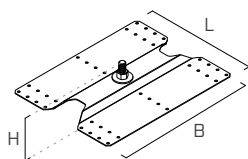
TECHNICAL DATA*

substructure	minimum thickness	fastening systems included
 Fe	0,5 mm	rivet 6,3 x 20,2 mm with EPDM washer (x 24) 
 Al	0,7 mm	

			SPEAR		
			EN 795:2012 C	CEN/TS 18415:2013	UNI 11578:2015 C
users		no.			
minimum span	x_{min}	[m]	2		
maximum span	x_{max}	[m]	7,5		
maximum deflection	y_{max}	[m]	1,44		

* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

COPPO | CODES AND DIMENSIONS

CODE	description	material		B [mm] [in]	H [mm] [in]	L [mm] [in]	pcs	
COPPO	support for faux tile roofing panel	AISI 304 stainless steel grade 1.4301	A2 AISI 304	166 - 200 6 9/16 - 8	65 2 9/16	322 12 11/16	1	

I PATROL + T-ROOF

LIFELINE ON SUPPORT FOR PVC/TPO AND BITUMINOUS ROOFS

WATERPROOF

The TROOFWPLATE plate ensures complete waterproofing for flat and even slightly inclined roofs. The package includes fasteners and cellular rubber gaskets, to ensure roof waterproofing.

ADAPTABLE

The various fastening kits enable specific installation for each substructure and for different insulation thicknesses.

UNIVERSAL

Universal system for application on the roof surface with installation on various supporting substructures.



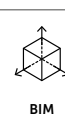
MAXIMUM NUMBER OF USERS



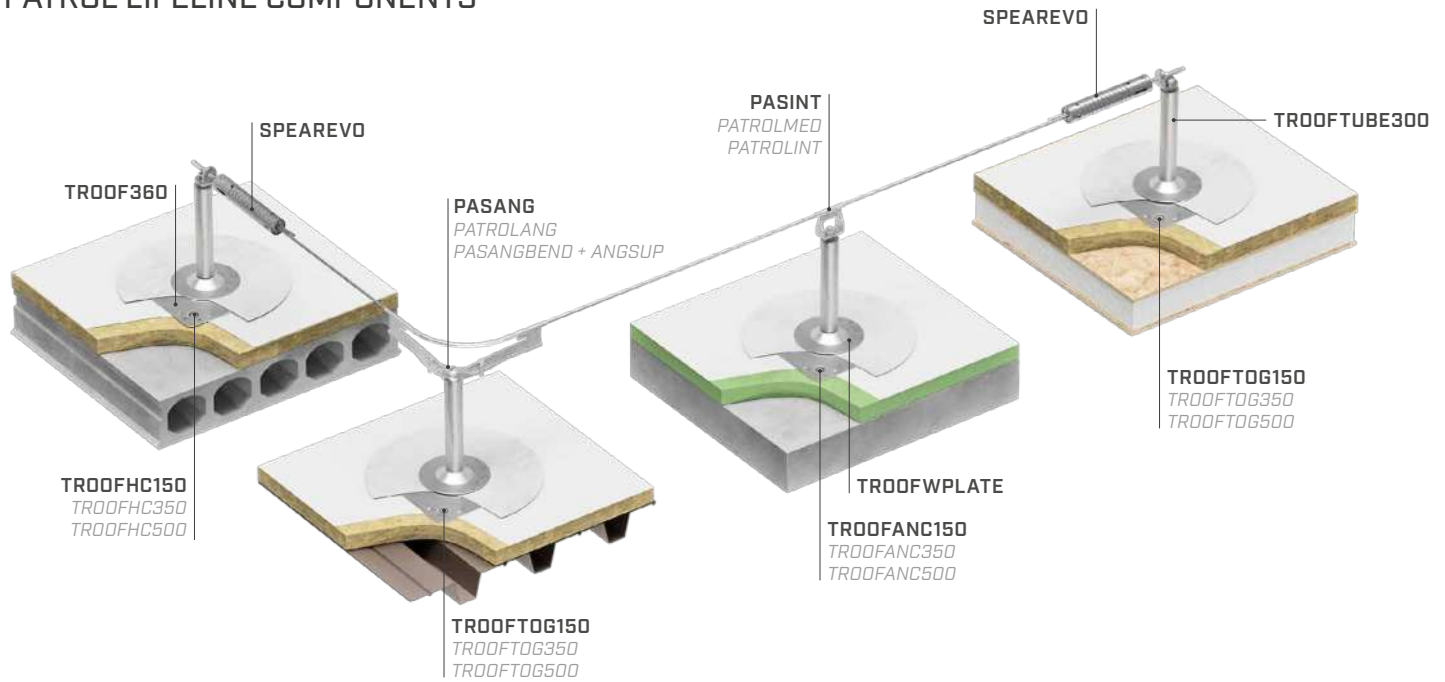
LOAD DIRECTION



TYPES OF APPLICATION



PATROL LIFELINE COMPONENTS



T-ROOF | CODES AND DIMENSIONS

CODE	description	material		B [mm]	H [mm]	L [mm]	s [mm]	pcs
TROOF360	universal plate for installation on the roof surface	AISI 304 stainless steel grade 1.4301	A2 AISI 304	360	-	360	3	1
TROOFWPLATE	waterproofing plate			Ø100	-	-	-	1
TROOFTUBE300	spacer to overcome obstacles	EN AW-6060-T6 AISI 304 stainless steel grade 1.4301	A2 AISI 304 alu 6060	50	300	-	-	1
TROOFTOG150				-	150	-	-	1
TROOFTOG350	toggle bolt kit with cup washer	bright zinc plated carbon steel	S235 H06	-	350	-	-	1
TROOFTOG500				-	500	-	-	1
TROOFHC150				-	150	-	-	1
TROOFHC350	fastening kit for substructure in aerated concrete	bright zinc plated carbon steel		-	350	-	-	1
TROOFHC500				-	500	-	-	1
TROOFANC150				-	150	-	-	1
TROOFANC350	fastening kit for concrete substructure	bright zinc plated carbon steel		-	350	-	-	1
TROOFANC500				-	500	-	-	1

PATROL + BLOCK

LIFELINE ON SUPPORT WITH BALLAST FOR FLAT ROOFS

WITHOUT DRILLING

It is designed for installation on flat roofs, and does not require to drill the roof covering, avoiding thermal bridging and preserving the waterproofing layer of the structure.

FLAT ROOFS

Designed for flat roofs with inclines up to 5° with PVC, TPO or bituminous final covering, with or without gravel.

SIMPLE

Concrete ballast slabs in standard sizes simplify the installation.

EN
795:2012
C

CEN/TS
18419:2013

UNI
11578:2015
C

PVC

TPD

BYTUM

MAXIMUM NUMBER
OF USERS



LOAD DIRECTION



TYPES OF
APPLICATION



SOFTWARE



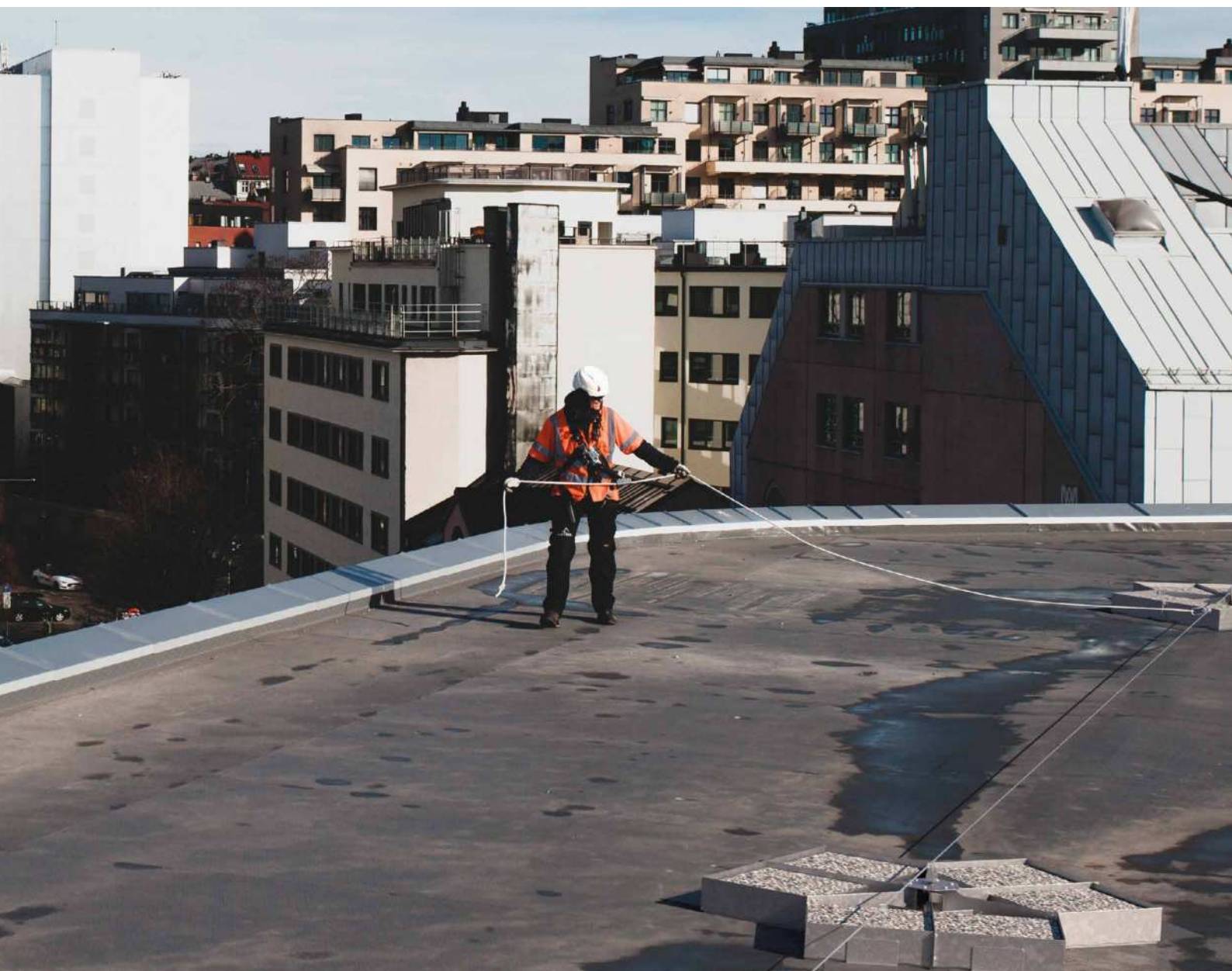
BIM



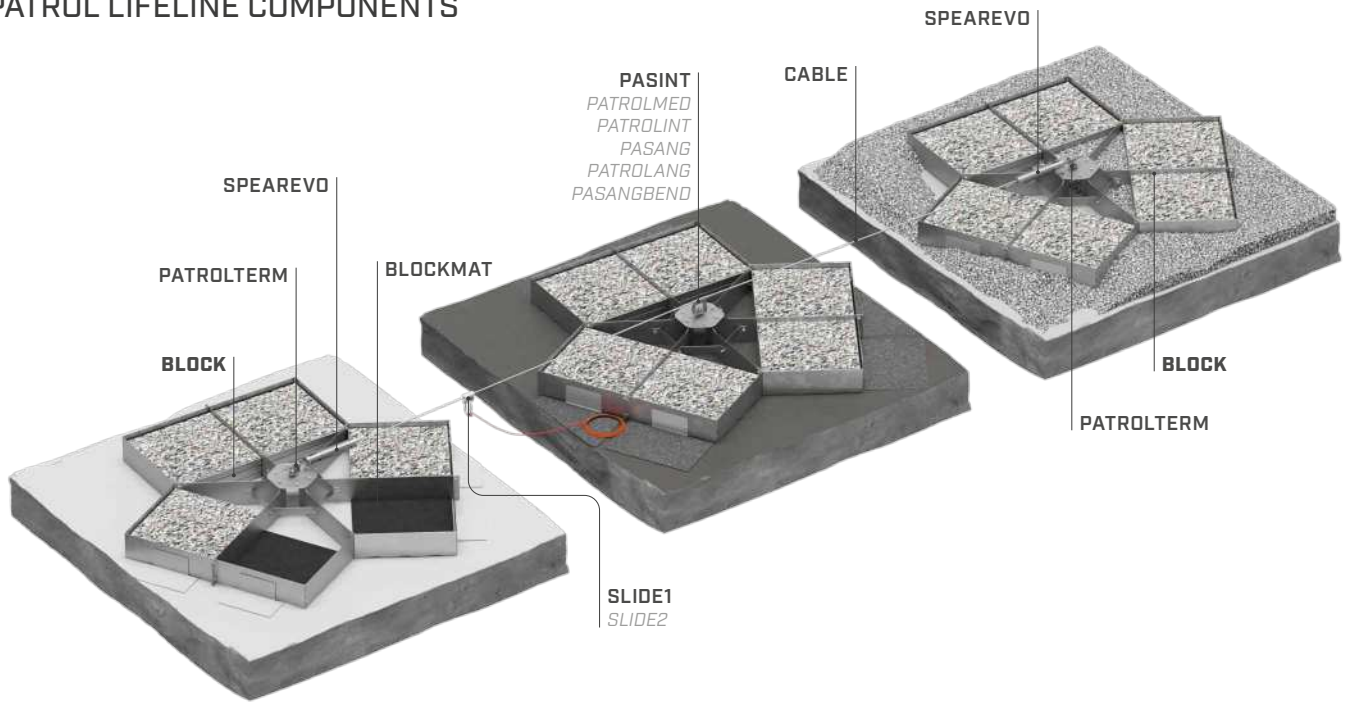
VIDEO



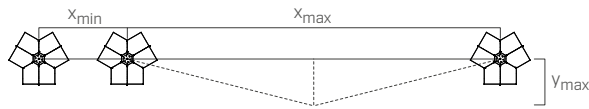
MANUALS



PATROL LIFELINE COMPONENTS



TECHNICAL DATA*



			SPEAREVO		
			EN 795:2012 C	CEN/TS 18415:2013	UNI 11578:2015 C
users		no.	2		
minimum span	x_{min}	[m]	2		
maximum span	x_{max}	[m]	10		
maximum deflection	y_{max}	[m]	2		

* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

BLOCK | CODES AND DIMENSIONS

CODE	material		B [mm] [in]	H [mm] [in]	L [mm] [in]	pcs	
BLOCK	AISI 304 stainless steel grade 1.4301	A2 AISI 304	1870 73 5/8	165 6 1/2	1645 64 3/4	1	
BLOCKPLATE	AISI 304 stainless steel grade 1.4301	A2 AISI 304	120 4 3/4	120 4 3/4	240 9 7/16	1	
BLOCKMAT							optional
ballast weight							18 bricks x 21,5 kg = 387 kg
total weight							400 kg

COMPLEMENTARY PRODUCTS

CODE	description	B [mm] [in]	L [mm] [in]	s [mm] [in]	pcs	
BLOCKMAT	BLOCKMAT mats not included in the supply of the BLOCK item (3 pieces per BLOCK are required) it can be ordered separately	550 21 5/8	1050 41 5/16	6 0.24	1	

PATROL + PATROLEND

DIRECT FASTENING ON STEEL AND CONCRETE SUBSTRUCTURES

EASY

Quick and easy assembly directly onto concrete or steel structure.

UNIVERSAL

System designed for different applications: flat, façade, overhead.

FUNCTIONAL

Specially designed shuttles can be used to enable the operator to overcome bends and intermediate points without ever becoming disconnected from the system.



CSA Z259.16 READY
Validated through testing



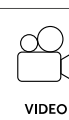
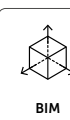
MAXIMUM NUMBER
OF USERS



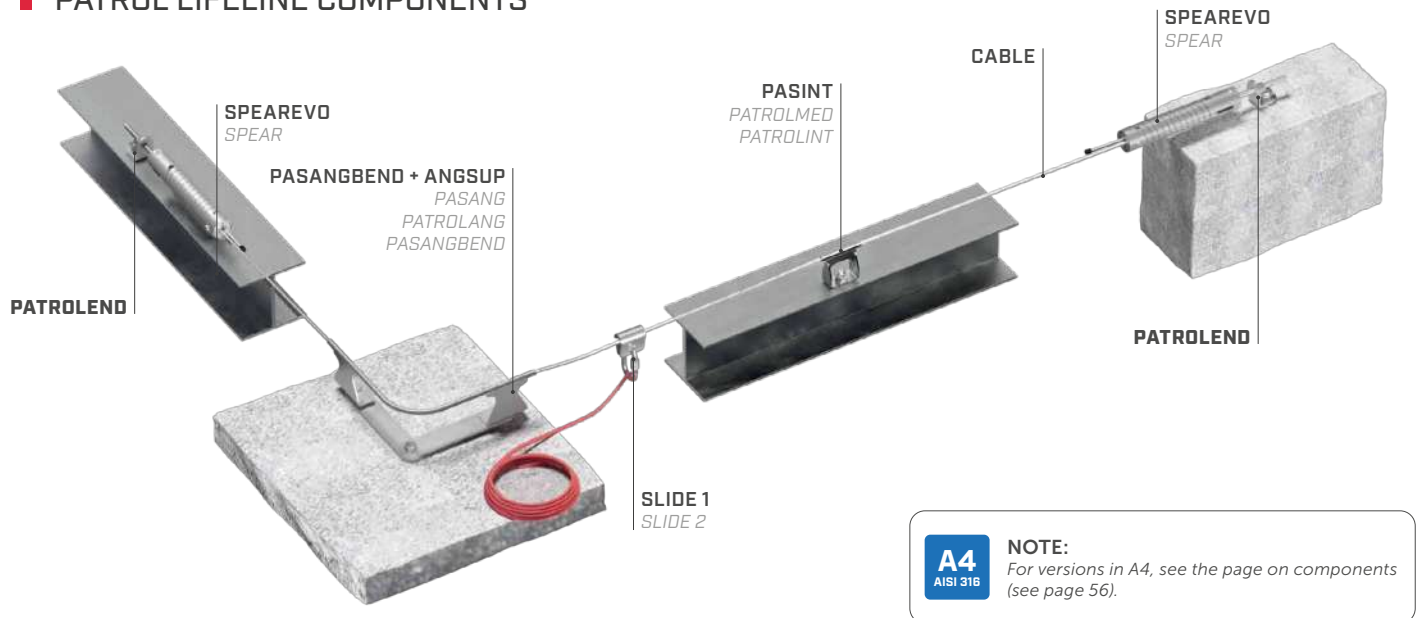
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TYPES OF
APPLICATION



PATROL LIFELINE COMPONENTS

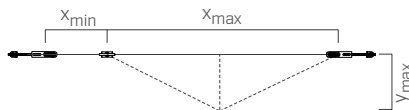


TECHNICAL DATA*

PATROLEND

substructure	minimum thickness	fasteners
C20/25	116 mm	INA 5.8 M16 VIN-FIX
	170 mm	SKR Ø16
	170 mm	AB1 M16

substructure	minimum thickness	fasteners
S235JR	5 mm	DIN 933 M16 DIN 125-1A M16 MUT AI 985 M16



			SPEAR					SPEAREVO				
			EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009	EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009
users		no.			(SPAN)							
minimum span	x_{min}	[m]	2		2		2		2			
maximum span	x_{max}	[m]	7,5		7,5		15		15			
maximum deflection	y_{max}	[m]	1,44		1,44		3,40		3,40			

* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

PATROLEND | CODES AND DIMENSIONS

CODE	description	material		B [mm] [in]	H [mm] [in]	L [mm] [in]	s [mm] [in]	pcs	
PATROLEND	end element	AISI 304 stainless steel grade 1.4301	A2 AISI 304	40 1 9/16	61 2 3/8	66 2 5/8	6 0.24	1	
PATROLEND A4	A4 end element	AISI 316 stainless steel grade 1.4401	A4 AISI 316	40 1 9/16	61 2 3/8	66 2 5/8	6 0.24	1	

PATROL OVERHEAD

OVERHEAD LIFELINE ON STEEL AND CONCRETE

FUNCTIONAL

Lifeline for aerial applications such as maintenance of coaches, trucks, machinery and aeroplanes.

SAFE

The sliding device allows operators to pass intermediate elements and curves without ever disengaging from the system.

PRACTICAL

Possibility of anchoring to the upside-down TOWER support to lower the lifeline relative to the ceiling.

EN 795:2012 C	CEN/TS 18415:2013	UNI 11578:2015 C	AS/NZS 1891.4:2009	AS/NZS 1891.2:2001	CSA Z259.16
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CSA Z259.16 READY
Validated through testing



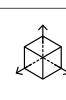
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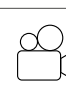
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TYPES OF
APPLICATION



BIM



VIDEO



MANUALS

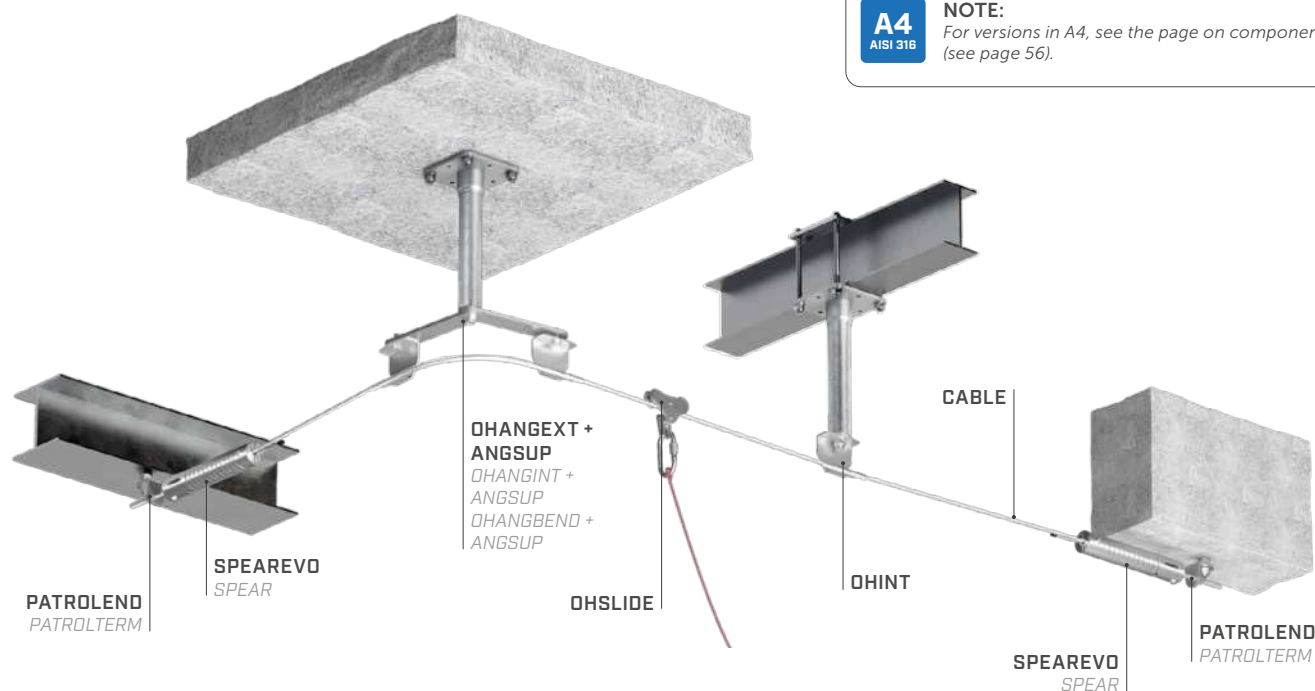


PATROL LIFELINE COMPONENTS

A4
AISI 316

NOTE:

For versions in A4, see the page on components (see page 56).



TECHNICAL DATA*

PATROLEND | PATROLTERM

substructure	minimum thickness	fasteners
C20/25	116 mm	INA 5.8 M16 VIN-FIX
	170 mm	SKR Ø16
	170 mm	AB1 M16

substructure	minimum thickness	fasteners
S235JR	5 mm	DIN 933 M16 DIN 125-1A M16 MUT AI 985 M16

* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

PATROL + PATROLEND

			SPEAR					SPEAREVO				
			EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009	EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009
users	no.											
minimum span	x_{min}	[m]	2			2		2			2	
maximum span	x_{max}	[m]	7,5			7,5		15			15	
maximum deflection	y_{max}	[m]	1,40			1,40		3,40			3,40	

For PATROLEND components, see page 56.

PATROL + TOWER / TOWERA2 / TOWERXL

			SPEAR					SPEAREVO				
			EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009	EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009
users	no.											
minimum span	x_{min}	[m]	2			2		2			2	
maximum span	x_{max}	[m]	7,5			7,5		15			15	
maximum deflection	y_{max}	[m]	1,80			1,80		4,00			4,00	

For TOWER / TOWERA2 / TOWERXL components, see page 30-34.

I PATROL ON WALL

WALL-MOUNTED LIFELINE ON STEEL AND CONCRETE

MINIMALIST DESIGN

The size of the components minimises the aesthetic impact of the safety device on the wall.

FUNCTIONAL

Thanks to the different components availability, it is possible to create customised lifelines according to site requirements.

PRACTICAL

It can be used components that allow the operator to overcome intermediate points and curves by means of a sliding device.

EN 795:2012 C	CEN/TS 18415:2013	UNI 11578:2015 C	AS/NZS 1891.4:2009	AS/NZS 1891.2:2001	CSA Z259.16
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CSA Z259.16 READY
Validated through testing



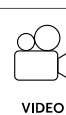
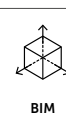
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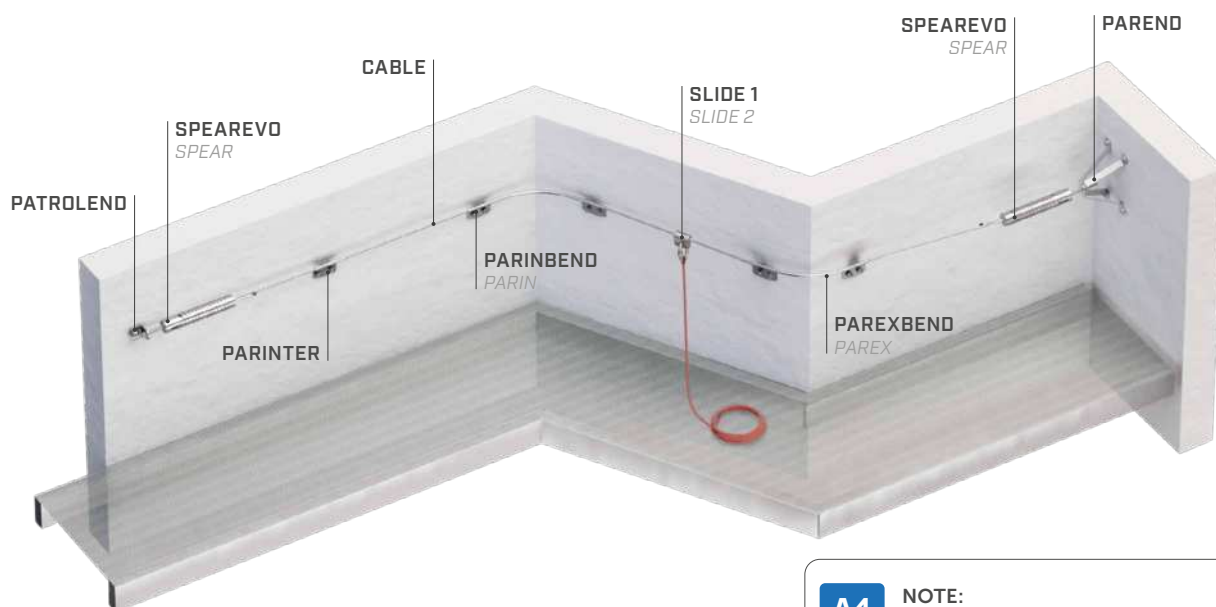
LOAD DIRECTION



TYPES OF
APPLICATION



PATROL LIFELINE COMPONENTS



A4
AISI 316

NOTE:

For versions in A4, see the page on components (see page 56).

TECHNICAL DATA*

PATROLEND | PATROLEND A4

substructure	minimum thickness	fasteners
C20/25	116 mm	INA 5.8 M16 VIN-FIX
	170 mm	SKR Ø16
	170 mm	AB1 M16
S235JR	5 mm	DIN 933 M16 DIN 125-1A M16 MUT AI 985 M16

PAREND | PAREND A4

substructure	minimum thickness	fasteners
C20/25	98 mm	INA 5.8 M12 VIN-FIX
	130 mm	SKR Ø12
	140 mm	AB1 M12
S235JR	5 mm	DIN 933 M12 DIN 125-1A M12 MUT AI 985 M12

* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

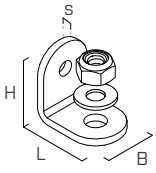
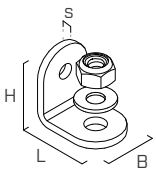
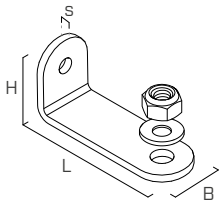
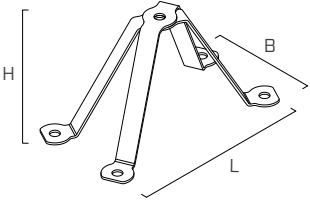


			SPEAR					SPEAREVO				
			EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009	EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009
users	no.				 (SPAN)						 (SPAN)	
minimum span	x_{min}	[m]	2		2		2				2	
maximum span	x_{max}	[m]	7,5		7,5		15				15	
maximum deflection	y_{max}	[m]	1,40		1,40		3,40				3,40	

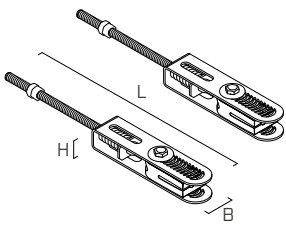
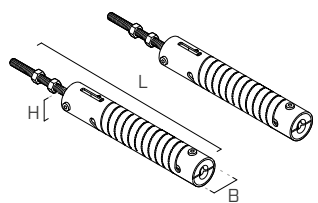
END ELEMENTS | CODES AND DIMENSIONS

CODE	description	material		B [mm] [in]	H [mm] [in]	L [mm] [in]	s [mm] [in]	pcs	
PATROLEND	end element	AISI 304 stainless steel grade 1.4301	A2 AISI 304	40 1 9/16	61 2 3/8	66 2 5/8	6 0.24	1	
PATROLEND A4	A4 end element	AISI 316 stainless steel grade 1.4401	A4 AISI 316	40 1 9/16	61 2 3/8	66 2 5/8	6 0.24	1	
PAREND	end element	AISI 304 stainless steel grade 1.4301	A2 AISI 304	300 11 3/4	150 6	300 11 3/4	- -	1	
PAREND A4	A4 end element	AISI 316 stainless steel grade 1.4401	A4 AISI 316	300 11 3/4	150 6	300 11 3/4	- -	1	

END ELEMENTS | CODES AND DIMENSIONS

CODE	description	material	B [mm] [in]	H [mm] [in]	L [mm] [in]	s [mm] [in]	pcs	
PATROLTERM	end element	AISI 304 stainless steel grade 1.4301	40 1 9/16	61 2 3/8	66 2 5/8	6 0.24	1	
PATROLTERMA4	A4 end element	AISI 316 stainless steel grade 1.4401						
PATROLEND	end element	AISI 304 stainless steel grade 1.4301	40 1 9/16	61 2 3/8	66 2 5/8	6 0.24	1	
PATROLEND A4	A4 end element	AISI 316 stainless steel grade 1.4401						
PATROLTERML	long end element	AISI 304 stainless steel grade 1.4301	40 1 9/16	61 2 3/8	180 7 1/8	6 0.24	1	
PAREND	end element with 4 feet per side	AISI 304 stainless steel grade 1.4301	300 11 3/4	150 6	300 11 3/4	- -	1	
PAREND A4	A4 end element with 4 feet per side	AISI 316 stainless steel grade 1.4401						

TENSIONERS AND ENERGY ABSORBERS | CODES AND DIMENSIONS

CODE	description	material	B [mm] [in]	H [mm] [in]	L [mm] [in]	s [mm] [in]	pcs	
SPEAR	set of pair of tensioners with absorber	AISI 304 stainless steel grade 1.4301 EN AW 6082 aluminium	50 1 15/16	63 2 1/2	334 13 3/16	- -	1	
SPEAR A4	set of pair of tensioners with A4 absorber	AISI 316 stainless steel grade 1.4401 EN AW 6082 aluminium						
SPEAREVO	set of pair of tensioners with absorber	AISI 304 stainless steel grade 1.4301	50 1 15/16	50 1 15/16	436 17 1/8	- -	1	
SPEAREVO A4	set of pair of tensioners with A4 absorber	AISI 316 stainless steel grade 1.4401						

■ INTERMEDIATE ELEMENTS | CODES AND DIMENSIONS

CODE	description	material	d ₁ [mm] [in]	B [mm] [in]	H [mm] [in]	L [mm] [in]	s [mm] [in]	pcs	
PASINT	pass-through intermediate element	AISI 304 stainless steel grade 1.4301	-	35 1 3/8	86 3 3/8	100 4	-	1	
PASINTA4	A4 pass-through intermediate element	AISI 316 stainless steel grade 1.4401	-						
PARINTER	pass-through intermediate element for façades	AISI 304 stainless steel grade 1.4301	-	100 4	88 3 7/16	120 4 3/4	-	1	
PARINTERA4	pass-through intermediate element for A4 façades	AISI 316 stainless steel grade 1.4401	-						
PATROLINT	semi-automatic intermediate element	AISI 304 stainless steel grade 1.4301	-	50 1 15/16	50 1 15/16	375 14 3/4	5 0.20	1	
PATROLMED	non-pass-through intermediate element	AISI 304 stainless steel grade 1.4301 EN AW 6082 aluminium	55 2.17	30 1 3/16	50 1 15/16	-	-	1	
OHINT	pass-through intermediate element for aerial application	AISI 304 stainless steel grade 1.4301	-	40 1 9/16	86 3 3/8	130 5 1/8	-	1	
OHINTA4	pass-through intermediate element for aerial application in A4	AISI 316 stainless steel grade 1.4401	-						

■ SLIDING DEVICES | CODES AND DIMENSIONS

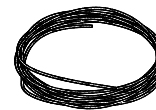
CODE	description	material	d ₁ [mm] [in]	B [mm] [in]	H [mm] [in]	L [mm] [in]	pcs	
SLIDE1	removable sliding device	AISI 304 stainless steel grade 1.4301	-	30 1 3/16	60 2 3/8	60 2 3/8	1	
SLIDE1A4	removable A4 sliding device	AISI 316 stainless steel grade 1.4401	-					
SLIDE2	fixed sliding device	AISI 304 stainless steel grade 1.4301	-	30 1 3/16	60 2 3/8	60 2 3/8	1	
SLIDE2A4	fixed A4 sliding device	AISI 316 stainless steel grade 1.4401	-					
OHSLIDE	removable sliding device for overhead lifeline	AISI 304 stainless steel grade 1.4301	-	46,5 1 7/8	93 3 11/16	98 3 7/8	1	
OHSLIDEA4	removable sliding device for overhead A4 lifeline	AISI 316 stainless steel grade 1.4401	-					

■ ANGLE BRACKETS AND ACCESSORIES | CODES AND DIMENSIONS

CODE	description	material	d ₁ [mm] [in]	B [mm] [in]	H [mm] [in]	L [mm] [in]	pcs	
PASANG	corner pass-through element	AISI 304 stainless steel grade 1.4301	-	300	69	300	1	
PASANGA4	A4 pass-through angle bracket	AISI 316 stainless steel grade 1.4401	-	11 3/4	2 11/16	11 3/4	1	
PASANGBEND	pass-through angle bracket for adjustable supports 105°-165°	AISI 304 stainless steel grade 1.4301	-	54,5	102	565	1	
PASANGBENDA4	pass-through angle bracket for adjustable A4 supports 105°-165°	AISI 316 stainless steel grade 1.4401	-	2 3/16	4	22 1/4	1	
PAREX	external pass-through angle bracket for façades	AISI 304 stainless steel grade 1.4301	-	326	116	326	1	
PAREXA4	external pass-through angle bracket for A4 façades	AISI 316 stainless steel grade 1.4401	-	12 3/4	4 9/16	12 3/4	1	
PAREXBEND	external pass-through angle bracket for façades adjustable 105°-165°	AISI 304 stainless steel grade 1.4301	-	72	116	565	1	
PAREXBENDA4	external pass-through angle bracket for A4 façades adjustable 105°-165°	AISI 316 stainless steel grade 1.4401	-	2 13/16	4 9/16	22 1/4	1	
PARIN	internal pass-through angle bracket for façades	AISI 304 stainless steel grade 1.4301	-	357	88	357	1	
PARINA4	internal pass-through angle bracket for A4 façades	AISI 316 stainless steel grade 1.4401	-	14	3 7/16	14	1	
PARINBEND	internal pass-through angle bracket for façades adjustable 105°-165°	AISI 304 stainless steel grade 1.4301	-	42	87	565	1	
PARINBENDA4	internal pass-through angle bracket for A4 façades adjustable 105°-165°	AISI 316 stainless steel grade 1.4401	-	1 5/8	3 7/16	22 1/4	1	
PATROLANG	non-pass-through angle bracket	AISI 304 stainless steel grade 1.4301 EN AW 6082 aluminium	90 3.50	-	58 2 1/4	175 6 7/8	1	
OHANGINT	internal pass-through angle bracket for overhead application	AISI 304 stainless steel grade 1.4301	-	354	86	354	1	
OHANGINTA4	inside pass-through angle bracket for aerial application in A4	AISI 316 stainless steel grade 1.4401	-	13 15/16	3 7/16	13 15/16	1	
OHANGEXT	external pass-through angle bracket for overhead application	AISI 304 stainless steel grade 1.4301	-	326	86	326	1	
OHANGEXTA4	outside pass-through angle bracket for aerial application in A4	AISI 316 stainless steel grade 1.4401	-	12 3/4	3 7/16	12 3/4	1	
OHANBEND	external/internal pass-through angle bracket for overhead application, adjustable 105°-165°	AISI 304 stainless steel grade 1.4301	-	39,5	86	565	1	
OHANBENDA4	external/internal pass-through angle bracket for overhead application, adjustable 105°-165° in A4	AISI 316 stainless steel grade 1.4401	-	1 9/16	3 7/16	22 1/4	1	
ANGSUP	support for PASANGBEND, OHANGINT and OHANGEXT	AISI 304 stainless steel grade 1.4031	-	275	16	0 - 550	1	
ANGSUPA4	support for PASANGBENDA4, OHANGINTA4 and OHANGEXTA4	AISI 316 stainless steel grade 1.4401	-	10 7/8	5/8	0 - 19 3/4	1	
BENDTOOL	adjustable angle bracket bending tool (see page 238)	S235JR zinc plated steel	-	353,5 13 15/16	95 3.75	171 - 353 6 3/4 - 13 15/16	1	

ROPE | CODES AND DIMENSIONS

CODE	description	material	pcs
CABLE	stainless steel rope Ø8 7x7	AISI 316 stainless steel grade 1.4401	1



INFORMATION PLATES AND ACCESSORIES | CODES AND DIMENSIONS

CODE	description	material	pcs
PATROLSTOP	limit switch element	-	1
TARGA _{xy} *	information plate for fall protection systems	stainless steel (AISI 304), plastic	1
TARGAHOR _{xy} *	information plate for PATROL and H-RAIL	stainless steel (AISI 304), plastic	1
TARGAVERT _{xy} *	information plate for VERTIGRIP	stainless steel (AISI 304), plastic	1

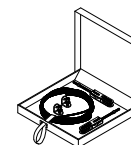
*xy represents the ISO 639-1 language code, see the table below for reference.

EXAMPLE:

TARGAEN information plate for fall protection systems in EN (English)
TARGAHOREN information plate for PATROL and H-RAIL in EN (English)
TARGAVERT EN information plate for VERTIGRIP in EN (English)

PATROLKIT10 | 10 m LIFELINE KIT

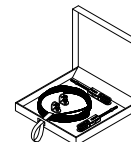
CODE	description	material	
PATROLKIT10	PATROLTERM end element	AISI 304 stainless steel grade 1.4301	2
	SPEAR set of pair of tensioners with absorber	AISI 304 stainless steel grade 1.4301 EN AW 6082 aluminium	1
	CABLE stainless steel rope Ø8 7x7 11 m	AISI 316 stainless steel grade 1.4401	1



Also includes a 22 kN webbing length 0.4 m EN 795/B EN 566 - EN 354.

PATROLKIT15 | 15 m LIFELINE KIT

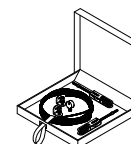
CODE	description	material	
PATROLKIT15	PATROLTERM end element	AISI 304 stainless steel grade 1.4301	2
	SPEAR set of pair of tensioners with absorber	AISI 304 stainless steel grade 1.4301 EN AW 6082 aluminium	1
	CABLE stainless steel rope Ø8 7x7 16 m	AISI 304 stainless steel grade 1.4301	1



Also includes a 22 kN webbing length 0.4 m EN 795/B EN 566 - EN 354.

PATROLKIT30 | 30 m LIFELINE KIT

CODE	description	material	
PATROLKIT30	PATROLTERM end element	AISI 304 stainless steel grade 1.4301	2
	SPEAR set of pair of tensioners with absorber	AISI 304 stainless steel grade 1.4301 EN AW 6082 aluminium	1
	PATROLMED non-pass-through intermediate element	AISI 304 stainless steel grade 1.4301 EN AW 6082 aluminium	1
	CABLE stainless steel rope Ø8 7x7 31 m	AISI 316 stainless steel grade 1.4401	1



Also includes a 22 kN webbing length 0.4 m EN 795/B EN 566 - EN 354.