

## Assembly instructions for personal safety nets and side protection nets

EN 1263-2 is decisive for the construction and attachment of safety nets. Personal safety nets must absolutely meet the safety requirements of EN 1263-1.

### Labeling requirement

According to EN 1263-1, personal safety nets are subject to mandatory labeling with the following information:

- ✓ Name of the manufacturer
- ✓ Date of manufacture
- ✓ Network type
- ✓ Exact article description
- ✓ Minimum energy absorption and breaking strength
- ✓ Identifier (symbol) of the certifying test center.

### **Test seals and test Labels**

Each safety net has a protective net label and one or more test meshes. These are provided with a Seal of approval and an identification number. The ID number of the Net and check mesh have to be the same. This is the only way to see that the network and test string belong together.

Every safety net must be checked annually for its energy absorption. For this purpose, a test mesh is sent to a competent examiner or sent to the manufacturer of the network. The responsible examiner provides written evidence about the results of the exam. If the result is positive, this is indicated on the label.

Will a new or additional label be issued, this sticker must be attached to the network again, to prove its suitability.



Test

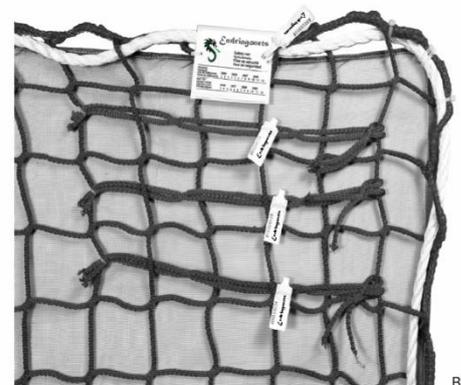


Bild 2

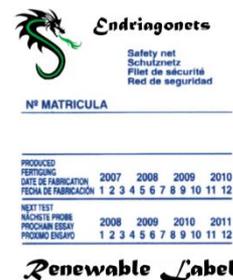


Bild 3

## **Assembly instructions for personal safety nets and side protection nets**

### **Use of personal safety nets**

During construction work at great heights, personal safety nets that comply with the EN 1263-1 standard (fall protection) must be used to protect workers from falling.

When assembling the nets, it must be ensured that the workers can move freely.

### **Construction and dismantling of personal safety nets**

Personal safety nets may only be installed or dismantled by qualified personnel who have the appropriate knowledge. The persons entrusted with the assembly / disassembly of fall arrest nets must be secured against falling by suitable measures (lifting platform, safety harness) while the nets are being assembled / dismantled. Gloves are compulsory during assembly / disassembly.

### **Anchoring forces - carrier material**

The attachment of protective nets must be carried out on suitable, stable structures. The following must be considered: The distances between individual suspension points must not be more than 2.5 m, whereby each suspension point must be designed for comparable loads of at least 6 kN.

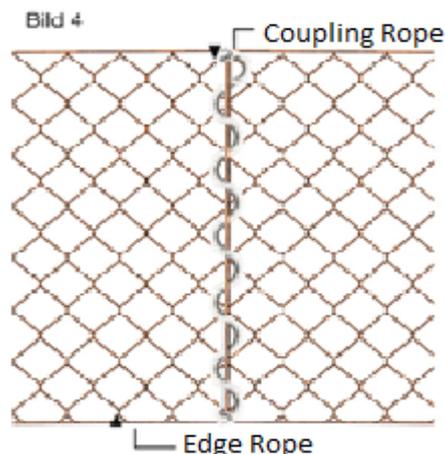
### **Suspension**

Suspension ropes, safety snap hooks, net thimble loops or protective net thimble brackets are used for suspension. The rope breaking force of the suspension rope must be at least 30 kN with a 1-leg suspension and at least 15 kN with a 2-leg suspension.

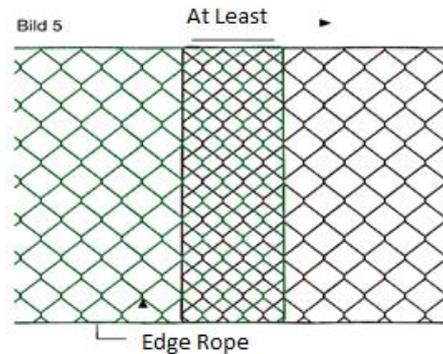
### **Connection of several Networks**

The coupling rope is used to connect several safety nets to form a large area. The rope breaking force of the coupling rope must be at least 7.5 kN. When connecting the net with a coupling rope, two safety nets are placed flush next to each other. The coupling rope is knotted at both corners of one side, stitch by stitch through the edge stitch and knotted again at the two opposite corners. (see picture 4).

An opening that can arise between two coupled networks must not be larger than 100mm.



If several nets are to be connected without a coupling rope, the attached nets must overlap by at least 2m (see Figure 5).



### Dimension / Minimum Size

The following values require a minimum size of 35m<sup>2</sup> and a minimum length of the shortest side of 5m required.

### Fall height / Minimum catch width

Safety nets are to be hung up as close as possible below the areas to be secured. The height of the fall, i.e. the distance between the edge of the fall and the surface of the safety net, must not be greater than 3m in the edge area up to 2m (Hr) and otherwise (Hi) not greater than 6m (see Figure 6). These requirements apply in relation to the resistance (energy absorption capacity) of the protective network. In general, the height of the fall may be according to the rules for concretising the requirements from the ordinance on workplaces (see ArbStätt V and technical rules ASR A2.1 on this), which the EC directives on minimum requirements for safety and health protection (see 89/654 / EEC, 92/58 / EEC and 92/57 / EEC), not more than 3m when working on roofs or floors with a floor area of up to 50m<sup>2</sup> and an angle of inclination of 22.6° and not more than 2m for larger or steeper areas

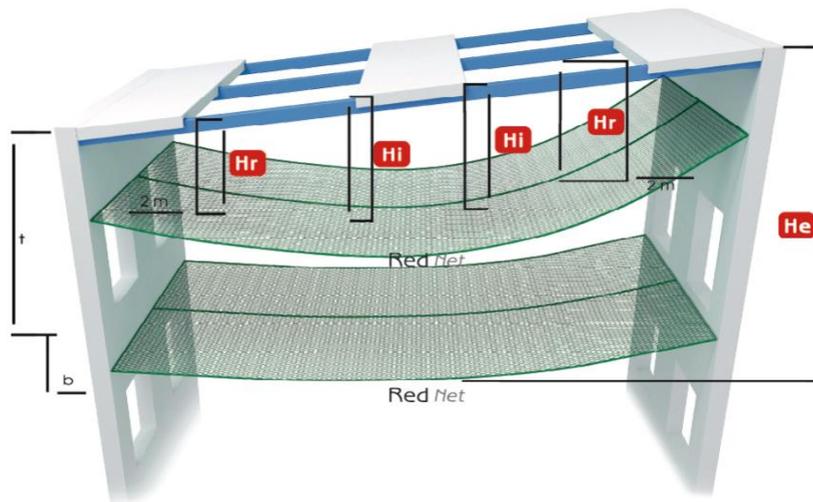


Bild 6

The catch width is directly related to the height of the fall: (see table 1 and figure 7).

Fall height H3:	$\leq 1,0$	$\leq 3,0$	$\leq 6,0$	Meter
Minimum catch width b:	$\geq 2,0$	$\geq 2,5$	$\geq 3,0$	Meter

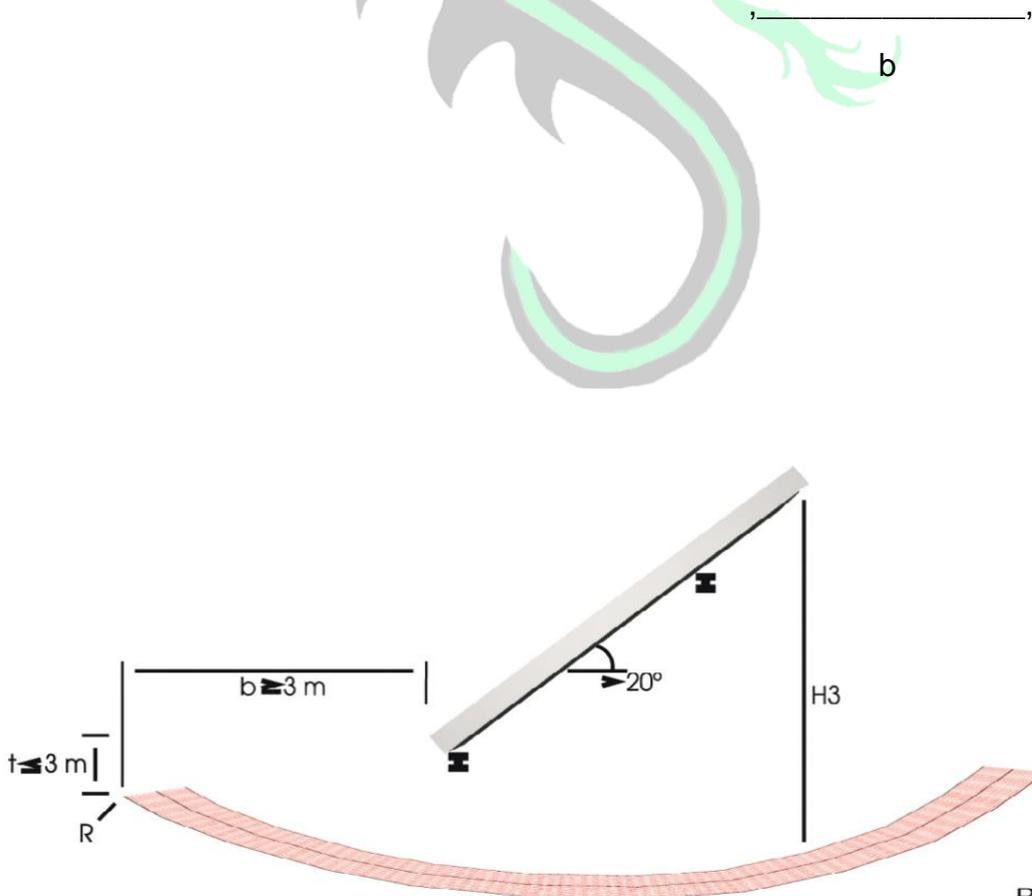
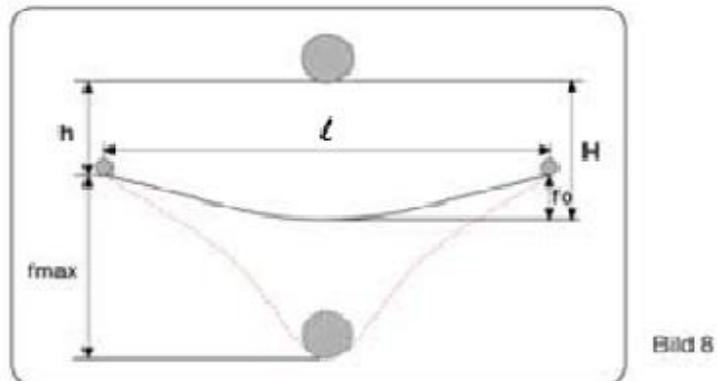


Bild 7

### Free space under the protective net

When suspending protective nets, it must be ensured that falling people cannot collide with solid objects if the net is deformed. The deformation depends on the shortest side of the net and the height of the fall (see Table 2 and Figure 8). In addition, a safety distance  $S > 0$  for traffic routes etc. must be considered by maintaining sufficient free space under the protective net.



The curves are valid if:

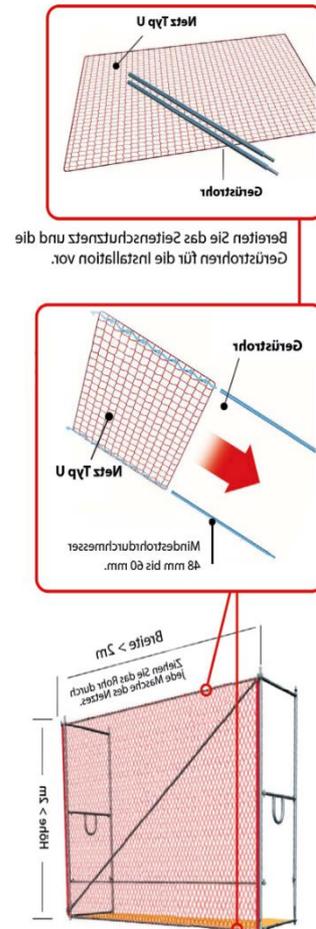
$$f_0 \leq 0,1 \times l$$
$$H_1 = h + f_0 \leq 6,0 \text{ m.}$$

Tabelle 2

The Endriagonets Safety net m2 Red PPM 5mm meets the requirements according to EN 1263-1

## Use of side protection nets (type U)

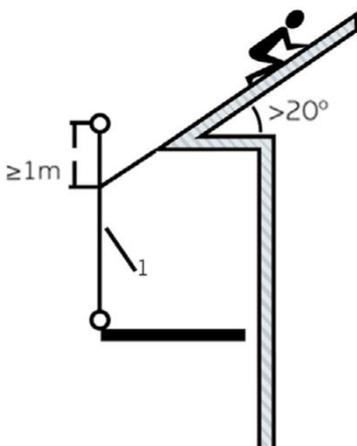
These nets are used as a protective wall in the roof safety scaffold (see DIN 4420-1) or as a protective roof wall during construction work (see EN 13374). The nets are installed vertically by pulling a scaffolding tube through each edge mesh (threading it loop by loop) As soon as the scaffolding tubes are mounted on the stand or vertical frame, the side protection net is fully tensioned, as shown in the picture. Supporting structures to accommodate the side protection net (type U) must be designed in such a way that they withstand the impact force resulting from the restraint of a falling person. The floor or structure on which the frame or scaffolding is mounted must also have the above Can withstand forces. This is fulfilled if a system framework according to EN 12811 is used.



A simple and quick type of assembly is fastening connect quick buckle straps fasteners with clamp locks (GSV- Quick buckle strap)

Some of our side protection nets in standard sizes are already available with Quick buckle strap.

*Recommended distance: 75 cm*



## **Discard**

Safety nets may no longer be used as such if:

- A person has already been caught in them (unless they have been re-examined)
- The minimum energy consumption isn't longer guaranteed (see test sticker).
- The nets have visible defects (such as considerable wear and tear, defective meshes, damaged edge rope, damaged thimble loops).

## **Storage and warning of dangers**

Safety nets are:

- To be kept in dry rooms.
- Do not store near heat sources
- Not to be brought into contact with aggressive substances (e.g. acids, bases, solvents, oils)
- To be stored protected from direct sunlight.

