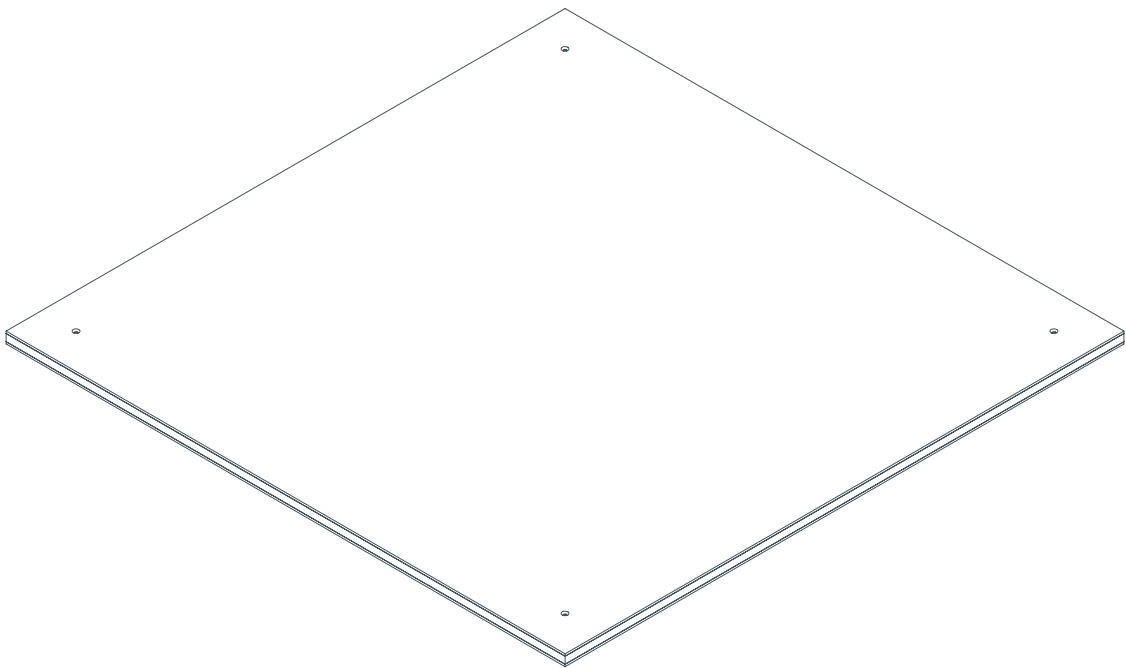


Light Panels

O&M Manual



Protect the environment by
not disposing of this product
with your household waste.
Check with your local
authority for recycling advice
and facilities.

Unibox Statement

This manual serves as a comprehensive guide for the operation and maintenance of your Unibox product(s). If you encounter any uncertainties during maintenance procedures, please do not hesitate to contact us where a member of our staff can provide support you and address any questions or concerns you may have.

It is crucial to emphasise that only qualified electrical engineers or Unibox trained professionals should carry out any work on our

products. Additionally, it is essential to isolate all power sources during maintenance to ensure the personal safety of maintenance personnel. We are ready to assist you at any stage of the process. Please feel free to reach out to our team today at 0161 655 2100 or quality@unibox.co.uk, or simply scan the QR code provided below.



Unibox Warranty - English

Standard Warranty

Definitions

The Company – United Aluminium Limited and subsidiary companies (including trading styles Unibox and Lumenal).

The Product – Equipment purchased from The Company.

The Component – Piece of The Product which can be sent for diagnosis.

Service – Any additional time or service purchased from The Company for installation.

The Customer – The entity that has bought The Product.

Statement

The company's products are supplied with a 3-year Warranty. This is the company's commitment to replace or repair the product, free of charge, following any manufacturing defects with the product that may arise after date of invoice.

All components used in our products are tested before they leave our factory to ensure that they are free from defects and are in good working order. All components used are appropriate for the products produced and comply with UK regulatory guidelines and obligations.

In order to fulfil the terms of this Warranty, Customers must have used a qualified electrician for any works on our product in accordance with BS7671-IET wiring regulations.

Defects within first year – UK mainland only

Within the first year, the company will attempt to repair or replace the product free of charge to resolve any defect that can be substantiated as a manufacturing fault. The course of action taken will be at the company's sole discretion. If the fault is not deemed to be a manufacturing fault, the site visit may be subject to charge (see General Terms for site visit charges).

Defects within 2-3 years – UK mainland only

For any defects identified in the 2nd or 3rd year, the company will repair or replace a returned product or part that can be verifiably shown to be due to a manufacturers fault. However where return to manufacturer is not possible the Company will carry out a remote diagnostic after the fault report has been completed. If The Company think it is required, a chargeable site visit will be arranged, which will not be chargeable if the fault is found to be a manufacturing issue. The company will carry out a repair or replacement on site. The course of action taken will be at the company's sole discretion. Please refer to Warranty General Terms.

To exercise your rights under this Warranty, the component should be returned to Unibox, Greenside Way, Middleton, M24 1SW by The Customer for diagnosis, repair or replacement.

Any on-going works on the product, should be completed by a qualified electrician in accordance with BS7671-IET wiring regulations.

Defects within 2-3 years – UK mainland only

The following terms must be met in order to claim under the Standard Warranty:

1. This Warranty covers products installed and maintained in the United Kingdom only (including Northern Ireland).
2. If the product or service in question has not been paid for in full within the agreed payment terms of the invoice issued, then the Warranty is null and void.
3. Following the repair or replacement of The Product, The Company will continue to honour the Warranty on The Product for the unexpired period of the Warranty.
4. The Warranty is limited to material / component defects only.

5. The Customer will complete and return the Warranty Claim Form to The Company in order for defects to be diagnosed effectively. The Warranty Claim Form will be sent to The Customer on receipt of a warranty claim.
6. If it is not possible to return The Product to The Company thereby necessitating the need to attend the Customers premises, The Company will charge a discounted rate of £200 plus travelling expenses (£1.75 per mile from The Company base to site, including return) per site within the United Kingdom (including Northern Ireland) to attend to any repairs in situ. These costs will only apply if fault is not deemed to be a manufacturing one. Please note: any costs in relation to the access to equipment in years 2-3 is not covered. These will be invoiced separately once a full remedy has been reached.

Warranty Exclusions

The Warranty excludes the following:

1. Defects arising from; wilful damage, unusual wear and tear, alteration or modifications undertaken to The Product by either the Customer or any installation team independent to The Company.
2. Damage or other failure arising from installation by another party, extraordinary events (Force Majeure) including, but not limited to; extreme weather events, fire, power failure.
3. If The Company attends The Customer's premises and the repair is found to be outside of the above Warranty terms but within the exclusions (E.g., non-manufacturing fault) all labour, travel and expenses costs will be charged to The Customer.
4. Alterations made to The Product, so that it is not used for the purpose which it was intended.

Disclaimer

Damaged goods should be reported to quality@unibox.co.uk within 72 hours of receipt of goods.

The Company will not be held responsible or liable for any expenses or consequential loss or damages resulting from defective products with liability limited to the terms of the Warranty.

The Company will not be held responsible for any damage or loss arising from any information (including but not limited to drawing, design or specification) provided by The Customer.

The Company will not be liable for any harm to goods, individuals or property on the Customer's premises.

The Customer's statutory rights are not affected by this Warranty.

Cleaning and Maintenance Procedures

Before laying down aggregate

Ensure top of each panel is clean and free from any dirt and debris before laying down stone aggregate. Any surface contaminants may reduce light transmission and reduce peak performance.

Product Materials

Acrylics

Use a bucket of lukewarm water, with a few drops of mild liquid detergent (such as washing up liquid) and a non-abrasive cloth to clean a range of plastics. It's important the cloth is non-abrasive as acrylics are more easily scratched than standard glass. Put plenty of water in your bucket so that you can rinse the cloth frequently. This prevents any dirt and grit from scratching the acrylic.

As a bonus, at the end of the cleaning process, using an antistatic cleaner will prevent a build up of static charge which can attract dust building up.

Glass

Use a bucket of lukewarm water, with a few drops of mild liquid detergent (such as washing up liquid), or a mixture of one part white vinegar and four parts water (preferably distilled water), or window and glass cleaner and a non-abrasive cloth to clean glass. Avoid cleaning in direct sunlight to avoid streaking. Start from the top of the glass pane and work your way down.

LEDs

Ensure power is switched off first. For dusty or slightly dirty LEDs, simple dry cleaning is usually sufficient. Ideally, cleaning by means of compressed air (e.g. central supply or spray can) is recommended here. The LEDs and/or the board are blasted with clean air. If compressed air from a central supply is used, care should be taken that the air is purified. If this is not the case, the opposite effect may be achieved, e.g. additional contaminants such as oils may be sprayed onto the components or the board.

The simplest method is cleaning the LEDs with a clean, soft, lint-free, dry cloth (cellulose or linen) or a clean brush.

Driver Cabinets/Units

PLEASE NOTE: driver and driver cabinets should only be accessed by qualified electricians.

If driver failure is suspected contact Unibox directly.

Cabinets should be cleaned regularly to remove dust and other loose debris. Cabling and other connections must be avoided.

Failure Report

Please get in touch with the below information if there is a failure or maintenance issue.

Site name and address:

Contact name:

Contact number:

Description of failure:

Any images of failure:

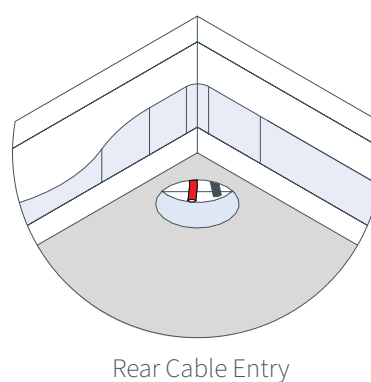
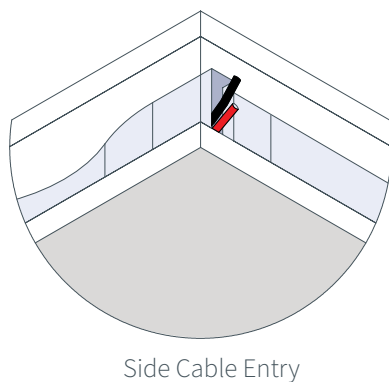
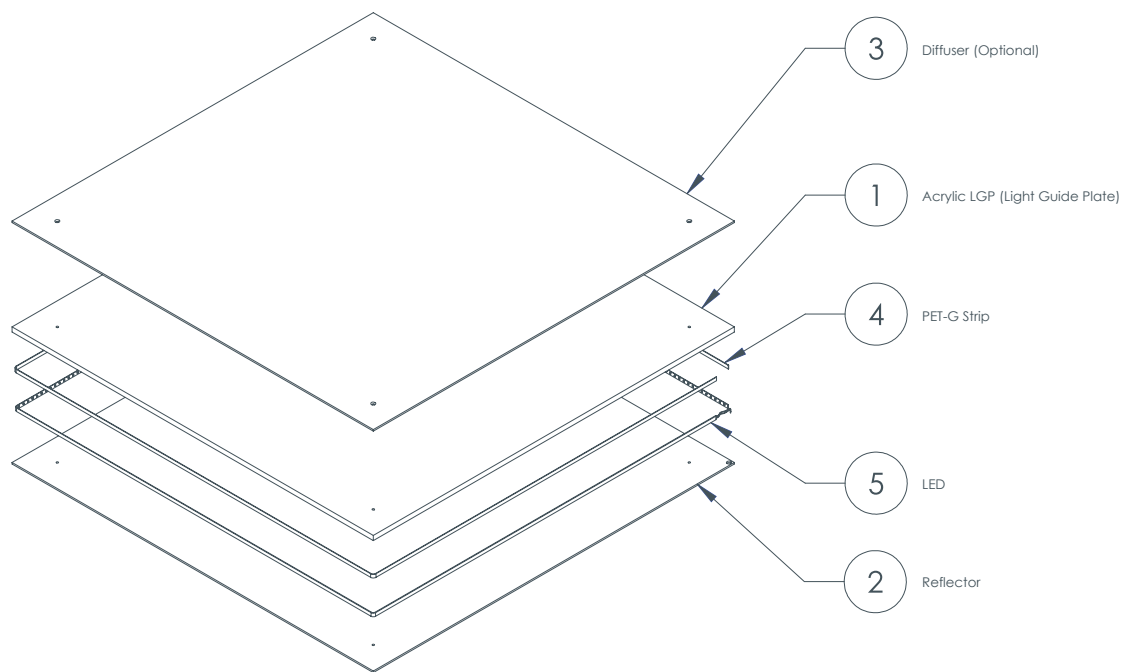
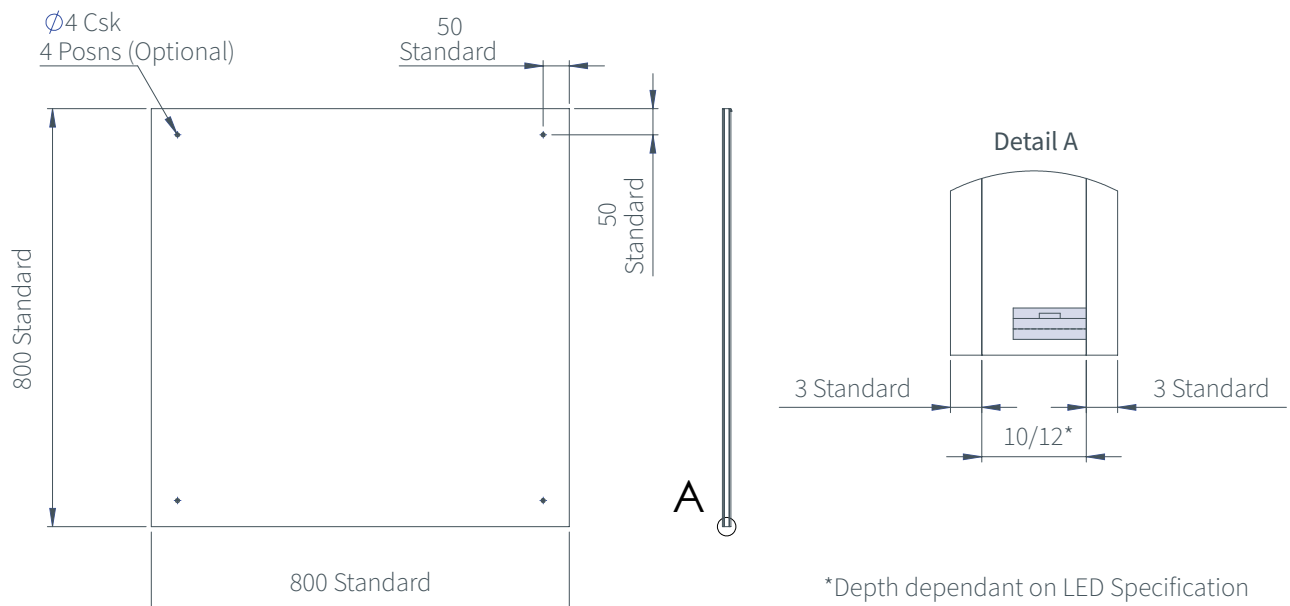
Please use the rough guide below for potential reasons for a failure. (Use as a guide only reasons may vary)

1. Individual lightpanel not illuminated: This would most likely be a lightpanel failure or connection under the panel.

2. Group of 4 tiles not illuminated: This would most likely be a DALI controller failure or connection at the cabinet.

3. Whole section of floor not illuminated: This would most likely be a driver failure or a fuse in the driver cabinet has tripped.

Appendices - 1.1 Technical Drawings

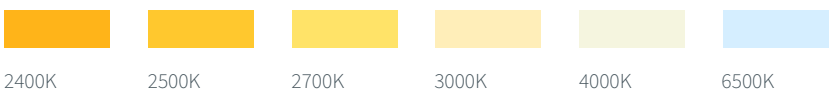


Appendices - 1.2 LED Data

LED Length (mm)	Input Voltage	Output Voltage	Power Consumption	Lumen Output	Lumen Efficiency	IP Rating	CRI	LED Beam Angle	Nominal Lifetime
1000	220 V - 240V / 50 Hz - 60 Hz	24 V	14.4 W	2200K: 1800 lm 2400K: 1886 lm 2700K: 1972 lm 3000K: 2016 lm 4000K: 2131 lm 6500K: 2160 lm	2200K: 125 lm / W 2400K: 131 lm / W 2700K: 137 lm / W 3000K: 140 lm / W 4000K: 148 lm / W 6500K: 150 lm / W	IP 20	90+	120 °	54000 hours

Illumination - options

LPG-10



LGP Ref.	LED (V)	Watt/m	Lumens/m	Lumens/w	Colour binning	CRI	Colour temp (k)
LGP10-24-14.4-2400	24	14.4	1886	131	3 SDCM	90+	2400±70
LGP10-24-14.4-2500	24	14.4	1886	131	3 SDCM	90+	2500±70
LGP10-24-14.4-2700	24	14.4	1972	137	3 SDCM	90+	2700±70
LGP10-24-14.4-3000	24	14.4	2016	140	3 SDCM	90+	3000±80
LGP10-24-14.4-4000	24	14.4	2131	148	3 SDCM	90+	4000±120
LGP10-24-14.4-6500	24	14.4	2160	150	3 SDCM	90+	6500±240

LPG-12



LGP ref.	LED (V)	Watt/m	Lumens/m				Lumens/w				Colour binning	CRI	Colour temp (k)			
LGP12-24-14.4-2400	24	14.4	1886				131				3 SDCM	90+	2400±70			
LGP12-24-14.4-2500	24	14.4	1886				131				3 SDCM	90+	2500±70			
LGP12-24-14.4-2700	24	14.4	1972				137				3 SDCM	90+	2700±70			
LGP12-24-14.4-3000	24	14.4	2016				140				3 SDCM	90+	3000±80			
LGP12-24-14.4-4000	24	14.4	2131				148				3 SDCM	90+	4000±120			
LGP12-24-14.4-6500	24	14.4	2160				150				3 SDCM	90+	6500±240			
LGP12-24-28-22/6500	24	28	N 1945	W 2160	N+W 1030		N 135	W 150	N+W 140		3 SDCM	90+	2200k(N) - 6500k(W)			
LGP12-24-19.2-RGB	24	19.2	R 211	B 384	G 87	RGB 614	R 33	B 60	G 135	RGB 32	-	-	R 622	B 522	G 465	RGB -
LGP12-24-19.2-RGBW	24	19.2	R 211	B 384	G 87	RGB 614	R 33	B 60	G 135	RGB 32	-	-	R 622	B 522	G 465	RGB -

Appendices - 1.3 Component Data Sheets

Recommended Sealant Spec: *Adiseal Ultra Clean*

Description

Adiseal Ultra Clear is a high quality, professional and universal sealant and adhesive based on MSP/Hybrid technology. After application the sealant cures with atmospheric moisture to form a durable rubber seal.

Application

- Especially for bonding and joint sealing in which the sealant and / or glue should visually be minimized by the brightness of the material, such as glass and various plastics.
- Perfect for connecting joints between or adjoining to clear / transparent building materials and building components in construction, industrial, automotive and marine.
- Ideal for bonding and assembling of many and especially clear / transparent building materials and building components in construction, industrial, automotive and marine.

Properties

- Crystal clear
- Durable elastic, max movement capability 25%
- Universal bonding-, sealing- and assembling sealant, for inside and outside for use on almost all substrates.
- Paintable with water based paints, alkyd resin paint can cause curing inhibition of the paint. Test in advance.
- Fast curing. Wet in wet applicable.
- Free of isocyanates, phthalate, solvents and silicone.
- Tack-free after cure through.
- UV radiation and weather resistant.
- Neutral curing, almost odourless.
- Non corrosive to metals.
- Absorb acoustical and mechanical vibrations.
- Non bubbling and shrinkage nil.

Technical Data

Base Slump	mm	ISO 7390	MSP
Density	g/ml		<2
Skin formation / open time	min.	23°C/55%RV	10
Curing through (24 hours)	mm	23°C/55%RV	2
Shrinkage			nil
Max. movement capacity	%		25
Temperature resistance after curing	°C		-40 / +100
Mechanical properties		2mm film	
Shore-A hardness		DIN 53505	45
Modulus 100%	MPa	DIN 53504	1,45
Tensile strength	MPa	DIN 53504	2,20
Elongation at break	%	DIN 53504	300

Shelf Life

In good closed original packing, stored on a cool and dry place, between +5° C and +25° C; till 12 months after production date. Frost resistant till -15°C during transport

Application conditions

Application temperature +5°C till +40°C. Surfaces must be dry, clean and solid. Clean surfaces with Adisolve Cleaner. In general, Adiseal Ultra Clear adheres perfectly without the use of a primer to various substrates. Porous surfaces if necessary to be pre-treated with a

primer. Adhesion tests prior to the application are recommended. Use Adisolve to smooth the joint.

Application conditions

Adiseal Ultra Clear is perfectly paintable with water based paints. We recommend an adhesion and compatibility first. When Adiseal Ultra Clear will be painted over (not necessary) we recommend to sand the sealant and junction surfaces by means of Scotch-Brite. For an optimal result we recommend to paint within a few days after application.

Paint ability

Adiseal Ultra Clear is perfectly paintable with water based paints. We recommend an adhesion and compatibility first. When Adiseal Ultra Clear will be painted over (not necessary) we recommend to sand the sealant and junction surfaces by means of Scotch-Brite. For an optimal result we recommend to paint within a few days after application.

Limitations

Not suitable for continuous under water applications. Among others not recommended for PE, PP, Teflon, wax, neoprene and bitumen surfaces, always carry out an adhesion test on the substrate before application. Not suitable for applications in direct contact with the sealing of isolation glass or in direct contact with PVB foil of coat glass. Not suitable in combination with natural stone. Not suitable for vertical movement joints. Slight discoloration (lighter colours) can occur in certain circumstances.

Safety

Avoid prolonged contact with skin. In the event non-cured material gets into the eyes, flush with water and consult a doctor. Material Safety Data Sheet available on request.

Warranty

Adiseal Ltd warrants that its product complies, within its shelf life, to its specification. The liability shall in no case exceed the amount fixed in our Conditions of Sale. In no event seller is liable for any incidental or consequential damage.

Liability

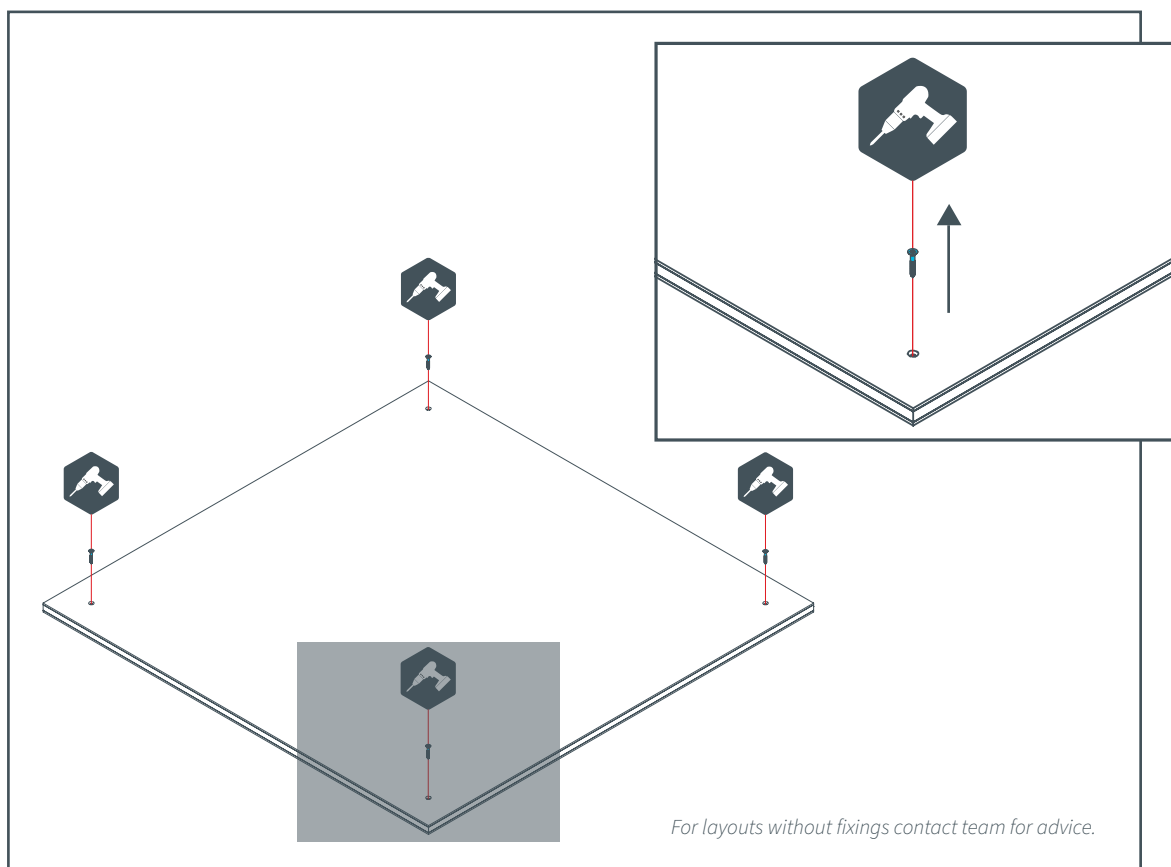
All supplied information is the result of our test and experience and is of general nature. However, they do not imply any liability. It is the responsibility of the user to verify by his own tests if the product is suitable for the application.

In conformity with:

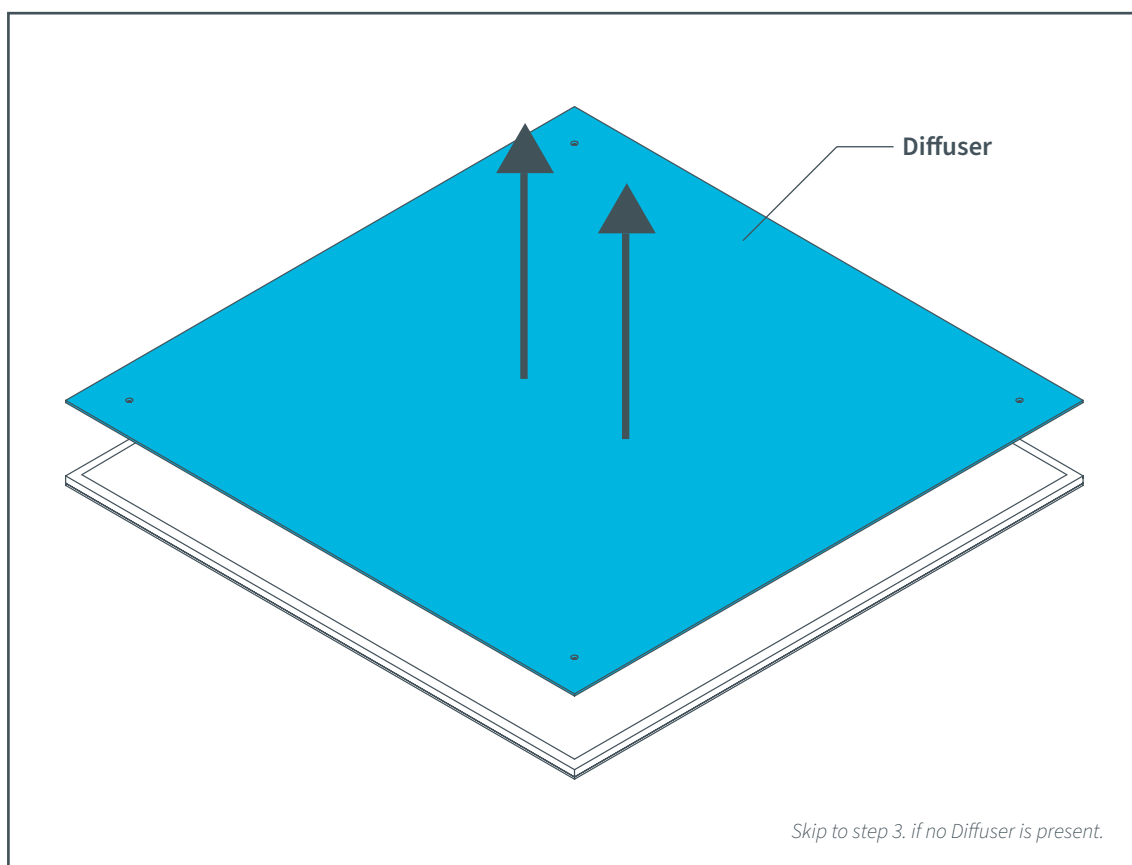
ISO 11.600 F25HM

Disassembly of Light Panels

1

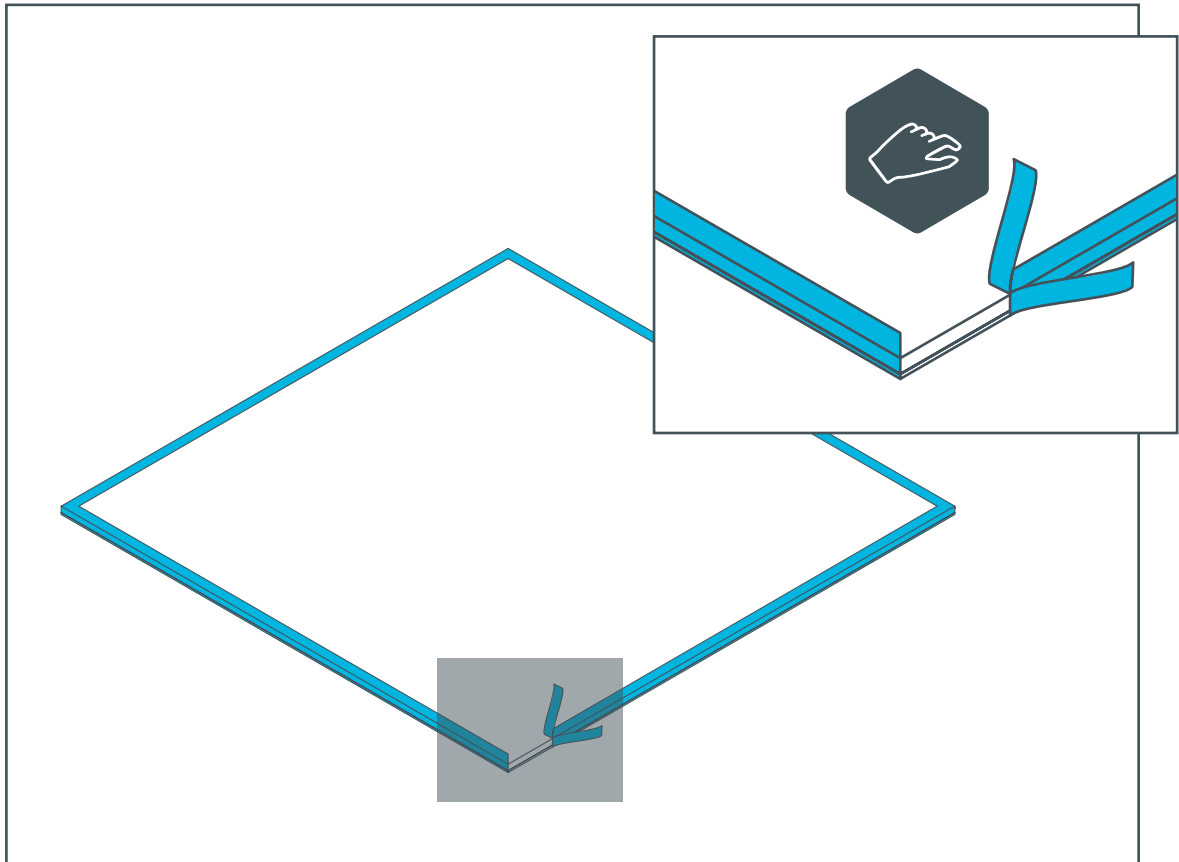


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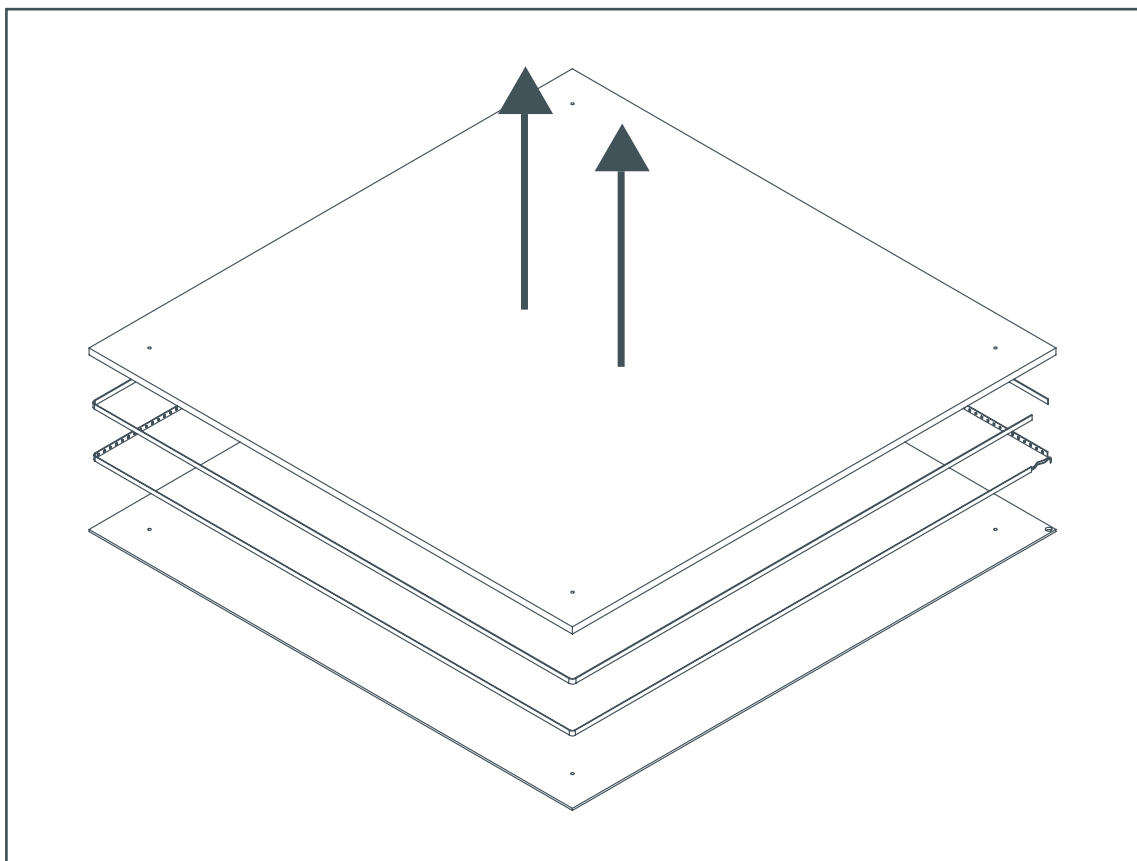


Disassembly of Light Panels

3



4



Manufacturer Contact Information

**Unibox
Greenside Way
Middleton
Manchester
M24 1SW**

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Fax: 0845 277 6001
Email: quality@unibox.co.uk
Website: lighting.unibox.co.uk