

MINI CATCH NET FAN

USER GUIDE



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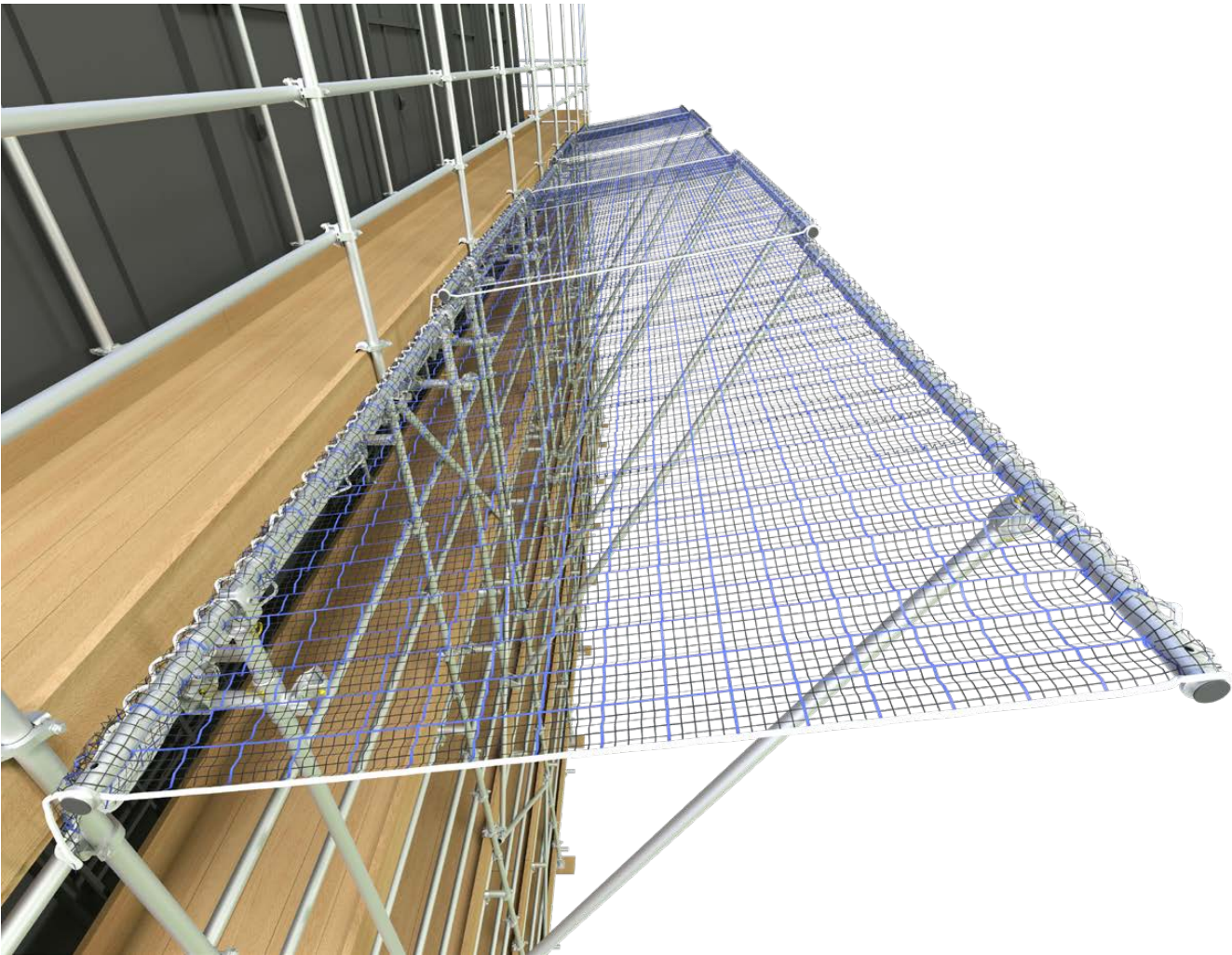
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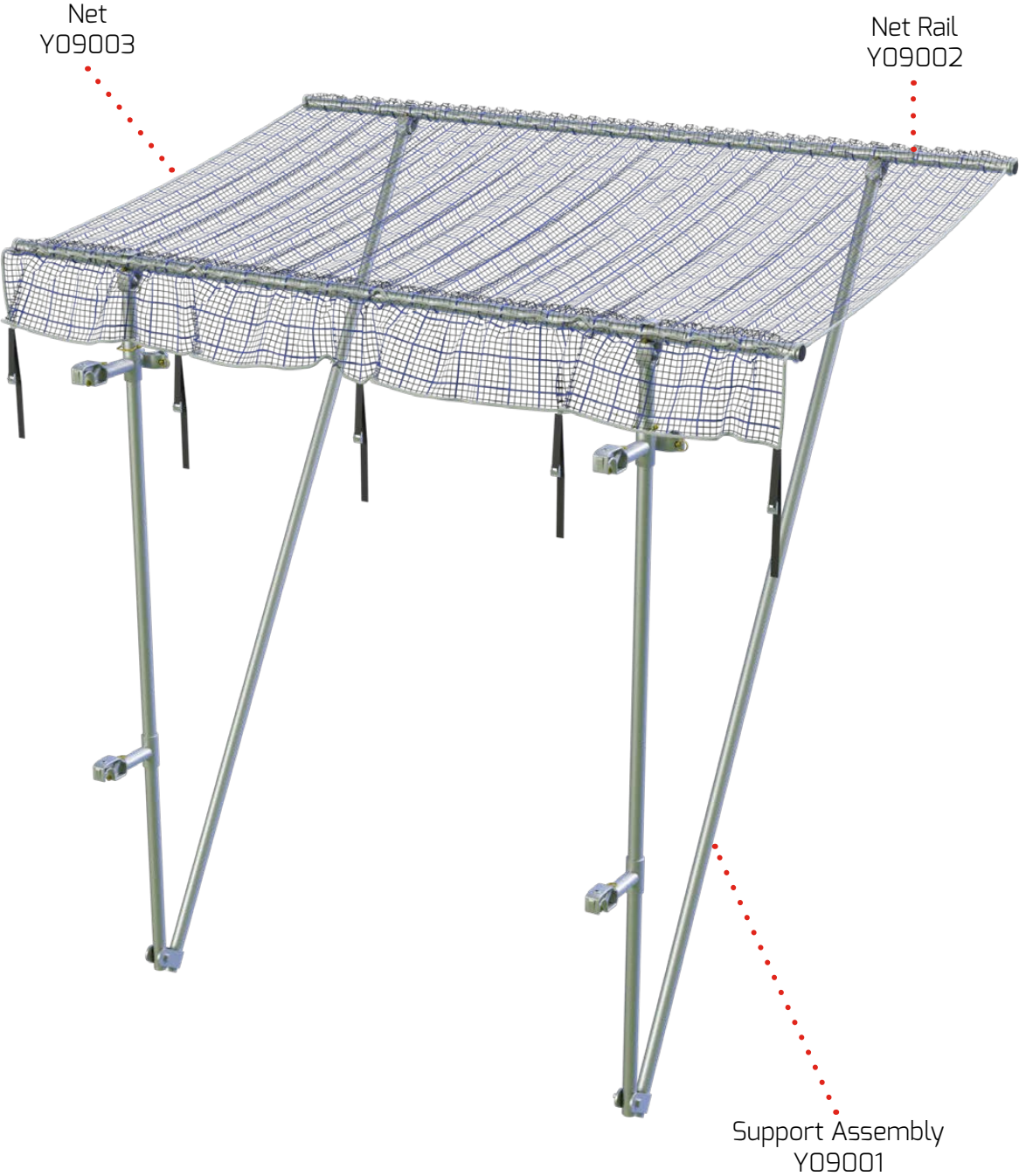
1.0 Introduction

DESSA offers efficient lightweight temporary roofing, encapsulation solutions, aluminium lattice girders and safety products. DESSA's unique and distinctive aluminium solutions are suitable for not only grandstands, stages and events but also public utility works, local authorities, government buildings, historic buildings, highways, bridges and industrial market sectors. Time proven on demanding and complex applications across varied climates throughout the UK, Canada, UAE, Australia and Europe, DESSA offer unrivalled span capabilities and alternative configurations. From a choice of roofing solutions and general purpose lattice girders providing unrivalled cost to strength ratio, to high capacity lattice girders complete with a dedicated bracing system, we provide the industry with an ever widening range of cost effective products along with extensive after sales support to the highest professional standards. At DESSA we develop innovative and practical solutions for the support, access and weather protection industries. All of our designs are technically proven and are registered with protected design rights meaning only DESSA can offer superior solutions through our products. Our senior management team at DESSA offer considerable experience in the fields of contracting, engineering, manufacture and customer service. Having introduced a number of class leading products into the UK market and we have worked closely with a number of key clients in developing bespoke solutions to their problems which we manufacture on an exclusive basis.

2.0 Key features

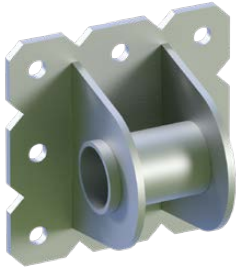
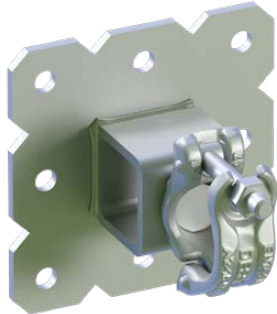
- Lightweight
- High Strength
- Lockable for transport
- Fitted without tools
- Adjustable rail location Pre-marked rail for easy assembly
- No loose parts
- Fully Tested
- Adjustable lower claw
- Suits tube Ø48.3

3.0 Component Recognition



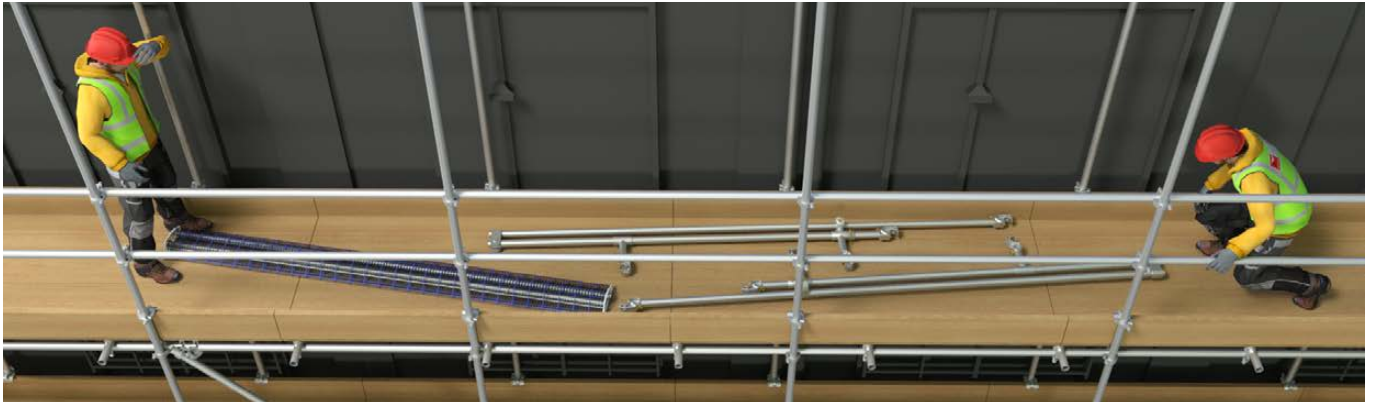
4.0 Catalogue

DESCRIPTION	PART No	WEIGHT (kg)	DIM 1 (m)	DIM 2 (m)
Support Assembly Supplied complete with Sliding lower bracket and adjustable top bracket with locking pin. For securing the net to a scaffold or a facade. 	Y09001	4.6	2.55	0.43
Net Rail To support the net at outer and inner edge. 	Y09002	3.8	3.00	0.06
Net 100x100mm mesh and 20x20mm overlay for catching debris and tools. Supplied with integrated cam buckles. 	Y09003	4.2	3.60	2.10
2m Spacer This optional spacer allows for spacing the support assemblies 2m apart. 	Y09004	3.0	2.08	0.08
0.6m Spacer This optional spacer allows for spacing the support assemblies 0.6m apart. 	Y09005	1.6	0.68	0.08

DESCRIPTION	PART No	WEIGHT (kg)	DIM 1 (m)	DIM 2 (m)
Wall anchoring bracket This enables attaching the Mini Catch Net Fan directly onto a facade. 	Y09006	2.10	0.16	0.10
90mm offset shear anchor Alternative way of fixing the Mini Catch Net Fan to a facade utilizing scaffold tubes. 	AB0001	2.00	0.16	0.16
Net Rail connector Bracket Allows to splice two net rails enabling the installation of a corner fan. 	Y09007	0.60	0.16	0.13
Corner Fan Support Spur Ø48,3mm outer diameter support spur with a hinged connection bracket. Connects to the end of overhanging net rails and ties back to the main support assembly to provide support for the outer edge of a corner fan. 	Y09008	3.50	3.00	0.20
Quick release pin 	AF0002	0.10	82mm	Ø12mm

5.0 Assembly Instructions

5.1 Inspection.

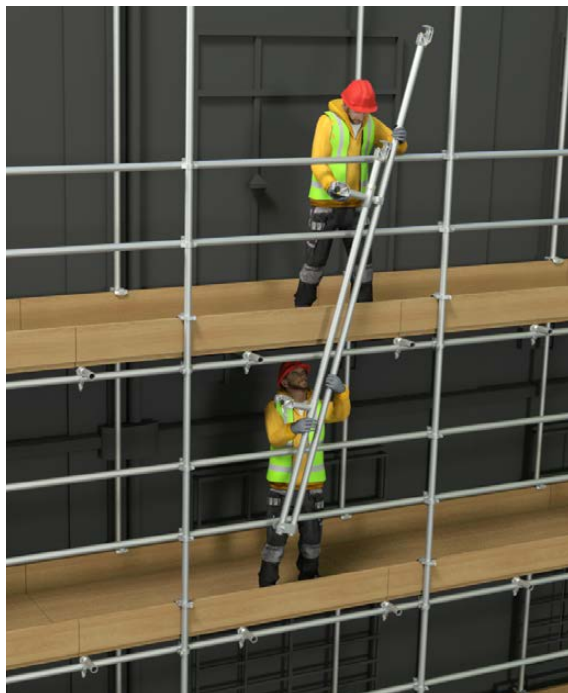


Lay the components out for inspection. Unfurl the net in full. It is essential that the 20x20mm mesh is uppermost and the cam buckle straps are on the edge closest to the scaffold following the installation. Check that the service tag is attached and a valid test date is stipulated. Carry out a visual inspection and report any discrepancies or concerns immediately. Inspect the support assemblies.

5.2 Installing the supports.

Both the erecting and dismantling of the safety nets have to be executed with the corresponding PPE.

The free space underneath the safety net of the Mini Catch Fan must be at least 3 metres, nothing, except the articulated arms must obstruct the path of a potential fall. DESSA recommends the use of the Mini Catch Fan as close as possible to the work area. A fall, even with the protection of a safety nets system is never fully free of risks.



Employing a safe method of work the supports need to be located vertically outside the scaffold elevation. The uppermost claw needs to be located above the desired connection point and then push-locked onto the ledger (as shown below).

The locking pin will slide out allowing for the ledger to enter the claw. Do not force the claw over the ledger - it should not require force when the assembly is perpendicular to the face of the scaffold.



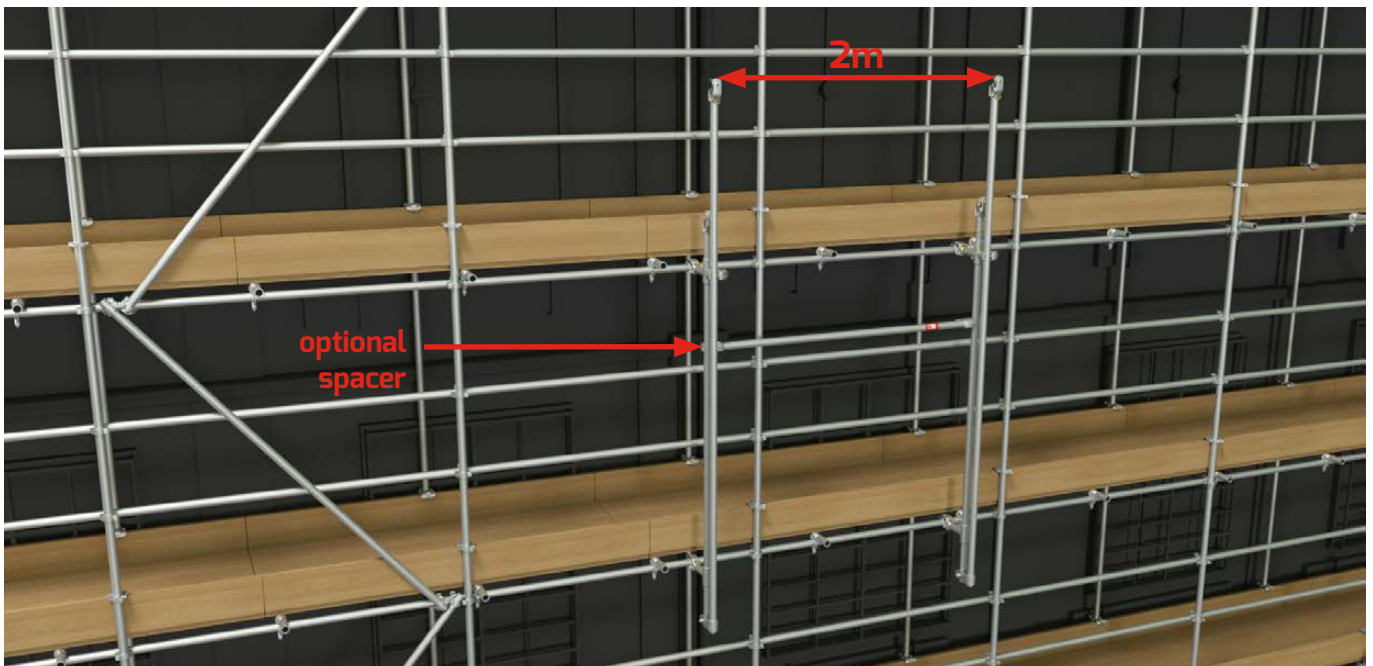
The sliding connector should be attached to the scaffold at the lowest possible location:



Install the second support assembly.



The distance between the supports should be 2m. This can be achieved using the optional DESSA spacer Y09004.



5.3 Installing the net

With the 20x20mm mesh on the inside connect the outer rail to the upper claws. The claws should be located centrally between the collars as shown below.



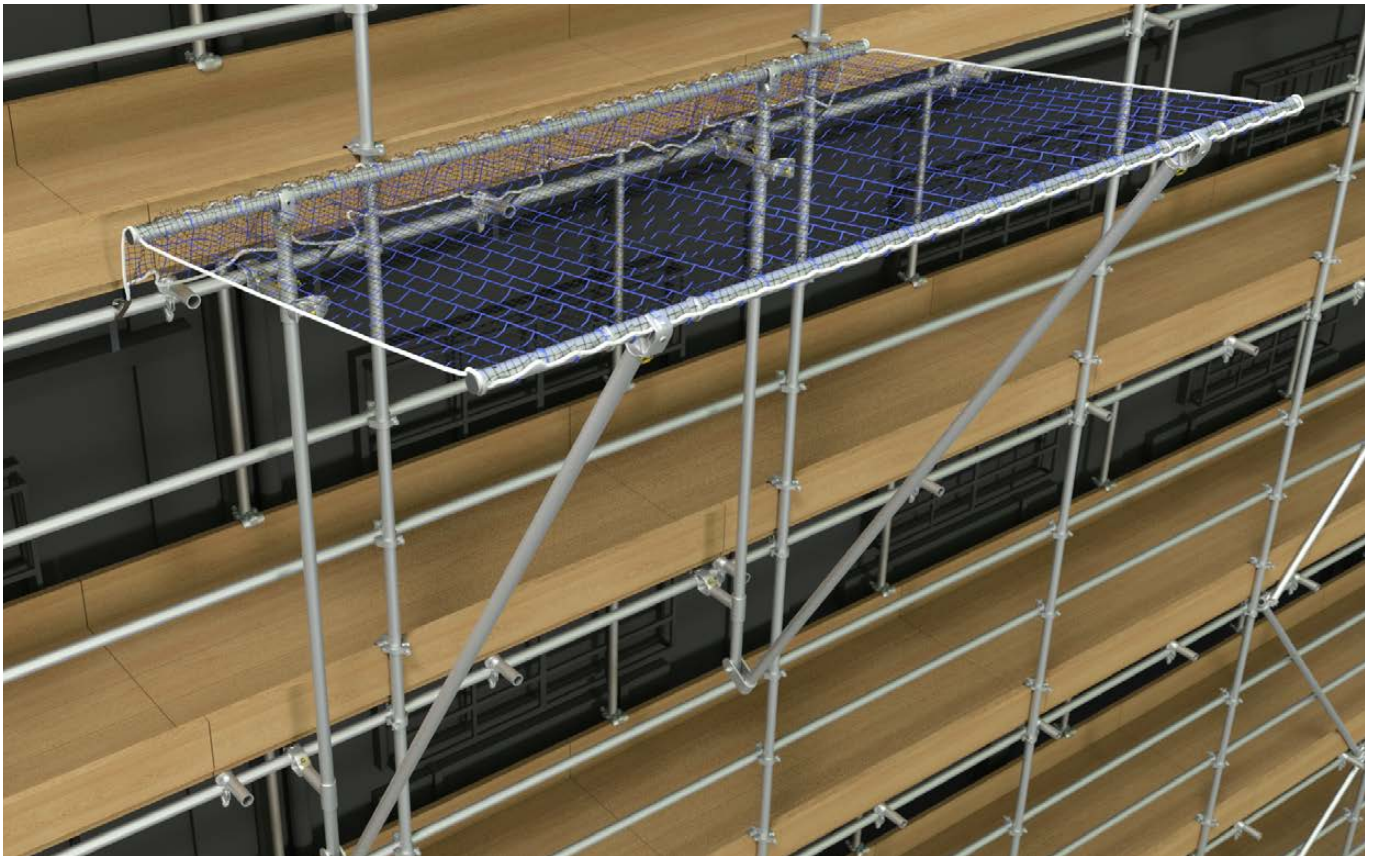
Simply put the rail into the claw. Ensure the claw is central between the collars.



Install the internal rail making sure that the net stays on top of the rail, does not get in the way and is not clipped in the claw.



Hold the upright and open the fan by reaching under the net flap and disengaging the claw spring pins on both the supports. Push the upright out and away from the claw and lower the fan into position by using the net.

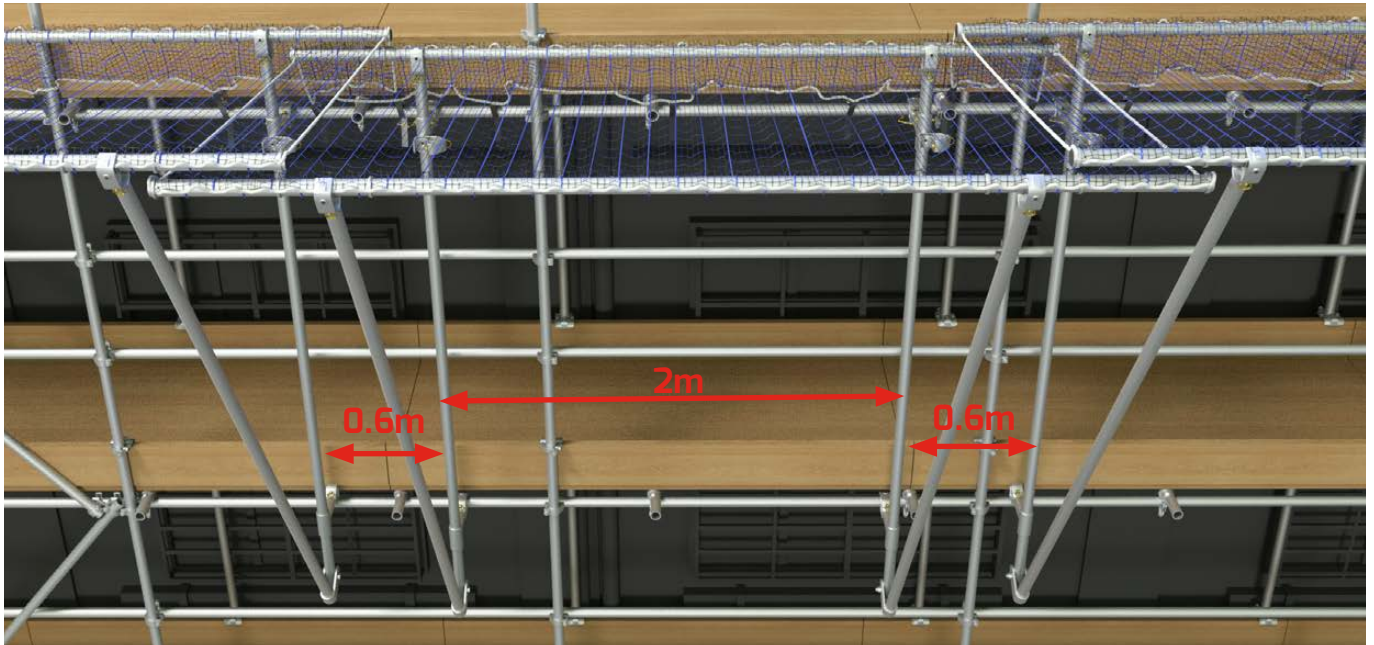


Complete the installation by attaching the five cam buckle straps to the scaffold. This should introduce tension to the net flap allowing you to close the gap between the fan and the scaffold.

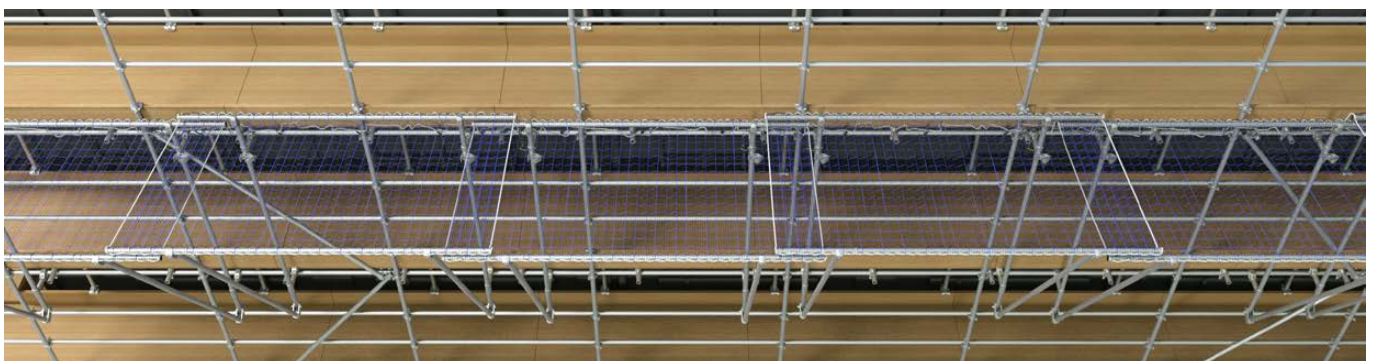


5.4 Installing a row of fans

In order for the fans to function correctly an overlap needs to be ensured between them. This can be achieved by installing the fans 0.6m apart. To ensure this is done correctly use the DESSA provided 0.6m spacer (Y09005).



To ensure overlap the internal claws on the supports need to be shifted downwards on every second pair of support assemblies.



6.0 Setting the fans in the out of service position

6.1 Using spacer with hook Y09004 retract each upper fan rail assembly locking the uprights into the rear safety claw. Following this lift each remaining fan locking in a similar manner.



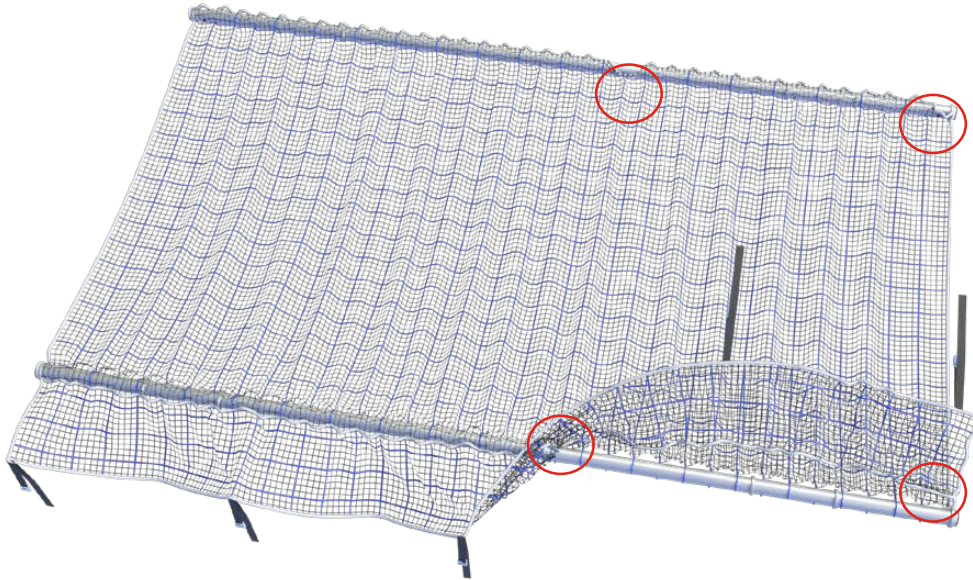
Proceed to lift the remaining, lower fans to complete the entire row:



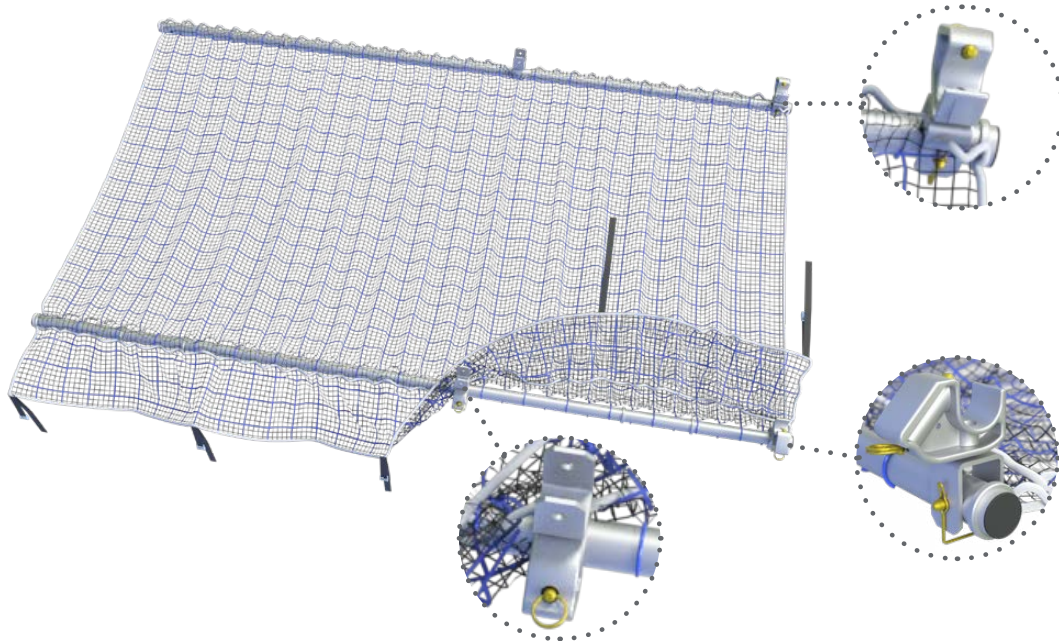
7.0 Corner Formation

7.1 Assembling the net extension.

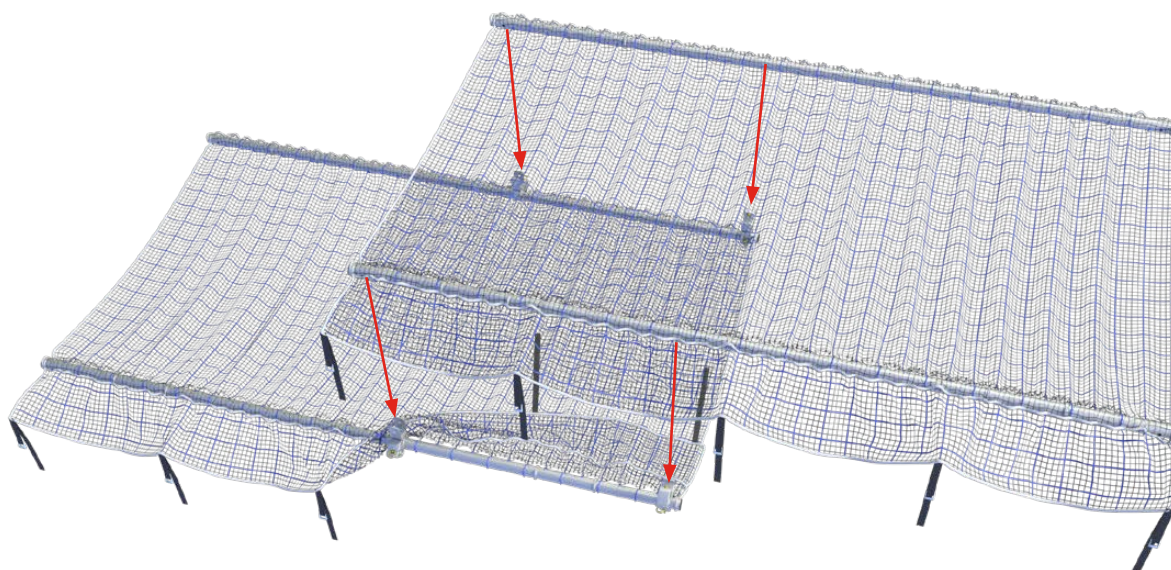
Place the rails with net on a flat surface. Make sure that the 20x20mm mesh is the uppermost. Expose the rails by twisting the net on the outer rail and flipping the net flap next to the inner rail.



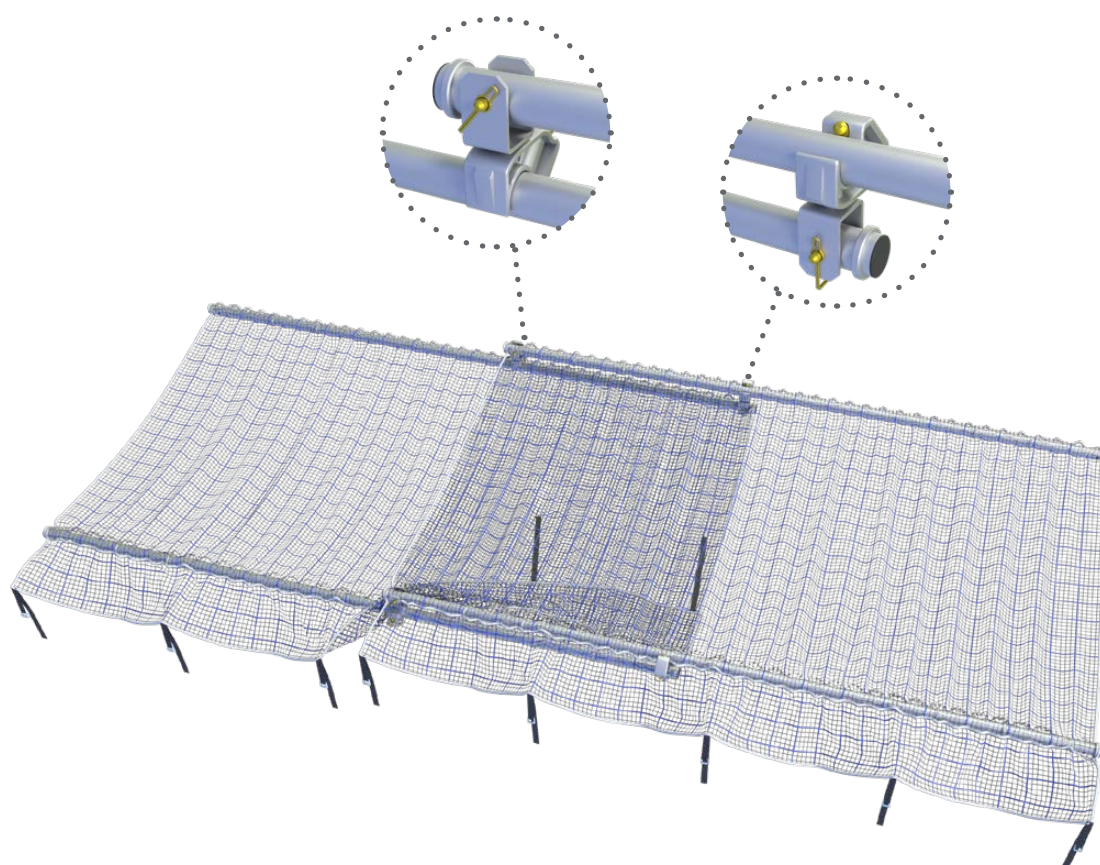
Locate four Y09007 brackets as shown below. The ones attached to the ends of the rails will use AF0002 pins and the ones closer to the middle of the rails will snap on using the claw.



Install the overlapping net by placing the respective rails in the brackets as shown below. If needed slide the net ropes out of the way. Make sure that the overlapping extension net has the 20x20mm mesh on top.

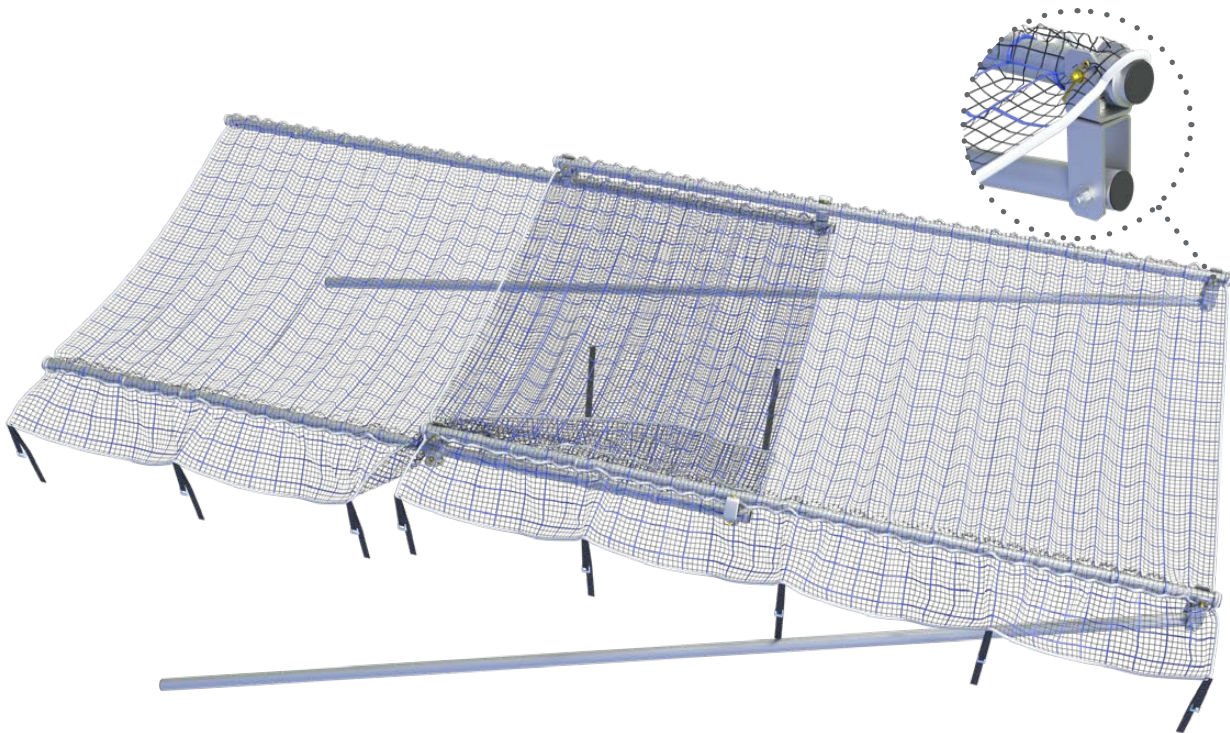


Use AF0002 pins in the U-shaped brackets and snap the claws on.



7.2 Connect the support spurs Y09008.

Use the AF0002 quick release pins to connect two support spurs to the ends of net rails of the upper set.



7.3 Install a pair of supports next to a corner of the scaffold, install spacer Y09004 above the lower hinge as shown below. Using the methods as detailed previously attach the double fan assembly to the support frames.



7.4 Unfold the fan as you would a single one, bearing in mind that the assembly is heavier. The optional spacer Y09004 with hook can be used to restrain the fan allowing the fan to be lowered slowly. Allow the support spurs to hang unrestricted for now.



7.5 Using the integrated hook on spacer Y09004 reach out and bring the support spurs back to the outer support assembly.



7.6 Tie the support spurs back to the outer support assembly using standard scaffold swivel couplers.



8.0 Connection to a facade

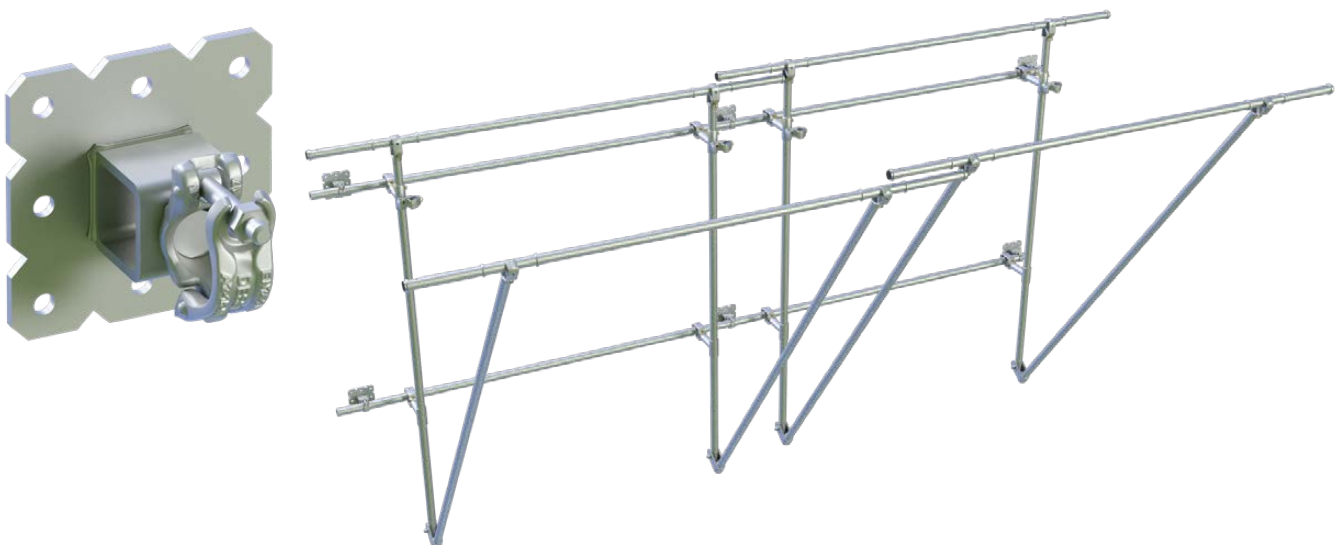
8.1 Using the dedicated catch fan offset bracket Y09006.

You will need four brackets per fan. Suitable and safe connectors need to be chosen according to the type of wall you wish to anchor to - see below (net omitted for clarity).



8.2 Using the 88mm offset shear tie AB0001.

To use this bracket you will also need standard scaffold tube to serve as connection points for the fan support assemblies. The advantage of this method is that you will need less brackets than you would when using the one depicted above. Again, suitable and safe connectors should be determined according to the type of wall you wish to anchor to (shown below - net omitted for clarity)



9.0 Technical Details

This fan is classed as light duty (Class A) according to TG20 (section 10.5) and is intended to catch small falling objects such as fittings and/or tools from a vertical distance of no more than 6m.

Please note that a protection fan is not a guarantee of stopping a falling object due to all the factors that play a part in this: initial trajectory of a falling object, influence of the wind etc.

The suitability of this fan should be decided during the risk assessment stage.

Classification: BS EN 12811-4 V1 B5 SLO

CLASSIFICATION BS EN 12811-4:	
Shape class	V1 - Uniform Inclined Surface
Width class	B5 (1.8m min)
Snow loading class	SLO - no snow load
Maximum test energy impact	1120J

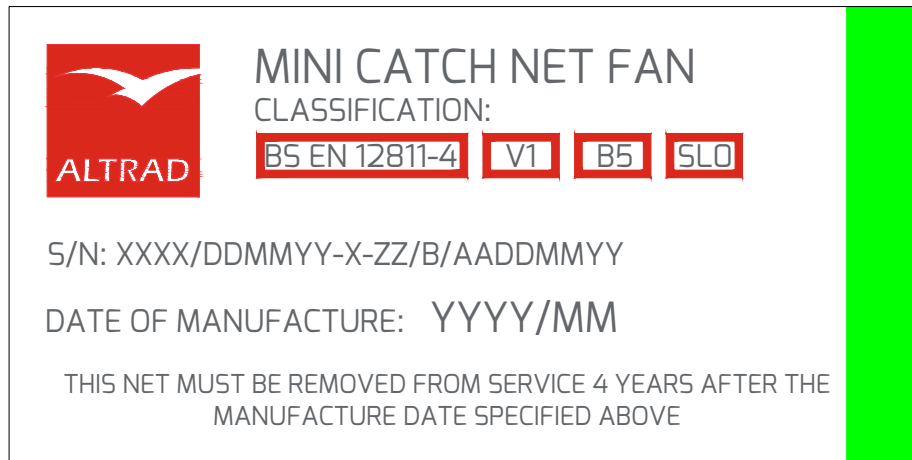
TECHNICAL DATA FOR KNOTLESS SAFETY NET TA2Q100 PP + TOOLS NET 20 MM MESH	
Raw material	Safety net: 100 % high-tenacity polypropylene Tools net: 100 % high-tenacity polypropylene
Type of net	Safety net: Knotless / Tools net: Knotless
Energy of the net	A2
Configuration of the mesh	Square "Q"
Size of the mesh	Safety net: 100 mm / Tools net: 20 mm
Diameter of the mesh rope	Safety net: 5 mm / Tools net: 2 mm
Minimum breaking force of the mesh rope	2,2 kN
Breaking Energy of the net	4,7 kJ
Raw material border rope	100% polysteel
Breaking strength border rope	20 kN
Diameter of the border rope	10 mm
UV treatment	Yes (300 kLY)
Colour	Safety net: Blue / Tools net: Black
Weight	432 gr/m2

10.0 Maintenance, Storage and inspection.

The Mini Catch Fan is a fully bolted assembly and therefore any routine maintenance is straightforward using the minimum tools.

The nets should be stored on racks, under cover to avoid degradation. The service tag should be

inspected for a valid manufacture date. This can be done by simply reading the “YYYY/MM” date on the label or identifying the colour on the right margin of the label that will correspond with the date of manufacture of that batch of nets.



Support assemblies as well as all remaining alloy components are robust and hard wearing, there is no special requirements concerning the storage conditions.

The safety nets must not be removed from their wrapping until the moment of their installation and will be kept safe from the attack of acids, oils and/or solvents.

In the case of a fall of an object, the replacement of the parts of the system that have been affected must be carried out; the system acts by deformation in case of impact, therefore, the parts of the system which have been deformed will be visible and those will need replacing.

The nets must remain as clean as possible from sharp elements such as metal points, metal wire, wood, nails, and of course other materials such as waste scraps.

Both the installation of the Mini Catch Fan as well as the subsequent moving shall be carried out with the help of the necessary PPE.

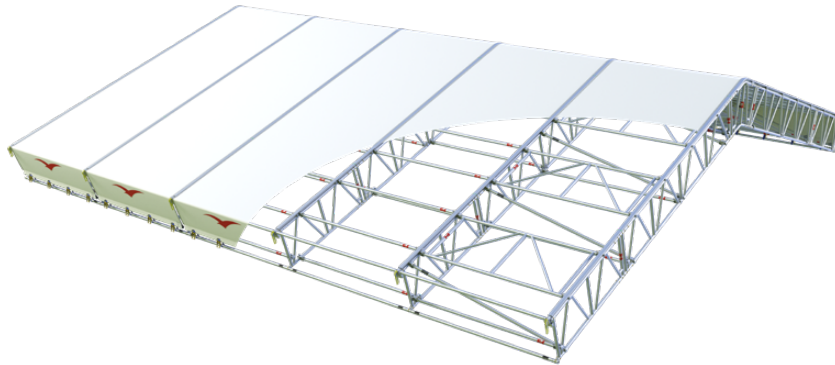
On the safety net an inspection must be carried out to verify if there are deformations or breakages in the mesh and if the net label is in good condition. The service tag should be completed using indelible ink following this inspection. Note, the net lifespan depends on weather conditions, the good or bad use of the nets, exposure to sparks, concrete, or other aggressive substances. A typical lifespan in the UK assuming normal use and exposure will be approximately 4 years. If the nets are maintained and repaired regularly this lifespan can be doubled.

The metal components should be checked for deformation, breakages in welded points, rust, retaining pins, smooth claw operation and tightness of hinge bolts etc

Wherever there is doubt about any part of the system you must contact DESSA technical bureau.

Other products from DESSA include:

- TEMPORARY ROOFING SYSTEMS



- RANGER™ STAIR



- SAFETY PRODUCTS



- LATTICE GIRDERS



