

vektron ceiling rafts



# vektron    table of content

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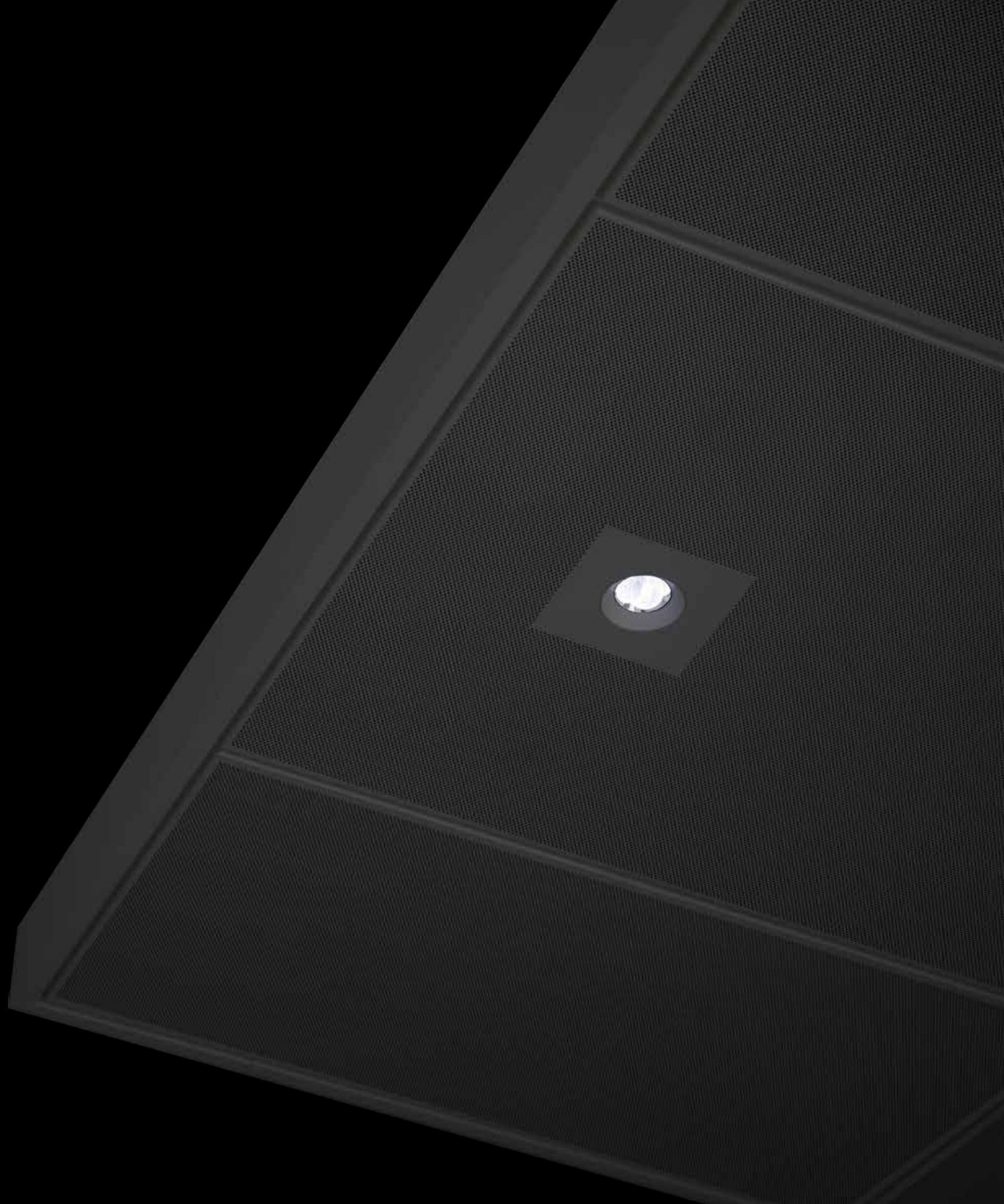
# vektron ceiling rafts

Today's office spaces must be designed to meet the requirements of widespread part-time telecommuting and circular building. Office layouts may have to be reconsidered and workstations may need to make space for meeting rooms, shared spaces, conversation hubs and collaborative spaces of all sizes.

Are light and acoustic features still in the right place when modifying the layout? Do we have the right comfort equipment in the right location? With flexible vektron ceiling rafts you have the freedom to install them where you need and change their locations when necessary.

vektron ceiling rafts are standardized solutions that fit many different environments, are easy to design, fast to produce and simple to assemble and install.

Thanks to this flexible approach our suspended ceilings can evolve alongside the changing destination of an office building and can be re-used when your company outgrows its current locations and is ready to move to new headquarters.





# vektron ceiling rafts

vektron ceiling rafts are ready-made and easy to install suspended ceilings for office use. They come in two different sizes, three different layouts each, two available colours and can be equipped with luminaires.

Each raft is composed of vektron clip-in tiles made from cold rolled galvanised steel. Each tile is perforated (RD1821) and available in either white or black epoxy polyester powder coating.

Black and white colour tiles are the most common yet functional finishes for any environment, finished with low gloss levels that enhance the overall visual effect and add elegance to the whole.

Made-to-measure finishes are available on request. Contact your local vektron consultant to discuss the possibilities.





# vektron ceiling rafts

## acoustics & lighting

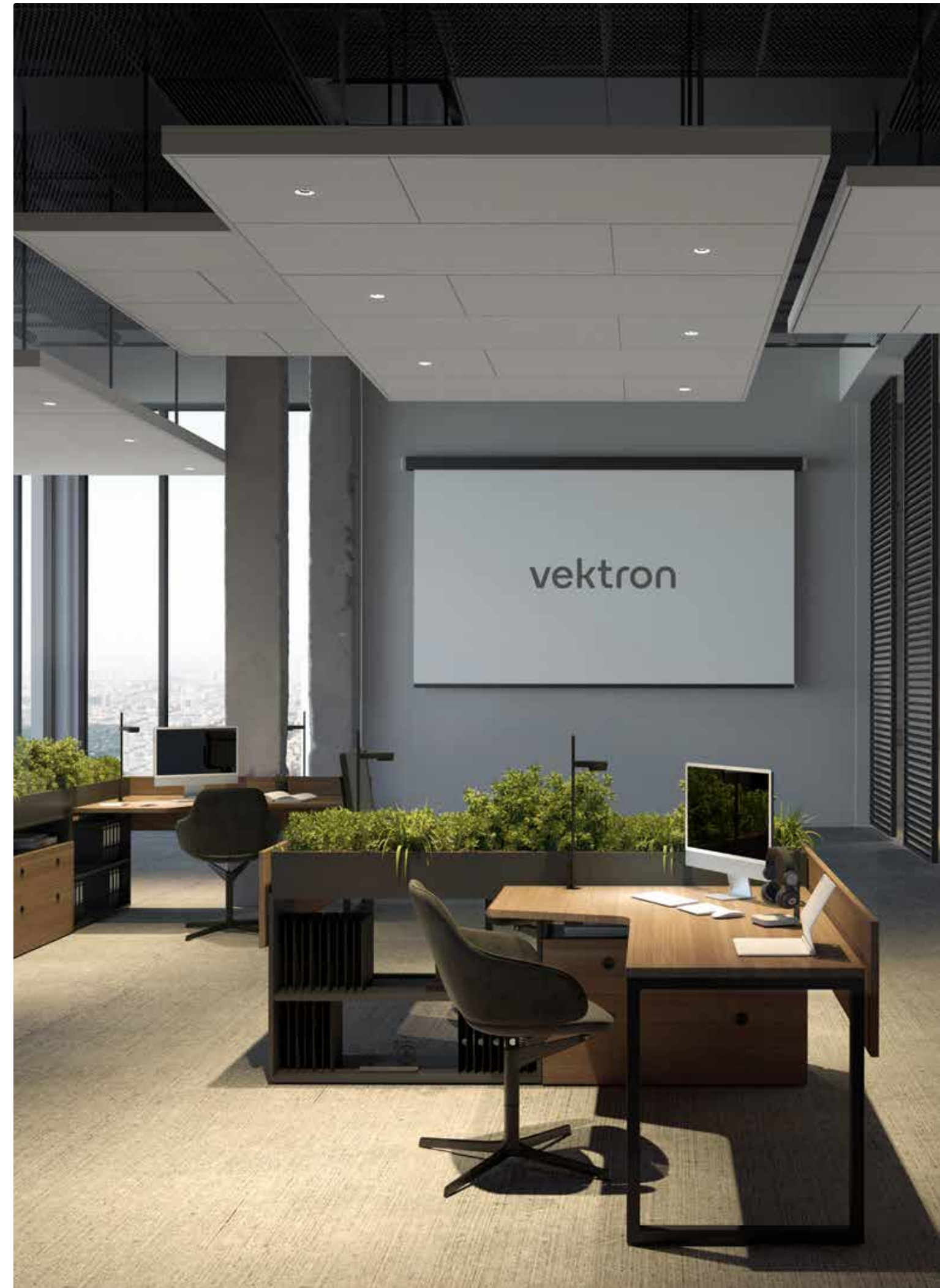
Any vektron ceiling raft can be equipped with kreon's lighting and acoustic absorption to meet the comfort needs in modern office environments.

### Acoustics

Every vektron ceiling raft is provided with soundtex acoustic fleece and mineral wool. In combination with a full perforation (RD1821) the absorption level increases and provides perfect absorption, combining optimal auditive comfort with the flexibility of a freehanging vektron ceiling raft.

### Lighting

High quality luminaires can be equipped into the vektron ceiling rafts to illuminate office spaces and to yield optimal work environments. vektron ceiling rafts are available with four to six high efficient kreon aplis 60 downlights with flood reflector. These luminaires simply need to be clipped on the ceiling tile on site and ensure a minimum lux level of 500lx (measured at table height) with a UGR of <19.



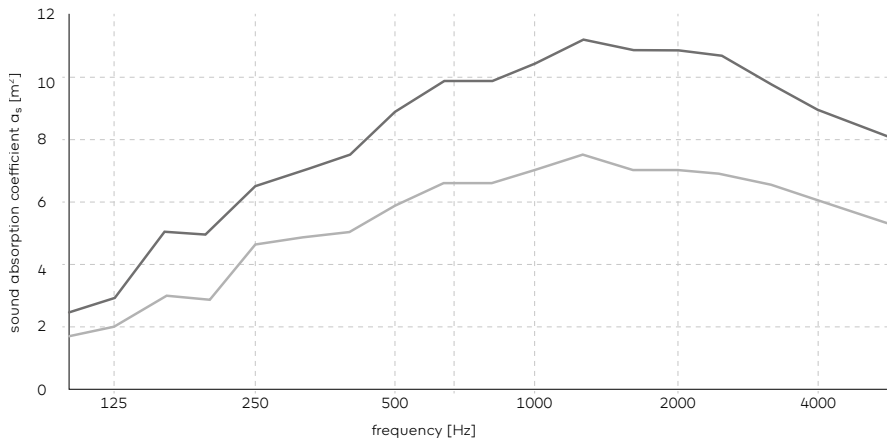
# vektron ceiling rafts acoustics

1800 x 2400mm

	● 1800 x 2400mm	● 1800 x 3600mm
Frequency [Hz]	Sound absorption coefficient $\alpha_s$ [m²]	
125	2,0	2,9
250	4,4	6,5
500	5,9	8,8
1000	6,9	10,4
2000	7,1	10,6
4000	6,0	9,0

Measured in accordance with EN-ISO 354:2003

1800 x 3600mm



Ceiling type	ceiling raft
Panel type	clip-in
Perforation	full perfo, RD1821 round, Ø1,8mm diagonal pitch: 2,47mm perfo open area: 21%
Tested with	Soundtex on backside + mineral wool in PE-foil 80/50
Volume reverberation room	214m³

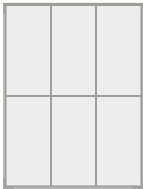




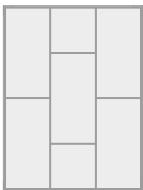
# vektron ceiling rafts

1800 x 2400mm

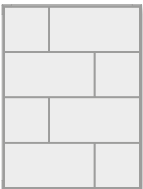
type 1



type 2

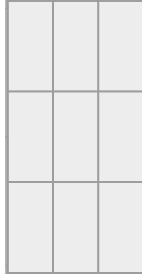


type 3

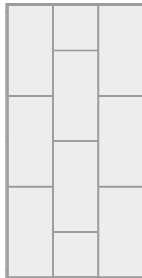


1800 x 3600mm

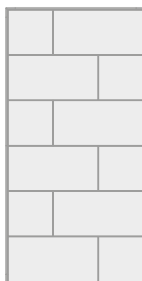
type 1



type 2



type 3



Perforated cassette panels      fitted with acoustic soundtex and extra mineral wool (35mm; 35kg/m³)



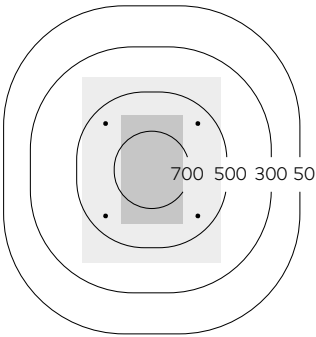
vektron

ceiling rafts

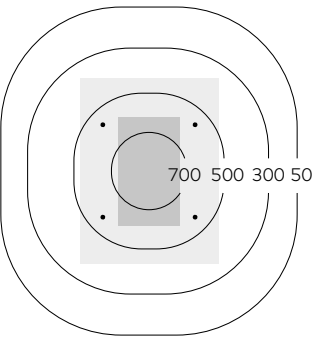
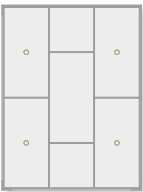
lighting

1800 x 2400mm

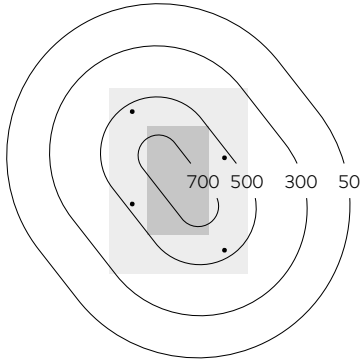
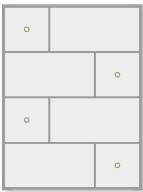
type 1



type 2



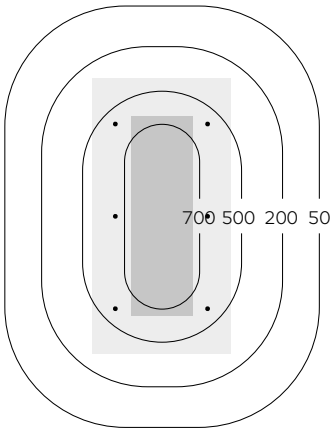
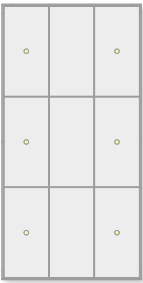
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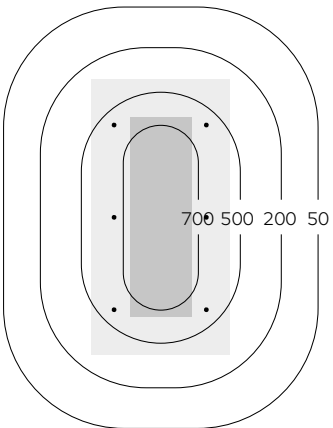
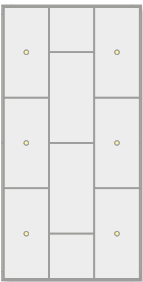
Perforated cassette panels	fitted with acoustic soundtex and extra mineral wool (35mm; 35kg/m³)
Luminaires	4 kreon aplis 60 downlights with flood reflector, 3000K, 4x12W, UGR<19
Guaranteed lux level	≥500lx at table height
(raft at 2m above table surface)	

1800 x 3600mm

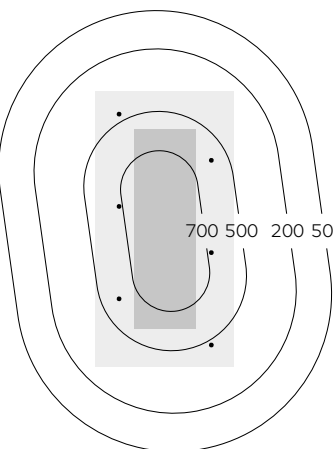
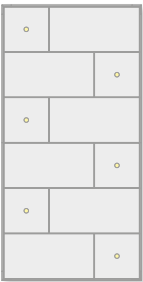
type 1



type 2



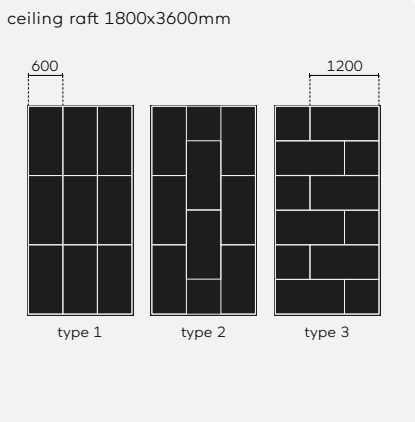
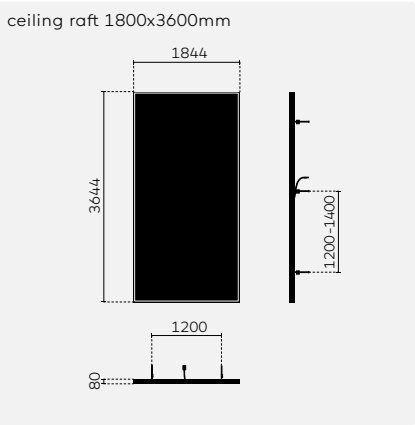
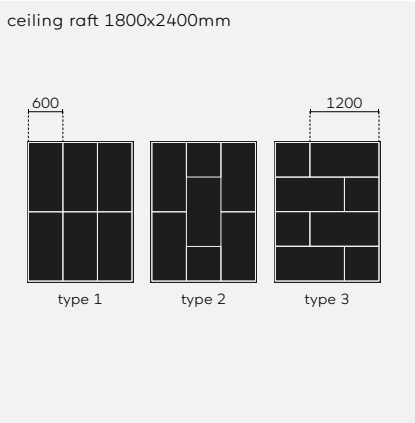
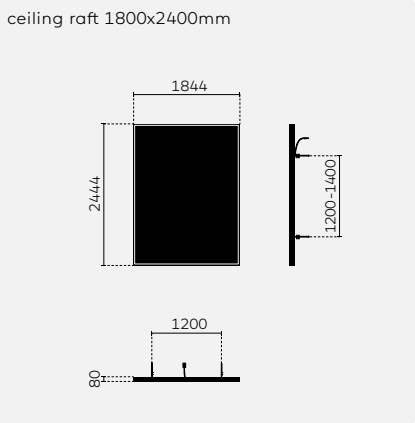
type 3



Perforated cassette panels	fitted with acoustic soundtex and extra mineral wool (35mm; 35kg/m³)
Luminaires	6 kreon aplis 60 downlights with flood reflector, 3000K, 6x12W, UGR<19
Guaranteed lux level	≥500lx at table height
(raft at 2m above table surface)	

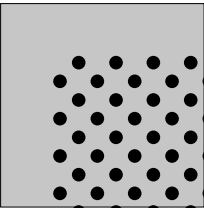


vektron ceiling rafts

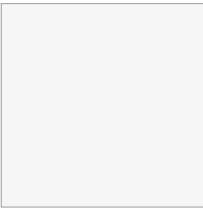


	Colour	Base reference
 <b>ceiling raft, type 1</b> LxW 1800 x 2400mm	○	<a href="#">VK918111</a>
	●	<a href="#">VK918112</a>
 <b>ceiling raft, type 2</b> LxW 1800 x 2400mm	○	<a href="#">VK918121</a>
	●	<a href="#">VK918122</a>
 <b>ceiling raft, type 3</b> LxW 1800 x 2400mm	○	<a href="#">VK918131</a>
	●	<a href="#">VK918132</a>
 <b>ceiling raft, type 1</b> LxW 1800 x 3600mm	○	<a href="#">VK918311</a>
	●	<a href="#">VK918312</a>
 <b>ceiling raft, type 2</b> LxW 1800 x 3600mm	○	<a href="#">VK918321</a>
	●	<a href="#">VK918322</a>
 <b>ceiling raft, type 3</b> LxW 1800 x 3600mm	○	<a href="#">VK918331</a>
	●	<a href="#">VK918332</a>

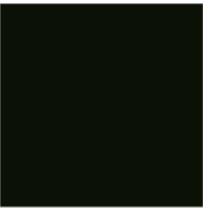
RD1821 perforation



vektron white, gloss ≤ 6%



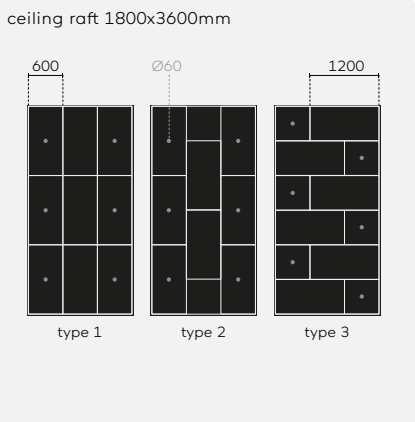
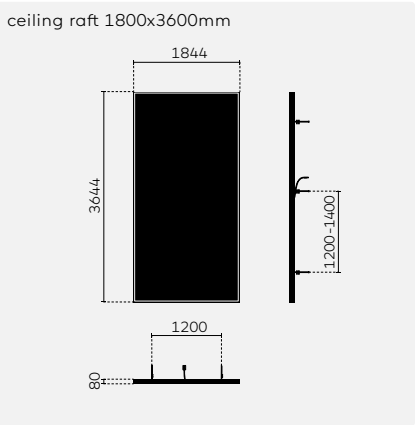
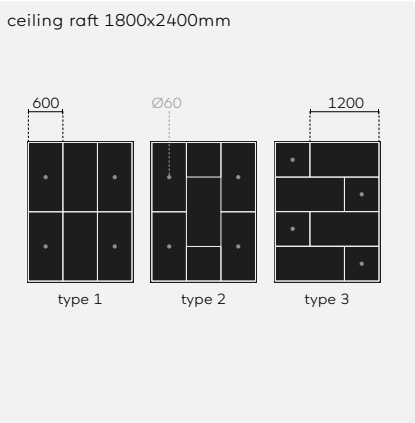
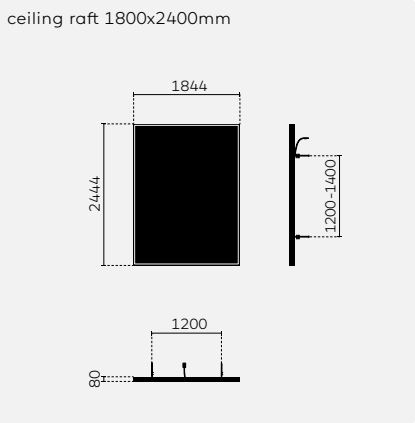
RAL 9004, gloss ≤ 3%









vektron

ceiling rafts

aplis 60



	<b>ceiling raft, type 1 ①</b> LxW 1800 x 2400mm Gear: DALI incl.	Colour	Base reference	9030 3000K, CRI90 ①	90TW tunable white, CRI90 ②	A light solution type A: aplis 60
		○	<u>VK918111</u>	●	●	●
		●	<u>VK918112</u>	●	●	●
	<b>ceiling raft, type 2 ①</b> LxW 1800 x 2400mm Gear: DALI incl.	○	<u>VK918121</u>	●	●	●
		●	<u>VK918122</u>	●	●	●
	<b>ceiling raft, type 3 ①</b> LxW 1800 x 2400mm Gear: DALI incl.	○	<u>VK918131</u>	●	●	●
		●	<u>VK918132</u>	●	●	●
	<b>ceiling raft, type 1 ②</b> LxW 1800 x 3600mm Gear: DALI incl.	○	<u>VK918311</u>	●	●	●
		●	<u>VK918312</u>	●	●	●
	<b>ceiling raft, type 2 ②</b> LxW 1800 x 3600mm Gear: DALI incl.	○	<u>VK918321</u>	●	●	●
		●	<u>VK918322</u>	●	●	●
	<b>ceiling raft, type 3 ②</b> LxW 1800 x 3600mm Gear: DALI incl.	○	<u>VK918331</u>	●	●	●
		●	<u>VK918332</u>	●	●	●

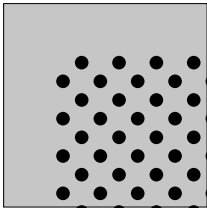
	CRI	CCT	Wattage	Drive current	Fixture lumen
① LED	CRI90+	3000K	12W	350mA	1270lm
② LED	CRI90+	2700K-5000K	2x12W	300mA	890lm

REMARKS

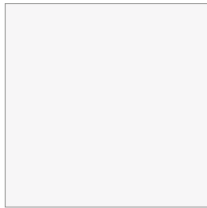
- ① 1 circuit  
② 2 circuits

IP40

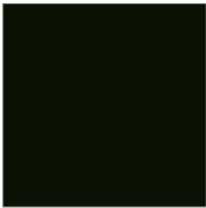
RD1821 perforation



vektron white, gloss ≤ 6%



RAL 9004, gloss ≤ 3%

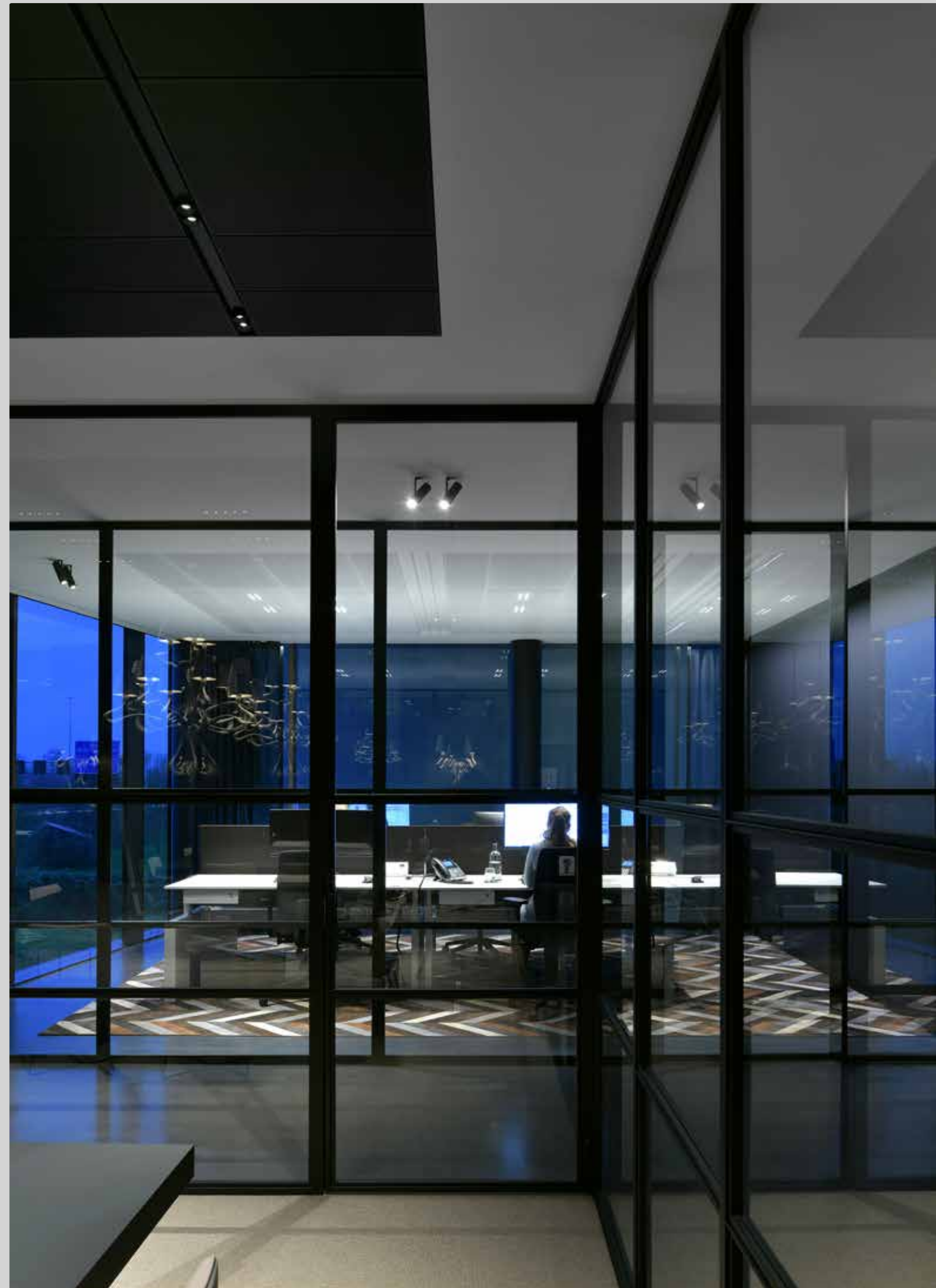




Ceilings usually have an indistinctive character in the space surrounding us. In daily life, as well as in architecture, they are seldom noticed. vektron ceiling solutions will make these anonymous surfaces come alive: structure, relief and symmetric shadow gaps support the architectural rhythm of space whilst creating effects like rest, order... and even chaos.

vektron integrated ceiling solutions are one-of-a-kind custom-made comfort solutions, produced and installed with the greatest attention to detail, created at the specific request of the client for a specific space. These are individual works of artisanship that require detailed design, proper planning, careful production and precise installation, "à la tête du client."

vektron metal ceilings can be arranged and customised to match your vision perfectly. We offer a wide choice of tile dimensions, materials, colours, finishings, perforations, accessories and options.





## Design

vektron creates and designs ceiling systems that give every space its own unique personality.

## Integration

vektron systems offer full integration of all building comfort systems:

- Acoustic solutions (sound absorption & attenuation)
- Lighting (ambient lighting, downlights, projectors, ...)
- Ventilation & Climate control (cooling & heating)
- Audio (highly efficient integrated speakers)

vektron products are 100% compatible with each other and not only meet the relevant building standards but also exceed them in many cases.

## Project management

At every stage of your project, we can be the single point of contact for all parties involved. You can count on our full support during:

- Initial design and specifications
- Planning and coordination
- Execution

Our consultants work on applications of every kind: from stadiums, airports, offices, to healthcare projects and beyond.

## Environment

vektron ceiling solutions deliver the environmental results you need for your projects, from achieving energy savings with highly efficient LED luminaires, simplifying waste management by recycling, and enhancing indoor environmental quality with acoustics. vektron ceiling solutions are BREEAM and LEED compliant.



## Lighting

The perfect integration of luminaires within vektron ceilings brings a meaningful dimension of functionality and discretion to the spaces that surround them.

### Applications

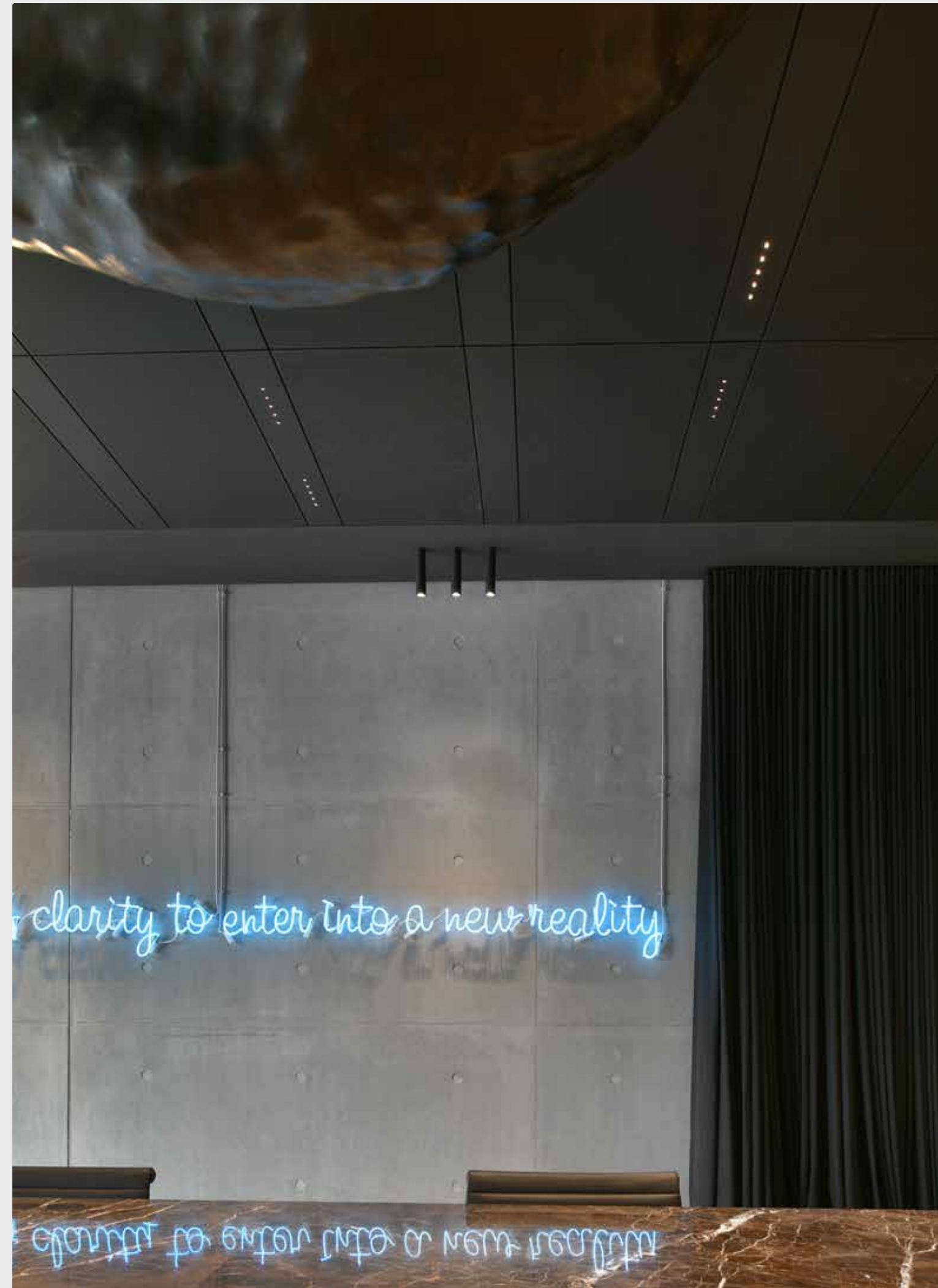
- General lighting
- Workspace lighting (UGR<19)
- Spot lighting
- Linear lighting
- Wallwashing

### Technique

- Pre-assembled
- Pre-wired (3m cable + 3-/5- pole connection)
- Matching tile colours

### Emergency

- Emergency lighting
- Signs





#### Climate ceiling

Invisibly and unobtrusively integrated in vektron ceiling solutions, the climate ceiling generates a comfortable, healthy and clean indoor climate.

##### Advantages

- Increased perception of comfort (PPD -11%)  
No draught and perceived temperature difference compared to traditional systems.
- Operates at low temperature differential (H/C) and is compatible with heatpumps & geothermal installations.
- Fanless operation (no moving parts)

##### Technique

- Activation of ceiling by WLT technology with CU/AL heat exchanger
- Hydraulic connection with flexibles

##### Output

- Cooling: 106,3W/m<sup>2</sup> (according to DIN EN 14240)
- Heating: 101,5W/m<sup>2</sup> (according to DIN EN 14037)

#### Ventilation

Ventilation has become an essential part of any building design. The provision of air diffusers within the vektron ceiling solutions family provides an elegant answer to a service integration which is often problematic in appearance and difficult to harmonise.

##### Types

- In-tile
- On-tile
- Between-tiles

##### Purpose

- Supply
- Extraction



## Acoustic comfort

Suspended ceilings have a considerable influence on the acoustic performance of a space and should be designed in such a way as to address the aural demands of the occupants within.  
vektron systems offer full integration of all building comfort systems:

### Sound absorption

- Standard acoustic fleece
- Optional sealed mineral wool inlay
- Absorption factor up to 0,9
- Different perforation types and perforation fields

### Sound attenuation

- Sound attenuation up to 47 dB
- Optional gypsum inlay 9,5/12,5mm

## Audio

vektron ceilings offer a complete range of invisibly integrated speakers. Connected directly or wireless to any audio source, like computers, building automation systems, smartphones or tablets.

### Technique

- Pre-wired
- DIN rail amplifier
- Bluetooth connected interface





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