

# PLATFORMS

# information 🚺

An unloading platform is used to transport materials and equipment to the construction site. It allows to quickly load/unload materials between a construction site and any storey. An outrigger platform is an ideal addition to a crane. The size and carrying capacity allow

to place on it materials, containers, moguls and different devices used at construction sites.

The mounting of the platform takes only few minutes and allows to save time both while changing its location and transporting materials.

Carrying capacity of 4 tonnes, the platform's floor at the same level as the ceiling ensures ergonomics.



- quick installation
- carrying capacity of 4 tonnes

X

- visibility
- universality
- cost-effectiveness
- mobility
- meets safety norms
- certified







Accessories for cranes.



# properties

- three different sizes available
- maximum carrying capacity of 4 tonnes
- two stamps used for installation
- platform at the same level as the floor
- opening front part
- possibility to transport long elements
- anti-slip floor

Z

- anchoring points for PPE
- railing with toe board
- compliance with EU standards





Platform at the same level as the floor



anchoring points for PPE



Fixing of the crane's sling



Anti-slip floor



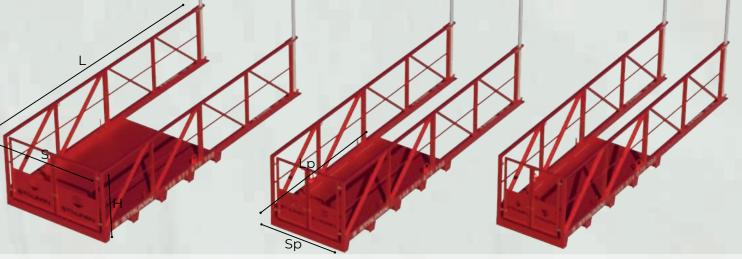
Gate/opening front part. Possibility to transport long elements.





# Technical specification of unloading platforms

CAT. NO.	NAME	L/Lp [m]	S/Sp [m]	H [m]	Lm [m]	Weight [kg]	
1130	WIDE PLATFORM	6,12/3,5	2,36/2,2	1,36	2,74	850	
1120	MEDIUM PLATFORM	6,12/3,5	1,68/1,51	1,36	2,74	720	
1110	NARROW PLATFORM	6,12/3,5	1,46/1,27	1,36	2,74	650	



WIDE PLATFORM

MEDIUM PLATFORM

NARROW PLATFORM

**(i)** 



# MODULAR PLATFORM

# information (j

The modular version of the Unloading Platform allows it to be disassembled into four main parts, which reduces the spatial dimensions of the device. This allows for the optimization of storage and transport (road transport, sea transport, etc.).

# advantages

- quick installation
- carrying capacity of 4 tonnes
- visibility
- universality
- cost-effectiveness
- mobility
- meets safety norms
- certified



32-084 MORAWICA 191 tel.: +48 571 870 100 centrala@strumin.pl

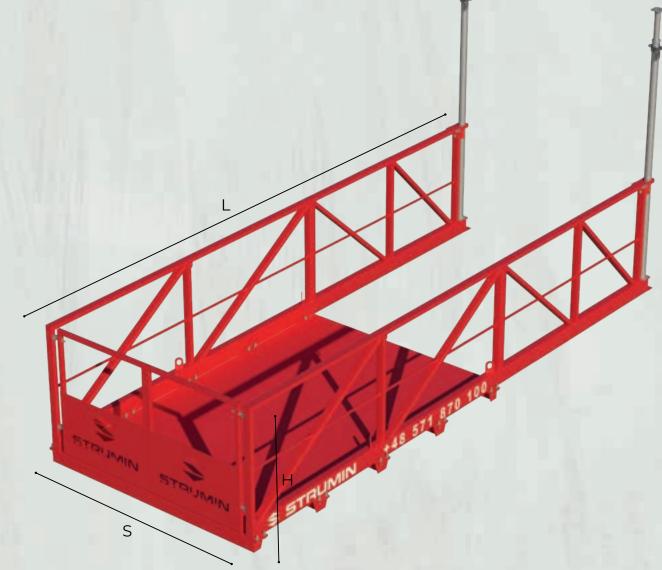
STRUM

INT



# Technical specification of modular platforms

WIDE PLATFORM										
	CAT. NO.	NAME	L [m]	S [m]	H [m]	quantity	Weight [kg]	TOTAL [kg]		
	1130 [B:]	Working Platform	3.42	2.44	0.16	1	423	929		
	1130 [A:]	Load-bearing barriers	6.10	1,24	0.12	2	440			
	1130 [D:]	Platform's gate	1.22	1.04	0.04	2	66.6			
MEDIUM PLATFORM										
	CAT. NO.	NAME	L [m]	S [m]	H [m]	quantity	Weight [kg]	TOTAL [kg]		
	1120 [B:]	Working Platform	3.42	1.75	0.16	1	302	782		
	1120 [A:]	Load-bearing barriers	6.10	1.24	0.12	2	440			
	1120 [D:]	Platform's gate	1.22	0.68	0.04	2	40			
	NARROW PLAT	FORM								
	CAT. NO.	NAME	L [m]	S [m]	H [m]	quantity	Weight [kg]	TOTAL [kg]		
	1110 [B:]	Working Platform	3.42	1.53	0.16	1	269	745		
	1110 [A:]	Load-bearing barriers	6.10	1.24	0.12	2	440			
	1110 [D:]	Platform's gate	1.22	0.57	0.04	2	36			





# **BELAY DEVICE - HINGED GALLOW [130]**

#### information

**(i)** 

X

ONE USER

The Hinged Gallow [130] Belay Device together with personal protecting equipment was designed to provide safety while performing works at height. Its aim is to protect the user from falling during construction works.

Depending on individual needs, the gallow can be mounted in several various types of sockets offered by the STRUMIN as universal elements that can be used in other anchoring devices.

The gallow can be mounted to the floor, to the wall, to a steel I-beam profile and to a lost socket embedded in concrete. The Hinged Gallow device is designed for use by a single user.

The device can be assembled entirely by hand or by using a crane, for which purpose the gallow is equipped with a sling.

The device consists of three separate parts: Gallow, Adapter [130] and Socket (4 types). (Floor Socket, Side Socket, Lost Socket, for steel I-beam profile)

#### properties

- improves safety
- may save health and life
- low weight
- fast and easy mounting
- visibility
- modular structure
- easy for storing and transporting
- EN-795 (type B)
- certificate
- wide range of possible applications



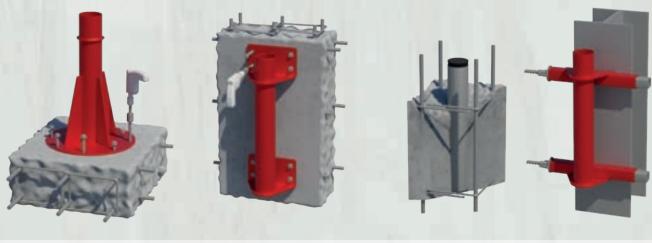


CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	PURPOSE	
3110	HINGED GALLOW	3,3	2,40	40,5	Anchor device	
3150	ADAPTER [130]	0,1	1,85	13,3	Anchor device adapter	

The HINGED GALLOW Anchoring Device is a basic component of all Anchoring Devices equipped with the "Hinged" catching arm. The Gallow ensure simple assembly and disassembly, which is done in practically two steps. The catching arm has been equipped with

a new solution - a breakable joint (*hinged joint*), which protects the device from tearing as a result of the action of forces with higher values that may occur during a rescue operation. Thanks to this solution, it is possible to simultaneously connect several rescuers and rescue devices with a total weight of 1200 kg to the same anchor point. The Gallow is standardly equipped with a sling, which is used during attachments using a crane. The Adapter [130] of the Hinged Gallow anchor device helps attach it to the sockets that fix the equipment to a given surface. The Adapter [130] is equipped with a socket that holds the Gallow at a greater height. Thanks to this, the total height of the anchor point is (as standard) 4.6 m. Depending on the type of socket used and the method of its attachment, the Gallow can work higher or lower, which makes it easier to configure the system in a given work place with different working conditions.

CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]		
3120	FLOOR SOCKET	0,50	0,35	12,5	Anchor device socket	
3130	SIDE SOCKET	0,56	0,22	10,8	Anchor device socket	
3140	LOST SOCKET	0,50	0,09	1,5	Anchor device socket	
3193	HEB SOCKET	0,58	0,55	12	Anchor device socket	



FLOOR SOCKET

SIDE SOCKET

LOST SOCKET

HEB SOCKET

The sockets are used to mount a given anchoring device on a specific workstation. Thanks to the different types of sockets, they can be attached to different surfaces (horizontal and vertical) and they can also be attached to different objects (steel profiles, embedded in concrete during masonry work).

The sockets have been tested for high loads and the self-tapping concrete screws provide very high pull-out strength.

The maximum forces acting on all sockets in this group can reach values around 25 kN. All sockets have been tested for strength in these extreme load cases.



# **BELAY DEVICE - HIGH GALLOW**

 $(\mathbf{i})$ 

Z

### information

The High Gallow is an anchoring device designed to assemble fall protection systems, mainly for vertical configurations and for configurations with a small deviation.

The anchor point is located at a height of 6.5 meters.

Up to 4 users can be connected to the Device simultaneously. The stability of the High Gallow is ensured by the solid Large Inertial Ballast, which is available as a ready-made steel formwork designed to be poured with concrete on the construction site. The ballast weighs 1900 kg, which ensures high stability of the system without the need to make any connections to the ground.

The device is designed, tested and certified in accordance with the EN 795:2012 standard. The High Gallow is a Type E anchoring device.

#### properties

- improves safety
- may save health and life
- high stability
- 4 users at once
- visibility
- modular structure
- easy for storing and transporting
- EN-795 (type E)
- certificate
- wide range of possible applications



32-084 MORAWICA 191 tel.: +48 571 870 100 centrala@strumin.pl



FOUR USERS

CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	PURPOSE	
3110	H-GALLOW (with core)	3,3	2,40	44,5 (with core)	Anchor device	
3170	HIGH ADAPTER	4,5	1,55x1,35	98,0	Anchor device adapter	

The HINGED GALLOW Anchoring Device is a basic component of all Belay Devices equipped with the "Hinged" catching arm. The Gallow ensure simple assembly and disassembly, which is done in practically two steps.

The Hinged Gallow used in the configuration of the High Gallow are equipped with an additional core reinforcing the center pole of the Gallow. This allows to increase the number of users simultaneously connected to the anchor point. The High Gallow allows for four users to work simultaneously. The catching arm has been equipped with a new solution - a breakable joint (hinged joint), which protects the device from tearing as a result of the action of forces with higher values that may occur during a rescue operation. Thanks to this solution, it is possible to simultaneously connect several rescuers and rescue devices with a total weight of 1500 kg to the same anchor point. The gallows is standardly equipped with

The gallows is standardly equipped with a sling, which is used during attachments using a crane. The High Adapter is used to mount the Gallow in a socket, which allows the anchor point to be raised to a height of 6.5 meters. The structure allows for stable operation and transfer of heavy loads thanks to the side buttresses used. The construction has been designed, tested and certified together with the Gallow and Inertial Ballast for compliance with the EN 795:2012 standard, according to Type E. The High Adapter with buttresses allows for the transfer of loads from the Gallow at a level of 15 kN.

**(i)** 

CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	
3192	BIG INERTIAL BALLAST	1,85x1,85	0,55	115 / 1900	Anchor device ballast socket



**BIG INERTIAL BALLAST FORMWORK** 

**BIG INERTIAL BALLAST WITH CONCRETE** 

32-084 MORAWICA 191 tel.: +48 571 870 100 centrala@strumin.pl



Big Inertial Ballast consisting of a steel formwork intended to be poured with concrete. The structure is equipped with adjustable feet that allows to set the ballast in a horizontal position.

# BELAY DEVICE - HINGED GALLOW [S-BALLAST]

### information

 $(\mathbf{i})$ 

Z



The use of the Hinged Gallow [S-Ballast] does not require fixing to the ground, which makes it useful in the case of work on formwork and other objects/grounds that do not provide adequate pull-out strength (compare with the anchoring device of the Hinged Gallow [130]).

#### properties

- improves safety
- may save health and life
- luser
- visibility
- modular structure
- emptyable ballast
- easy for storing and transporting
- EN-795 (type E)
- certificate
- wide range of possible applications







CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	PURPOSE
3110	HINGED GALLOW	3,3	2,40	40	Anchor device
3191	SMALL IN. BALLAST	1,30x1,30	0,58	Total: 1270	Anchor device ballast socket



HINGED GALLOW

The Small Inertial Ballast has been designed as a ready-made formwork for pouring concrete on site when the system is being configured. Due to the experience gained with its use, a "50/50" option has been introduced, which allows the ballast to be filled with 50% concrete and the remaining mass is provided by bulk material: gravel bagged into individual 25 kg ballasts (23 bags).



SMALL INERTIAL BALLAST, Total: 1270 kg

CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	
3191	SMALL IN. B. FORMWORK	1,30x1,30	0,58	83	Formwork
3191	SMALL IN. B. CONCRETE	1,30x1,30	0,58	~710	Formwork filled 50% with concrete



SMALL INERTIAL BALLAST FORMWORK

may pose a risk of death.



SMALL INERTIAL BALLAST WITH CONCRETE, 50%: ~710 kg

Due to the experience gained with its use, a 50/50 option has been introduced, which allows the ballast to be filled with 50% concrete and the remaining mass is provided by bulk material: gravel bagged into individual 25 kg ballasts (23 bags). The total mass of the Small Ballast must be 1270 kg. Partially filling the ballast with bulk material facilitates possible transport, e.g. between different construction sites. The use of this solution requires strict

adherence to the instructions for use of this device, as incorrect configuration



# ANCHORING SYSTEM - GUARD LifeLINE [B/C] 4 USERS

**(i)** 

X

#### information

Anchorage system - GUARD LifeLINE [B/C] is designed to create fall protection. It is equipped with four types of sockets that allow you to attach the system in different conditions at the work site. Two Sockets screwed to concrete (vertically or horizontally), one Socket designed to be embedded in concrete and one Socket designed to be attached to steel structures. Guard Lifeline is designed to be used by four people at the same time. The anchor line is equipped with a self-locking K-Lock device. The entire Anchorage System is fully tested in accordance with EN 795:2012 Type B/C.

# properties

- improves safety
- may save health and life
- high stability
- 4 users at once
- visibility
- modular structure
- easy for storing and transporting
- EN-795 (type B/C)
- certificate
- wide range of possible applications



CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	PURPOSE	
3210	LIFELINE POLE	0,15x0,15	2,10	16	Anchor device	
3160	ADAPTER [92]	0,1	1,46	11,7	Anchor device adapter	
3220	ANCHOR ROPE	16mm	21	~3,5	Anchor Line	
3230	K-LOCK DEVICE	0,33x0,22	7,5cm	3,5	Self-clamping device	

The Lifeline Pole is the main element of the GUARD Anchorage System. It is equipped with [extremity anchor points] to which the ["Lifeline" - Anchorage Line] can be connected - i.e. a flexible line terminated with anchor points (connector - snap hook). The use of the Lifeline Pole allows the Anchorage Line (Lifeline) to be installed at the appropriate height to ensure its correct use - i.e. the requirement for the anchor points/lines to be as high as possible above the user's head.

The Lifeline-Pole Adapter [92] is used to secure the Pole in the Socket fixed to the ground. The Adapter [92] takes on the greatest loads during work in the event of a fall and during possible rescue operations. Its strength was confirmed during the Anchoring System tests, in which forces of the order of 25 kN occur.



The K-LOCK device allows for quick and easy tightening of the Anchoring Line to the required working length. It is equipped with a lock that switches the jaws to open mode (rope tension adjustment mode) or closed mode (clamping). The Anchoring Line is made using a high-strength braided polyester rope. Its design has been individually developed and tested for the needs of this specific GUARD system. The rope, subjected to a series of various tests, shows an actual strength\* of around 27 kN, with knots, loops and crimping with the K-Lock device.

> Information provided by manufacturers and competitors is most often inconsistent with the actual state, where the stated strength of the ropes refers to its idealized tensile strength, excluding phenomena occurring in knots and crimped areas. For this reason, the actual strength of the ropes is often only 60% of the stated value.

CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	
3120	FLOOR SOCKET	0,50	0,35	12,5	Anchor device socket
3130	SIDE SOCKET	0,56	0,22	10,8	Anchor device socket
3140	LOST SOCKET	0,50	0,09	1,5	Anchor device socket
3193	HEB SOCKET	0,58	0,55	12	Anchor device socket



The sockets are used to mount a given anchoring device on a specific workstation. Thanks to the different types of sockets, they can be attached to different surfaces (horizontal and vertical) and they can also be attached to different objects (steel profiles, embedded in concrete during masonry work).

The sockets have been tested for high loads and the self-tapping concrete screws provide very high pull-out strength.

The maximum forces acting on all sockets in this group can reach values around 25 kN. All sockets have been tested for strength in these extreme load cases.



# ANCHORING SYSTEM - GUARD LifeLINE [C/E]

1 USER

STRUMI

# infor<u>mation</u>

 $(\mathbf{i})$ 

Z

The GUARD LifeLINE [C/E] anchoring system on Small Inertial Ballasts is designed to create fall protection systems. The system's inertial ballasts do not require fixing to the ground, making them very useful in formwork or other tasks that require frequent transfer of the protection system.

The anchor line is equipped with a self-clamping K-Lock device. The working range of the Anchor Line is 5 to 20 meters. Guard Lifeline [C/E] is designed for one user. The system has been designed based

on Type C/E according to the EN 795:2012 standard.

#### properties

- improves safety
- may save health and life
- high stability
- 1 user at once
- visibility
- modular structure
- easy for storing and transporting
- EN-795 (type C/E)
- certificate
- wide range of possible applications





CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	PURPOSE	
3210	LIFELINE POLE	0,15x0,15	2,10	16	Anchor device	
3191	SMALL IN. BALLAST	1,30x1,30	0,58	Total: 1270	Anchor device ballast socket	
3220	ANCHOR ROPE	16mm	21	~3,5	Anchor Line	
3230	K-LOCK DEVICE	0,33x0,22	7,5cm	3,5	Self-clamping device	

The Lifeline Pole is the main element of the GUARD Anchorage System. It is equipped with [extremity anchor points] to which the ["Lifeline" - Anchorage Line] can be connected - i.e. a flexible line terminated with anchor points (connector - snap hook). The use of the Lifeline Pole allows the Anchorage Line (Lifeline) to be installed at the appropriate height to ensure its correct use - i.e. the requirement for the anchor points/lines to be as high as possible above the user's head.



The Small Inertial Ballast has been designed as a ready-made formwork for pouring concrete on site when the system is being configured. Due to the experience gained with its use, a "50/50" option has been introduced, which allows the ballast to be filled with 50% concrete and the remaining mass is provided by bulk material: gravel bagged into individual 25 kg ballasts (23 bags).

The K-LOCK device allows for quick and easy tightening of the Anchoring Line to the required working length. It is equipped with a lock that switches the jaws to open mode (rope tension adjustment mode) or closed mode (clamping). The Anchoring Line is made using a high-strength braided polyester rope. Its design has been individually developed and tested for the needs of this specific GUARD system. The rope, subjected to a series of various tests, shows an actual strength\* of around 27 kN, with knots, loops and crimping with the K-Lock device.

(\*) Information provided by manufacturers and competitors is most often inconsistent with the actual state, where the stated strength of the ropes refers to its idealized tensile strength, excluding phenomena occurring in knots and crimped areas. For this reason, the actual strength of the ropes is often only 60% of the stated value.

CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	
3191	SMALL IN. B. FORMWORK	1,30x1,30	0,58	83	Formwork
3191	SMALL IN. B. CONCRETE	1,30x1,30	0,58	~710	Formwork filled 50% with concrete





SMALL INERTIAL BALLAST FORMWORK

SMALL INERTIAL BALLAST WITH CONCRETE, 50%: ~710 kg

Due to the experience gained with its use, a 50/50 option has been introduced, which allows the ballast to be filled with 50% concrete and the remaining mass is provided by bulk material: gravel bagged into individual 25 kg ballasts (23 bags). The total mass of the Small Ballast must be 1270 kg.

Partially filling the ballast with bulk material facilitates possible transport, e.g. between different construction sites. The use of this solution requires strict adherence to the instructions for use of this device, as incorrect configuration may pose a risk of death.





# ANCHORING SYSTEM - GUARD LifeLINE [C/E]

2 USERS

# information

 $(\mathbf{i})$ 

Z

The GUARD LifeLINE [C/E] anchoring system on Big Inertial Ballasts is designed to create fall protection systems. The system's inertial ballasts do not require fixing to the ground, making them very useful in formwork or other tasks that require frequent transfer of the protection system.

The anchor line is equipped with a self-clamping K-Lock device. The working range of the Anchor Line is 5 to 20 meters. Guard Lifeline [C/E] is designed for two users. The system has been designed based

on Type C/E according to the EN 795:2012 standard.

#### properties

- improves safety
- may save health and life
- high stability
- 2 users at once
- visibility
- modular structure
- easy for storing and transporting
- EN-795 (type C/E)
- certificate
- wide range of possible applications





CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	PURPOSE	
3210	LIFELINE POLE	0,15x0,15	2,10	16	Anchor device	
3220	ANCHOR ROPE	16mm	21	~3,5	Anchor Line	
3230	K-LOCK DEVICE	0,33x0,22	7,5cm	3,5	Self-clamping device	

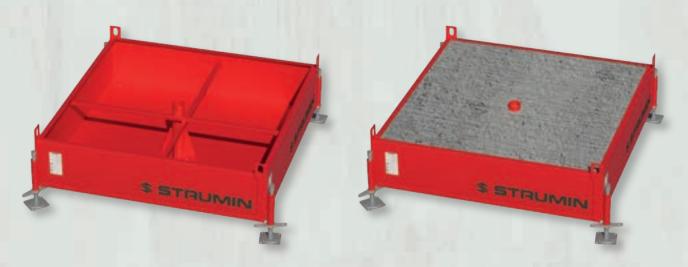
The Lifeline Pole is the main element of the GUARD Anchorage System. It is equipped with [extremity anchor points] to which the ["Lifeline" - Anchorage Line] can be connected - i.e. a flexible line terminated with anchor points (connector - snap hook). The use of the Lifeline Pole allows the Anchorage Line (Lifeline) to be installed at the appropriate height to ensure its correct use - i.e. the requirement for the anchor points/lines to be as high as possible above the user's head.



The K-LOCK device allows for quick and easy tightening of the Anchoring Line to the required working length. It is equipped with a lock that switches the jaws to open mode (rope tension adjustment mode) or closed mode (clamping). The Anchoring Line is made using a high-strength braided polyester rope. Its design has been individually developed and tested for the needs of this specific GUARD system. The rope, subjected to a series of various tests, shows an actual strength\* of around 27 kN, with knots, loops and crimping with the K-Lock device.

Information provided by manufacturers and competitors is most often inconsistent with the actual state, where the stated strength of the ropes refers to its idealized tensile strength, excluding phenomena occurring in knots and crimped areas. For this reason, the actual strength of the ropes is often only 60% of the stated value.

CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	
3192	BIG INERTIAL BALLAST	1,85x1,85	0,55	115 / 1900	Anchor device ballast socket



#### **BIG INERTIAL BALLAST FORMWORK**

**BIG INERTIAL BALLAST WITH CONCRETE** 

32-084 MORAWICA 191 tel.: +48 571 870 100 centrala@strumin.pl



Big Inertial Ballast consisting of a steel formwork intended to be poured with concrete. The structure is equipped with adjustable feet that allows to set the ballast in a horizontal position.

# SAFETY NETS – LiteMESH

#### information

The LiteMESH system is designed to protect the external edges of buildings, it is used as protection for work on lower levels and as protection for communication routes. The net catches falling objects and simultaneously protects people below.

 $(\mathbf{i})$ 

Z

LiteMESH is a combination of two nets with a wide and fine mesh. It catches large objects and small elements, and even semi-liquid materials, such as mortars, etc. The system is easy, fast and universal to install to the front and top of the ceiling and to the wall. Thanks to the lightness and flexibility of the system, it is possible to adapt it to any construction conditions.

The LiteMESH net provides fast and cheap protection for construction works and other works requiring an increase in the level of safety.

#### properties

- catches falling objects,
- easy and quick to install,
- flexible applications,
- low weight of system elements,
- protects traffic routes,
- economical,
- manual installation.



LiteMESH module in top mount configuration.



LiteMESH module in front mount configuration.



LiteMESH can be mounted to vertical posts or horizontal beams (steel, concrete, etc.) - console mounting adapter.



TECH	INICAL SPEC	IFICATIO		$(\mathbf{i})$	
CAT. NO.	NAME	L [m]	S [m]	WEIGHT [kg]	PURPOSE
4110	MODULE LtM 6m	3-6	3,0	37,0	A system designed to catch falling objects
4100	CONSOLE LtM		3,0	16,0	and people falling from the working level.
4120	NET S 6x3m	6,0	3,0	5,0	(protects against falls up to 0.4 m)
4130	NET S 4x3m	4,0	3,0	4,0	
4140	CORNER 3x3m	3,0	3,0	3,0	
4150	STRING LtM	4,5		1,0	
4160	TIGHTEN LtM (edge rope holder)	0,26	0,05	0,5	

SWIVEL CONSOLE ARM 

MODULE NET 6x3 (4x3) m

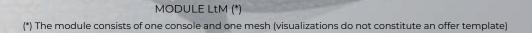
CONNECTING ROPE Ø8

CONSOLE HOLDER

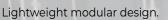
EDGE ROPE HOLDER

SWIVEL JOINT

Value -







+48 510

- lightweight design, simple and intuitive assembly, simple and flexible system, universal mounting adapter, console mounting adapter, adjustable net inclination, can be folded, ossy to transport and store

- easy to transport and store.



The adapter allows for installation: top, bottom and to the ceiling.



Tilting arm of the net-adjustment to individual requirements.

Mounting to vertical posts or horizontal beams.

- catches falling objects,
- protects the space below the work area, e.g. traffic routes, etc.,
- works with other edge protection systems
   e.g. EPS.
- low weight,
- possibility of attachment to the bottom of the protected structure.











100x100 mesh catching falling objects, tools. Mosquito net catching small elements.

# ANCHORING SYSTEM - SPIDER LifeLINE [C/E]

2 USERS

#### information \_\_\_\_\_

**(i)** 

20

The SPIDER LifeLINE [C/E] anchoring system on Portable Rubber Ballasts is designed to create fall protection systems. The system's inertial ballasts do not require fixing to the ground, making them very useful in formwork or other tasks that require frequent transfer of the protection system.

The anchor line is equipped with a self-clamping K-Lock device. The working range of the Anchor Line is 5 to 20 meters. Spider Lifeline [C/E] is designed for two users. The system has been designed based

on Type C/E according to the EN 795:2012 standard.

#### properties

- improves safety
- may save health and life
- 2 users at once
- visibility
- modular structure
- easy for storing and transporting
- EN-795 (type C/E)
- certificate
- wide range of possible applications





CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	PURPOSE	
3310	SPIDER DEVICE	1,95x0,92	0,78	700	Anchor device	



The SPIDER Anchoring Device is part of the SPIDER LifeLINE Anchoring System. It consists of portable rubber ballasts (25 kg) and a Telescopic Pole (of the Anchor Line) with a breakable hinge. The new "HINGED TELESCOPE" solution ensures proper operation of the anchoring system for two users and increases the stability of the inertial ballasts by reducing the forces tensioning the Anchor Line. This increases the subjective perception of the user's sense of security. The portable ballasts are placed on an additional rubber coating with a high coefficient of friction, which provides high friction forces that hold the ballast in place. The Hinged Telescope Pole with a breakable hinge is a new solution that allows for increasing the load capacity of the system in the event of a "deep" fall. In such a situation, the Anchoring Line 'switches' to Delta mode, which reduces the forces tensioning the Anchoring Line - which in effect reduces the forces acting on the ballasts, and the entire system shows greater stability.

CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]		
3320	RUBBER BALLAST	0,88x0,44	0,13	~32	Anchor device ballast	
3230	K-LOCK DEVICE	0,33x0,22	7,5cm	3,5	Self-clamping device	
3220	ANCHOR ROPE	16mm	21	~3,5	Anchor Line	



Portable Rubber Ballast [32 kg] allows for the configuration of a Large Ballast Module, which constitutes the main part of the SPIDER Anchoring Device. Thanks to the use of this element, the Device can be folded into various shapes depending on the requirements of the workstation.

32-084 MORAWICA 191 tel.: +48 571 870 100 centrala@strumin.pl





The K-LOCK device allows for quick and easy tightening of the Anchoring Line to the required working length. It is equipped with a lock that switches the jaws to open mode (rope tension adjustment mode) or closed mode (clamping). The Anchoring Line is made using a high-strength braided polyester rope. Its design has been individually developed and tested for the needs of this specific GUARD system. The rope, subjected to a series of various tests, shows an actual strength\* of around 27 kN, with knots, loops and crimping with the K-Lock device.

(\*)

Information provided by manufacturers and competitors is most often inconsistent with the actual state, where the stated strength of the ropes refers to its idealized tensile strength, excluding phenomena occurring in knots and crimped areas. For this reason, the actual strength of the ropes is often only 60% of the stated value.

# STAIRWAYS MODULO N

#### information

 $(\mathbf{i})$ 

Ż

Construction site stairways are universal devices providing safe move between floors at construction sites. Tanks to seven available sizes and smooth angle regulation, they provide the access to any working level. Folded stairways may be used as a bridge with a range of 5.7 m. Thanks to the implementation of high, cold-formed profiles, the system's project provide high durability of the construction and does not demand any additional support or toe boards.

#### advantages

#### - universal system

- different lengths available
- a stairway and a bridge in one
- anti-slip
- galvanized construction
- simple and intuitive installation
- compliance with applicable safety standards
- certified

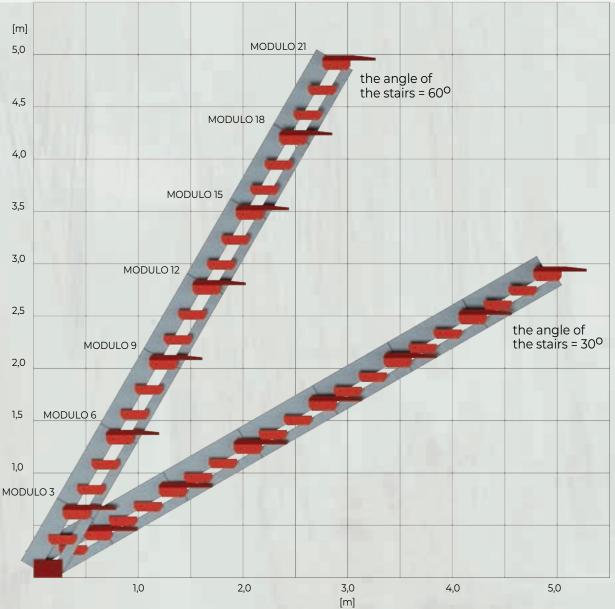




CAT. NO.	NAME	L[m]* for <b>a</b> =0	L[m]* for <b>a</b> =30/60	H[m]* for <b>a</b> =30/60	WEIGHT [kg]	PURPOSE
2110	MODULO 3	0,9	0,8 / 0,6	0,7 / 0,7	46,0	For the implementation
2120	MODULO 6	1,7	1,5 / 1,0	1,0 / 1,4	70,0	of temporary
2130	MODULO 9	2,5	2,2/1,4	1,3 / 2,1	94,0	communication routes
2140	MODULO 12	3,3	2,9/1,8	1,7 / 2,8	116,0	
2150	MODULO 15	4,1	3,6/2,2	2,1/3,5	138,0	
2160	MODULO 18	4,9	4,3/2,6	2,5 / 4,2	162,0	
2170	MODULO 21	5,8	5,0 / 3,0	2,9 / 4,9	185,0	No.

(\*)
 L[m] - length of the stairs, H[m] - height of the stairs
 N[kN] - generalized load-bearing capacity of the stairs (permissible load in the least favorable configuration - horizontally).
 (detailed information in the technical documentation of the device)

TILT ANGLE ADJUSTMENT



**()** 



Automatically positioned upper and lower foot

Supporting beam serves as a toe board

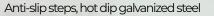


- modular system available in 3, 6, 9, 12, 15, 18 and 21 steps modules

- available in 3, 6, 9, 12, 15, 18 and 21 su
  a stairway and a bridge in one
  integrated railing
  anti-slip steps
  galvanized construction
  easy and intuitive installation
  quick and durable assembly with reusable screws inserted in concrete - ease of storing and transporting







# LANDING MODULO N





# SOLID BOX

#### information

(j)

Z

SOLID BOX is used to safely store and transport tools. Its design connects functionality, mobility and ease of transport with a crane, a pallet truck or a forklift truck. Anti-theft construction of the box is supported by a range of safeguarding measures. Thanks to its versatility, it can be used both at small and big construction sites.

#### advantages

- safety of tools
- ease of transport
- mobility
- big capacity
- anti-theft
- waterproof
- certified



The SOLID BOX is made of powder-coated steel. It is available in three sizes and two colour versions.



A lid is equipped with a pneumatic shock absorber which provides smooth opening and closing and protects its user's fingers from being caught.



The box offers different options and functions, e.g. can be mounted to the surface with anchors.





ТЕСН	NICAL SF	PECIFI	CATIC	N					<b>(i)</b>
CAT. NO.	NAME	L [cm]	S [cm]	H [cm]	WEIGHT[kg]	LOAD CAP.[kg]	COLOR	PURPOSE	
6310	LARGE BOX	200/191*	75/69*	82/68*	142,0	500,0	sand	Safe storage	
6320	MEDIUM BOX	150/141*	65/60*	68/56*	97,0	500,0	sand	and transport of tools	
6330	SMALL BOX	100/91*	50/45*	55/42*	60,0	500,0	sand		

(\*) - external and internal size



LARGE BOX

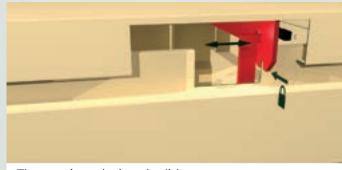
MEDIUM BOX

SMALL BOX









Three points closing the lid.

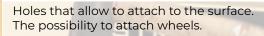




A collar locking the lid (in case of damaging hinges).

The Pneumatic shock absorber of the lid.

- a multi-point locking system and lid catching
- a lid equipped with a shock absorber
- suitable for transporting with a pallet truck or a crane
- waterproof
- three available sizes
- available colours: sand, army green
- possibility to attach wheels
   produced in a certified production facility
- strengthened construction
- continuous welds
- hidden lock









ININ

**()** 

# DUMP SKIP CONTAINER

#### information

A skip container is used to transport different types of materials, i.e. hardcore, waste, equipment, tools or mortar.

The container allows to safely unload construction waste by a crane or a loader operator. The solution increases the level of safety at a construction site and lowers the risk of accidents. Together with a dump platform, the container allows to be transported with a pallet truck to any place at a construction site.



#### advantages

- construction which allows to dump materials

Z

- safe
- high capacity
- mobility
- easy to transport
- certified

Transport, unloading of rubble, waste, etc.



Supports the transport of materials on the construction site





TECH	INICAL SPECIFICAT	ION					<b>(i)</b>
CAT. NO.	NAME	L [m]	S [m]	H [m]	WEIGHT [kg]	PURPOSE	
6270	LARGE SKIP CONTAINER 1,4 m <sup>3</sup>	1,55	1,20	1,10	135	Enables safe transport and	
6280	SMALL SKIP CONTAINER 0,8 m <sup>3</sup>	1,50	1,05	0,80	115	unloading of various materia	ls
	<image/>	L					
		48 51	0 7 9 5				

# EDGE PROTECTION PRODUCTS

#### information

EPP (Edge Protection Products) are wide range of products that include edge protection fences. They are widely used at construction sites, during road works, to temporary protect such works as digging trenches etc.

 $(\mathbf{i})$ 

The poles were designed for different types of holders and the filling of the railing, depending on requirements, may be full (i.e. panel mesh or boarding). EPS contain edge protection measures and work with shuttering systems.

# properties

- universal system
- different types
- of fixing methods
- universal poles, h: 120 cm
- filling with toe board
   galvanized / lacquered construction
- simple and intuitive installation
- complies with safety norms: 92/57/EWG, PN-EN-13374+A1

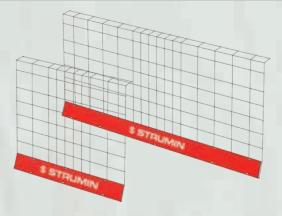
🕲 ( E

- certified

SSTRUMIN



TE	CHNICAL SP	PECIFI	CATI	ON		<b>()</b>
CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	PURPOSE	
5420	MESH PANEL 250	1,20	2,50	8,70	Protection of working edges	
5450	MESH PANEL 130	1.20	1.30	540	against falling persons and objects.	



The mesh panel is made of welded galvanized mesh, which consists of three protection areas:

- a 12 cm wide upper "shelf" acting as a handrail,
- vertical filling up to 120 cm above the working level,
- a full steel toe board 15 cm high.

The varied arrangement of the vertical bars is from 10-20 cm, the oblique positioning of the toe board allows for effective retention of small items (e.g. debris) from being accidentally thrown from the working level.

CAT. NO.	NAME	Η[]	L [m]	WEIGHT [kg]	PURPOSE	
5410	BOARD 250	3,2x15cm	2,50	6,50	Protecting working edges against falling persons and objects.	
				levels (board It protects pe of the workin The lower bo	ling - board 250 (2.5 m) - is made of three dimensions 2500 x 150 x 32). ople from falling over the edge g level. It is mounted in the H, Standard and Single post holders. ard is a safeguard - a toeboard, which is used II objects accidentally thrown out of the working level.	
CAT. NO.	NAME	H [m	n] L [m	] WEIGHT [kg]	PURPOSE	
5430	FENCE MES	SH 1,20r	m 100,0	) 15	Protecting working edges against falling persons and objects.	
				Its main adva to weather co The system is road works, a a warning ba	n is a safety barrier made of non-stretchable PVC mesh. antage is light weight, easy assembly, resistance onditions, and universality of the system. a used on construction sites, during renovations, nd securing deep excavations. The solution is rrier that informs about approaching a dangerous zone. osts are made of structural and galvanized steel.	

CAT. NO.	NAME	H [m]	L [m]	WEIGHT [kg]	PURPOSE
5440	MESH WALL NET	1,20m	3,0	1,5	Protecting working edges against falling persons and objects.

RUMÎ

The MESHWALL net is a safety barrier made in the form of a polypropylene net. Its main advantage is its low weight, easy assembly, and resistance to weather conditions. The MESHWALL barrier consists of posts, e.g. LITE, a net and an edge rope, which acts as a grab and an element tensioning the entire system.

The net is manufactured in accordance with the standards of Edge Protection Systems and fall protection systems (safety nets).

CAT. NO.	NAME	H [m]	WEIGHT [kg]	PURPOSE (cooperates with:)
5110	H POST	1,20	3,80	Mesh Panel, Board, Brackets/Adapter: 5210, 5220, 5230, 524, 5250, 5310, 5320
5120	STANDARD POST	1,20	2,90	Board, Brackets/Adapter: 5210, 5220, 5230, 524, 5250, 5310, 5320
5130	LITE POST	1,20	2,80	Mesh Panel, Brackets/Adapter:: 5210, 5220, 5230, 524, 5250, 5310, 5320
5140	SINGLE POST	1,20	3,60	Mesh Panel, Board
5150	FENCE POST	1,20/1,50	3,00	Fencing Mesh
5160	KBW CLAMPING POST	1,80	13,5	Mesh Panel, Board

The H post is used to create a safety barrier with mesh filling or boarding. The STANDARD post is used to create a safety barrier with boarding filling. The LITE post is used to create a safety barrier with mesh filling.

H, Standard and Lite posts can be used in several types of brackets that can be attached to different surfaces and in different positions.

The posts are locked in the socket by rotating them a small angle (~45°) and positioning them in the working position relative to the ceiling.

They are made of structural steel and galvanized.

The SINGLE post is used to create a safety barrier with mesh filling or boarding. It is designed for mounting in a concrete base using concrete screws or mounting anchors.

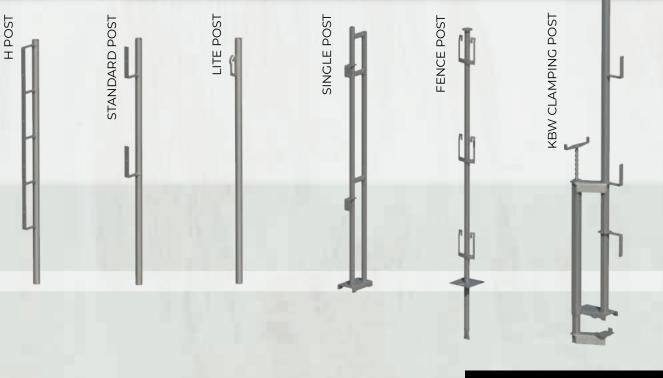
It ensures quick, simple and cheap implementation of a safety barrier. Made of structural steel, galvanized.

The FENCE post is a light and simple element that holds the fence mesh. Equipped with handles that prevent accidental detachment of the mesh, e.g. during gusts of wind. The square foot makes it easy to attach the posts at a fixed height, which improves and speeds up installation in the ground.

The post has two reflective fields, significantly increasing visibility at night or during bad weather (fog, snowfall, rain, etc.).

Made of galvanized steel, which makes it resistant to weather conditions.

The KBW clamping post is used to create a safety barrier with mesh filling or boarding. The post can be mounted on the edge of the ceiling by screwing the lower clamping jaw. This type of mounting can also be used on girders located below the ceiling. Thanks to the height of the post, which is 180 cm, it is possible to secure the upper level to the required height of min. 1.0 m. The maximum spacing of the lower jaw is 50 cm. Made of structural steel, galvanized.





CAT. NO.	NAME	H [m]	WEIGHT [kg]	PURPOSE (cooperates with:)
5210	VERTICAL BRACKET	0,25	1,46	H-Post, Standard and Lite, Adapters 5310 and 5320
5220	HORIZONTAL BRACKET	0,20	1,10	H-Post, Standard and Lite, Adapters 5310 and 5320
5230	HAMMERED BRACKET	0,60	2,80	H-Post, Standard and Lite, Adapters 5310 and 5320
5240	GIRDER BRACKET	0,25	2,60	H-Post, Standard and Lite, Adapters 5310 and 5320
5250	LARSEN BRACKET	0,27	2,00	H-Post, Standard and Lite, Adapters 5310 and 5320
5260	WALL BRACKET	0,10	0,36	Mesh Panel, Board
5270	PLATFORM BRACKET	0,10x0,22	0,90	100x100 mm Beam
5280	TOEBOARD BRACKET	0,13	0,30	Mesh Panel, Board
5290	ATTIC BRACKET	0,51	4,50	H-Post, Standard and Lite



CAT. NO.	NAME	H [m]	WEIGHT [kg]	PURPOSE (cooperates with:)
5310	ADAPTER 250	0,43	1,13	H-Post, Standard and Lite, Brackets: 5210, 5220, 5230, 5240, 5250, Consoles: 5610, 562
5320	ADAPTER 500	0,68	2,22	H-Post, Standard and Lite, Brackets: 5210, 5220, 5230, 5240, 5250, Consoles: 5610, 562
5510	UNIVERS. CEILING CLAMP	0,55	6,80	H-Post, Standard and Lite, Adapters 5310 and 5320
5610	RIGID CONSOLE	1,50	9,20	H-Post, Standard and Lite, Adapters 5310 and 5320
5620	ADJUSTABLE CONSOLE 1	,10x0,50	9,50	H-Post, Standard and Lite, Adapters 5310 and 5320



# CANOPIES

#### information

**(i)** 

Canopies are used to increase the level of safety and the comfort of working.

They help to organize points where workers gather tools, PPE and collective protective equipment.

Canopies may be used to create working areas that provide safety of people, machines and devices and protect them from different weather conditions, such as rain, snow and insolation. They can also be used as a place where different elements, such as a switchgear, a first aid kit, firefighting equipment, information boards, benchtops and other objects are gathered.



A stackable construction allows to easily store canopies.



Simple, intuitive installation and deinstallation in just a few steps.



Adjustable legs and a wall with accessories.





							$\mathbf{i}$
CAT. NO.	NAME	L [m]	S [m]	H [m]	WEIGHT[kg]	PURPOSE	
6110	CANOPY	4,15	2,25	2,40	155,0	Increases level of safety	
6120	ACCESSORY BOARD	1,25	1,25	0,20	43,0	and comfort in work places.	
6130	RUBBER BALLASTS	0,70	0,40	0,56	300,0 *		

Ŗ

Canopies increase the level of safety and comfort at a working area. It is an optimal solution for organizing workspace at a construction site. Thanks to a modular construction, it is possible to create a complete product equipped with a switchgear, a first aid kit, firefighting equipment, information boards, benchtops etc. Canopies belong the "machines and devices" group and this is how they are classified from the formal point of view. - protects the user from unfavourable weather conditions

- increases the safety and comfort of work
- provides access to basic OSH equipment
- an easy and intuitive installation
- a simple and flexible system
- a modular construction
- easy to store and transport
- certified in accordance with the 2006/42/EC directive
- standardized norms: EN ISO 12100:2012

(\*)

STRUMIN

One set of rubber ballasts consists of three 25 kg rubber weigh<mark>ts.</mark> The system p<mark>rov</mark>ides for the possibility of using one additional 25 kg

The system provides for the possibility of using one additional 25 kg weight for each ballast, therefore the maximum weight of 4 sets of rubb<mark>er</mark> ballasts is 400 kg.

🔊 ( E

The accessory board includes:

- waterproof formwork board,
- electrical switchboard,
- fire extinguisher,
- first aid kit,
- hanger,
- lamp.





Transport holders for a crane's sling.



A transport locker of the legs.





The working roof is optionally equipped with rubber ballasts, which weigh down the structure when it is not possible to anchor it to the ground. Each leg is equipped with an adapter for connecting the ballast set to the roof structure.





# NETS Type T

# information

T-type net systems protect the workplace if there is the danger of a fall from heights. The system is a connection of two nets with wide and small loops. It catches people, large objects and small elements, and even semi-liquid material, i.e. mortar. The construction is a damping system which absorbs energy generated during a fall and minimalizes the overload that is created while trying to stop a falling object/person.

catches falling people and objects

absorbs a fall from up to 7 m

EN-1263-1\_2015-02E standard

protects circulations areas

compliance with

universal installation durable construction manual installation Z



#### advantages

\_

\_

Type T net ceiling module



Type T net wall module

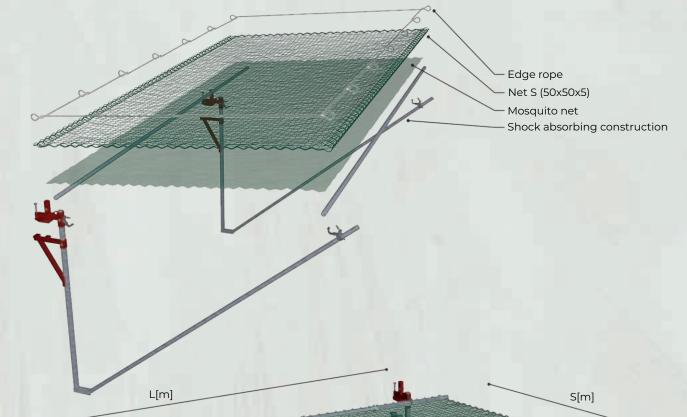


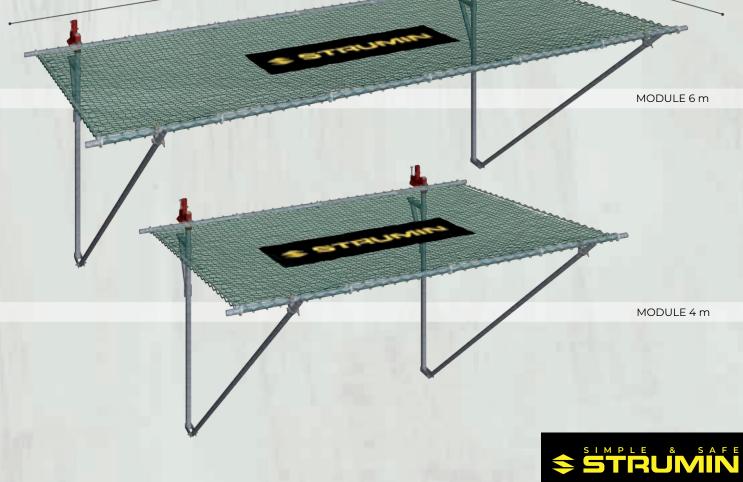
32-084 MORAWICA 191 tel.: +48 571 870 100 centrala@strumin.pl



Type S corner net

	No.	properties					
	CAT. NO.	NAME	L [m]	S [m]	H [m]	WEIGHT [kg]	PURPOSE
	4200	MODULE 6m	6,00	3,00	2,40	120	Protects against falls from height.
	4210	MODULE 4m	4,00	3,00	2,40	106	Captures falls of people and objects from a height of up to 7 m.
	4220	WALL MODULE 6m	6,00	3,00	2,40	103	
	4230	WALL MODULE 4m	4,00	3,00	2,40	89	
	42022:	NET S 6x3 m	6,00	3,00		5	
	42122:	NET S 4x3 m	4,00	3,00		4	
	4240	NET S 3x3 m	3,00	3,00		3	
_							







A modular system installed from the top.



A regulated jaw holder.



- regulated ceiling holder adjustment
- of the jaws spacing from 20 cm do 110 cm

- self-locking wall holder
   fast and durable installation
   a net catching people and objects
- a "mosquito" net catching small elements
- easy to store and transport
- line elements

TU



An adapter mounted to a wall.



**(i)** 

Quick installation with screws inserted in concrete.