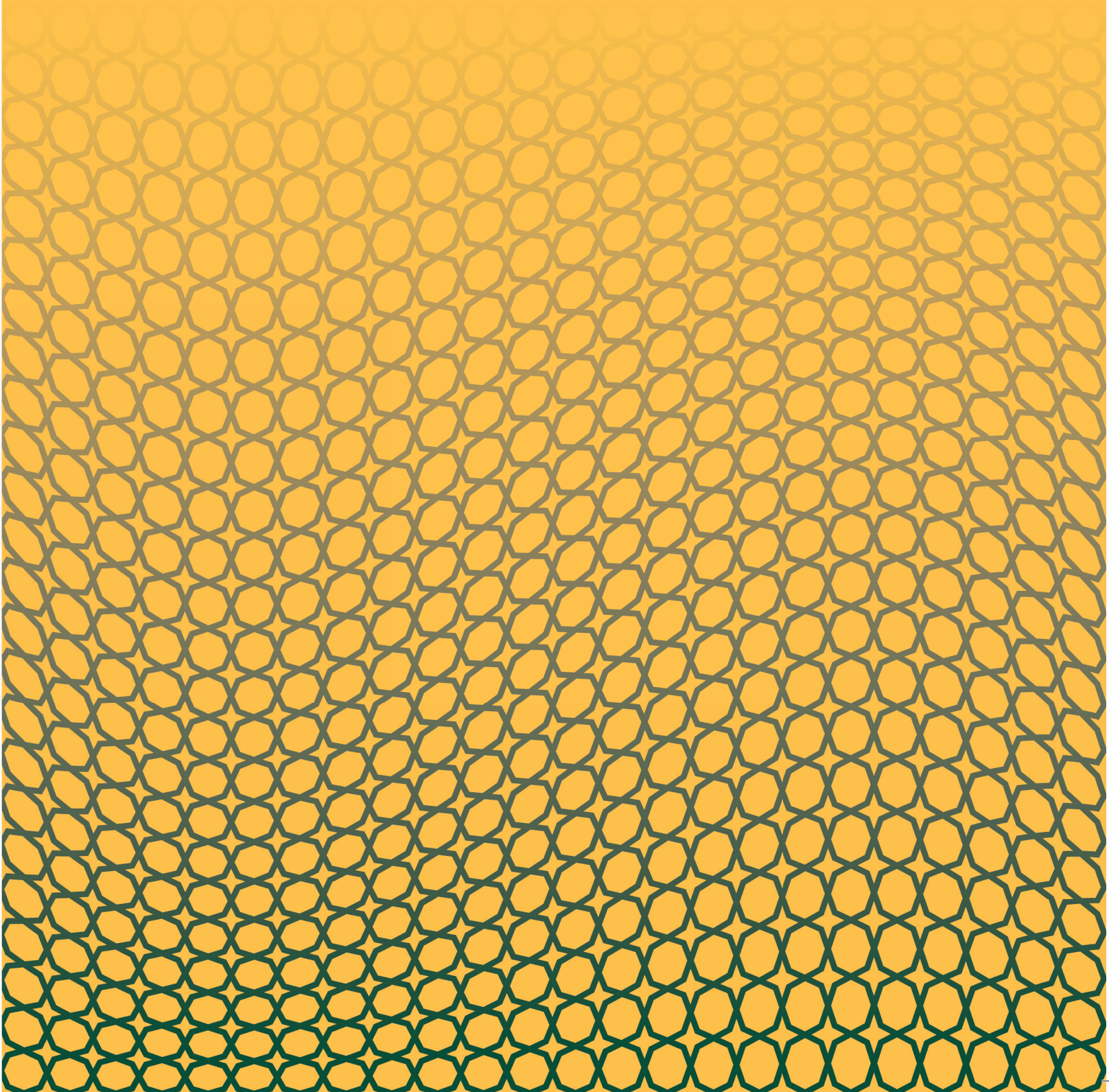


LEÓN DE ORO

SAFETY NETS

Trust
the net

AND ACCESORIES





History



For more than 40 years our company has been striving to manufacture the best quality nets in the market, at the most competitive price possible. This philosophy has guided all our efforts, and we have dedicated our lives to becoming what we are today:

EL LEON DE ORO is a brand represented in more than 60 countries, with 2 delegations in **the United Kingdom** and **the United Arab Emirates**, with the most modern machinery and technology in the market of nets & ropes. In addition, we have an internal laboratory for scientific research and innovation, and staff of almost 100 professionals.

For all this, we would like to **thank all our customers** for the high level of demand and for their loyalty, as well as **our partners** in the European Committee for Standardization and external laboratories and, of course, **our competitors** who help us to be stronger and more creative every day.

Nowadays, the second generation of the founding family, represented by General Director, **Alfredo Sánchez**, takes the reins of the company, adapting it to respond to the new challenges of the market and to protect its core values, such as supreme quality of the products and immediate customer service, which allows us to continue growing and celebrating success together.

“We would like to thank all our customers for the high level of demand and for their loyalty”



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5 reasons for choosing us

Safety

The **certificates** from prestigious external laboratories guarantee that our safety nets comply with all international standards which allow you to work for the most important projects in the world. Every safety net is traceable by its register number.

Quality

We stand for supreme quality using only premium raw material and manufacturing machinery. That's why our nets have **the best tenacity** and resistance to UV rays/heat/cold/wind.

Best value

Thanks to our market stability and long-term relationships with partners/suppliers, we achieve **the best market price** for all our products.

Experience

We are proud of having several generations working at our factory who have **more than 40 years of experience** in making the nets for the most difficult projects.

Personalized service

Being available 24/7, **we are fast** in solving your doubts about standards and net tailoring. We customize the nets, labels and production time.

100% of nets and ropes are manufactured in Spain

Tecnología Deportiva, S.A. Group also includes **LEON DE ORO UK** with a warehouse in the United Kingdom and **LEON DE ORO GULF** in the UAE.



Tecnología Deportiva, S.A. is one of the largest factories in the world dedicated to the manufacture safety & nets and ropes.

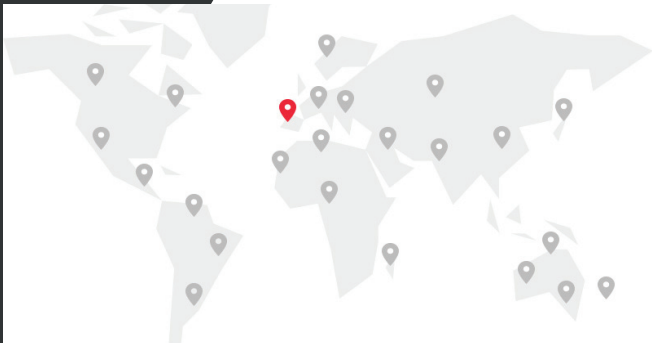


Safety nets are known under the brand **EL LEON DE ORO**.



We are the members of the **European Commission of Normalization**. It allows us to take part in international efforts to develop netting manufacturing.





**EL LEON
DE ORO**
is more than

40
years of
experience

60
countries of
presence

65
different
machines

100
professionals

1200
customers
around the world

R&D: INNOVATION AS ATTITUDE

*In the 21st century nobody doubts the beneficial work of scientific research, the fact of its importance in different businesses. **We believe in progress** and we want to be part of the change in the field of netting manufacturing.*



Internal research

At our own laboratory with modern equipment we check the raw material and final product by chemical, static, dynamic and aging test to ensure their highest quality, so the nets have the appropriate strength and mesh size. Each production is controlled by R & D department directed by personnel with specific training in textile materials.

We are in constant research for the development of new products that allow us to be at the forefront of the market.

External research

With the support of the University of Alicante, we carry out scientific studies on different types of nets that can possibly help to make decisions in European Standardization Committees and support the initiatives of clients in the elaboration of new products.



BREAKING FORCE TESTING SERVICE

According to EN 1263-1, safety nets are valid for 1 year after the production date. The standard prohibits the use of expired nets. The date of the production and the first test are indicated on the label.

Our laboratory provides with the service of testing of the sample meshes that are attached to our safety nets.

WHY HIGH TENACITY POLYPROPYLENE (PPhT)?



1. PPhT is 100% recyclable, anti-allergic and eco-friendly

We ensure with OEKO-TEX certificate that the installers who are in contact with our products won't have any allergic reaction.



2. PPhT doesn't absorb water



3. PPhT has unfavourable environment for microorganisms

Our PPhT does not contribute to the reproduction of microorganisms, because it blocks the light and it is not a nutrient solution for bacteria and microbes.



4. PPhT has less density than the water, so it floats.



5. PPhT does not conduct electricity

Proved by a scientific research.



6. High resistance to UV rays, cold/hot



7. High chemical resistance to acids

Neither solvents nor other organic and inorganic acids can damage our polypropylene except boiled Xylene.



8. High chemical resistance to dirt

Our polypropylene does not react with cement, paint or other substances.



9. PPhT can be colourful (green, blue, red, yellow, sand, white, black, etc.) which is visible on building site

Nylon can only be manufactured in white or black.

Material

WHY KNOTLESS TECHNOLOGY?

ALWAYS SAME MESH SIZE

All knotted netting must be treated in heat autoclave for mesh stabilization, so they remain fixed. And if it's not done properly, it can cause different meshes sizes within the same net. It's impossible for knotless meshes which are fixed forever.

SPACE SAVING

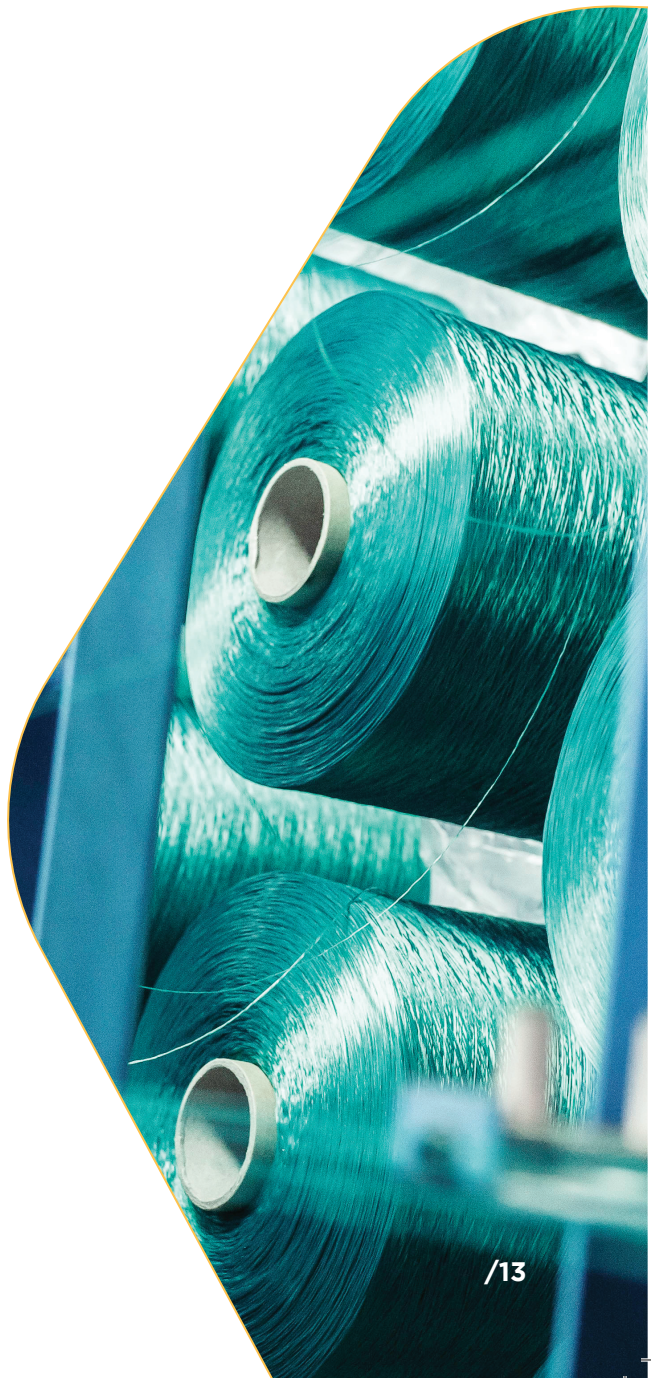
Knotless nets take less space and are easier to pack. Therefore, this feature helps to save money while transporting.

LIGHT WEIGHT

Knotless nets are lighter than knotted. It is also an important value when transporting and mounting large nets.

HARMLESS IN CASE OF FALL

Knotless nets are harmless in case of catching peoples. This feature could be different with knotted nets when people can have dangerous scratches and burns.





Guarantee of quality

CERTIFICATES OF EXCELLENCE OF THE COMPANY

- ⬡ CERTIFICATE AENOR ER0167/2001 and CERTIFICATE IQNet confirm that our management system complies with the current international standard ISO 9001. We are a reliable partner that has a management system under external control.
- ⬡ CERTIFICATE OF ORIGIN demonstrates that 100% of our products are manufactured in Spain.

QUALITY CERTIFICATES

- ⬡ OEKO-TEX CERTIFICATE confirms that all our polypropylene nets meet all international environmental standards and restrictions on hazardous substances (according to REACH regulation). The fiber has been assigned Product Class 1 (items for babies and infants), which is the most restrictive in its scale.
- ⬡ AITEX FIRE REACTION CERTIFICATE confirms the highest class "M1" to our flame-retardant polypropylene fiber.
- ⬡ B1 CERTIFICATE OF FIRE REACTION confirms the compliance with DIN 4102-1.
- ⬡ CERTIFICATE UKAS OF FIRE REACTION confirms that flame retardant nylon nets meet the requirements of NFPA 701.

CERTIFICATES OF CONFORMITY OF THE PRODUCTS

- ⬡ CERTIFICATES AENOR, EUROTEST, GS confirm that safety nets comply with EN-1263-1.
- ⬡ CONFORMITY CERTIFICATE confirm that our safety nets are tested to meet or exceed ANSI A10.11.
- ⬡ CE CERTIFICATE confirms compliance with the EN-1891 standard of a Type A Semi-static rope.
- ⬡ DECLARATION OF CONFORMITY signed by the Director General.
- ⬡ CERTIFICATE RITT SPORT LOISIRS confirms compliance with the French standard NF S 52-106, which regulates the production of ski-protection nets: a) for rigid posts (S1); b) for flexible posts (S2).
- ⬡ DEKRA CERTIFICATE confirms the conformity and quality of container nets.

Terms

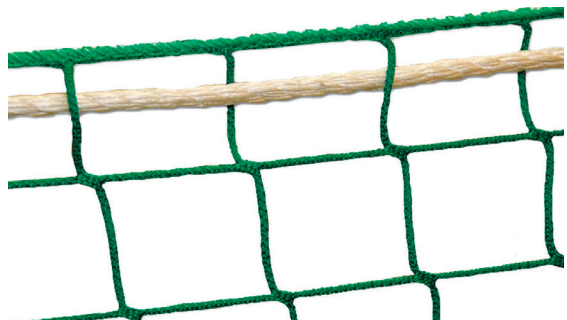
SAFETY NET is the net that catches the person in case of a fall or allows to avoid falling. We always need a certification when we talk about people's safety.



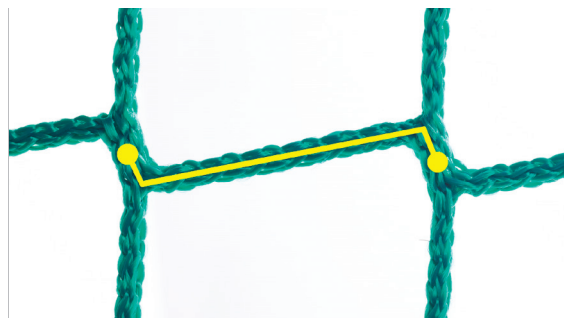
PROTECTION NET is the net that catches objects (NOT people). Now, in Europe there is no standard about nets for objects, so no certification is needed.



SYSTEM is an assembly of safety net components, which forms as equipment to be used in accordance with the instruction manual.



MESH SIZE is a distance between two connections of mesh rope from the center to the center of these connections.



— Introduction to safety nets

European standards

EN 1263-1 establishes the safety standards and test methods that safety nets must comply with.

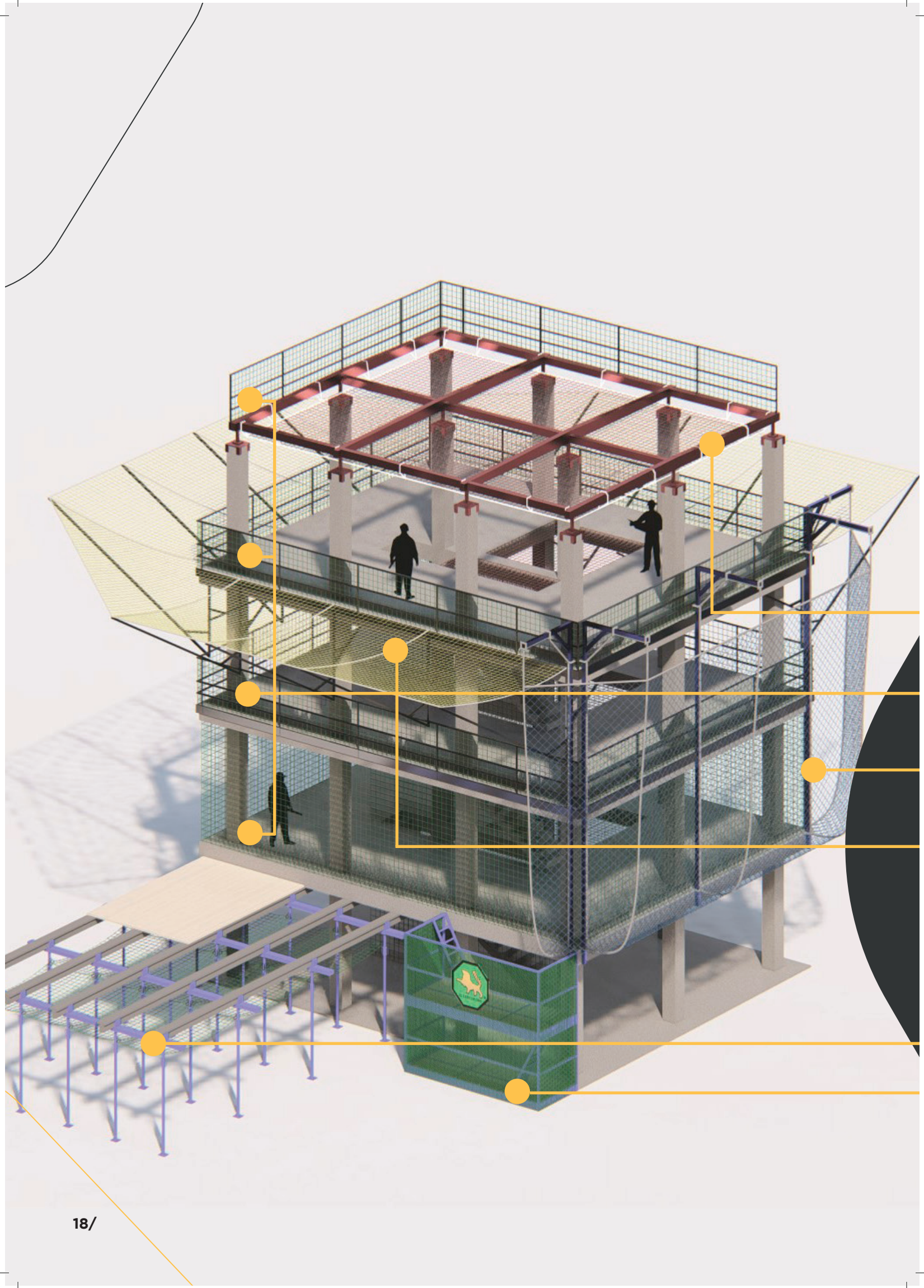


EN 1263-2 establishes the rules of the installation of the safety net.



El León de Oro provides safety nets according to EN 1263-1.

However, it will always depend on the end customer if the net complies with EN 1263-2 (installation part), as it's the responsibility of the installer.



Safety systems according to EN 1263-1

— *SYSTEM S*

— *SYSTEM U*

— *SYSTEM V*

— *SYSTEM T*

Other protection solutions:

— *Formwork safety system UNE 81652*

— *Protection nets for falling objects*

SYSTEM S

MATERIAL	High Tenacity Polypropylene (PPhT)
STANDARD	EN 1263-1
CERTIFICATE	AENOR; GS
ECO-CERTIFICATE	OEKO-TEX
TYPE	Knotless
UV-RESISTANCE	300 kly
BORDER ROPE	30 kN (Type K)
SIZES	Up to your needs

System S

System S consists of:

SAFETY NET

The standard EN-1263 defines the minimum dimension of the safety net whose smaller side will be equal to or greater than 5 meters and its area equal to or greater than 35 m2.

BORDER ROPE

It is passed through each mesh of the net at the perimeter and is tested in accordance with the requirements indicated in the standard 1263-1. Minimum breaking load 30kN.

TEST MESHES AND TAGS

attached to the safety net to determine deterioration due to aging.

MARKING AND CUSTOM LABELING

According to standard EN-1263-1

INSTALLATION MANUAL

Installation accessories

TIE ROPE TYPE M EN 1263-1 30 KN

Objective: to attach the net of System S to the structure.

Material: PaHT
Diameter: 13 mm
Minimum resistance: 30 kN.

Article:
70021000000

- Roll: 100 ml



TIE ROPE TYPE Z EN 1263-1 15 KN

Objective: to attach the safety net to the structure (double branch).

Material: PPHT
Diameter: 10 mm
Minimum resistance: 15 kN.

Roll: 100 ml.

Article:
70425000114



COUPLING ROPE TYPE O EN 1263-1 7,5 KN

Objective: to join safety nets with each other.

Material: PaHT
Diameter: 8mm
Minimum resistance: 7,5 kN

Roll: 100 ml

Article:
70025000000



RAFFIA ROPE 15 KN

It is used in twofold position for mounting the nets of System S. NB: this rope is not certified.

Material: PPHT raffia
Diameter: 10 mm
Breaking force: 15 kN
Articles:

Orange;
70428000100

White: 70428000101

Blue: 70428000103

Roll: 220 ml. MOQ: 108 rolls/pallet



- 2,5 m with/without loop
- Article: 70028000000**



NETCLAW CLASSIC

To connect the safety nets to the lower flange of the steel beams. Ideally used when installing safety nets in the installation of the steel decking and mezzanine floors.

Material: Passivated carbon sprung
Diameter: 8 mm

Available in sizes: 25 mm, 40 mm and 75 mm.

Article: X9999999990



NETCLAW SUPERFIX

Article: X9999999991



SCAFFCLAW

Objective: to attach the safety nets directly to a rated system scaffold.

Article: X9999999992



FAQs

How to measure correctly the space for the safety net?

We manufacture the safety nets according to the sizes that you provide us with. You have to take into account the type of fixation (carabiner, rope etc.) and whether you want the safety net to be tense or not. We always say that it is better to have a little more net than a little less. The large safety net can be enroled and adjusted, but the small safety net does not work at all.



I need to cover a very large hole (50x50 m) with the safety net (System S). Is it possible to manufacture such a large safety net?

Everything is possible. However, transporting and installing such a large safety net is impossible in 99.9% of cases. The weight of the net could be around 580 kg! Therefore, we recommend buying, for example, 25 units of 10x10 m and rolls of the coupling rope 7.5 kN. This will cover the 50x50 hole without problem.



What are the standard sizes for the System S safety nets?

There are actually no standard sizes for this net system, but the most requested ones are **5x10m, 6x12m 7,5x15, 10x10 & 12,5x20m**. If you have enough safety nets in many different sizes in stock + coupling ropes + tie ropes, you would be meeting your customer's needs easily and quickly.



Would it be possible to use the safety nets for arresting a people's fall together with nets intended to arrest the fall of objects?

This is highly recommended. You can check the available nets and kind of meshes for this purpose on the page 59.



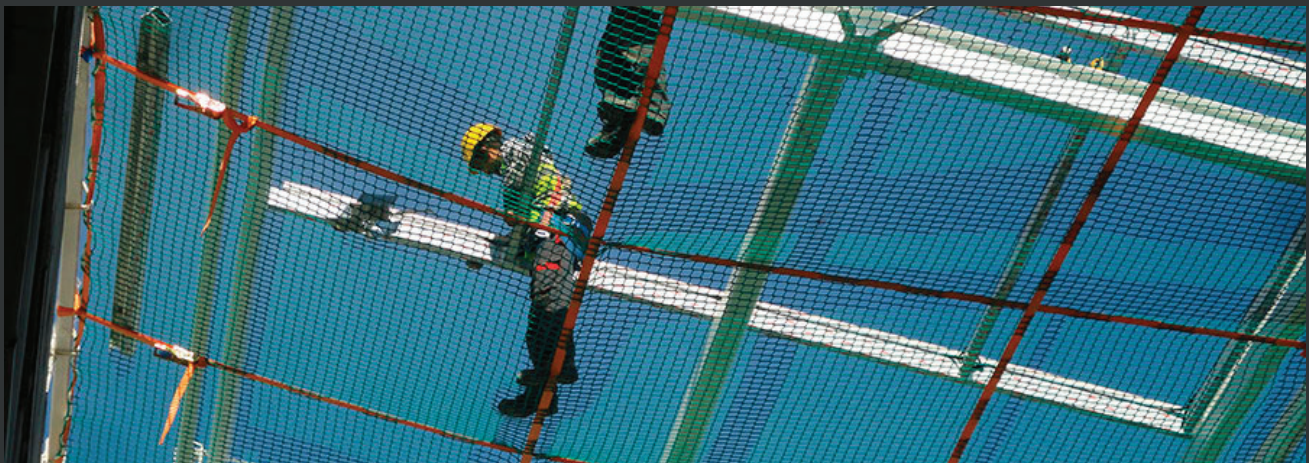
SAFETY NET EN 1263-1 S-Q

THICKNESS	MESH	CLASS*	COLOUR	ARTICLE
5 mm	100 mm	A2	Green	44445010002
5 mm	100 mm	A2	Blue	44445010003
5 mm	100 mm	A2	Red	44445010004
5 mm	100 mm	A2	Black	44445010001
5 mm	100 mm	A2	White	44445010000
5 mm	60 mm	B1	Red	44445006004
5 mm	60 mm	B1	Blue	44445006003
5 mm	60 mm	B1	White	44445006000
5 mm	45 mm	B1	Green	44445004502
5 mm	45 mm	B1	Blue	44445004503
5 mm	45 mm	B1	Black	44445004501
5 mm	45 mm	B1	White	44445004500

*A2 (Min breaking energy 2.3 kJ).
B1 (Min breaking energy 4.4 kJ).

Working platform nets

The working platform nets are designed to be used in the inaccessible areas to scaffoldings. The nets are installed in a way to create a kind of platform on which you can walk. Although, nowadays there is no standard for this kind of nets, we are currently in the committee in charge of its development.

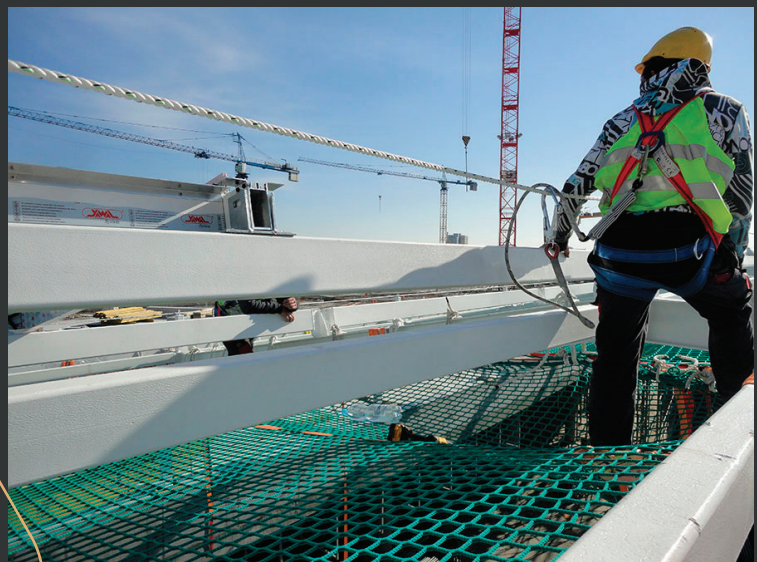


The working platform nets must meet the following criteria:

The net must meet EN 1263-1, according to net class B, with a maximum mesh width of 45 mm.

Installation tips for WP

- The nets must be installed no more than 1,50 m below the underside of the construction;
- The net inclination must not exceed 20°;
- Maximum sag must be no more than 50 cm at the lowest point under the load of a person, or no more than 30 cm after retensioning on the second day.



- The nets must be secured with bands (as per DIN EN 12195-2) or ropes (30kN minimum breaking strength). And the distance between two suspension points must be 50 cm maximum.
- The tightening straps must be threaded through the whole net – every ten meshes, for ten meshes – as cross braces.
- The distance between the intersecting straps must be maximum 2 m x 2 m, at a 2 m distance from the edge of the net.
- The cross brace straps are pre-tensioned by hand, making allowance for horizontal loads of at least 2.2 kN per suspension point.

For any further information on the use of working platform nets, you can check Bau BG's BGI 662.

Nets for bridges & civil works

Safety nets for bridges and civil works serve for the protection of areas with the possibility of concrete detachment and fall.



FAQs

What regulations do we apply to this type of nets?

There is no regulation. The function of the net is to collect concrete falls, not people, it is not obligatory to comply with EN 1263-1. But we recommend using certified safety nets that comply with the EN 1263-1 standard, because in the end it is all about the safety of people who can walk or drive under the concrete fall.

What size of the mesh is recommended for this type of protection?

We recommend safety net with the mesh 60 mm joint together with any of the nets for the objects that you can see on the page 59.

SAFETY NET EN 1263-1 S-Q

THICKNESS	MESH	CLASS*	COLOUR	ARTICLE
5 mm	45 mm	B1	Green	44445004502
5 mm	45 mm	B1	Blue	44445004503
5 mm	45 mm	B1	White	44445004501
5 mm	45 mm	B1	Black	44445004500
5 mm	45 mm	B1	Red	44445004504
5 mm	60 mm	B1	Green	44445006002
5 mm	60 mm	B1	Blue	44445006003
5 mm	60 mm	B1	White	44445006001
5 mm	60 mm	B1	Black	44445006000
5 mm	60 mm	B1	Red	44445006004

*B1 (Min breaking energy 4.4 kJ).





SYSTEM U

MATERIAL

High Tenacity Polypropylene (PPHT)

STANDARD

EN 1263-1

CERTIFICATE

EUROTEST

ECO-CERTIFICATE

OEKO-TEX

TYPE

Knotless

UV-RESISTANCE

300 kly

BORDER ROPE
PASSED THROUGH
MESHES

Up to your needs (EN 1263-1 doesn't require)

SIZES

Up to your needs

System U

System U consists of:

SAFETY NET

Has the function of preventing the fall of people or materials from an open edge: edges of floors, roofs, stairs and excavations (vertical protection).

TEST MESHES AND TAGS

Attached to the safety net to determine deterioration due to aging.

MARKING AND CUSTOM LABELING

According to standard EN 1263-1

INSTALLATION MANUAL

Installation accessories

STRAP

Objective: To fix the net to the metallic tubes of the railing.

Colours available:

Blue:

70455500013

Red:

70455500004

White:

70455500000

Green:

70455500002

EXPANDING METAL ANCHOR

Objective: To hook and fasten the net after having placed the anchor into the slab.

Article:

46998000000

PROTECTIVE CAP

Objective: It is used as a Protection on corrugated steel rods.

Article:

46999900005

PVC CARTRIDGE

Objective: It is inserted into the concrete floor to support the steel railing that hold the balustrade.

Article:

46999900002

COUPLING ROPE TYPE O EN 1263-1 7,5 kN

Objective: to join safety nets with each other.

Material: PaHT

Diameter: 8mm

Minimum

resistance: 7,5 kN

Roll: 100 ml

Article:

70025000000



FAQs

What is the solution for protection from falling instruments within System U?

Usually they combine the safety net with a kind of toe-board with tiny meshes. You can check the options on page 59.

I need the net of System U with a perimeter rope. Does this net meet EN 1263-1 standard?

Yes. Meanwhile, according to the standard EN 1263-1, the safety net of System U does not have a special requirement about the perimeter rope passed through the meshes. Our System U safety nets have a perimeter rope sewn to the edge of the net. The perimeter rope passed through meshes for the System U can be a solution for some metallic structures that don't have upper rail.

What are the standard measurements of the nets of U system?

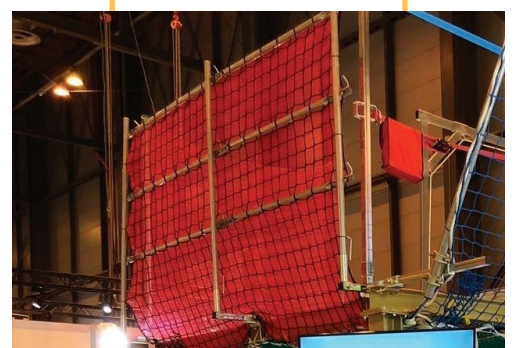
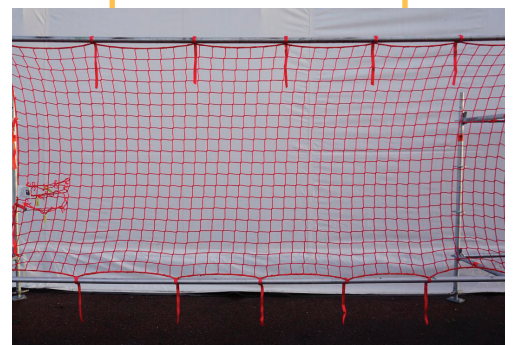
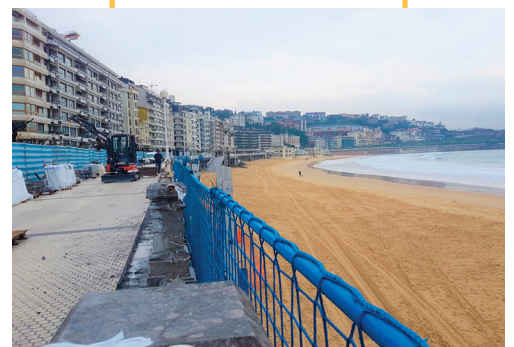
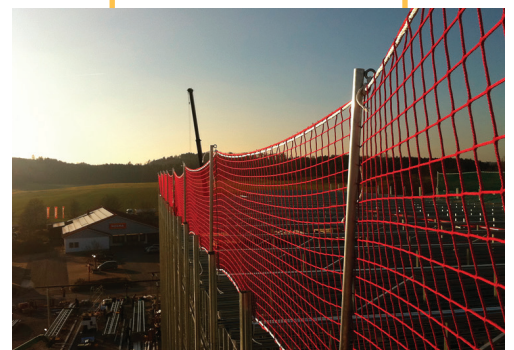
There are no standard sizes for this type of nets, but the most requested measures are 2x10, 2x5, 1.5x10 and 2x11. Having storage of these measures + straps, in 99% of cases you can give the quick and effective solution to your customers.

How many straps do I need in order to install the safety net of U system 2x10?

According to the EN 1263-1 standard, the straps must be installed every 70 cm. Then you need about 36 straps for each net.

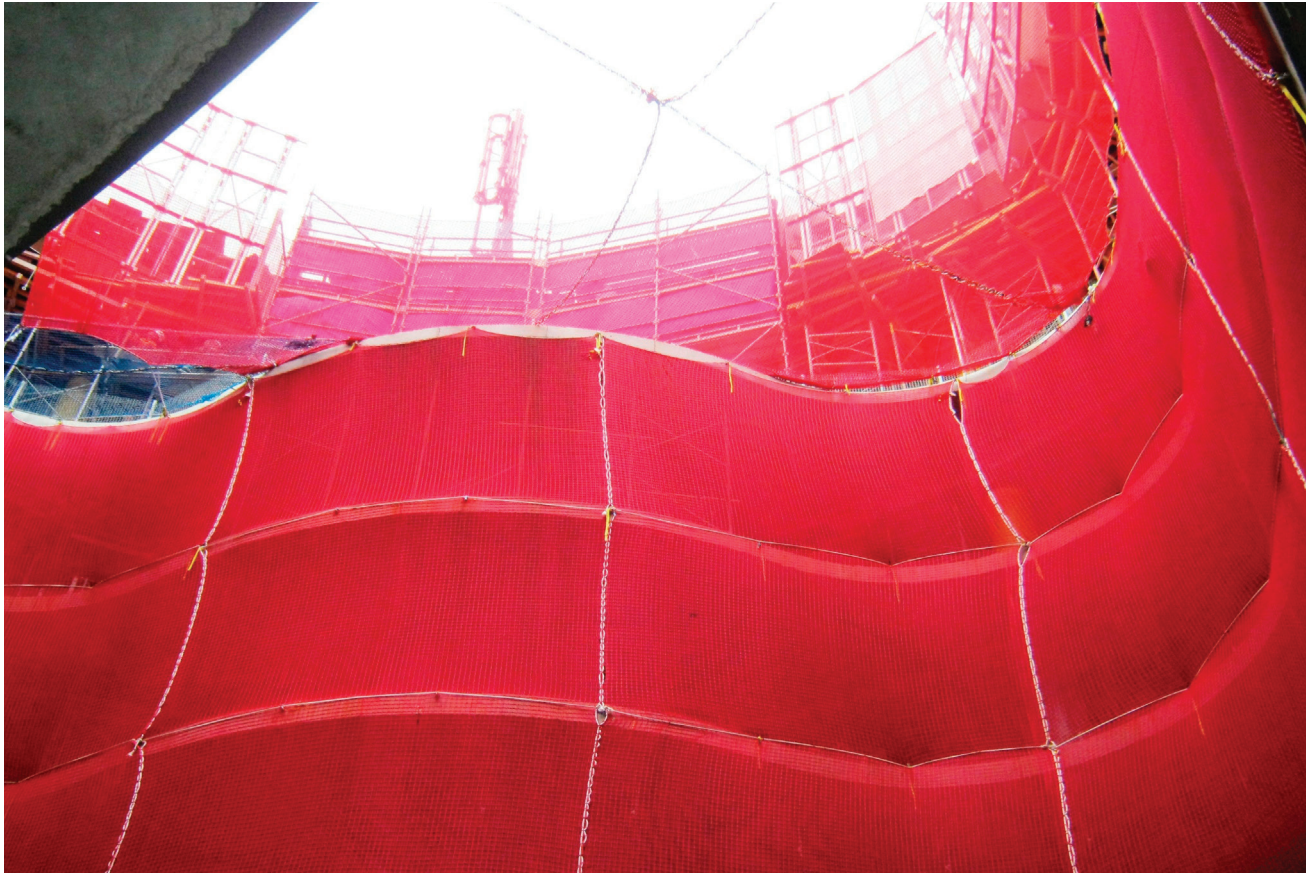
Can you buy a pack: metal structures + nets?

That's right, indeed. That's how it looks.



Vertical closure

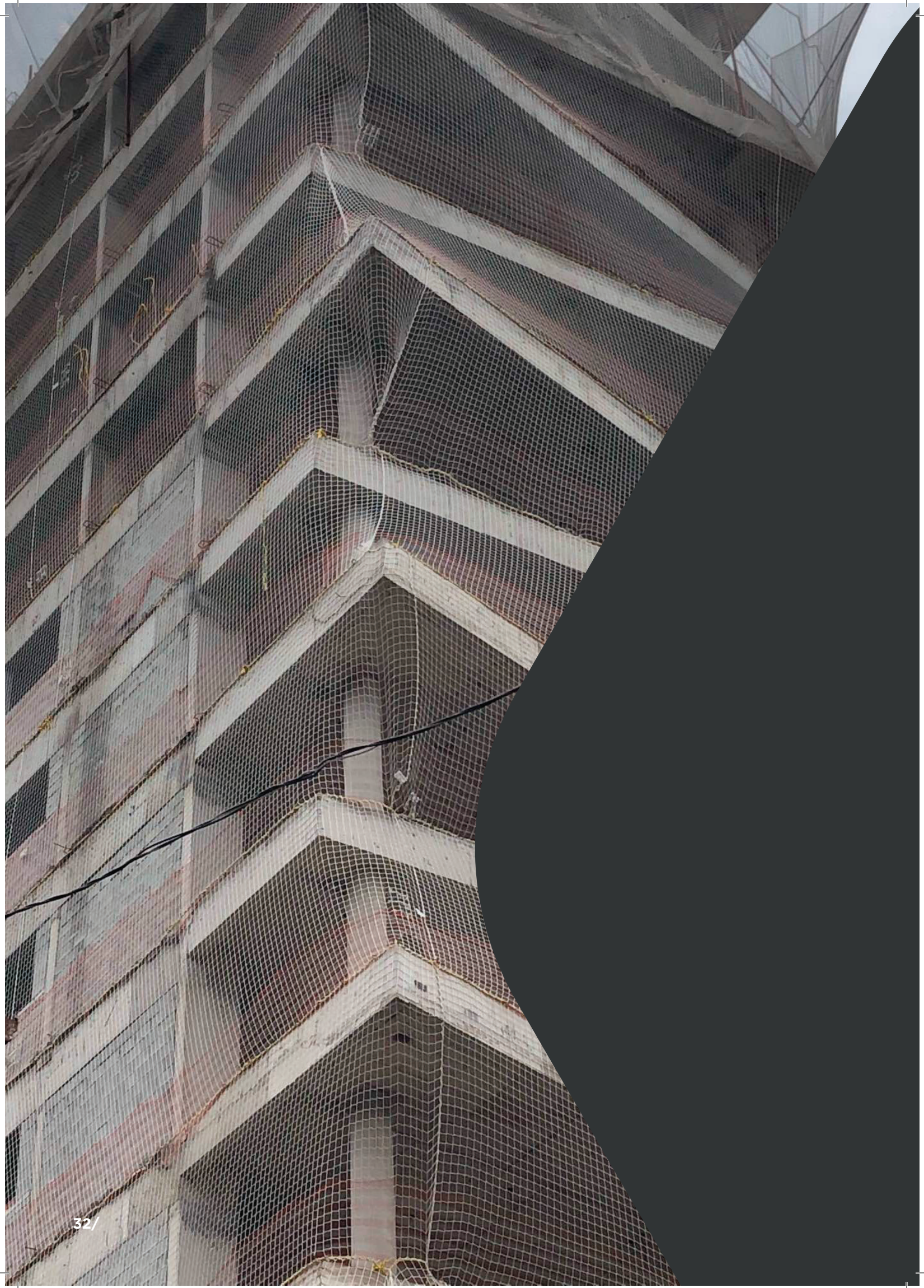
The safety nets of the vertical closure are designed to prevent the fall of people over the edge. Its function is the perimeter enclosure of building structures.



These nets protect completely the voids so that there is no possibility that workers could fall into the void from the inside. In addition to protecting the holes in the floor, they also serve to prevent the fall of people from open windows and stairs.

While installing this type of nets, it is very important that they would be placed with the highest tension possible for avoid the possibility to be suspended outside of the edge.





FAQs

What are the standard sizes for the nets of vertical closure?

There are no standard sizes for this type of nets, but the most requested measurements are 3x10 with toe-board of 0,5 m. Having storage of these measures + metal anchors, in 99% of cases you can give the quick and effective solution to your customers.



What is the solution for protection from falling instruments for this system?

To prevent the falling of objects, we recommend you combine the main net with a mosquito net or any debris net on top. You can check all the options on page 59.



SAFETY NET EN 1263-1 U-Q

THICKNESS	MESH	CLASS*	COLOUR	ARTICLE
5 mm	100 mm	A2	Green	44445030002
5 mm	100 mm	A2	Blue	44445030003
5 mm	100 mm	A2	Red	44445030004
5 mm	100 mm	A2	Black	44445030001
5 mm	100 mm	A2	White	44445030000
5 mm	45 mm	B1	Green	44445034502
5 mm	45 mm	B1	Blue	44445034503
5 mm	45 mm	B1	Black	44445034501
5 mm	45 mm	B1	White	44445034500

*A2 (Min breaking energy 2.3 kJ).
B1 (Min breaking energy 4.4 kJ).

SYSTEM T

MATERIAL

High Tenacity Polypropylene (PPhT)

STANDARD

EN 1263-1

ECO-CERTIFICATE

OEKO-TEX

TYPE

Knotless

UV-RESISTANCE

300 kly

BORDER ROPE

20 kN

SIZES

Up to your needs

System T

System T consists of:

SAFETY NET

These nets are used to prevent the fall of people or materials from an open edge. Edges of floors (horizontal use, attached to metallic structure like a tray).

BORDER ROPE

It is passed through each mesh of the net at the perimeter and is tested in accordance with the requirements indicated in EN 1263-1. Minimum breaking load 20kN.

TEST MESHES AND TAGS

attached to the safety net to determine deterioration due to aging.

MARKING AND CUSTOM LABELING

according to standard EN-1263-1

INSTALLATION MANUAL

Installation accessories

STRAP

Objective: To fix the net to the metallic tubes of the railing.

Colours available:

Blue: 70455500013

Red: 70455500004

White: 70455500000

Green: 70455500002

COUPLING ROPE TYPE O EN-1263-1 7,5 kN

Objective: to join safety nets with each other.

Material: PaHT

Diameter: 8mm

Minimum resistance: 7,5 kN

Roll: 100 ml

Article: 70025000000



FAQs

Besides the safety net for catching a person, I need a net for catching the instruments. What can you offer?

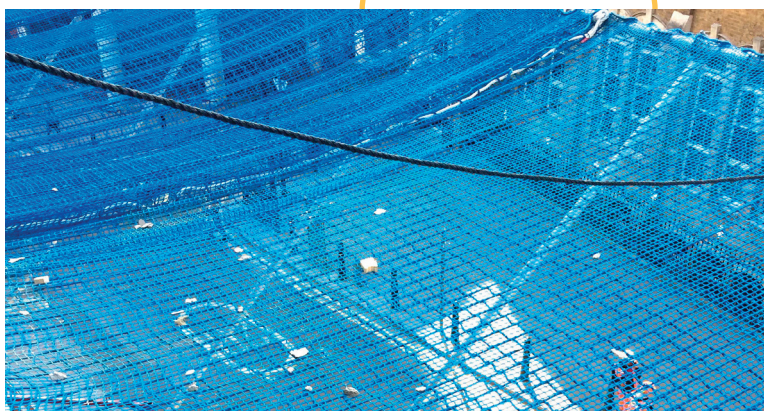
For catching falling objects, we recommend combining the main net (100 mm or 60 mm mesh) designed to catch people with the 2 mm mesh 20 mm net that also collect small objects up to 50 kg or with the mosquito net that has the 1 mm mesh and it's perfect for collecting dust and small objects.

What are the standard measures of safety nets of System T?

There are no standard sizes for this type of nets. Everything depends on the size of the metallic structure. But the clients usually ask for: 3x6, 3x12, 3x4,5.

Can you buy a pack: metal structures + nets?

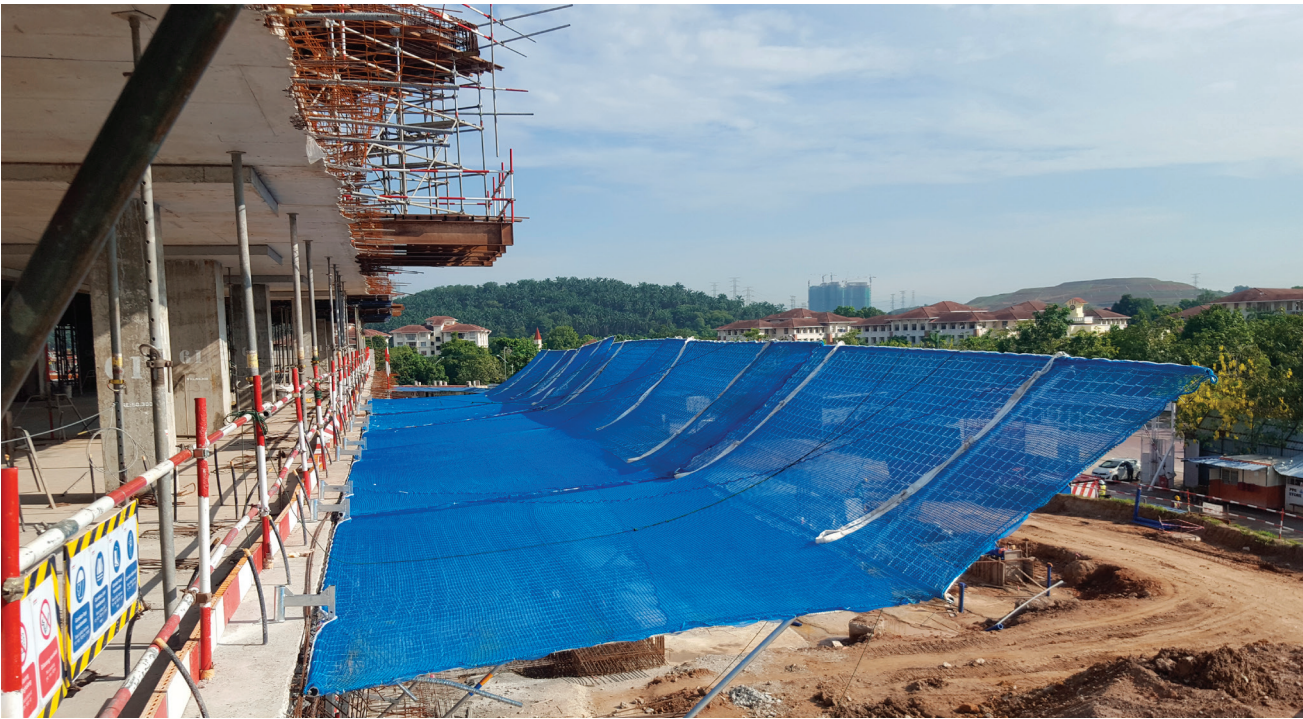
That's right, indeed. That's how it looks like.



SAFETY NET EN 1263-1 T-Q

THICKNESS	MESH	CLASS*	COLOUR	ARTICLE
5 mm	100 mm	A2	Green	44445020019
5 mm	100 mm	A2	Blue	44445020003
5 mm	100 mm	A2	Red	44445040014
5 mm	100 mm	A2	Black	44445020020
5 mm	100 mm	A2	White	44445021110
5 mm	60 mm	B1	Green	44445020009
5 mm	60 mm	B1	Blue	44445020023
5 mm	60 mm	B1	Black	44445020101
5 mm	60 mm	B1	White	44445020100
5 mm	60 mm	B1	Red	44445040015

*A2 (Min breaking energy 2.3 kJ).
B1 (Min breaking energy 4.4 kJ).



SYSTEM V

MATERIAL	High Tenacity Polypropylene (PPhT)
STANDARD	EN 1263-1
CERTIFICATE	AENOR
ECO-CERTIFICATE	OEKO-TEX
TYPE	Knotless
UV-RESISTANCE	300 kly
BORDER ROPE	20 kN
SIZES	- 5 x 10 m (diamond mesh) - Custom made

System V

System V consists of:

SAFETY NET

With perimeter rope passed through all the meshes. The net is joint to the gallows structure.

BORDER ROPE

It is passed through each mesh of the net at the perimeter and is tested in accordance with the requirements indicated in the standard 1263-1. Minimum breaking load 20kN.

TEST MESHES AND TAGS

Attached to the safety net to determine deterioration due to aging.

MARKING AND CUSTOM LABELING

According to standard EN 1263-1

INSTALLATION MANUAL

Installation accessories

COUPLING ROPE TYPE O EN 1263-1 7,5 kN

Objective: to join safety nets with each other.

Material: PaHT
Diameter: 8mm
Minimum resistance: 7,5 kN
Roll: 100 ml

Article: 70025000000



TIE ROPE TYPE G EN 1263-1 20 kN

Objective: to attach the net of System V or T to the structure.

Material: PPht
Diameter: 12 mm,
Minimum resistance: 20 kN
• Roll: 100 ml
Configuration: twisted
Article: 70421020000



• Roll: 100 ml
Configuration: braided
Article: 70421020012



PLASTIC BASE

Objective: It is inserted in the slab for the attachment of the gallows.

Article: 46999900001



FAQs

What is a gallows system in terms of safety?

It is an L-shaped metal structure that serves as a support for the safety net.

What are the standard measures of the nets of System V?

The standard size of this type of nets is 5x10m in diamond mesh. It is possible to make the safety nets of System V upon your request (whatever size, whatever color) in square mesh. In addition, the nets with square mesh are easier to install, and they look better aesthetically.



SAFETY NET EN 1263-1 V-D

THICKNESS	MESH	CLASS*	COLOUR	ARTICLE
5 mm	100 mm	A2	Green	45445019002
5 mm	100 mm	A2	Blue	45445019003
5 mm	100 mm	A2	Red	45445019004
5 mm	100 mm	A2	White	45445018000

*A2 (Min breaking energy 2.3 kJ).





FORMWORK SAFETY SYSTEM

MATERIAL	High Tenacity Polypropylene (PPhT)
STANDARD	UNE 81652 System B
ECO-CERTIFICATE	OEKO-TEX
TYPE	Knotless
UV-RESISTANCE	300 kly
CLASS	A2 (Min breaking energy 2.3 kJ)
SIZES	1 x 10 m, 2 x 10 m

Formwork safety system

Formwork safety system consists of:

SAFETY NET FOR HORIZONTAL USE

that meets standard UNE 81652 SYSTEM B designed to avoid falling of a person to the lower floor.

TEST MESHES AND TAGS

Attached to the safety net to determine deterioration due to aging.

MARKING AND CUSTOM LABELING

according to standard UNE 81652

INSTALLATION MANUAL

Installation accessories

ANCHOR UNE 81652

Objective: To hook the net and fix it to the structure. The anchors are placed in the holes of the posts. For the correct installation, two anchors per linear meter must be used.

Article: 46998000000

COUPLING ROPE TYPE O EN 1263-1 7,5 KN

Objective: to join safety nets with each other.

Material: PaHT
Diameter: 8mm
Minimum resistance: 7,5 kN
Roll: 100 ml

Article: 70025000000



FAQs

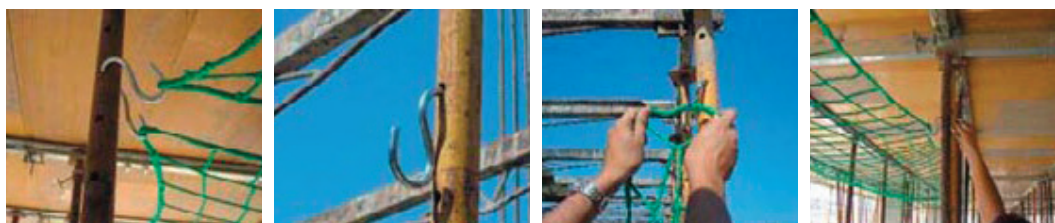
What are the formwork nets for?

Formwork nets were created to prevent falls to the lower floor during mounting/dismounting different formwork systems. The nets are fixed to the pillars of formwork.



How to install formwork safety nets according to UNE 81652 B SYSTEM?

- The nets must be located at a maximum distance of 80 cm from the working level.
- The formwork hooks are located in the holes of the posts.
- These hooks must be positioned at every linear meter along the net.
- The net is located such a way that it is well extended.
- The use of coupling rope is recommended to join the nets together.





Formwork safety net

DIMENSIONS	THICKNESS	MESH	CLASS*	COLOUR	ARTICLE
Up to your needs	5 mm	100 mm	A2	Green	44445040002
Up to your needs	5 mm	100 mm	A2	Blue	44445040003
1 x 10 m	5 mm	100 mm	A2	Red	44445940007
1 x 10 m	5 mm	100 mm	A2	Blue	44445940003
1 x 10 m	5 mm	100 mm	A2	White	44445940011

*A2 (Min breaking energy 2.3 kJ).
B1 (Min breaking energy 4.4 kJ).



SKYLIGHT SAFETY SYSTEM

MATERIAL

High Tenacity Polypropylene (PPhT)

STANDARD

EN 1263-1; EN 795

ECO-CERTIFICATE

OEKO-TEX

TYPE

Knotless

UV-RESISTANCE

300 kly

CLASS

A2 (Min breaking energy 2.3 kJ).

SIZES

Up to your needs

— Skylight safety system

Skylight safety system consists of:

SAFETY NET EN 1263-1

Designed to prevent the fall of the person who works on the roof and has the possibility of falling.

RATCHET STRAP

The net covers the skylight or roof and is adjusted thanks to the Ratchet strap. The strap complies with EN 795 Class B and can be used as a fastening point in combination with a rope for personal protection.

TEST MESHES AND TAGS

Attached to the safety net to determine deterioration due to aging.

MARKING AND CUSTOM LABELING ACCORDING TO STANDARD EN 1263-1

According to standard EN-1263-1

Installation accessories

CARABINER 25KN

Objective: to attach the net to the structure or cable.

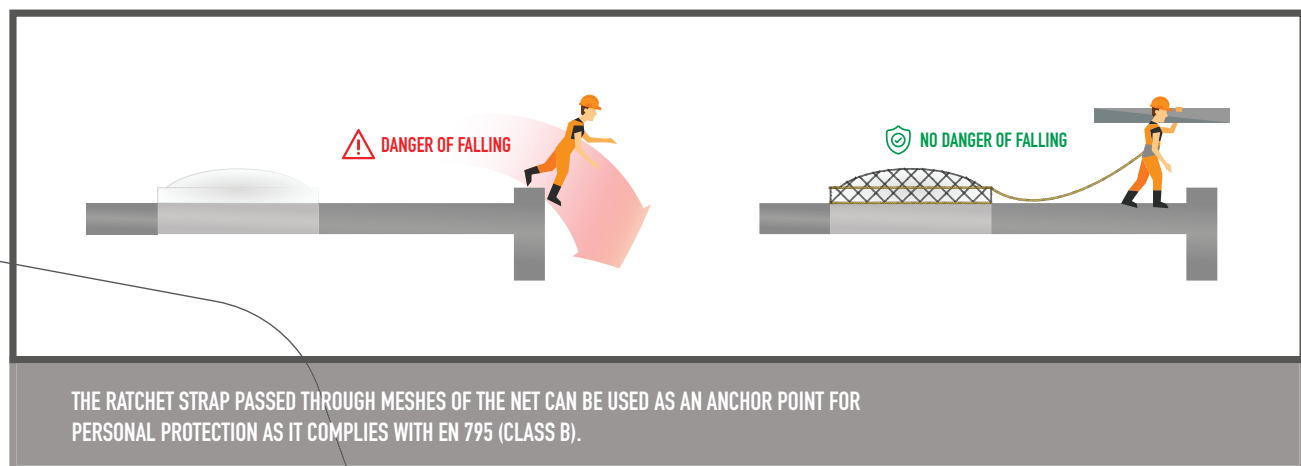
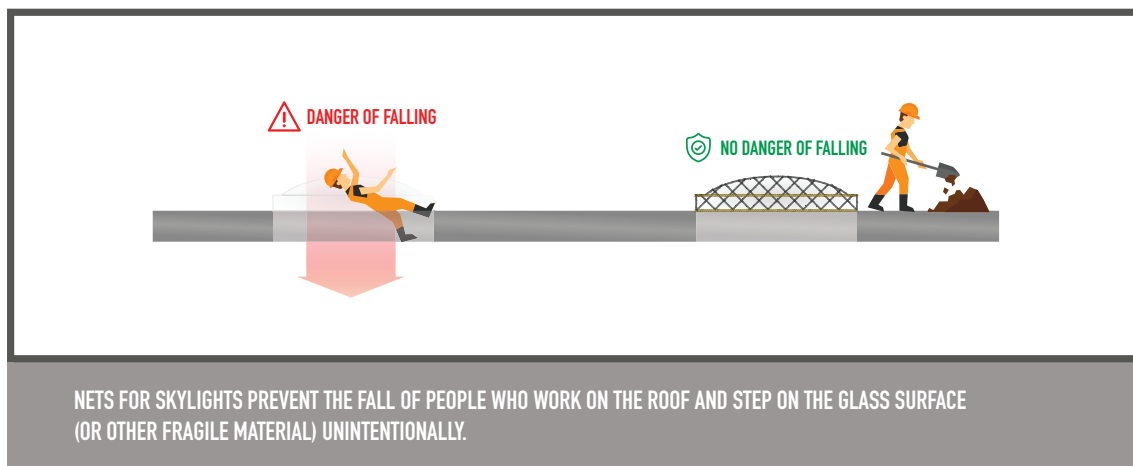
Article: 95808080000



FAQs

What is the main function of the net for sky/roof lights?

Nets for skylights (dome nets or roof light nets) have 2 main functions:



What are the standard sizes for skylights?

The standard measurements are 2 x 2 m, 3 x 3 m, 1.5 x 1.5. They fit with the tensioner. It is possible to make nets for customized skylights.



Roof light net EN 1263-1+EN 795

THICKNESS	MESH	CLASS*	COLOUR	ARTICLE
5 mm	100 mm	A2	Black	44445010091
6 mm	70 mm	A2	Black	44046010091

*A2 (Min breaking energy 2.3 kJ).

Safety system ANSI A10.11

MATERIAL	Polyamide High Tenacity (PaHT)
STANDARD	ANSI A10.11
CERTIFICATE	071019/A
TYPE	Knotless
COLOUR	Black
SIZES	Up to your needs
FLAME RETARDANT CERTIFICATE	NFPA 701

Safety system ANSI A10.11

Safety system ANSI A10.11 consists of:

**SAFETY SYSTEM
ANSI A10.11**

designed to catch
the person in case
of fall

BORDER ROPE

It is passed through
each mesh of the
net at the perimeter
and is tested in
accordance with
the requirements
indicated in the
standard 1263-1.
Minimum breaking
load 30kN.

**TEST MESHES AND
TAGS**

attached to
the safety net
to determine
deterioration due to
aging.

**MARKING AND
CUSTOM LABEL-
LING**

according to
standard ANSI
A10.11

**INSTALLATION
MANUAL**

FAQ

Must safety nets comply with ANSI A10.11 in Europe?

No, in Europe safety nets have to comply with
EN 1263-1. ANSI A10.11 is an American standard
and has to be met only in the United States and
Canada.



Safety system ANSI A10.11

THICKNESS	MESH	COLOUR	ARTICLE
6 mm	70 mm	Black	10226007001



FLAME-RETARDANT NETS

MATERIAL

High Tenacity Polypropylene (PPhT);
High Tenacity Polyamide (PaHT)

STANDARD

DIN 4102-1; NFP92 503-505; NFPA 701.

ECO-CERTIFICATE

OEKO-TEX

TYPE

Knotless

SIZES

Up to your needs

Flame-retardant nets

FAQs

How to choose a flame-retardant net?

Flame-retardant nets are the ones that have retardation in the propagation and a rapid extinction of the flame. They are used in areas where there is a high possibility of fire due to certain types of work such as metal cutting with radial machinery etc.

The grease of our PPHT is fireproofed before it's converted to the net.

Therefore, the net does not lose its qualities, unlike the nets of other brands that obtain the fireproof treatment through the process of deep immersion.

This type of treatment does not guarantee more than 1 month outdoors.

Our flame-retardant nets are designed both for indoor and outdoor use where they do not lose their special property even after several years of use. Our flame-retardant nets are classified as M1 and B1 and have the corresponding certificates

I bought a flame-retardant net and it burns. It is normal

Yes, it's normal. Flame-retardant nets burn, but they have delay in the propagation and the rapid extinction of the flame.

FLAME-RETARDANT NETS

THICKNESS	MESH	COLOUR	ARTICLE
2 mm	20 mm	White	10343002000
2 mm	22 mm	Black	10513522301
3 mm	35 mm	White	99443003520
3 mm	45 mm	White	10443004520
3 mm	45 mm	Green	10443004502
3 mm	100 mm	White	10443010020
3 mm	100 mm	Green	10443010022
5 mm	45 mm	Green	10445004522
5 mm	100 mm	Black	10445010001
5 mm	100 mm	Green	10445010022



PROTECTION NETS FOR FALLING OBJECTS

MATERIAL	High Tenacity Polypropylene (PPhT)
TYPE	Knotless
ECO-CERTIFICATE	OEKO-TEX
UV	300 kly
SIZES	Up to your needs

Protection nets for falling objects

(Facades, ceilings, windows, etc.)

FAQs

Must protection nets comply with any regulations in Europe?

At the moment, no. When it is not about catching a person, the nets do not have to comply with any norm. But you should be aware that if the objects fall and can damage people/cars located below, it is necessary to acquire the highest quality nets like ours in order to avoid problems.



What are the biggest sizes of the protection nets?

The measures depend on the mesh and the thickness of the net. But for a better transportation and installation, we recommend that the net would not weigh more than 150 kg.

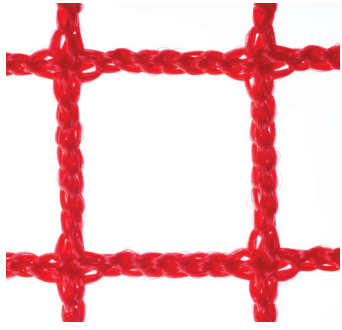
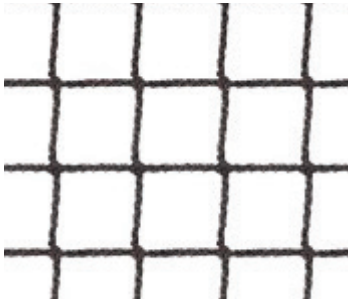
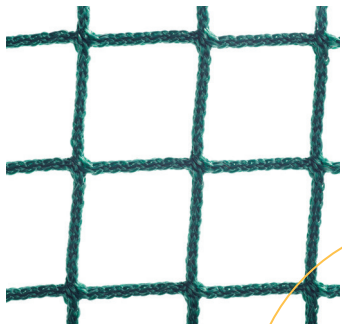
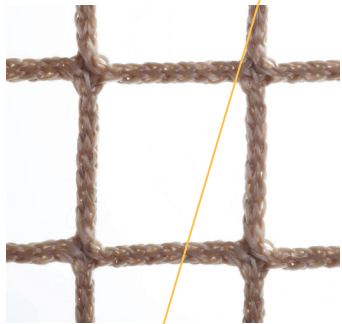
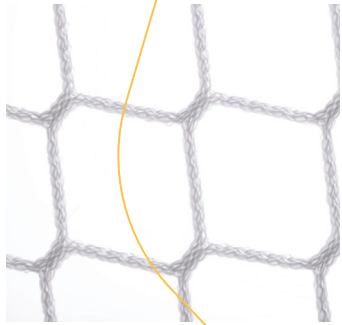


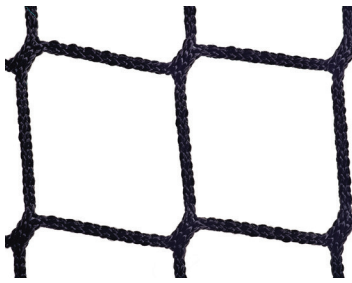
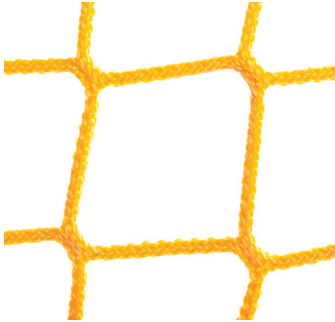
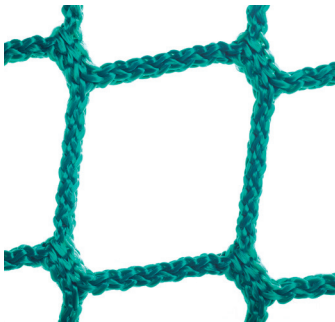
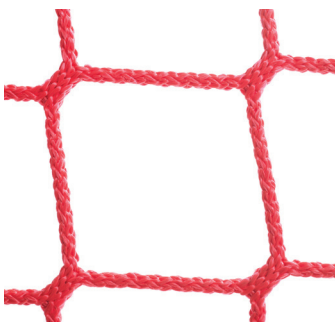
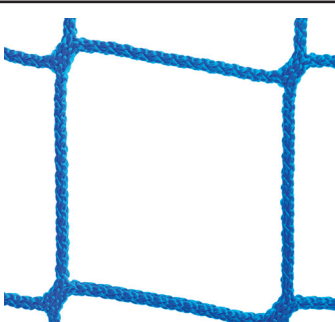
How to choose the thickness and mesh protection net?

They should be chosen depending on the weight and size of the object to be stopped/caught.



List of products:

THICKNESS	MESH	COLOUR	ARTICLES	
2 mm	20 mm	Red Black White Blue	10332002004 10332501501 10343002000 10332501503	
2 mm	22 mm	Black	10513522301	
2,3 mm	20 mm 35 mm 45 mm	Dark-Green	10442002022 10442003522 10442004522	
3 mm	25 mm	Beige	10443002509	
3 mm	35 mm	White Green	10443003500 10443003502	

THICKNESS	MESH	COLOUR	ARTICLES	
3 mm	45mm	Green Black White	10443004502 10443004501 10443004500	
4 mm	45 mm	Black Red White Green Yellow	10444004501 10444004504 10444004500 10444004502 10444004506	
5 mm	45 mm	Green Black White Blue Beige	10445004502 10445004501 10445004500 10445004503 10445004509	
5 mm	60 mm	Green Red Blue White	10445006002 10445006004 10445006003 44445020100	
5 mm	100 mm	Green Black Red White Blue Beige	10445010002 10445010001 10445010004 10445010000 10445010003 10445010009	



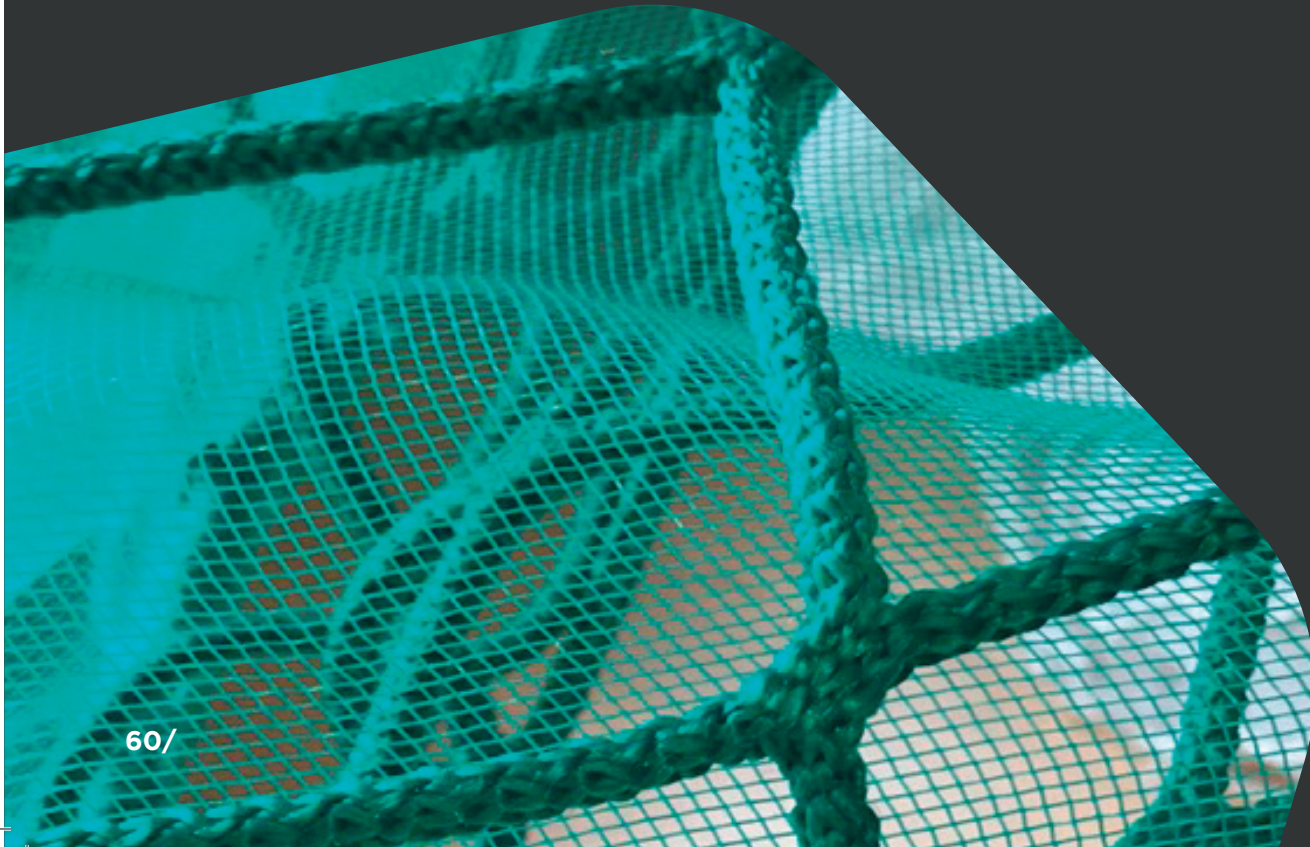
Nets/meshes for catching objects

Description	Thickness (mm)	Mesh (mm)	Weight (gr/m2)	UV Resistance
Mosquito net	1	1	90	v
Flame retardant mosquito net (M1; DIN 4102-1 B1)	1	1	90	v
Waterproof tarpaulin	-	-	160	v
Shade net	-	-	165	v
PVC net	1	0,2	340	v
Flame retardant PVC net (M1; DIN 4102-1 B1)	1	0,2	340	v
Toeboard net	1,5	7	205	v
Debris net	2	20	140	v

MOSQUITO NET

Our mosquito nets have a special double treatment against UV rays that makes it very resistant. The weight of 1 m² is double more than any usual mosquito net (90 g vs 40 g). It is possible to manufacture mosquito nets in any size and in various colors. It is mainly used to protect scaffolding or together with the safety net for falling objects and also separately.

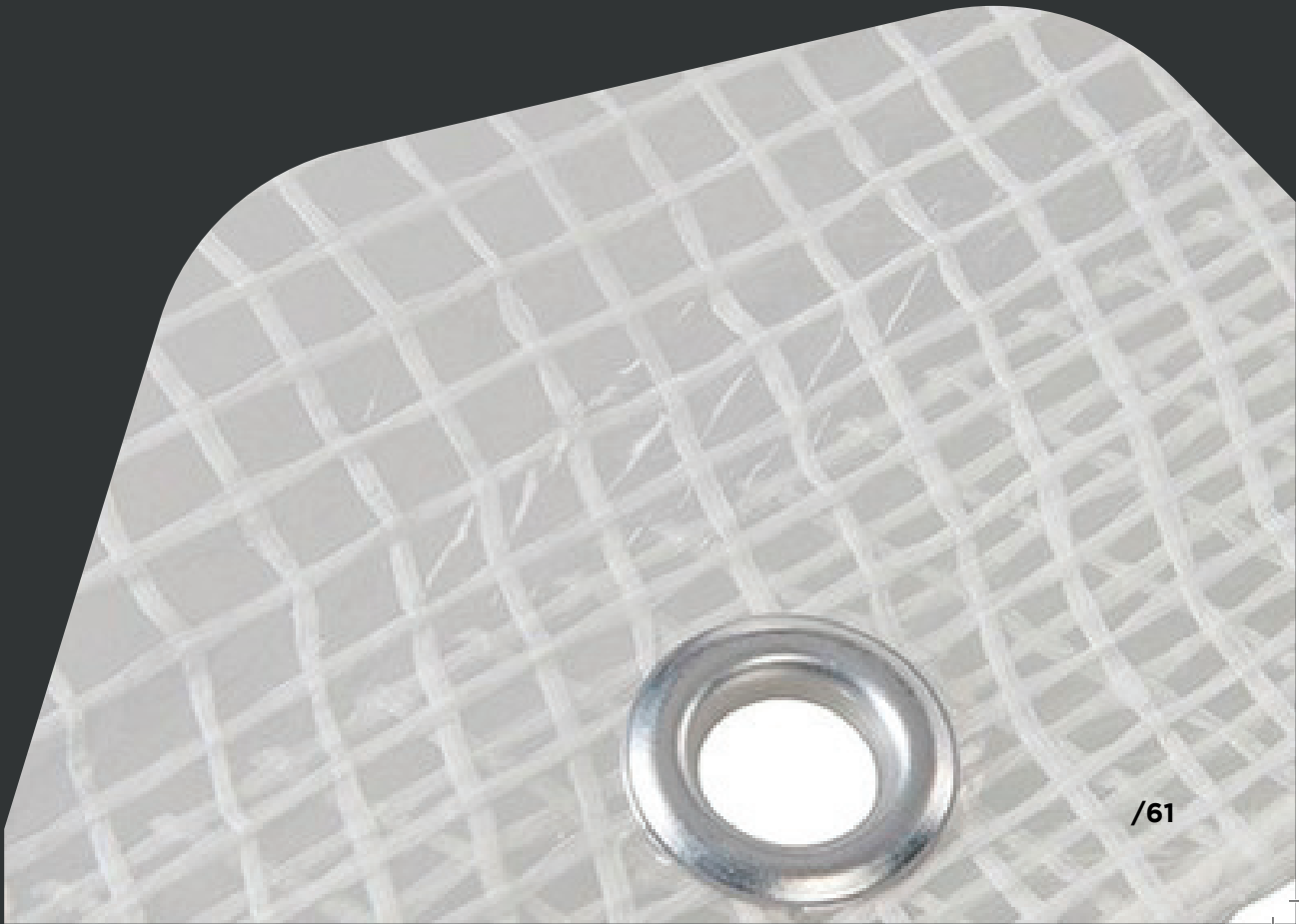
Material	High Tenacity Polyethylene (HDPE)
Colour	White, Black, Blue, Green, Yellow Flame retardant - white
Mesh	1 mm
Thickness	1 mm
Weight	90 g / m ²
Sizes	Up to your needs



WATERPROOF TARPAULIN

Waterproof tarpaulin is designed to protect from rainwater and wind. It is used together with the safety net for catching objects in bad weather conditions

Material	High Tenacity Polyethylene (HDPE)
Flame retardant certificate	AITEX: Class M1, B1 DIN-4102
Colour	White (transparent)
Weight	160 g / m2
Breaking force	515 N / 5 cm
Sizes	Up to your needs



SHADE NET

Shade net has as its main function to conceal or protect the interior of the spaces on site, protect from the sun the outdoor parking lots, patios and crops and also together with the safety net protect from the fall from the rubble.

The meshes are classified according to the percentage of light they filter. Therefore, our 90% masking Mesh allows 10% of the sunlight to pass through. Its durability depends on the type of installation, but under normal conditions, at least four years.

Material	High Tenacity Polyethylene (HDPE)
Densidad	70%
Colour	Green
Mesh	1 mm
Thickness	1 mm
Weight	165 g / m2
Sizes	2 x 50 m



PVC MESH

The PVC fabrics are designed to prevent the objects falling together with the safety net of System U and collecting objects together with the safety nets of System S and System T. They are also used to cover and protect plants in greenhouses, facades on building site and fences. We can also offer the banner printing on it.

Material	PVC
Colour	White
Weight	340 g / m2
Breaking force	230/160 daN / 5 cm
Sizes	Up to your needs
Resistencia	-30 C / +70 C
Flame retardant certificates	M1/NFP 92-507 B1/DIN 4102-1 G1/GOST 30244-94 VKF 5.3/SN 1988988

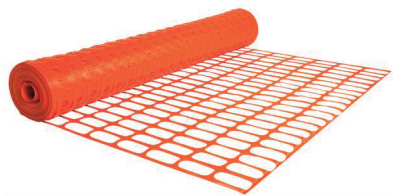
MESH BANNER PRINTING

Advertising on protective meshes made of the raschel fabric is a way to give a good image and promotion of the builder or any other company. The printing can be colourful. The Raschel fabric allows to reduce the amount of dust and the fall of materials and objects. Mesh Raschel is waterproof and very resistant to UV rays thanks to its antisolar treatment.



Material	High Tenacity Polyethylene (HDPE)
Colour	White
Weight	50 g / m2
Sizes	2 x 50 / 2 x 100 / 2,6 x 50 / 2,6 x 100 / 3,1 x 50 / 3,1 x 100
Norma	DIN 53857

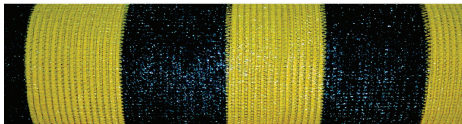
WARNING BARRIER



Warning barrier is made from a resistant high tenacity polyethylene (HDPE) mesh on orange colour. It is a practical and economical signaling system.

Material	High Tenacity Polyethylene (HDPE)
Colour	Orange
Weight	90 g / m2
Sizes	1 x 50 m

SHADE WARNING MESH



Shade warning mesh is a perfect alert solution for hiding construction site/roads/scaffolding etc. They can be reinforced with PVC with eyelets.

Material	High Tenacity Polyethylene (HDPE)
Colour	Yellow & Black
Density	90%
Sizes	Sizes 1 x 50

ROPES & ACCESSORIES

For the installation of any system complying with EN 1263-1, it is mandatory to use the certified ropes & accessories.

TIE ROPE TYPE M EN 1263-1 30 kN

Objective: to attach the net of System S to the structure.

Material: PaHT

Diameter: 14 mm

Minimum resistance: 30 kN.

• Roll: 100 ml

Article: 70021000000

• 2,5 m with/without loop

Article: 70028000000



TIE ROPE TYPE G EN 1263-1 20 kN

Objective: to attach the net of System V or T to the structure.

Material: PPHT

Diameter: 12 mm

Configuration: twisted

Minimum resistance: 20 kN

• Roll: 100 ml

Article: 70421020000

Article: 70421020012

Configuration: braided



TIE ROPE TYPE Z EN 1263-1 15 kN

Objective: to attach the safety net to the structure (double branch).

Material: PPHT

Diameter: 10 mm

Minimum resistance: 15 kN.

Roll: 100 ml.

Configuration: braided

Article: 70425000114

Material: PPHT

Diameter: 10 mm

Minimum resistance: 15 kN.

Roll: 100 ml.

Configuration: twisted

Article: 70425000000



COUPLING ROPE TYPE O EN 1263-1 7,5 kN

Objective: to join safety nets with each other.

Material: PaHT

Diameter: 8mm

Minimum resistance: 7,5 kN

Roll: 100 ml

Article: 70025000000



RAFFIA ROPE 15 kN

It is used in twofold position for mounting the nets of System S. NB: this rope is not certified.

Material: PPHT raffia

Diameter: 10 mm

Breaking force: 15 kN

Articles:

Orange: 70428000100

White: 70428000101

Blue: 70428000103

Roll: 220 ml. MOQ: 108 roll/pallet



ELASTIC ROPE

Material: Rubber latex inside and high tenacity polyester shirt.

Articles:

6 mm white:

70016000200

8 mm white:

70018000200

8 mm blue: 70418000203

Roll: 200 ml



ROPE 14 MM EN 795

*Objective:
The rope serves for
horizontal and vertical
lifelines and complies with
all the requirements of EN
795.*

Material: PaHT
Diameter: 14 mm
Configuration: braided
Breaking force: 40 kN
Article: 70421400002
Roll: 100 ml



KERNMANTLE ROPE EN 1891 "GOLDEN ROPE" 30 KN

Material: PaHT
Type A
Breaking force: 30 kN
Diameter: 10.5 mm
Configuration: braided
with / without suit
Certificate: EC-Type
Article: 70011100000
Roll: 100 ml



ROPE 4 MM

Material: PES
Diameter: 4 mm
Configuration: braided
Colour: white
Article: 70014000000
Roll: 100 ml



ROPE 5 MM

Material: PP
Diameter: 5 mm
Configuration: braided
Yellow: 70418000006
White: 70418000000
Green: 70418000002
Red: 70418000004
Black: 70418000001
Blue: 70418000003
Roll: 200 ml



ROPE 6 MM PA

Material: PaHT
Diameter: 6 mm
Configuration: braided
Colour: white
Article: 70016000100
Roll: 100 ml



ROPE 6 MM PES

Material: PES
Diameter: 6 mm
Configuration: braided
Articles:
White: 70216000000
White with spots: 70216010000
Roll: 100 ml



ROPE 7 MM

Material: PP
Diameter: 7 mm
Configuration: braided
Black: 70126000000
White: 70217000000
Roll: 100 ml



ROPE 8 MM

Material: PP
Diameter: 8 mm
Configuration: braided
Green: 97418000002
White with spots: 70218010000
White: 70428000000
Roll: 100 ml



ROPE 10 MM

Material: PPHT
Diameter: 10 mm
Configuration: braided
White/Green:
70419000032
White/Red:
70419000034



ROPE 14 MM

Material: PST
Diameter: 14 mm
Configuration: cabled
White: 70421400001
Black: 95001200001



PLASTIC BASE

Objective: It is inserted in the slab for the attachment of the gallows
Article: 46999900001



PVC CARTRIDGE

Objective: It is inserted into the concrete floor to support the steel railing that hold the balustrade.
Article:
46999900002



PROTECTIVE CAP

Objective: It is used as a Protection on corrugated steel rods.
Article: 46999900005



EXPANDING METAL ANCHOR

Objective: To hook and fasten the net after having placed the anchor into the slab.
Article:
46998000000



STRAP

Objective: To fix the net to the rail guard system or any safety guards.
Available Colours:
Blue: 70455500013
Red: 70455500004
White: 70455500000
Green: 70455500002



CARABINER 25 KN

Objective: to attach the net to the structure or cable.
Article: 95808080000

