

# isollux<sup>TM</sup>

Intelligent Lighting Solutions



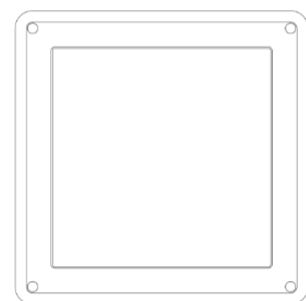
The Ultimate IP65 Cleanroom Luminaire | **Soffito<sup>TM</sup>**



Designed for commercial and industrial applications.

Designed in New Zealand and manufactured under license in Shenzhen, Soffito is the optimum high power, LED clean room luminaire, suitable for a broad range of commercial and industrial applications. It is the ultimate lighting solution for areas where the combination of hygiene, ease of maintenance and reliability, are critical to meeting the stringent demands of commercial customers.

Suitable for recessed or surface mount applications, Soffito is proven in application and introduced to the global market only after three years of extensive trials across medical, pharmaceutical and food processing facilities.



660mm

110mm



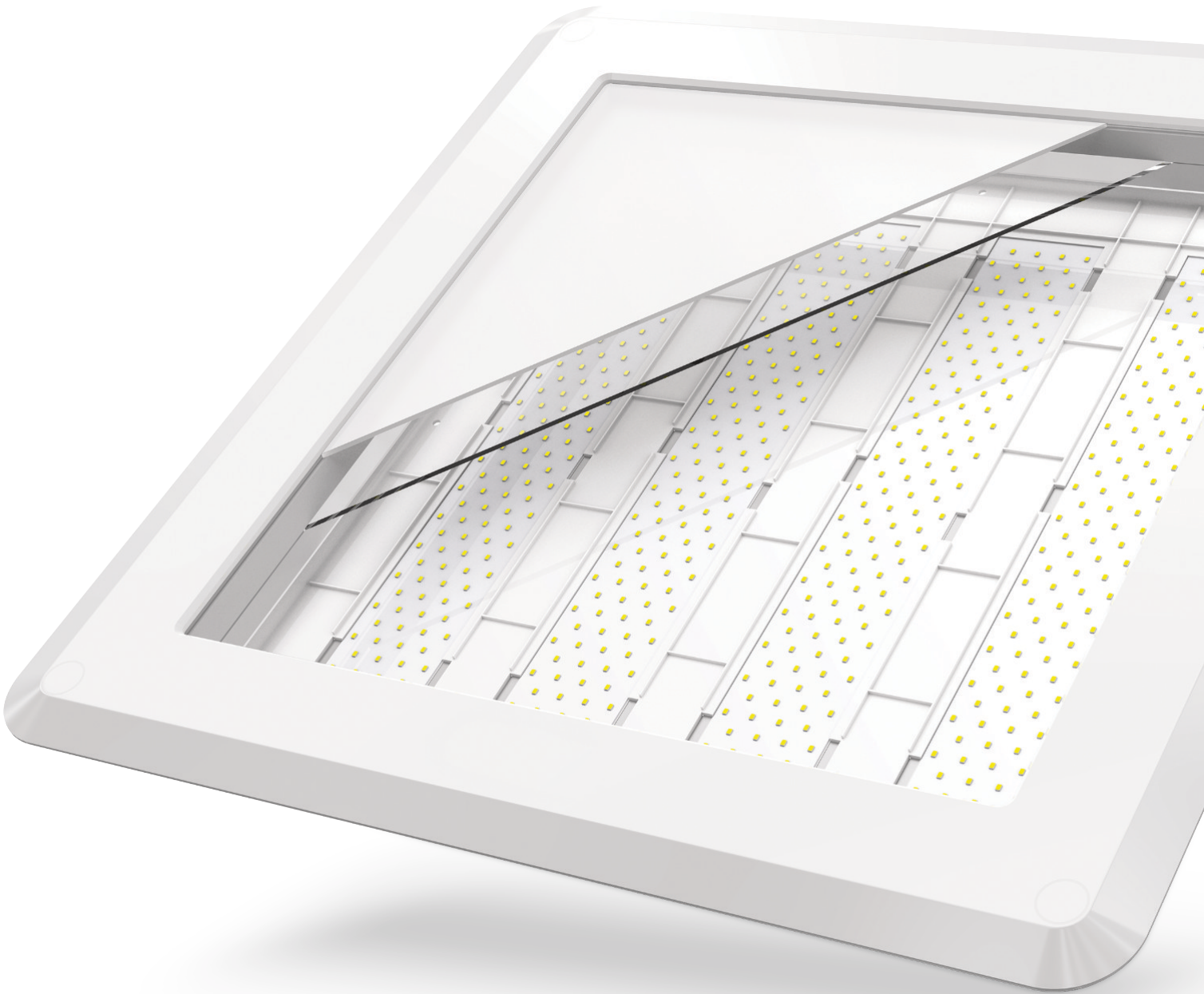


Hygienic, germ-free  
and easy to clean.

Soffito's unique design eliminates the folds and grooves where contaminants and microbes typically accumulate in clean room fittings. The one piece plastic frame assembly is fabricated from a special blend of polymers, that are fire resistant, will not rust and offers impact resistance. The product is suitable for use with chlorine and quaternary cleaners at standard dilutions, simplifying cleaning and reducing cleaning cycle time.

Resistant to:





Optional dual lens, reduces thermal exchange in cool rooms and chillers.

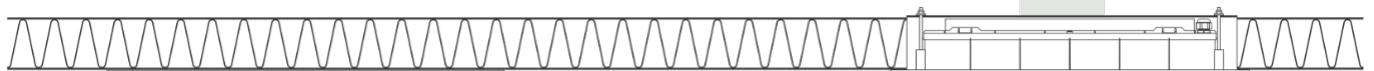
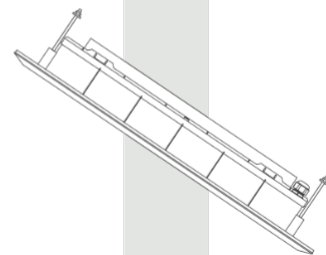
Soffito was awarded a global patent in 2018. The unique design includes the optional addition of a dual lens to reduce thermal losses and thermal exchange through the fitting in chillers and cool rooms.



Installs from above or below  
flush or surface mount.

Light weight and easy to handle, Soffito installs easily from above, passing through its own footprint, to mount flush against refrigerated panel and ceilings between 75-300mm deep, creating an IP65 seal to the room below.

Alternatively it can be installed directly to solid surfaces using the Soffito mounting box kit, available in stainless steel or powder coated finish. The kit includes pre-fixed brackets for mounting the LED driver internally.





## Designed in New Zealand, Manufactured in Shenzhen, Proven in industry

Famous for its lamb; beef, fish and dairy exports, New Zealand provided the ideal proving ground to develop and test the ultimate high performance clean room luminaire.

The New Zealand primary industry sector is critical to the country's economy and has some of the most demanding hygiene standards in the world. Our design team spent months, visiting sites, meeting customers to understand and define their needs first hand. Customers demanded ease of installation, reliability, excellent performance and most importantly a rapid return on investment.

Once the initial prototype design was complete our team worked closely with our manufacturing partners of ten years, based in Shenzhen China to select materials and finalise tooling. The final product 'Soffito' quickly became the "go-to" product of choice.

Five years after our journey began, with many satisfied customers and a global patent, we are taking the product to a global market.



Sanitisers



Cool Stores



Wash Down



## Frosted lens eliminates glare and shadow

Meeting the high lux levels required for clean rooms and food processing facilities is relatively easy, avoiding glare is not. Especially where surfaces are predominantly white or stainless steel and work activities are centred around fast moving machinery or sharp knives.

The frosted lens of Soffito eliminates spotting and glare, using the surfaces of walls and floors to bounce light around plant and equipment. The result is a well lit, highly uniform working environment improving visual acuity and safety around complex machinery. Making work places easier to inspect and maintain hygiene standards during wash down.





## Medical and Pathology

Medical environments provide a variety of light fixture design challenges. Soffito is ideally suited for use with the increasingly diverse range of medical-sanitisers used to combat the spread of multi-resistant strains of bacteria.

Soffito creates a hermetic seal when installed, ideal for in pressurised rooms such as surgeries, critical care and pathology labs. Once installed the majority of components can be maintained without the need to break the rooms seal. Extremely useful in busy hospital theatres where access is limited.

Soffito's rich colour spectrum meets patient health requirements, so medical staff are able to identify and diagnose illnesses dependent on early visually detection, such as hypoxia.



Ultra Violet Protection  
UV LED Available on Request\*



Hermetic Seal



Sanitisers



Cool Stores



Wash Down





## Pharmaceutical and Chemical Industries

Whilst meeting the stringent hygiene requirements of the pharmaceutical industry, the standard Soffito product range can be specified to support a range of colour filters to prevent damage to photo sensitive compounds.

Custom production options\* include protection against ultra-violet light sources, inclusion of UV LEDs within the arrays or increased resistance to chemicals.



Selective Colour Filter



Ultra Violet Protection



Hermetic Seal Pressure



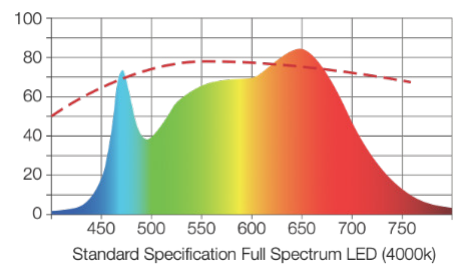
Increase Chemical Resistance

\*Maybe subject to MOQ



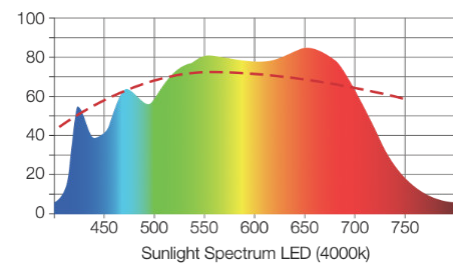
## Excellent performance at standard specification.

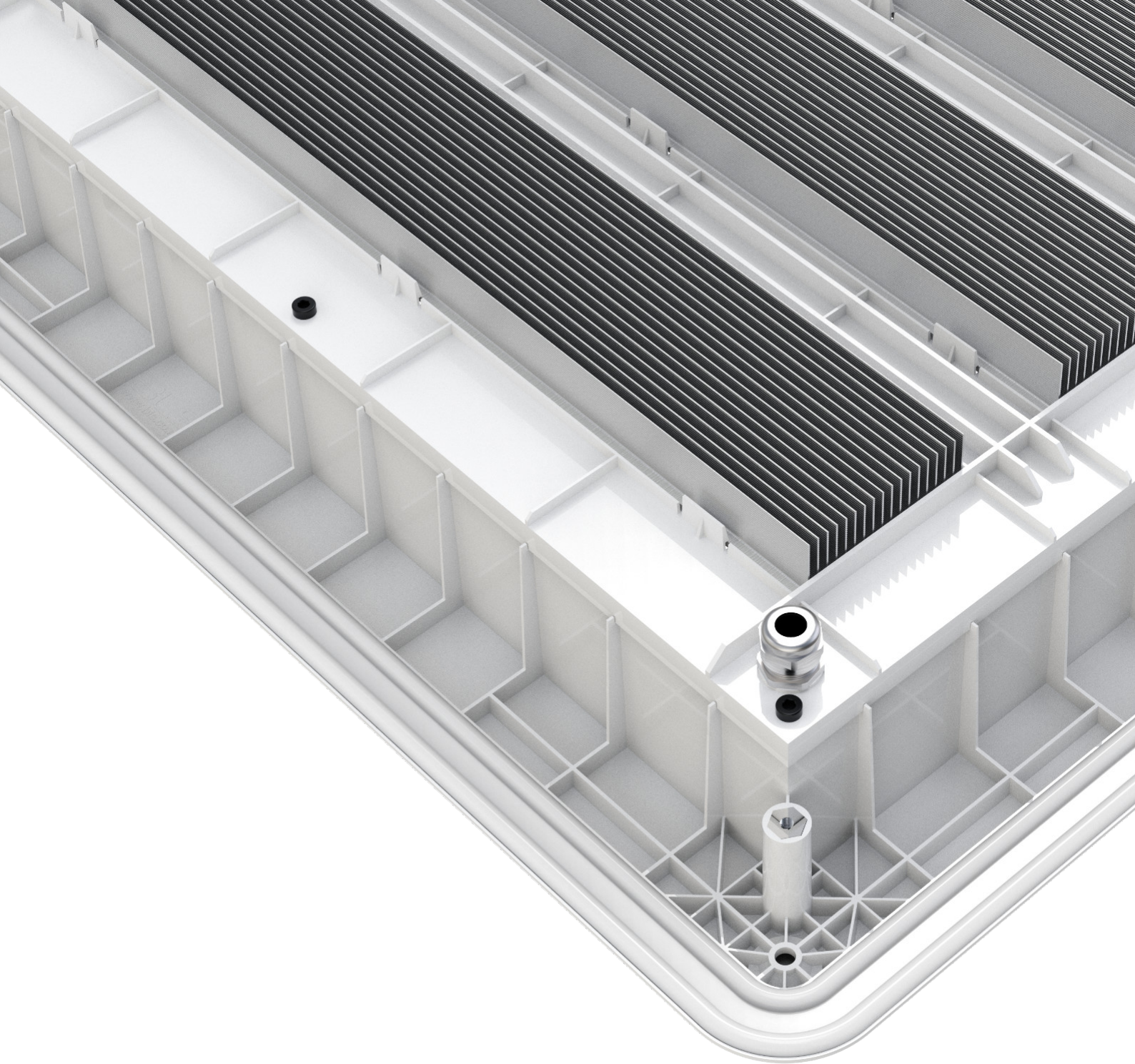
The standard specification balances colour accuracy to efficacy without compromise. Important in areas which are often devoid of daylight. To deliver luminaire performance of 142lm/W Ra85 / R9  $\geq 10$  @ 5000k at Ta 30°C.



## Quality control and colour proofing.

Soffito is also available with a range of Ra95 chipset options including the latest 'Sunlight Spectrum LED', a chipset that delivers exceptional accuracy, a reduced blue peak and continuous saturation with R1-R15  $\geq 95$ , ideal for colour sensitive applications and quality control.





Cell and frame constructions delivers a light weight, rigid structure.

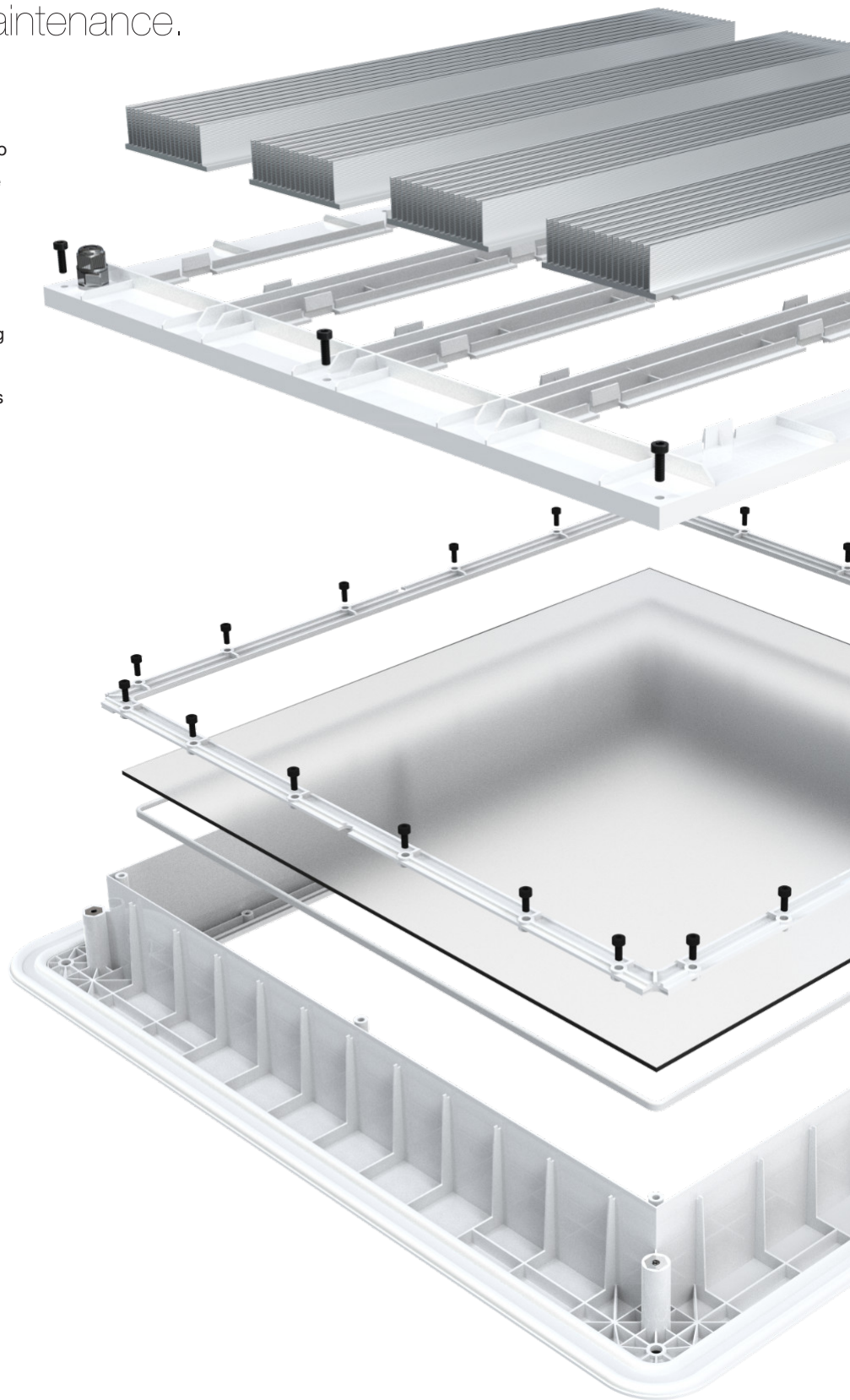
When assembled each light weight component locks to the next to create a rigid structure. This provides a stable frame to create an IP65 seal between the product and surface to which it is mounted. The dual-point seal provides a gulley into which silicon may be added to bridge ceiling joints or uneven surfaces.

## Replacement components support long term maintenance.

Industrial plants are tough on equipment, minimising downtime after an event is essential. That is why we designed Soffito, so that every component can be replaced in the field and in-situ with simple tools.

Where access from above is possible, every element of the design may be replaced from the top down, the majority of which, effecting the room below. Protecting the room below from accidental release of dust and microbes during an adhoc maintenance event.

Another innovation is the elimination of a formed or shaped lens. Instead the use of sheet material ensures the lens can be maintained easily and replaced if required without the need to wait for a unique component, future proofing the installation.



High performance without any sacrifices

## HE LED Chip

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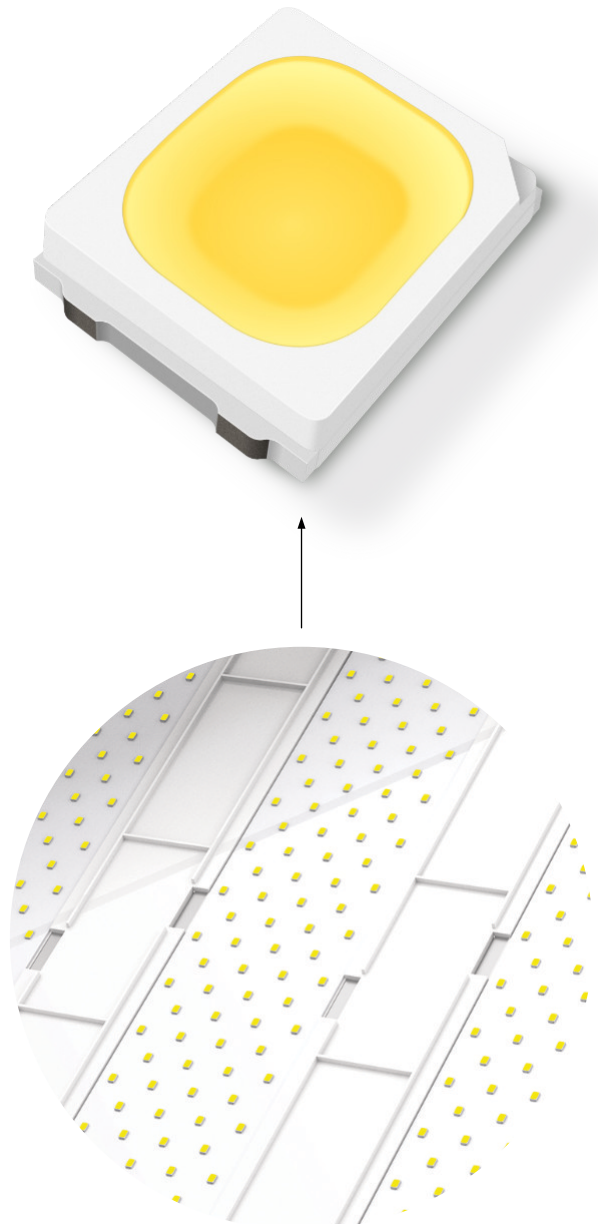
184lm/W @ Ra85

100,000Hrs/L90

**Ra 85 | Ra95 | 3000K | 4000K | 5000K | 6000K**

The Isollux HE LED Chip is powerful and long-lasting. Capable of delivering 184 lumens per watt (before losses) and the ability to last four times the industry standard with proper driver management\*. The HE Chip delivers an exceptional ROI, with a low environmental impact and class leading performance.

Isollux HE is a dual die chipset, operated at less than 50% of its peak drive current, designed to deliver the maximum service life and efficacy of the luminaire. It has an exceptionally long service life of L90 100,000Hrs specified to optimise the luminaire performance. It is ideal to support long term maintenance strategies minimising waste

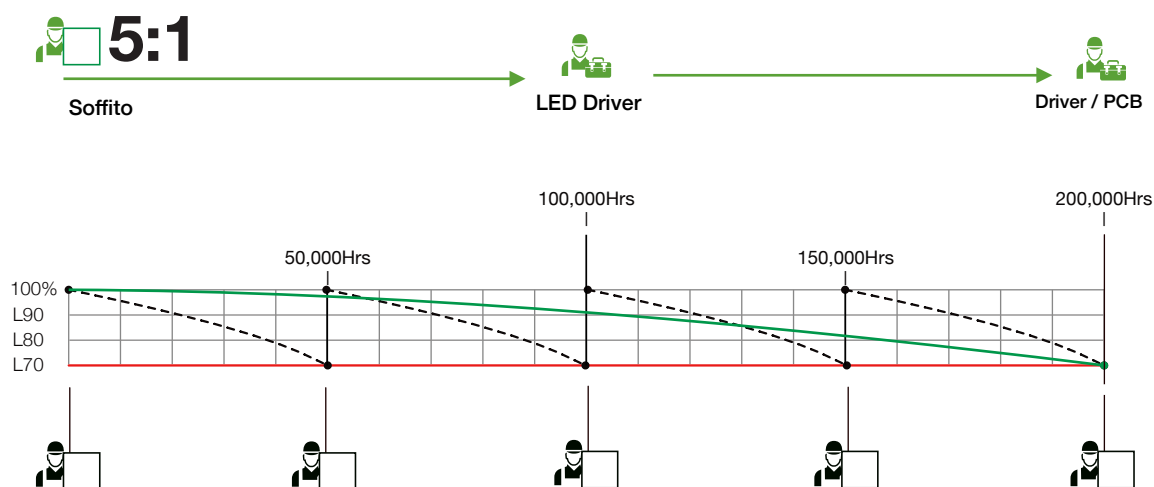


\*HE Chipset L90 Lifetime calculated using 9,000hr independent LM80 photometry report, citing zero failures, using the Energy Star TM-21 protocol. Calculations are based on ambient temperatures of 25°C. Assumes driver replacement as routine maintenance event with driver replacement schedules subject to, power quality, frequency of switching cycles and average to peak ambient operating temperatures. Assumes driver replacement at midpoint of lifecycle, with the calculated MTFB 192.2K hrs min. MIL-HDBK-217F (25°C) based on the 100W 1500mm TPA/TPH. Average driver life 62,000Hrs

# The sustainable approach

Isollux HE dual chip technology increases LED lifetime up to 200,000 Hrs, with maintenance kits to extend the practical life of the luminaire. Simple, efficient and financially beneficial.

- ▶ Reduces total cost of ownership maximising ROI and NPV
- ▶ Reduces land fill, manufacturing and supply related carbon footprint by up to 640%
- ▶ Delivers a longer practical performance life (L90 >100,000 Hrs\* - L70 > 200,000 Hrs)
- ▶ Supports planned and unscheduled maintenance to the maximum life of the fitting
- ▶ Minimises downtime with easily maintained and replaceable parts
- ▶ Ensures continuity of fixtures on site
- ▶ Components easily dismantled at end of life for recycling



\* HE Chipset L90 Lifetime calculated using 9,000hr independent LM80 photometry report, citing zero failures, using the Energy Star TM-21 protocol. Calculations are based on ambient temperatures of 25°C. Assumes driver replacement as routine maintenance event with driver replacement schedules subject to, power quality, frequency of switching cycles and average to peak ambient operating temperatures. Assumes driver replacement at midpoint of lifecycle, with the calculated MTFB 192.2K hrs min. MIL-HDBK-217F (25°C) based on the 100W 1500mm TPA/TPH. Average driver life 62,000Hrs.

# Applications



Dairy Production & Storage



Meat & Poultry



Pharmaceuticals



Food Packaging & Printing



Coolstores & Distribution



Medical & Pathology



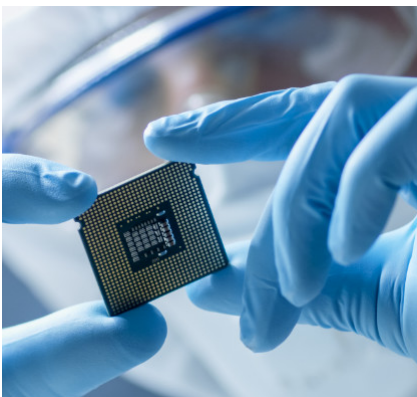
Bottling & Labelling



Bakeries & sweets



Fresh Produce



High-Tech Manufacturing



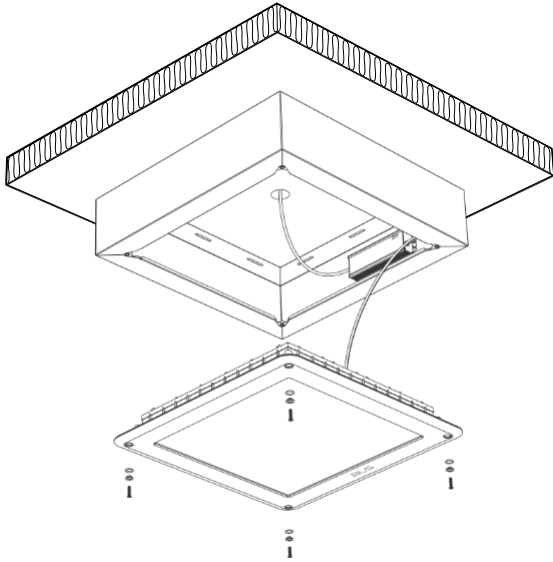
Aqua Culture Smolt & Production



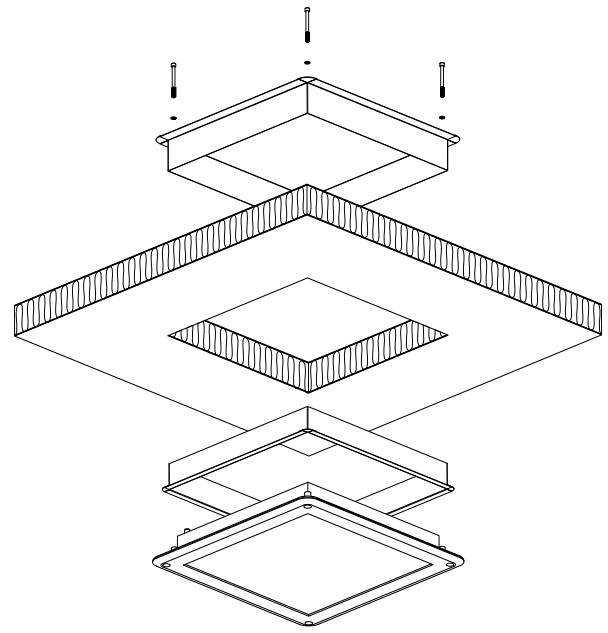
Industrial Chemicals

# Simple Installation Options

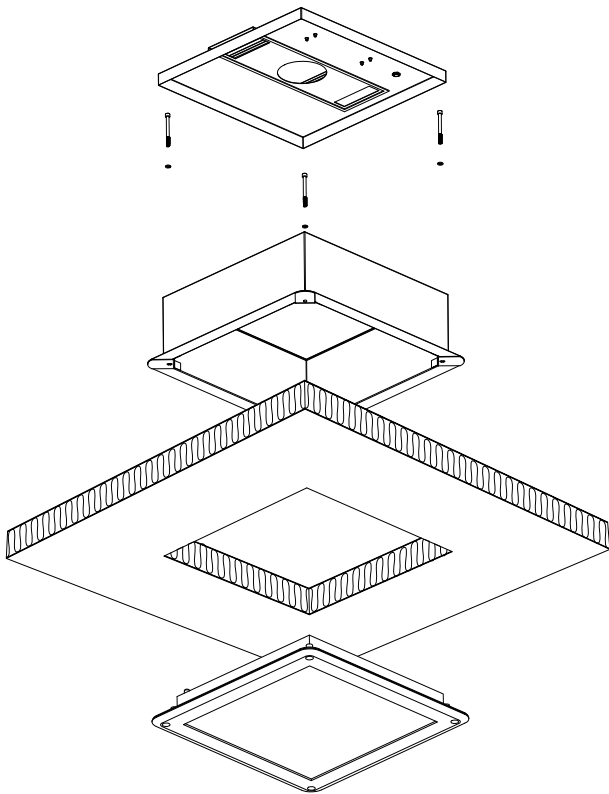
With approved Isollux installation kits



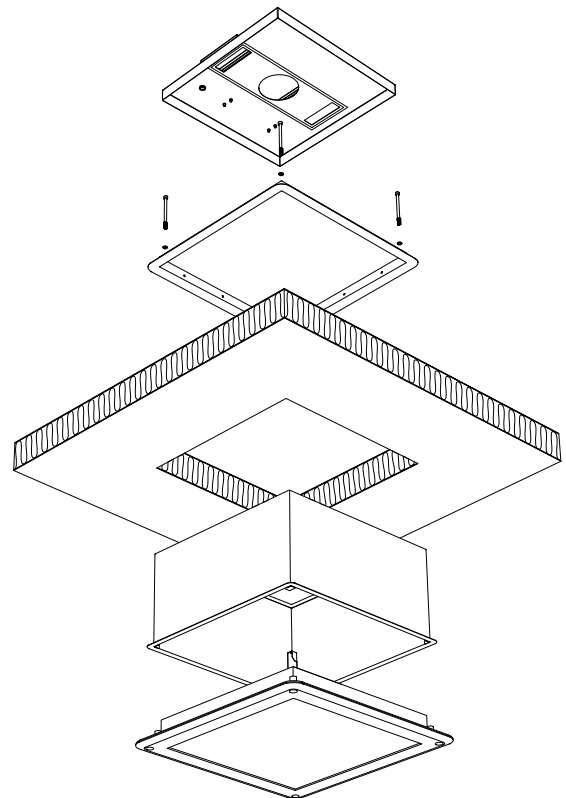
Surface Mount Box | SFO-MB



Telescopic Flashing Kit | SFO-FK



Top Mount Box with Vented Lid | SFO-TB

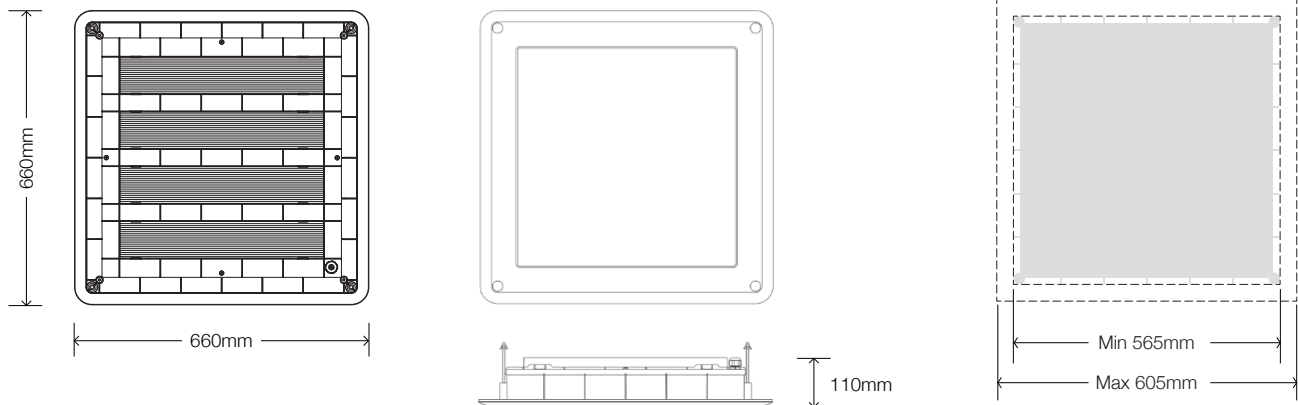


Vented Enclosure | SFO-VB



# Soffito-HE Chipset Product Codes

L90-100,000Hrs | 142lm/W



PRODUCT	PERFORMANCE			AMBIENT		DRIVER	INRUSH	MAX PSU 16A	WARRANTY
Model Number	Output	Power	Efficiency	Min	Max°	Function	Amps	Type C Breaker	24/7 @ max (Ta)
<b>Soffito HE</b>									
SFO-HE-XYX-100W-ND	14,200lm	100W	142lm/W	-40°C	50°C	Non Dim	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-100W-DM	14,200lm	100W	142lm/W	-40°C	50°C	0-10V	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-100W-DA	14,200lm	100W	142lm/W	-40°C	50°C	DALI	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-150W-ND	21,300lm	150W	142lm/W	-40°C	50°C	Non Dim	65A	7 @ 230 Vac	5 YRS
SFO-HE-XYX-150W-DM	21,300lm	150W	142lm/W	-40°C	50°C	0-10V	65A	7 @ 230 Vac	5 YRS
SFO-HE-XYX-150W-DA	21,300lm	150W	142lm/W	-40°C	50°C	DALI	65A	7 @ 230 Vac	5 YRS
SFO-HE-XYX-180W-ND	25,560lm	180W	142lm/W	-40°C	50°C	Non Dim	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-180W-DM	25,560lm	180W	142lm/W	-40°C	50°C	0-10V	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-180W-DA	25,560lm	180W	142lm/W	-40°C	50°C	DALI	65A	6 @ 230 Vac	5 YRS
<b>Soffito HE - Low Power</b>									
SFO-HE-XYX-40W-ND	5,680lm	40W	142lm/W	-40°C	50°C	Non Dim	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-40W-DM	5,680lm	40W	142lm/W	-40°C	50°C	0-10V	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-40W-DA	5,680lm	40W	142lm/W	-40°C	50°C	DALI	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-60W-ND	8,520lm	60W	142lm/W	-40°C	50°C	Non Dim	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-60W-DM	8,520lm	60W	142lm/W	-40°C	50°C	0-10V	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-60W-DA	8,520lm	60W	142lm/W	-40°C	50°C	DALI	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-80W-ND	11,360lm	80W	142lm/W	-40°C	50°C	Non Dim	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-80W-DM	11,360lm	80W	142lm/W	-40°C	50°C	0-10V	65A	6 @ 230 Vac	5 YRS
SFO-HE-XYX-80W-DA	11,360lm	80W	142lm/W	-40°C	50°C	DALI	65A	6 @ 230 Vac	5 YRS

**(X)** Correlated Colour Temperature options include: 4000°K **(4)** | 5000°K **(5)** | 6000°K **(6)**

**(YY)** Ra (CRI) Options include Ra85 **(85)**, Ra95. **(95)** Example: 5,000k Ra85, XYX = 585

**ND** Non dimming (Vo to reduce output) | **DM** 1-10V Dimming | **DA** DALI



\*High radiant temperatures or unexpected heat sources can potentially damage or significantly impair the performance of the luminaire. Use of third party non-approved enclosures will void warranty. Only suitable for use with Isollux approved and manufactured installation kits. Please contact Isollux prior to installation if further information is required.



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Regional Authorised Global Partners can be found in the following locations

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