

AMF Sonic Ceiling Rafts

THERMATEX® Sonic modern

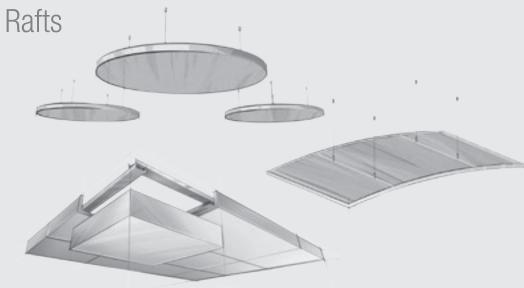
THERMATEX® Sonic arc

THERMATEX® Sonic sky

THERMATEX® Sonic element

HERADESIGN® Sonic modular HERADESIGN® Sonic element

TOPIQ® Sonic element











Once buildings of all types are completed and occupied, subsequent acoustic optimisation often seems very difficult. Installation of a suspended ceiling isn't always an option to ensure a comfortable acoustic climate and less reverberation. Ceiling rafts from Knauf AMF can be quickly and simply retrofitted, efficiently avoiding unwanted sound configurations in rooms and at the same time are true objects of design.



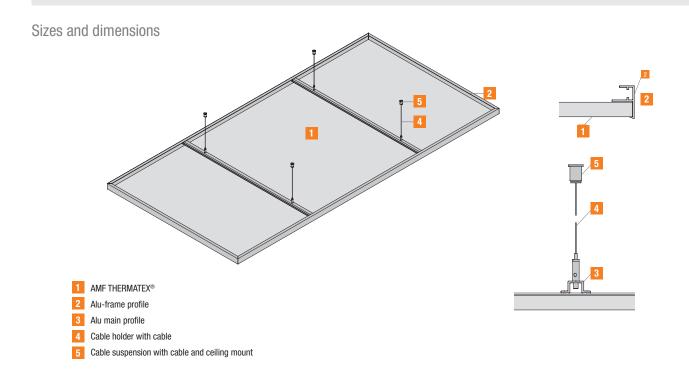
THERMATEX® Sonic

Product Range

	Product	Thickness	Weigl	nt [kg]	Sizes L x W
	Product	[mm]	m²	pcs.	[mm]
		43		7	1200 x 600
<u>.o</u>	THERMATEX® Sonic modern	43		13	1200 x1200
(® Soni	THERMALEX® SOUIC MODERN	43		18	1800 x 1200
MATE		43		23	2400 x 1200
THERI	THERMATEX® Sonic arc	35		16	1910 x 1180
amme	THERMATEX® Sonic sky	40	8		1200 x 1200
progra		40	8		2400 x 1200
Product programme THERMATEX® Sonic		40	8		3600 x 1800
_ ₾	TUEDMATEV® Conic clament	40	9		max. ø 1200
	THERMATEX® Sonic element	40	9		max. 1200 x 1200

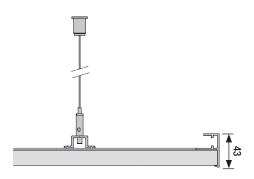
Other sizes on request

THERMATEX® Sonic modern





Section THERMATEX® Sonic modern

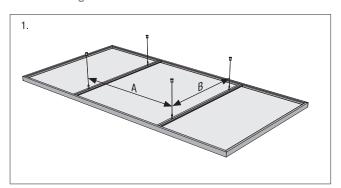


The raft is suspended by four cables. The suspension system enables the raft to be quickly and exactly installed and aligned. Every raft is delivered with suspension system.

They consist of:

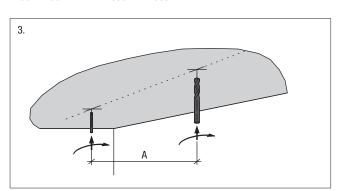
- · Cable hanger with cable holder
- Cable (standard length 1.0 m, other cable lengths and ceiling mounts on request)
- · Ceiling mount
- Building material class: A2-s1,d0 as per EN 13501-1 (or C-s1,d0 depending on printed motif)
- · Sound absorption: EN ISO 354
- Humidity resistance: up to 90% relative humidity
- Frame colours: Alu anodised E6-EV1, white similar to RAL 9016, other colours on request
- Surface: fleece-coated white or motif printed

Installation guidelines and advice

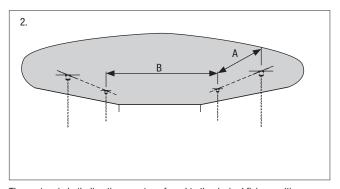


Fixing centres for sizes:

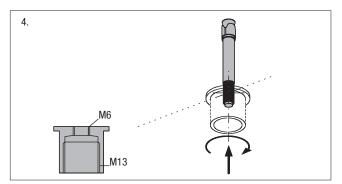
	Α	В
1200 x 1200 mm	500	800
1200 x 1800 mm	700	800
1200 x 2400 mm	1000	800



Depending on the soffit material and type of fixing, drilling may be necessary.



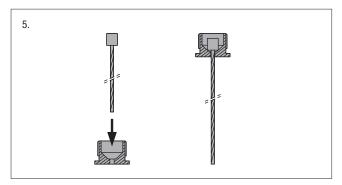
The centres in both directions are transferred to the desired fixing positions.



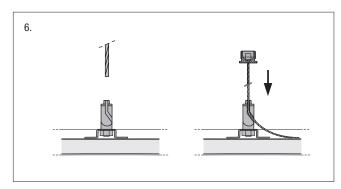
The included ceiling mounts feature an M6 internal thread for installation to the ceiling (soffit). Suitable fixings should be chosen for the specific installation and the type of soffit in consultation with the screw/plug manufacturer.

Possible fixings: M6 bolt or appropriate screw and plug combination

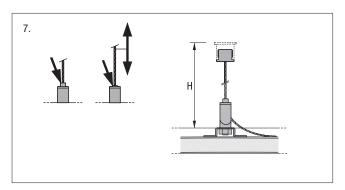




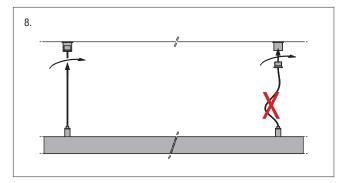
Thread the cables with the unpressed end through the mounting cap.



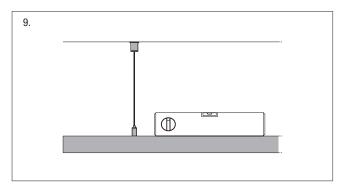
Subsequently, the cables are threaded through the adjustable, pre-installed cable holders.



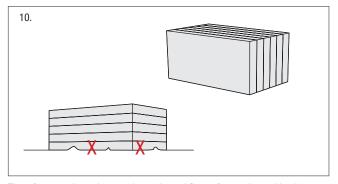
By releasing the clamping mechanism, the required suspension height can be set exactly before installation.



To install the rafts, the mounting caps should be completely screwed into the pre-installed ceiling fixings by two people. The raft should be supported equally through all four cables, no loose cables are permitted.



Finally, the entire ceiling raft is aligned



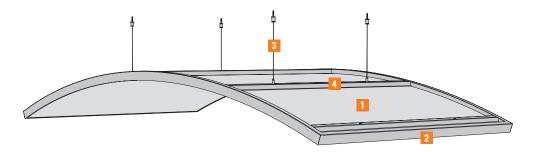
The rafts must always be stored on a dry and flat surface and can either be stacked (max 8 pieces) or stand on the long edge (no stacking permitted). Mechanical stress (impacts etc.) can cause damage to the product.

During transport and installation of ceiling rafts, the rafts must always be carried by two people. When removing the packaging and at all times when handling the rafts, clean white cotton gloves should be worn. Ensure that only the frames of the ceiling rafts are handled.



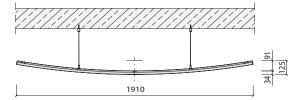
THERMATEX® Sonic arc

Sizes and dimensions



- 1 AMF THERMATEX®
- 2 Frame system 15 x 34 x 7 mm / size 1910 x 1180 mm, radius approx. 5.0 m
- 3 Cable holder with cable
- 4 Cross brace to fix cable hanger

Section THERMATEX® Sonic arc convex



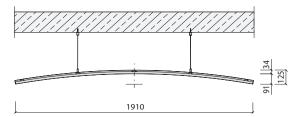
Delivery

The raft is suspended by four cables. The suspension system enables the raft to be quickly and exactly installed and aligned. Every raft is delivered with suspension system.

They consist of:

- Cable hanger with cable holder
- Cable (standard length 1.0 m, other cable lengths and ceiling mounts on request)
- Ceiling mount

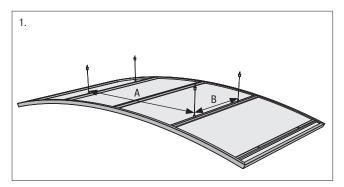
Section THERMATEX® Sonic arc concave



Properties

- Sound absorption: EN ISO 354
- Humidity resistance: up to 90% relative humidity
- Depth: 91 mm
- Frame colours: white similar to RAL 9010, anodised, all RAL colours on request
- Surface: fleece-coated (black, white, creme, silver, other surfaces on request)

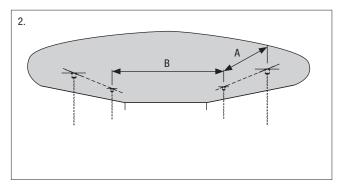




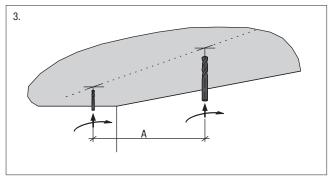
Fixing centres:

A = 900 mm

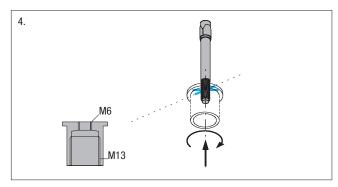
B = 600 mm



The centres in both directions are transferred to the desired fixing positions.



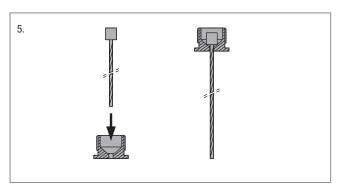
Depending on the soffit material and type of fixing, drilling may be necessary.



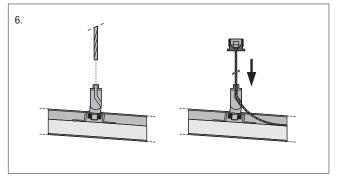
The included ceiling mounts feature an M6 internal thread for installation to the ceiling (soffit). Suitable fixings should be chosen for the specific installation and the type of soffit in consultation with the screw/plug manufacturer.

Possible fixings:

M6 bolt or appropriate screw and plug combination

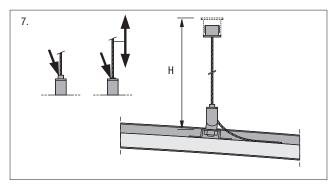


Thread the cables with the unpressed end through the mounting cap.

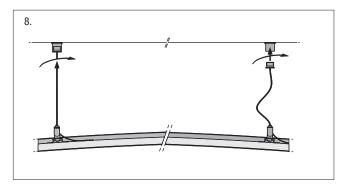


Subsequently, the cables are threaded through the adjustable, pre-installed cable holders.

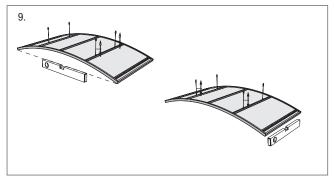




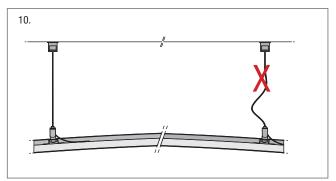
By releasing the clamping mechanism, the required suspension height can be set exactly before installation.



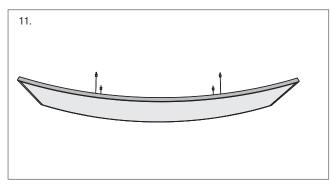
To install the rafts, the mounting caps should be completely screwed into the pre-installed ceiling fixings by two people.



Finally, the entire ceiling raft is aligned.

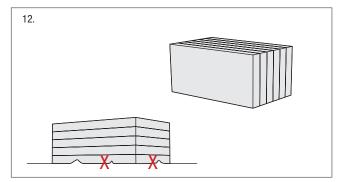


The rafts should be supported equally through all four cables, no loose cables are permitted.



The steps apply to both convex and concave ceiling rafts, regardless of the version.

Fixing, installation and handling is exactly the same for convex and concave rafts.



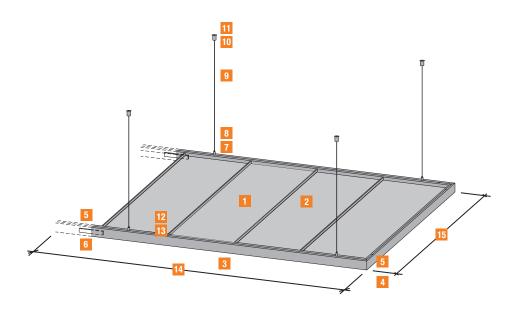
The rafts must always be stored on a dry and flat surface and can either be stacked (max 8 pieces) or stand on the long edge (no stacking permitted). Mechanical stress (impacts etc.) can cause damage to the product.

During transport and installation of ceiling rafts, the rafts must always be carried by two people. When removing the packaging and at all times when handling the rafts, clean white cotton gloves should be worn. Ensure that only the frames of the ceiling rafts are handled.

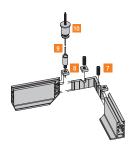


THERMATEX® Sonic sky

Sizes and dimensions



Frame construction with corner connectors



Frame construction with corner connectors



Tiles:

- 1 AMF THERMATEX Acoustic alternative, elements as per System F
- 2 Main profile according to span table System F

Frame

- 3 Aluminium L-Profile 40 x 30 mm
- 4 Corner connector
- 5 Adjustment screws
- 6 Splice

Hanger:

- 7 Slot nut
- 8 Lower cable holder
- 9 Cable
- 10 Upper cable holder
- 11 Ceiling mount

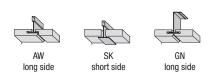
Cross bracing (for lengths over 3.00 m)

- 12 Angle bracket 50 x 50 x 1.75 mm
- 13 Screws 3.5 mm x 13.5 mm

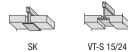
Dimensions:

- 14 Length as per client requirements
- 15 Width dependent on tile size, max. 2500 mm

Edge configuration (plank tiles)



Edge configuration (square tiles)



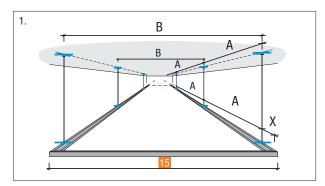
Profile		Height [mm]	Thickness [mm]	Tile size [mm]
PQZ 19/50		50	0.5	300 x 1800
T 24/38		38	0.4	300 x 1500

Profile dependent on selected tile type and tile size

Properties

- Building material class: A2-s1,d0 as per EN 13501-1
- Sound absorption: EN ISO 354
- Humidity resistance: up to 90% relative humidity
- Frame colours: Alu anodised E6-EV1, white similar to RAL 9016, other colours on request
- $\bullet \quad \text{Surface:} \quad \text{THERMATEX$^{\tiny{\$}}$ Alpha (black, white, creme, silver)}$
 - THERMATEX® Alpha HD fleece laminated (white)
- Edges: VT, AW, GN



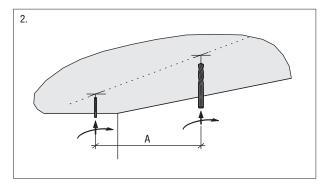


Fixing centres:

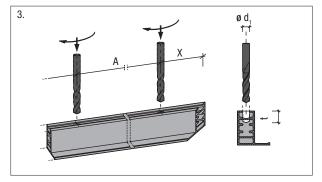
B = 15 - 16 mm

A ≤ 1500 mm

 $X \le 150$ mm (max. distance from perimeter)



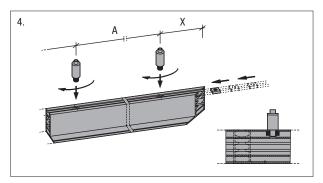
Depending on the soffit material and type of fixing, drilling may be necessary.



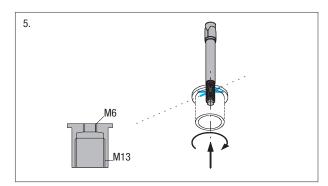
Profile holes:

ø d1 = 6,0 mm

 $t \ge 12 \text{ mm}$

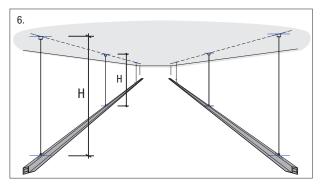


All suspension screw connections have to be secured with a chemical screw-lock.



The included ceiling mounts feature an M6 internal thread for installation to the ceiling (soffit). Suitable fixings should be chosen for the specific installation and the type of soffit in consultation with the screw/plug manufacturer.

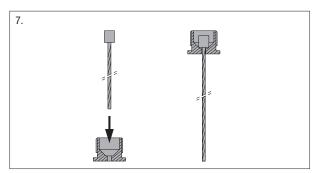
Possible fixings: M6 bolt or appropriate screw and plug combination.



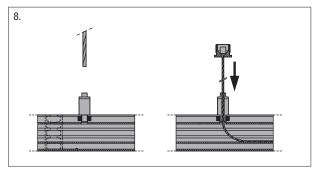
Lower edge of soffit – lower edge of ceiling raft = H + 40 mm $\,$

The rafts must be suspended from the soffit by using approved fixings (plugs, screws, wires, etc.). Each fixing (plug, screw) needs to be mechanically pretested to a loading of 750N using appropriate testing equipment and this testing should be documented. Additional loads such as light fittings, signs, etc. have to be separately supported from the soffit using additional means. Note that the requirements of EN 13964 section 5.3 (testing of metal suspension and connecting components) should be observed.

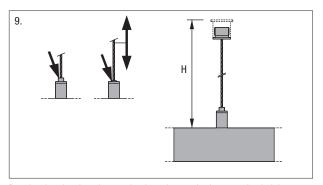




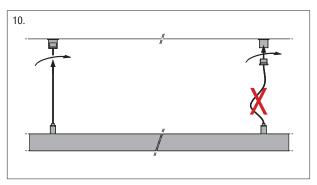
Thread the cables with the unpressed end through the mounting cap.



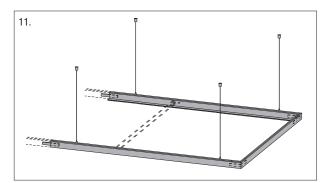
Subsequently, the cables are threaded through the adjustable, preinstalled cable holders.



By releasing the clamping mechanism, the required suspension height can be set exactly before installation.

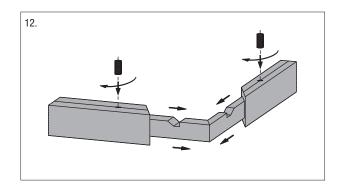


The rafts should be supported equally through all four cables, no loose cables are permitted.

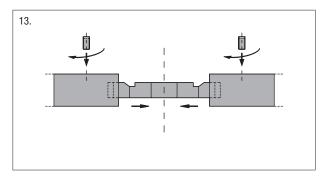


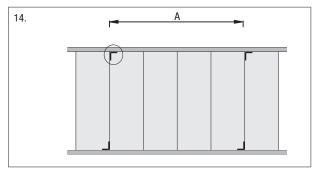
Corner and splice cross bracing:

- Installation takes place after each element is installed.
- The cross braces are to be fixed across the full raft (same raft width across the entire length)
- Exact lay out is required for a flawless joint pattern.



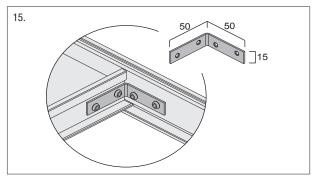




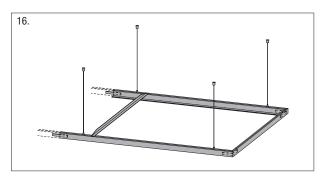


Cross bracing: $A \le 2000 \text{ mm}$

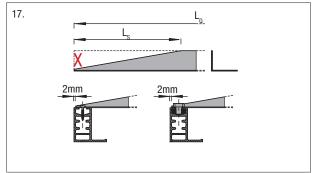
For rafts with a complete length of over 3.0 m, screw the reinforcement profiles to the frame profile at regular intervals \leq 2000 mm.



The necessary 50 x 50 x 15 x 1.75 mm angle brackets as well as the $3.5\,x\,13.5$ mm screws are included in the delivery.

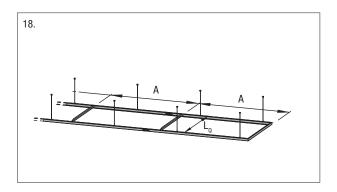


The cross profiles shown, including fixings, are not included in the standard delivery.

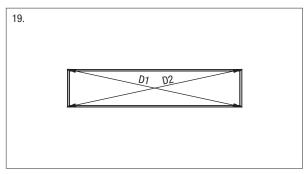


Cross bracing: $LQ = \frac{15}{10} - 4 \text{ mm}$ $A \le 2000 \text{ mm}$

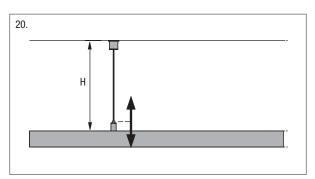
Angle of cross bracing: $L_s \sim 100 \text{ mm}$



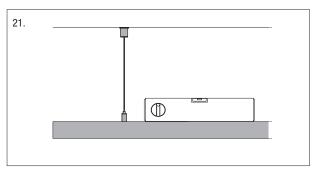




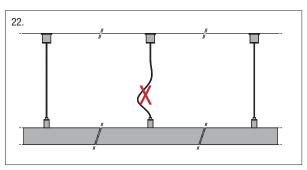
D1 = D2



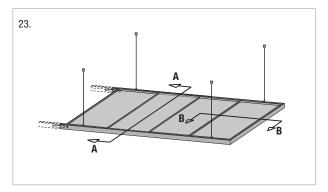
After installing the suspension (cable hanger to raft and ceiling mount including cable), the suspension height can be checked and when necessary corrected. The raft is then fixed on all hangers by two people.



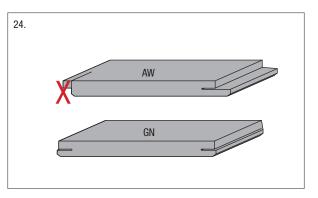
The entire ceiling raft is then aligned.



The raft should be supported equally through all four cables, no loose cables are permitted.

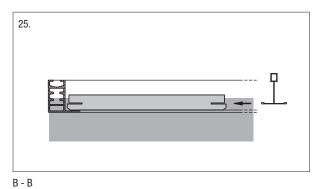


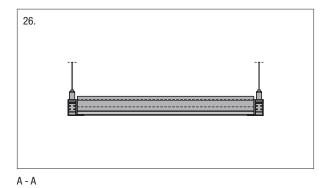
The ceiling tiles are inserted.

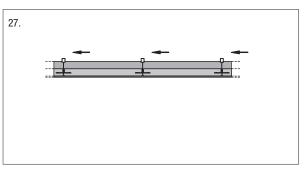


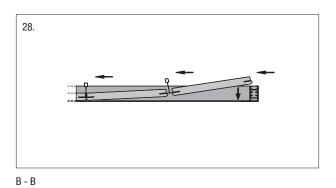
First tile









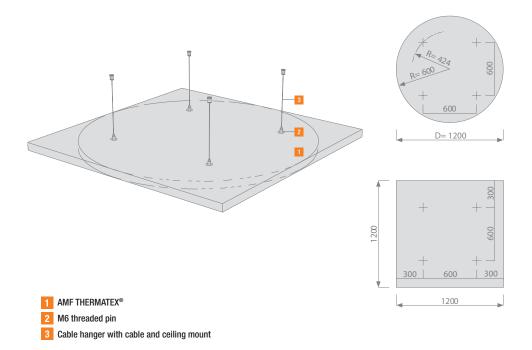


B - B

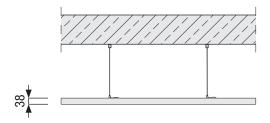


THERMATEX® Sonic element

Sizes and dimensions



Section THERMATEX® Sonic element



Delivery

The raft is suspended by four cables. Depending on shape, more hangers may be required, or three may be sufficient. The suspension system enables the raft to be quickly and exactly installed and aligned. Every raft is delivered with suspension system.

They consist of:

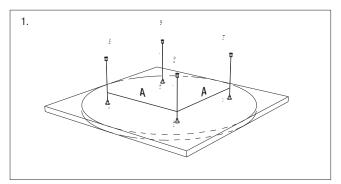
- Cable hanger with cable holder
- Cable (standard length 1.0 m, other cable lengths and ceiling mounts on request)
- · Ceiling mount

Additionally, each package contains a template for transferring the fixing points.

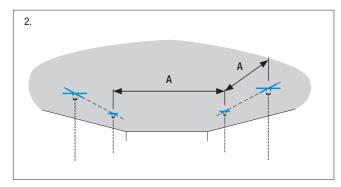
Properties

- Sound absorption: EN ISO 354
- Humidity resistance: up to 90% relative humidity
- Shape: Rectangular and circular
- Colours: white similar to RAL 9010
- Surface: all over fleece-coated white, coloured edges optional, other colours on request

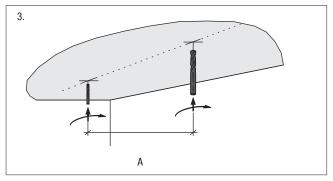




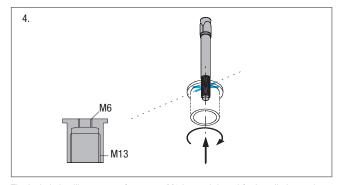
The steps apply to both circular and square/rectangular ceiling rafts, regardless of the version. The fixing centres for circular and square/rectangular rafts is $A=600\ mm$.



The centres in both directions are transferred to the desired fixing positions. The included template can be used for this.

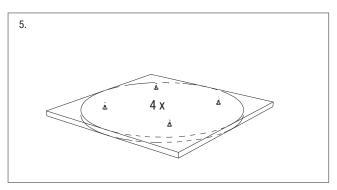


Depending on the soffit material and type of fixing, drilling may be necessary.

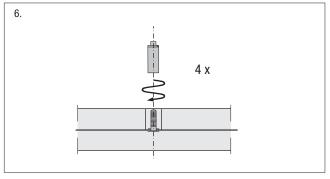


The included ceiling mounts feature an M6 internal thread for installation to the ceiling (soffit). Suitable fixings should be chosen for the specific installation and the type of soffit in consultation with the screw/plug manufacturer.

Possible fixings: M6 bolt or appropriate screw and plug combination.

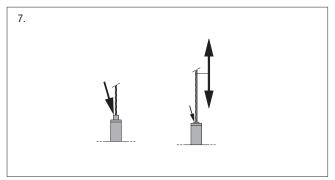


The four pre-installed M6 threaded pins serve as fixing points.

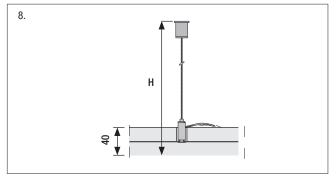


The cable hangers included in the delivery should be fully twisted on to these and the cable threaded through.

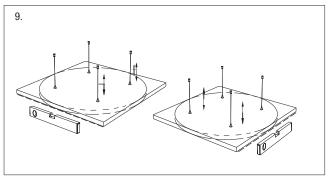




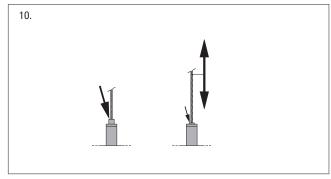
By releasing the clamping mechanism, the required suspension height can be set exactly before installation.



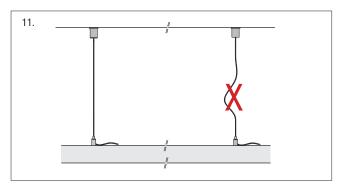
After installing the suspension (cable hanger to raft and ceiling mount including cable), the suspension height can be checked and when necessary corrected. The raft is then fixed on all hangers by two people.



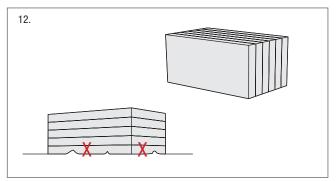
The entire ceiling raft is then aligned.



The cable hangers can be adjusted at any time. By releasing the clamping mechanism, the required suspension height can be set exactly.



The raft should be supported equally through all four cables, no loose cables are permitted.



The rafts must always be stored on a dry and flat surface and can either be stacked (max 8 pieces) or stand on the long edge (no stacking permitted). Mechanical stress (impacts etc.) can cause damage to the product. During transport and installation of ceiling rafts, the rafts must always be carried by two people. When removing the packaging and at all times when handling the rafts, clean white cotton gloves should be worn. Ensure that only the frames of the ceiling rafts are handled.

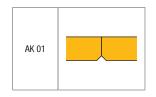


HERADESIGN® Sonic

Product Range

	Product		ess Weight [kg/pcs.]		Edge configuration	System component	Size L x W x H [mm]		
		25		5.8		8.8		1) Corner component	600 x 600 x 125
				4.9	superfine A2	7.8	AK-01	2) Side component 600	600 x 600 x 125
nodular	HERADESIGN® superfine / HERADESIGN® superfine A2		superfine	9.8		15.5		3) Side component 1200	1200 x 600 x 125
® Sonic r			8	4.1		6.5		4) Standard 600	600 x 600
Product programme HERADESIGN® Sonic modular				8.1		13.0		5) Standard 1200	1200 x 600
ıme HER/	HERADESIGN® fine / HERADESIGN® fine A2	25	fine	6.3	fine A2	9.3		1) Corner component	600 x 600 x 125
program				5.4		8.2		2) Side component 600	600 x 600 x 125
Product				10.8		16.2	AK-01	3) Side component 1200	1200 x 600 x 125
				4.5		6.8		4) Standard 600	600 x 600
				8.9		13.7		5) Standard 1200	1200 x 600

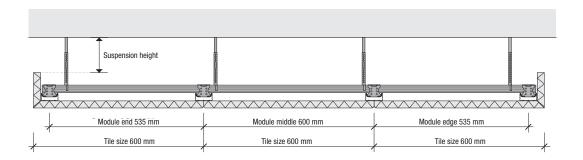
Edge Configurations



	Product	Thickness [mm]	Weight [kg/ceiling raft]	Edge configuration	Size L x W x H [mm]
<u> </u>	HERADESIGN® superfine	25	53.70	AK-01	2400 x 1200 x 125
SSIGN® element	neradesigns superine		27.10		1200 x 1200 x 125
HERADESIGN® Sonic element	HERADESIGN® fine	25	57.90	AK-01	2400 x 1200 x 125
₩ S			29.20		1200 x 1200 x 125

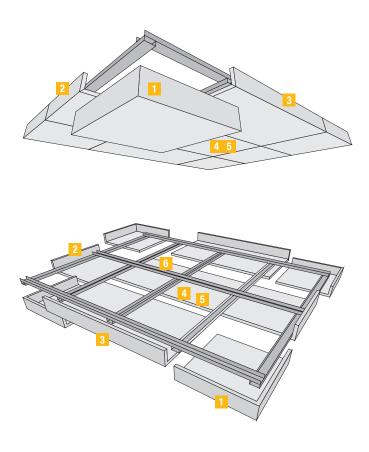
HERADESIGN® Sonic modular

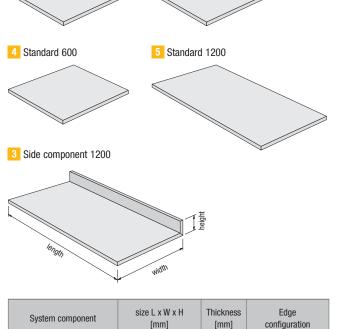
Sizes and dimensions





Sizes and dimensions





600 x 600 x 125

600 x 600 x 125

1200 x 600 x 125

600 x 600

1200 x 600

25

25

25

AK-01

AK-01

AK-01

AK-01

AK-01

Corner component

Side component 600

Side component 1200

Standard 600

Standard 1200

2 Side component 600

1 Corner component

Installation guidelines and advice

For the installation requirements see DIN 18168 "Lightweight ceiling linings and suspended ceilings", as well as EN 13964 "Suspended ceilings – requirements and test methods".

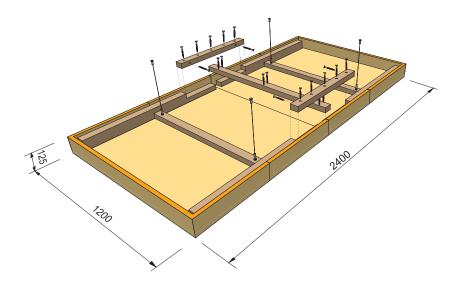
- Installation of primary profiles: centres according to System
 B 2.1/B 2.2. In the long direction, set one primary profile into each corner of the upstand of the ceiling raft.
- Distribute main profiles symmetrically in the module, a main profile in each corner of the upstand.
- A 10 mm gap should be ensured between the inside of the upstand and the cross profile.
- Screw patterns see chapter B 2.1/B 2.2.
- Begin tile installation from the middle of the raft.
- Push together and align acoustic tiles plank formats, across the profile direction and fix to the main profiles with HERADESIGN® screws. For each tile width and centre distance, two screws are required. For indoor swimming pools and vibrating constructions three screws.
- Note: Observe the necessary corrosion protection requirements.
- Square tiles: Observe the installation direction marked on the reverse of the tile when installing the tiles.

- Cross joints: four tile corners meet at one point, which means increased accuracy is required when installing!!
- Screws: HERADESIGN® screws. Corrosion protection must be determined
 by the prevailing room conditions. The screw heads must be set flush
 with the tile surface and when coloured HERADESIGN® screws are not
 used, the screw heads should be painted after installation with the
 delivered or equivalent paint.
- Acoustic overlays or films are installed step by step with the installation
 of the acoustic tiles. A PE film with a thickness of up to 30 µm does
 not affect the sound absorption of the underlying absorber and is
 recommended as trickle protection for mineral wool overlays
- Damaged or soiled tiles or tiles with colour deviations may not be installed. Tiles with edge configurations for T-profile installations can not be used, as the tile size is smaller than the module.
- · Seek professional advice where necessary.



HERADESIGN® Sonic element 1200/2400

Sizes and dimensions

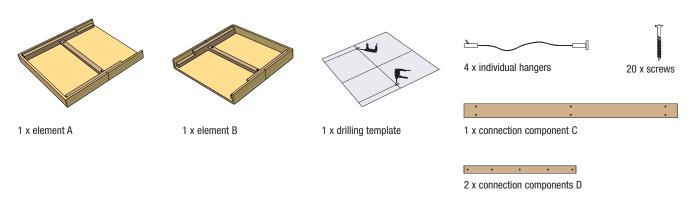


Delivery

The set delivered consists of:

- Element A with preassembled grid structure and hanger base
- Element B with preassembled grid structure and hanger base
- 3 x connecting elements with the appropriate number of connecting screws, supplied in a plastic bag.
- 4 x individual hangers (hanger height < 500 mm) in a plastic bag
- Elements A and B from different sets are not compatible and should only be used as part of the set provided.

Product	Size L x W x H	Weight kg/ceiling raft
Heradesign® superfine	2400 x 1200 x 125 mm	53.70
Heradesign® fine	tile thickness 25 mm	57.90

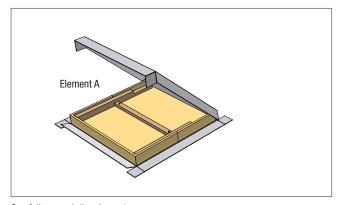


Properties

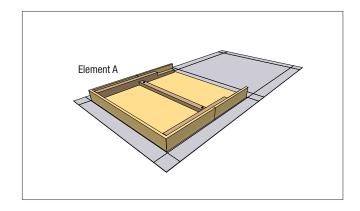
- The ceiling raft set is not suitable for use in indoor swimming pools or spas.
- Surface: The surface layer consists of biologically recommended, magnesite bonded wood wool acoustic tiles.
- Colour: The standard colours of Heradesign ceiling tiles are white, similar to RAL 9010 or beige, natural tone 13. Other colours (RAL, NCS, StoColor) available on request.

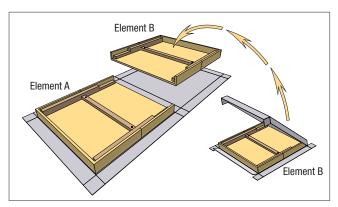


For the installation requirements see DIN 18168 "Lightweight ceiling linings and suspended ceilings", as well as EN 13964 "Suspended ceilings – requirements and test methods".

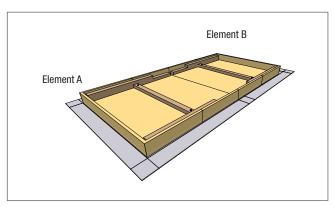


Carefully unpack the elements

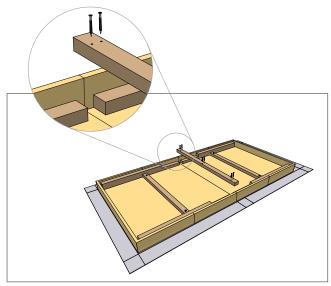




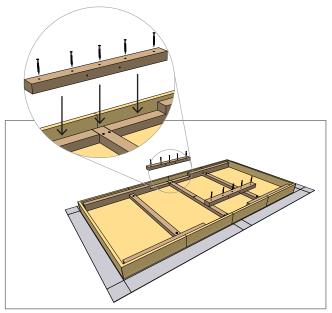
Put elements together



Ensure precise alignment

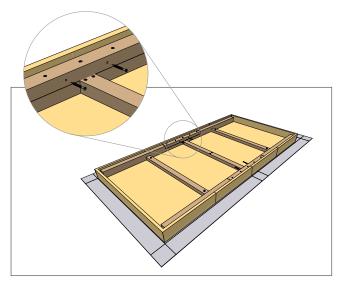


Install connection component C with 6 screws.

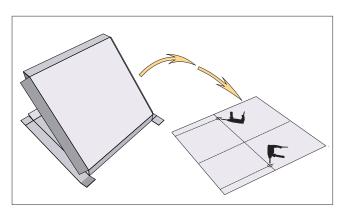


Install connection components D, each with 5 screws.

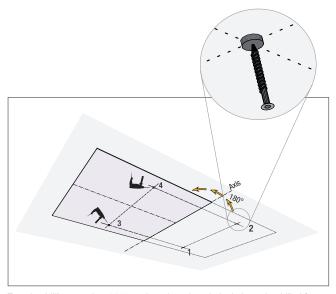




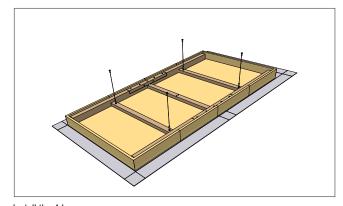
Fix connection component D with an additional 2 screws, horizontally.



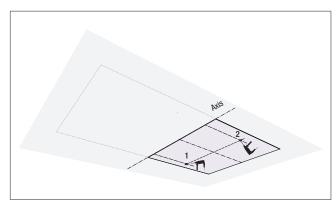
Remove the drilling template from the packaging.



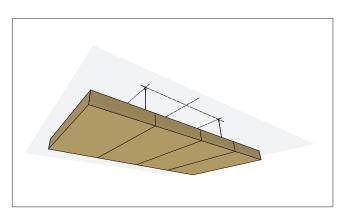
Turn the drilling template 180° on the axis and mark the holes to be drilled for hangers 3 and 4. Install upper hanger parts for hangers 1 to 4.



Install the 4 hangers.



Determine the axis for the ceiling raft. Lay the drilling template on the axis and mark the holes to be drilled for hangers 1 and 2.

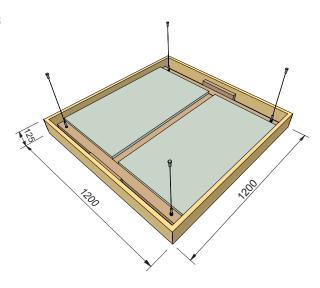


Install the ceiling raft. Lift the ceiling raft, holding it level and fix the upper hangers to the lower parts.



HERADESIGN® Sonic element 1200/1200

Sizes and dimensions



Delivery

The set delivered consists of:

- Element A with preassembled grid structure and hanger base
- ullet 4 x individual hangers (hanger height < 500 mm) in a plastic bag

Product	Size L x W x H	Weight kg/ceiling raft
Heradesign® superfine	1200 x 1200 x 125 mm	27.10
Heradesign® fine	Tile thickness 25 mm	29.20







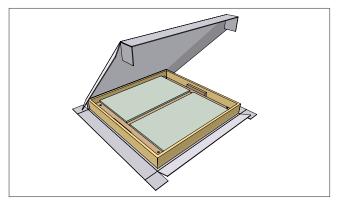
4 x individual hangers

Properties

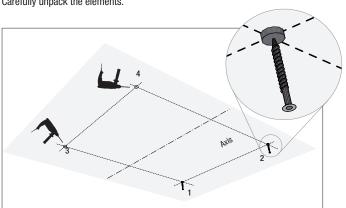
- The ceiling raft set is not suitable for use in indoor swimming pools or spas.
- Surface: The surface layer consists of biologically recommended, magnesite bonded wood wool acoustic tiles.
- Colour: The standard colours of Heradesign ceiling tiles are white, similar to RAL 9010 or beige, natural tone 13. Other colours (RAL, NCS, StoColor) available on request.



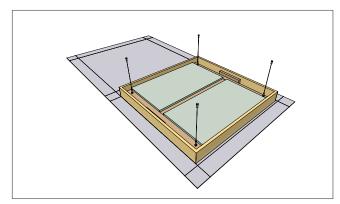
For the installation requirements see DIN 18168 "Lightweight ceiling linings and suspended ceilings", as well as EN 13964 "Suspended ceilings – requirements and test methods".



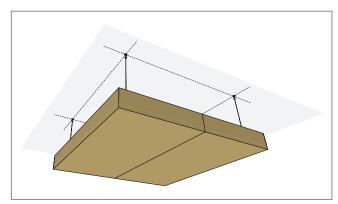
Carefully unpack the elements.



Mark the holes on the soffit at the correct centres and drill according to the plugs being used. Fix the upper hanger parts using suitable screws for the underlying surface.



Screw the enclosed cable hanger onto the hanger base.



Install the ceiling raft. Lift the ceiling raft, holding it level and fix the upper hangers to the lower parts.



TOPIQ® Sonic element

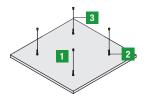
Product Range

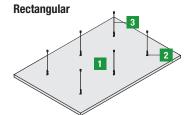
	Product	Thick- ness [mm]	Weight [kg/m²]	Size L x W [mm]
0	TOPIQ® Sonic element circular	40	5.6*	up to Ø 1200*
[®] Sonic	TOPIQ® Sonic element square	40	5.6*	up to max. 1200 x 1200*
OPIQ® elem	TOPIQ® Sonic element rectangular	40	5.6*	up to max. 1800 x1200*
101	TOPIQ® Sonic element oval	40	5.6*	up to max. 1800 x 1200*

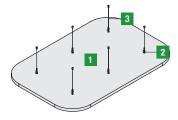
Other shapes/sizes on request

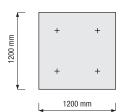
Sizes and dimensions of standard elements

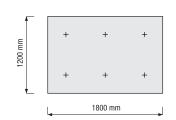
Square

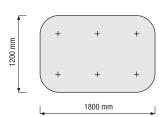








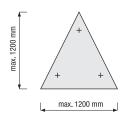




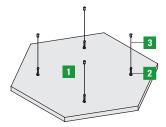
Sizes and dimensions of special elements

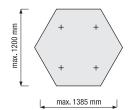
Triangular



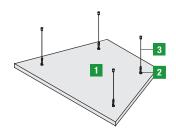


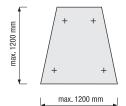
Hexagonal





Trapezoid



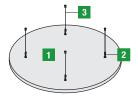


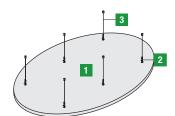
^{*}Weight dependent on size of ceiling raft



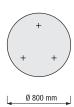
Circular

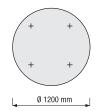


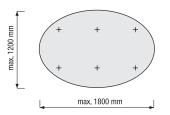




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Suspension

Every ceiling raft is delivered including spiral anchors (fixing to raft). The rafts are suspended by cables, attached to the spiral anchors with hooks.

Technical Properties

Thickness

• Sound absorption: EN ISO 354

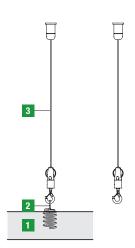
Humidity resistance: up to 95% relative humidity
 Shapes / sizes: Circular up to ø 1200 mm

Square up to max. 1200 x 1200 mm Rectangular up max. 1800 x 1200 mm Oval up to max. 1800 x 1200 mm

Special shapes/sizes: Triangular, hexagonal, trapezoid Other shapes/sizes on request

Approx. 40 mm

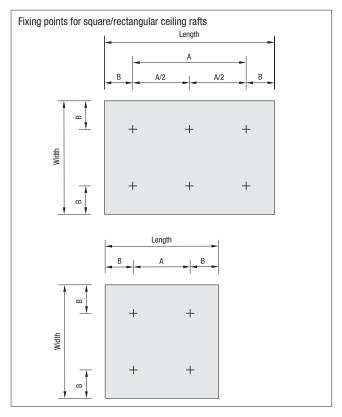
• Weight per raft: Approx. 6.0 kg/m² (incl. suspension)



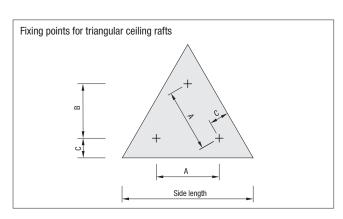
- 1 AMF TOPIQ® Sonic element
- 2 Spiral anchor
- 3 Cable suspension with hooks, cable and ceiling mount



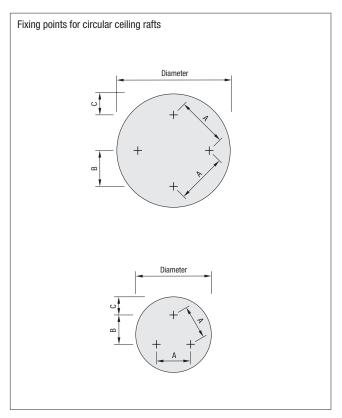
Installation advice



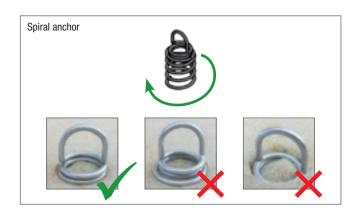
Length [mm]	Width [mm]		B [mm]
1800	1200	6x	250
1200	1200	4x	250
900	900	4x	150



Side length [mm]		A [mm]	B [mm]	C [mm]
1200	3x	680	589	150
1000	3x	480	416	150
800	3x	280	243	150

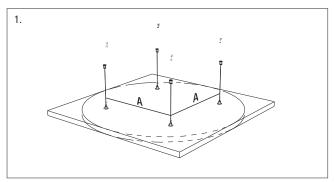


Diameter [mm]		A [mm]	B [mm]	C [mm]
1200	4x	495	350	250
1000	4x	495	350	150
800	3x	346	150	200

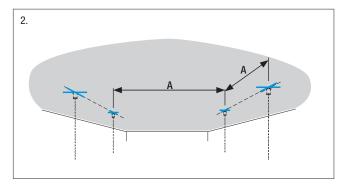


The spiral anchors are twisted in a clockwise direction into the ceiling rafts at the required fixing points. The exact depth of the spiral anchor in the ceiling raft is important!

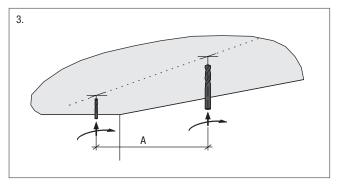




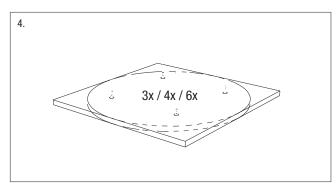
The steps apply to both circular and square/rectangular ceiling rafts, regardless of the version. The fixing centres for circular and square/rectangular rafts is $A=600\ mm$.



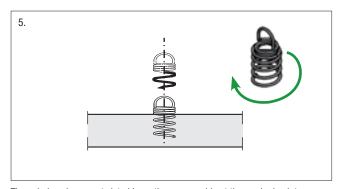
The centres in both directions are transferred to the desired fixing positions.



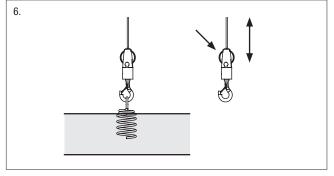
Depending on the soffit material and type of fixing, drilling may be necessary. Plugs and screws must be suitable for the underlying surface and used in accordance with the manufacturer's recommendations.



Every package includes a template to mark the fixing points. The required number and lay out of spiral anchors should be taken from the table on the previous page.



The spiral anchors are twisted in on the reverse side at the marked points.

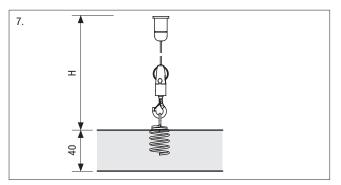


The raft is suspended with the included cables, attached to the spiral anchors with hooks. By releasing the clamping mechanism, the required suspension height can be set exactly before installation.

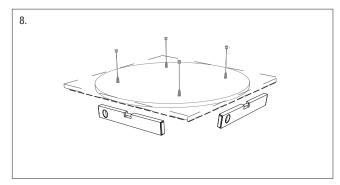


OBSERVE ANCHOR DEPTH!

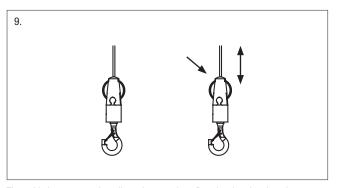




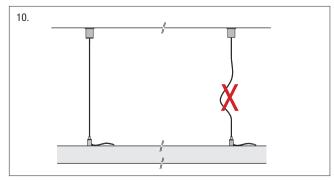
After installing the suspension (cable hanger to raft and ceiling mount including cable), the suspension height can be checked and when necessary corrected. The raft is then fixed on all hangers by two people.



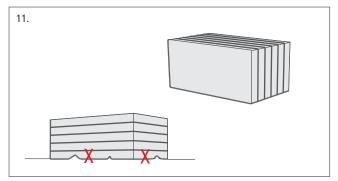
The entire ceiling raft is then aligned.



The cable hangers can be adjusted at any time. By releasing the clamping mechanism, the required suspension height can be set exactly.



The rafts should be supported equally through all four cables, no loose cables are permitted



The rafts must always be stored on a dry and flat surface and can either be stacked (max 8 pieces) or stand on the long edge (no stacking permitted). Mechanical stress (impacts etc.) can cause damage to the product. During transport and installation of ceiling rafts, the rafts must always be carried by two people. When removing the packaging and at all times when handling the rafts, clean white cotton gloves should be worn. Ensure that only the frames of the ceiling rafts are handled.