SINGLE ANCHOR POINTS AND ENGINEERED SYSTEMS

SALESGUIDES • IMPERIAL

FALL PROTECTION SYSTEMS:

- SINGLE ANCHOR POINTS
- HORIZONTAL LIFELINE SYSTEMS

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XSPLATFORMS' ANCHOR POINTS FOR ROOF

OUR ROOF BASE PLATES

With our modular system, you can easily install fall protection on most roof types using one of just three different bases: XSBase plate, XSMD or XTrusion. The application of the base plates is outlined in the matrix below. All the components in our range are compatible with these three base plates, so that you can create a single anchor point or a horizontal lifeline on almost every roof surface.

XSBASE PLATE

Art. 11110

The XSBase plate is an aluminium casted plate with a stainless steel insert that forms the connection between the roofing material and an attachment point, which can be installed on the XSBase plate.

XSMD

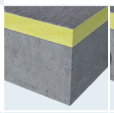
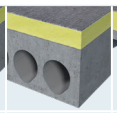
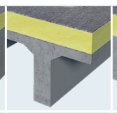
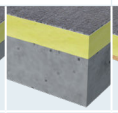
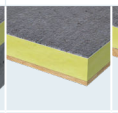
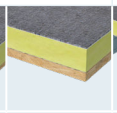
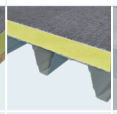
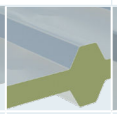
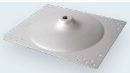
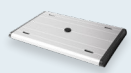
Art. 11911 / 11921

The XSMD Base plate is a stainless steel cone shaped plate. It forms the connection between the cold roofing or sandwich panel and the anchor point that is installed on top.

XTRUSION

Art. 11705 / 11405

The XTrusion base is an aluminium profile that forms the connection between the seam clamps and the anchor point which is installed on top of the XTrusion.

	CONCRETE				PLYWOOD + OSB		METAL DECK			ZINC	ALUMINUM
BASE PLATES											
 XSBase plate	✓	✓	✓	✓	✓	✓	✓				
 XSMD								✓	✓		
 XTrusion								✓		✓	✓

COMPATIBILITY AND UNIQUE FEATURES

OF OUR ROOF ANCHOR POINTS

Anchor points (or anchorage points) are permanent anchors in the surface of the structure.
If more freedom of movement is needed, a temporary lifeline can be placed between two anchor points.

Alternatively, a permanent anchor point can be used as a standalone anchor point, in which case a user is secured directly to the anchor point itself. At least, a single anchor point consists of an anchor, a base plate and an attachment point.

Other advantages are:

- Our modular range of fall protection for roofs covers almost every type of roof surface with only three different base plates.
- All our anchor points can be installed much quicker than comparable systems.
- Can be equipped with extra modules for increased functionality (abseiling, for example) or increased absorption (to protect the roof surface in case of a fall).

XSGLOBE EYE

Art. 11211

A safety eye that can rotate 360°. For use as a single anchor point, or as an anti-pendulum anchor in combination with an engineered system or other anchor point.

RAP GLOBE

Art. 11661

Like the XSGlobe, the RAP Globe can rotate 360°. This safety eye can also be used for work on sloping roofs or for rope access/abseiling.

RAP

Art. 16650

The RAP is used as an extra attachment point on an anchor point of an engineered system. It can rotate 360° and can also be used for rope access/abseiling.

CERTIFICATIONS

The conformity of the anchor points for roofs are approved by SATRA Technology Centre Ltd. (United Kingdom) according to the European Standards:

- **EN 795:2012 type A** – Personal fall protection equipment – Anchor devices
- **CEN/TS 16415:2013 type A** – Personal fall protection equipment – Anchor devices – Recommendations for anchor devices for use by more than one person simultaneously.

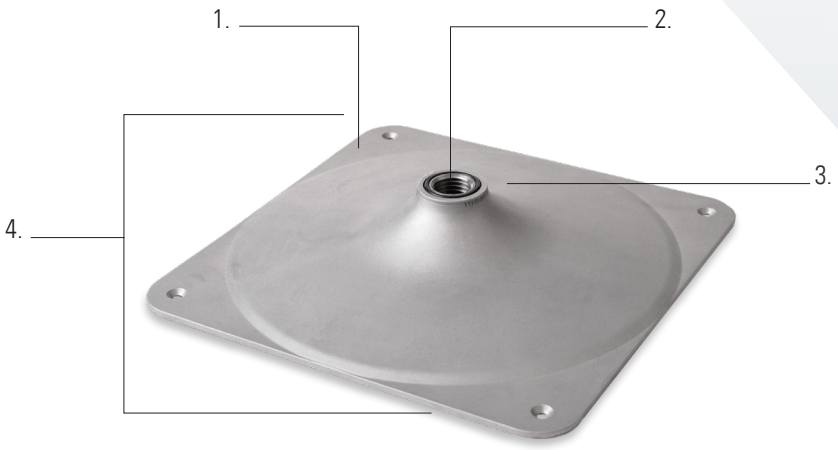
The corrosion resistance of all XSPlatforms fall protection products is tested according to ISO 9227:2012. Furthermore the anchor points for roofs are designed to meet the requirements of the following standards:

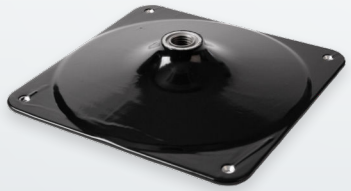
- **OSHA 1910 subpart I & 1926 subpart M** and **ANSI Z359.6 (North America)**
- **CSA Z259.16 (Canada)**
- **AS/NZS 1891.2 & AS/NSZ 5532 (Australia and New Zealand)**

THE XSBASE PLATE

FEATURES OF THE XSBASE PLATE

1. Aluminum casted plate.
2. M30 thread for compatibility with different options for single anchor points or horizontal lifelines, such as an XSBending kit.
3. Installable with only one anchor, for quick installation and minimum roof penetration.
4. The base design makes the XSBase plate strong and durable.
5. The base is also available with PVC coating or TPO coating.



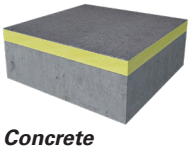


5. XSBase plate with PVC coating

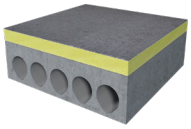
AVAILABLE XSBASE PLATES

XSBase plate: This type of XSBase plate is used on roofing materials that are not coated with PVC.
XSBase plate PVC coated: This type of XSBase plate is used on roofs that are PVC coated.
XSBase plate TPO coated: This type of XSBase plate is used on roofs that are TPO coated.
The PVC/TPO coating on the plate allows for easy and quick waterproofing of the entire connection.

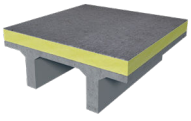
SUITABLE FOR INSTALLATION ON:



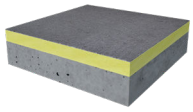
Concrete
min. 140 mm (5 1/2")



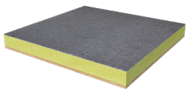
Hollow concrete
min. flange
35 mm (1 3/8")



TT concrete sections
min. flange
40 mm (1 9/16")

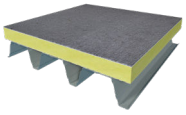


Cellular concrete
min. 100 mm (3 15/16")



Plywood
min. 12 mm (15/32")

OSB
min. 15 mm (11/16")



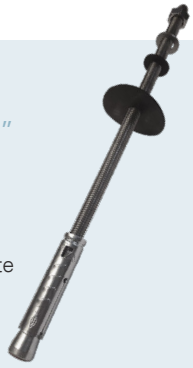
Deep deck roof
min. 0.63 mm (24 ga)

INSTALLATION MATERIALS

XSMECHANICAL ANCHOR M12 12"

Art. 11401

XSMechanical anchor is required for installation on concrete and hollow concrete roofs.



XSTOGGLE ANCHOR M12 12"

Art. 11309

XSToggle anchor M12 is only required for installation on cellular concrete, TT concrete sections, plywood, or deep deck steel roofs. The large contact surface allows the applicable forces to be better distributed over the roofing material.

XSBASE PLATE CONFIGURATIONS

SINGLE ANCHOR POINTS CONFIGURATION OPTIONS

XSGLOBE EYE

An anchor point for fall arrest and restraint work on roofs with a maximum angle of 15°.

XSIMPACT 360°

An anchor point for work positioning on roofs with a max. angle of 15°.

RAP GLOBE

An anchor point for work positioning / abseiling* on roofs with a max. angle of 15°.

* Abseiling is only possible on anchor points installed on (hollow) concrete surfaces.

HORIZONTAL LIFELINE BASE PLATE CONFIGURATION OPTIONS

XSBENDING KIT SETUP

XSBending kit Pro provides absorption - it lowers the load on the roof if a fall occurs.

XSDYNAMIC SETUP

XSDynamic provides absorption - it lowers the load on the roof if a fall occurs.

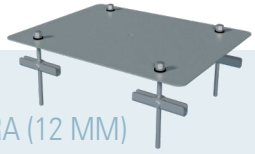
XSBENDING KIT AND XSDYNAMIC

XSBending kit Pro in combination with the XSDynamic provides maximum absorption - it lowers the load on the roof if a fall occurs.

XSBASE PLATE XL

Art. 11712

It is a sub base, which distributes the applicable forces over a larger surface. The sub base is installed on deep deck roofing (min thickness: 0.63 mm (24 gauge)) with an insulation between 100 mm and 240 mm (4" - 9 1/2").



XSBASE PLATE XTRA (12 MM)

Art. 11710

Includes a sub base, which distributes the applicable forces over a larger surface. The sub base is required for installation on plywood min. thickness 12 mm (15/32") and OSB min. thickness 15 mm (19/32") roofing.

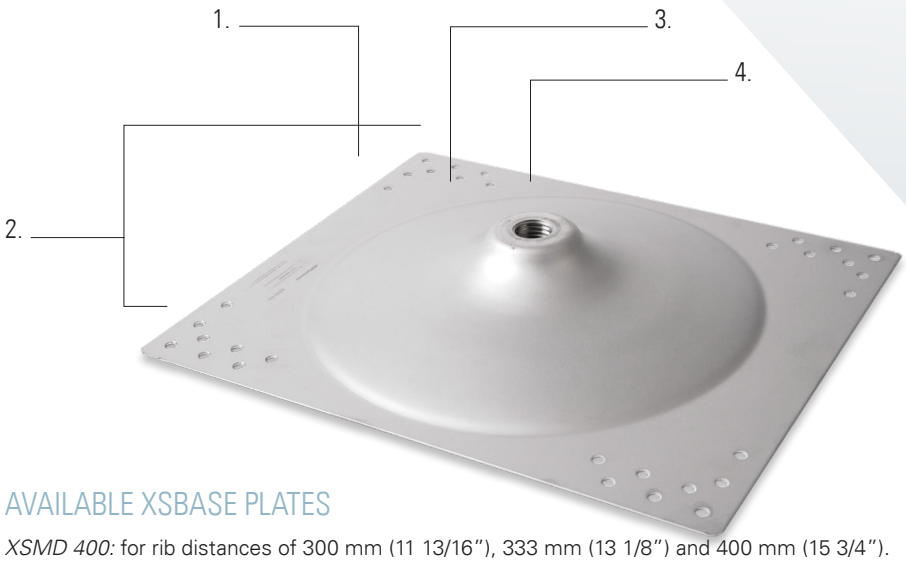
EXTREMITY CORNER FIXATION SCREWS

To provide extra stability for an XSBase plate when installed as a start, corner or endpoint in an XSPlatforms horizontal lifeline system when installed on a roof with soft insulation.

THE XSMD

FEATURES OF THE XSMD

1. Made of stainless steel instead of aluminium.
2. The smart hole pattern is designed to cover the rib distances of the most common trapezoidal roof profiles.
3. The cone-shaped plate has more strength, especially in the corners of an engineered system.
4. M30 top thread for compatibility with different options for single anchor points or horizontal lifelines, such as XSBending kit.

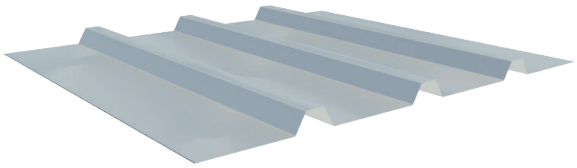


XSMD 500

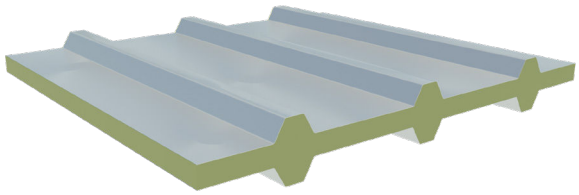
AVAILABLE XSBASE PLATES

XSMD 400: for rib distances of 300 mm (11 13/16"), 333 mm (13 1/8") and 400 mm (15 3/4").
XSMD 500: for rib distances of 375 mm (14 3/4"), 450 mm (17 3/4") and 500 mm (19 11/16").

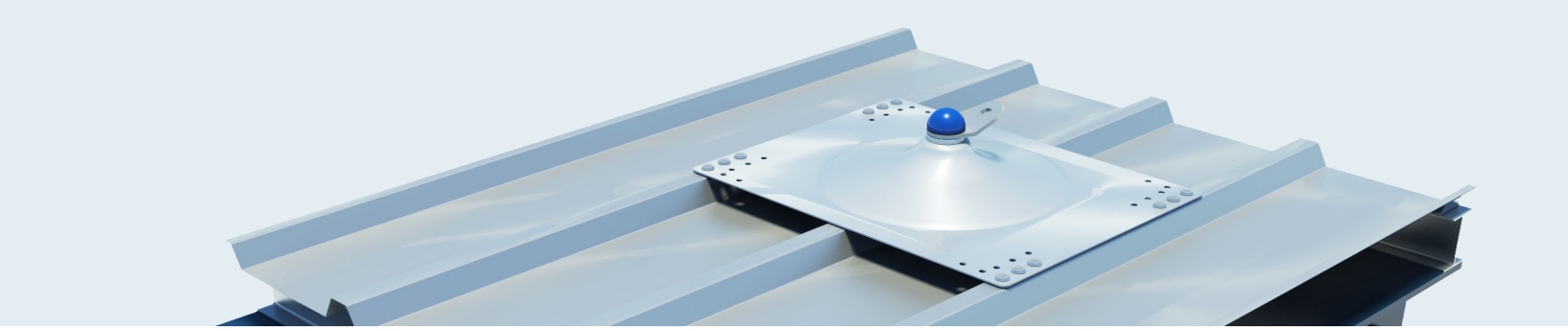
SUITABLE FOR INSTALLATION ON:



Trapezoidal cold roof
Min. 0.63 mm (24 gauge) *without insulation*



Sandwich panels
Top steel min. 0.5 mm (25 gauge)



XSMD BASE PLATE CONFIGURATIONS

SINGLE ANCHOR POINTS CONFIGURATION OPTIONS

XSGLOBE EYE

An anchor point for fall arrest and restraint work on roofs with a maximum angle of 15°.

XSIMPACT 360°

An anchor point for work positioning on roofs with a max. angle of 15°.

RAP GLOBE

An anchor point for work positioning on roofs up to an angle of 15°.

HORIZONTAL LIFELINE BASE PLATE CONFIGURATION OPTIONS

XSBENDING KIT SETUP

XSBending kit Pro provides absorption - it lowers the load on the roof if a fall occurs.

XSDYNAMIC SETUP

XSDynamic provides absorption - it lowers the load on the roof if a fall occurs.

XSBENDING KIT AND XSDYNAMIC

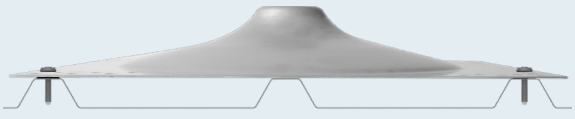
XSBending kit Pro in combination with the XSDynamic provides maximum absorption - it lowers the load on the roof if a fall occurs.

INSTALLATION MATERIALS

XSMD BULB-TITE RIVET SET

Art. 15090

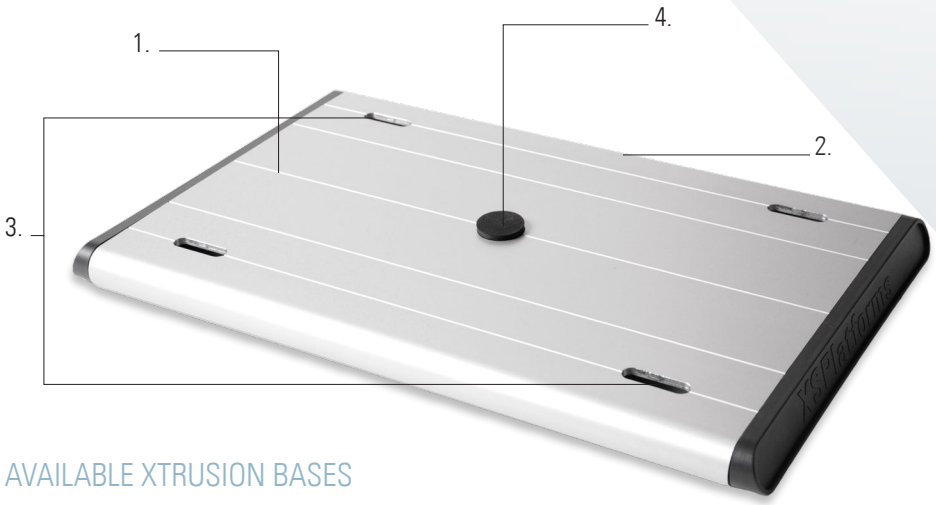
Installation of the XSMD occurs with twelve Ø 7.7 mm (5/16") aluminum bulb-tite rivets.

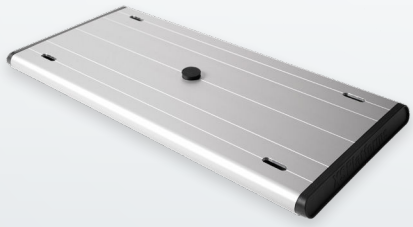


THE XTRUSION

FEATURES OF THE XTRUSION

1. Aluminium anodised profile.
2. Flat extrusion profile, which can easily be installed from above with a single action.
3. Slotted holes for installation on various rib distances.
4. M30 top thread for compatibility with different options for single anchor points or horizontal lifelines, such as XSBending kit.



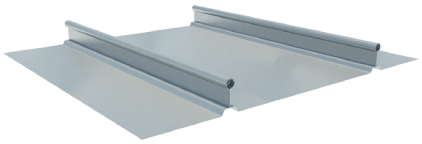


XTrusion 700 for wider profile pitches

AVAILABLE XTRUSION BASES

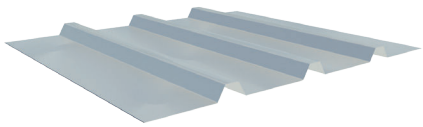
XTrusion 550: for seam widths from 300 (11 13/16") to 460 mm. (18 7/64")
XTrusion 700: for seam widths from 460 (18 7/64") to 610 mm (21 1/64").

SUITABLE FOR INSTALLATION ON:



Standing round seam profile
Aluminum min. 0.9 mm (19 gauge)
Steel min. 0.75 (22 gauge)

Standing double fold seam roof profile
Zinc min. 1 mm (15 gauge)



Trapezoidal cold roof profile
Min. 0.63 mm (24 gauge) *without insulation*

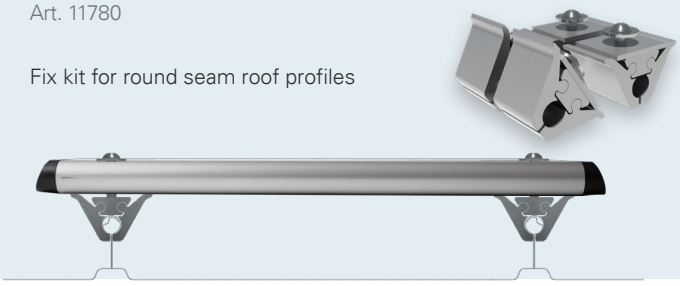
INSTALLATION MATERIALS

The XTrusion can be installed with special clamps that are attached on the roof profile. Thanks to the ingenuity of the XTrusion base, it can be installed with three different clamps on three different folding roof profiles: round seam, double fold and trapezoidal roof profiles.

XTRUSION FIX KIT (ROUND SEAM)

Art. 11780

Fix kit for round seam roof profiles



XTRUSION BASE PLATE CONFIGURATIONS

SINGLE ANCHOR POINTS CONFIGURATION OPTIONS

XSGLOBE EYE

An anchor point for fall arrest and restraint work on roofs with a maximum angle of 15°.

XSIMPACT 360°

An anchor point for work positioning on roofs with a max. angle of 15°.

RAP GLOBE

An anchor point for work positioning / abseiling* on roofs up to an angle of 15°.

HORIZONTAL LIFELINE BASE PLATE CONFIGURATION OPTIONS

XSBENDING KIT SETUP

XSBending kit Pro provides absorption - it lowers the load on the roof if a fall occurs.

XSDYNAMIC SETUP

XSDynamic provides absorption - it lowers the load on the roof if a fall occurs.

XSBENDING KIT AND XSDYNAMIC

XSBending kit Pro in combination with the XSDynamic provides maximum absorption - it lowers the load on the roof if a fall occurs.

XTRUSION FIX KIT (DOUBLE FOLD)

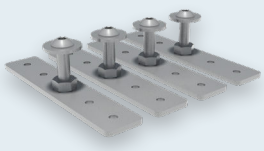
Art. 11781

Fix kit for double fold seam roof profiles

XSTRUSION FIX KIT (BUILD-UP-ON-SITE)

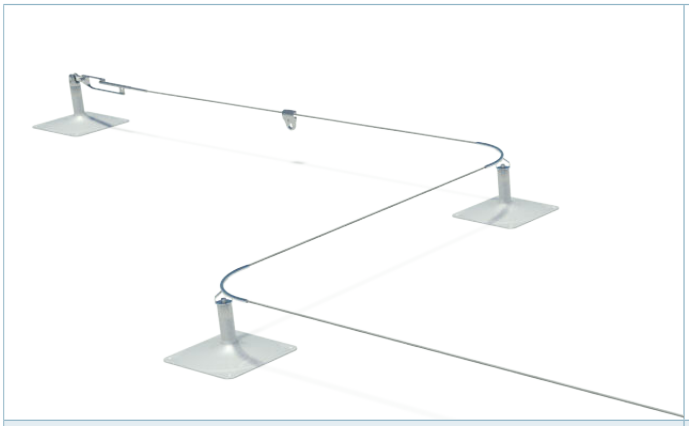
Art. 1783

Build-up-on-site kit for trapezoidal cold roof profiles

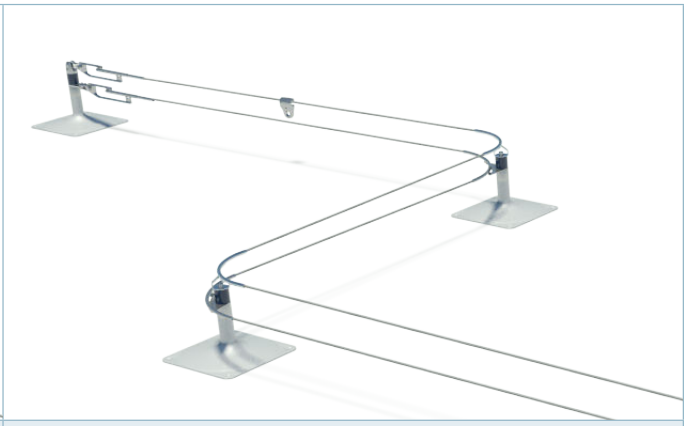


ABOUT OUR ENGINEERED SYSTEMS

Like most XSPlatforms fall protections systems our engineered systems are built up out of modular components. Meaning that several products can be used for two types of installation: XSLinked and LinkedPro.



XSLINKED SYSTEM - SINGLE LIFELINE



LINKEDPRO SYSTEM - TWO OR THREE LIFELINES

COMPATIBILITY AND UNIQUE FEATURES

OF XSPLATFORMS ENGINEERED SYSTEMS

XSPlatforms' range of horizontal lifeline systems are suitable for installation on (flat/low sloped) roofs. Also this system can be incorporated on walls, ceilings and overhead structures.

XSPlatforms' horizontal lifeline systems can be installed on the various surfaces by means of our XSBase plate (art. 11110/11111/11112), XTrusion (art. 11705/11405) and XSMD (art. 11911/11921) base plates for roofs.

Other advantages are:

- Can be installed on concrete, plywood, trapezoidal steel roofs and more.
- LinkedPro can be installed als a multi-route system, where different lifeline routes are installed on the same set of anchor points.
- Risk reduction can be achieved with the XSPoint and XSSlider Pro, these components make it impossible to disconnect the slider from the lifeline in an unsafe zone.
- With multiple lines the users are able passing each other without disconnecting.
- With XSPlatforms' ODIN lifeline Calculation tool the installer can calculate a lifeline solution virtually that complies with the aplicable standards.

CERTIFICATION

The conformity of the horizontal lifeline systems XSLinked and LinkedPro has been approved by SATRA Technology Centre Ltd. (United Kingdom) according to the European Standards:

- EN 795:2012 type C – Personal fall protection equipment – Anchor devices
- CEN/TS 16415:2013 type C – Personal fall protection equipment – Anchor devices – Recommendations for anchor devices for use by more than one person simultaneously.

The corrosion resistance of all XSPlatforms fall protection products is tested according to ISO 9227:2012. Furthermore the horizontal lifeline system has been designed to meet the requirements of the following standards:

- ANSI Z359.6 (Fall Protection Code) and OSHA 1910 subpart I & 1926 subpart M (North America)
- CSA Z259.16 (Canada)
- AS/NZS 1891.2:2001 (Australia and New Zealand)

ODIN LIFELINE CALCULATION TOOL

A unique online calculation tool that allows you to calculate the adequate lifeline solution for virtually any situation that involves work at height.

ODIN is the easiest way to guarantee that the custom XSPlatforms lifeline configuration you are offering complies with the applicable standard. Making an exact calculation for a horizontal lifeline system requires a lot of specific knowledge about the applicable safety standards and formulas. ODIN performs these calculations quickly, easily and reliably.

ODIN easily calculates the forces released in case of a fall and provides a detailed configuration report about a fall protection system:

- ✔ Configurations are accurate and reliable.
- ✔ The most all-embracing tool of its kind.
- ✔ Very quick and easy to use.
- ✔ No extensive knowledge is required to use ODIN.
- ✔ Provides professional, relevant configuration reports.
- ✔ Cost-effective calculations.
- ✔ Accessible from anywhere at any time: available for desktop,smartphone or tablet.

ODIN can calculate lifeline setup compliance to the following standards

- ✔ EN795:2012 & CEN/TS16415 (Europe)
- ✔ ANSI Z359.6:2016 (United States)
- ✔ CSA Z259.16-04:2015 (Canada)

ODIN-TOOL.COM

ODIN®
Lifeline calculation tool

COMPONENTS
OF AN ENGINEERED SYSTEM

Like most XSPlatforms fall protections systems our engineered systems are built up out of modular components. Meaning that several products can be used for two types of installation: XSLinked and LinkedPro.

XSLINKED

XSLinked is our standard lifeline system, which can be used by one or two users. The XSSlider connects a user's lanyard to the horizontal lifeline, and is able to slide through intermediates and corners. It can be attached to the lifeline with a single action.

LINKEDPRO

The LinkedPro roof systems enables the connection of two to six users to one system simultaneously (with maximum of three lifelines). The users are contiually secured and enjoy optimum freedom of movement on both sides of the lifelines.

- Suitable for almost every type of roof
- Between two and three steel cables
- Suitable for one to six users
- Clear identification as a result of colored spacers
- Possibility of expanding your existing XSLinked tracks to LinkedPro

INTERMEDIATE AND CORNERS FOR XSLINKED

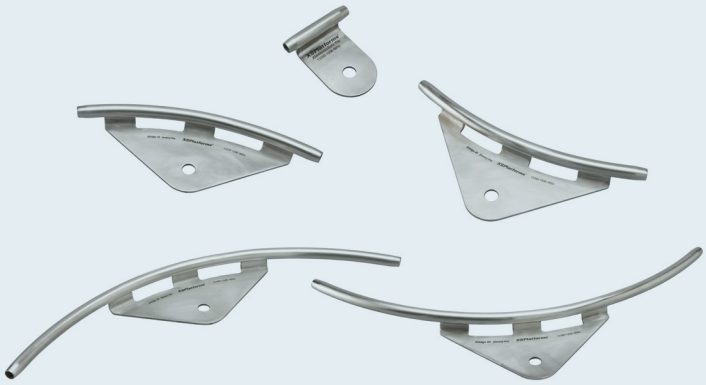
Art. 12411 / 12511 / 12611

A series of modular 45 and 90 degree corners, which can be mounted on a XSConnector Pro or XSBending kit Pro.

INTERMEDIATE & CORNERS FOR LINKEDPRO

Art. 13351 / 13361 / 13371 / 13381 / 13391

Additional brackets are needed to staple the system together with Spacers into our multi-lined horizontal lifeline system: LinkedPro. For each corner there are two corner types: the inner and outer XSEdge's of 45 and 90 degrees.

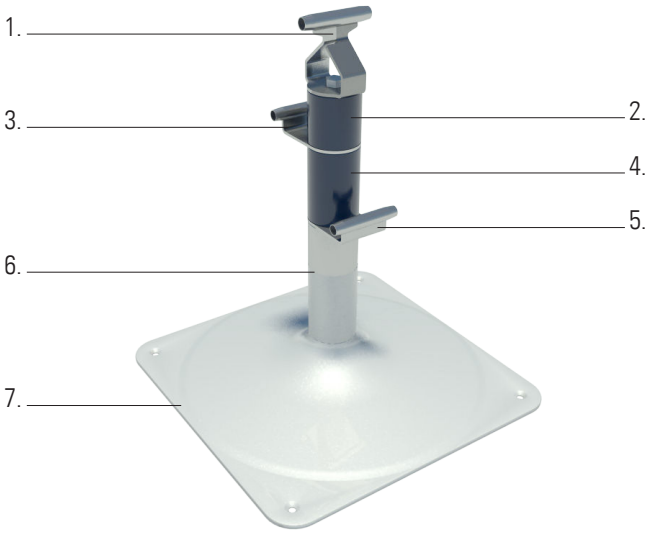


SPACERS AND XTENSIONS

Art. 13405 / 13400 / 13410 (Spacers)
Art. 13415 / 13425 (XTensions)

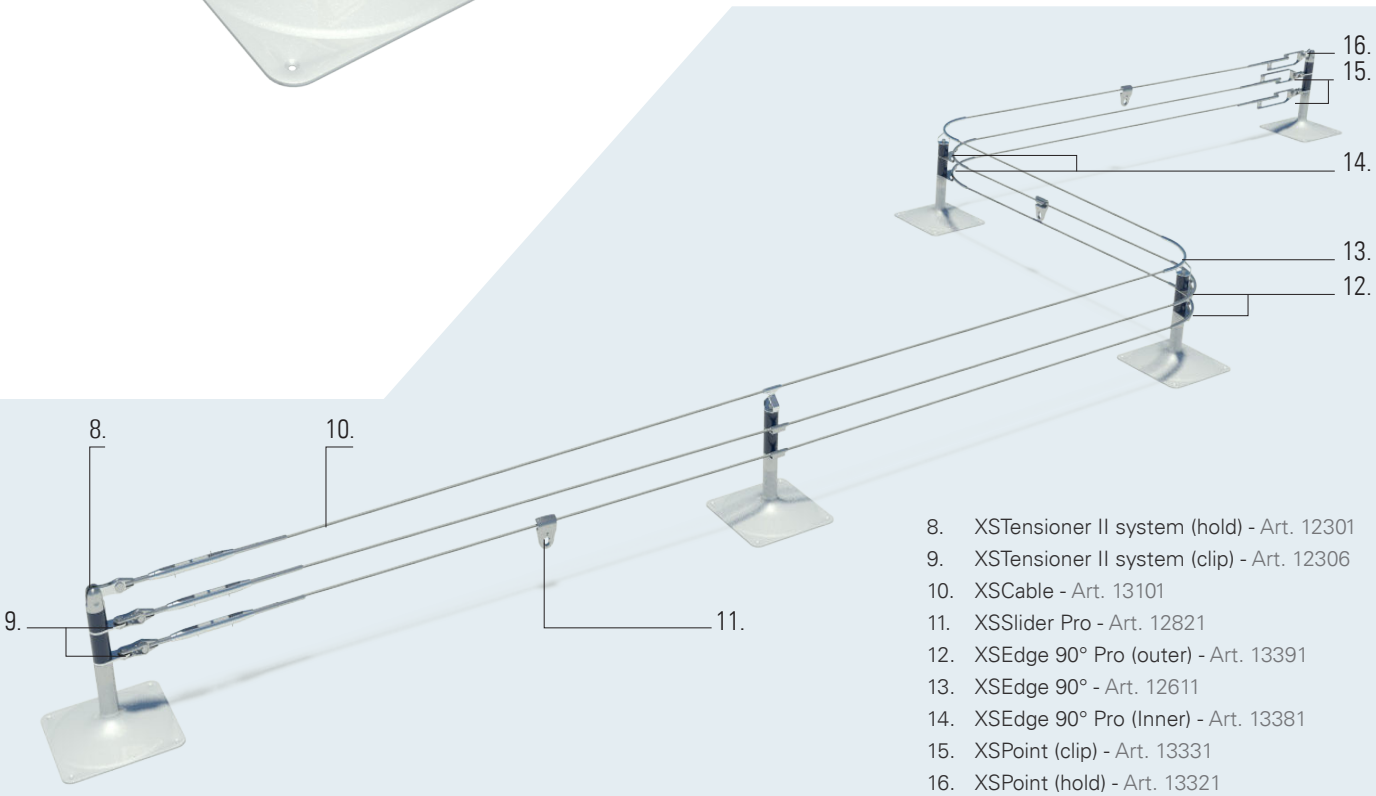
Spacers are mostly used to create a LinkedPro system. When the horizontal lifeline is not high enough, the XTension or spacer can be used to mount on the XSBending kit Pro to setup a higher system.

Note: Never install spacers and XTensions on a XSConnector Pro



EXAMPLE OF A LINKEDPRO SYSTEM CONFIGURATION (ON XSBASE PLATE)

1. XSIntermediate - Art. 12411
2. Spacer 50 - Art. 13400
3. XSIntermediate Pro - Art. 13351
4. Spacer 75 - Art. 13410
5. XSIntermediate Pro - Art. 13351
6. XSBending kit Pro - Art. 11311
7. XSBase plate - Art. 11110



8. XSTensioner II system (hold) - Art. 12301
9. XSTensioner II system (clip) - Art. 12306
10. XSCable - Art. 13101
11. XSSlider Pro - Art. 12821
12. XSEdge 90° Pro (outer) - Art. 13391
13. XSEdge 90° - Art. 12611
14. XSEdge 90° Pro (Inner) - Art. 13381
15. XSPoint (clip) - Art. 13331
16. XSPoint (hold) - Art. 13321

COMPONENTS OF AN ENGINEERED SYSTEMS

SLIDERS IN GENERAL

A slider connected to a lanyard, connects a user's harness to the lifeline, following users as they move along the trajectory.

XSPlatforms designed two sliders with each specific features.

XSSLIDER

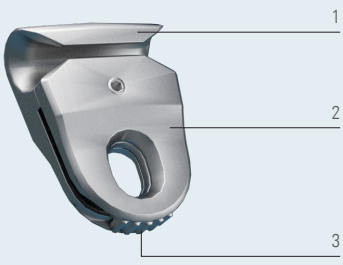
Art. 12811

The XSSlider is designed to easily slide over the anchor points, even at the corners of the lifeline route. The XSSlider can be opened via an handle which makes the user able to detach/attach any time where they want to.

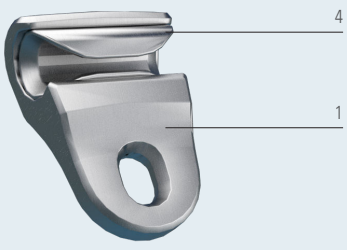
XSSLIDER PRO

Art. 12821

Just as the XSSlider, the XSSlider Pro is designed to slide easily over the anchor points and corners of the lifeline route. The difference is the rotating insert that is used to enter the lifeline system via an XSPoint. The XSPoint is situated at the start and end point of a lifeline trajectory and is ment to be used as a safe attach/detach location. The user can't attacht/detach between these start and end points.



XSSlider



XSSlider Pro

FEATURES:

1. XSSlider body
2. Sliding clamp
3. Handle
4. Rotating insert

XSLINKED HORIZONTAL LIFELINE SYSEMS

FEATURES

XSBASE PLATE

Art. 11110

The XSBase plate is an aluminium casted plate with a stainless steel insert that forms the connection between the roofing material and an attachment point, which can be installed on the XSBase plate.

XSMD

Art. 11911 / 11921

The XSMD Base plate is a stainless steel cone shaped plate. It forms the connection between the cold roofing or sandwich panel and the anchor point that is installed on top.

XTRUSION

Art. 11705 / 11405

The XTrusion base is an aluminium profile that forms the connection between the standing seam roofs, and the anchor point which is installed on top of the XTrusion.

XSBENDING KIT PRO & XSCONNECTOR PRO

Art. 11611 / 11665

The award-winning XSBending kit Pro is a cylindrical component that is applied to the base plates of the lifeline system, it bends in the direction of the fall to absorb the shock. This way, the XSBending kit Pro protects users and at the same time prevents damage to the surface of the roof.

XSDYNAMIC KIT

Art. 14751

The XSDynamic can provide even more absorption by increasing the deflection of the lifeline. When it is activated by a fall, the spring inside the XSDynamic is stretched.

The XSConnector Pro is ideal for working with low systems in combination with the XSDynamic kit (required).

XSBENDING KIT RAP

Art. 11611 / 11665

Another version of the XSBending kit Pro but with a longer M30 thread, is the XSBending kit RAP. This component create an anchor point on the same location where the anchor point is installed. The RAP can be used for rope access situations.

XSPOINT

Art. 13321

Further risk reduction can be achieved with the XSPoint and XSSlider Pro, these components make it impossible to disconnect the slider from the lifeline in an unsafe zone. This makes the safety provided by the lifeline system less dependent on its correct usage.

SPAN, CLEARANCES AND LOAD CALCULATIONS

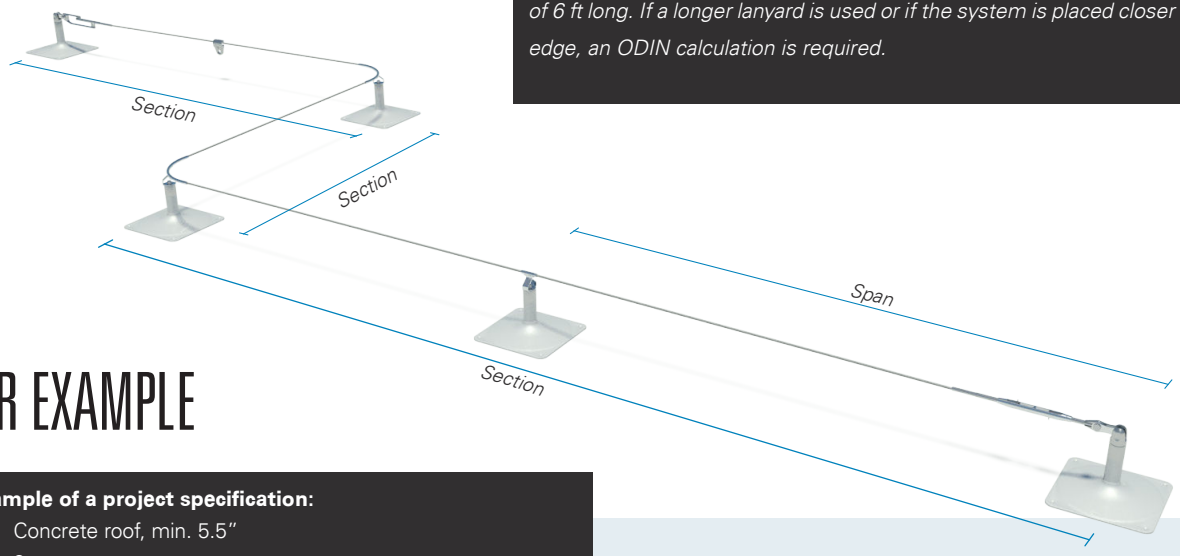
HOW TO READ THE TABLES

The tables on the following pages outline the system performance based on the three different fall arrest combinations

Maximum span in meters: This is the maximum distance between the anchor points, per section. A section is a part of an engineered system between a start and an end point, or between a start and a corner post (for example, an "L" shaped system will consist of two sections). If you install a system with multiple corners, check the maximum span, and maximum clearance per section. This way, you can propose a system without making a complex ODIN calculation.

Required clearance in meters: The minimum required distance between the working level (for example the roof) and the lower level (the ground or another obstruction) for a safe fall.

Important: *all clearances and load calculations are based on the assumption that a fall arrest system is placed 6 ft from the roof edge, with use of a lanyard of 6 ft long. If a longer lanyard is used or if the system is placed closer to the roof edge, an ODIN calculation is required.*



FOR EXAMPLE

Example of a project specification:

- ✔ Concrete roof, min. 5.5"
- ✔ 2 users
- ✔ Roof height: 25 ft.
- ✔ XSLinked system with one section of 252 ft.

1. Check the the table on the right page to compare the possible options:

- XSBending kit
- XSBending kit + XSDynamic
- XSConnector Pro + XSDynamic

2. Check the required clearances per option:

- **XSBase plate with XSBending kit:** the user needs a minimum clearance of 20'8"ft.
- **XSBase plate with XSBending kit + XSDynamic:** the user needs a minimum clearance of 24'11"ft.
- **XSBase plate with XSConnector Pro + XSDynamic:** the user needs a minimum clearance of 22'6"ft.

3. When comparing the roof height with the required clearance, you can conclude that all three options are suitable for this situation.

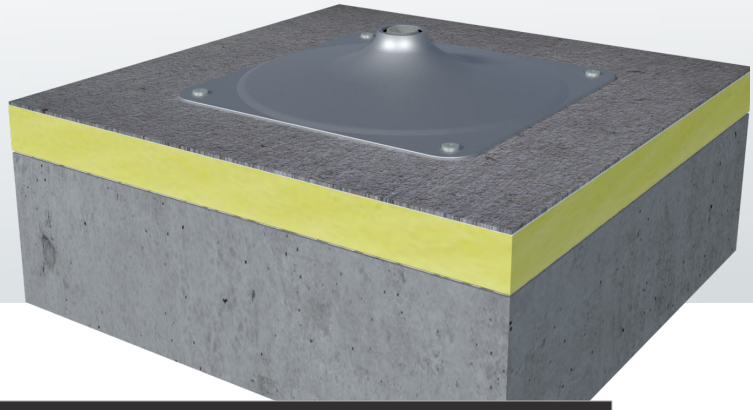
The max. span between anchor posts is 49 ft. The roof height is 25 ft and the clearances are 20'8", 24'11"and 22'6". You can choose between the solution with the lowest fall clearance or opt for the solution with a higher energy absorption. In both cases the user will not hit the ground in case of a fall.

**Cold roof: thermal insulation layer is located below the structural decking*

SPAN, CLEARANCES AND LOAD CALCULATIONS FOR THE XSBASE PLATE

XSBASE PLATE ON CONCRETE ROOF OF MIN. 140 MM (5 1/2")
INSTALLED WITH XSMECHANICAL ANCHOR

These anchor points are installed to the roof by means of the aluminum XSBase plate. In the case of installation on reinforced class C20/25 concrete, with a minimum thickness of 140 mm (5 1/2"), installation occurs with one XSMechanical anchor with an M12 thread end per base plate. The use of a single anchorage system to install the base plates minimizes the chance of damages, due to penetration/drilling, and the chance of leakages.



	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + Spacer 30 / 50 + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	49	42	49	49	49	40	40	40
80 ft < L ≤ 160 ft	49	49	49	49	49	40	40	40
160 ft < L ≤ 400 ft	49	49	49	49	49	40	40	40
400 ft < L ≤ 820 ft	49	49	49	49	49	40	40	40

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + Spacer 30 / 50 + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	18'3"	18'8"	21'2"	24'7	26'	19'	22'	23'4"
80 ft < L ≤ 160 ft	18'7"	19'7"	21'2"	24'8"	26'3"	19'1"	22'2"	23'5"
160 ft < L ≤ 400 ft	19'	20'8"	21'4"	24'11"	26'7"	19'4"	22'6"	23'10
400 ft < L ≤ 820 ft	19'1"	21'7"	21'7"	25'5"	27'2"	19'7"	22'11"	24'2"

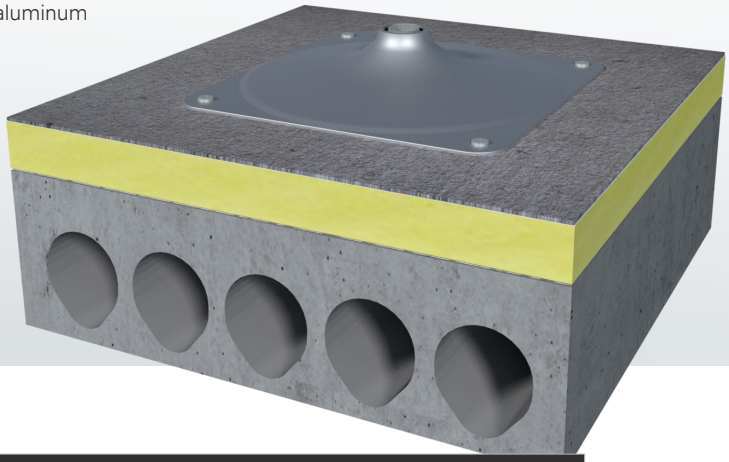
N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

SPAN, CLEARANCES AND LOAD CALCULATIONS FOR THE XSBASE PLATE

XSBASE PLATE ON HOLLOW CONCRETE ROOF WITH A MINIMUM FLANGE OF 35 MM (1 3/8") INSTALLED WITH XSMECHANICAL ANCHOR

These anchor points are installed to the roof by means of the aluminum XSBase plate. In the case of installation on reinforced hollow-core concrete, with a minimum flange thickness of 35 mm
(1 3/8"), installation occurs with one XSMechanical anchor with an M12 thread end per base plate. The use of a single anchorage system to install the base plates minimizes the chance of damages, due to penetration/ drilling, and the chance of leakages.



	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + Spacer 30 / 50 + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	49	42	49	49	49	40	40	40
80 ft < L ≤ 160 ft	49	49	49	49	49	40	40	40
160 ft < L ≤ 400 ft	49	49	49	49	49	40	40	40
400 ft < L ≤ 820 ft	49	49	49	49	49	40	40	40

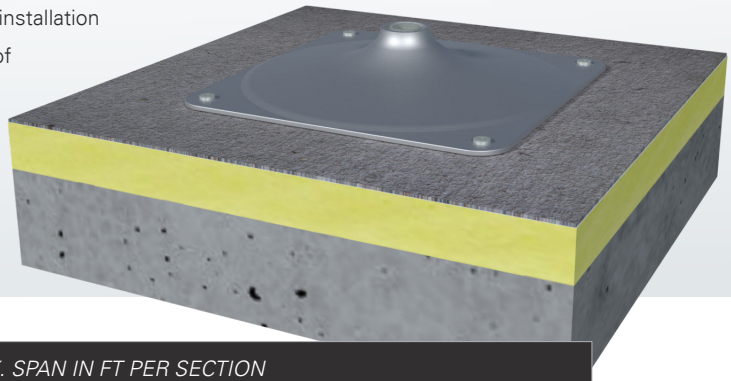
	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + Spacer 30 / 50 + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	18'3"	18'8"	21'2"	24'7	26'	19'	22'	23'4"
80 ft < L ≤ 160 ft	18'7"	19'7"	21'2"	24'8"	26'3"	19'1"	22'2"	23'5"
160 ft < L ≤ 400 ft	19'	20'8"	21'4"	24'11"	26'7"	19'4"	22'6"	23'10
400 ft < L ≤ 820 ft	19'1"	21'7"	21'7"	25'5"	27'2"	19'7"	22'11"	24'2"

N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

XSBASE PLATE ON CELLULAR CONCRETE ROOF OF MIN. 100 MM (3 15/16")
INSTALLED WITH XSTOGGLE ANCHOR

These anchor points are installed to the roof by means of the aluminum XSBase plate. In the case of installation on GB4/600 type cellular concrete, with a minimum thickness of 100 mm (3 15/16"), installation occurs with one XSToggle anchor per base plate. The use of a single anchorage system to install the base plates minimizes the chance of damages, due to penetration/ drilling, and the chance of leakages.



	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	40	N/A	49	49	40	40	40	33
80 ft < L ≤ 160 ft	49	N/A	49	49	40	40	40	36
160 ft < L ≤ 240 ft	49	N/A	49	49	44	40	40	36
240 ft < L ≤ 400 ft	49	N/A	49	49	44	40	40	38
400 ft < L ≤ 820 ft	49	N/A	49	49	48	40	40	40

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	17'8"	N/A	21'2"	24'7	24'5"	19'	22'	22'1"
80 ft < L ≤ 160 ft	18'7"	N/A	21'2"	24'8"	24'6"	19'1"	22'2"	22'9"
160 ft < L ≤ 240 ft	18'9"	N/A	21'3"	24'9"	25'5"	19'2"	22'4"	22'11"
240 ft < L ≤ 400 ft	19'	N/A	21'4"	24'11"	25'6"	19'4"	22'6"	23'5"
400 ft < L ≤ 820 ft	19'1"	N/A	21'7"	25'5"	27'	19'7"	22'11"	24'2"

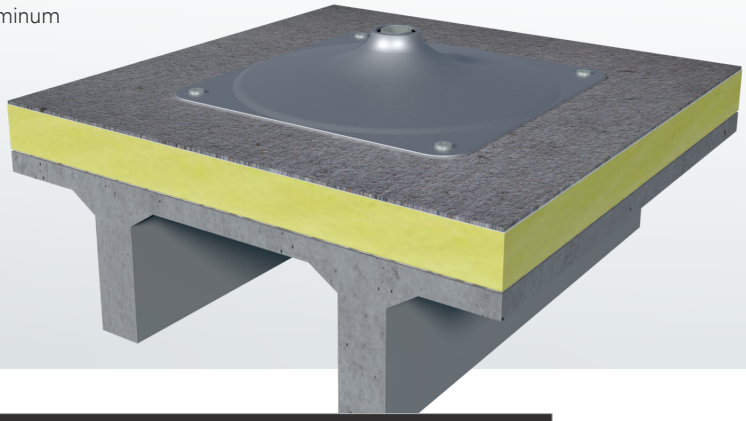
N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

SPAN, CLEARANCES AND LOAD CALCULATIONS FOR THE XSBASE PLATE

XSBASE PLATE ON TT CONCRETE SECTION OF MIN. 40 MM (1 9/16") (QUALITY CONCRETE C50/60) INSTALLED WITH XSTOGGLE ANCHOR

These anchor points are installed to the roof by means of the aluminum XSBase plate. In the case of installation on reinforced class C50/60 TT section concrete, with a minimum flange thickness of 40 mm (1 9/16"), installation occurs with one XSToggle anchor anchor with an M12 thread end per base plate. The use of a single anchorage system to install the base plates minimizes the chance of damages, due to penetration/drilling, and the chance of leakages.



	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	49	28	49	49	49	40	40	40
80 ft < L ≤ 160 ft	49	40	49	49	49	40	40	40
160 ft < L ≤ 400 ft	49	49	49	49	49	40	40	40
400 ft < L ≤ 820 ft	49	49	49	49	49	40	40	40

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	18'3"	17'4"	21'2"	24'7	26'	19'	22'	23'4"
80 ft < L ≤ 160 ft	18'7"	18'10"	21'2"	24'8"	26'3"	19'1"	22'2"	23'5"
160 ft < L ≤ 400 ft	19'	20'8"	21'4"	24'11"	26'7"	19'4"	22'6"	23'10
400 ft < L ≤ 820 ft	19'1"	21'7"	21'7"	25'5"	27'2"	19'7"	22'11"	24'2"

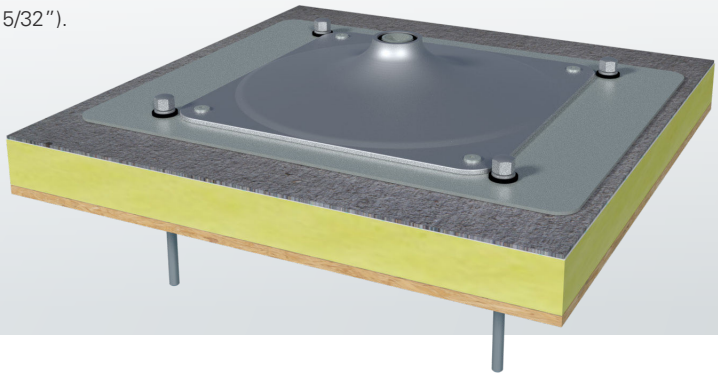
N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

XSBASE PLATE ON PLYWOOD ROOF DECK OF MIN. 12 MM (15/32") INSTALLED WITH 4 XSTOGGLE ANCHORS AND XSBASE PLATE XTRA

These anchor points are installed to the plywood substructure by means of the aluminum XSBase plate and XSBase plate Xtra 12 mm (15/32").

Due to the possible fragility of plywood substructures installation requires the use of extra fixings. In the case of installation on a plywood substructure, with a minimum thickness of 12 mm (15/32") installation occurs with four M10 XSToggle anchors per base plate and the XSBase plate Xtra.



	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	36	N/A	49	49	N/A	40	40	26
80 ft < L ≤ 160 ft	44	N/A	49	49	N/A	40	40	26
160 ft < L ≤ 240 ft	49	N/A	49	49	N/A	40	40	28
240 ft < L ≤ 400 ft	49	N/A	49	49	N/A	40	40	30
400 ft < L ≤ 820 ft	49	N/A	49	49	N/A	40	40	32

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	17'5"	N/A	21'2"	24'7	N/A	19'	22'	20'7"
80 ft < L ≤ 160 ft	18'2"	N/A	21'2"	24'8"	N/A	19'1"	22'2"	20'8"
160 ft < L ≤ 240 ft	18'9"	N/A	21'3"	24'9"	N/A	19'2"	22'4"	21'3"
240 ft < L ≤ 400 ft	19'	N/A	21'4"	24'11"	N/A	19'4"	22'6"	21'9"
400 ft < L ≤ 820 ft	19'1"	N/A	21'7"	25'5"	N/A	19'4"	22'11"	22'8"

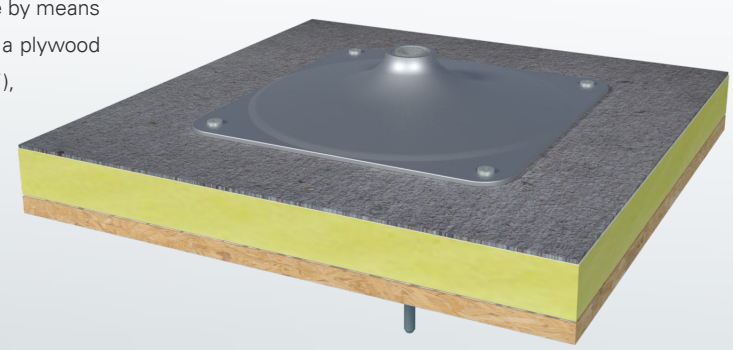
N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

SPAN, CLEARANCES AND LOAD CALCULATIONS FOR THE XSBASE PLATE

XSBASE PLATE ON PLYWOOD ROOF DECK OF MIN. 18 MM (11/16") INSTALLED WITH XSTOGGLE ANCHOR

These anchor points are installed to the plywood substructure by means of the aluminum XSBase plate. In the case of installation on a plywood substructure, with a minimum thickness of 18 mm (11/16"), installation occurs with one XSToggle anchor with an M12 thread end per base plate. The use of a single anchorage system to install the base plates minimizes the chance of damages, due to penetration/drilling, and the chance of leakages.



Type of the absorber / no. of users	*MAX. SPAN IN FT PER SECTION*							
	XSBending kit Pro		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	30	N/A	49	40	N/A	40	34	N/A
80 ft < L ≤ 160 ft	36	N/A	49	42	N/A	40	36	N/A
160 ft < L ≤ 240 ft	49	N/A	49	44	N/A	40	36	N/A
240 ft < L ≤ 400 ft	49	N/A	49	44	N/A	40	38	N/A
400 ft < L ≤ 820 ft	49	N/A	49	48	N/A	40	40	N/A

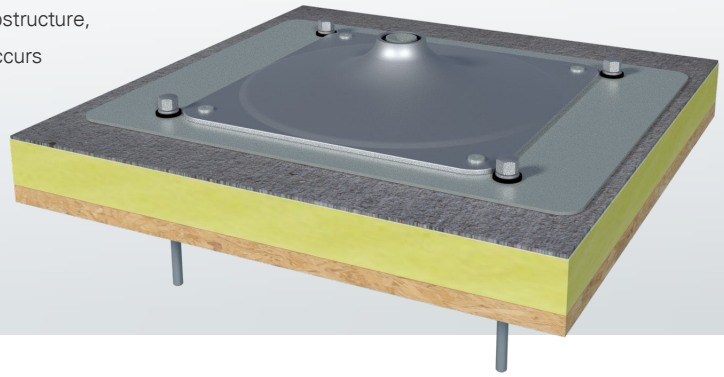
	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	16'11"	N/A	21'2"	23'	N/A	19'	21'	N/A
80 ft < L ≤ 160 ft	17'6"	N/A	21'2"	23'6"	N/A	19'1"	21'6"	N/A
160 ft < L ≤ 240 ft	18'9"	N/A	21'3"	23'10"	N/A	19'2"	21'7"	N/A
240 ft < L ≤ 400 ft	19'	N/A	21'4"	23'11"	N/A	19'4"	22'2"	N/A
400 ft < L ≤ 820 ft	19'1"	N/A	21'7"	25'2"	N/A	19'4"	22'11"	N/A

N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

XSBASE PLATE ON OSB ROOF DECK OF MIN. 18 MM (11/16")
INSTALLED WITH 4 XSTOGGLE ANCHORS AND XSBASE PLATE XTRA

These anchor points are installed to the OSB substructure by means of the aluminum XSBase plate. In the case of installation on a OSB substructure, with a minimum thickness of 18 mm (11/16"), installation occurs with four XSToggle anchors with an M10 thread end per base plate.



	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	30	N/A	49	38	N/A	40	32	N/A
80 ft < L ≤ 160 ft	36	N/A	49	40	N/A	40	32	N/A
160 ft < L ≤ 240 ft	49	N/A	49	40	N/A	40	34	N/A
240 ft < L ≤ 400 ft	49	N/A	49	42	N/A	40	36	N/A
400 ft < L ≤ 820 ft	49	N/A	49	44	N/A	40	38	N/A

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	16'11"	N/A	21'2"	22'8"	N/A	19'	20'9"	N/A
80 ft < L ≤ 160 ft	17'6"	N/A	21'2"	23'1"	N/A	19'1"	20'9"	N/A
160 ft < L ≤ 240 ft	18'9"	N/A	21'3"	23'2"	N/A	19'2"	21'3"	N/A
240 ft < L ≤ 400 ft	19'	N/A	21'4"	23'9"	N/A	19'4"	21'9"	N/A
400 ft < L ≤ 820 ft	19'1"	N/A	21'7"	24'3"	N/A	19'4"	22'7"	N/A

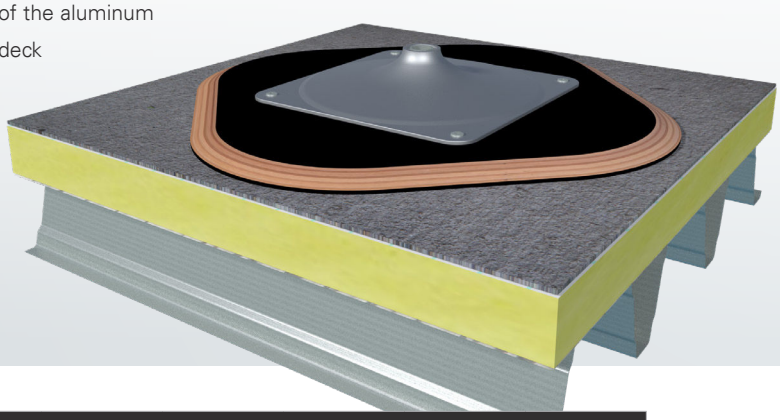
N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

SPAN, CLEARANCES AND LOAD CALCULATIONS FOR THE XSBASE PLATE

XSBASE PLATE ON DEEP DECK ROOF OF MIN. 0.63 MM (24 GAUGE) INSTALLED WITH XSTOGGLE ANCHOR AND XSBASE PLATE XL

These anchor points are installed to the roof by means of the aluminum XSBase plate. In the case of installation on a steel deep deck profile, with a minimum thickness of 0.63 mm (24 gauge), installation occurs with a XSBase plate XL and one XSToggle anchor M12 per base plate. The use of a single anchorage system to install the base plates minimizes the chance of damages, due to penetration/drilling, and the chance of leakages.



	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	30	N/A	49	40	N/A	40	32	N/A
80 ft < L ≤ 160 ft	36	N/A	49	40	N/A	40	34	N/A
160 ft < L ≤ 240 ft	49	N/A	49	42	N/A	40	36	N/A
240 ft < L ≤ 400 ft	49	N/A	49	44	N/A	40	36	N/A
400 ft < L ≤ 820 ft	49	N/A	49	46	N/A	40	40	N/A

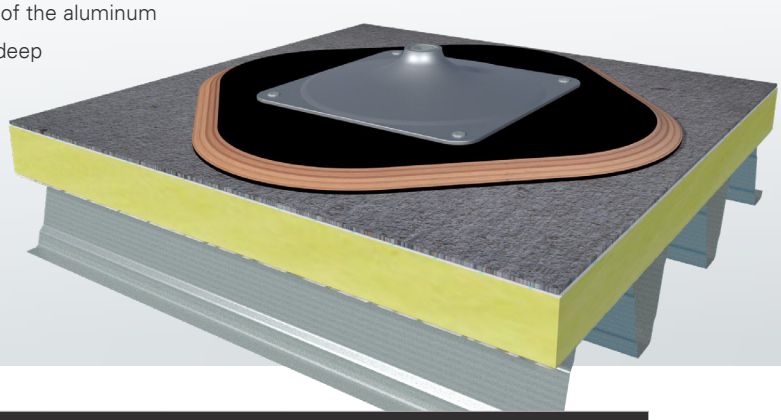
	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	16'11"	N/A	21'2"	23'	N/A	19'	20'9"	N/A
80 ft < L ≤ 160 ft	17'6"	N/A	21'2"	23'1"	N/A	19'1"	21'2"	N/A
160 ft < L ≤ 240 ft	18'9"	N/A	21'3"	23'7"	N/A	19'2"	21'7"	N/A
240 ft < L ≤ 400 ft	19'	N/A	21'4"	23'11"	N/A	19'4"	21'9"	N/A
400 ft < L ≤ 820 ft	19'1"	N/A	21'7"	24'10"	N/A	19'4"	22'11"	N/A

N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

XSBASE PLATE ON DEEP DECK ROOF OF MIN. 0.75 MM (21 GAUGE) INSTALLED WITH XSTOGGLE ANCHOR (M12) AND XSBASE PLATE XL

These anchor points are installed to the roof by means of the aluminum XSBase plate. In the case of installation on a steel deep deck profile, with a minimum thickness of 0.75 mm (21 gauge), installation occurs with a XSBase plate XL and one XSToggle anchor M12. The use of a single anchorage system to install the base plates minimizes the chance of damages, due to penetration/drilling, and the chance of leakages.



	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	46	N/A	49	49	49	40	40	40
80 ft < L ≤ 160 ft	49	N/A	49	49	49	40	40	40
160 ft < L ≤ 400 ft	49	N/A	49	49	49	40	40	40
400 ft < L ≤ 820 ft	49	N/A	49	49	49	40	40	40

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	18'1"	N/A	21'2"	24'7	26'	19'	22'	23'4"
80 ft < L ≤ 160 ft	18'7"	N/A	21'2"	24'8"	26'3"	19'1"	22'2"	23'5"
160 ft < L ≤ 400 ft	19'	N/A	21'4"	24'11"	26'7"	19'4"	22'6"	23'10
400 ft < L ≤ 820 ft	19'1"	N/A	21'7"	25'5"	27'2"	19'7"	22'11"	24'2"

N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

SPAN, CLEARANCES AND LOAD CALCULATIONS FOR THE XTRUSION

XTRUSION ON STEEL ROUND SEAM DECK OF MIN. 0,7 MM/22 GAUGE BEMO HOOK CLIP SYSTEM INSTALLED WITH XTRUSION FIX KIT ROUND SEAM

These anchor points are installed to aluminum roof panels with circular interlock geometry (round seam), with a minimum thickness of 0.7 mm (22 gauge), by means of the XTrusion base plate. In this case installation occurs with four aluminum round seam clamps per base plate. The use of this clamping method to install the base plates of the HLL eliminates the chance of damages, due to penetration/drilling, and the chance of leakages.

	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	44	N/A	49	49	46	40	40	33
80 ft < L ≤ 160 ft	49	N/A	49	49	49	40	40	34
160 ft < L ≤ 240 ft	49	N/A	49	49	49	40	40	36
240 ft < L ≤ 400 ft	49	N/A	49	49	49	40	40	38
400 ft < L ≤ 820 ft	49	N/A	49	49	49	40	40	40

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	18"	N/A	21'2"	24'7	25'8"	19'	22'	22'1"
80 ft < L ≤ 160 ft	18'7"	N/A	21'2"	24'8"	26'3"	19'1"	22'2"	22'5"
160 ft < L ≤ 240 ft	18'9"	N/A	21'3"	24'9"	26'5"	19'2"	22'4"	22'11"
240 ft < L ≤ 400 ft	19'	N/A	21'4"	24'11"	26'7"	19'4"	22'6"	23'5"
400 ft < L ≤ 820 ft	19'1"	N/A	21'7"	25'5"	27'2"	19'4"	22'11"	24'2"

N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

XTRUSION ON ALUMINIUM ROUND SEAM DECK OF MIN. 1 MM/18 GAUGE BEMO HOOK CLIP SYSTEM INSTALLED WITH XTRUSION FIX KIT ROUND SEAM

These anchor points are installed to aluminum roof panels with circular interlock geometry (round seam), with a minimum thickness of 1 mm (18 gauge), by means of the XTrusion base plate. In this case installation occurs with four aluminum round seam clamps per base plate. The use of this clamping method to install the base plates of the HLL eliminates the chance of damages, due to penetration/drilling, and the chance of leakages.

	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	49	N/A	49	49	49	40	40	40
80 ft < L ≤ 160 ft	49	N/A	49	49	49	40	40	40
160 ft < L ≤ 240 ft	49	N/A	49	49	49	40	40	40
240 ft < L ≤ 400 ft	49	N/A	49	49	49	40	40	40
400 ft < L ≤ 820 ft	49	N/A	49	49	49	40	40	40

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	18'3"	N/A	21'2"	24'7	26'2"	19'	22'	23'4"
80 ft < L ≤ 160 ft	18'7"	N/A	21'2"	24'8"	26'3"	19'1"	22'2"	23'5"
160 ft < L ≤ 240 ft	18'9"	N/A	21'3"	24'9"	26'5"	19'2"	22'4"	23'8"
240 ft < L ≤ 400 ft	19'	N/A	21'4"	24'11"	26'7"	19'4"	22'6"	23'10
400 ft < L ≤ 820 ft	19'1"	N/A	21'7"	25'5"	27'2"	19'4"	22'11"	24'2"

N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

SPAN, CLEARANCES AND LOAD CALCULATIONS FOR THE XTRUSION

XTRUSION ON STEEL ROUND SEAM DECK OF MIN. 0,7 MM/22 GAUGE BEMO HALTER CLIPS INSTALLED WITH XTRUSION FIX KIT ROUND SEAM

These anchor points are installed to aluminum roof panels with circular interlock geometry (round seam), with a minimum thickness of 0.7 mm (22 gauge), by means of the XTrusion base plate. In this case installation occurs with four aluminum round seam clamps per base plate. The use of this clamping method to install the base plates of the HLL eliminates the chance of damages, due to penetration/drilling, and the chance of leakages.

	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	28	N/A	49	28	N/A	40	N/A	N/A
80 ft < L ≤ 160 ft	34	N/A	49	30	N/A	40	N/A	N/A
160 ft < L ≤ 240 ft	40	N/A	49	32	N/A	40	N/A	N/A
240 ft < L ≤ 400 ft	46	N/A	49	32	N/A	40	N/A	N/A
400 ft < L ≤ 820 ft	49	N/A	49	34	N/A	40	N/A	N/A

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	16'8"	N/A	21'2"	20'8"	N/A	19'	N/A	N/A
80 ft < L ≤ 160 ft	17'3"	N/A	21'2"	21'1"	N/A	19'1"	N/A	N/A
160 ft < L ≤ 240 ft	17'10"	N/A	21'3"	21'7"	N/A	19'2"	N/A	N/A
240 ft < L ≤ 400 ft	18'9"	N/A	21'4"	21'8"	N/A	19'4"	N/A	N/A
400 ft < L ≤ 820 ft	19'1"	N/A	21'7"	22'4"	N/A	19'4"	N/A	N/A

N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

XTRUSION ON ALUMINIUM ROUND SEAM DECK OF MIN. 1 MM/18 GAUGE BEMO HALTER CLIPS INSTALLED WITH XTRUSION FIX KIT ROUND SEAM

These anchor points are installed to aluminum roof panels with circular interlock geometry (round seam), with a minimum thickness of 1 mm (18 gauge), by means of the XTrusion base plate. In this case installation occurs with four aluminum round seam clamps per base plate. The use of this clamping method to install the base plates of the HLL eliminates the chance of damages, due to penetration/drilling, and the chance of leakages.

	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	30	N/A	49	40	N/A	40	28	N/A
80 ft < L ≤ 160 ft	36	N/A	49	40	N/A	40	28	N/A
160 ft < L ≤ 240 ft	49	N/A	49	42	N/A	40	30	N/A
240 ft < L ≤ 400 ft	49	N/A	49	44	N/A	40	32	N/A
400 ft < L ≤ 820 ft	49	N/A	49	46	N/A	40	32	N/A

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	16'11"	N/A	21'2"	23'	N/A	19'	19'11"	N/A
80 ft < L ≤ 160 ft	17'6"	N/A	21'2"	23'1"	N/A	19'1"	20'	N/A
160 ft < L ≤ 240 ft	18'9"	N/A	21'3"	23'7"	N/A	19'2"	20'5"	N/A
240 ft < L ≤ 400 ft	19'	N/A	21'4"	23'11"	N/A	19'4"	21'	N/A
400 ft < L ≤ 820 ft	19'1"	N/A	21'7"	24'10"	N/A	19'4"	21'4"	N/A

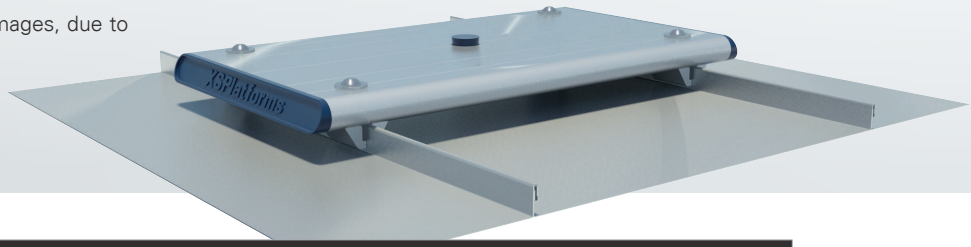
N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

SPAN, CLEARANCES AND LOAD CALCULATIONS FOR THE XTRUSION

XTRUSION ON ZINC STANDING DOUBLE FOLD DECK OF MIN. 1,0 MM (15 GAUGE) INSTALLED WITH XTRUSION FIX KIT DOUBLE FOLD

These anchor points are installed to zinc roof panels with double fold flat interlock geometry (double fold seam) with a minimum thickness of 1 mm (15 gauge), by means of the aluminum XTrusion base plate. In this case installation occurs with four aluminum double fold seam clamps per base plate. The use of this clamping method to install the base plates of the HLL eliminates the chance of damages, due to penetration/drilling, and the chance of leakages.



	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	34	N/A	49	49	N/A	40	30	N/A
80 ft < L ≤ 160 ft	40	N/A	49	49	N/A	40	32	N/A
160 ft < L ≤ 240 ft	49	N/A	49	49	N/A	40	32	N/A
240 ft < L ≤ 400 ft	49	N/A	49	49	N/A	40	34	N/A
400 ft < L ≤ 820 ft	49	N/A	49	49	N/A	40	36	N/A

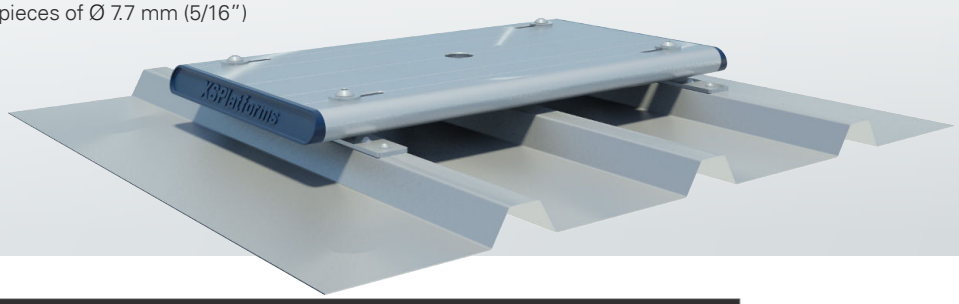
	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	17'3"	N/A	21'2"	24'7	N/A	19'	20'3"	N/A
80 ft < L ≤ 160 ft	17'9"	N/A	21'2"	24'8"	N/A	19'1"	20'9"	N/A
160 ft < L ≤ 240 ft	18'9"	N/A	21'3"	24'9"	N/A	19'2"	20'10"	N/A
240 ft < L ≤ 400 ft	19'	N/A	21'4"	24'11"	N/A	19'4"	21'5"	N/A
400 ft < L ≤ 820 ft	19'1"	N/A	21'7"	25'5"	N/A	19'4"	22'2"	N/A

N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

XTRUSION ON TRAPEZOIDAL COLD ROOF PROFILES OF MIN. 0.63 MM (24 GAUGE) WITHOUT INSULATION INSTALLED WITH BUILT-UP-ON-SITE KIT

These anchor points are installed to steel trapezoidal cold roof plates, with a minimum thickness of 0.63 mm (24 gauge), by means of the XTrusion base plate. Installation of one XTrusion base plate occurs with four XTrusion Build-up-on-site kits and sixteen pieces of Ø 7.7 mm (5/16") bulb-tite rivets.



	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	49	42	49	49	49	40	40	40
80 ft < L ≤ 160 ft	49	49	49	49	49	40	40	40
160 ft < L ≤ 400 ft	49	49	49	49	49	40	40	40
400 ft < L ≤ 820 ft	49	49	49	49	49	40	40	40

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	18'3"	18'8"	21'2"	21'2"	26'	19'	22'	23'4"
80 ft < L ≤ 160 ft	18'7"	19'7"	21'2"	21'2"	26'3"	19'1"	22'2"	23'5"
160 ft < L ≤ 400 ft	19'	20'8"	21'4"	21'4"	26'7"	19'4"	22'6"	23'10
400 ft < L ≤ 820 ft	19'1"	21'7"	21'7"	21'7"	27'2"	19'7"	22'11"	24'2"

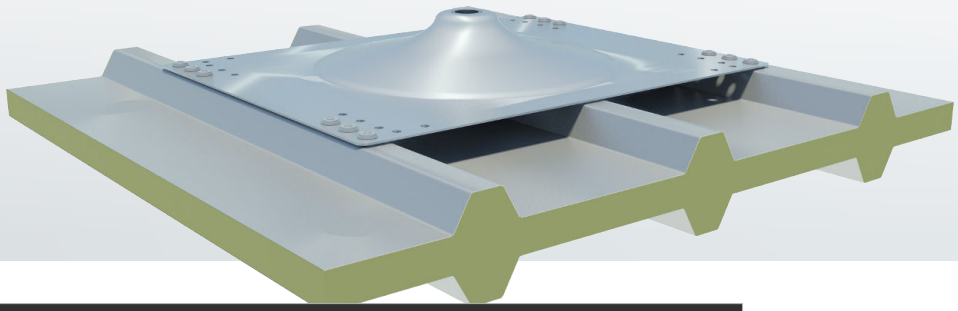
N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

SPAN, CLEARANCES AND LOAD CALCULATIONS FOR THE XSMD

XSMD ON SANDWICH PANELS, TOP STEEL MIN. 0,5 MM (25 GAUGE) INSTALLED WITH 12 BULB-TITE RIVETS

These anchor points are installed to sandwich panels with a steel top layer with a minimum thickness of 0,5 mm (25 gauge), by means of the XSMD base plate. Installation occurs with twelve Ø 7,7 mm (5/16") bulb-tite rivets.



	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	34	N/A	49	49	N/A	40	38	N/A
80 ft < L ≤ 160 ft	40	N/A	49	49	N/A	40	40	N/A
160 ft < L ≤ 240 ft	49	N/A	49	49	N/A	40	40	N/A
240 ft < L ≤ 400 ft	49	N/A	49	49	N/A	40	40	N/A
400 ft < L ≤ 820 ft	49	N/A	49	49	N/A	40	40	N/A

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	17'3"	N/A	21'2"	24'7	N/A	19'	21'9"	N/A
80 ft < L ≤ 160 ft	17'9"	N/A	21'2"	24'8"	N/A	19'1"	22'2"	N/A
160 ft < L ≤ 240 ft	18'9"	N/A	21'3"	24'9"	N/A	19'2"	22'4"	N/A
240 ft < L ≤ 400 ft	19'	N/A	21'4"	24'11"	N/A	19'4"	22'6"	N/A
400 ft < L ≤ 820 ft	19'1"	N/A	21'7"	25'5"	N/A	19'4"	22'11"	N/A

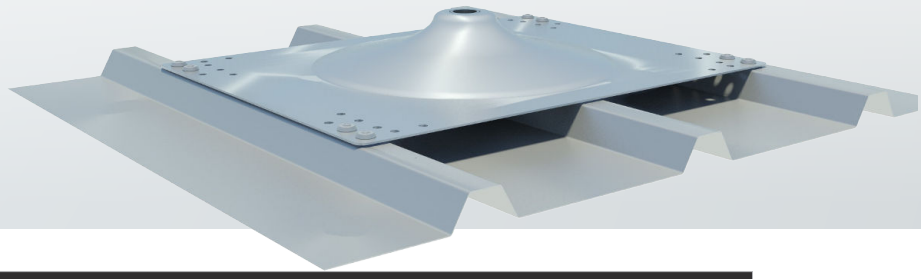
N/A = Not applicable

These values are calculated conform the ANSI Z359.6:2016 and OSHA 1926.502 standards

SPAN, CLEARANCES AND LOAD CALCULATIONS FOR THE XSMD

XSMD ON TRAPEZOIDAL COLD ROOF OF MIN. 0,63 MM (24 GAUGE) INSTALLED WITH 12 BULB-TITE RIVETS

These anchor points are installed to steel trapezoidal cold roof plates, with a minimum thickness of 0,63 mm (24 gauge), by means of the XSMD base plate. In this case installation occurs with twelve Ø 7,7 mm (5/16") bulb-tite rivets.



	MAX. SPAN IN FT PER SECTION							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	49	27	49	49	49	40	40	40
80 ft < L ≤ 160 ft	49	38	49	49	49	40	40	40
160 ft < L ≤ 400 ft	49	49	49	49	49	40	40	40
400 ft < L ≤ 820 ft	49	49	49	49	49	40	40	40

	REQ. CLEARANCE IN FT							
Type of the absorber / no. of users	**XSBending kit Pro**		**XSBending kit Pro + XSDynamic**			**XSConnector Pro + XSDynamic**		
Per section	1	2	1	2	3	1	2	3
L ≤ 80 ft	18'3"	17'4"	21'2"	24'7	26'	19'	22'	23'4"
80 ft < L ≤ 160 ft	18'7"	18'8"	21'2"	24'8"	26'3"	19'1"	22'2"	23'5"
160 ft < L ≤ 400 ft	19'	20'8"	21'4"	24'11"	26'7"	19'4"	22'6"	23'10
400 ft < L ≤ 820 ft	19'1"	21'7"	21'7"	25'5"	27'2"	19'7"	22'11"	24'2"

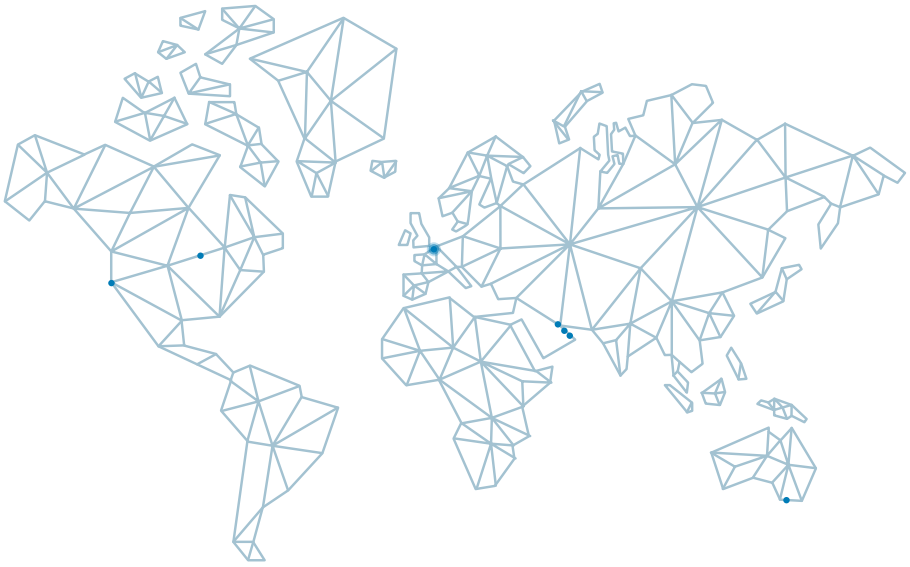
N/A = Not applicable

These values are calculated conform the European standard EN795:2012 and CEN/TS16415:2013

ABOUT XSPLATFORMS WORK AT HEIGHT

In 1997, we began to provide safety equipment for people working on roofs in The Netherlands. At that time, safety was already more of a calling than business. Now, we are a rapidly growing international company that designs safety solutions for the most complex buildings in the world. We still have the same aspiration as we had when we started: to make working at heights safer and easier — for everyone, everywhere.

With innovative access-to-height solutions we provide everything that is necessary to get people working at height home safe.



INTERESTED?

Would you like to know more about the XSPlatforms fall protection solutions? Or would you like to receive a quote? Feel free to contact our XSPlatforms Partner at any time and they will be happy to help you.

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BEMO Inspiring Metal Envelopes

Bemo USA Corporation
1755 N. 48th Street
Mesa, Arizona, USA 85205

Int'l Mobile Ph. +1 480-267-1067
USA Office Ph. +1 480-545-7900 Ext 232
USA Office fax +1 480-545-4999

BEMOUSA.COM