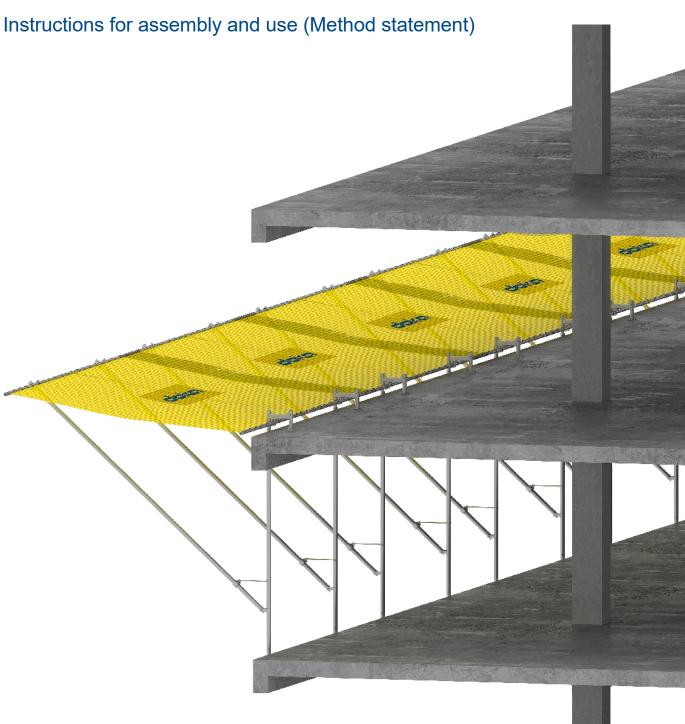


# The Formwork Experts.

# Safety net fan SNF

according to EN1090-2

# **User Information**



# **Contents**

3	Elementary safety warnings
6	Declaration of conformity
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## **Elementary safety warnings**

#### **User target groups**

- This booklet is aimed at all persons who will be working with the Doka product or system that it describes. It contains information on the standard design for setting up this system, and on correct, compliant utilisation of the system.
- All persons working with the product described herein must be familiar with the contents of this booklet and with all the safety instructions it contains.
- Persons who are incapable of reading and understanding this booklet, or who can do so only with difficulty, must be instructed and trained by the customer.
- The customer is to ensure that the information materials provided by Doka (e.g. User Information booklets, Instructions for Assembly and Use, Operating Instruction manuals, plans etc.) are available to all users, and that they have been made aware of them and have easy access to them at the usage location.
- In the relevant technical documentation and formwork utilisation plans, Doka shows the workplace safety precautions that are necessary in order to use the Doka products safely in the usage situations shown.
  - In all cases, users are obliged to ensure compliance with national laws, Standards and rules throughout the entire project and to take appropriate additional or alternative workplace safety precautions where necessary.

#### Remarks on this booklet

- This booklet can also be used as a generic method statement or incorporated with a site-specific method statement.
- Many of the illustrations in this booklet show the situation during formwork assembly and are therefore not always complete from the safety point of view.
  - Any safety accessories not shown in these illustrations must still be used by the customer, in accordance with the applicable rules and regulations.
- Further safety instructions, especially warnings, will be found in the individual sections of this booklet!

## **Planning**

- Provide safe workplaces for those using the formwork (e.g. for when it is being erected/dismantled, modified or repositioned etc). It must be possible to get to and from these workplaces via safe access routes!
- If you are considering any deviation from the details and instructions given in this booklet, or any application which goes beyond those described in the booklet, then revised static calculations must be produced for checking, as well as supplementary assembly instructions.

#### Hazard assessment

The customer is responsible for drawing up, documenting, implementing and continually updating a hazard assessment at every job-site.
This booklet serves as the basis for the site-specific hazard assessment, and for the instructions given to users on how to prepare and utilise the system. It does not substitute for these, however.

## Regulations; industrial safety

- All laws, Standards, industrial safety regulations and other safety rules applying to the utilisation of our products in the country and/or region in which you are operating must be observed at all times.
- If a person or object falls against, or into, the sideguard component and/or any of its accessories, the component affected may only continue in use after it has been inspected and passed by an expert.

# Rules applying during all phases of the assignment:

- The customer must ensure that this product is erected and dismantled, reset and generally used for its intended purpose under the direction and supervision of suitably skilled persons with the authority to issue instructions. These persons' mental and physical capacity must not in any way be impaired by alcohol, medicines or drugs.
- Doka products are technical working appliances which are intended for industrial/commercial use only, always in accordance with the respective Doka User Information booklets or other technical documentation authored by Doka.
- The stability of all components and units must be ensured during all phases of the construction work!
- The functional/technical instructions, safety warnings and loading data must all be strictly observed and complied with. Failure to do so can cause accidents and severe (even life-threatening) damage to health, as well as very great material damage.
- Fire-sources are not permitted anywhere near the formwork. Heating appliances are only allowed if properly and expertly used, and set up a safe distance away from the formwork.
- The work must take account of the weather conditions (e.g. risk of slippage). In extreme weather, steps must be taken in good time to safeguard the equipment, and the immediate vicinity of the equipment, and to protect employees.
- All connections must be checked regularly to ensure that they still fit properly and are functioning correctly. It is very important to check all screw-type connections and wedge-clamped joins whenever the construction operations require (particularly after exceptional events such as storms), and to tighten them if necessary.
- It is strictly forbidden to weld Doka products in particular anchoring/tying components, suspension components, connector components and castings etc. or otherwise subject them to heating. Welding causes serious change in the microstructure of the materials from which these components are made. This leads to a dramatic drop in the failure load, representing a very great risk to safety. The only articles which are allowed to be welded are those for which the Doka literature expressly points out that welding is permitted.

#### **Assembly**

- The equipment/system must be inspected by the customer before use, to ensure that it is in suitable condition. Steps must be taken to rule out the use of any components that are damaged, deformed, or weakened due to wear, corrosion or rot.
- Combining our formwork systems with those of other manufacturers could be dangerous, risking damage to both health and property. If you intend to combine different systems, please contact Doka for advice first.
- The equipment/system must be assembled and erected in accordance with the applicable laws, Standards and rules by suitably skilled personnel of the customer's, having regard to any and all required safety inspections.
- It is not permitted to modify Doka products; any such modifications constitute a safety risk.

## Transporting, stacking and storing

- Observe all regulations applying to the handling of formwork and scaffolding. In addition, the Doka slinging means must be used - this is a mandatory requirement.
- Remove any loose parts or fix them in place so that they cannot be dislodged or fall free!
- All components must be stored safely, following all the special Doka instructions given in the relevant sections of this booklet!

#### **Maintenance**

 Only original Doka components may be used as spare parts. Repairs may only be carried out by the manufacturer or authorised facilities.

#### **Miscellaneous**

 We reserve the right to make alterations in the interests of technical progress.

## Symbols used

The following symbols are used in this booklet:



#### **NOTICE**

Failure to observe this may lead to malfunction or damage.



#### **CAUTION / WARNING / DANGER**

Failure to observe this may lead to material damage, and to injury to health which may range up to the severe or even life-threatening.



#### Instruction

This symbol indicates that actions need to be taken by the user.



#### Sight-check

Indicates that you need to do a sight-check to make sure that necessary actions have been carried out.



#### Tip

Points out useful practical tips.



#### Reference

Refers to other documents and materials.

# **Declaration of Conformity**

In this assembly and user's manual, the described "Doka Safety Net Fan System" is connected to the brand name "DOKA"; the product itself "TSS Safety Net Fans", on which Doka Safety Net Fan is based on is manufactured by TSS Trading LLC and is fully compliant with EN 1263-2, certified by TÜV SÜD Middle East LLC under the certificate number MUA-16D-5208.

The following table sets the components corresponding with each system and declares the conformity of the different designated and various article numbered components.

Doka		TSS
Description - Name of component	Doka Item Code	TSS Item Code
Safety net fan 3.10x5.85m SNF2	584760000	TSFNTBY3163
Safety net fan 3.10x4.00m SNF2	584761000	TSFNTBY3142
Safety net fan extra wide 4.80x5.85m SNF2	584762000	TSFNTBY4863
Safety net fan extra wide 4.80x4.00m SNF2	584763000	TSFNTBY4842
Safety net 3.10x5.85m SNF2	584764000	TSFNTBYNO3163
Safety net 3.10x4.00m SNF2	584765000	TSFNTBYNO3142
Safety net extra wide 4.80x5.85m SNF2	584766000	TSFNTBYNO4863
Safety net extra wide 4.80x4.00m SNF2	584767000	TSFNTBYNO4842
Body 2.75m SNF2	584768000	TSFBDYG2.75
Body 3.25m SNF2	584769000	TSFBDYG3.25
Extension leg 1.50m SNF2	584770000	TSFEXLLG
Extension leg 0.75m SNF2	584771000	TSFEXSLG
Wall attachment SNF2	584772000	TSFWAAT
Slab attachment flat SNF2	584773000	TSFFLAT
Scaffold attachment SNF2	584774000	TSFSCAT
Knee brace SNF2	584775000	TSFKBATP
Double coupler 48/60mm SNF2	584776000	TSFDBLCP
Double coupler 48/48mm SNF2	584777000	TSFDBLC48
Wind lock SNF2	584778000	TSWILKP
Diagonal tube 4.25m SNF2	584779000	TSFDIA425
Diagonal tube extension SNF2	584780000	TSFDIAGEXT
Extension arm SNF2	584781000	TSFEXAR
Supporting shoe SNF2	584782000	TSFSUHHDG
Lifting sling SNF2	584784000	TSFLS250
Anchor bolt M12x120 SNF2	584785000	TSSANBM12x120
Assembly stool SNF2	584786000	TSFASSTL
Horizontal tube 5.85m SNF2	584787000	TSFHOT585
Horizontal tube 4.00m SNF2	584788000	TSFHOT400
Horizontal tube 2.925m SNF2	584789000	TSFHOT295
Swivel coupler 48/60 SNF2	584790000	TSFSWIVCP6048
Swivel coupler 48/48 SNF2	584791000	TSFSWCP4848

#### **General Safety information**

It is imperative that Doka Fans are installed by competent and trained personnel. Doka offers on-site product training to ensure safe and correct use of products.

Training is strongly recommended.

All Doka Fan components must be inspected by a competent debris prior to re-use. A record inspection of the annual testing of Safety Nets must be kept by the customer.
Following the fall of a heavy object or debris in the Fans, the unit must be inspected by a competent person prior to re-use.
Personnel involved in the assembly and installation of the Fans must be trained and competent on working at height and wear necessary Personal Protective and Fall Protection Equipment.

#### **Description and use**

Doka has developed the Doka Fan as a result of a comprehensive study of the problems associated with the falling of objects and debris as well as risks of falling objects for the workers or members of public below, during the construction stage of structures.

The Doka Fan addresses these risks on sites by absorbing the energy of the fall and containing the falling object or person within the net.

Unlike similar products on the market the Doka Fan has the unique ability to adapt to various building shapes and facade materials, as well as coping with high wind loading, particularly in high-rise and exposed structures.

### **Fan Positioning**

# Doka Fan Positioning limits according to EN 1263-2

The positioning limits stated in EN 1263-2 for Safety Fans are intended for the purpose of arresting the fall of objects from height.

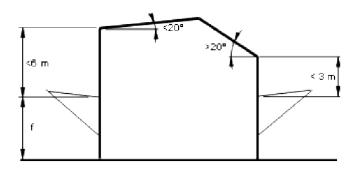
In accordance with EN1263-2 Safety nets: Part 2: Safety requirements for the positioning limits, Safety Fans designed to arrest the fall of a person should be positioned as follows:

For surfaces sloping less than 20°, the maximum falling height must not exceed 6 m. For surfaces sloping more than 20°, the maximum falling height must not exceed 3 m.

It is however recommended to install the Doka Fans as close to the risk area as possible to minimise the falling height and the subsequent injury to falling person.

Distance (f) below the Doka Fan unit should not be less the overall height of the Fan unit.

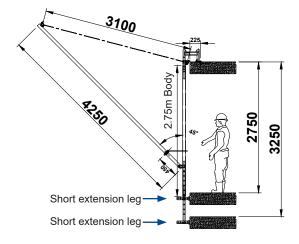
No object must obstruct the bottom of the Doka Fan to ensure undisturbed arrest of fall.

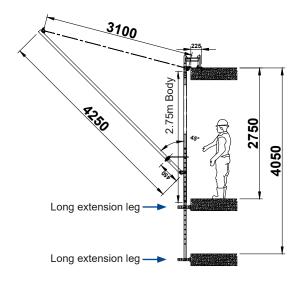


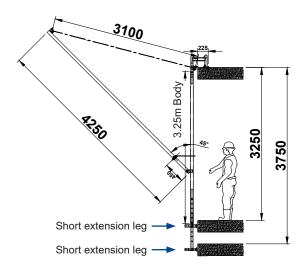
# Design guide

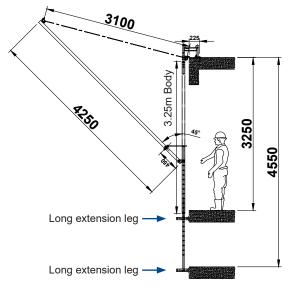
### **Selection Guide**

- Establish building floor/floor height
- Select suitable combination of Doka Safety Net Fan Body type (2.75m or 3.25m) and Doka Safety Net Fan
  extension leg type (Short or Long) from section below
- Select correct product No. from the chart below







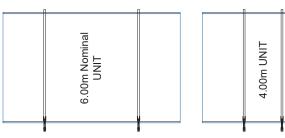


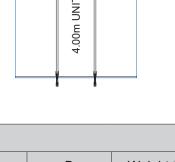
Extension Leg Type					
Pody Typo	Short		Long		
Body Type	Min.	Max.	Min.	Max.	
Body 2.75m	2.75m	3.25m	2.75m	4.05m	
Body 3.25m	3.25m	3.75m	3.25m	4.55m	

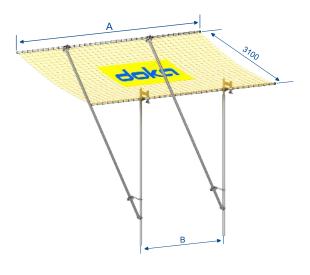
# **Type selection**

 Select required fan width (Standard type or Extra-wide type)

# **Standard Type**



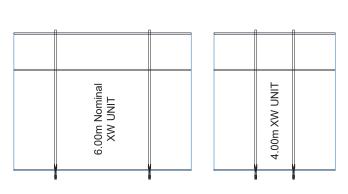




Standard Type					
Body Type	Width	А	В	Weight *	
2.75m	3.10m	5.85m	3.5m±0.25	105 kg	
2.75m	3.10m	4.00m	1.65m±0.25	95 kg	
3.25m	3.10m	5.85m	3.5m±0.25	110 kg	
3.25m	3.10m	4.00m	1.65m±0.25	100 kg	

<sup>\*</sup> Approx. weight of complete unit with slab attachment and extension leg.

## **Extra Wide Type**



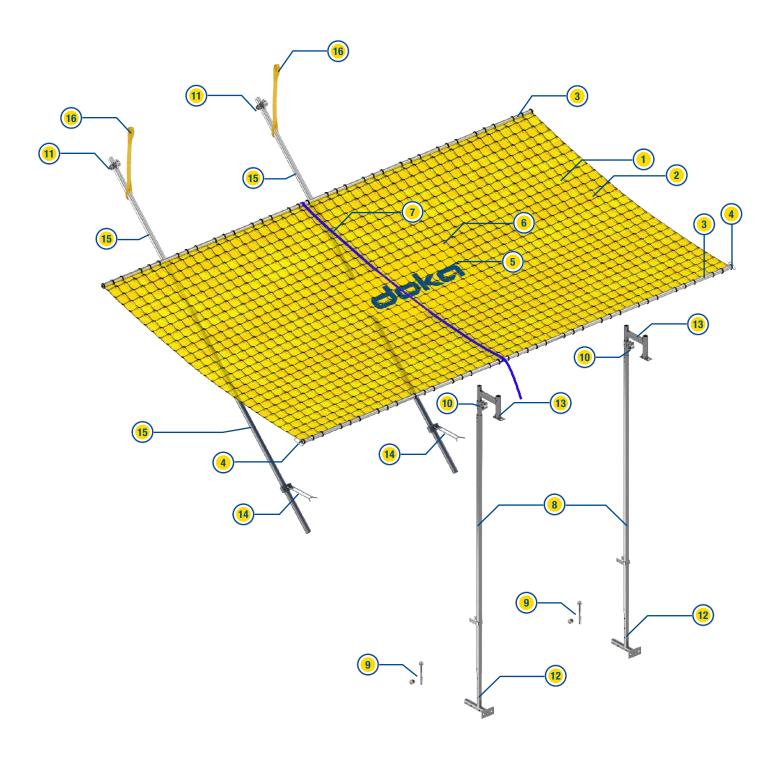
Extra Wide Type					
Body Type	Width	Α	В	Weight *	
2.75m	4.70m	5.85m	3.5m±0.25	125 kg	
2.75m	4.70m	4.00m	1.65m±0.25	115 kg	
3.25m	4.70m	5.85m	3.5m±0.25	130 kg	
3.25m	4.70m	4.00m	1.65m±0.25	120 kg	

<sup>\*</sup> Approx. weight of complete unit with slab attachment and extension leg.



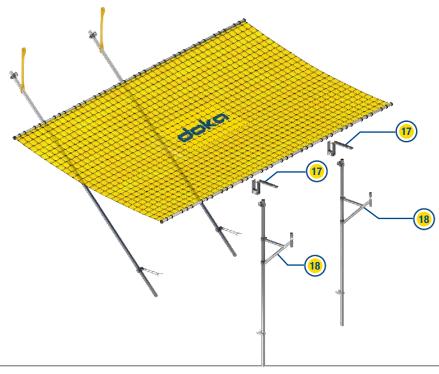
# **System overview**

# **Standard Type**

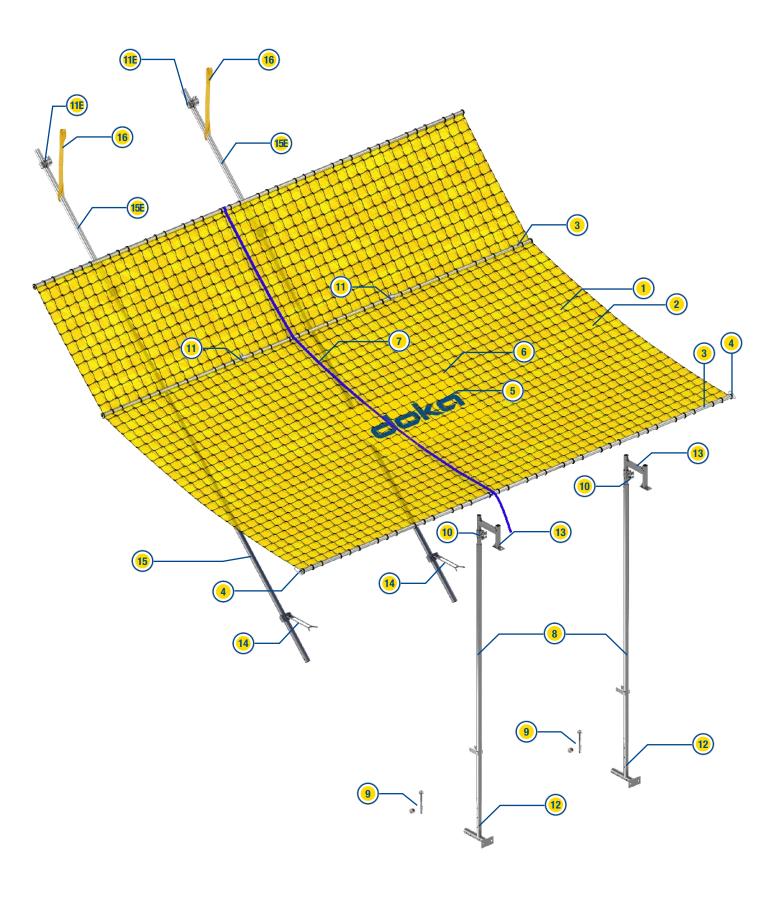


Pos.	Description	Quantity	weight(Kg)
1	Double layer net 3.12x6.30m SNF2	1	11.00
1	Double layer net 3.12x4.20m SNF2	1	8.00
2	Debris net 3.00x6.50m SNF2	1	0.20
2	Debris net 3.00x4.50m SNF2	1	0.20
3	Horizontal tube 5.85m SNF2	2	9.60
3	Horizontal tube 4.00m SNF2	2	6.60
4	Karabinar 6X60	4	0.02
5	Doka Logo SNF2	1	80.0
6	Cable tie SNF2	50	0.15
7	Folding rope 4.50m SNF2	1	0.20
8	Body 3.25m SNF2	2	17.30
8	Body 2.75m SNF2	2	14.50
9	Anchor bolt M12x120 SNF2 + Hexagon nut M12 SNF2	2	0.11
10	Coupler adjustable SNF2	2	1.00
11	Double coupler 48/60mm SNF2	2	1.00
12	Extension leg 0.75m SNF2 *	2	3.20
12	Extension leg 1.50m SNF2 *	2	6.40
13	Slab attachment SNF2 *	2	5.20
14	Wind lock SNF2	2	1.80
15	Diagonal tube 4.25m SNF2	2	7.90
16	Lifting sling SNF2	2	0.10
17	Slab attachment flat SNF2 *	2	2.70
18	Knee brace SNF2 *	2	7.65

<sup>\*</sup> M12x90 Bolt + M12 Nylock Nut are already attached on the respective standard components

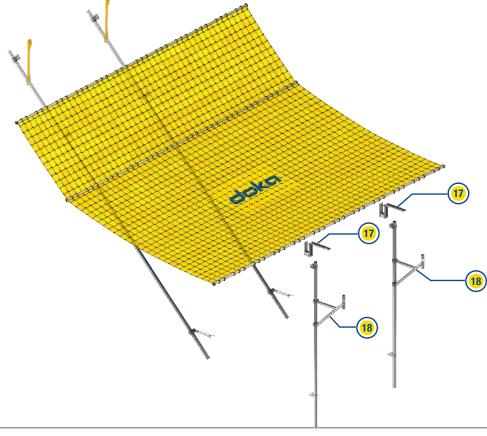


# Extra wide type



Pos.	Description	Quantity	weight(Kg)
1	Double layer net 4.80x6.30m SNF2	1	11.00
1	Double layer net 4.80x4.20m SNF2	1	8.00
2	Debris net 3.00x6.50m SNF2	1	0.20
2	Debris net 3.00x4.50m SNF2	1	0.20
3	Horizontal tube 5.85m SNF2	3	9.60
3	Horizontal tube 4.00m SNF2	3	6.60
4	Karabinar 6X60	6	0.02
5	Doka Logo SNF2	1	0.08
6	Cable tie SNF2	50	0.15
7	Folding rope 4.50m SNF2	1	0.20
8	Body 3.25m SNF2	2	17.30
8	Body 2.75m SNF2	2	14.50
9	Anchor bolt M12x120 SNF2 + Hexagon nut M12 SNF2	2	0.11
10	Coupler adjustable SNF2	2	1.00
11	Double coupler 48/60mm SNF2	2	1.00
11E	Double coupler 48/48mm SNF2	2	1.00
12	Extension leg 0.75m SNF2 *	2	3.20
12	Extension leg 1.50m SNF2 *	2	6.40
13	Slab attachment SNF2 *	2	5.20
14	Wind lock SNF2	2	1.80
15	Diagonal tube 4.25m SNF2	2	7.90
15E	Diagonal tube extension SNF2	2	2.86
16	Lifting sling SNF2	2	0.10
17	Slab attachment flat SNF2 *	2	2.70
18	Knee brace SNF2 *	2	7.65

\* M12x90 Bolt + M12 Nylock Nut are already attached on the respective standard components



# **Required Tools For Assembly**



All operatives involved must wear necessary Personal Protection Equipment (PPE) suitable for the job and environment and are trained and competent for this task.

Prior to assembling the Fans on site, ensure that an even and clean area 7m x 10m in dimension is allocated to this operation allowing ample additional space for stacking of assembled Fans.

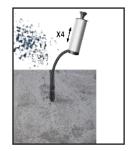
Assembly area must NOT be below any operation where there may be risk of falling debris.

Installation team must also ensure that assembly area is accessible by site crane for moving into location.

# **Anchoring to the structure**

### Installation guide



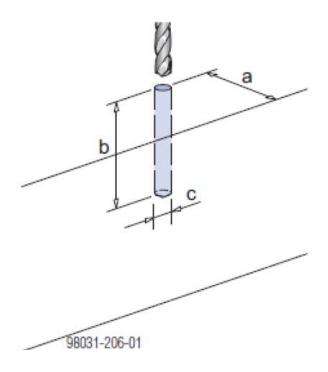








- 1. Drill a hole and clear it from drilling dust and debris (using blowpump or equivalent method)
- 2. Lightly tap the throughbolt through the fixture into hole with a hammer, until fixing depth is reached
- 3. Tighten to the required torque



- a Distance from edge min. 100 mm
- b Depth of drilled hole min. 100 mm
- c Diameter of drilled hole 12 mm
- d Minimum slab thickness 150 mm Installation torque min. 50 Nm

# Required design load capacity of the anchor bolts:

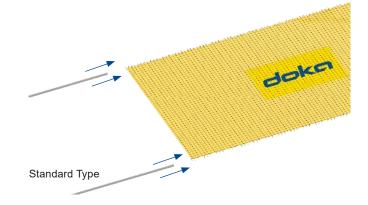
- Tensile force: 13.90 kNShear force: 9.40 kN
- e.g. Rawlplug Throughbolt R-XPT-12120/25 (European approval ETA-08/0339) in uncracked concrete C20/25, or equivalent products from other manufacturers.

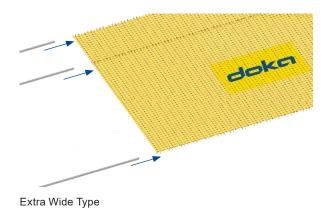
# Step by step Installation

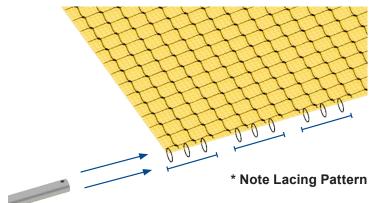
## Step 1: Lacing nets into horizontal tubes

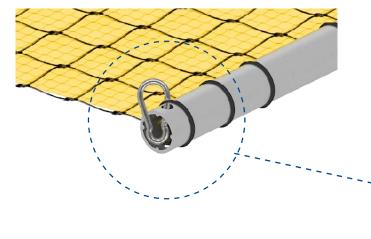
Lace the inner and outer Horizontal tubes in to the safety net units, ensuring the tube is fed every second mesh as indicated.

For ease of assembly ensure that the 20x20 net portion is facing downward.



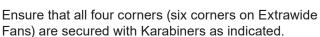






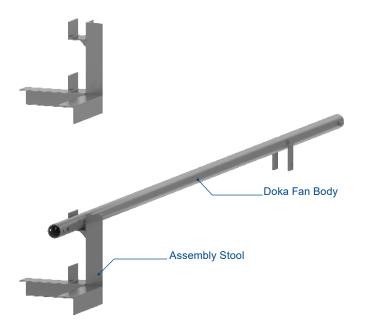
Secure the ends of the Nets using a steel Karabiner or similar.

Karabiner is fed through the pre-drilled hole on Horizontal tube ends.

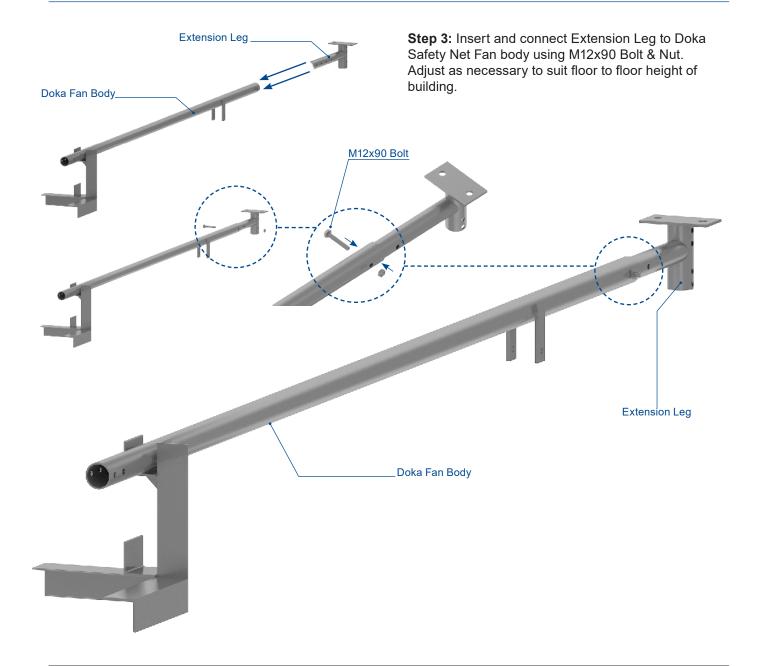


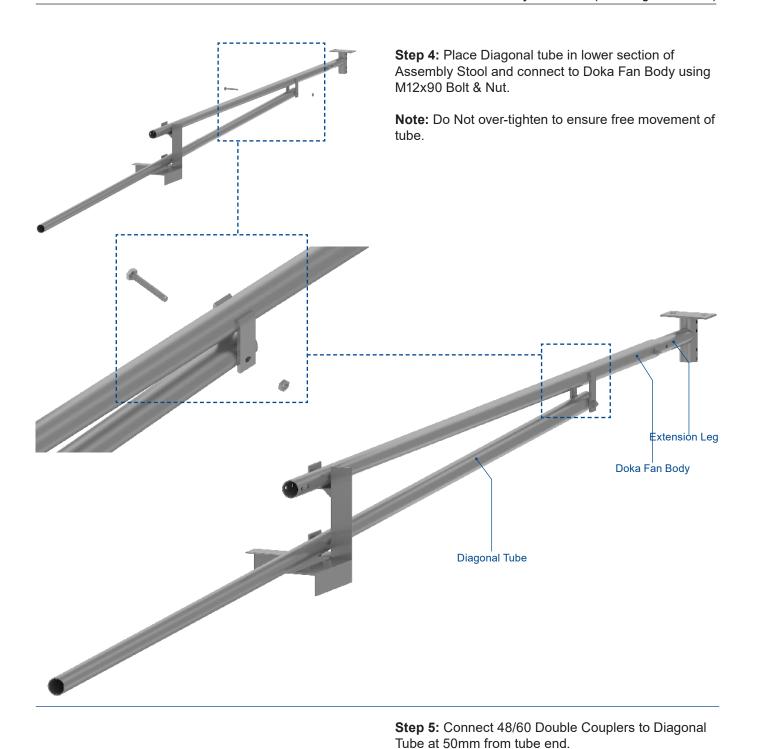
67.555555

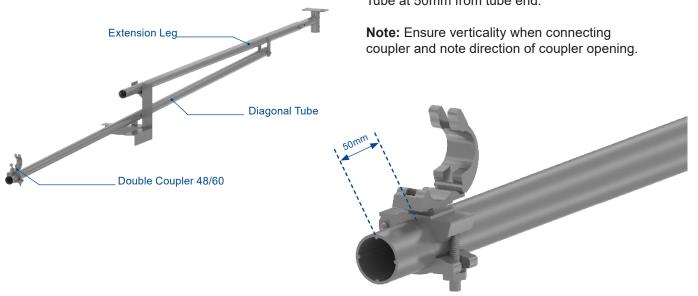
Ensure that Fans) are

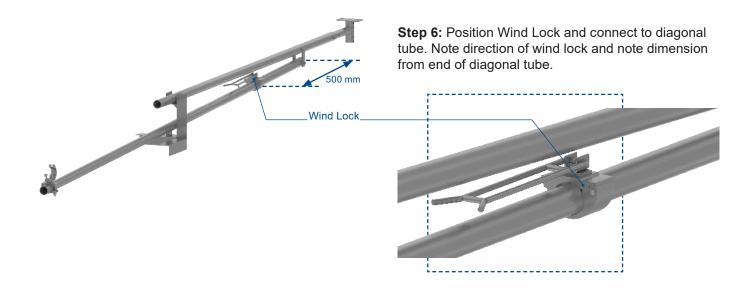


**Step 2:** Place the Doka Fan Body within the upper housing section of the Assembly Stool. Ensure that the housing brackets for the diagonal tube is facing down.









#### **Standard Type**

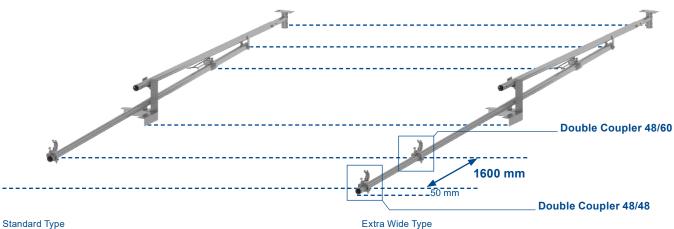
**Step 7:** Connect 48/60 Double Couplers to Diagonal Tube at 50mm from tube end.

**Note:** Ensure verticality when connecting coupler and note direction of coupler opening.

#### **Extra Wide Type**

**Step 7(XW):** Connect 48/48 Double Couplers to Diagonal Tube at 50mm and 1600mm from tube end.

**Note:** Ensure verticality when connecting coupler and note direction of coupler opening.



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**Step 8:** Repeat steps 2-5 for second leg placing the assembly at correct spacing.

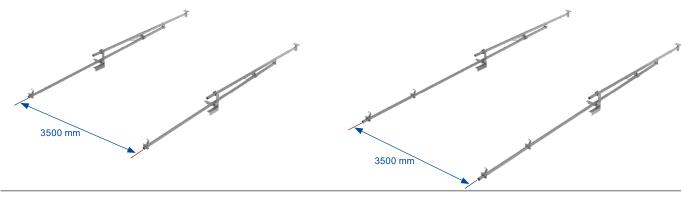
Refer to Dimension Section of this guide for spacing. (3.5m apart for 6.00m Units and 1.65m for 4.00m Units).

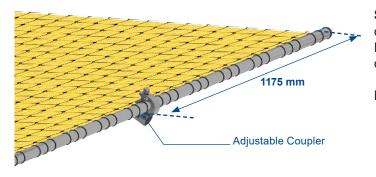
**Note:** Body spacing may be adjusted by ±150mm from project to project .

**Step 8(XW):** Repeat steps 2-5 for second leg placing the assembly at correct spacing.

Refer to Dimension Section of this guide for spacing. (3.5m apart for 6.00m Units and 1.65m for 4.00m Units).

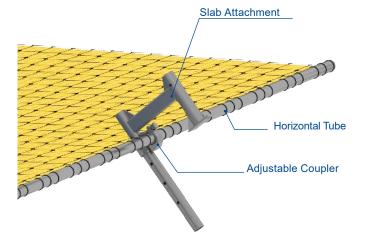
**Note:** Body spacing may be adjusted by ±150mm from project to project.





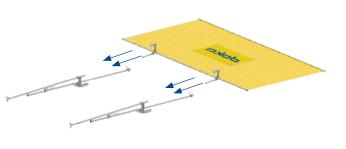
**Step 9:** Place and connect Adjustable coupler at correct distance from end of Inner Horizontal tube (1175mm). Refer to Dimension Section of this guide for more details.

Note: Do Not fully tighten the coupler at this stage.



**Step 10:** Insert Slab Attachments into Adjustable Couplers on both sides and offer into the top of the Doka Fan Body.

**Note:** Ensure logo is at the bottom and 20x20 layer is on top.



**Step 11:** Insert and connect the Slab attachment into the Doka Fan Body using M12x90 Bolt & Nut. Adjustable coupler must be fully tightened at this stage.

**Note:** Slab Attachment may be bolted to Doka Safety Net Fan Body using various pre-drilled holes to suit floor/floor height of the building.

Note: Direction of logo to be placed under.

Double Coupler 48/60

Slab Attachment

doka

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Doka Fan Body

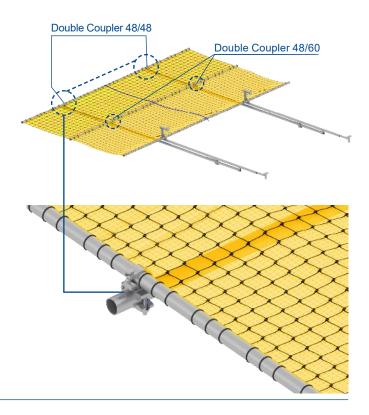
#### **Extra Wide Application**

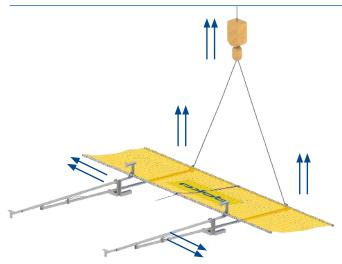
**Step 11(XW):** Insert and connect the Slab attachment into the Doka Fan Body using M12x90 Bolt & Nut. Adjustable coupler must be fully tightened at this stage.

**Note:** Slab Attachment may be bolted to Doka Fan Body using various pre-drilled holes to suit floor/floor height of the building.

**Step 12(XW):** Place outer Horizontal tube in 48/48 Double couplers on both sides at correct distance (1175mm) from the ends and fully tighten the coupler. Refer to Dimension Section of this guide for more details.

**Note:** Ensure squareness and verticality of the connection and ensure that no net cord is caught inside the coupler.





**Step 13:** Connect lifting sling to Crane and lift Doka Fan unit in a controlled manner. Ensure that Assembly Stools are removed out of the way.

**Note:** When Doka Fan unit is in its vertical position care must be taken as the Fan unit will open up. Ensure no personnel is standing under the Unit.



**Step 14:** Crane the Doka Fan unit on to the slab in a controlled manner ensuring that Slab Attachments are lowered on to the slab first.

**Note:** Care to be taken not to expose the operatives to open edge. All operatives must be trained and competent equipped with all necessary Personal Protective Equipment.

Note: Edge Protection removed for clarity.

**Step 14(XW):** Crane the Extra Wide Doka Fan unit on to the slab in a controlled manner ensuring that the inner tube is lower into the Flexi Attachment.

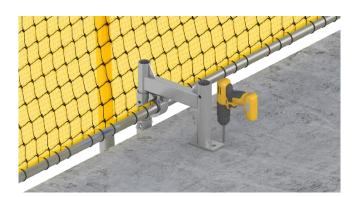
Flexi attachments are pre-fixed onto edge of slab prior to craning the fans.

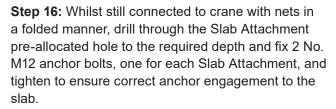
**Note:** Care to be taken not to expose the operatives to open edge. All operatives must be trained and competent equipped with all necessary Personal Protective Equipment.

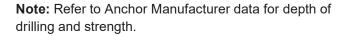


**Step 15:** Ensure that at this stage the Crane is still attached to the Fan unit and that the Fan unit is located in the correct position for connection to slab.



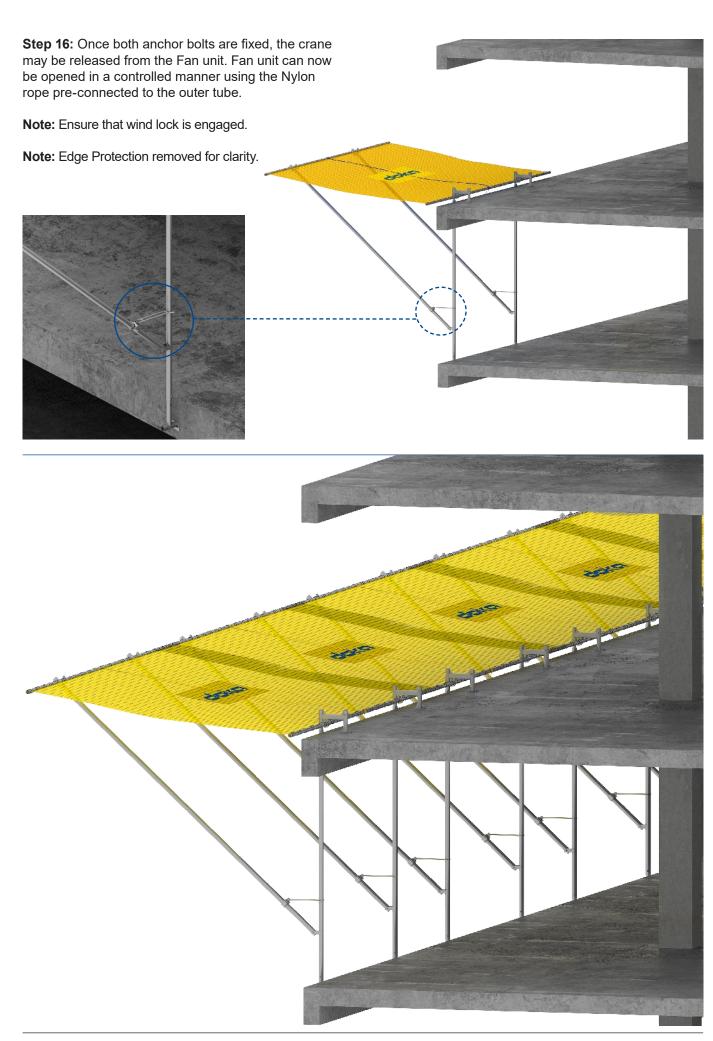












#### **Overlap**

To ensure total coverage of gaps between Doka Fan units, the Fans must either be laced together or overlapped. Using the customary method of overlap, the lower units must be installed prior to upper units as indicated in the sketch below. This method of overlap allows for easy access when folding units for craneage. The overlapping is achieved automatically using the adjustable coupler when used in conjunction with Slab attachment.

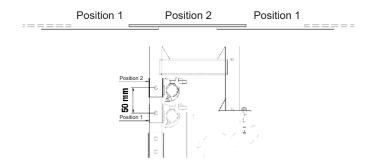
When using other attachments (Wall or Flexi attachments), the Fan units are simply stack on top of one another

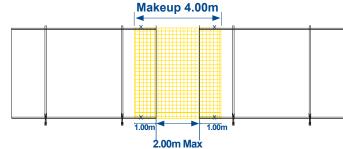
### **Makeup Units**

When it is not possible to overlap the Doka Fan the use of a "makeup unit" will cover the empty space between them and allows a full coverage of the edge protection.

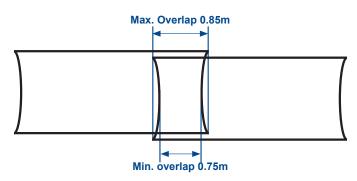
For makeup units typically the standard net unit with 4.00m length is used.

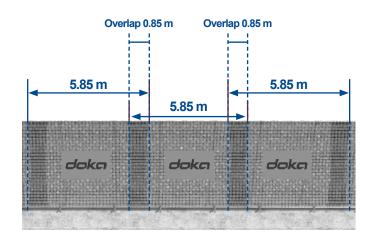
The makeup unit will be connected with 2 swivel couplers to the standard Doka Safety Net Fans on each side. A min. overlap of 1.00m on each side needs to be maintained.

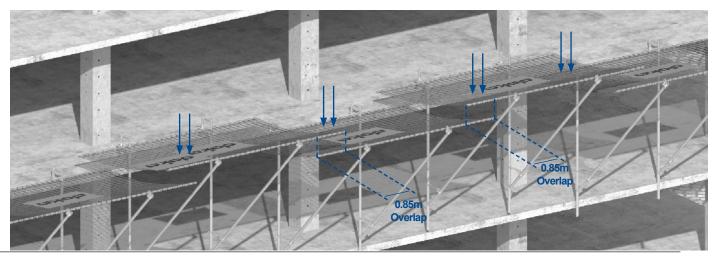


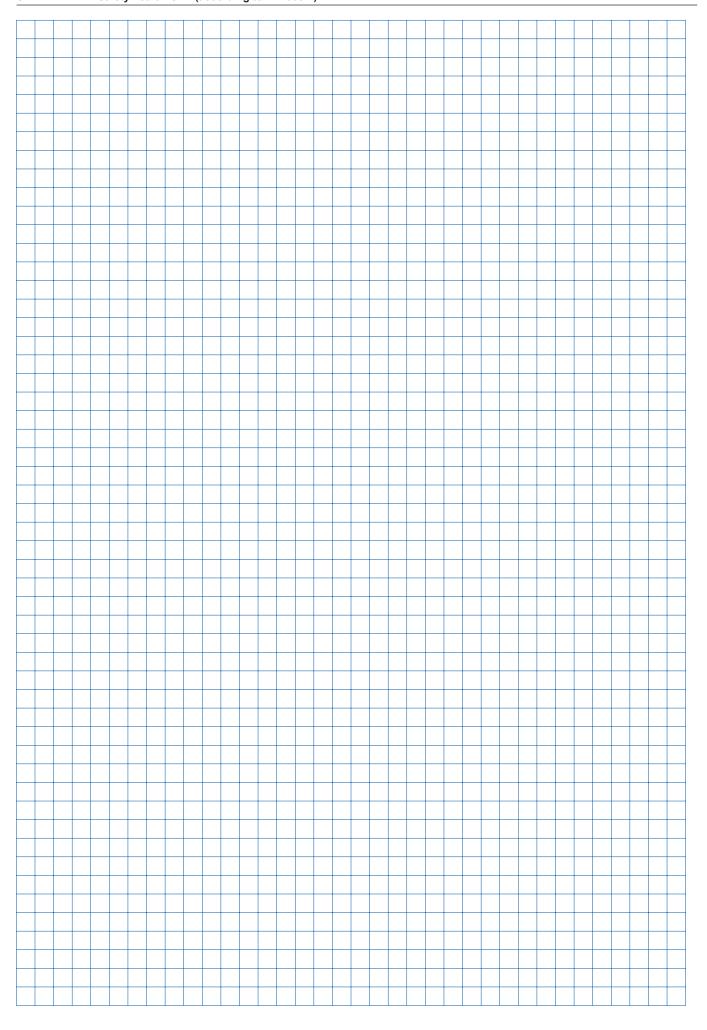


The extent of overlap between Doka Fan units determines the effective length of unit on plan. To maintain the minimum overlap of 0.75m between Doka Fan units as required by EN-1263, it is recommended to overlap the units at 0.85m as the nets are narrower in the middle.









#### Additional area of use

## **Wall Attachment Application**

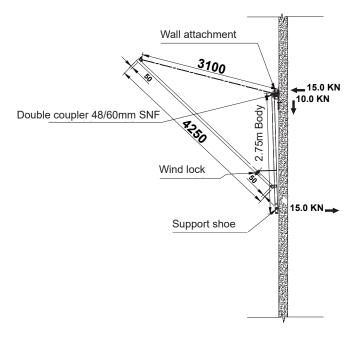
Enables anchor connection of the Doka Fan to walls and vertical surfaces. Key hole enables pre-drilling for anchors.

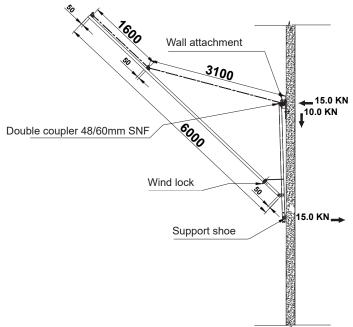
Locking bolt ensures secure positioning of the Fan.



Description	Wt.(kg)
Slab attachment SNF	2.40
Bolt M12x90 SNF	0.11







# **Slab Attachment Flat Application**

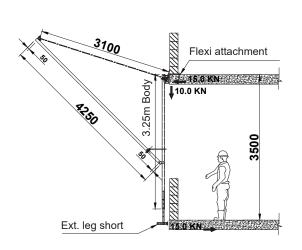
Enables anchor connection of the Doka Fan to slabs whilst allowing block work or similar operation on the slab edge.

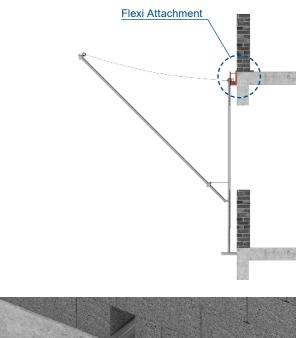
Flexi Attachment can be installed ahead of the Fan installation enabling speedy erection.

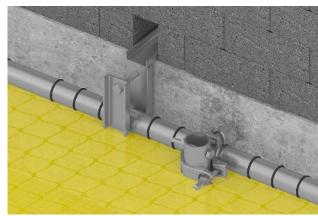
Locking bolt ensures secure positioning of the Fan.

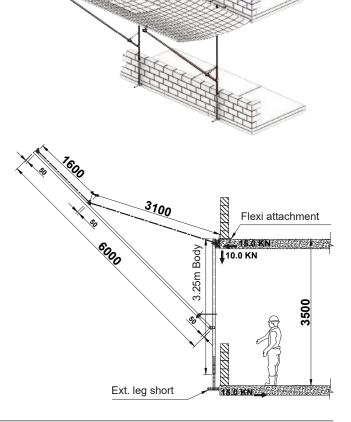


Description	<b>Wt.</b> (kg)
Slab attachment flat SNF	2.40
Bolt M12x90 SNF	0.11







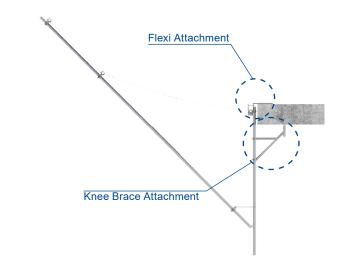


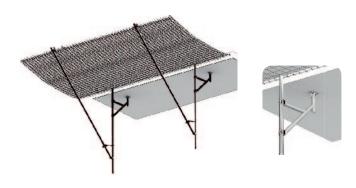
#### **Knee Brace Attachment**

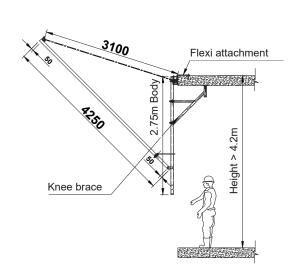
Used to support the Doka Fan from the underside of the slab. Twin coupler connection provides infinite adjustment. Most suitable where floor-to-floor height exceeds the limits of the extension leg or where

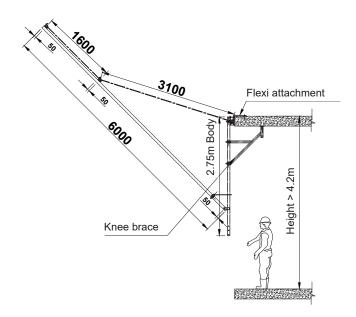


Description	<b>Wt.</b> (kg)
Knee brace SNF	7.10
Bolt M12x90 SNF	0.11







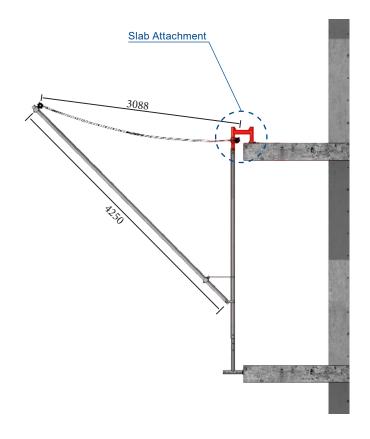


## **Slab Attachment**

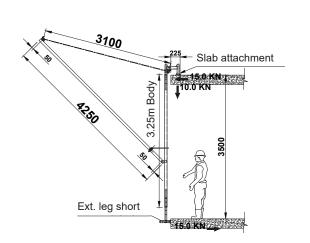
Used to mount Doka Fan on top of cast concrete slab. 16.00mm Ø,12.00mm Ø drill hole to accommodate M16 or M12 Anchor Bolt.

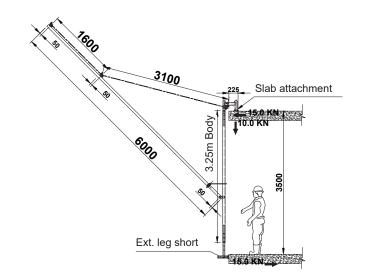
Socket tube enable connection of edge protection





Description	Wt.(kg)
Slab attachment SNF	4.50
Bolt M12x90 SNF	0.10
Hexagon nut M12 SNF	0.01

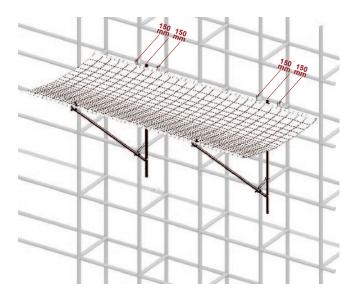




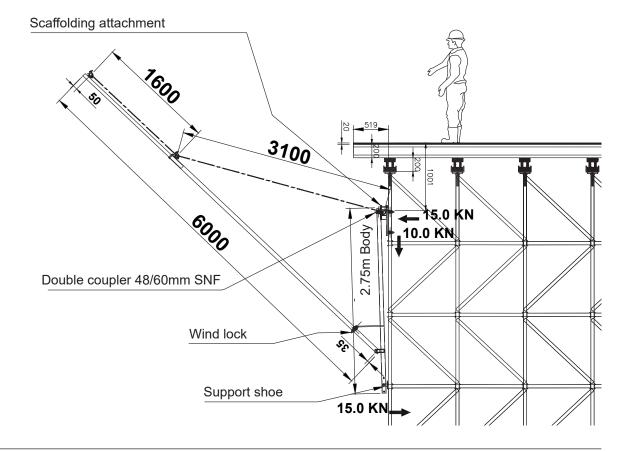
#### **Scaffold Attachment**

Used to connect the Doka Fan to scaffold and shoring structures. Connection must be made to the vertical members and user must ensure that loading imposed on the scaffold structure are designed and catered for.

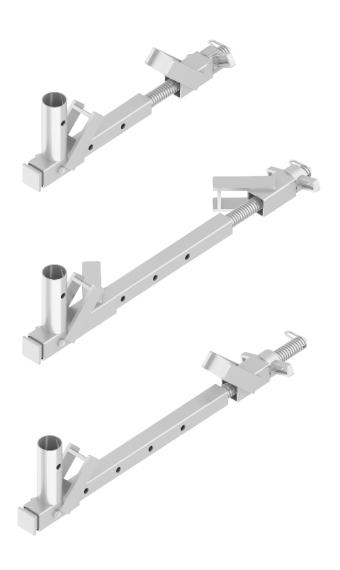


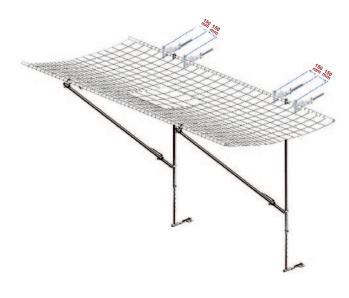


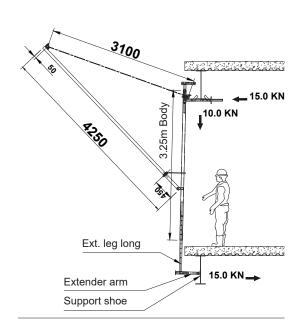
Description	Wt.(kg)
Scaffold attachment SNF	3.35
Bolt M12x90 SNF	0.11

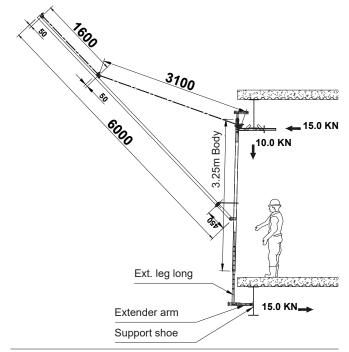


## **Steel Jaw Clamp Application**









# **Wind Loading**

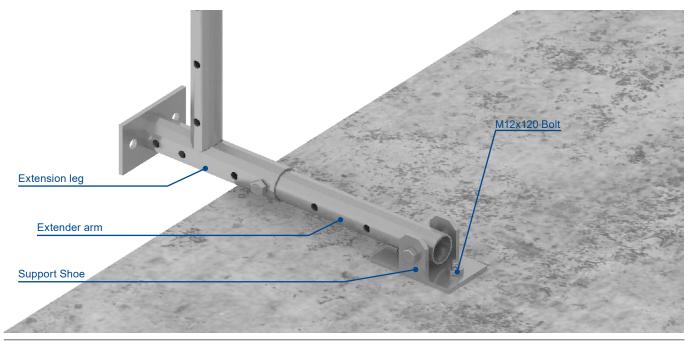
The following factors have a direct impact on the imposed wind loading on Doka Fans.

- · Use of Fine mesh debris netting.
- · Topography of the building.
- · Height of the building.

Item No.	Standard	3.1m wide	Extra Wide 4.7m wide		
	Wind Lock	Tie Down	Wind Lock	Tie Down	
5-20 (Up to 100m high)	_	_	<b>✓</b>	_	
20-30 Stories (100 - 135m high)	<b>✓</b>	_	<b>✓</b>	_	
30-40 (135 - 175m)	<b>✓</b>	_	<b>✓</b>	<b>✓</b>	
40-50 (175 - 225m)	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	
+50 (+225m)	• 🗸 *	• -	• 🗸 *	• •	

- \* Doka Recomended triple Body Fans
- Contact Technical Office

Particular attention must be paid on corner Fan units where the vortex wind has higher damaging affect.



### Safety Net Fan net label

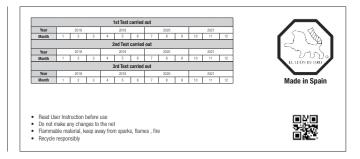
Safety Net Fan nets are manufactured in accordance to EN1263-1

Each net is supplied with a label carrying important information for the end user. All manufacturer's data and traceability Identification number is supplied on the label.

End user must ensure that In accordance EN1263-1 the nets are tested for UV degradation.

Test Tags are provided with nets for this purpose. Due date for testing is marked on the label. If in doubt, please contact Doka.

Designation	Standard	System	Class	Mesh Size	Mesh Configuration	Level	Net Size(m)	Testing Agency	Date of Prototype test	Rated Load	Net Material
Safety Net	EN1263-1	Т	B-1	M-060	Q	L	6.30m x 3.10m	TÜV SÜD ME	21° May 2018	100KG from 7m(7.0KJ)	HTPP
Safety Net	ANSI A10.37			1-2 3/8"		L	20' 8" x 10' 2"	TÜV SÜD ME	21° May 2018	100 lbs from 23 ft (2300 ft lbs) 45KG from 7m(3.1KJ)	HTPP
EN 1263-1:2014     ANSI A10.37-2016 Register Number:						TSS					
Date of Production:											
Date of Delivery:						www.tss-me.com					
Article No. (TSS): TSFNTBYN03163					WARNING!						
							THIS SYSTEM IS NO	T A PERSON	NEL NET AND DOE	S NOT CONFORM TO ANSI A10.	11



## **Lifting Sling Label**

Lifting slings are classed as lifting accessories. In accordance with regulation of each country or territory, thorough examination MUST be conducted by the end user every 6 months (recommended) or 12 months.

Lifting Slings are manufactured to EN 1492-1 with a Safe Working load of 250Kg

(F.O.S of 7:1 against failure). Note loading capacity in each orientation on label. If in doubt , please contact Doka.





## **Safety**

# Doka Safety Net Inspection Check list

- 1. Ensure that all Fan units are correctly anchored or attached to the structure.
- 2. Check that there are no gaps larger than 100mm between Fan unit and structure.
- 3. Ensure that Fan overlaps are 0.75m minimum at joints.
- 4. All Fans must be clear of debris and fallen objects.
- 5. Wind lock where applicable must be engaged.
- 6. Check that on high structures Fan units are anchored top and bottom.
- Check that all extension legs bear against the slab below.

All Safety Net components must be inspected by a competent person prior to re-use.

A record inspection of the annual testing of Safety Nets must be kept by the customer.

Following the fall of an object or person in the Nets, the unit must be inspected by a competent person prior to re-use.

# **Annual inspection of Doka Safety Net Fans**

- All Doka Nets are supplied complete with 3 test tags, each with a same unique ID as the safety net.
- It is the requirement of the EN standard that the nets are tested at least once a year for UV degradation. Testing facility is offered by Doka for their customers.
- Depending on the country of use the expected life span of safety nets may be from 2-4 years.
- Due dates for testing of tags are quoted on the safety net label. Otherwise test have to be carried out every 12 months following the first use
- Safety Nets that fail the test or inspection MUST be destroyed.

#### **Doka FAN Cleaning Procedure**

# Important guidance notes for Doka Safety Net Fan cleaning:

- It is strongly recommended that the Fan units are inspected and cleaned on a weekly basis. For inspection guidance notes refer to weekly inspection guidelines.
- 2. A site risk assessment must be carried out for this process if deemed necessary.
- Before starting the cleaning process, the area below the Fans must be cordoned off to prevent any workers entering this area.
- 4. Ensure that all workers involved in the cleaning have adequate PPE and Fall Protection Equipment, are competent in the use of such equipment and are trained in working at height. All cleaning process must be carried out from behind the edge protection. If edge protection must be removed for cleaning, workers must wear fall protection equipment. The open areas of edge protection must also be cordoned off to prevent un-authorised entry of other workers.
- Using the folding rope provided, fold the Fans so that the debris is bagged into the fan net, ensuring that no object is too close to the edge of the fan nets which may accidentally fall off the edge.
- 6. First remove the heavy objects from the net e.g. Blocks, timber beams, steel props etc, and place inside a bucket for safe disposal.
- 7. After removal of heavy objects, life the fan nets and throw all small debris on the edge of the slab, ensuring no debris fall from the gaps between slab and fan units. Gaps may also be covered with cloth prior to this process. Brush off debris and move into bucket for safe disposal.
- 8. In case of fall of fresh concrete on the net, it must be washed and cleaned immediately.
- 9. In case of concrete on the net, it must be changed.
- Fans nets must be inspected for any damage or tear after cleaning.
- 11. Unfold the Fan net into open position.

# Doka Fan First Installation Inspection checklists:

Important instructions & notes for Doka Safety Net Fan system:

- Make sure all couplers and bolts are tightened before craning.
- Ensure that lifting slings are installed correctly. 2No. Per unit.
- Fans must be connected to the structure using correct attachment as specified by Doka using correct anchors as specified by Doka.
   Refer to User instruction and drawings.
- Windlocks must be installed at the correct position and engaged when Fan unit is open.
   See user instruction for more detail.
- Ensure that the structure upon which the Fans are installed on(Slab, walls, scaffolding etc) is capable of carrying the imposed loads.
   Check with Eng on site.
- Ensure Minimum overlap of 0.85m between Fan units.
- For tall structures and structures exposed to heavy wind load, ensure that Fan units are tied top and bottom. See user instruction fo further guidance.
- Installers must ensure that crane operator is lifting the units in position with the guidance of a crane banksman and all parties are communications between the involved parties are in place.

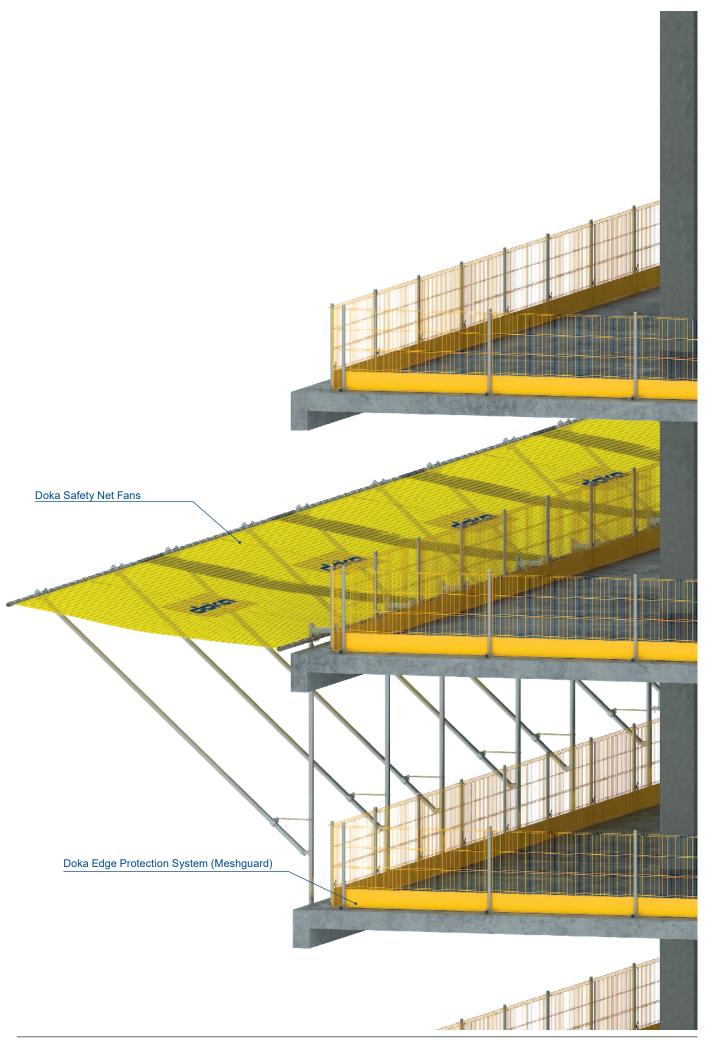
Date of Installation: Location of Installation: Inspection carried out by: Date & Signature: Project Name:

# Doka Fan Weekly Inspection checklist:

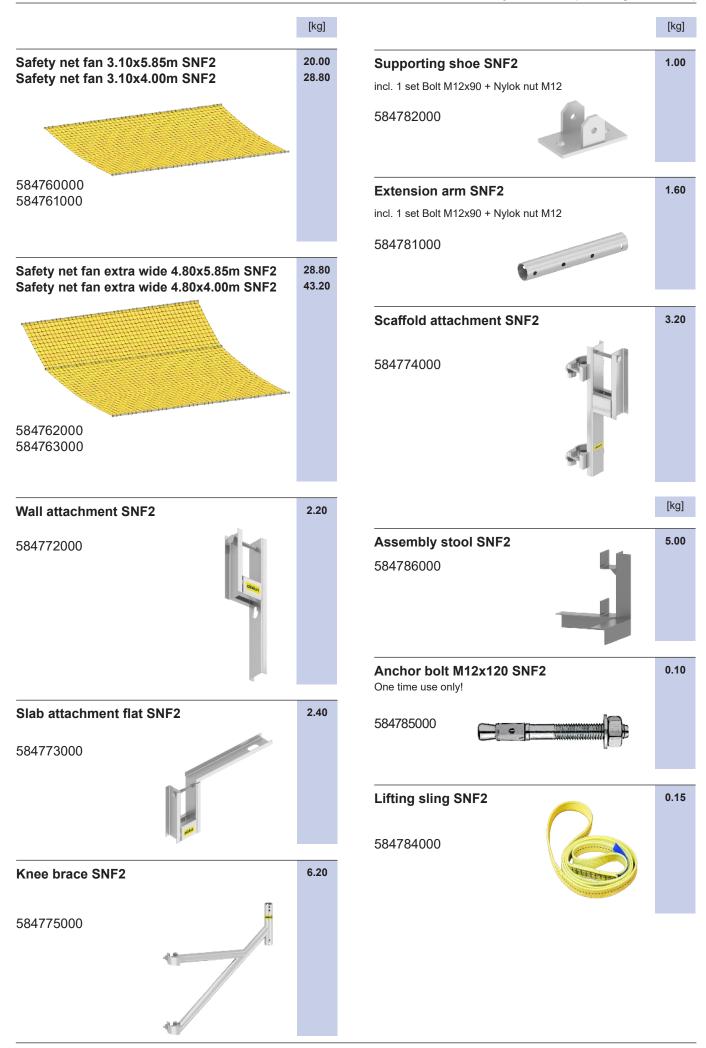
Important instructions & notes for Doka Safety Net Fan system:

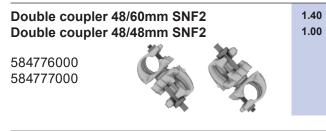
- Ensure lifting slings are intact and under 6 months old. Always use purpose made Lifting Slings.
- Ensure Anchor bolts are tight and un tampered with.
   Always use Doka Specified Anchor Bolts.
- Ensure there are no wind damage to the Fan Metal structure and wind locks. No Bending of tubes should be visible.
- Fold Fans in upright position and secure if heavy winds are expected.
- Fan nets must be clean of any concrete and debris.
   Cleaning is required immediately if fresh concrete is in the net.
- Fan nets must be inspected for any damage or tear.
   Incase of fall of heavy objects in the Fan, Doka must be notified.
- Ensure Minimum overlap of 0.75m between Fan units.

Date of Installation:
Location of Installation:
Inspection carried out by:
Date & Signature:
Project Name:

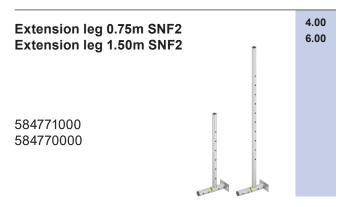


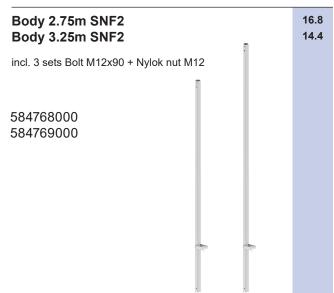


















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With more than 160 sales and logistics facilities in over 70 countries, the Doka Group has a highly efficient distribution network which ensures that equipment and technical support are provided swiftly and professionally.

An enterprise forming part of the Umdasch Group, the Doka Group employs a worldwide workforce of more than 6000.

