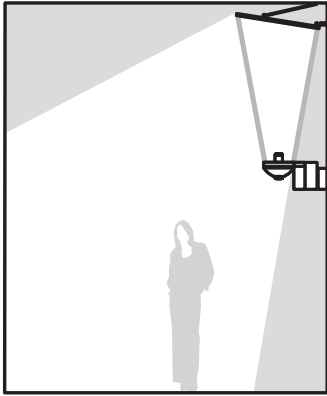


Lighting Tools Interior

Chapter 9
Secondary reflector systems



Siteco Mirrortec® Secondary Reflector Systems



Siteco Mirrortec® Secondary Reflector Systems
Application | Function
page 9.2

Siteco Mirrortec® Reflectors



SMR 100
page 9.10



SMR 100 circular
page 9.10



SMR 100A
page 9.10



SMR 200CA
page 9.14

Siteco Mirrortec® Projectors



SMW 400
page 9.16



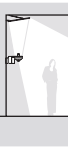
R1 MINI ALU
page 9.20



R1 MINI S
page 9.20



SMW 1000
page 9.24



Siteco Mirrortec® secondary reflector systems



Secondary reflector systems offer a range of photometric and architectural benefits and are suitable for the homogeneous, targeted illumination of surfaces.

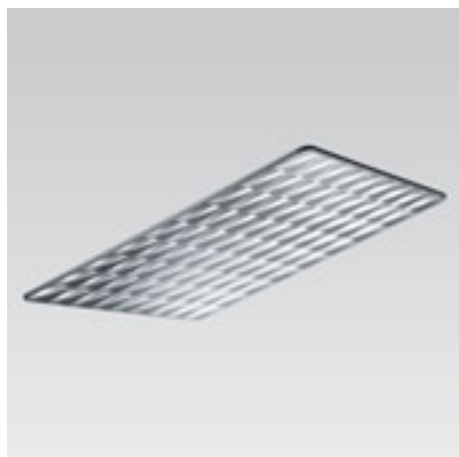
Application

Architectural lighting concepts and sophisticated lighting solutions are implemented with secondary reflector systems. The possible bandwidth extends from 20 square metre-large atria to 1200 metre-long airport halls, 6 metre-wide roads and 5400 square metre-large public squares illuminated from only one point on the side. Siteco Mirrortec® solutions are recommended for many such tasks, and their implementation can be discussed together with our specialists.

Function

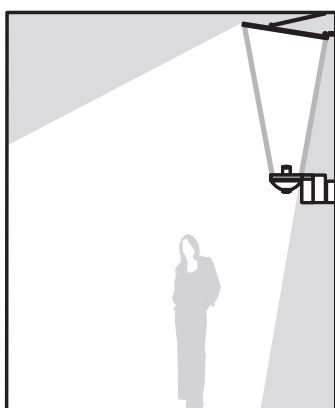
Light is guided by a very narrow distribution projector onto a multifaceted reflector and is reflected symmetrically or asymmetrically according to the properties of these specular facets. Especially high light comfort is achieved by the correct selection of projector and reflector and the distance between these.

In contrast to a conventional luminaire, the light source is split via the multifaceted system into individual light points with low intensity. According to observer position and size of the individual facets, light point resolution is the result. Glare is thus minimised. At the same time the high number of facets achieve a highly uniform illumination. Maintenance is facilitated with the low installation position of the projector. The reflector under normal conditions is maintenance-free.



Technology

The following diagrams and tables offer an overview of the technology. Symmetric and asymmetric specular reflectors can illuminate various surfaces due to their reflection characteristics. The size of such surfaces is modified with reflector height and angle of inclination. The achievable illuminance changes with the geometry (reflector height, reflector size, inclination and projector height) and the number and lamp configurations of the projector. The aim is always good light point resolution and high uniformity of illuminance.



The diagrams on the following pages represent the light distribution patterns of the reflectors and inclination angles in the applications. The tables list possible distances between projector and reflector with reflector configuration vertically above the projector. Some fields are not filled. Here such combinations make no sense photometrically or architecturally.

Statements about expected illuminance values can only be made in individual cases.









Asymmetric reflectors must be fundamentally **vertically mounted** above the projector. Symmetric reflectors can be positioned further into the space, whereby system light output ratio is modified according to the distance between projector and reflector.

Because of the flexibility of the Siteco Mirrortec® technology, combinations in addition to those listed are possible for custom solutions.






Siteco would be pleased to provide you with the necessary support.



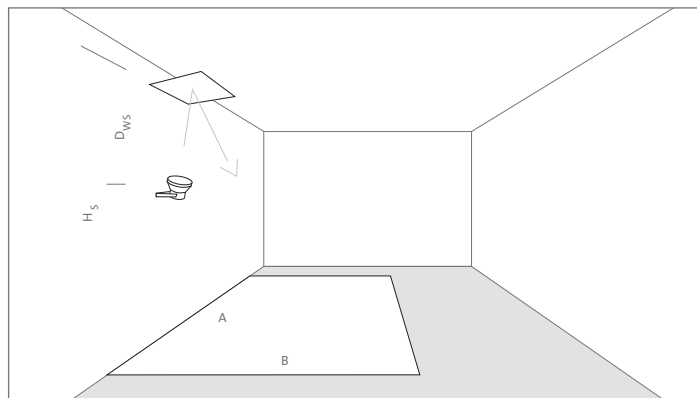
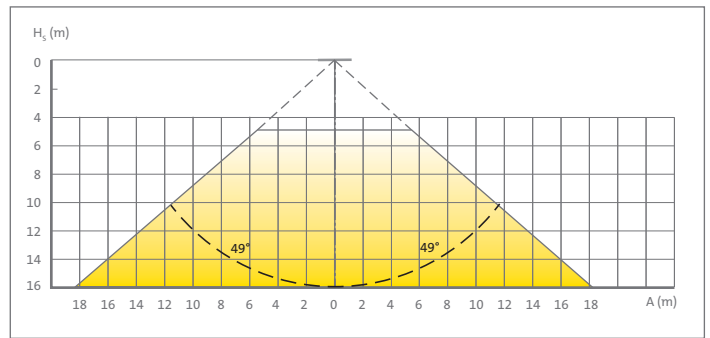
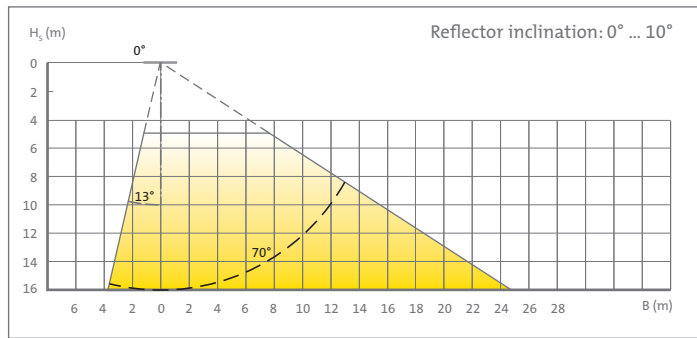
2. Combinations of projectors with Siteco Mirrortec® Reflector 100, **symmetric reflection**;
square, 900 x 900mm or circular, $\varnothing = 900\text{mm}$

Order no.		lamp	H _s (m)	5	6	7	8	9	10	11	12	
	5NX722E1MB08		D _{WS} (m) (1 projector)	2.5	2	2	2					
			D _{WS} (m) (2 projectors)		2.5	2	2					
	5NX724E1MB08		D _{WS} (m) (1 projector)		2	2	2					
			D _{WS} (m) (2 projectors)		3	2.5	2					
	5NX724E1PB08		D _{WS} (m) (1 projector)		2	2	2	2	2	2	2	2
			D _{WS} (m) (2 projectors)		3	2.5	2	2	2	2	2	2
	5NW41421RG1		D _{WS} (m) (1 projector)			3.5	3	3	3	3	3	
			D _{WS} (m) (2 projectors)									
	5NW41421TG1		D _{WS} (m) (1 projector)			3.5	3	3	3	3	3	3
			D _{WS} (m) (2 projectors)									

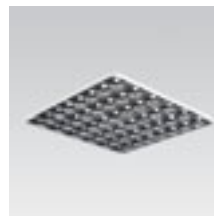
3. Combinations of projectors with Siteco Mirrortec® Reflector 100, **symmetric reflection**;
square, 1200 x 1200mm or circular, $\varnothing = 1200\text{mm}$

Order no.		lamp	H _s (m)	6	7	8	9	10	11	12	13	14	15	16	
	5NW41421RG1		D _{WS} (m) (1 projector)		3.5	3	3	3	3	3	3	3	3	3	
			D _{WS} (m) (2 projectors)			4	4	4	4	4	4	4	4	4	4
	5NW41421TG1		D _{WS} (m) (1 projector)		3.5	3	3	3	3	3	3	3	3	3	3
			D _{WS} (m) (2 projectors)			4	4	4	4	4	4	4	4	4	4
	5NA75601VP11C		D _{WS} (m) (1 projector)				3	3	3	3	3	3	3	3	
			D _{WS} (m) (2 projectors)					3.5	3.5	3	3	3	3	3	
















The following tables list **possible reflector-projector combinations** with a minimally recommended distance between projector and reflector. Deviations may lead to glare and/or light output ratio losses..








4. Combinations of projectors with Siteco Mirrortec® Reflector 100A, **asymmetric reflection**; square, 600 x 600mm

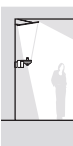
Order no.	lamp	H _s (m)	5	6	7	8	9	10
 R1 MINI 5	5NX722E1MB08  HIT-CE G12 70W	D _{ws} (m) (1 projector)	2	2	2	2		
		D _{ws} (m) (2 projectors)	2	2	2	2		
 R1 MINI ALU	5NX724E1MB08  HIT-CE G12 70W	D _{ws} (m) (1 projector)	2	2	2	2		
		D _{ws} (m) (2 projectors)	2	2	2	2		
	5NX724E1PB08  HIT-CE G12 150W	D _{ws} (m) (1 projector)	2	2	2	2	2	2
		D _{ws} (m) (2 projectors)	2	2	2	2	2	2
 SMW 400	5NW41421RG1  HIT E40 250W	D _{ws} (m) (1 projector)		3	3	3	3	3
		D _{ws} (m) (2 projectors)			3	3	3	3
	5NW41421TG1  HIT E40 400W	D _{ws} (m) (1 projector)		3	3	3	3	3
		D _{ws} (m) (2 projectors)			3	3	3	3

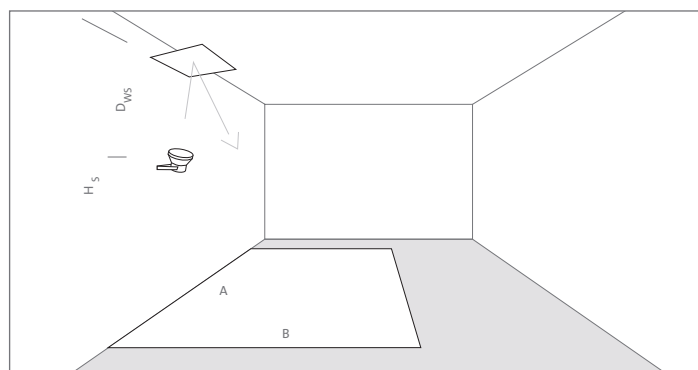
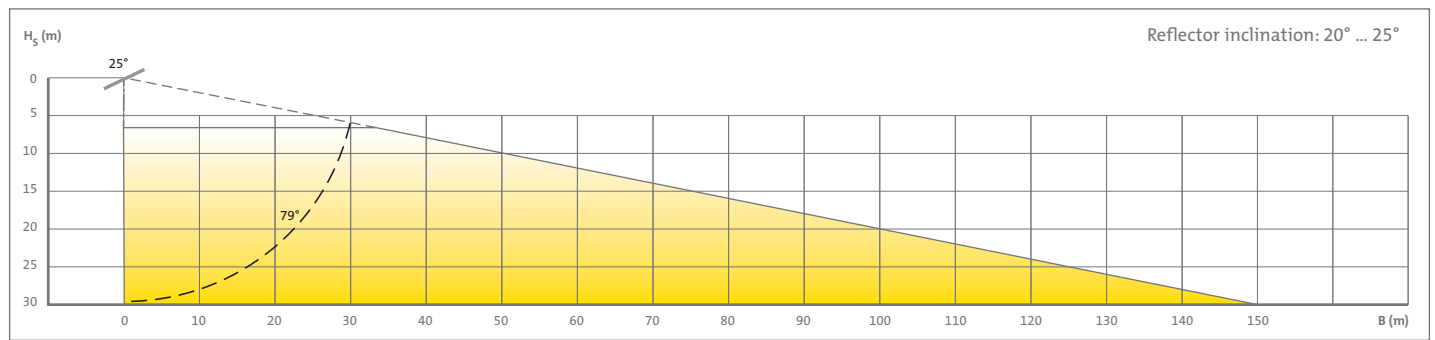
5. Combinations of projectors with Siteco Mirrortec® Reflector 100A, asymmetric reflection; square, 900 x 900mm

Order no.		lamp	H _s (m)	5	6	7	8	9	10	11	12	
	5NX722E1MB08		D _{WS} (m) (1 projector)	2	2	2	2					
			D _{WS} (m) (2 projectors)	2	2	2	2					
	5NX724E1MB08		D _{WS} (m) (1 projector)	2	2	2	2					
			D _{WS} (m) (2 projectors)	2	2	2	2					
	5NX724E1PB08		D _{WS} (m) (1 projector)	2	2	2	2	2	2	2	2	2
			D _{WS} (m) (2 projectors)	2	2	2	2	2	2	2	2	2
	5NW41421RG1		D _{WS} (m) (1 projector)		3	3	3	3	3	2	2	
			D _{WS} (m) (2 projectors)			3	3	3	3	2	2	
	5NW41421TG1		D _{WS} (m) (1 projector)		3	3	3	3	3	2	2	
			D _{WS} (m) (2 projectors)			3	3	3	3	2	2	

6. Combinations of projectors with Siteco Mirrortec® Reflector 100A, asymmetric reflection; square, 1200 x 1200mm

Order no.		lamp	H _s (m)	6	7	8	9	10	11	12	13	14	15	16
	5NW41421RG1		D _{WS} (m) (1 projector)	3	3	3	3	3	2	2				
			D _{WS} (m) (2 projectors)		3	3	3	3	3	3	3	3	3	3
	5NW41421TG1		D _{WS} (m) (1 projector)	3	3	3	3	3	2	2				
			D _{WS} (m) (2 projectors)		3	3	3	3	3	3	3	3	3	3
	5NA75601VP11C		D _{WS} (m) (1 projector)				3	3	3	3	3	3	3	3
			D _{WS} (m) (2 projectors)					3	3	3	3	3	3	3






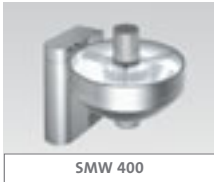








The following tables list **possible reflector-projector combinations** with a minimally recommended distance between projector and reflector. Deviations may lead to glare and/or light output ratio losses.

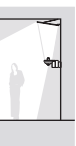


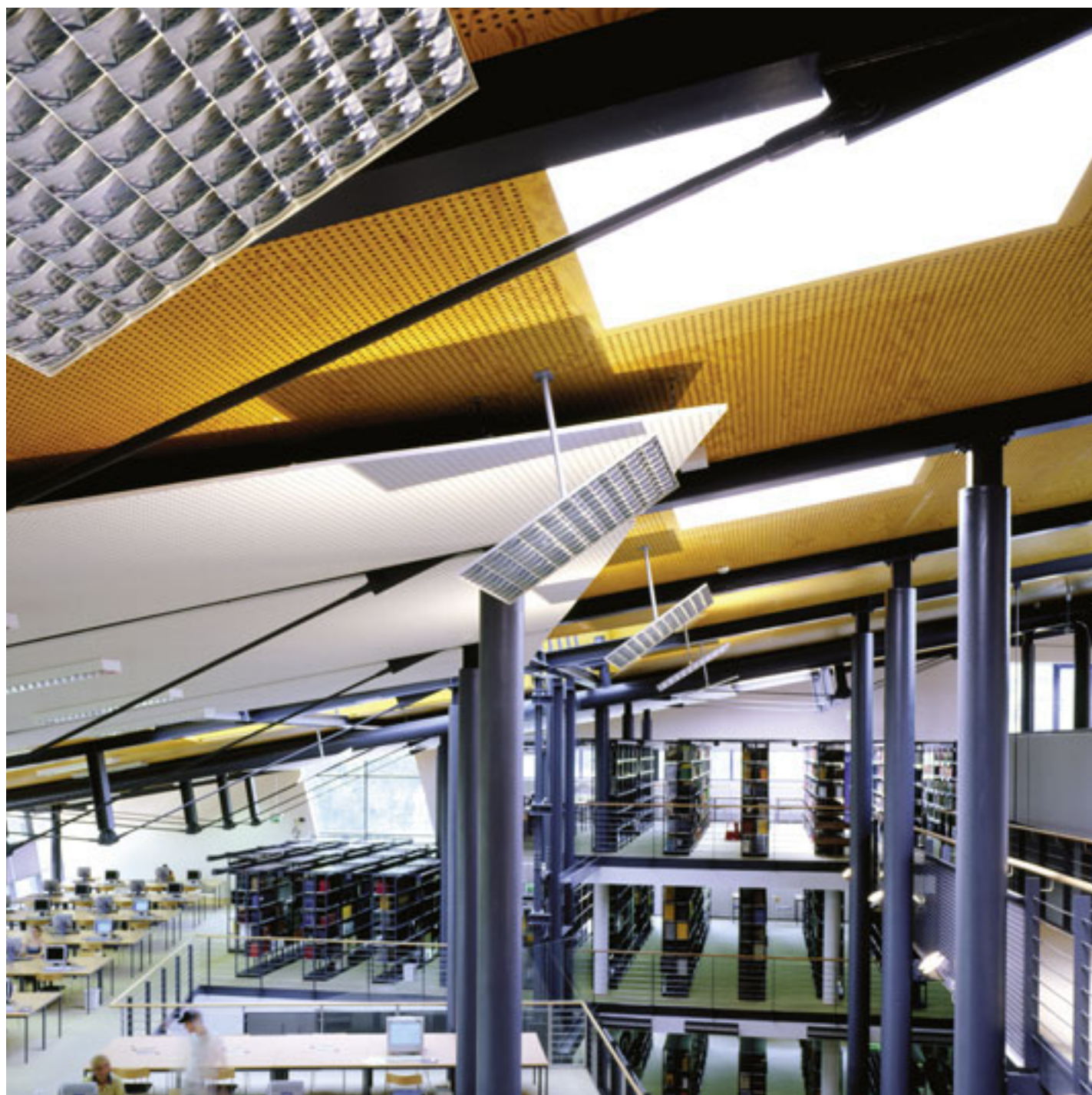
7. Combinations of projectors with Siteco Mirrortec® Reflector SMR 200CA, **asymmetric reflection**; square, 844 x 852mm

Order no.	lamp	H _s (m)	7	8	9	10	11	12
 R1 MINI 5	5NX722E1MB08 	D _{ws} (m) (1 projector)	2	2	2	2		
		D _{ws} (m) (2 projectors)	3	3	3	3	3	3
 R1 MINI ALU	5NX724E1MB08 	D _{ws} (m) (1 projector)	2.5	2	2	2		
		D _{ws} (m) (2 projectors)	3	3	3	3	3	3
	5NX724E1PB08 	D _{ws} (m) (1 projector)	2.5	2	2	2	2	2
		D _{ws} (m) (2 projectors)	3	3	3	3	3	3
 SMW 400	5NW41421RG1 	D _{ws} (m) (1 projector)			3.5	3	3	3
		D _{ws} (m) (2 projectors)				4	4	4
	5NW41421TG1 	D _{ws} (m) (1 projector)			3.5	3	3	3
		D _{ws} (m) (2 projectors)				4	4	4
 SMW 1000	5NA75601VP11C 	D _{ws} (m) (1 projector)			4	3.5	3	3
		D _{ws} (m) (2 projectors)						4

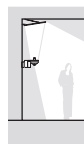
Siteco Mirrortec® Reflector 100 | ... 100A

The Siteco Mirrortec® 100 and 100A reflectors are components of the Siteco Mirrortec® system that is based upon the principle of secondary reflection. The 100 and 100A reflectors have been designed on the basis of the patented Siteco Fresnel reflector technology, enabling a very flat construction and precise targeting of each single facet. According to reflector choice, symmetrical (Reflector 100) or asymmetrical (Reflector 100A) light distribution is created. The reflectors are fixed either with a robust ball-and-socket joint pendant for ceiling/wall mounting or via wire suspension.





- + ultra-flat faceted reflector with Fresnel technology
- + excellent optical characteristics: brilliant appearance, superior light point resolution, defined beam area with good uniformity
- + the light source is still not visible even from greater distances
- + high quality construction, minimal construction height
- + depth effect of facets
- + low installation effort required, low weight
- + easy cleaning with washable, flat front

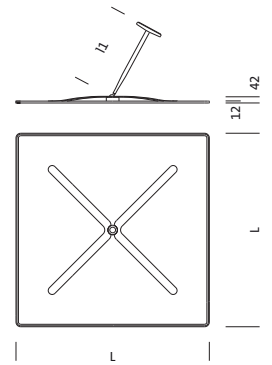




Siteco Mirrortec® Reflector 100, square construction | symmetric light distribution

Siteco Mirrortec® Reflector 100 ultra-flat light point resolution reflector | Fresnel technology for symmetric light distribution | 100 x 100mm Fresnel facets with flat, smooth front side | Aluminium honeycomb structure as baseplate with extruded aluminium frame.

Application area: indoors
Rec. reflector height: H= 5..16m

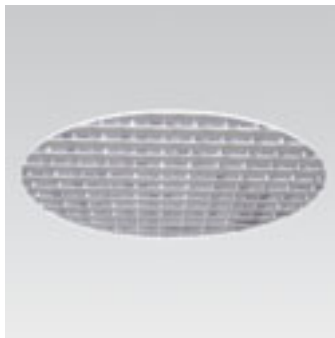


	L	l1
5NW139 ..QA	618	330
5NW139 ..QB	919	490
5NW139 ..QC	1221	640

L (mm)	B (mm)	Wt. (kg)	Order No.
Fresnel reflector 100, square, incl. tubular pendant suspension			
600	600	6.1	5NW13991QA
900	900	9.7	5NW13991QB
1200	1200	16.0	5NW13991QC

Fresnel reflector 100, square, incl. 3 pcs. single wire suspension			
600	600	3.0	5NW13993QA
900	900	8.8	5NW13993QB
1200	1200	14.8	5NW13993QC

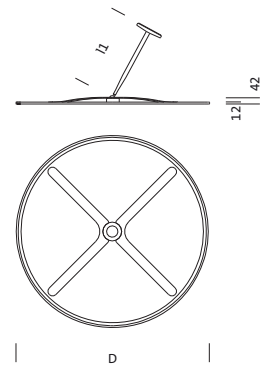
-version suitable for swimming pools on request



Siteco Mirrortec® Reflector 100, round construction | symmetric light distribution

Siteco Mirrortec® Reflector 100 ultra-flat light point resolution reflector | Fresnel technology for symmetric light distribution | 100 x 100mm Fresnel facets with flat, smooth front side | Aluminium honeycomb structure as baseplate with extruded aluminium frame.

Application area: indoors
Rec. reflector height: H= 5..16m

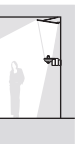


	D	l1
5NW139 ..KA	618	330
5NW139 ..KB	919	490
5NW139 ..KC	1221	640

D (mm)	Wt. (kg)	Order No.
Fresnel reflector 100, circular, incl. tubular pendant suspension		
600	4.3	5NW13991KA
900	9.8	5NW13991KB
1200	14.1	5NW13991KC

Fresnel reflector 100, circular, incl. 3 pcs. single wire suspension		
600	3.9	5NW13993KA
900	4.8	5NW13993KB
1200	11.7	5NW13993KC

-version suitable for swimming pools on request

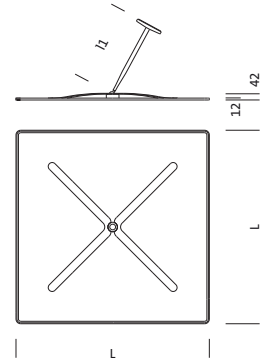




Siteco Mirrortec® Reflector 100A | asymmetric distribution

Siteco Mirrortec® Reflector 100A ultra-flat light point resolution reflector | Fresnel technology for asymmetric light distribution | 75 x 100mm Fresnel facets with flat, smooth front side; aluminium honeycomb-structure as baseplate with extruded aluminium frame

Application area: indoors
 Rec. reflector height: H= 5..16m



	L	l1
5NW140 ..QA	618	330
5NW140 ..QB	919	490
5NW140 ..QC	1221	640

L (mm)	B (mm)	Wt. (kg)	Order No.
Fresnel reflector 100, square, incl. tubular pendant suspension			
600	600	6.1	5NW14091QA
900	900	11.6	5NW14091QB
1200	1200	18.2	5NW14091QC

L (mm)	B (mm)	Wt. (kg)	Order No.
Fresnel reflector 100, square, incl. 3 pcs. single wire suspension			
600	600	3.4	5NW14093QA
900	900	8.8	5NW14093QB
1200	1200	8.6	5NW14093QC

-version suitable for swimming pools on request

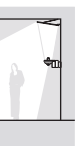


Siteco Mirrortec® Reflector 200CA

The Siteco Mirrortec® 200CA reflector is a component of the Siteco Mirrortec® system that is based upon the principle of secondary reflection.

The 200CA reflector features asymmetric distribution and is constructed with convex free-form facets. The reflector can be mounted either with wire mounting, a wall fixing element or pendants.

- + can be deployed at high mounting heights
- + ideal light point resolution for the illumination of large areas indoors
- + free-form facets guarantee a high level of uniformity in the illuminated area
- + long life with protected corrosion-proofed reflector surface
- + extensive mounting accessories available





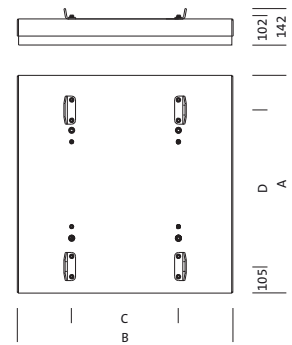
Siteco Mirrortec® Reflector 200CA | asymmetric distribution

Siteco Mirrortec® Reflector 200CA light point resolution reflector | convex free-form single facets for asymmetric light distribution; reflector facets of rigid polymer material, highly specular aluminized and sealed | reflector elements each with 4 single facets 200 x 200mm on an aluminium baseplate; several reflector elements combined to one reflector, mounted on torsionally rigid support system of alloyed aluminium

Application area: indoors

Rec. reflector height: H= 7..30m

- also suitable for swimming pools with corresponding accessories



	A	B	C	D
5NW72640QA	850	845	480	650
5NW72640QB	1275	1260	900	1070
5NW72640QC	1700	1680	1315	1205
5NW72640QD	2120	2100	1730	1500

L (mm)	B (mm)	Wt. (kg)	Order No.
845	850	20.0	5NW72640QA
1260	1275	39.7	5NW72640QB
1680	1700	65.0	5NW72640QC

Siteco Mirrortec® Reflector 200CA Mounting Accessories

Mounting accessories (not shown)

Wire suspension

4-point ceiling suspension for variable heights to 2m | with turnbuckle for fine adjustment | for reflector inclination 15°...25°

Wall mounting

4-point wall connection with wall connection elements and wires for oblique suspension from the wall | with turnbuckle for fine adjustment | for reflector inclination to 45°

Pendant suspension

4-point pendant suspension with chlorine-resistant pendants for suspension heights to 1.75 m | with height adjustment | for ceiling connection to be implemented on-site

Type	Order no.
Wire suspension	5NW92640A
Wall mounting	5NW92640B
Chlorine-resistant pendants	5NW92640C

- Load capacity of suspension: max. 120kg (maintenance specifications in the installation instructions must be observed)



Siteco Mirrortec® Projector 400

The rotationally symmetric Siteco Mirrortec® projectors have been specially developed for combining with the Siteco Mirrortec® reflectors. The projectors are characterised by high light output ratios and narrow light distribution with narrow half-peak divergence, without light spill. This is made possible with precise optics: with the parallel beam version the inverse lamp alignment controls the beam area of ± 2.5 degrees so exactly that the projectors are suitable as projector systems for the Siteco Mirrortec® reflectors as well as for the precise, point illumination of towers and buildings. Walls and ceilings.

The projector of high quality diecast aluminium is compactly constructed for easy handling: the projector head and electrical housing that additionally functions as a wall surface mounting module are separately constructed, but connected via a rotating hinge. This enables the projector head to be variably adjusted and securely fixed with three screws.

- + patented optics specially developed for secondary reflector systems: inverse mounting position and axial lamp arrangement for parallel light distribution
- + extremely narrow distribution for optimal light point resolution
- + high level of uniformity on the reflector with minimal light spill
- + simple, discreet design
- + can be universally used for indoors and outdoors
- + compact design with diecast aluminium housing
- + optimised housing form: no shadows from socket or lampholder
- + relamping without tools



Housing

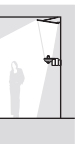
Housing of diecast aluminium, metallic grey (RAL 9006) coated | projector head and electrical case have a rotatable and pivotable joint | temperature-resistant cover panel | plated and anodised aluminium reflector | tool-free relamping via opening of upper tube hood

Electrics

Projector wired ready for connection | with 3-pole terminal, max. 2.5mm² | cable entry for cables D= 6...12mm | with LLCG, power factor corrected, and ignitor

Lighting technology

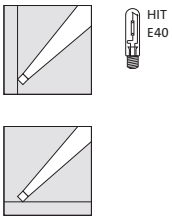
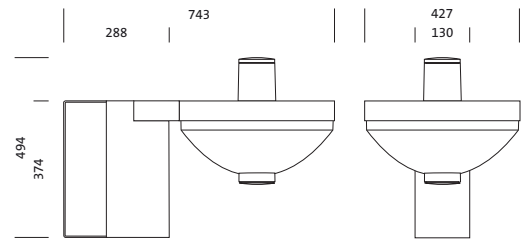
Due to patented lighting technology with inverse mounting position, beam area is precisely defined: parallel distribution optimised for secondary reflectors, maximum light output ratio and uniform illumination in $\pm 8^\circ$ beam range | significantly reduced light immission with less than 1.6% of luminous flux outside of range $\pm 10^\circ$





Siteco Mirrortec® Projector 400 | parallel distribution

Siteco Mirrortec® Projector 400 for surface mounting to wall or to a mast | patented lighting technology with inverse mounting position; aluminium reflector, highly specular, parallel distribution; with transparent cover | with LLCG, parallel p.f. correction and ignitor | housing of diecast aluminium, metallic grey (RAL 9006); reflector of plated and anodised aluminium, matt exterior; cover of toughened safety glass



Protection rating: IP65

Insulation class: I

Application area: indoors or outdoors

Recommended distance from projector to reflector:

250W: $D_{WS} = 2.4m$

400W: $D_{WS} = 2.4m$

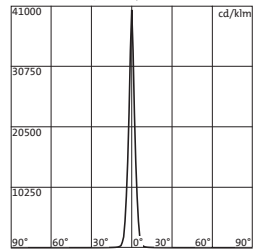
IP 65

Lamps	Socket	Wt. (kg)	LLCG w. th. prot., p.f. corr. Order No.
1x HIT 250W	E40	20.2	5NW41421RG1
1x HIT 400W	E40	21.6	5NW41421TG1

- recommended lamps with 400W: Osram HQI-BT 400W
 Note on lamp selection: when specifying lamps, the permissible lamp burning position must be considered (specification by lamp manufacturer)

5NW41421RG1

1 x HIT 250Wc/952 ϕ 20000 lm



l_{max} 40309 cd/klm at $\gamma 0^\circ$

	C 0/180	C 90/270
$\alpha_{50\%}$	2 x 2.3°	2 x 2.3°
$\alpha_{10\%}$	2 x 5.2°	2 x 5.2°



SiCOMPACT® R1 MINI

The projectors of the SiCOMPACT® R MINI family with narrow light distribution are suitable for combining with Siteco Mirrortec® reflectors and fit within the Siteco Mirrortec® system.

They are also outstandingly suitable for the illumination of horizontal surfaces as part of sophisticated architectural lighting.



Housing

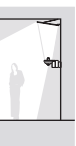
Housing of diecast aluminium; mounting bracket of steel, galvanised (SiCOMPACT® R1 MINI-S) or diecast aluminium (SiCOMPACT® R1 MINI Aluminium); all parts with weather-resistant coating in Siteco® metallic grey (DB 702S) | luminaire cover of toughened safety glass | pressure equalisation system with air-permeable membrane for condensation avoidance in housing

Electrics

Luminaire wired ready for connection with 3-pole terminal, max. 2.5mm² | cable entry for cables D= 7...14mm; optional protective tubing for cable to projector | with integral ballast (LLCG, with parallel power factor correction), spacially separated from lamp compartment

Lighting technology

Highly specular aluminium reflector with rotationally symmetrical narrow light distribution | lamp recommendation: Osram HCI-T or Philips CDM-T





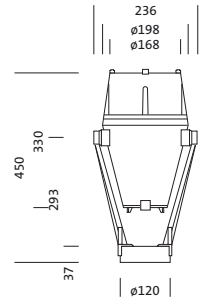
- + ideal projector for short projector-reflector distances
- + compact diecast aluminium housing with narrow distribution optics
- + including pressure equalisation port preventing condensation in housing
- + high efficiency with compact design
- + all electrical components integrated within housing





SiCOMPACT® R1 MINI Aluminium | narrow distribution

SiCOMPACT® R1 MINI Aluminium projector for mounting to cross-arm or vertical and horizontal surfaces | with aluminium reflector, highly specular, narrow distribution; with transparent cover panel | with LLCG, parallel p.f. correction and ignitor | housing and design mounting bracket of diecast aluminium; Siteco® metallic grey (DB 702S); cover of toughened safety glass (ESG)



Protection rating: IP65

Insulation class: I

Application area: indoors or outdoors

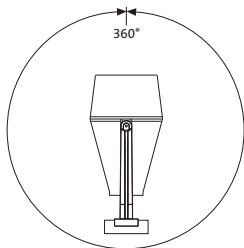
Recommended distance from projector to reflector:

70W: $D_{W5} = 2..3m$

150W: $D_{W5} = 2..3m$

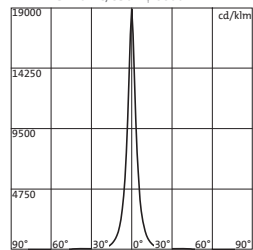
IP 65

Lamps	Socket	Wt. (kg)	narrow distribution Order No.
with integrated CG, with integrated ign. (with automatic power disconnection)			
1x HIT-CE 70W	G12	5.9	5NX724E1MB08
1x HIT-CE 150W	G12	6.9	5NX724E1PB08



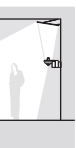
5NX724E1MB08

1 x HIT-CE 70Wc/830 ϕ 6600lm



I_{max} 18903 cd/klm at $\gamma 0^\circ$

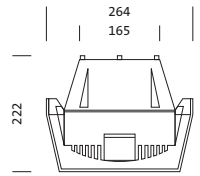
	—	- - - -
	C 0/180	C 90/270
$\alpha_{50\%}$	2 x 3.3°	2 x 3.3°
$\alpha_{10\%}$	2 x 8.9°	2 x 8.9°





SiCOMPACT® R1 MINI-S | narrow distribution

SiCOMPACT® R1 MINI-S projector for mounting to cross-arm or vertical and horizontal surfaces | with aluminium reflector, highly specular, narrow distribution; with transparent cover panel | with LLCG, parallel p.f. correction and ignitor | housing of diecast aluminium; mounting bracket of steel; Siteco® metallic grey (DB 702S); cover of toughened safety glass (ESG)



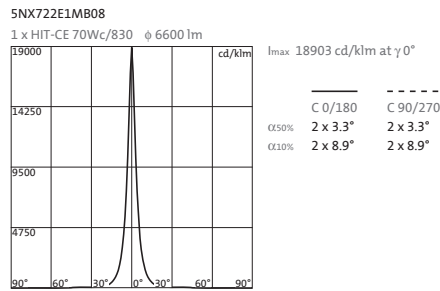
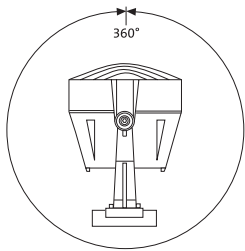
Protection rating: IP65
 Insulation class: I
 Application area: indoors or outdoors
 Recommended distance from projector to reflector:
 $D_{W5} = 2.3m$

IP 65



narrow distribution

Lamps	Socket	Wt. (kg)	Order No.
with integrated CG, with integrated ign. (with automatic power disconnection)			
1x HIT-CE 70W	G12	4.7	5NX722E1MB08



SiCOMPACT® R1 MINI-S | ... MINI Aluminium Optical Accessories



Baffle ring
 for glare limitation when viewed directly | galvanised, coated black (RAL 9005, matt)

Type	Order no.
Baffle ring	5NX72400XB01

SiCOMPACT® R1 MINI Aluminium Mounting Accessories



Wall arm
 for mounting projector | wall arm of diecast aluminium, Siteco® metallic grey (DB 702S)

Type	Order no.
Wall arm	5NY72400XW18



Siteco Mirrortec® Projector 1000

The Siteco Mirrortec® Projector 1000 is suitable for combining with the Siteco Mirrortec® reflectors and fits within the Siteco Mirrortec® system. The projector fulfils the highest demands for performance and visual comfort as well as energy efficiency and operating cost efficiency. Its innovative construction combines state-of-the-art lighting and luminaire technology.

The lighting technology has been optimised for the use of high efficiency 1000 W HIT-DE lamps and via the special reflector geometry allows precise control of light with minimal light spill and glare.

The narrow light distribution achieves a luminous intensity of 30000 cd/klm. For longer maintenance cycles and a very high luminaire service life, the projector is equipped with an efficient thermal management system, reflected in the construction of the luminaire: eye-catching cooling ribs dominate the rear of the slimline projector. A robust and practical locking catch secures the back that can be opened for maintenance of the electrics and optics. The luminaire form and front side determine the relatively large-area optic. Construction of the housing has been kept as flat and as efficient as possible in order to minimise the effects of wind.

- + compact construction: reflector = housing
- + flat design: low windage area, low weight
- + thermal management: reflector tight-fits to housing
- + housing with integral cooling elements
- + thermal decoupling of connection box with integral ignitor
- + lamp cover of ceramic glass; with protective grid
- + narrow optics with a luminous intensity of 30,000 cd/klm
- + luminaire light output ratio nLB= 87%
- + trapezoid bracket for robust fixing and flexible mounting (long hole + two additional mounting holes)
- + housing of diecast aluminium
- + including pressure equalisation port preventing condensation in housing
- + all-pole mains disconnection with opening of housing
- + no external cables due to integrated terminal box and ignitor box



Housing

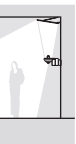
2-part housing of diecast aluminium, coated in Siteco® metallic grey (DB 702S); with side mounting bracket of galvanised steel | all-round weather-resistant sealing in housing profile | cover of flat ceramic glass | mounting bracket with adjustment feature for floodlight, with twist protection | pressure equalisation system with air-permeable membrane for condensation avoidance in housing | insulation class: I | protection rating: IP65

Electrics

Luminaire wired ready for connection | with 3-pole connection terminal (version for instant hot re-ignition: (4-pole connection terminal), max. 2.5mm² | cable gland for cable D= 6..12mm | luminaire for separate gearbox; ignitor or ignitor for instant hot re-ignition integrated in luminaire housing | all-pole mains disconnection with opening of housing

Lighting technology

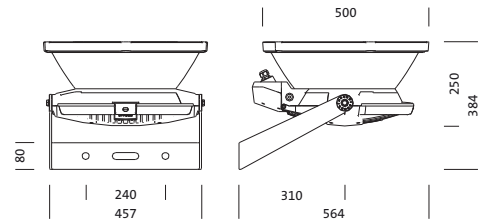
Highly specular aluminium reflector with rotationally symmetrical narrow light distribution





Siteco Mirrortec® Projector 1000 | narrow distribution

Siteco Mirrortec® Projector 1000 for mounting to cross-arms, vertical and horizontal surfaces | with aluminium reflector, highly specular, narrow distribution; with transparent cover panel | for separate ballast; with ignitor, optionally with hot re-ignition | housing and ring of cover of diecast aluminium; mounting bracket of galvanised steel; all parts in Siteco® metallic grey (DB 702S); reflector of aluminium, satin matt outer; cover of glass ceramics; with protective grid



HIT-DE
K12s-36
l=187

Protection rating: IP65
Insulation class: I
(without ballast)
Application area: indoors or outdoors
Recommended distance from projector to reflector:
 $D_{WS} = 3..4m$

IP 65

Lamps	Socket	Wt. (kg)	narrow distribution Order No.
without CG, with ign.			
1x HIT-DE l=187 1000W	K12s-36	13.5	5NA75601VP11C
without CG, with ign. (with hot re-ignition)			
1x HIT-DE l=187 1000/2000W	K12s-36	16.5	5NA75671WP11C
- please order gearbox separately			
Mandatory accessories (for details see below)			
Article		Wt. (kg)	Order No.
LLCG, ind., for 1x HI . HS . 1000W		12.1	5NA77901VE0
LLCG, p.f. corr., for 1x HI . 1000W		15.5	5NA77921VR0

Electrical Accessories



Fig. 1

Control gear unit for mounting to wall, in switching cabinet, to supporting structure or in correspondingly dimensioned masts | compact unit for operation of projector; with ballast, compensation capacitor | wired ready for connection with 9-pole connection terminal, max. 6mm² | cable gland for cables D= 8...13.5mm | capsuled casting resin, black; base plate with 2 fixing points
Protection rating IP65 | insulation class I

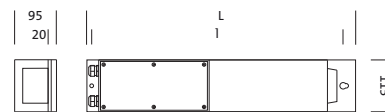
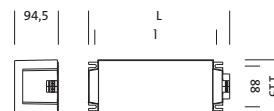


Fig. 2

Ballast for installation in switching cabinet, without power factor correction | 3x 4mm² connection terminal | capsuled casting resin, black | base plate with 4 fixing points
Protection rating IP20 | insulation class I



For lamps	Fig.	Lamp current (A)	Mains voltage (V)	L (mm)	l (mm)	Wt. (kg)	Order no.
Control gear unit, power-factor corrected, IP65							
HIT-DE 1000W	1	9.5	220/230/240	524	495	15.5	5NA77921VR0
Ballast with terminals, without power factor correction, IP20							
HIT-DE 1000W	2	9.5	230/240	230	168	12.1	5NA77901VE0