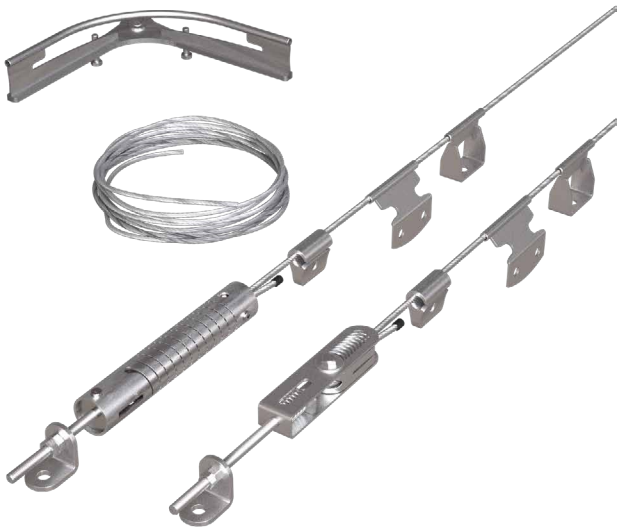
PATROL
HORIZONTAL LIFELINE



MODULAR, SIMPLE, SAFE SYSTEM.

With our PATROL LIFELINE system, horizontal, overhead or façade lifelines, 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

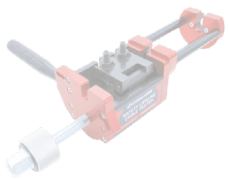
page 235

CANARY
SINGLE-HANDED SHEARS FOR WIRE ROPES

page 236

CRIMPING MACHINES

CRIMP TOOL TEST



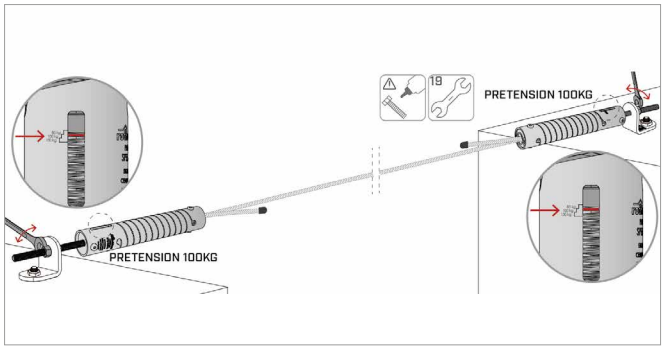
KEY POINTS

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.

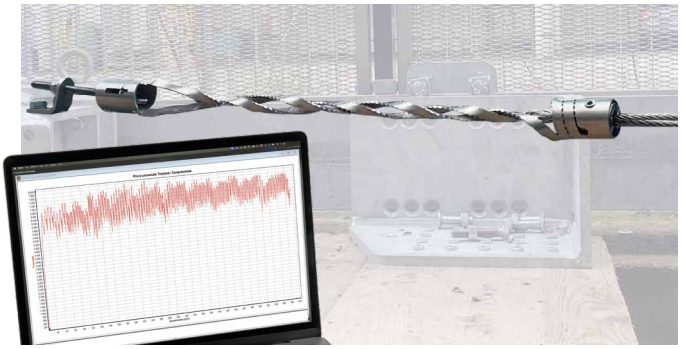
CABLE TENSIONING

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.



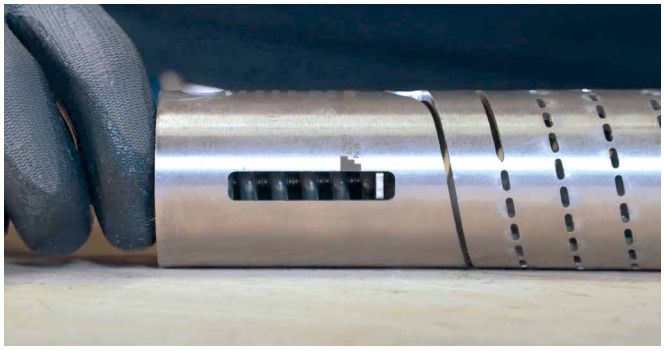
ENERGY ABSORPTION

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.

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 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009

MAXIMUM NUMBER OF USERS

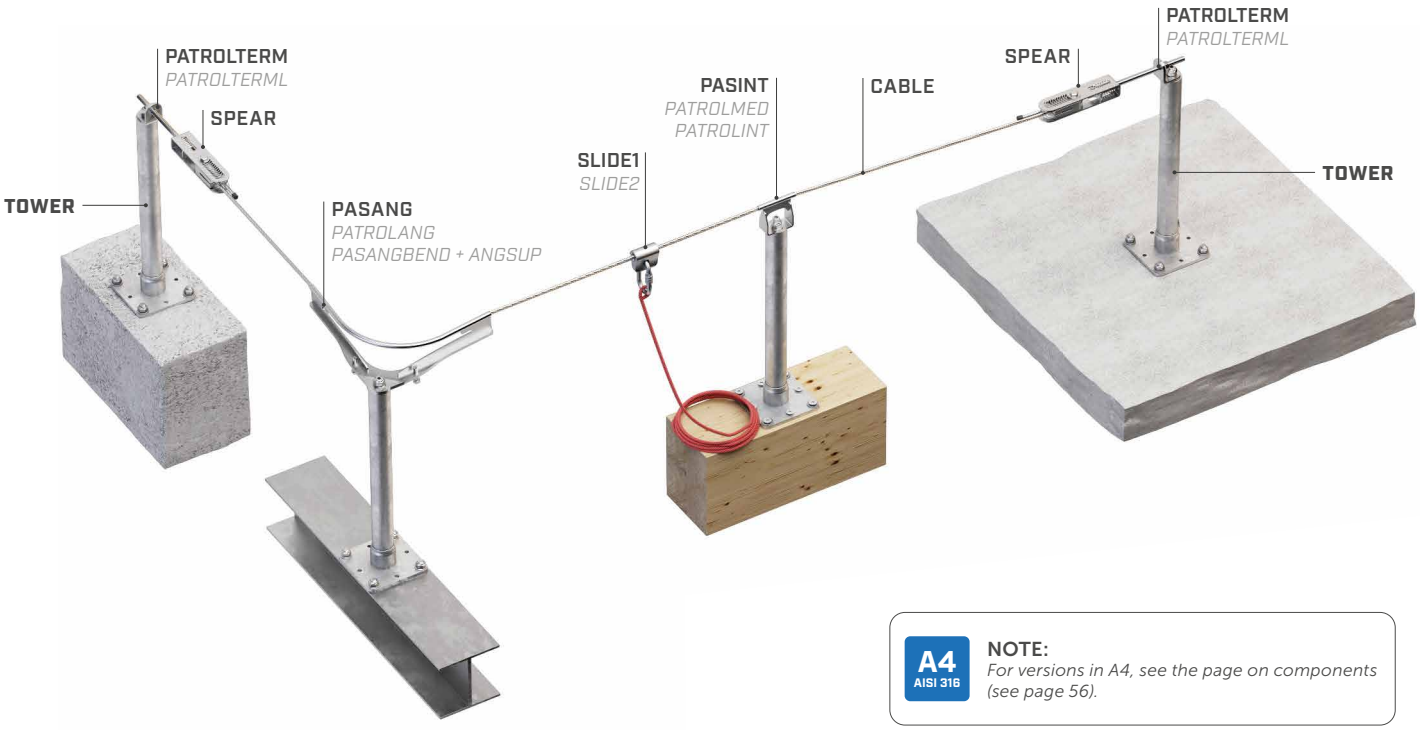
LOAD DIRECTION

TYPES OF APPLICATION

SOFTWARE

BIM VIDEO MANUALS

PATROL LIFELINE COMPONENTS

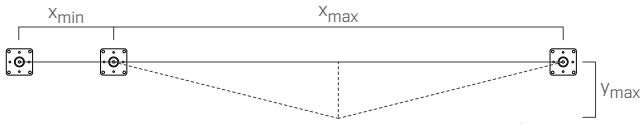


A4 AISI 316 **NOTE:**
For versions in A4, see the page on components (see page 56).

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

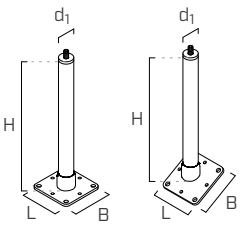


			SPEAR	
			EN 795:2012 C / CEN/TS 16415:2013 / UNI 11578:2015 C	AS/NZS 1891.2:2001 / AS/NZS 1891.4:2009
users		no.		
minimum span	x_{min}	[m]	2	2
maximum span	x_{max}	[m]	15	15
maximum deflection	y_{max}	[m]	3,60	3,60

** 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 | CODES AND DIMENSIONS

CODE	material	d_1		B		H		L		pcs
		[mm]	*[in]*	[mm]	*[in]*	[mm]	*[in]*	[mm]	*[in]*	
TOWER300	S235JR zinc plated steel S235 HDG	48	*1.89*	150	*6*	300	*11 3/4*	150	*6*	1
TOWER400		48	*1.89*	150	*6*	400	*15 3/4*	150	*6*	1
TOWER500		48	*1.89*	150	*6*	500	*19 3/4*	150	*6*	1
TOWER600		48	*1.89*	150	*6*	600	*23 5/8*	150	*6*	1
TOWER700		48	*1.89*	150	*6*	700	*27 1/2*	150	*6*	1
TOWER800		48	*1.89*	150	*6*	800	*31 1/2*	150	*6*	1
TOWER22500		48	*1.89*	150	*6*	500	*19 3/4*	150	*6*	1



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

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 16415:2013 | UNI 11578:2015 C | AS/NZS 1891.2:2001 | AS/NZS 1891.4:2009

MAXIMUM NUMBER OF USERS

LOAD DIRECTION

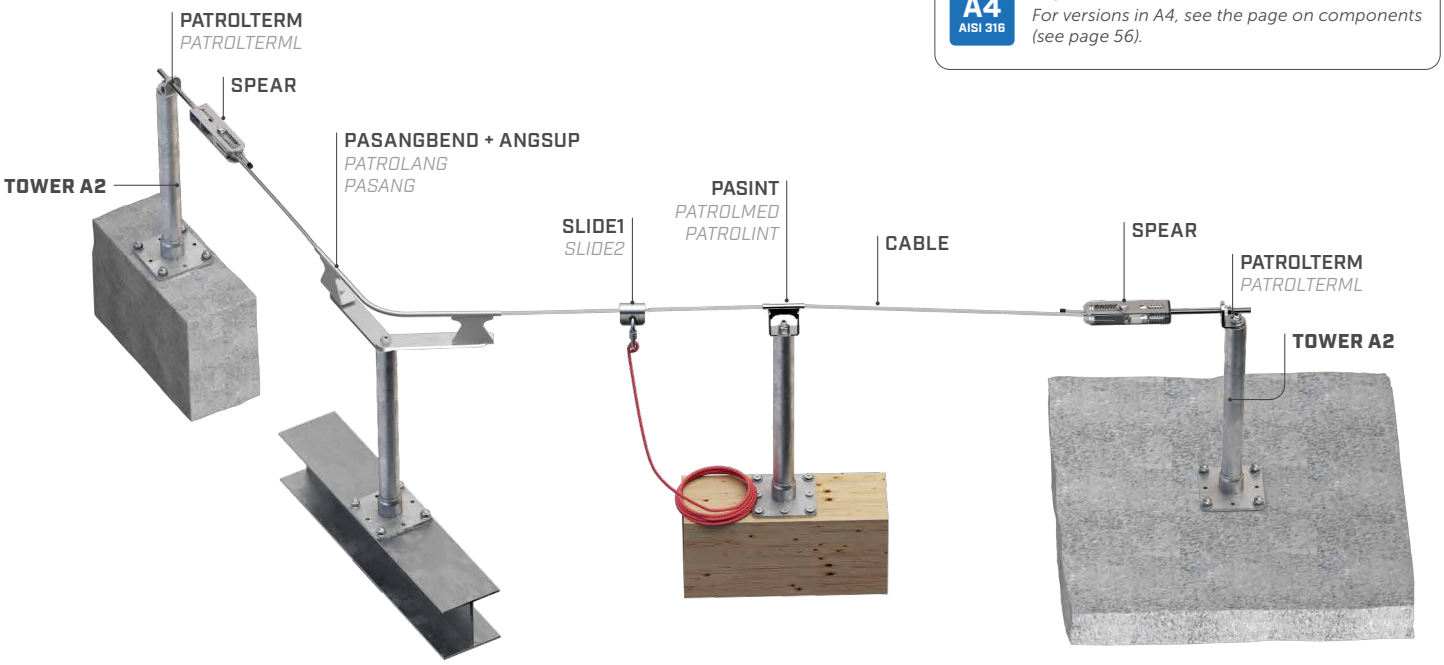
TYPES OF APPLICATION

SOFTWARE

BIM | VIDEO | MANUALS

PATROL LIFELINE COMPONENTS

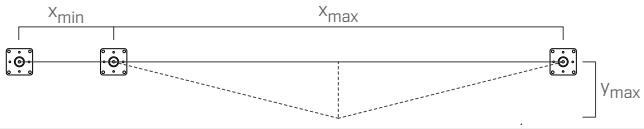
A4 AISI 316 **NOTE:**
For versions in A4, see the page on components (see page 56).



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

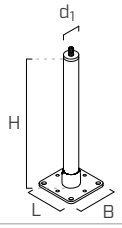


			SPEAR	
			EN 795:2012 C / CEN/TS 16415:2013 / UNI 11578:2015 C	AS/NZS 1891.2:2001 / AS/NZS 1891.4:2009
users		no.		
minimum span	x_{min}	[m]	2	2
maximum span	x_{max}	[m]	15	15
maximum deflection	y_{max}	[m]	3,60	3,60

** 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	AISI 304 stainless steel grade 1.4301	A2 AISI 304	48 *1.89*	150 *6*	300 *11 3/4*	150 *6*	1
TOWERA2400			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.

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 16415:2013 | UNI 11578:2015 C

MAXIMUM NUMBER OF USERS

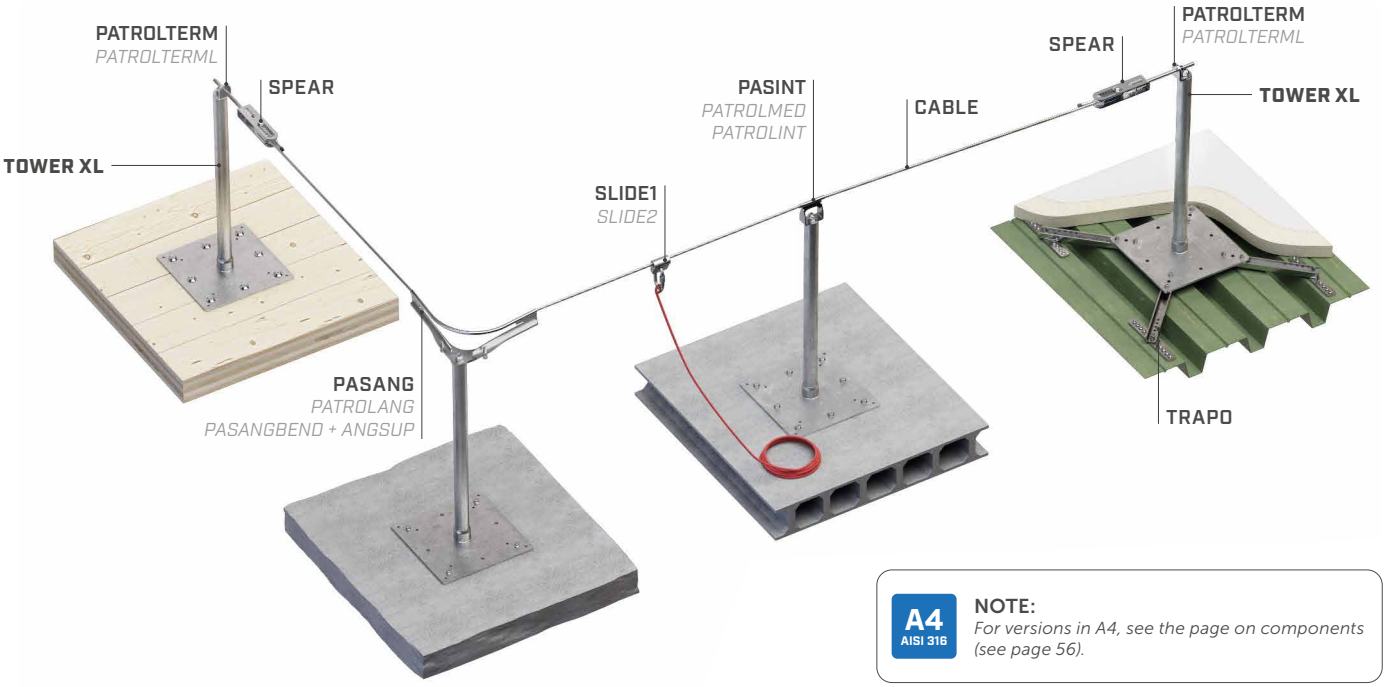
LOAD DIRECTION

TYPES OF APPLICATION

SOFTWARE

BIM | VIDEO | MANUALS

PATROL LIFELINE COMPONENTS

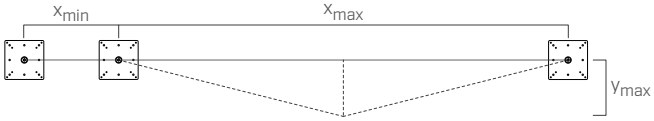


A4 AISI 316 **NOTE:**
For versions in A4, see the page on components (see page 56).

TECHNICAL DATA*

substructure	minimum thickness	fasteners
CLT	100 mm	VGS (EVO) Ø11 HUS Ø10
C20/25	110 mm	AB7 M10 SKR Ø10 INA 5.8 M10 VIN - FIX

substructure	minimum thickness	fasteners
C45/55	30 mm	BEF TOWERXL1 Ø10
	0,75 mm	TRAPO SET

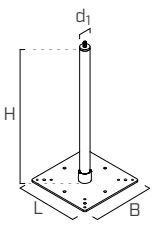


			SPEAR
			EN 795:2012 C · CEN/TS 16415:2013 · UNI 11578:2015 C
users		no.	
minimum span	x_{min}	[m]	2
maximum span	x_{max}	[m]	15
maximum deflection	y_{max}	[m]	3,6

** 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 XL | CODES AND DIMENSIONS

CODE	material	d_1 [mm]	d_1 [in]	B [mm]	B [in]	H [mm]	H [in]	L [mm]	L [in]	pcs
TOWERXL300	S235JR zinc plated steel S235 HDG	48	1.89	350	13 3/4	300	11 3/4	350	13 3/4	1
TOWERXL400		48	1.89	350	13 3/4	400	15 3/4	350	13 3/4	1
TOWERXL500		48	1.89	350	13 3/4	500	19 3/4	350	13 3/4	1
TOWERXL600		48	1.89	350	13 3/4	600	23 5/8	350	13 3/4	1
TOWERXL700		48	1.89	350	13 3/4	700	27 1/2	350	13 3/4	1
TOWERXL800		48	1.89	350	13 3/4	800	31 1/2	350	13 3/4	1
TOWERXL1000		48	1.89	350	13 3/4	1000	39 3/8	350	13 3/4	1



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

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 16415:2013 | UNI 11578:2015 C | AS/NZS 1891.4:2009 | AS/NZS 1891.2:2001 | BS 8610:2017 A3/A5 | AS/NZS 5532:2013 | 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.

MAXIMUM NUMBER OF USERS

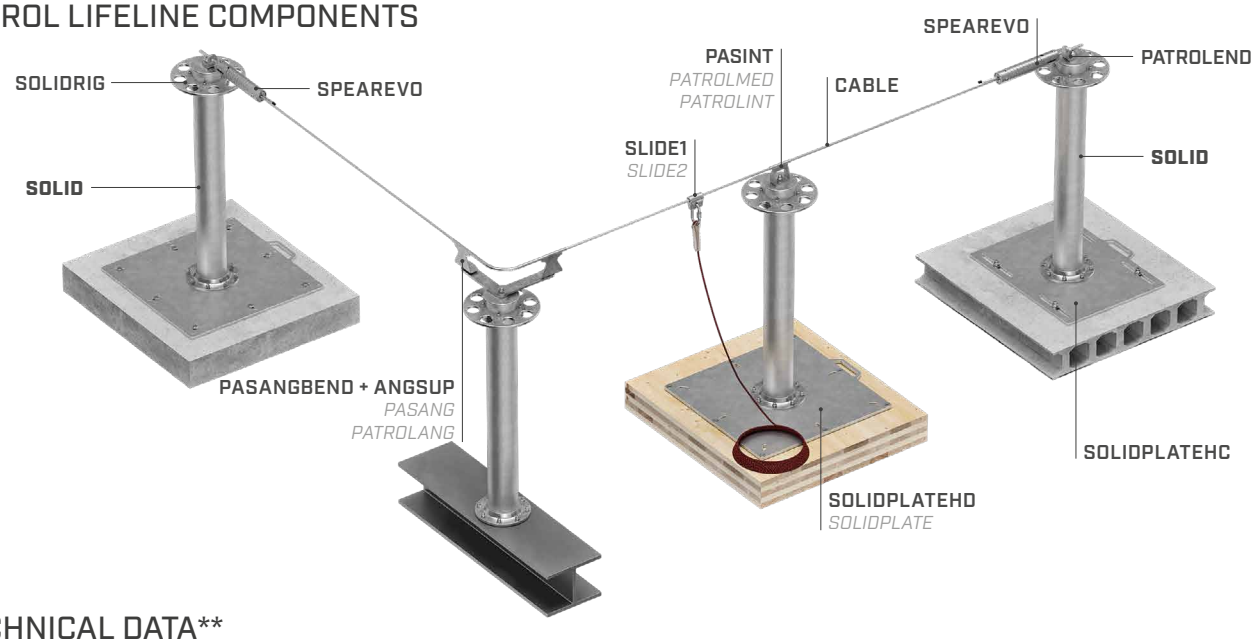
LOAD DIRECTION

TYPES OF APPLICATION

SOFTWARE

BIM | VIDEO | MANUALS

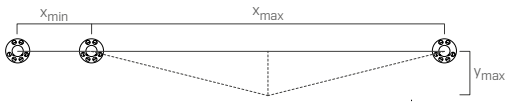
PATROL LIFELINE COMPONENTS



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

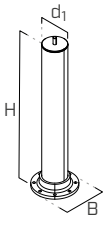
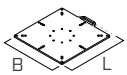
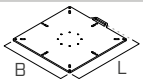
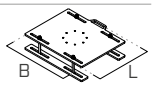
substructure	minimum thickness	fasteners
C20/25	140 mm	AB1 Ø12
		SKR (EVO) Ø12
		INA Ø12 8.8 VIN-FIX



			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 8610:2017 A3/A5 / AS/NZS 5532:2013	ANSI* Z359.18 - 2017 A
users		no.	4	5	2	1
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	alu 6082	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	alu 6082	- -	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	

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 16415:2013 | UNI 11578:2015 C | AS/NZS 1891.4:2009 | AS/NZS 1891.2:2001

MAXIMUM NUMBER OF USERS

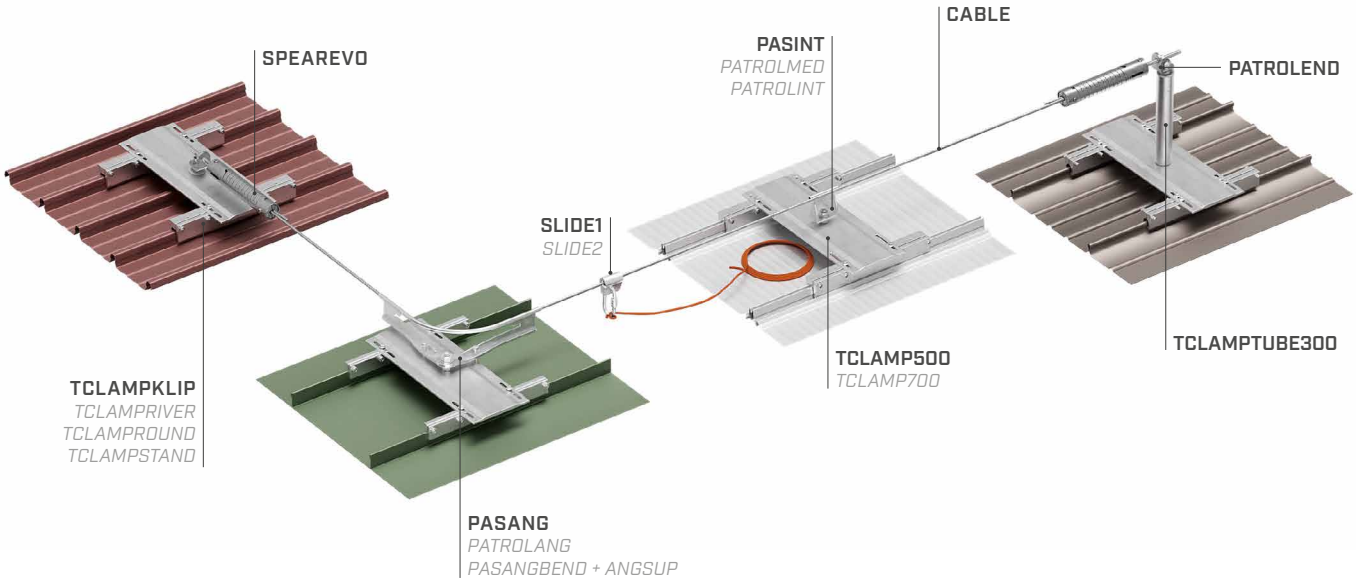
LOAD DIRECTION

TYPES OF APPLICATION

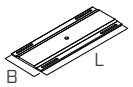
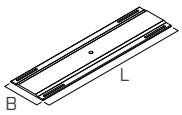
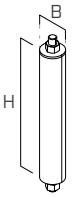
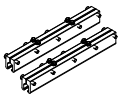
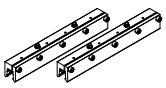
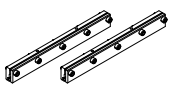
SOFTWARE

BIM | VIDEO | MANUALS

PATROL LIFELINE COMPONENTS



T-CLAMP | CODES AND DIMENSIONS

CODE	description	material		B [mm] [in]	H [mm] [in]	L [mm] [in]	pcs	
TCLAMP500	universal plate for small and medium spans between seams	EN AW-6082-T6	alu 6082	190 *7 1/2*	- -	515 *20 1/4*	1	
TCLAMP700	universal plate for large spans between seams	EN AW-6082-T6	alu 6082	190 *7 1/2*	- -	760 *29 15/16*	1	
TCLAMPTUBE300	optional spacer to overcome obstacles	EN AW-6060-T6/ AISI 304	alu 6060 A2 AISI 304	50 *1 15/16*	300 *11 3/4*	- -	1	
TCLAMPKLIP	fastening clamps set for Klip-Lok type roofs	EN AW-6060-T6		- -	- -	- -	1	
TCLAMPRIVER	fastening clamps set for Riverclack type roofs	EN AW-6060-T6		- -	- -	- -	1	
TCLAMPROUND	fastening clamps set for round standing seam roofs	EN AW-6060-T6	alu 6060	- -	- -	- -	1	-
TCLAMPSTAND	fastening clampsset for standing seam roofs	EN AW-6060-T6		- -	- -	- -	1	

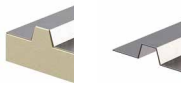
PATROL + SHIELD | SHIELD 2

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.

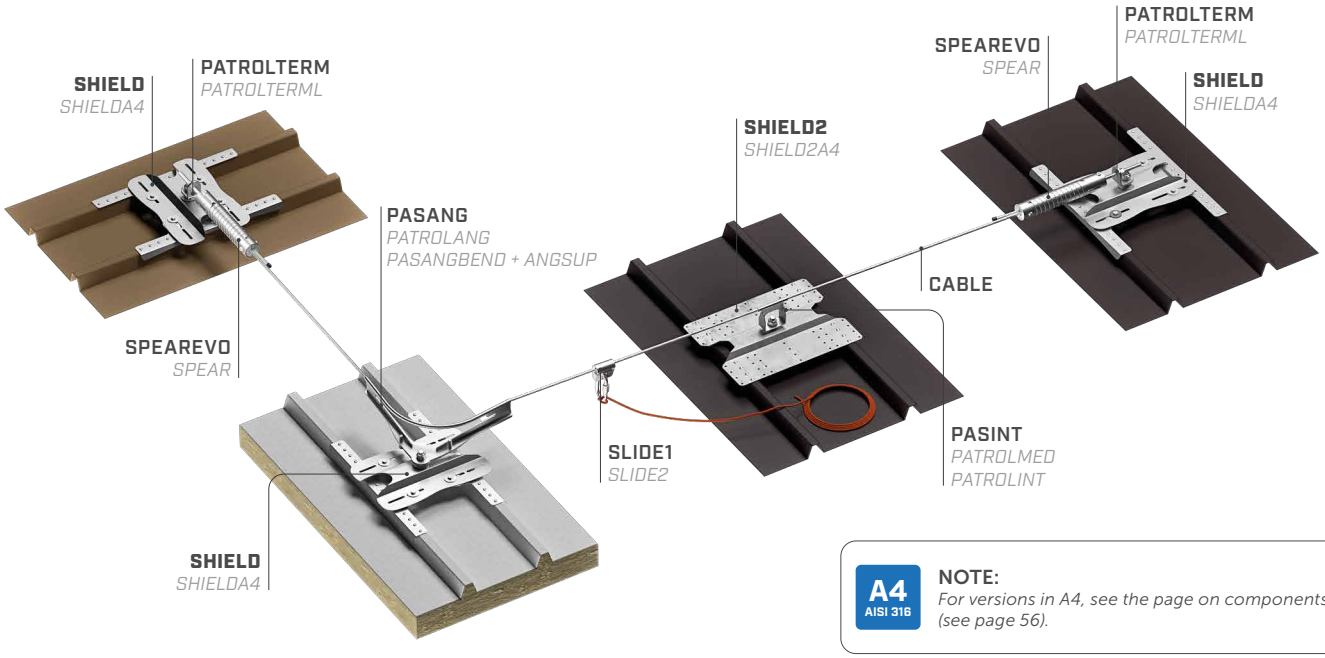
FUNCTIONAL
SHIELD can be used as a start, end or corner lifeline; SHIELD 2 is ideal as a straight intermediate point.

	EN 795:2012 C · CEN/TS 16415:2013 · UNI 11578:2015 C · AS/NZS 1891.2:2001 · AS/NZS 1891.4:2009
	
MAXIMUM NUMBER OF USERS	2 - 5
LOAD DIRECTION	
TYPES OF APPLICATION	

SOFTWARE

BIM · VIDEO · MANUALS

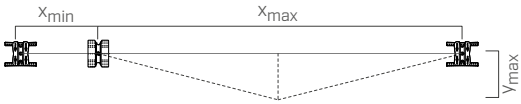
PATROL LIFELINE COMPONENTS



A4 AISI 316 **NOTE:**
For versions in A4, see the page on components (see page 56).

TECHNICAL DATA*

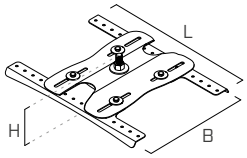
substructure		minimum thickness	fastening systems included
	Fe	0,5 mm	SHIELD: rivet 6,3 x 20,2 mm with EPDM washer (x 32) SHIELD2: rivet 6,3 x 20,2 mm with EPDM washer (x 16)
	Fe	0,5 mm	
	Al	1 mm	
	Al	1 mm	

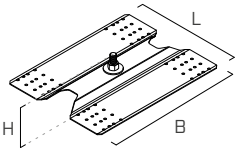


			SPEAR				SPEAREVO				
			EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009	EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009
users		no.										
minimum span	x_{min}	[m]	2			2		2			2	
maximum span	x_{max}	[m]	7,5			7,5		15			15	
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	
SHIELDA4	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	
SHIELD2A4	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.

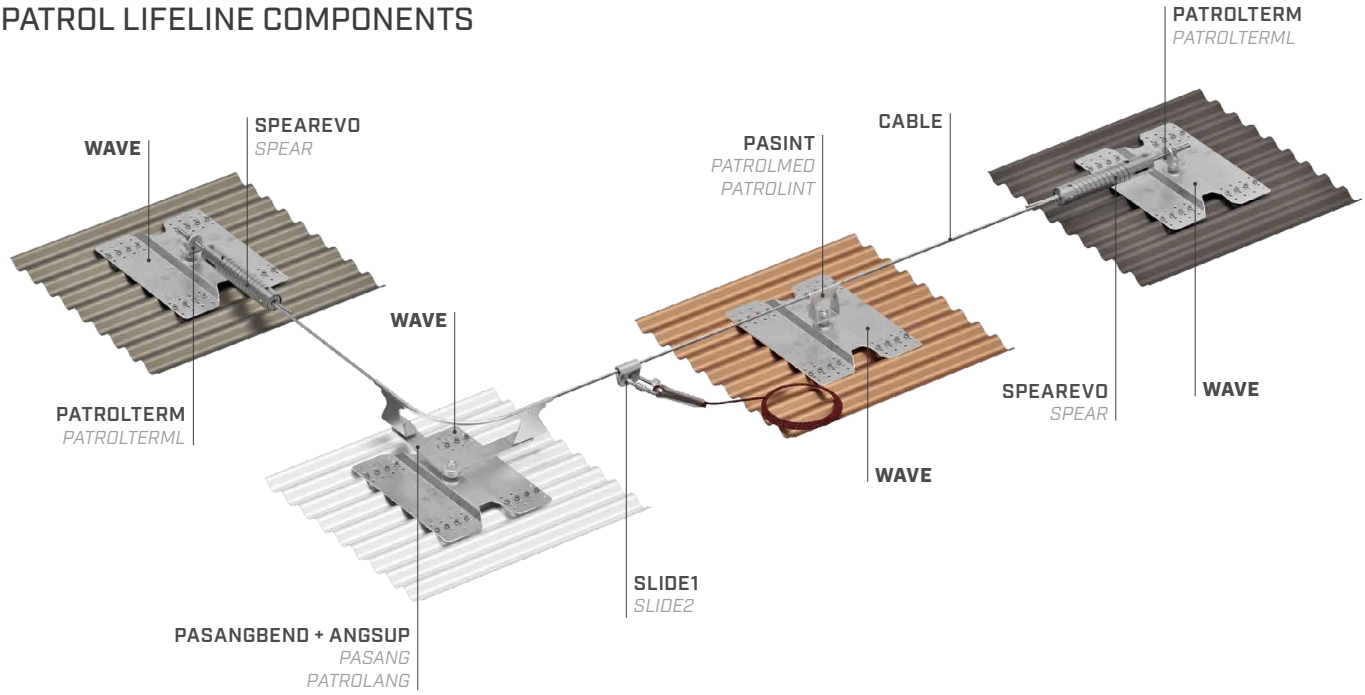
FUNCTIONAL
WAVE can be used as either an end, intermediate or angular support for lifeline systems.

	EN 795:2012 C · CEN/TS 16415:2013 · UNI 11578:2015 C
	
MAXIMUM NUMBER OF USERS	
LOAD DIRECTION	
TYPES OF APPLICATION	

SOFTWARE

BIM · VIDEO · MANUALS

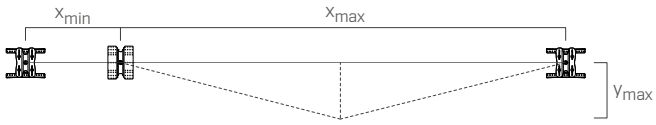
PATROL LIFELINE COMPONENTS



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

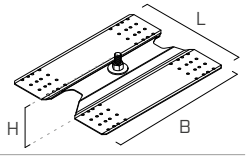
Wave pitch: 76 mm.



			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	A2 AISI 304	420 *16 9/16*	65 *2 9/16*	322 *12 11/16*	1	

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 16415:2013 | UNI 11578:2015 C

MAXIMUM NUMBER OF USERS

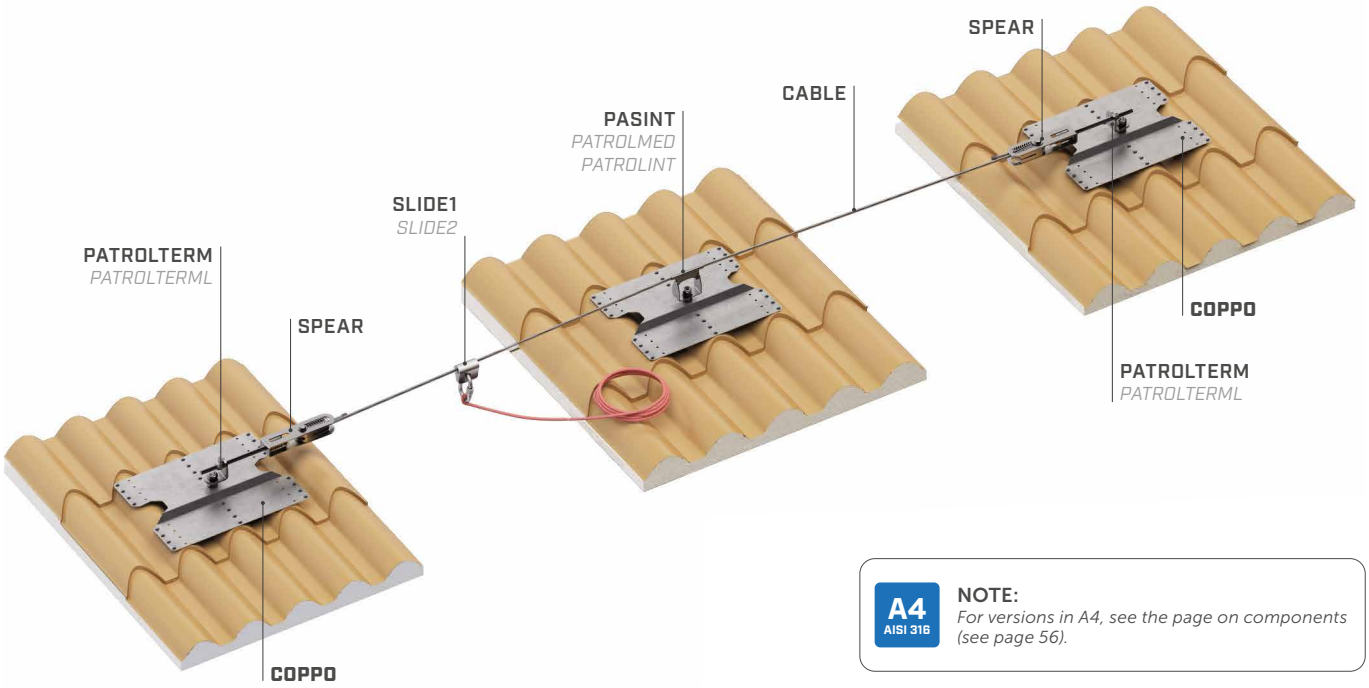
LOAD DIRECTION

TYPES OF APPLICATION

SOFTWARE

BIM | VIDEO | MANUALS

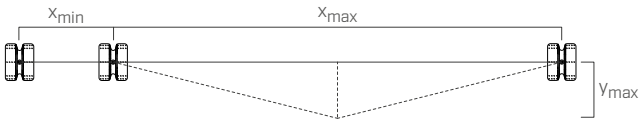
PATROL LIFELINE COMPONENTS



A4 AISI 316 **NOTE:**
For versions in A4, see the page on components (see page 56).

TECHNICAL DATA*

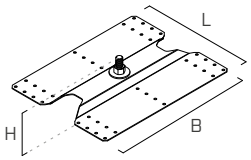
substructure		minimum thickness	fastening systems included
	Fe	0,5 mm	rivet 6,3 x 20,2 mm with EPDM washer (x 24)
	Al	0,7 mm	



			SPEAR
			EN 795:2012 C · CEN/TS 16415:2013 · 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	

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.

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

MAXIMUM NUMBER OF USERS

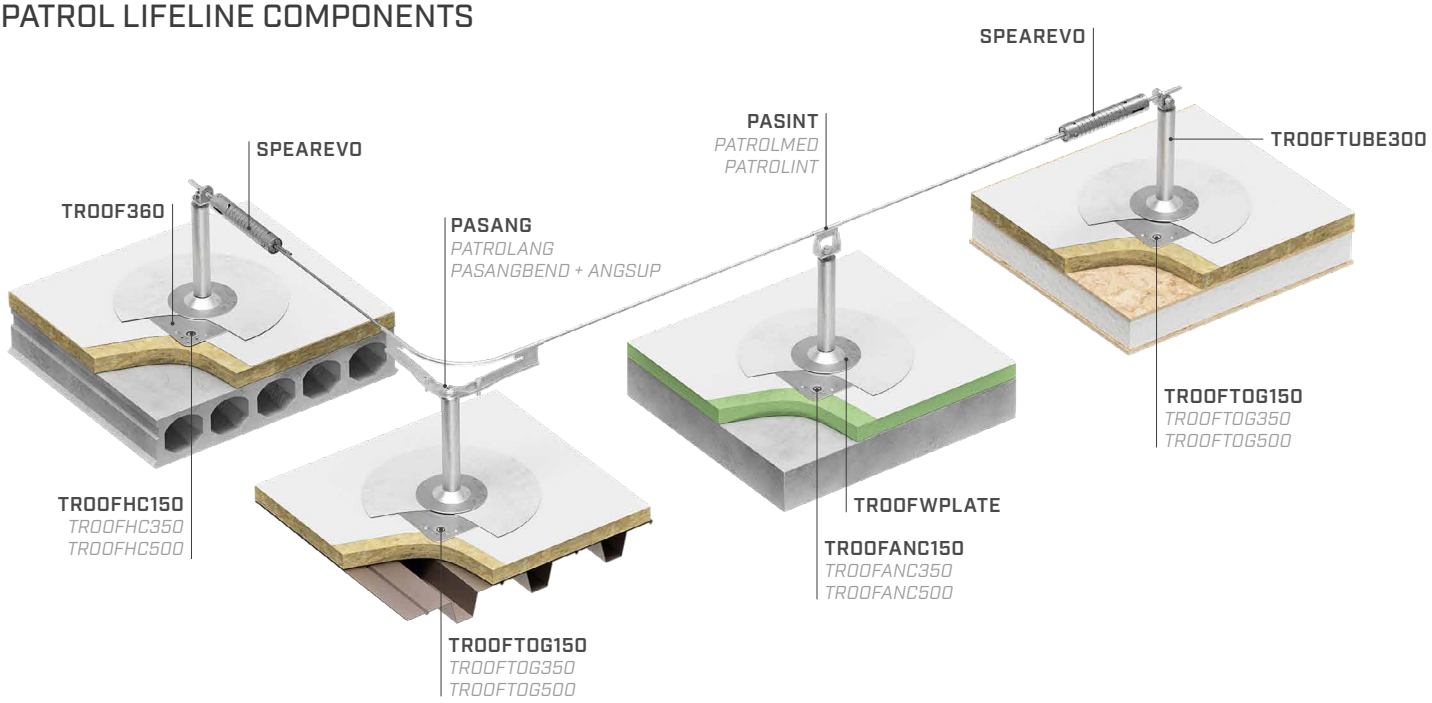
LOAD DIRECTION

TYPES OF APPLICATION

SOFTWARE

BIM | VIDEO | MANUALS

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	toggle bolt kit with cup washer	bright zinc plated carbon steel	S235 HDG	-	150	-	-	1
TROOFTOG350				-	350	-	-	1
TROOFTOG500				-	500	-	-	1
TROOFHC150	fastening kit for substructure in aerated concrete	bright zinc plated carbon steel		-	150	-	-	1
TROOFHC350				-	350	-	-	1
TROOFHC500				-	500	-	-	1
TROOFANC150	fastening kit for concrete substructure	bright zinc plated carbon steel		-	150	-	-	1
TROOFANC350				-	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.

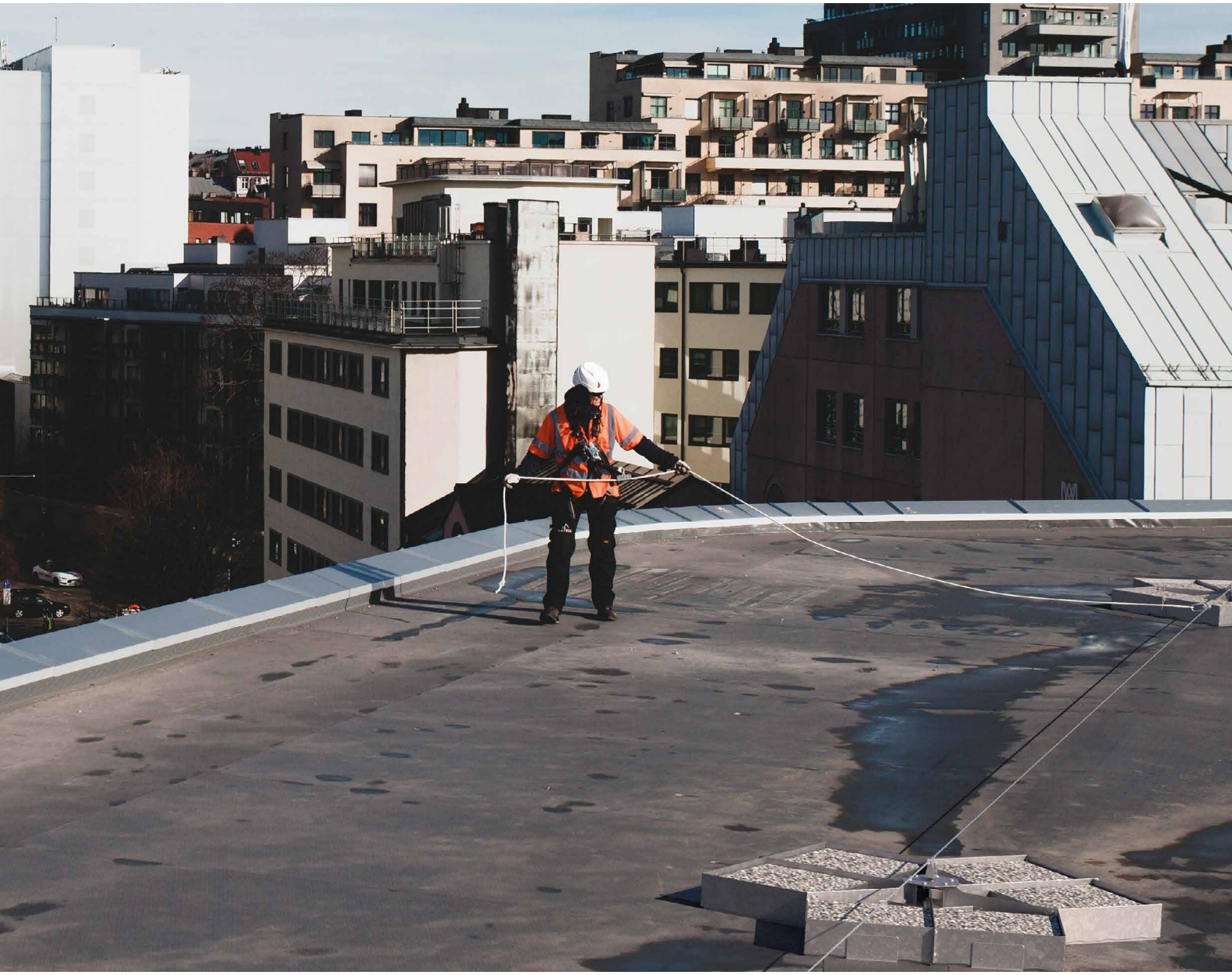
FLAT ROOFS
Designed for flat roofs with inclines up to 5° with PVC, TPO or bituminous final covering, with or without gravel.

SIMPLE
Concrete ballast slabs in standard sizes simplify the installation.

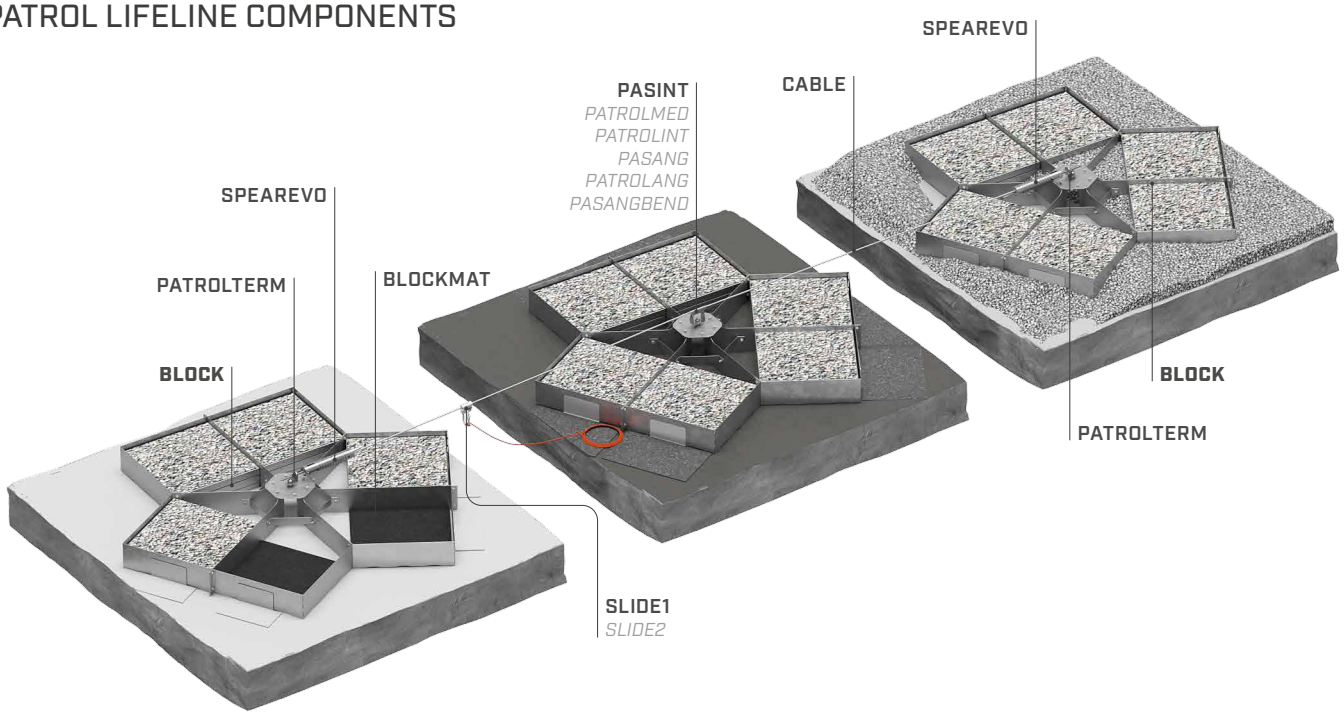
	EN 795:2012 C · CEN/TS 16415:2013 · UNI 11578:2015 C
	PVC · TPO · BYTUM
MAXIMUM NUMBER OF USERS	
LOAD DIRECTION	
TYPES OF APPLICATION	

SOFTWARE

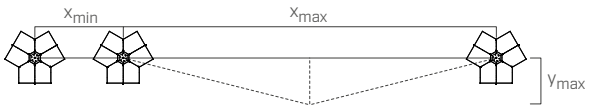
BIM · VIDEO · MANUALS



PATROL LIFELINE COMPONENTS



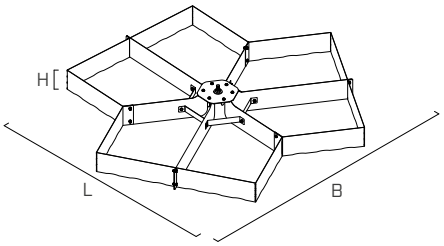
TECHNICAL DATA*



			SPEAREVO
			EN 795:2012 C / CEN/TS 16415:2013 / UNI 11578:2015 C
users		no.	
minimum span	x_{min}	[m]	2
maximum span	x_{max}	[m]	10
maximum deflection	y_{max}	[m]	2

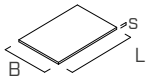
** The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified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

EN 795:2012 C | CEN/TS 16415:2013 | UNI 11578:2015 C | AS/NZS 1891.4:2009 | AS/NZS 1891.2:2001

CSA Z259.16 READY
Validated through testing

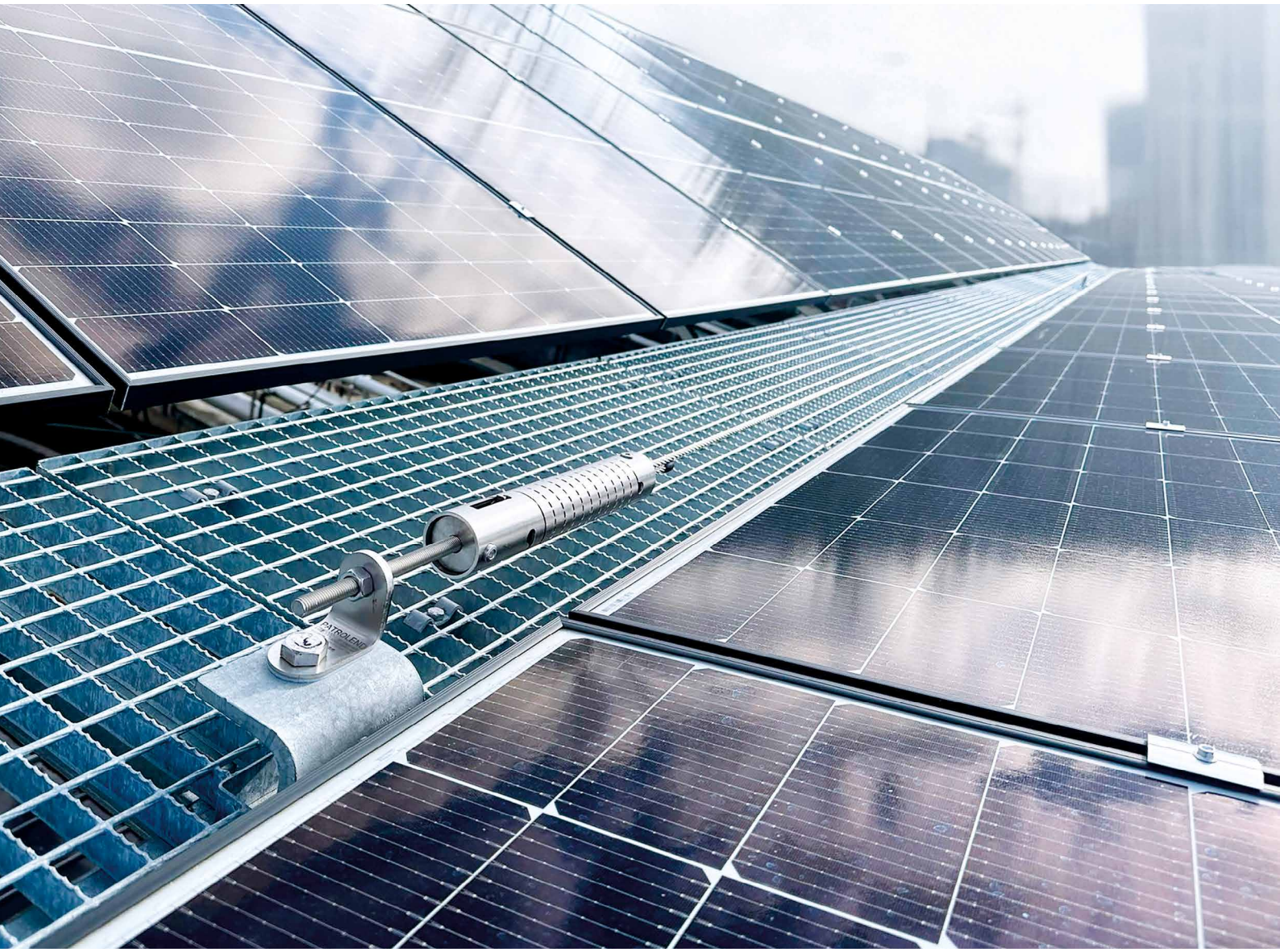
MAXIMUM NUMBER OF USERS

LOAD DIRECTION

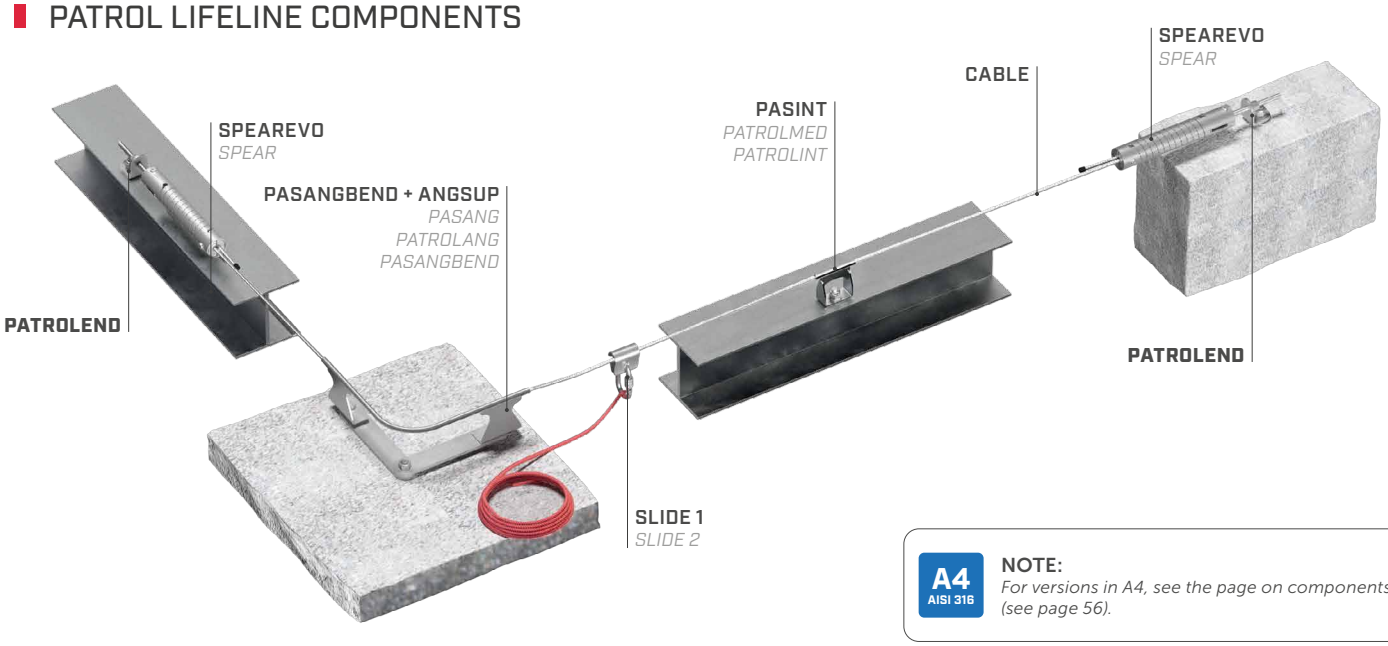
TYPES OF APPLICATION

SOFTWARE

BIM | VIDEO | MANUALS



PATROL LIFELINE COMPONENTS



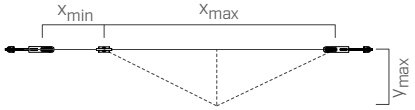
A4 AISI 316 **NOTE:**
For versions in A4, see the page on components (see page 56).

TECHNICAL DATA*

PATROLEND

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

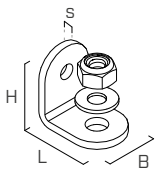
substructure	minimum thickness	fasteners
S235JR	5 mm	DIN 933 M16 DIN 125-1A M16 MUT AI 985 M16



			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	
PATROLENDA4	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 16415:2013 | UNI 11578:2015 C | AS/NZS 1891.4:2009 | AS/NZS 1891.2:2001 | CSA Z259.16

CSA Z259.16 READY
Validated through testing

MAXIMUM NUMBER OF USERS

LOAD DIRECTION

TYPES OF APPLICATION

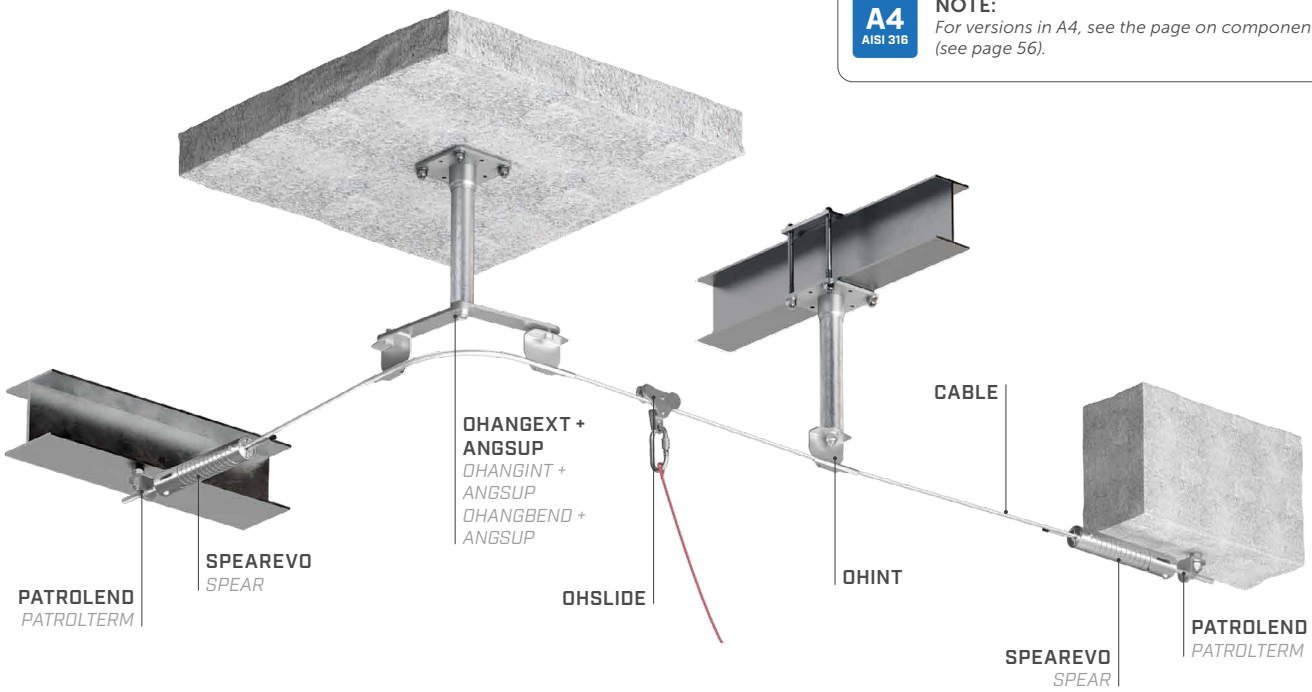
SOFTWARE

BIM | VIDEO | MANUALS

PATROL LIFELINE COMPONENTS

A4 AISI 316

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



TECHNICAL DATA*

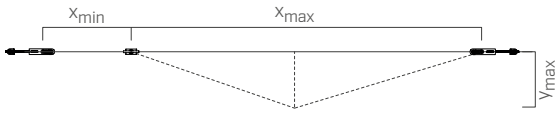
PATROLEND | PATROLTERM

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.*

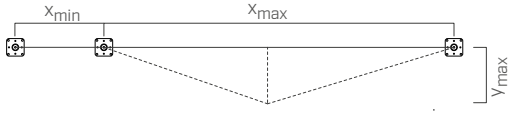
PATROL + PATROLEND



			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.	4			4 (SPAN)		4			4 (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	

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.	4			4 (SPAN)		4			4 (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]	1,80			1,80		4,00			4,00	

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

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 16415:2013 | UNI 11578:2015 C | AS/NZS 1891.4:2009 | AS/NZS 1891.2:2001 | CSA Z259.16

CSA Z259.16 READY
Validated through testing

MAXIMUM NUMBER OF USERS

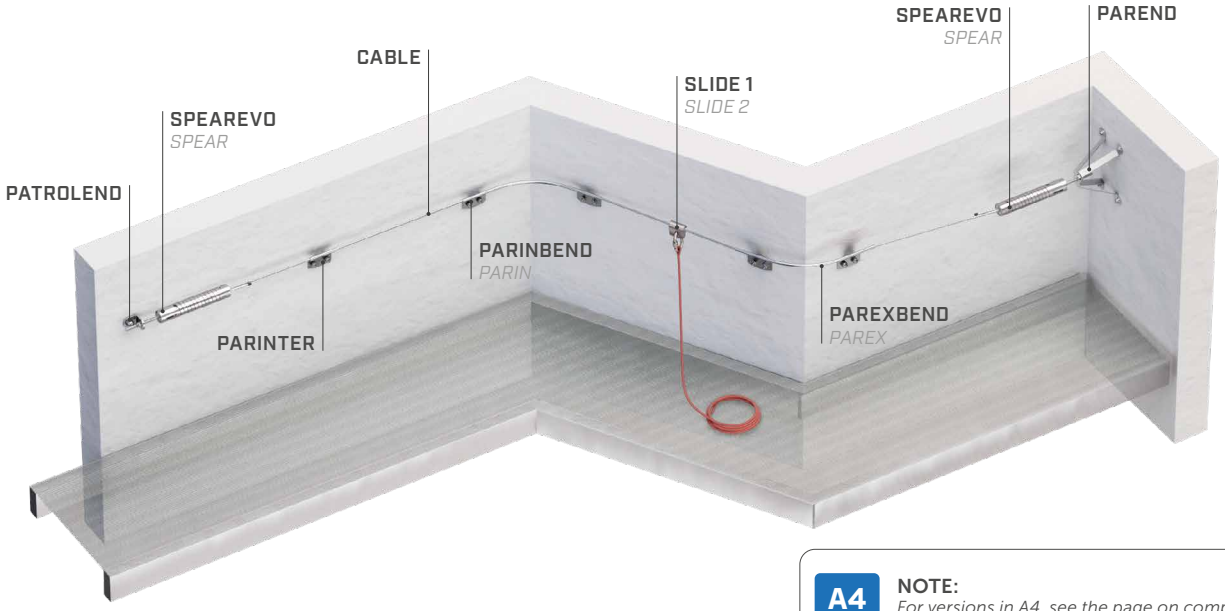
LOAD DIRECTION

TYPES OF APPLICATION

SOFTWARE

BIM | VIDEO | MANUALS

PATROL LIFELINE COMPONENTS



A4 AISI 316 **NOTE:**
For versions in A4, see the page on components (see page 56).

TECHNICAL DATA*

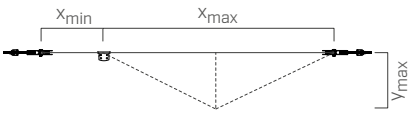
PATROLEND | PATROLENDA4

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 | PARENDA4

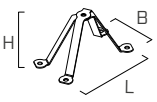
substructure	minimum thickness	fasteners
C20/25	98 mm	INA 5.8 M12 VIN-FIX
	130 mm	SKR Ø12
	140 mm	AB1 M12
S235JR	5 mm	DIN 933 M12 DIN 125-1A M12 MUT AI 985 M12

** 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.*



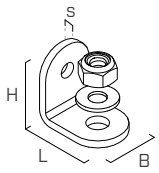
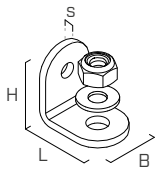
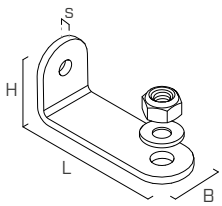
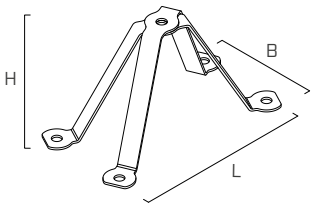
			SPEAR				SPEAREVO				
			EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009	EN 795:2012 C	CEN/TS 16415:2013	UNI 11578:2015 C	AS/NZS 1891.2:2001	AS/NZS 1891.4:2009
users		no.	4			4 (SPAN)		4			4 (SPAN)	
minimum span	x_{min}	[m]	2			2		2			2	
maximum span	x_{max}	[m]	7,5			7,5		15			15	
maximum deflection	y_{max}	[m]	1,40			1,40		3,40			3,40	

END ELEMENTS | CODES AND DIMENSIONS

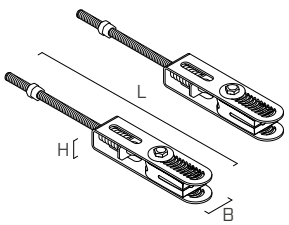
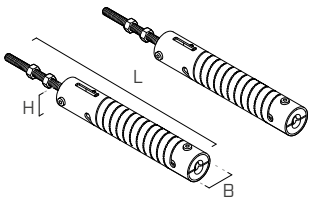
CODE	description	material		B [mm] [in]	H [mm] [in]	L [mm] [in]	s [mm] [in]	pcs	
PATROLEND	end element	AISI 304 stainless steel grade 1.4301	A2 AISI 304	40 *1 9/16*	61 *2 3/8*	66 *2 5/8*	6 *0.24*	1	
PATROLENDA4	A4 end element	AISI 316 stainless steel grade 1.4401	A4 AISI 316	40 *1 9/16*	61 *2 3/8*	66 *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	
PARENDA4	A4 end element	AISI 316 stainless steel grade 1.4401	A4 AISI 316	300 *11 3/4*	150 *6*	300 *11 3/4*	- -	1	

PATROL | components

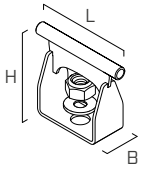
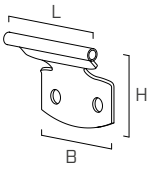
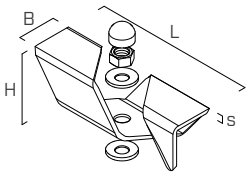
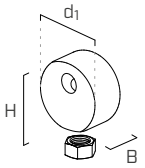
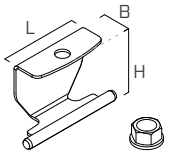
END ELEMENTS | CODES AND DIMENSIONS

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	
PATROLENDA4	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	
PARENDA4	A4 end element with 4 feet per side	AISI 316 stainless steel grade 1.4401						

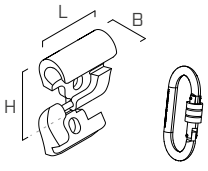
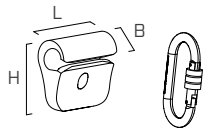
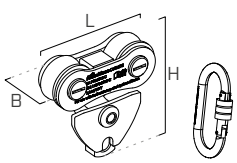
TENSIONERS AND ENERGY ABSORBERS | CODES AND DIMENSIONS

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	
SPEARA4	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	
SPEAREVOA4	set of pair of tensioners with A4 absorber	AISI 316 stainless steel grade 1.4401						

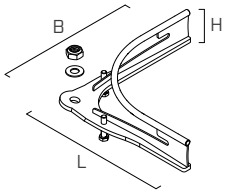
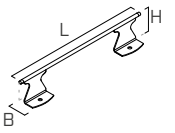
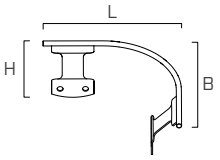
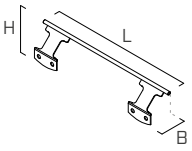
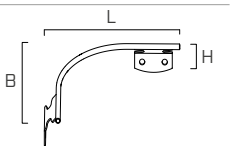
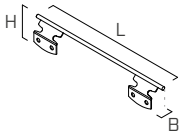
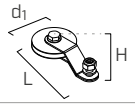
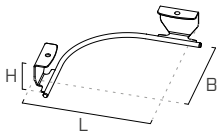
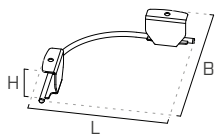
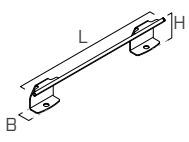
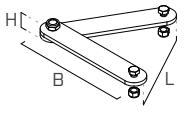
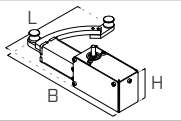
INTERMEDIATE ELEMENTS | CODES AND DIMENSIONS

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							

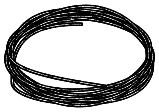
SLIDING DEVICES | CODES AND DIMENSIONS

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 *11 3/4*	69 *2 11/16*	300 *11 3/4*	1	
PASANGA4	A4 pass-through angle bracket	AISI 316 stainless steel grade 1.4401						
PASANGBEND	pass-through angle bracket for adjustable supports 105°-165°	AISI 304 stainless steel grade 1.4301	- -	54,5 *2 3/16*	102 *4*	565 *22 1/4*	1	
PASANGBENDA4	pass-through angle bracket for adjustable A4 supports 105°-165°	AISI 316 stainless steel grade 1.4401						
PAREX	external pass-through angle bracket for façades	AISI 304 stainless steel grade 1.4301	- -	326 *12 3/4*	116 *4 9/16*	326 *12 3/4*	1	
PAREXA4	external pass-through angle bracket for A4 façades	AISI 316 stainless steel grade 1.4401						
PAREXBEND	external pass-through angle bracket for façades adjustable 105°-165°	AISI 304 stainless steel grade 1.4301	- -	72 *2 13/16*	116 *4 9/16*	565 *22 1/4*	1	
PAREXBENDA4	external pass-through angle bracket for A4 façades adjustable 105°-165°	AISI 316 stainless steel grade 1.4401						
PARIN	internal pass-through angle bracket for façades	AISI 304 stainless steel grade 1.4301	- -	357 *14*	88 *3 7/16*	357 *14*	1	
PARINA4	internal pass-through angle bracket for A4 façades	AISI 316 stainless steel grade 1.4401						
PARINBEND	internal pass-through angle bracket for façades adjustable 105°-165°	AISI 304 stainless steel grade 1.4301	- -	42 *1 5/8*	87 *3 7/16*	565 *22 1/4*	1	
PARINBENDA4	internal pass-through angle bracket for A4 façades adjustable 105°-165°	AISI 316 stainless steel grade 1.4401						
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 *13 15/16*	86 *3 7/16*	354 *13 15/16*	1	
OHANGINTA4	inside pass-through angle bracket for aerial application in A4	AISI 316 stainless steel grade 1.4401						
OHANGEXT	external pass-through angle bracket for overhead application	AISI 304 stainless steel grade 1.4301	- -	326 *12 3/4*	86 *3 7/16*	326 *12 3/4*	1	
OHANGEXTA4	outside pass-through angle bracket for aerial application in A4	AISI 316 stainless steel grade 1.4401						
OHANBEND	external/internal pass-through angle bracket for overhead application, adjustable 105°-165°	AISI 304 stainless steel grade 1.4301	- -	39,5 *1 9/16*	86 *3 7/16*	565 *22 1/4*	1	
OHANGBENDA4	external/internal pass-through angle bracket for overhead application, adjustable 105°-165° in A4	AISI 316 stainless steel grade 1.4401						
ANGSUP	support for PASANGBEND, OHANGINT and OHANGEXT	AISI 304 stainless steel grade 1.4031	- -	275 *10 7/8*	16 *5/8*	0 - 550 *0 - 19 3/4*	1	
ANGSUPA4	support for PASANGBENDA4, OHANGINTA4 and OHANGEXTA4	AISI 316 stainless steel grade 1.4401						
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

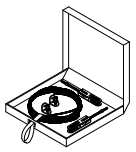
CODE	description	material	pcs
PATROLSTOP	limit switch element	-	1
TARGAxy*	information plate for fall protection systems	stainless steel (AISI 304), plastic	1
TARGAHORxy*	information plate for PATROL and H-RAIL	stainless steel (AISI 304), plastic	1
TARGAVERTxy*	information plate for VERTIGRIP	stainless steel (AISI 304), plastic	1

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

EXAMPLE:

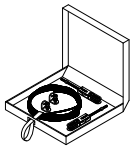
TARGAEN	information plate for fall protection systems in EN (English)
TARGAHOREN	information plate for PATROL and H-RAIL in EN (English)
TARGAVERT EN	information plate for VERTIGRIP in EN (English)

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	

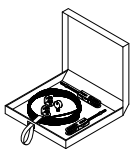
Also includes a 22 kN webbing length 0.4 m EN 795/B EN 566 - EN 354.

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.