SAFETYRESPECT®



Standard: EN 1263 / ANSI / ASSE A10.37-2016 / OSHA 1926.502

Dimensions: Metric

Material: Steel / Aluminium / PVC

Manufacturer: SafetyRespect GmbH

Language: English





Content

General Information	4
Components	5
Dimensions	7
Attachments and Accessories	8
Slab Fix for Catch Fan	9
Kneebrace	10
Wall Fix for Catch Fan	11
Scaffold Fix for Catch Fan	
Corner Net	13
Trestle	14
Sling	
Pull-in Rod	
Concrete Bolt 14x130 mm	16
Strapping Band	16
Transport and Storage	17
Exemplary Packaging Units	
Basic Information on Assembly	20
Overlap	21
Effective Length	22
Minimum Overlap	22
Length of the Ground Support Extension	23
Variant Slab up to 3800 mm	23
Variant Slab (with Kneebrace)	24
Wind Loads and other Load Effects	25
Wind Loads	25
Material and Snow Loads	25
Needed Tools and Equipment	26
Assembly	27
Pre-assembly	27
1. Setting up the pre-assembly area	27
2. Assembly of the Round-Round-Coupler	28
3. Assembly of the Half-Coupler	29
4. Ground Support Extension	30
5. Insertion of the Net Structure	33



6.	Assembly of the Attachments (Slab Fix, Wall Fix, Scaffold Fix)	35
Hangi	ng the Catch Fan	41
1.	Attaching the Lifting Slings	41
2.	Attaching the Catch Fan to the Crane Chains	42
3.	Inserting the Catch Fan into the Attachments (Slab Fix, Wall Fix, Scaffold Fix)	43
4.	Folding in the Catch Fan	47
Rehang	he Catch Fans	49
Variar	nt 1 – Repositioning the Attachments	49
1.	Assembly of the Attachments (Slab Fix, Wall Fix, Scaffold Fix)	49
2.	Folding in the Catch Fan and Attaching of the Lifting Slings	50
3.	Attaching the Hooks of the Crane Chains	51
4.	Craning the Catch Fan	52
5.	Insert the Catch Fan at the new Position	53
Variar	nt 2 – Craning with Attachments (nur Slab Fix und Wall Fix)	54
1.	Setting the Drill Holes on the new Floor	54
2.	Check the Locking Screws	55
3.	Folding in the Catch Fan and Attaching the Lifting Slings	56
4.	Attaching the Hooks of the Lifting Chains of the Crane	57
5.	Loosening of the Concrete Bolts	58
6.	Craning the Catch Fan	59
7.	Positioning of the Catch Fan at the new Floor	60
8.	Placing of the Attachments at the Level of the pre-drilled Holes	61
9.	Placing the Concrete Bolts in the pre-drilled Holes	62
10.	Lowering the Catch Fan	63
Catch W	idth and Vertical Distance to Slab Edge	64
Rescue f	rom the Net	65
Safety In	structions	66
Qualif	ication and General	66
Maint	enance	66
Insped	tion	67
Declarat	ion of Conformity	70



General Information

In addition to standard edge protection products and accessories, we offer another solution to increase safety on construction sites with the SafetyRespect Catch Fan. SafetyRespect Catch Fans provide reliable protection against falling objects during construction operations and reduce the consequences of workers falling.

Due to the 3m cantilever, the SafetyRespect Catch Fan creates an appropriate protection zone in front of the building against falling objects such as material, tools or construction debris. They are also used to catch workers who have had an accident and to enable them to be rescued.

Due to its flexible application possibilities, the SafetyRespect Catch Fan can be adapted to a wide variety of construction situations. It can be used in confined spaces without any problems, as the Catch Fan can be folded up towards the façade to create access for cranes etc.

The Catch Fan has a mesh size of 60x60 mm. The standard scope of delivery of the SafetyRespect Catch Fan also includes a fine-meshed net with a mesh size of 20x20 mm. It is connected to the safety net to protect against falling smaller objects.

Various attachments are available for horizontal and vertical use as well as for application on scaffolding.

The SafetyRespect Catch Fan has been developed to absorb load effects from people and material as a structure and to catch people from a height of up to 7m. Nevertheless, it is recommended that Catch Fans are installed as close as possible to the working level so that they minimise the risk of injury after a fall as much as possible.

In certain cases, the net units of the Catch Fans can additionally be equipped with a scaffold/dust protection net, should this be necessary or desired. Any wind loads that occur must always be taken into account.

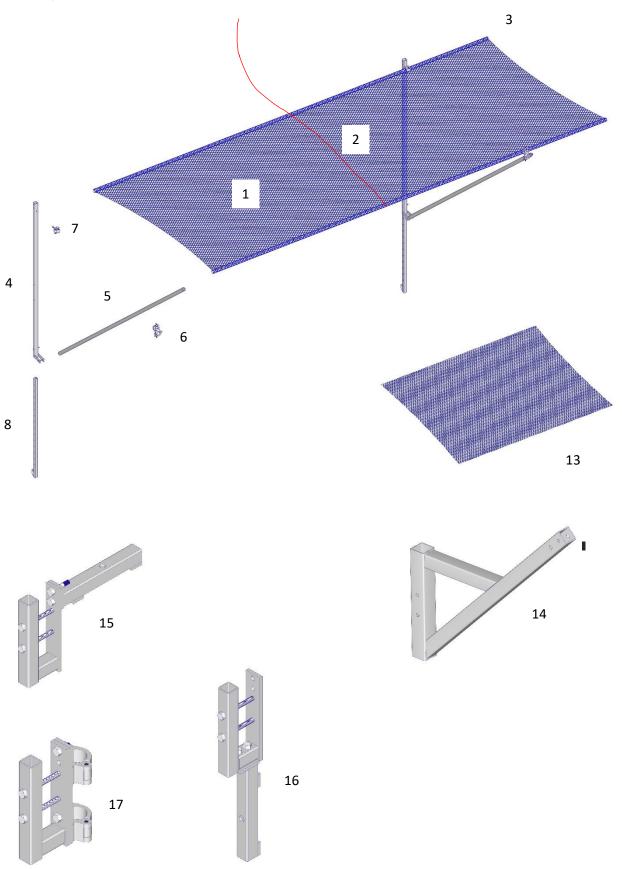
Pre-assembly, installation and repair should always be carried out by competent and instructed personnel. It is therefore recommended that all workers involved in the installation of SafetyRespect Catch Fans receive detailed training and instruction from experienced SafetyRespect colleagues.







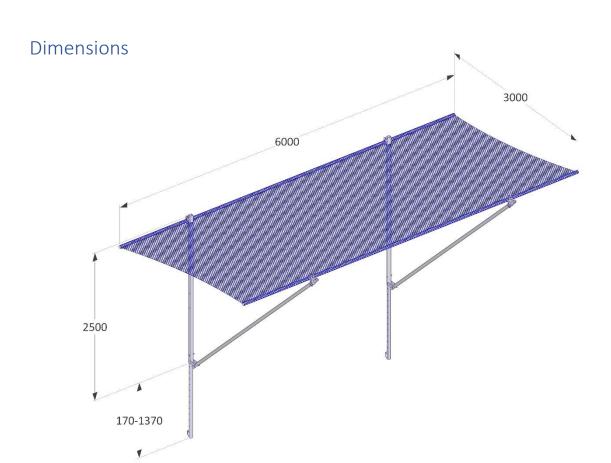
Components

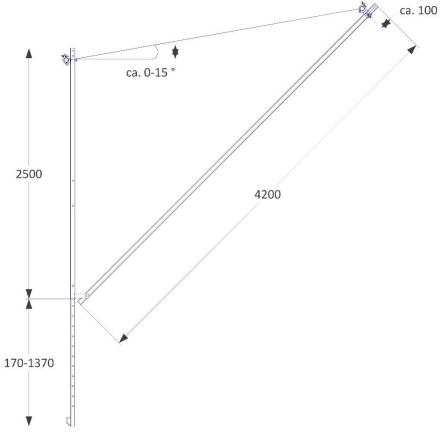




No.	Qty / Catch Fan	Item no.	Description	Weight (kg/pcs)
1	1	5050010	Net (M60xM20) 6m	12
		5050016	Net (M60xM20) 4m	9
2	1	400000003	Pull-in rope 5m	0,2
3	2	5056002	Horizontal tube 6m	9
		5056006	Horizontal tube 4m	6
4	2	5056001	Ground support 2500 mm	12,5
5	2	5056003	Diagonal brace 4200 mm	6,3
6	2	5056005	Round-Round-Coupler EN74	1,4
7	2	5056004	Half-Coupler	1
8	2	5050001	Ground Support Extension	6
9	4	860000001	Carabiner	0,3
10	4	8610000019	M12x80 Skt-Bolt	0,1
11	6	862000007	Self-locking Nut M12	0,02
12	2	8610000087	M12x20, Cylinder Head Screw	0,04
13	According to need	5050014	Corner Net	9
14	According to need	50500021	Kneebrace	8
15	2	5050003_S	Slab Fix for Catch Fan	4,7
16	According to need	5050003_W	Wall Fix for Catch Fan	4,7
17	According to need	5050004	Scaffold Fix for Catch Fan	2,5

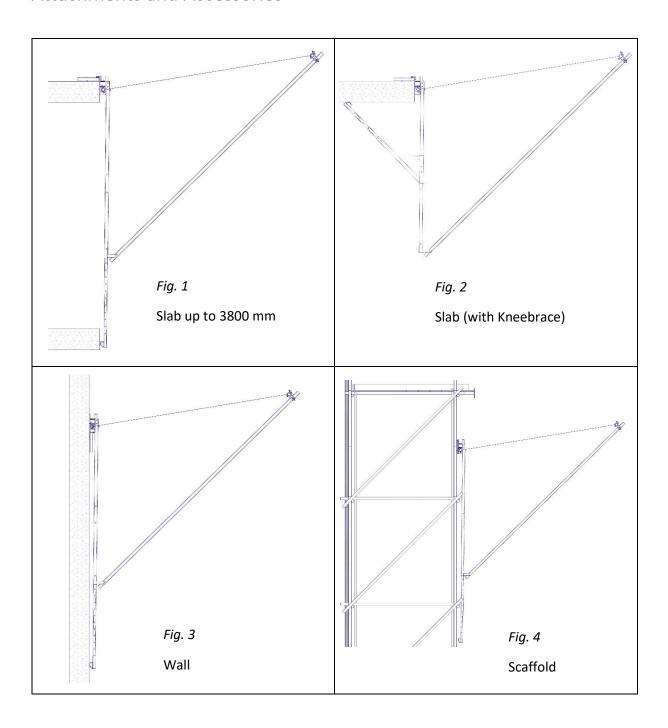






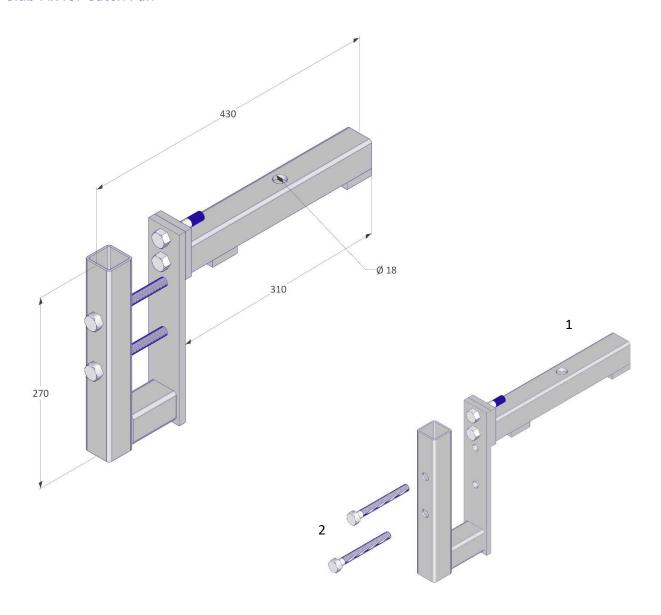


Attachments and Accessories





Slab Fix for Catch Fan



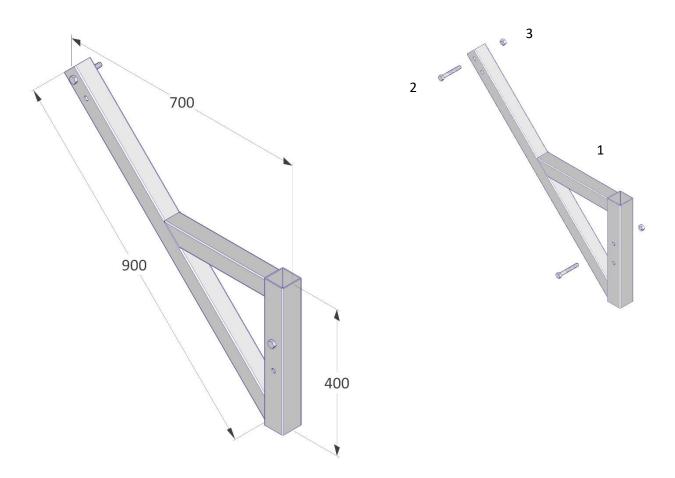
No.	Qty / Part	Qty / Catch Fan	Item no.	Description	Weight (kg)
1	1	2	5050003_S	Slab Fix for Catch Fan	4,5
2	2	4	8610000067	M12x120 Skt-Screw	0,12

The SafetyRespect Slab Fix for Catch Fan is used when mounting the Catch Fan system on slab edges. When using the Slab Fix as a slab attachment, the Catch Fan is either supported solely with the ground support extension (Art. No. 5050001) against the outer edge of the ceiling/wall below (see Fig. 1, page 8) or in combination with the Kneebrace over the open concrete edge against the underside of the slab (see Fig. 2 page 8). The two M12x120 Skt-Screws are used to securely fix the horizontal tube of the Catch Fan within the Slab Fix.

Two Slab Fix for Catch Fan are needed to securely mount a Catch Fan.



Kneebrace



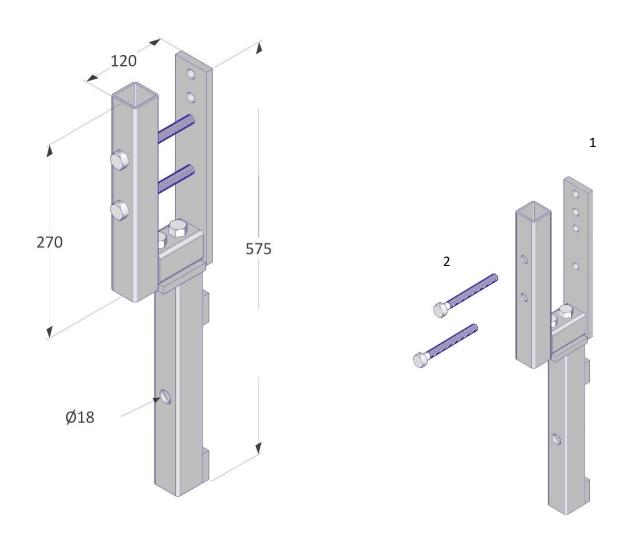
No.	Qty / Part	Qty / Catch Fan	Item no.	Description	Weight
					(kg)
1	1	2	5050002	Kneebrace	7,8
2	2	4	8610000019	M12x80 Skt-Screw	0,1
3	4	4	8620000007	Self-locking Nut M12	0,02

Up to a slab height of 3800 mm, the SafetyRespect Catch Fan can be easily assembled and installed by pulling out the ground support extension (art. no. 5050001). In the case of a projecting ceiling or ceiling heights greater than 3800 mm, the said ground support extension secures the Catch Fan with the aid of the Keebrace below the slab (see Fig. 2, page 8).

The Keenbrace therefore extends the range of application of the SafetyRespect Catch Fan. It ensures a safe assembly and a safe transfer of the occurring loads even with higher or overhanging ceilings.



Wall Fix for Catch Fan



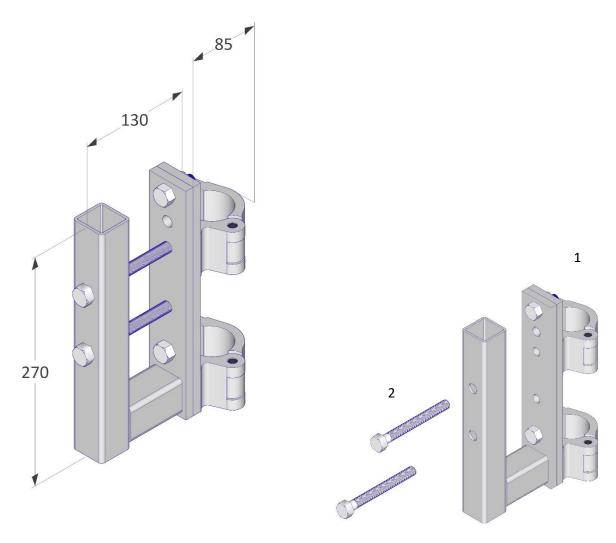
No.	Qty / Part	Qty / Catch Fan	Item no.	Description	Weight (kg)
1	1	2	5050003_W	Wall Fix for Catch Fan	4,5
2	2	4	8610000067	M12x120 Skt-Screw	0,12

The SafetyRespect Wall Fix for Catch Fan is used when mounting Catch Fan on vertical surfaces such as walls. When using the Wall Fix as a wall attachment, the Catch Fan is supported against the wall with the ground support extension (art. no. 5050001) (see Fig. 3, page 8). The two M12x120 Skt-Screws are used to securely fix the horizontal tube of the Catch Fan within the Wall Fix.

Two Wall Fixes for Catch Fan are required to securely mount a Catch Fan.



Scaffold Fix for Catch Fan



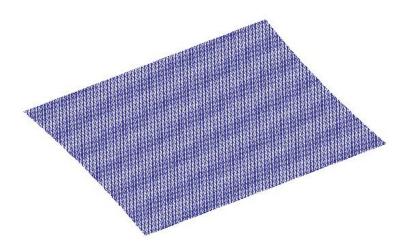
No.	Qty / Part	Qty / Catch Fan	Item no.	Description	Weight (kg)
1	1	2	5050004	Scaffold Fix for Catch Fan	2,4
2	2	4	8610000067	M12x120 Skt-Screw	0,12

The SafetyRespect Scaffold Fix for Catch Fan is used when mounting the Catch Fan on vertical scaffolding components. When using the Scaffold Fix as a scaffold attachment, the Catch Fan is supported against underlying scaffold parts with the ground support exension (Art. No. 5050001) (see Fig. 4, page 8). The two M12x120 Skt-Screws are used to securely fix the horizontal tube of the Catch Fan within the Scaffold Fix.

Two Scaffold Fix for Catch Fan are required to securely mount a Catch Fan.



Corner Net



Item no.	Description	Weight (kg)
5050014	Corner Net	6

The corner net is used to form a corner and to close the gap between two Catch Fans fixed at 90° to each other at the intersection of two slab edges. The corner net is attached between the Catch Fans with the aid of karabiners and rope.



Trestle



Item no.	Description	Weight (kg)
9310016	Trestle	12,5

The SafetyRespect Trestle serves as an aid for the pre-assembly of the Catch Fans on the construction site. It is used to hold the ground support tube for possible assembly of the half-coupler with plate head as well as for inserting the rear net retaining respectively horizontal tube.

Quickly folded out and ready for use with a permissible load capacity of 700 kg per trestle, four supporting steel profiles guarantee a safe stand.

Two SafetyRespect Trestles can be used to safely pre-assemble a Catch Fan.

Furthermore, thanks to its high permissible load capacity, it is also ideal for processing structural steel and rebar as well as painting and sawing work after the Catch Fans has been pre-assembled.

Trestle folded





Sling



Item no.	Description		Weight (kg)
4000149	Sling 1000 kg	L-1000	0,5
	mm		

Two lifting slings are attached to the outer horizontal tube at the height of the diagonal brace either during or after pre-assembly or before moving/dismantling. They are used to enable safe craning of the Catch Fans.

Equipped with a high load-bearing capacity and a low dead weight, the sling is equally flexible and gentle on the surface of the components of the SafetyRespect Catch Fan.

Pull-in Rod



Item no.	Description	Weight (kg)
4000150	Pull-in Rod	3

The Pull-in Rod is used by the riggers to pull the Catch Fan towards the edge of the building when the crane has pulled the Catch Fan into position.



Concrete Bolt 14x130 mm



Item no.	Description	Weight (kg)
8610000145	Concrete Bolt 14x130 mm	0,5

Nominal drill-Ø (mm)	14	
Drill hole depth (mm)	105	
Wrench size	SW21	
Max. Nominal torque	650	
Tangential impact wrench (Nm)		

The Concrete Bolt 14x130 mm is used for fixing Slab Fix and Wall Fix respectively for slab and wall fixing. One concrete screw 14x130 mm is required per fixing (Slab Fix or Wall Fix).

Strapping Band



Item no.	Description	Weight (kg)
300000003	Strapping Band, 600daN	5
300000006	Buckle	0,05

In order to prevent the ground support tubes from shearing out in the event of a significant load, the ground support tubes of each Catch Fan must be connected to each other in a tension-proof manner to ensure stability in the area of the diagonal pick-up straps. The woven polyester Strapping Band with a tensile strength of at least 600 kg is used for this purpose.



Transport and Storage

Ground Body

The Ground Support Tubes (art. no. 5056001), Ground Support Extensions (art. no. 5050001) and Diagonal Braces (art. no. 5056003) are always supplied pre-assembled as a unit. On request, the half-couplers with plate head can also be already bolted on and aligned at SafetyRespect. Usually these units are delivered on Euro pallets with U-frames.

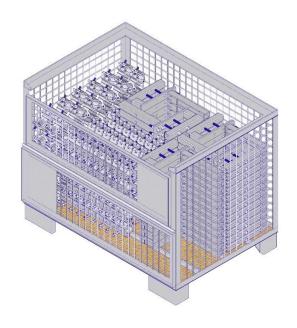


Net Structure

The net structure consisting of the SafetyRespect double net attached to the two horizontal tubes is packed and delivered rolled up and pre-assembled. The hauling rope attached to one horizontal tube is tied around the net and secures the package. Usually these units are delivered on Euro pallets with U-frames.





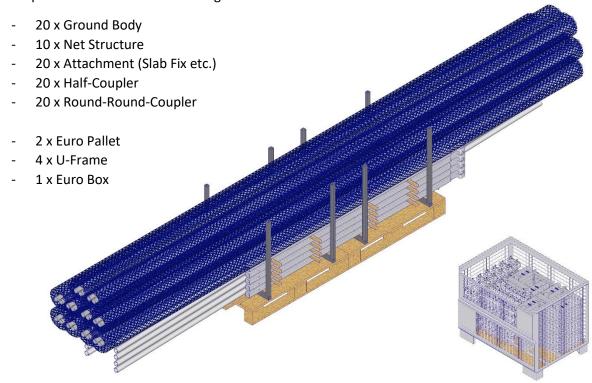


Further Components

The couplers and attachments (Slab Fix, Wall Fix, Scaffold Fix) and any other accesories are supplied in Euro Boxes.

Exemplary Packaging Units

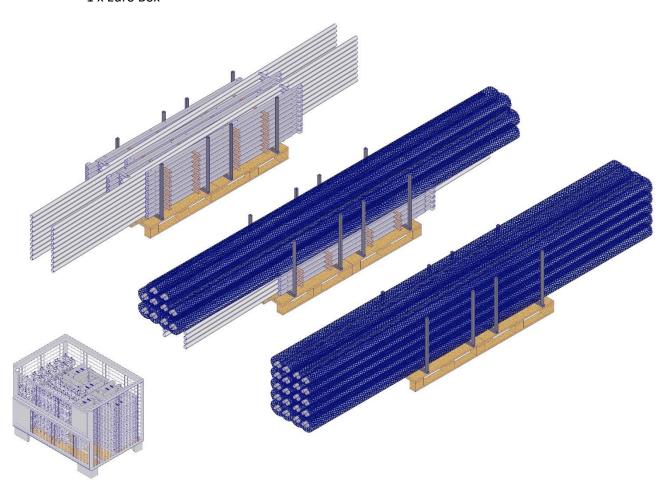
10 complete Catch Fan Units consisting of:





30 complete Catch Fan Units consisting of:

- 60 x Ground Body
- 30 x Net Structure
- 60 x Attachment (Slab Fix etc.)
- 60 x Half-Coupler
- 60 x Round-Round-Coupler
- 6 x Euro Pallet
- 12 x U-Frame
- 1 x Euro Box





Basic Information on Assembly

The Catch Fan is pre-assembled from the already pre-assembled units and the additional components on the ground and then lifted into position with a crane. For reasons of efficiency, it is worthwhile to pre-assemble as many Catch Fans as possible, ideally all in a row on the floor, and then crane them to the slab/wall/scaffold one after the other and insert them into the pre-assembled attachments (Slab Fix, Wall Fix, Scaffold Fix). For reasons of space or due to a lack of crane time, it is also possible to pre-assemble and crane individual units first, and then pre-assemble and crane units again, and so on. The exact procedure for assembly must be clarified on site or preferably in advance.

Precise consultation with those responsible on the construction site and the other trades is a basic requirement here.

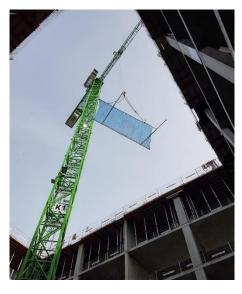
The crane operator in particular should be told exactly what kind of structures he or she is pulling. The net of the Catch Fans is practically a 'sail' of up to 18 m², which, once attached to the crane, can also behave as such. Both before and during the crane operation, good communication between the riggers on the ground, on/in the building and the crane supervisors is of the utmost importance.

There are four central assembly stages:

- Pre-assembly of the Catch Fans on the floor
- Placing the attachments on the slab/wall/scaffolding
- Craning and inserting the Catch Fans into the attachments
- Final work and follow-up inspection

The Catch Fans are mounted overlapping so that there are no gaps between the individual Catch Fans craned into position. They can also be conveniently folded in towards the edge of the slab, for example to allow crane access. In addition, they can be folded in and secured to the building by means of the hauling rope in case of strong winds or heavy snowfall.







Overlap

In order to ensure that there are no gaps between the mounted catchment screens, the catchment screens must overlap in a certain minimum grid. It is not recommended to knot the catchment screens together at two adjacent ends.

There are two patterns in which the collection screens can be overlapped:

- Variation A: One option is to alternately install a 'lower' and an 'upper' Catch Fan, first craning two 'lower' Catch Fans into position and then placing a third Catch Fan between the two already installed. In this case, the last unit assembled overlaps the previous two. The difference in height is achieved by removing and reinserting the locking screws in the attachments (Slab Fix, Wall Fix, Scaffold Fix).
- This type of overlap allows the structures to be easily folded in towards the edge of the building, creating crane access below the containment screens. Sufficient pre-planning is necessary to ensure that the 'top' Catch Fans are placed where material is subsequently transported by crane.

Lower Catch Fan

Upper Catch Fan

- Variation B: The other method of creating sufficient overlap is to create one upper and one lower side per Catch Fan. In this application, the Catch Fans are hung one after the other, with all locking screws removed from the attachments (Slab Fix, Wall Fix, Scaffold Fix) and set aside before the first crane pull. This method is quicker to assemble, but limits the flexibility to fold individual Catch Fans towards the edge of the building to ensure crane access.

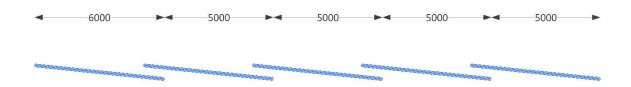


Effective Length

The effective length of the mounted Catch Fan depends on the size of the overlap.

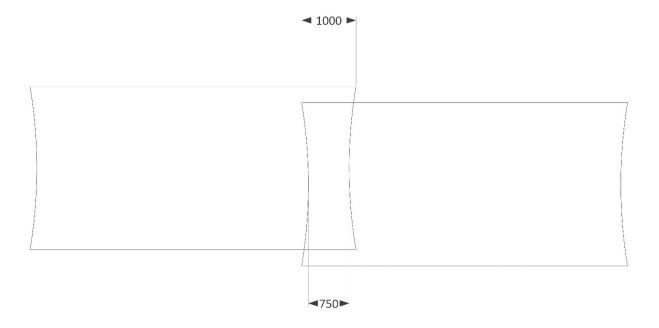
A SafetyRespect Catch Fan 6m with an overlap of 1000mm has, except for the first mounted Catch Fan, an effective length of 5m.

A SafetyRespect Catch Fan 4m with an overlap of 1000m has an effective length of 3m, except for the first mounted Catch Fan.



Minimum Overlap

The overlap of Catch Fans must be at least 750 mm. Special attention must be paid to the fact that the Catch Fans are naturally somewhat narrower at the 'waist', i.e. at the outer edges of the centre of the net. It is precisely at this point that the overlap must be at least 750 mm. As soon as the overlap is 1000 mm from the outer edges of the horizontal tubes, the minimum overlap of 750 mm is guarant.

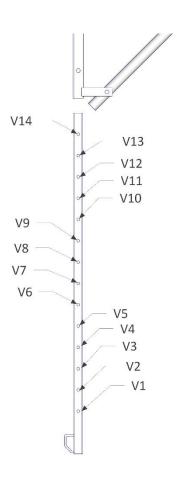




Length of the Ground Support Extension

Variant Slab up to 3800 mm

see fig. 1, page 8



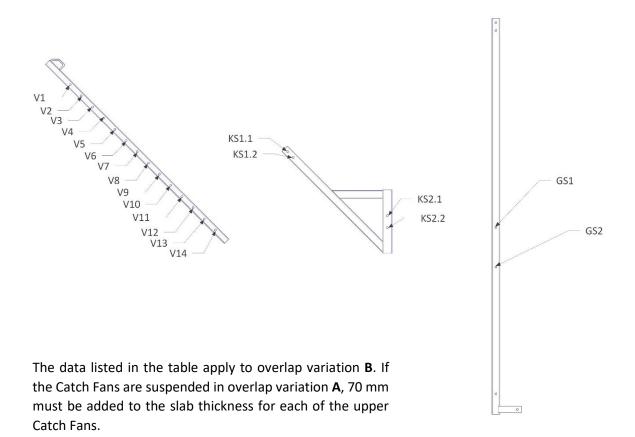
The data listed in the table apply to overlap variation **B**. If the Catch Fans are suspended in overlap variation **A**, 70 mm must be added to the slab height for each of the upper Catch Fans.

Slab height (top edge/top edge)	V
2700 mm	V4
2700-2850 mm	V5
2850-2950 mm	V6
2950-3100 mm	V7
3100-3200 mm	V8
3200-3250 mm	V9
3250-3350 mm	V10
3350-3450 mm	V11
3450-3550 mm	V12
3550-3680 mm	V13
3680-3800 mm	V14



Variant Slab (with Kneebrace)

see fig. 2, page 8



Slab thickness	V	KS1	KS2	GS
200-230 mm	V9	KS1.2	KS2.1	GS1
230-260 mm	V7	KS1.1	KS2.2	GS1
260-290 mm	V8	KS1.2	KS2.1	GS1
290-320 mm	V7	KS1.2	KS2.2	GS1
320-350 mm	V6	KS1.2	KS2.2	GS1
350-380 mm	V7	KS1.2	KS2.1	GS1
380-400 mm	V6	KS1.1	KS2.1	GS1



Wind Loads and other Load Effects

Wind Loads

At the latest from wind speeds of 20m/second or 72 km/h, the Catch Fans must be retracted or folded towards the edge of the building and secured to the building.

Especially if the Catch Fan is additionally equipped with a scaffold protection net as a third net layer, the structure is even more susceptible to wind loads. In this case, depending on the individual case, it is recommended to retract the Catch Fan even at lower wind speeds and to secure it to the building.

Material and Snow Loads

The SafetyRespect Catch Fan has been developed and designed exclusively for the load effects described in EN 1263-1. The absorption of higher loads is expressly not intended.

The Catch Fan must be cleared of dust, debris, rubbish, material and snow regularly and at short intervals. In case of heavy snowfall, the Catch Fan must be retrieved and secured to the building.



Needed Tools and Equipment

NOTE: In principle, special attention must be paid to personal safety. Suitable work clothing, safety shoes, safety gloves, hard hat and high-visibility waistcoat must always be worn. Furthermore, legal and official regulations must be followed. When working at height, it is mandatory to use maintained and approved personal safety equipment against falling. In case of doubt, contact SafetyRespect.

Pre-assembly Catch Fans

- Several ring spanners 19mm
- Several scaffolding ratchets 19-22mm
- Suitable pencil to make marks on the horizontal tubes
- Folding rule or tape measure
- Cutter knife
- Min. 2 trestles (e.g. the SafetyRespect trestle, item no. 9310016)

Mounting Attachments (Slab Fix, Wall Fix)

- Several ring spanners 19mm
- Several scaffolding ratchets 19-22mm
- Suitable pencil to make marks on the concrete
- Folding rule or tape measure
- Cutter knife
- Hammer drill with Ø14 drill bit, suitable for use in reinforced and cracked/uncracked concrete
- Borehole blower
- Drill hole brush
- Impact wrench (tangential impact wrench is recommended), suitable for use in reinforced and cracked/uncracked concrete.
- Sufficient concrete bolts 14x130 mm (item no. 8610000145)

Mounting Catch Fans

- Min. 2, better 10 slings (e.g. SafetyRespect sling, item no. 4000149)
- Pull-in Rod (item no. 4000150)
- Several scaffolding ratchets 19-22mm
- Cutter knife
- Sufficient woven strapping band, 600daN (item no. 3000000003)
- Sufficient phosphated buckles (item no. 30000006)
- (When assembling corner nets: sufficient carabiners and rope)



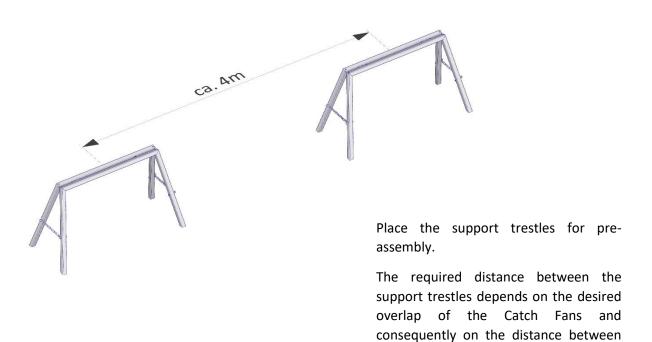
Assembly

Pre-assembly

1. Setting up the pre-assembly area

Required area on the ground for pre-assembly:

Min. 7m in width and >20m in length

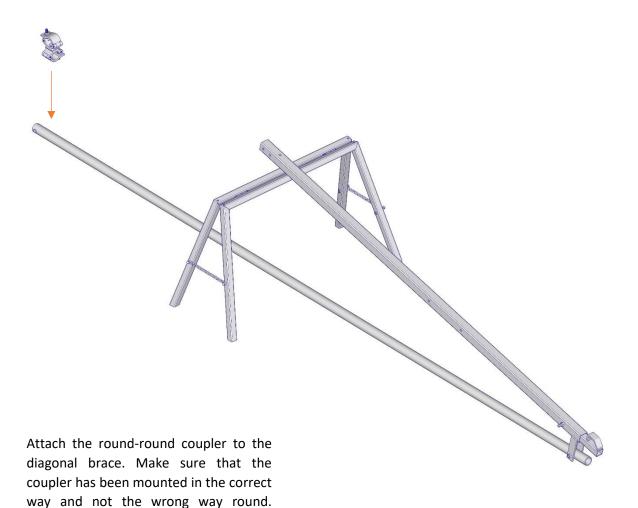


With a desired overlap of 1m, the ground support tubes are 4m apart, therefore the trestles also be approx. 4m apart.

the ground support tubes.



2. Assembly of the Round-Round-Coupler

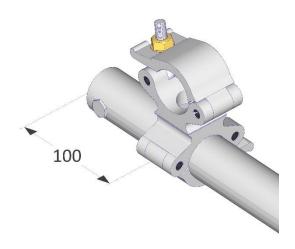


The position of the round-round coupler determines the later angle of inclination of the Cath Fan.

Tighten the coupling slightly to secure it, this will allow for later adjustments.

Usually a distance of 100 mm between the end of the diagonal brace and the centre of the coupler is correct.

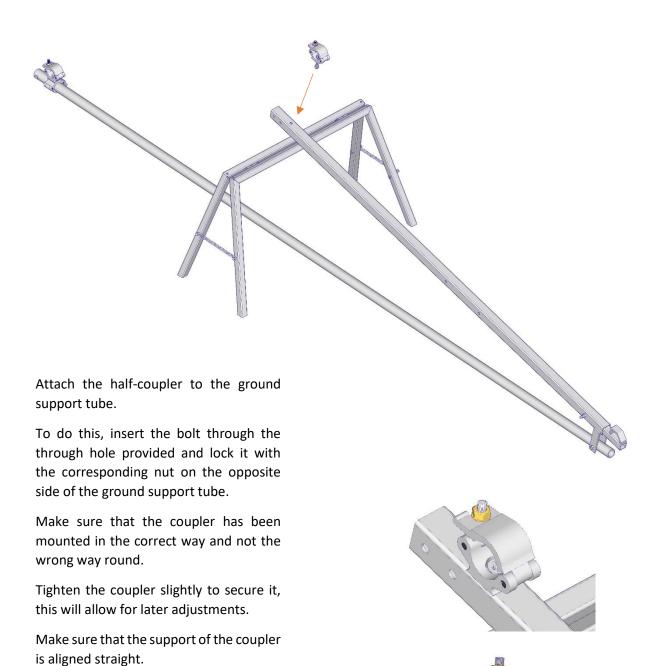
Make sure that the support of the coupler is aligned straight.





3. Assembly of the Half-Coupler

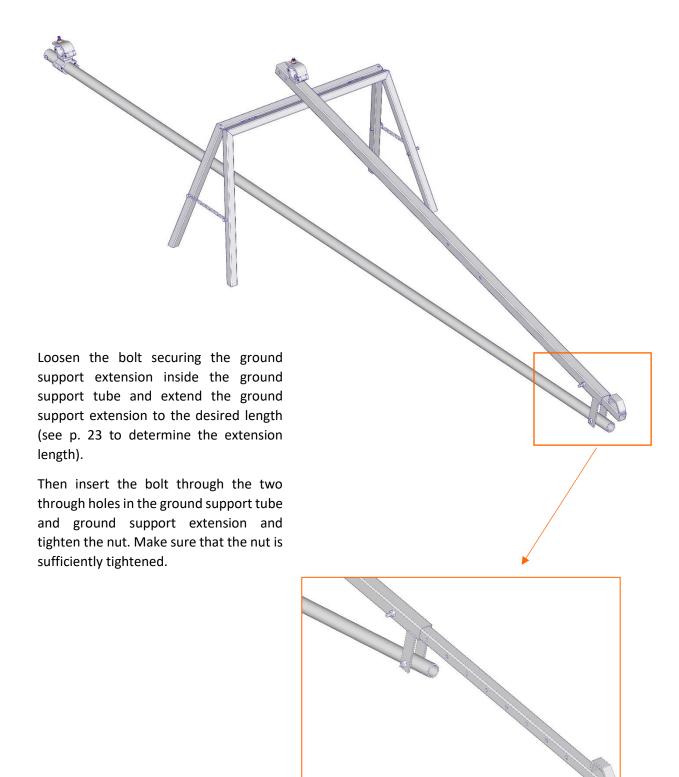
If the kneebrace is used, the half-coupler is not mounted now, but at a later time.





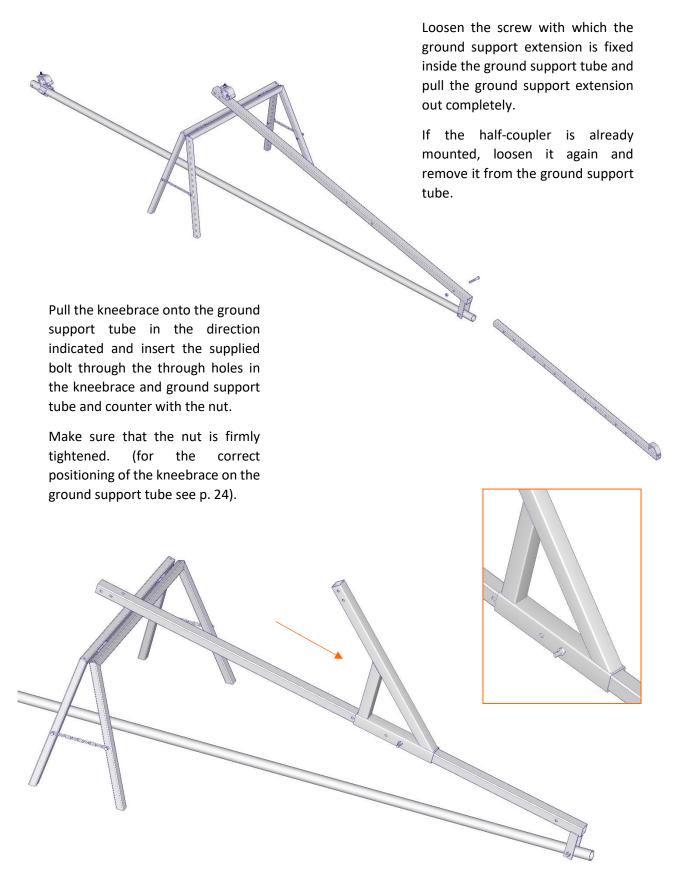
4. Ground Support Extension

Variant Slab up to 3800 mm (Extending the Ground Support Extension)

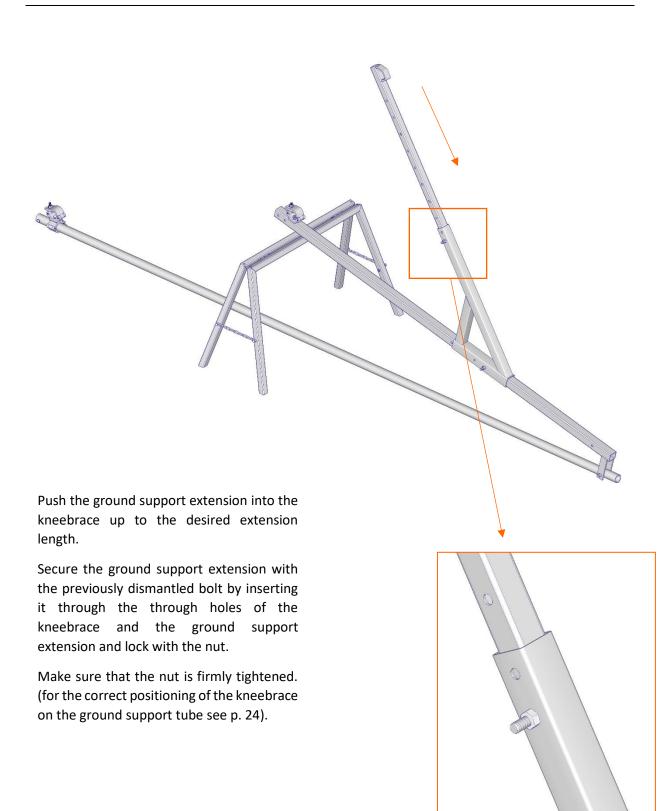




Variant Slab (with Kneebrace)

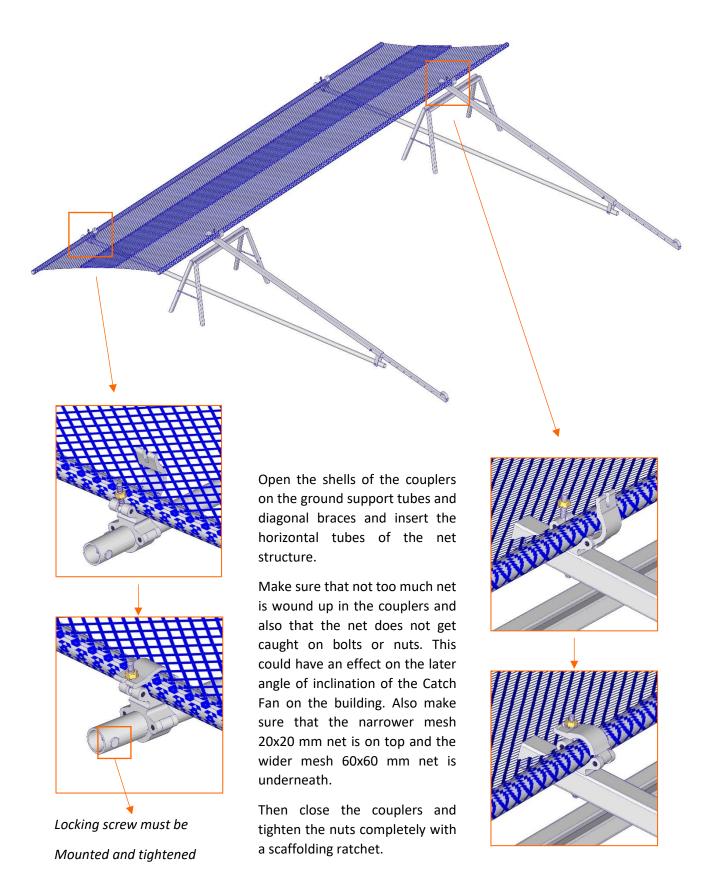




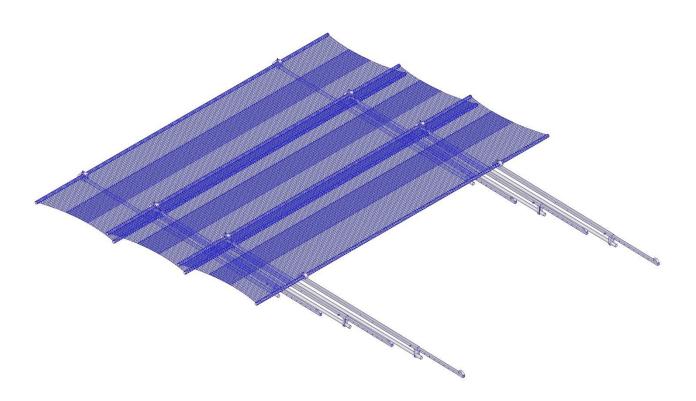




5. Insertion of the Net Structure







For reasons of efficiency, it is worthwhile to pre-assemble as many Catch Fans as possible and then crane them one after the other.

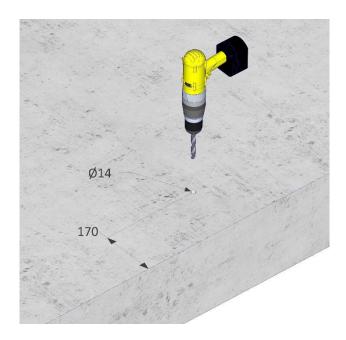
After a Catch Fan has been pre-assembled as described on the previous pages, it should be supported by the trestles and temporarily stored overlapping with the already pre-assembled Catch Fans.

In this way, you can pre-assemble them in a space-saving way and then attach the lifting slings to hang the Catch Fans individually.



6. Assembly of the Attachments (Slab Fix, Wall Fix, Scaffold Fix)

Slab Fix for Catch Fan



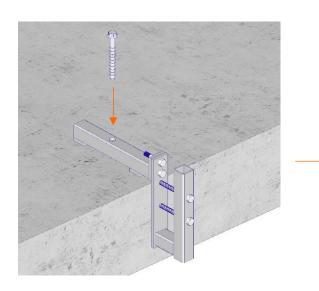
Drill the holes in the slab ceiling. Note the distance to the slab edge and the diameter of the drill hole. The drill hole shown is for the SafetyRespect concrete bolt 14x130.

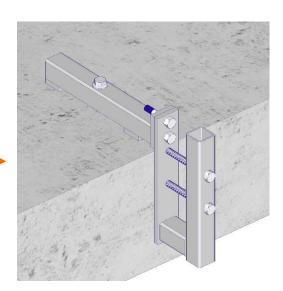
After the drilling process, use a drill hole blower to blow out the drill hole, then a drill hole brush and then again a drill hole blower to clean the drill hole of residues as best as possible.

Check the distances between the drill holes according to the installation plan and preliminary planning.

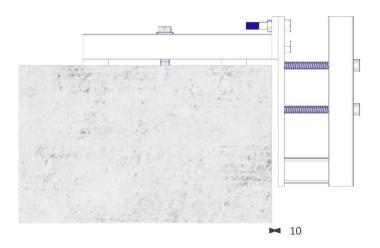
Then fix the Slab Fix to the slab edge with the concrete bolt and make sure that there is a distance of 10mm between the Ureceptacle of the containment screen and the vertical slab edge (See page 35).

The minimum distance of a Slab Fix to the buckling slab edge is at least 500 mm.





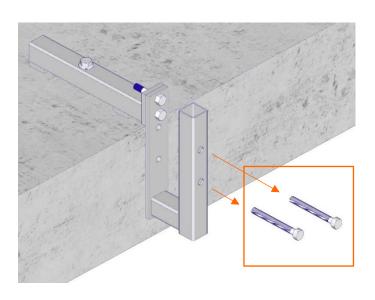


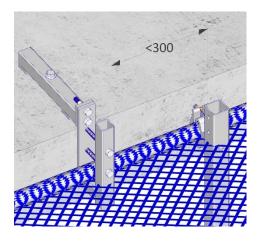


Then, using a scaffolding ratchet, carefully loosen the locking screws on the Slab Fix to allow the rear horizontal tube of the Catch Fan to be accommodated (can also be done before setting the Slab Fix). Put the screws aside, as soon as the Catch Fans are craned in, the locking screws are put back in place. If overlap variation **A** is to be used, the lower securing screws must remain in the Slab Fix for the upper Catch Fans and only the upper securing screw must be removed.

It is mandatory to use at least two attachments per Catch Fan!

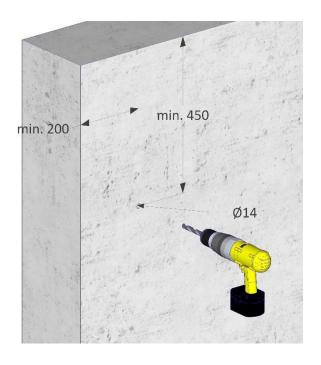
The distance between the fixed attachment and the ground support tube is <300 mm clear dimension. This maximum distance must be taken into account in the preliminary planning and the installation plan.







Wall Fix for Catch Fan



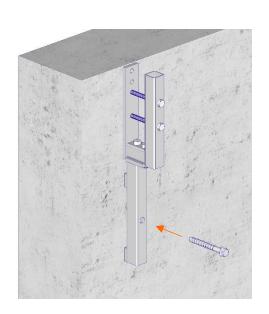
Drill the holes in the concrete wall. Note the distance to the wall edge and the diameter of the drill hole. The drill hole shown is for the SafetyRespect concrete bolt 14x130.

After the drilling process, use a drill hole blower to blow out the drill hole, then a drill hole brush and then again a drill hole blower to clean the drill hole of residues as best as possible.

Check the distances between the drill holes according to the installation plan and preliminary planning.

Then fix the Wall Fix to the wall with the concrete bolt.

The minimum distance of a Wall Fix to the buckling wall edge is at least 200 mm.

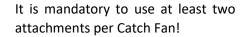






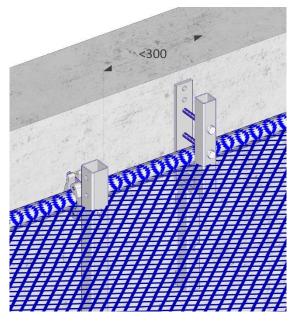
Then, using a scaffolding ratchet, carefully loosen the locking screws on the Wall Fix to allow the rear horizontal tube of the Catch Fan to be accommodated (can also be done before setting the Wall Fix). Put the screws aside, as soon as the Catch Fans have been craned in, the locking screws are put back in place.

If overlap variation **A** is to be used, the lower securing screws for the upper Catch Fans must remain in the Wall Fix and only the upper securing screw must be removed.



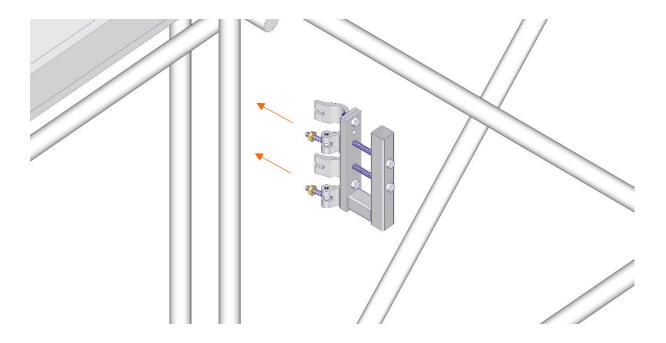
The distance between the fixed attachment and the ground support tube is <300 mm clear dimension. This maximum distance must be taken into account in the preliminary planning and the installation plan.





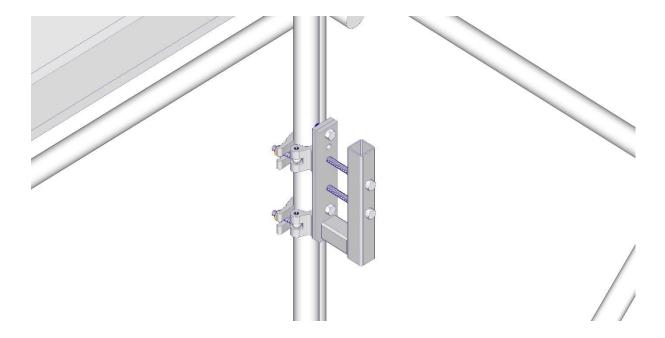


Scaffold Fix for Catch Fan



Open the half-couplers attached to the Scaffold Fix and guide the Scaffold Fix to the selected vertical tube. Then close the half-couplers with a scaffold ratchet and tighten the nuts comprehensively.

Check the distances between the Scaffold Fix according to the installation plan and preliminary planning.



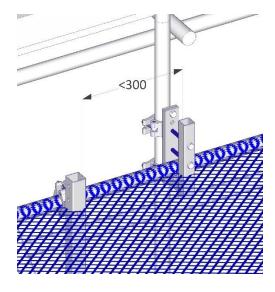


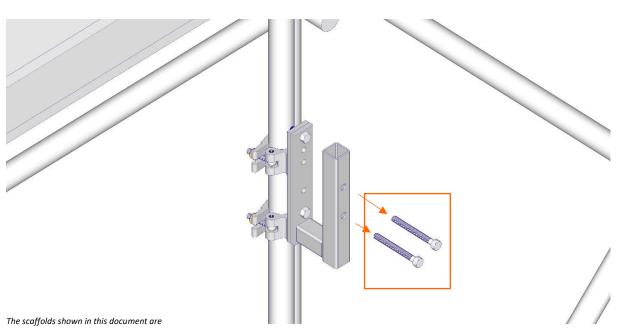
Then, using a scaffolding ratchet, carefully loosen the locking screws on the Scaffold Fix to allow the rear horizontal tube of the Catch Fan to be accommodated (can also be done before setting the Scaffold Fix). Put the screws aside, as soon as the Catch Fans are craned in, the locking screws are put back in place.

If overlap variation **A** is to be used, the lower securing screws must remain in the Scaffold Fix for the upper Catch Fan and only the upper securing screw must be removed.

It is mandatory to use at least two attachments per Catch Fan!

The distance between the fixed attachment and the ground support tube is <300 mm clear dimension. This maximum distance must be taken into account in the preliminary planning and the installation plan.



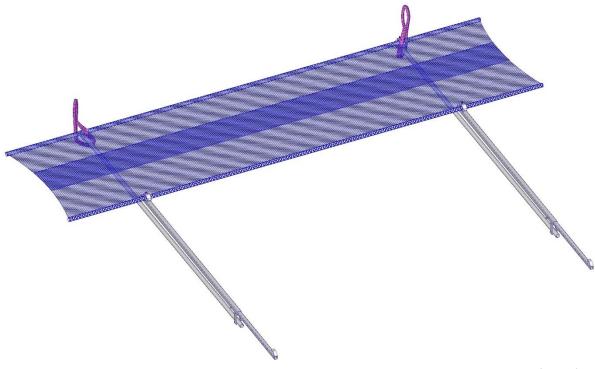


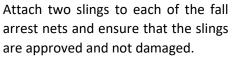
schematic illustrations and do not show scaffolds erected and anchored in accordance with the respective standards.



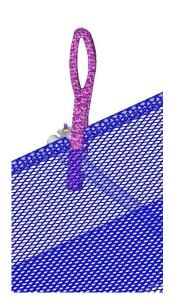
Hanging the Catch Fan

1. Attaching the Lifting Slings



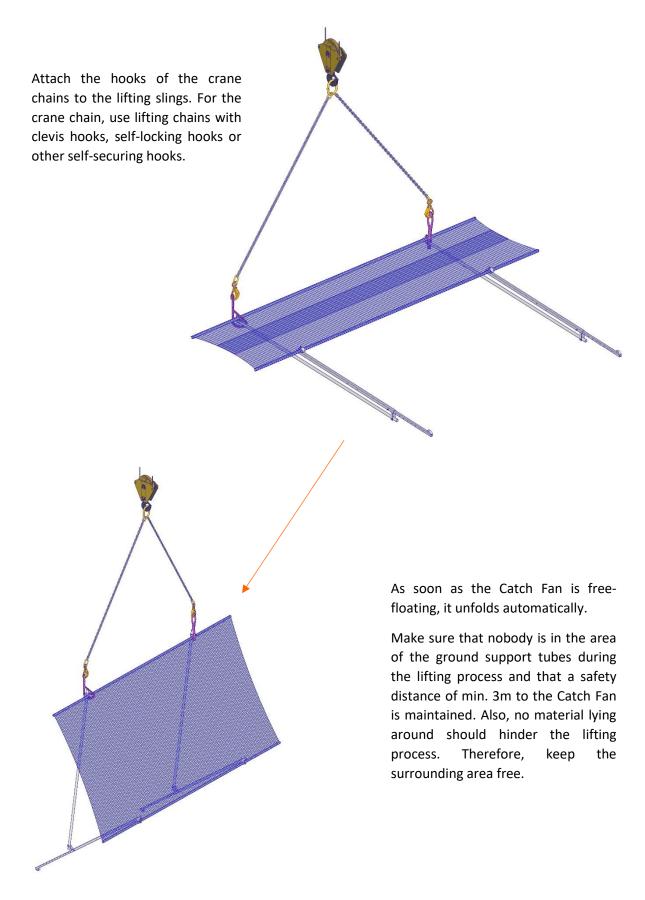


Sling the slings through the net around the diagonal brace and the outer horizontal tube to ensure safe craning of the unit.



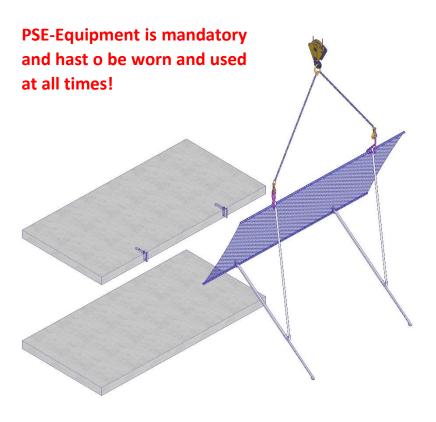


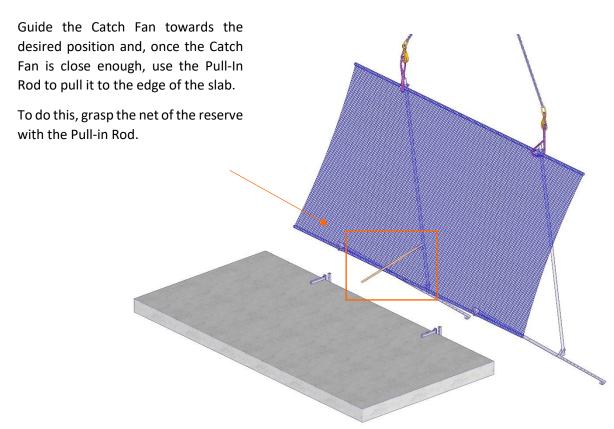
2. Attaching the Catch Fan to the Crane Chains



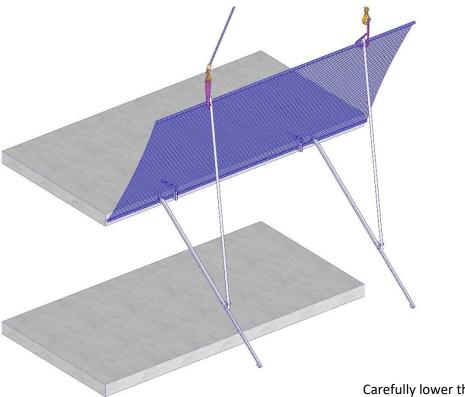


3. Inserting the Catch Fan into the Attachments (Slab Fix, Wall Fix, Scaffold Fix)



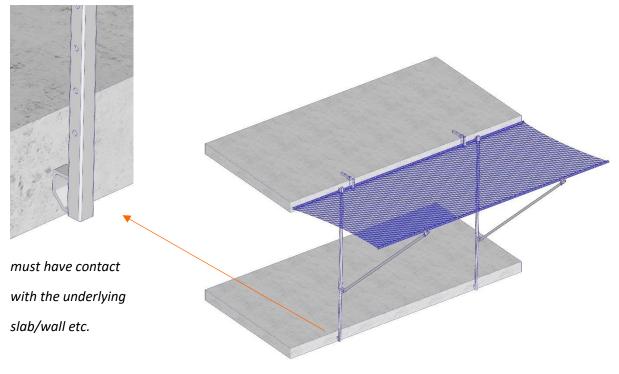






Carefully lower the Catch Fan into the attachments.

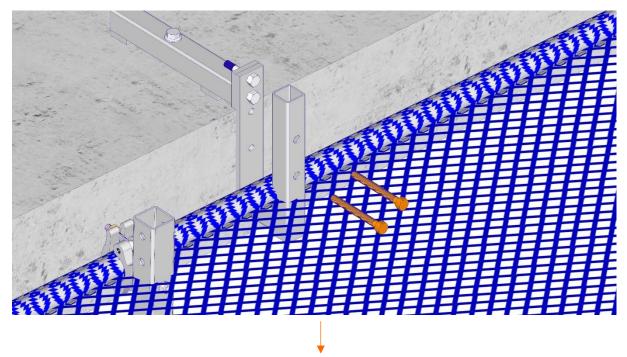
Then retract the Catch Fan by means of the Pull-in Rope attached to the outer horizontal tube and loosen the hooks of the crane chain.

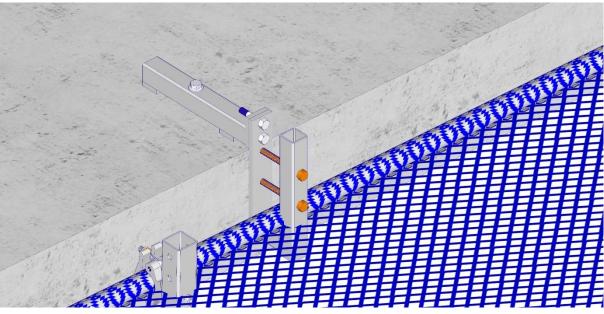




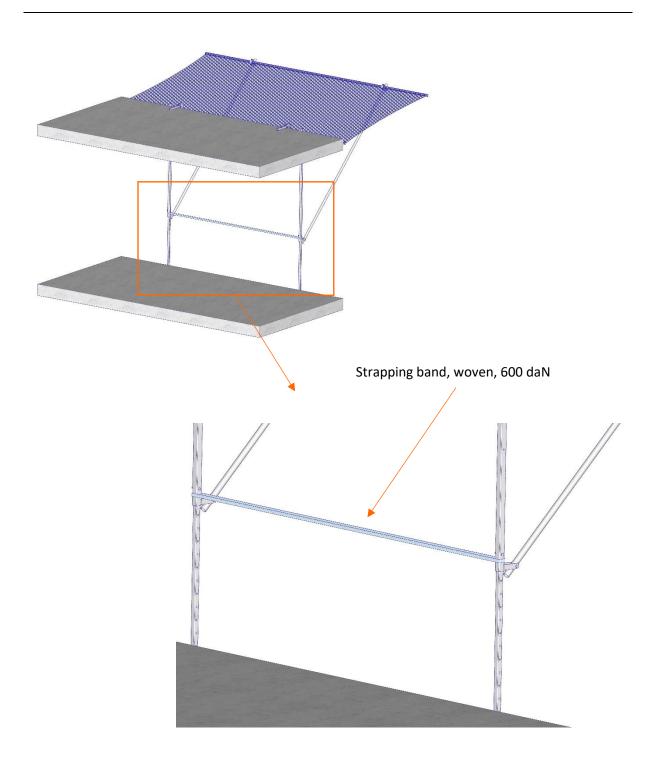
When the Catch Fan is suspended and the crane chain is removed, the previously removed securing screws of the attachments are reinserted.

If overlap variation **A** is used, care must be taken which attachments only the lower safety bolt is reinserted and only after the next Catch Fans have been craned also the upper safety bolt.





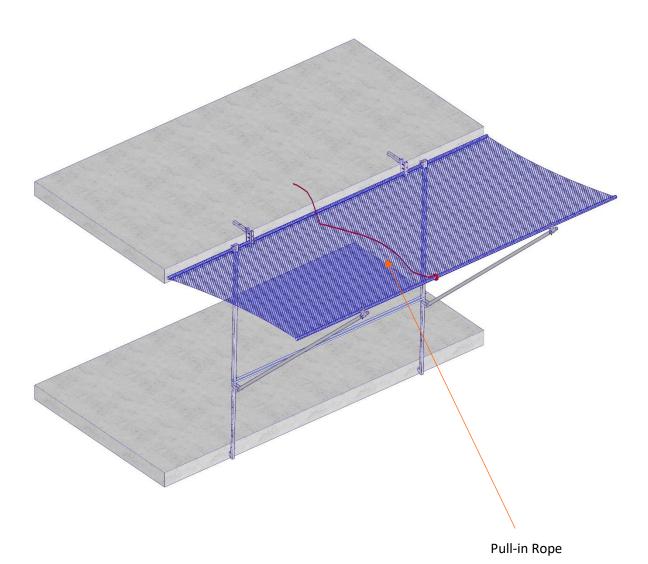




As the last step of the actual assembly, the ground support tubes must be connected to each other in the area of the diagonal flaps in a tension-proof manner, e.g. with polyester strapping (min. 600 kg tear strength or equivalent) to ensure the stability of the Catch Fan.



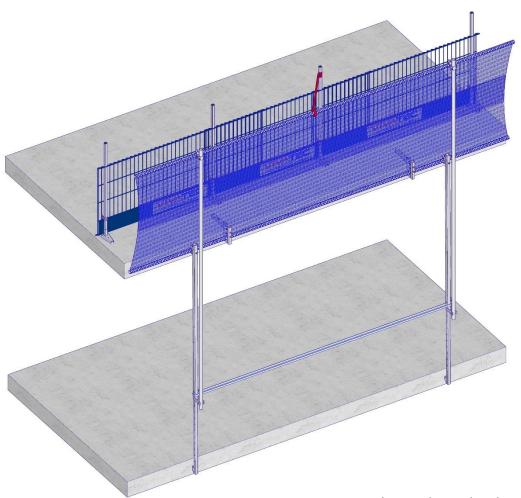
4. Folding in the Catch Fan



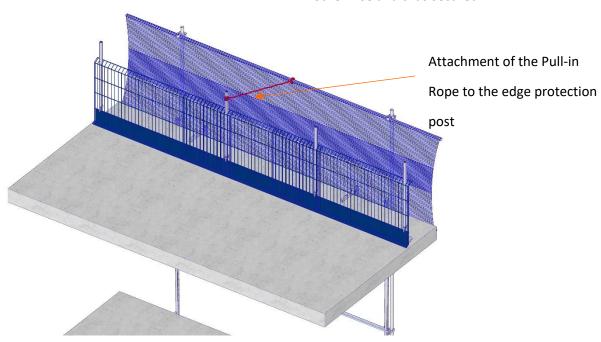
Each SafetyRespect Catch Fan has a retractable Pull-in Rope attached to the outer horizontal tube, which is used to fold the Catch Fan towards the edge of the slab and secure it to the building.

In this way, the Catch Fan system can be protected in the event of significant wind loads and, by folding it in, sufficient space can be created for material to be craned.





As soon as the Catch Fan has been folded in towards the edge of the slab by means of the Pull-in rope, the rope can be attached to an edge protection post, in-situ concrete pillars or otherwise and thus secured.

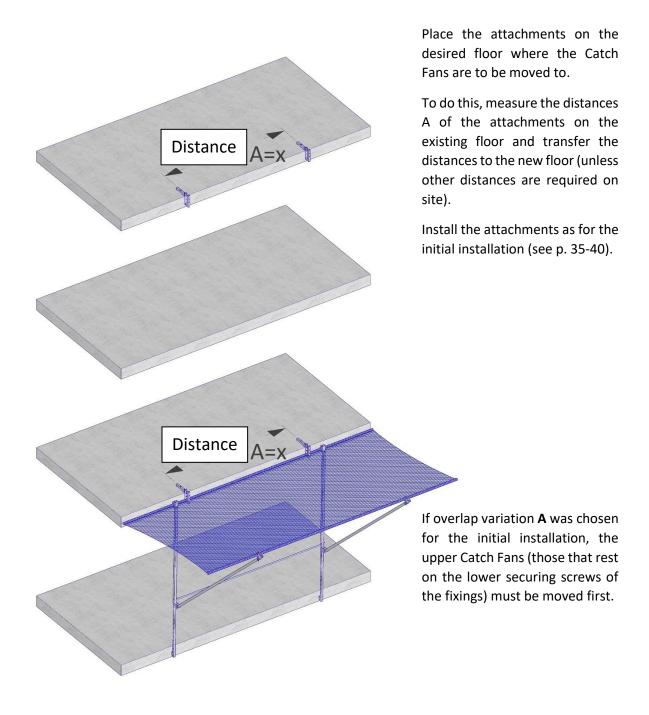




Rehang the Catch Fans

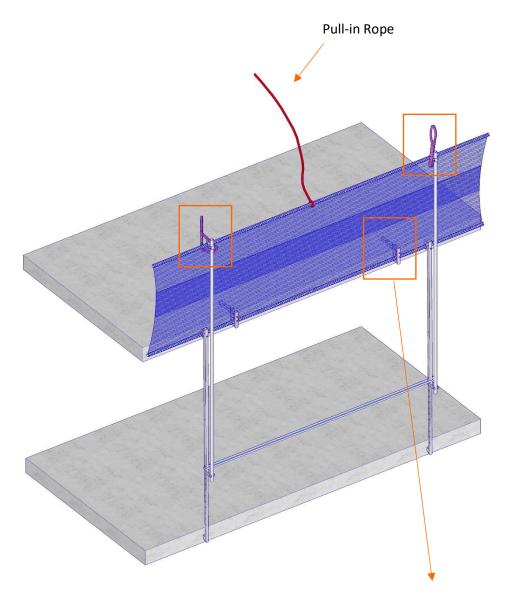
Variant 1 – Repositioning the Attachments

1. Assembly of the Attachments (Slab Fix, Wall Fix, Scaffold Fix)



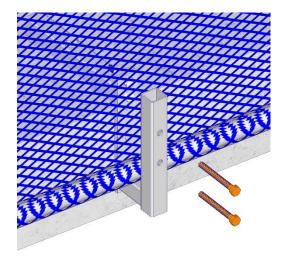


2. Folding in the Catch Fan and Attaching of the Lifting Slings



Fold the Catch Fans towards the edge of the slab with the aid of the Pull-in Rope and attach the slings (see page 41). Attach two slings to each Catch Fan and make sure that the slings are approved and not damaged. Sling the slings through the net around the diagonal brace and the outer horizontal tube to ensure safe craning of the unit.

Also remove the securing screws from the attachments to allow the Catch Fans to be craned out.

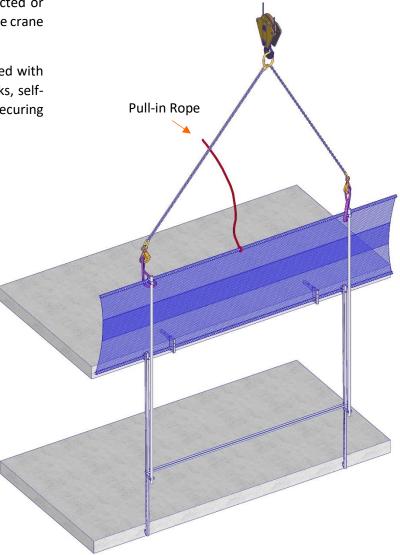


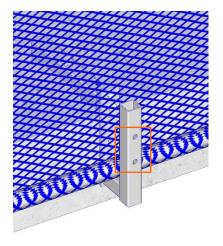


3. Attaching the Hooks of the Crane Chains

While the Catch Fan is retracted or folded, attach the hooks of the crane chain to the lifting slings.

The crane chain must be fitted with lifting chains with clevis hooks, self-locking hooks or other self-securing hooks.





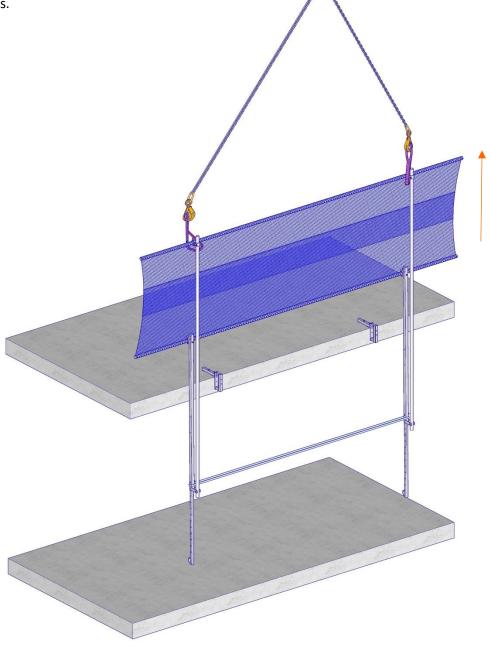
Make sure again that the securing screws of the attachments have been removed before the lifting process begins.



4. Craning the Catch Fan

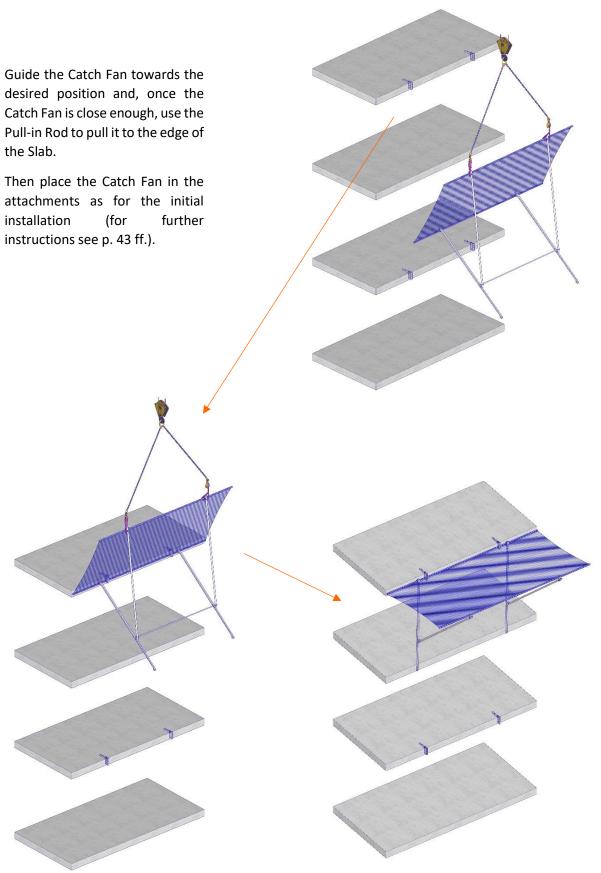
Now slowly and carefully lift the Catch Fan out of the attachments using the construction crane.

Be careful that the net of the Catch Fan does not get caught anywhere and that the ground support extensions do not get caught or jammed below the lower concrete slab during the lifting process.





5. Insert the Catch Fan at the new Position





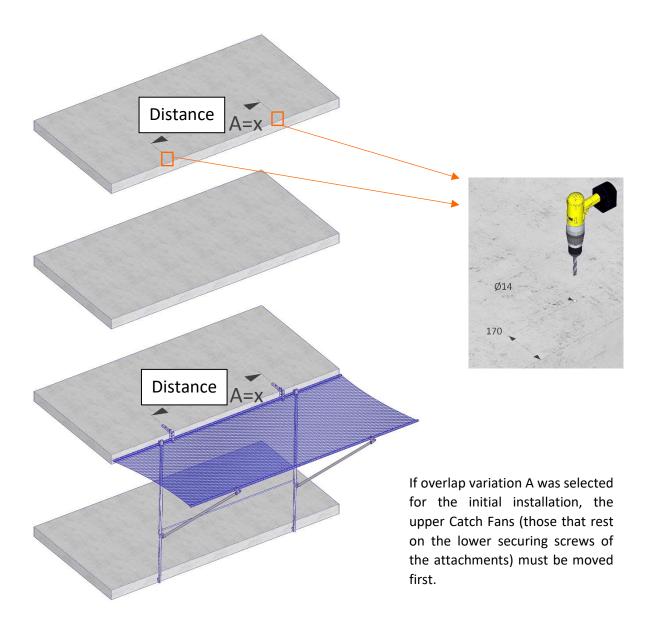
Variant 2 – Craning with Attachments (nur Slab Fix und Wall Fix)

1. Setting the Drill Holes on the new Floor

Drill the holes on the new floor in which the concrete bolts will be placed later. Place the concrete bolts on the new floor ready for insertion.

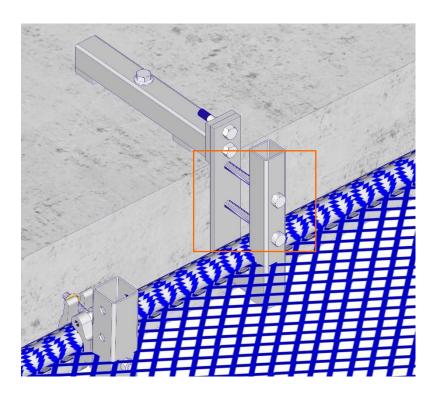
To do this, measure the distances A of the attachments on the existing floor and transfer the distances to the new floor (unless other distances are required on site).

Observe the instructions for drilling on pages 35-38.





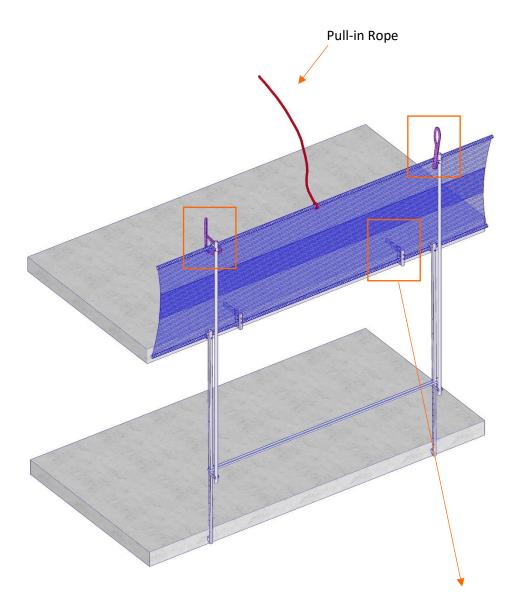
2. Check the Locking Screws



Check that the locking screws in the attachments are all screwed in tightly and, as a precaution, retighten all the locking screws.

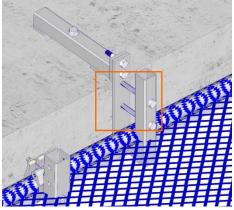


3. Folding in the Catch Fan and Attaching the Lifting Slings



Fold the Catch Fans towards the edge of the slab with the aid of the Pull-in Rope and attach the slings (see page 41). Attach two slings to each Catch Fan and make sure that the slings are approved and not damaged. Sling the slings through the net around the diagonal brace and the outer horizontal tube to ensure safe craning of the unit.

Important: The securing screws must remain screwed firmly into the attachment.



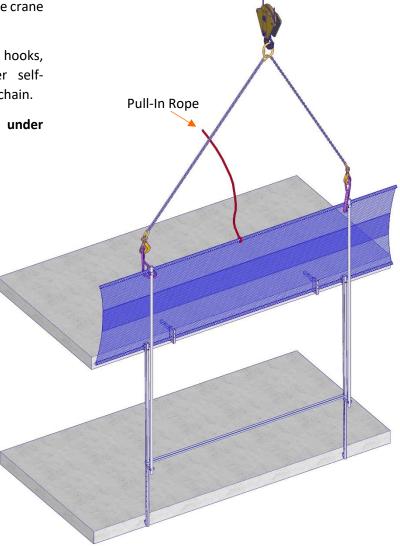


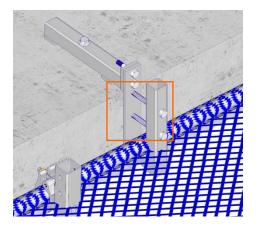
4. Attaching the Hooks of the Lifting Chains of the Crane

While the Catch Fan is retracted or folded, attach the hooks of the crane chains to the lifting slings.

Use lifting chains with clevis hooks, self-locking hooks or other self-securing hooks on the crane chain.

Then put the lifting chains under light tension.

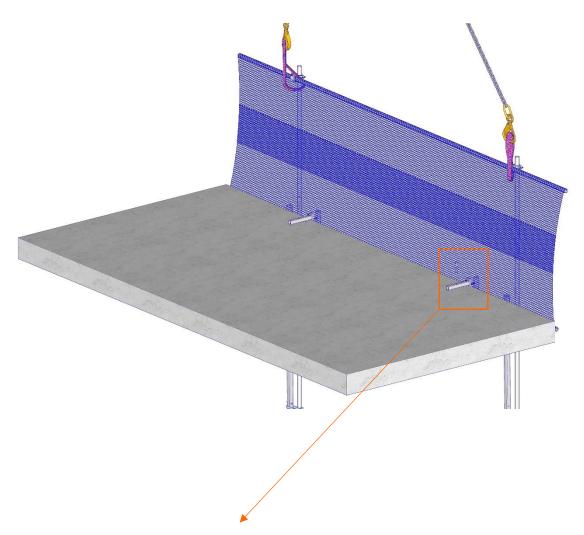


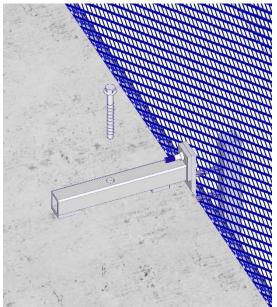


Make sure again that the securing screws of the attachments are securely screwed in before the lifting process begins.



5. Loosening of the Concrete Bolts



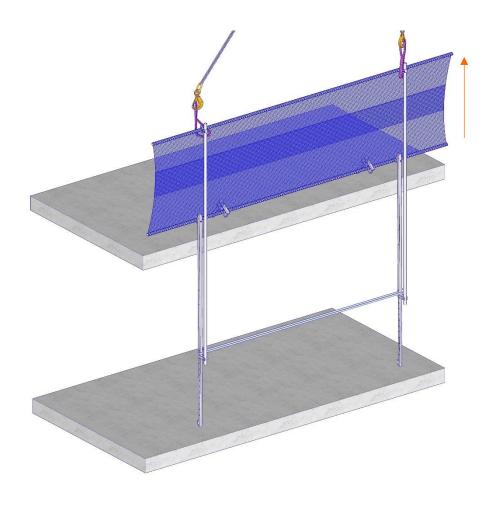


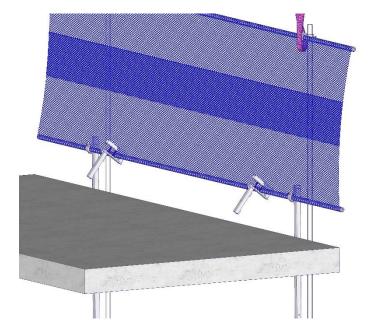
Once the sling chains are slightly tensioned, the concrete bolts can be removed using a tangential impact wrench and set aside.

Make sure that the Catch Fan does not tilt anywhere and push it slightly away from the edge of the ceiling.



6. Craning the Catch Fan





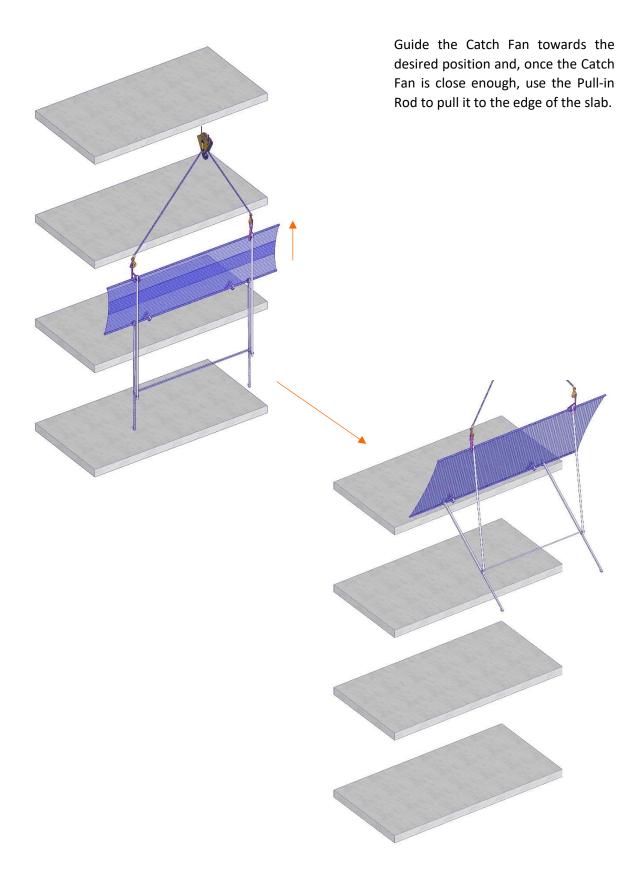
Now use the crane to slowly and carefully lift the Catch Fan together with the attachments.

Make sure that the net of the Catch Fan does not get caught anywhere and that the ground support extensions do not get caught below the lower concrete slab during the lifting process.

The Catch Fan now floats freely together with the attachments.

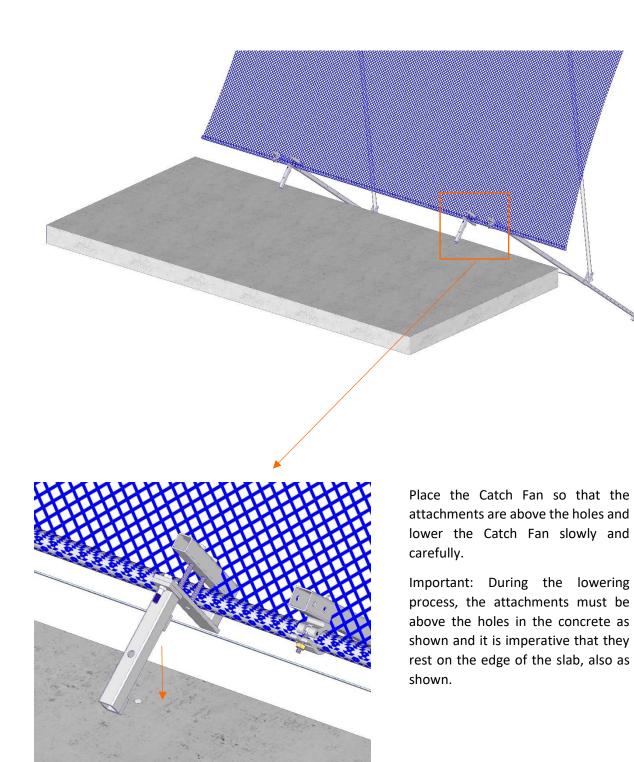


7. Positioning of the Catch Fan at the new Floor





8. Placing of the Attachments at the Level of the pre-drilled Holes





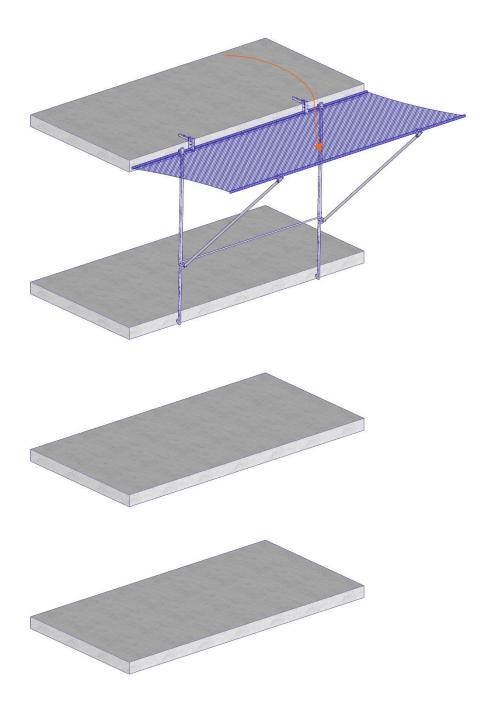
9. Placing the Concrete Bolts in the pre-drilled Holes

As soon as the attachments rest on the edge of the slab and the Catch Fan has been lowered slightly so that the fixings rest horizontally, the concrete bolts must be set. Please also refer to pages 35-38 for setting the concrete bolts. Important: While setting the concrete bolts, the crane's sling chains must still be kept slightly taut so that the freefloating Catch Fan remains in position.

Page **62** from **71**



10. Lowering the Catch Fan

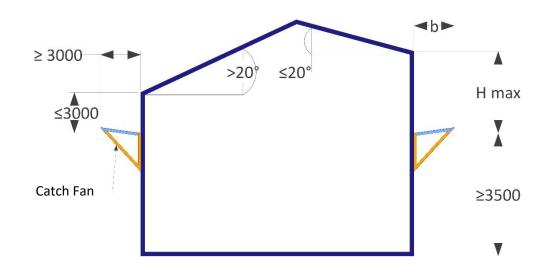


Then lower the crane's sling chains and with them the entire Catch Fan downwards.

Then pull in the fall-arrest chute by means of the hauling rope attached to the outer horizontal tube and loosen the hooks of the sling chain (see p. 43 f.).



Catch Width and Vertical Distance to Slab Edge



H max	≤1000	≤3000	≤6000
b	≥2000	≥2500	≥3000
			Catch Fan SafetyRespect

Positioning limits are defined in EN 1263-2 and apply to fall arrest nets, and therefore also to fall arrest catch fans, which are used, among other things, to catch people.

According to EN 1263-2 paragraph 4, safety nets used to catch people must be positioned according to the following principles:

- For work surfaces with an inclination of less than 20°, the maximum fall height is 6m.
- For work surfaces with an inclination of more than 20°, the maximum height of fall is 3m.
- The minimum free height below the fall arrest structure must be at least the total height of the fall arrest structure. Nothing may obstruct, block or impede the area below the fall arrest structure, this applies at least along the length of the horizontal tubes.

In principle, the SafetyRespect Catch Fan has been tested for falls and load impacts from a height of 7m. Nevertheless, SafetyRespect recommends positioning the Catch Fans as close as possible below the work surface for safety reasons. A fall into a Catch Fan is never completely risk-free and the closer the Catch Fan is to the working level, the less likely injuries to the personnel involved in the accident will occur.



Rescue from the Net

Before using the SafetyRespect Catch Fan as a personal Catch Fan, a rescue plan should be drawn up which will be applied in the event of an accident. In most cases of a person falling into the net, the height of the fall is low and the person can climb or roll out of the net on their own.

In the case of a fall where the person cannot climb out of the net by themselves, a competent person must make a visual assessment to decide the choice of rescue method.

The following rescue methods can be used:

- A trained rescuer, with the aid of abseiling equipment, can descend to the person who has fallen and may be injured in order to
 - help the fallen person out of the net;
 - lift the fallen person out of the net with the aid of rescue equipment;
 - tie the fallen person to him/her and abseil down to the ground together with the fallen person, if necessary by cutting a hole in the fall arrest net.
- If the equipment is available and the structural conditions permit, a lifting platform, telescopic forklift or similar device can be used so that the fire brigade, for example, can place itself under the net with a stretcher attached to the basket. The person is then strapped to the stretcher and a hole is then cut in the fall arrest net.

In the event of an accident, the most important thing is to remain calm and follow the rescue plan. In the event of a rescue, it is essential to always take care to protect oneself. The persons who undertake actions to rescue the injured person should not put themselves in danger. Wearing personal protective and safety equipment is an absolute obligation for the rescuers.



Safety Instructions

Qualification and General

The SafetyRespect Catch Fan must be installed by a correctly instructed and experienced person. For this purpose, we strongly recommend appropriate training by SafetyRespect experts.

In the event of significant load impact (possibly with deformation of the structure), it must be inspected and removed from service by qualified personnel. The net should be disposed of immediately in a professional manner to avoid confusion. The remaining components must be repaired by qualified personnel in consultation with SafetyRespect or else also disposed of.

Correct and damage-free assembly must be checked every time the net is attached, every time it is rehung and at regular intervals thereafter.

The wearing of personal protective and safety equipment during assembly, rehanging and disassembly is mandatory. Do not assemble at the slab edge without personal protective and safety equipment.

Before attaching and craning in the Catch Fans, it should be double-checked that all couplers etc. are sufficiently tightened and fastened. It is also advisable to keep measuring the distance between the ground support tubes to minimise the risk of error and to prevent the Catch Fans from the need to being craned again.

Maintenance

To ensure the full functionality and durability of the Catch Fan, care must be taken. It is imperative that damaged parts are either professionally repaired by trained personnel or, in the case of significant damage, professionally disposed of and replaced before use. In case of doubt, SafetyRespect should be consulted.

Deformed aluminium parts must not be straightened and reused. Bent or otherwise damaged aluminium parts must be replaced and not repaired.

Each Catch Fan is equipped with test fibres specifically for test procedures in one corner of the net. For the annual inspection, one test fibre must be detached at a time and sent to SafetyRespect or a recognised testing institute as desired (see 'Inspection').



Inspection

Before each use, the Catch Fan must be inspected by an instructed person for damage and deformation:

Frame

Aluminium components must not be bent and must not be straightened. Damaged aluminium components must be replaced and not repaired.

At all times, all steel and aluminium components must be carefully inspected for the following:

- Cracks and dents
- Deformation
- Corrosion
- Damage
- Wear and tear
- Visible SAFETYRESPECT label and identification number
- Sharp edges
- Contamination (concrete residues, bitumen residues etc.)

Net

Always check the nets carefully for the following:

- Damage to the net loops
- Damage to the circumferential guide rope
- Connection between the large-mesh 60x60 mm net and the fine-mesh 20x20 mm net
- Visible SAFETYRESPECT label and identification number
- Test fibres present
- Test label according to the standard

Each net tested and to be used must have an approval label. If in doubt, SafetyRespect must be contacted.

Assembly

- Always ensure that the correct concrete screws are used for horizontal and vertical applications in concrete with Slab Fix and Wall Fix. The minimum tensile load per concrete screw is 10 kN. If in doubt, SafetyRespect must be contacted.
- The structural capacity must be confirmed for the expected loads
- The attachments (Slab Fix, Wall Fix, Scaffold Fix) as well as the ground supports must be positioned and measured according to the drawing or planning. To prevent errors, it is advisable to measure several times.
- All fastenings (couplings, coupling braces, bolts and nuts etc.) must be sufficiently tightened.



Inspection of the mounted Catch Fan

- Are the couplers or coupling braces correctly tightened and fixed so that they cannot move or shift?
- Are the locking screws on the attachments (Slab Fix, Wall Fix and Scaffold Fix) correctly fitted so that the rear horizontal tube of the Catch Fan cannot come loose from the U-receptacle of the attachment?
- Is the screw that connects the ground support tube to the diagonal brace correctly mounted?
- Is the locking screw in the diagonal support at the level of the outer horizontal tube present and correctly fitted, which secures the Catch Fan parachute should the round-round coupler come loose?
- Have the nets been inspected so that they comply with EN 1263-1?
- Have the concrete screws been correctly inserted? Does the pressed-on washer
 of the screw head rests firmly on the top of the attachment (Slab Fix, Wall Fix,
 Scaffold Fix)?
- Do the fall arrest nets overlap by at least 1000 mm?
- Should the Catch Fan be attached to the building by means of a hauling rope due to strong winds?
- Is the net correctly and securely attached to both horizontal tubes by means of karabiners or have the two horizontal tubes been correctly pulled through the outer flaps of the nets?
- Are there any foreign objects in the Catch Fan? Is the Catch Fan significantly dirty?
- Is the Catch Fan correctly supported, either against an underlying slab edge/wall or against the lower edge of the slab?
- Are the corner nets in place and correctly attached and mounted?
- Are there visible cracks on the welds of the components?

Weekly inspection

It is strongly recommended that the inspection of the assembled Catch Fan is carried out weekly by a competent and instructed person.

Annual inspection

It is recommended that the SafetyRespect Catch Fan, including all components and accessories, be inspected annually by SafetyRespect or a recognised testing institute, unless otherwise stipulated in the relevant laws or regulations.

Once a year it is mandatory that one of the test fibres attached to the net is tested and examined. The test fibre must be sent to an independent accredited testing institute or to SafetyRespect. A net is ready for discard after a maximum of four years. The labels on the net indicate when the next test fibre must be sent. If in doubt, SafetyRespect must be contacted.



Expiry of the manufacturer's warranty

No Catch Fans may be used that do not meet the criteria in the lists above. Nets that do not pass the fibre test must be discarded. If the last of three test fibres has been used, the net may be used from the last test procedure can be used for a further year. After that, the net must be discarded. Passing the net test must be registered on the approval label.

Storage

The Catch Fans and all associated components and accessories must be stored in a dry, well-ventilated room without being exposed to the weather or aggressive substances. This applies in particular to the net structures.

Disposal

Before disposal, the aluminium should be separated from the steel components and then disposed of separately. The polypropylene net and hauling rope should also be separated from the structure and disposed of separately.



Declaration of Conformity

We heredowith confirm that our Catch Fans:

Item no. 5054000 Catch Fan 4m

Item no. 5056000 Catch Fan 6m

In combination with the following components respectively used as a system with:

Item no. 5050001 Ground Support Extension

Item no. 50500021 Kneebrace

Item no. 5050003_S Slab Fix for Catch Fan

Item no. 5050003_W Wall Fix for Catch Fan

conform to the requirements and guidelines of the standards **EN 1263-1:2014, ANSI / ASSE A10.37-2016** and **OSHA 1926.502** for a System T safety net.

A further prerequisite for the conformity of these components or this system with the standards is the correct assembly or use as well as the conformity of any components interacting with the aforementioned components with the standards. The instructions for assembly and use apply in their valid form.

This product complies with the health and safety regulations of the respective standards in the European Union. SafetyRespect GmbH is a certified welding company according to DIN EN 1090.

Category: Safety Net System T Manufacturer: SafetyRespect GmbH

Im Kurzen Busch 11 58640 Iserlohn

Germany

With best regards
SafetyRespect GmbH

Jan-Erik Monheimius i.V.

Product Manager





SafetyRespect GmbH

Im Kurzen Busch 11 58640 Iserlohn

Germany

Phone: +49 (0) 2371 155 41-0

Fax: +49 (0) 2371 219 58 70

Mail: info@safetyrespect.de

Web: www.safetyrespect.de