

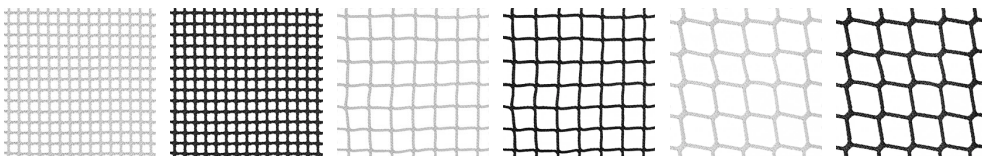
# Installation manual, usage guidelines, safety, and maintenance instructions for horizontal home nets


NI-DTFH LOFTNETS V1/20231002/01



L O F T N E T S

[www.loftnets.com](http://www.loftnets.com)



All our installation videos are available on our website and on YouTube  YouTube

I	SAFETY INSTRUCTIONS & PRODUCT GUARANTEES.....	3
1	INTRODUCTION AND SCOPE OF USE.....	3
2	GUARANTEE.....	3
II	PREPARING INSTALLATION.....	5
1	MAXIMUM WORKING LOADS.....	5
2	FRAME / SUPPORT STRUCTURE.....	5
3	VERIFYING THE CONTENTS OF THE DELIVERED ORDER.....	5
III	INSTALLATION.....	6
1	Installation of fastening hardware on frame / supporting structure.....	6
1.1	Safety.....	6
1.2	Pre-drilling.....	6
1.3	Spacing between fasteners.....	7
2	Positioning and pre-tensioning the net.....	8
3	Lacing and net tightening.....	10
3.1	START AND END KNOTS.....	10
3.2	POINT BY POINT LACING.....	10
3.3	CRISS CROSS LACING.....	12
3.4	PRE-LOADING BEFORE USE.....	14
IV	CARE AND MAINTENANCE.....	15
1	SYSTEMATIC NET INSPECTION OF THE NET AND REPLACING YOUR NET.....	15
1.1	Everyday maintenance: before every use.....	15
1.2	Quarterly maintenance.....	15
1.3	Replacing the net.....	15
1.4	Net adjustment service.....	15
2	RETENSIONING.....	16
3	CLEANING.....	16

# I SAFETY INSTRUCTIONS & PRODUCT GUARANTEES

Please read carefully and keep for future reference.

## 1 INTRODUCTION AND SCOPE OF USE

The horizontal suspended "home net" is a piece of equipment that can be used to fill open spaces or to delimit volumes. It is intended for both indoor and outdoor use. It is neither subject to building regulations nor to a ten-year guarantee. Its technical specifications have been validated by an independent inspection body.

Furthermore, we would like to point out that compliance with this independent approval does not only depend on the design of LOFTNETS products, but also on the conformity of the supporting structure and the correct installation of the net, in accordance to the recommendations listed in this document. These two criteria fall under the sole responsibility of the user.

**The horizontal home net can be used in a number of ways:**

- creating, extending or covering levels (horizontal, sloping or arched, such as mezzanines or attic conversions),
- creating, extending or covering a space or level of a terrace or outdoor space.

**For all the uses listed above, the home net may only be installed in private areas of residential buildings and/or hotels for individual use and under no circumstances for private collective or public use.**

**The following types of use (non-exhaustive list) of the home net are not covered by our technical report, which has been validated by an independent inspection body, and must be the subject of a specific study and validation:**

- ❑ Public spaces,
- ❑ buildings subject to labour law,
- ❑ collective areas of buildings used for residential purposes,
- ❑ construction site safety zones,
- ❑ protection of facilities such as ponds, swimming pools, water features or water collection tanks,
- ❑ safety nets,
- ❑ recreational areas.

## 2 GUARANTEE

LOFTNETS calculates the size of the net by taking into account the combination of the following 3 elements: **the net, the fastening hardware and the tensioning ropes.**

Any changes to these 3 elements and their amount could affect the final assembly, for which LOFTNETS cannot be held responsible. Therefore, provided that the order includes a net, fastening hardware and tensioning rope, our products are guaranteed for the following periods of time, subject to normal wear and tear:

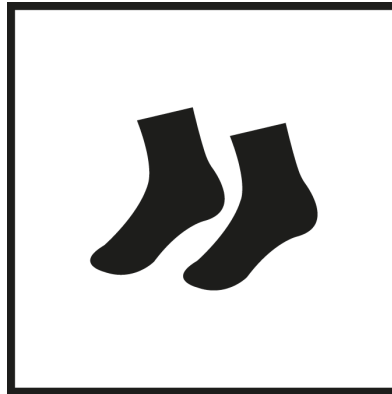
- **Custom-made nets and tension ropes** (when used as recommended in this document): 2-year guarantee.
- **Stainless steel or steel fastening hardware** (when used as specified in this document): 2-year guarantee.
- **Stainless steel or steel fastening hardware** (when used as specified in this document): 2-year guarantee.

The aesthetic appearance, colour or cleanliness of the nets and tensioning ropes are not covered by the guarantee as a result of intensive use, installation methods or exposure to UV light. The response to fire is unclassified.

# SAFETY RULES WHEN USING THE NET



**Do not jump on the net**



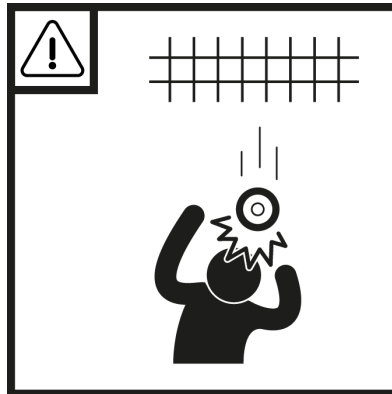
**Take off your shoes**



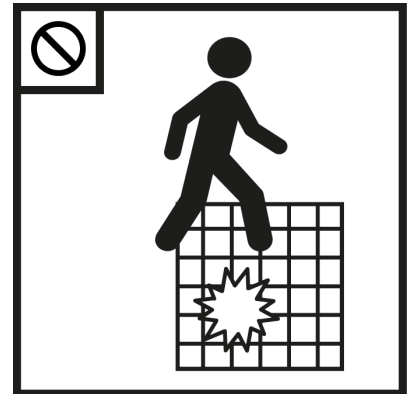
**Be careful of collisions**



**Our nets are not suitable for children under 36 months**



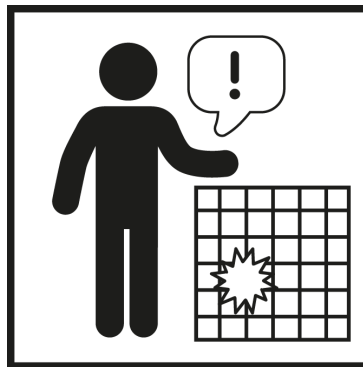
**Be careful of any items that could fall through the net meshes**



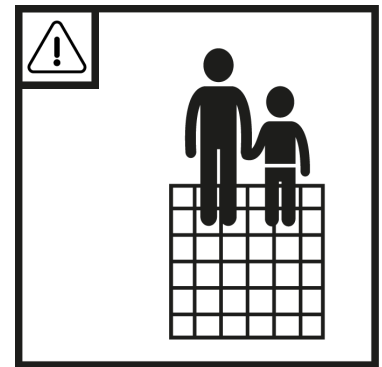
**If you see anything unusual about the net, fastening hardware or rope, alert the net owner**



**Do not use sharp or flammable objects, or any object that heats up when on the net**



**Do not use the net if damaged**



**Children must be accompanied by an adult at all times**

Furthermore, to facilitate access to and exiting the net, we recommend identifying an entrance and exit and installing a support point, such as a handrail.

Please note: the net is not initially designed for pets, but lighter animals may sleep and play on it. LOFTNETS cannot be held responsible for any potential damage caused by an animal. We recommend using a blanket to protect the net in this case.

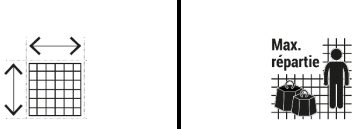
## II PREPARING INSTALLATION

### 1 MAXIMUM WORKING LOADS

The maximum working load or accumulated mass on the net is limited to the smaller of the following two values:

**For nets less than or equal to 8 m<sup>2</sup>: 120 kg/m<sup>2</sup> max spread over the total surface of the net. For nets larger than 8 m<sup>2</sup>: max. 120 kg spread over the total surface of the net.**

**For nets smaller than or equal to 8 m<sup>2</sup>: 120 kg/m<sup>2</sup> max spread over the total surface of the net. For nets larger than 8 m<sup>2</sup>: max. 1000 kg spread over the total surface of the net.**



$\leq 8 \text{ m}^2$	120 kg/m <sup>2</sup>
$> 8 \text{ m}^2$	1000 kg in total

### 2 FRAME / SUPPORT STRUCTURE

The calculation (with or without an additional safety coefficient), assessment, design and construction of the support structures fall under the responsibility of the customer, the commissioned professional or the architect.

The structure may consist of:

- - Wooden beams,
- - Logs (exterior),
- - Steel or Dyneema cables,
- - Round or square steel tubes fixed with plates,
- - Steel plates with welded rings,
- - IPE / HEA / HEB / UAP steel beams or angles,
- - Solid masonry walls (stone, concrete, brick),
- - Tubular structures, couch-like shapes, etc.

### 3 VERIFYING THE CONTENTS OF THE DELIVERED ORDER

Our team always checks the content and quality of the products before shipping but as a precautionary measure it is recommended that you:

- Check that the fastening hardware used is suitable for the net's supporting structure, whether supplied by LOFTNETS or purchased from another supplier,
- check the condition of the fastening hardware (rings should be without sharp or cutting edges) and ring welds,
- check the general condition of the net and meshes,

# III INSTALLATION

## 1 INSTALLATION OF FASTENING HARDWARE ON FRAME / SUPPORTING STRUCTURE

### 1.1 Safety

Make sure the fastening hardware is suited to your supporting structure. Fastening hardware should be placed in the corners and around the entire perimeter of the frame. They can be fitted in a vertical or horizontal position. The fitting recommendations are the following:

- The **8x80 mm Eye Screws** must be screwed in as far as possible, as well as the eye plate screws. The **12x120 mm Eye Screws** should be screwed in up to the second line (closest to the ring).
- Tighten the eye plate screws as much as possible, until they touch the eye plate itself.
- It is essential to properly attach the fastening hardware into the supporting structure.
- Position the fastening hardware at the top of your void, as close to your floor level as possible, to avoid creating a large step, while ensuring that they are properly anchored. Please be careful to not crack the frame when fastening into thin concrete or wooden beams.

**It is the responsibility of the person installing the fastening hardware to ensure that they are properly anchored.**



### 1.2 Pre-drilling

Pre-drilling facilitates the screwing in of fasteners such as Eye Screws and screws for plates and shackles. The pre-drilling diameter, depending on the type of material and fastening hardware, is described in the following table.

Type of fastening hardware	Pre-drilling dimensions: wood
Stainless steel A4 eye plate + screws 5x50 mm	Ø = 3 mm, L = 45 mm
Stainless steel shackle jumper A4 + screws 4,5x35 mm	Ø = 2 mm, L = 30 mm
Stainless steel Eye Screw 8x80 mm A4	Ø = 5-6 mm, L = 70 mm
Stainless steel Eye Screw 12x120 mm A4	Ø = 8 mm, L = 110 mm



### 1.3 Spacing between fasteners

The "d1" distance for corner fasteners depends on the type of fastening hardware:

Fastener	Distance to frame (d1) See diagram below
Stainless steel Eye Screw 8x80 mm A4	70 mm
Stainless steel Eye Screw 12x120 mm A4	90 mm
Stainless steel plate A4	50 mm
Shackle A4	50 mm
10X40 A4 stainless steel eye bolts	70 mm

The spacing between "d" fastening hardware should not exceed 120 mm.

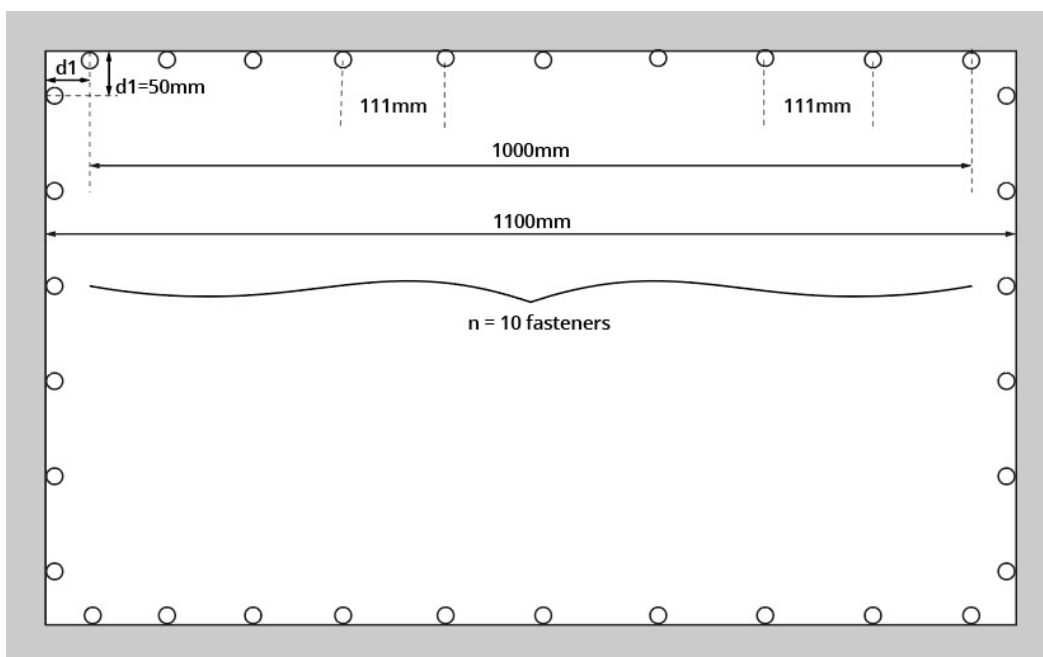
In the example below, the length of the void is 1100 mm.

The fasteners are eye plates: as highlighted in the table above, the first and last eye plates should be placed **50 mm from the inner edge** of the frame.

Between these two eye plates, there is now a **1000 mm** gap, leaving enough room for 8 additional eye plates every 111 mm, i.e. 9 spaces.

Therefore:  $9 \times 111 + 2 \times 50 = 1099 \text{ mm}$

*Note: A total of 10 eye plates is needed (1 angle + 8 intermediate plates + 1 angle), because if only 9 plates are used, the distance between two adjacent plates will be 125 mm, which would exceed the limit value of 120 mm.*



## 2 POSITIONING AND PRE-TENSIONING THE NET

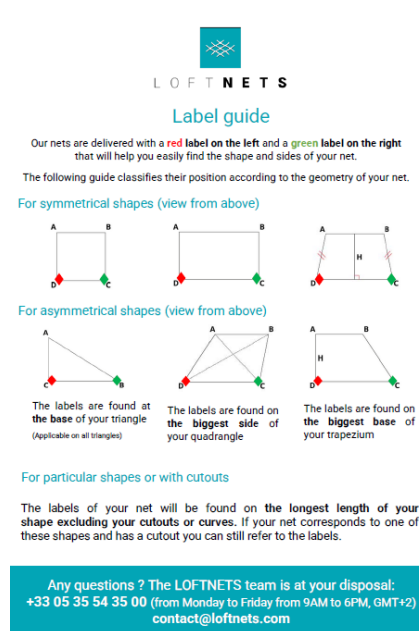
### ! WARNING

Using any type of traction/tensioning equipment, other than the plastic zip ties and ropes supplied by LOFTNETS, to stretch the home nets, is not recommended.

The use of a hoist, winch or pulley system could damage the net and its overall sturdiness.

The material supplied by LOFTNETS is sufficient for the correct tensioning of your net.

For 15, 20, 30 and 45 mm mesh nets: install the net with the smooth side facing upwards, the net was cut this way up and this side is more comfortable. This recommendation does not have any impact on your home net's safety but ensures optimal comfort. Our layout guide will help you determine which way to position your net.



When unpacked, the net may appear to be short or the wrong size for the space you are planning to fill. Once stretched the net should be the perfect size for your void. At the start, the net may appear 30cm shorter on each side. Once stretched, it should be between 3 and 15 cm from the inside edge of the structure, depending on the users' wishes.

To make installation and centring easier, it's essential to pre-tension your net with zip ties (supplied for Double Cross lacing) or using 4mm Point-by-Point rope.

**Fasten the attachment points in the correct order, keeping the net centered while gradually tightening it.**

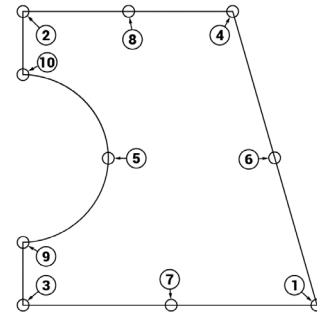
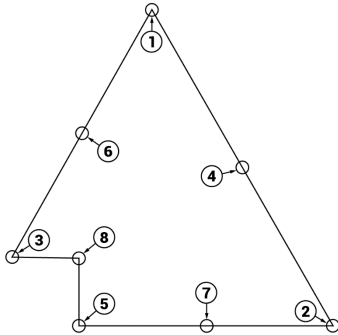


For **non-rectangular shapes**, the same principle can be applied to determine the optimum position and order of the pre-fastening attachment points of the net:

- Start with the **two furthest opposite ends**,
- Then at each iteration, always fasten **two opposite points** meaning that the free segments divide into **two equal portions**.

The pre-fastening stage is completed when the net **fills all the empty space** and takes on a shape close to its final intended shape.

Examples of net shapes and pre-fastening:



**! WARNING**

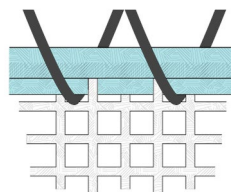
The pre-tensioning step does not mean the net is safely attached. **DO NOT WALK** on the net until the tensioning rope has been completely installed.

The installation is done by standing outside or underneath the net (do not stand on it during the installation or re-tensioning stage.)

During the pre-tension phase, keep the tension ropes or zip ties in place until the installation is complete.

**! WARNING**

If you chose a double boltrope, you need to lace around both boltropes, the stitched and unstitched one, so that they are both pulled on by the tensioning rope.



## 3 LACING AND NET TIGHTENING

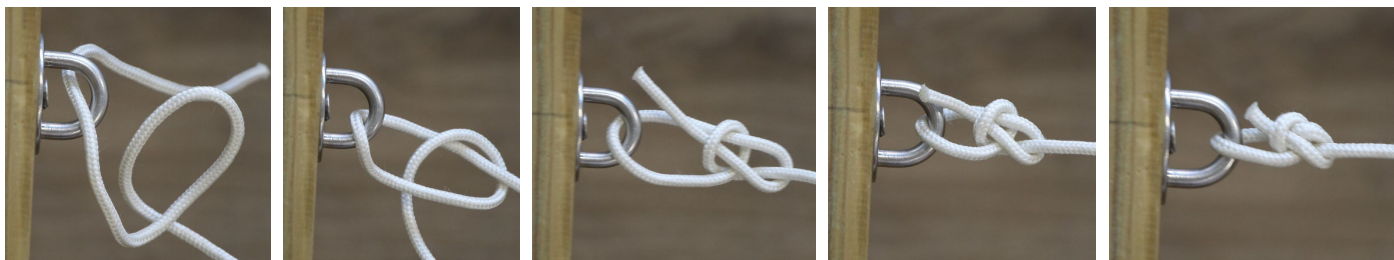
### 3.1 START AND END KNOTS

Knot A

→ Start knot for criss cross and point by point lacing

#### Bowline knot

Knot on the fastening

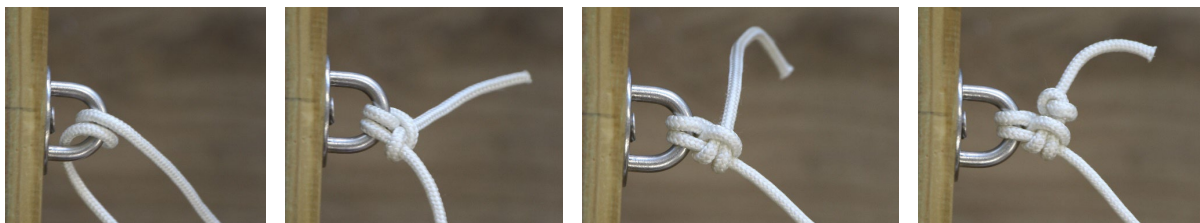


Knot B


→ Start knot for criss cross and point by point lacing

#### Wrap around once + 2 hitches + stopper not

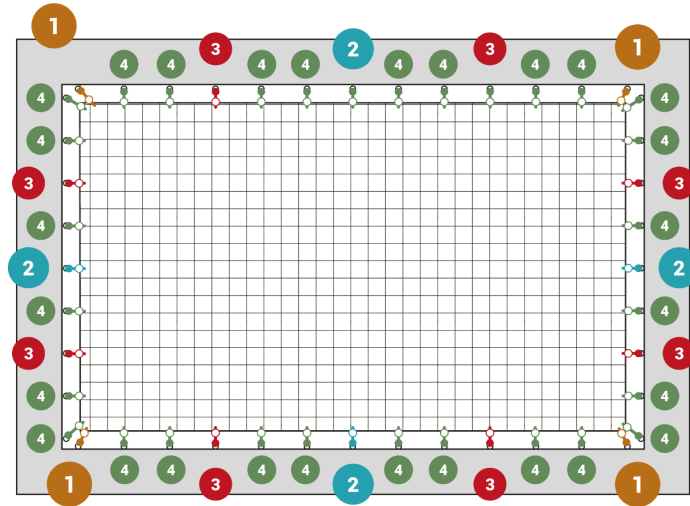
Knot on the fastening



### 3.2 POINT BY POINT LACING

(check out our tutos on our YouTube channel  YouTube )

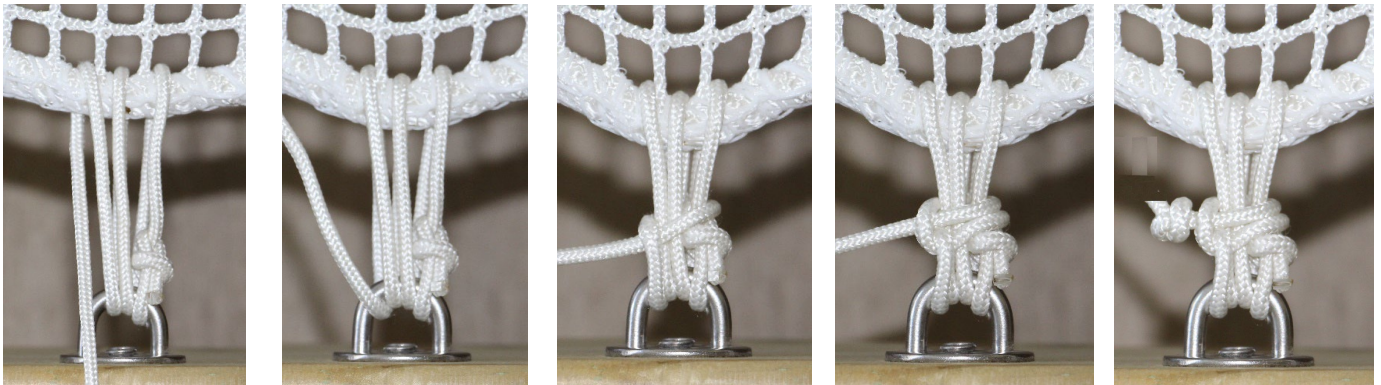
- **1 x rope Ø 5 mm, 90 cm long for each fastener**
- Attach each corner of the net first.
- **You can lace the rope through a different mesh each time, to distribute the tension evenly in the three meshes.**
- Once the corners are attached, lace from the centre of each side to tighten the net gradually around the entire periphery. Repeat until all fasteners are attached to the net.



**Eyescrews and Eye plates lacing process:**



Start: **Bowline knot** close to the ring



Pass the rope through 3 different meshes.

Make one loop around all the strands and slip the rope through the furthest stand.


Repeat this to make a second hitch.

End : do one stopper knot + cut off any excess rope

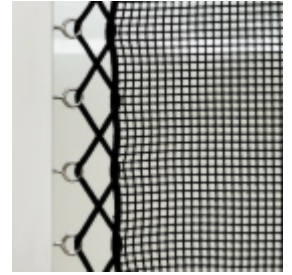
**ONCE THE KNOTS AND LACING ARE COMPLETED, IT IS SAFE TO USE YOUR NET.**

**You may need to re-tighten the net to bring it closer to the edge of your void,  
see section IV Net care / maintenance - 2. Re-tensioning.**

### 3.3 CRISS CROSS LACING

(check out our tutos on our YouTube channel  YouTube )

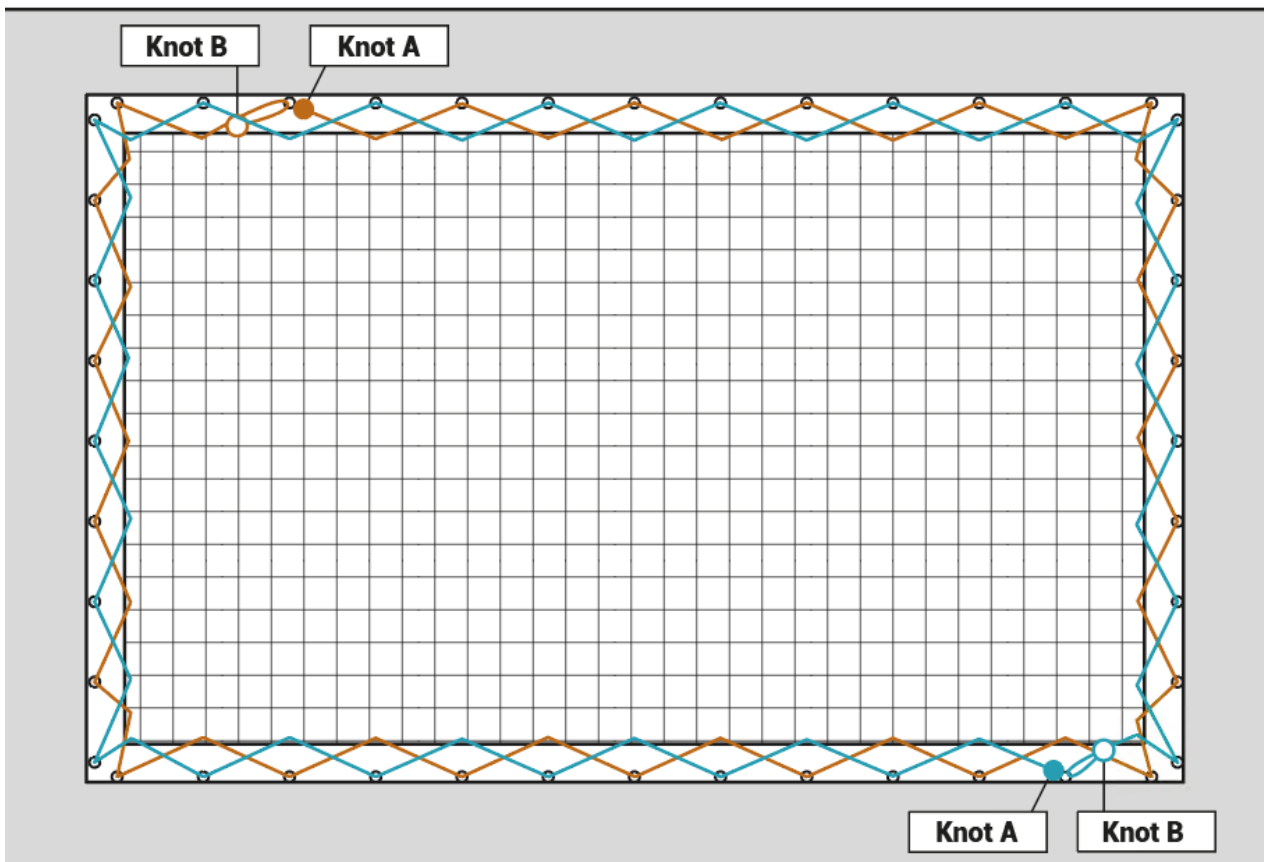
- **2 x Ø 10 mm ropes, length 2.5 x frame perimeter.**
- Start with lacing 1, lace while aiming for the mesh in front of the next fastener. Leave every other fastener free.
- After lacing 1 finished with start knot (knot A) and end knot (knot B), re-tighten to bring the net closer to the edge.
- Repeat the operation with the lacing 2, starting from a free fastener and skipping every other fastener (skip the fixation used by lacing 1)



**WARNING: it is essential to pass the rope slowly through each mesh of the net, otherwise burn marks may appear from the rope rubbing against the mesh.**

Lacing **1** 

Starting knot ● End knot ○



Lacing **2** 

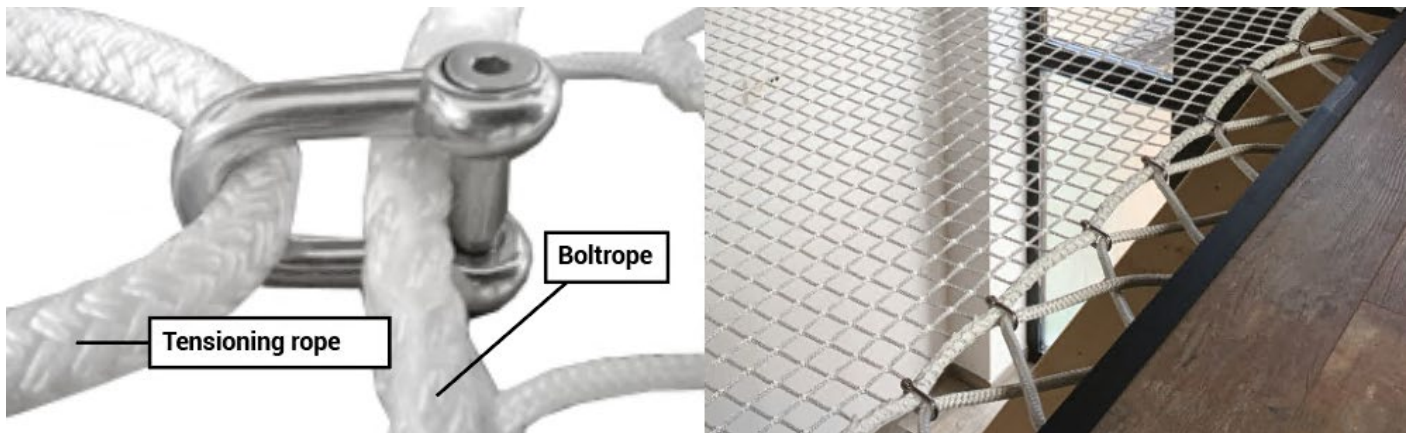
**ONCE THE KNOTS AND LACING ARE COMPLETED, IT IS SAFE TO USE YOUR NET.**

**You may need to re-tighten the net to bring it closer to the edge of your void,  
see section IV Net care / maintenance - 2. Re-tensioning.**

## FOR CRISS CROSS LACING: LACING D-SHACKLES

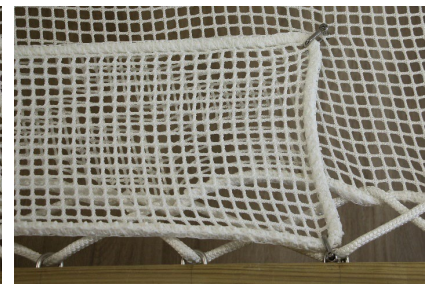
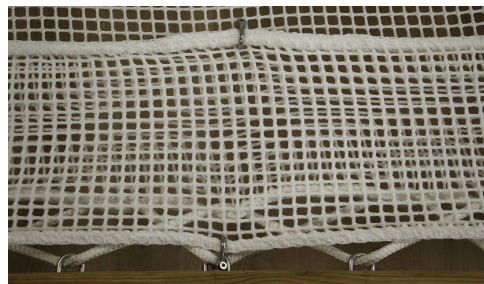
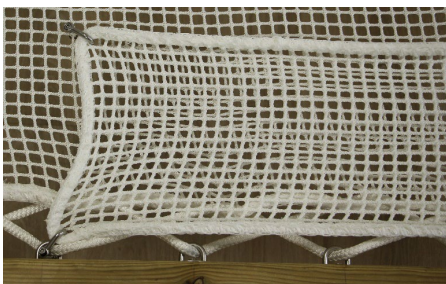
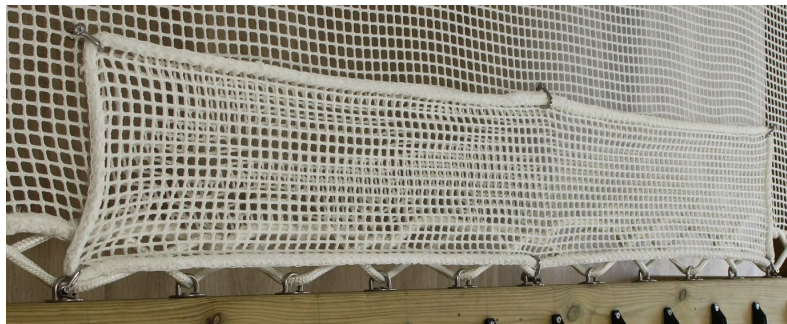
It is possible to attach the tension rope to the bolt rope by using shackles, instead of direct lacing, while following the same lacing pattern. Using shackles:

- Facilitates the installation and tensioning of the net.
- Avoids friction between the rope and the bolt rope and reduces wear and tear.



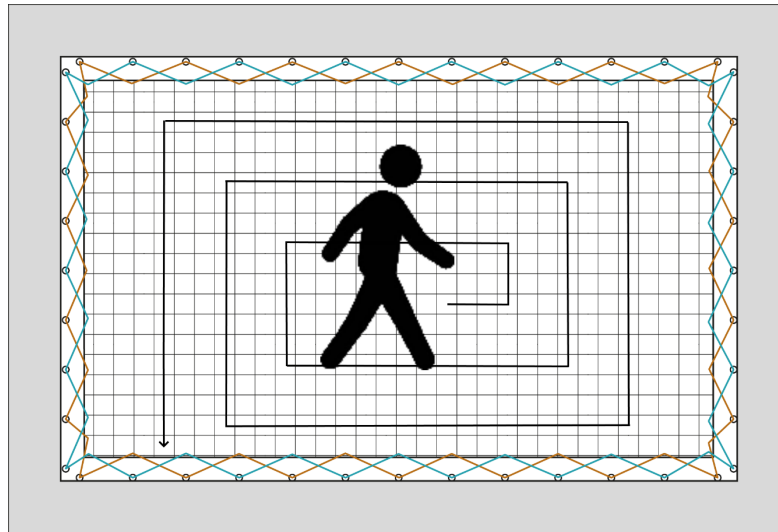
## OPTION: NET STEP KIT

If you ordered the additional "step kit" accessory, here's how to install it. It consists of a rectangular net with a boltrope and 6 shackles. The shackles are used to attach the net to the bindings and to the main net: 4 shackles at the corners and 2 on the edges. The net step must be properly tightened to be fully efficient as a safety barrier when accessing the net.



### 3.4 PRE-LOADING BEFORE USE

The net is an elastic material, so the final size cannot be achieved without pre-loading. Once the net is installed and the lacing is finished, we recommend walking on the net for about 15 minutes. Start by walking in the middle of the net, and then walk in the spiral towards the edges. This can be done several times. Do not jump on the net.



Your net may sag more after this, so you can retighten the tensioning ropes.

This tensioning will on the one hand bring the net closer to the edges of the frame and on the other hand, ensure that the final sizing of the meshes is achieved.

#### **Re-tensioning using the point by point lacing method:**

By standing outside the net or underneath the net (do not stand on it during this operation):

Repeat the installation steps of the point by point lacing as explained in III.3.2, applying more weight, without undoing the start knots.

Retighten each attachment point, tightening the end knots (C knot) one by one until the tension is correct across the whole net.

#### **Re-tensioning using the criss cross lacing method:**

By standing outside the net or underneath the net (do not stand on it during this operation):

- Identify the start knot.
- Begin pulling the rope from the start point and continue pulling the rope from one fixation to the next all the way around the net (like during the tensioning process during installation).
- Redo the end knot (Knot B) by adjusting it with the excess rope.
- Repeat the operation with the second rope.

# IV CARE AND MAINTENANCE

## 1 SYSTEMATIC NET INSPECTION OF THE NET AND REPLACING YOUR NET

### 1.1 Everyday maintenance: before every use

- Check the general condition of the net, the bolt rope and all the meshes making up the net. They should not appear "dry" or "brittle" and should not show signs of damage or cuts. The seams of the bolt rope should not be cut or frayed.
- Check the start and end knots of the lacing. They must not be loose or undone.
- Check that there are no missing or broken parts.

### 1.2 Quarterly maintenance

- Check that the frame / support structure does not get damaged over time.
- Check the condition of the fastening hardware and their proper anchorage. There should be no looseness in the anchorage.
- Check the condition of the tensioning rope for signs of fraying, cuts or wear.
- Check the condition of the meshes on the edge of the net. These, although taut, must not show any signs of ripping or damage.
- Check that the net has not been exposed to any high temperatures. It must not show any signs of melting, cuts or burning.
- Finally, during winter, low temperatures and snow load may damage the net. It is recommended in these conditions to remove the snow and dismantle the net for indoor storage.

### 1.3 Replacing the net

As the nets have a maximum warranty of 2 years, a biennial replacement of the entire home net and tensioning ropes or individual components may be necessary. No modifications should be made to the net or to any of its components. Any modification may result in damage to the product or personal injury.

If you notice any damage to any part of the installation net/ropes/fastening hardware, please replace the damaged parts and stop using the net.

### 1.4 Net adjustment service

LOFTNETS offers an adjustment service should you wish to modify your net. Please contact us for more information.

#### **WARNING**

Do not climb on the net if it has at least one of the above defects and contact LOFTNETS to examine how the home net can be made safe. Prevent access to the net by closing it off until it is repaired.

Supplier contact information: LOFTNETS – 21 rue Georges Lesieur 33300 Bordeaux – France - [contact@loftnets.com](mailto:contact@loftnets.com)

Tel: 33(0)5 35 54 35 00

## 2 RETENSIONING

The net, although made of a material specifically developed for the nautical sector with low elasticity, may stretch slightly over time. This may occur when the net is first installed or when heavier than normal loads are applied to it.

A 5 to 15 cm gap is calculated when sizing our nets to allow our customers to tighten their nets multiple times. The tension recovery method is described in section III.3.4.

## 3 CLEANING

Our nets have been designed and manufactured with quality materials and proven craftsmanship. With proper care and maintenance, our nets can last many years.

The net can be washed in cold water in a basin or in a washing machine on a gentle cycle at 30° maximum. Do not use aggressive detergents, use Marseille soap or other natural soaps. Air dry.

### WARNING

Cleaning agents (bleach, vinegar, etc.) can alter the chemical properties of the net and shorten its lifespan.





L O F T **N E T S**

**Send us photos of your projects to:**

**[contact@loftnets.com](mailto:contact@loftnets.com)**

**LOFTNETS would like to thank you buying our products and hope you enjoy relaxing on your net!**

**21 rue Georges Lesieur - 33300 Bordeaux - FRANCE**

Tel: +33(0)5 35 54 35 00

**Our team is available from Monday to Friday from 9am to 6pm**