

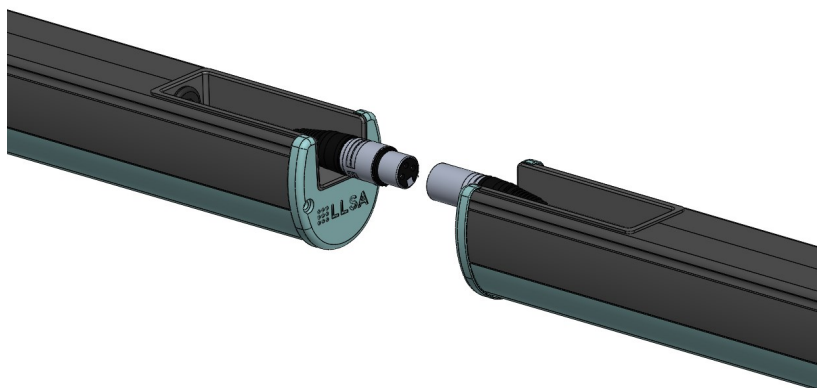
KAROO ETE

INSTALLATION MANUAL

WARNING :

ELECTRIC SHOCK HAZARD

LIGHT SOURCE NOT FOR END-USER REPLACEMENT



Class I

- The luminaires are electrically insulated and provided with a connection to earth.
- Earthing protects exposed metal parts that could become live in the event of basic insulation failure.

Installation Requirements

- This light fixture must be supplied with 220-230V, 50Hz AC power.
- Connect to an individual branch circuit.
- LLSA ensures a 2 kV surge protection on our PSU, anything out of this range will void warranty provided.
- Improper installation might cause an electric shock accident.
- Use an authorized electrical professionals to do the installation, repair and maintenance of the light fixture.
- Cut off the power before and during installation, maintenance and repair of the light fixture.
- Do not install the light fixture on top of or near hot objects to avoid damage. (For example hot gas pipes, exhaust funnels or stoves)
- Do not install the light fixture in a damp area or where liquid leakage is potential.
- Make sure no fire regulations are violated.
- Do not look directly at the light fixture for a long period of time to avoid eye damage.
- The use of third party equipment is not recommended by the manufacturer for it may lead to warranty void.
- Do not cover the lamp with heat insulating gasket or similar material.

Non-user replaceable light source

- The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

Cleaning and Maintenance of Enclosure

- Do not use solvent-based cleaning agents, this will cause cracks to form in the plastic diffuser covers.
- Clean with a damp cloth and silicone-based cleaning agent. (Such as Mr Min)

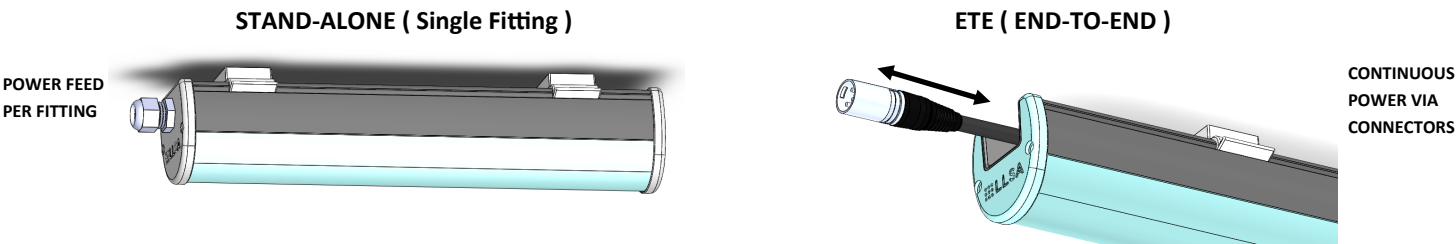
Product Information

NAME	VARIANTS	SUPPLY LENGTH	POWER
KAROO 900	Stand-alone (single fitting) / ETE (end-to-end) / 5-wire	860mm	27W
KAROO 1200	Stand-alone (single fitting) / ETE (end-to-end) / 5-wire	1136mm	35W
KAROO 1500	Stand-alone (single fitting) / ETE (end-to-end) / 5-wire	1411mm	40W
KAROO 1700	Stand-alone (single fitting) / ETE (end-to-end) / 5-wire	1686mm	58W
KAROO 2300	Stand-alone (single fitting) / ETE (end-to-end) / 5-wire	2236mm	65W

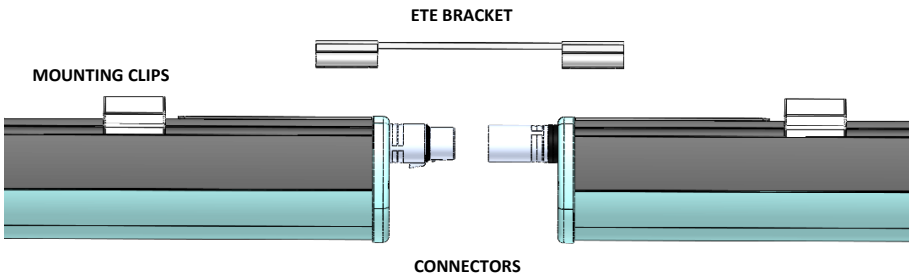
DIMENSIONS: Length x H65 x W56 mm

PRODUCT WEIGHT: 0.85kg/m

TYPES



ASSEMBLY : ETE



MAXIMUM CONNECTIONS : ETE

EXAMPLES : **DO NOT EXCEED 6A MAXIMUM PER POWER FEED**

PRODUCT TYPE	LENGTH (mm)	POWER (W)	Max No. Fittings	TOTAL (m)*	TOTAL (W)	SUPPLY (VAC)	TOTAL (Amp)	MAX (Amp)
KAROO ETE 900	860mm	27W	49	42.1	1323	230	5.7	6
KAROO ETE 1200	1136mm	35W	38	43.1	1254	230	5.4	6
KAROO ETE 1500	1411mm	40W	30	42.3	1260	230	5.4	6
KAROO ETE 1700	1686mm	58W	22	40.4	1276	230	5.5	6
KAROO ETE 2300	2236mm	65W	20	44.7	1320	230	5.7	6

* MAXIMUM distance(m) between AC Power feed points

Installation Guide

Important Safety Instructions

- This product should be installed by a competent person i.e. Qualified electrician.
- This product requires a constant stable electrical supply 220V - 240V VAC 50Hz - alternating current.
- DO NOT assemble power feeds or connect fittings together with LIVE AC supply, this can result in damage to power gear. Complete the installation and only switch circuit ON once fully assembled. Warranty Void if not done.
- This product could be HAZARDOUS if not used correctly, it could cause electric shock, serious bodily harm or death.
- Light source not intended for end-user replacement, replacement to be conducted by Qualified Electrician or by Manufacturer.

IMPORTANT NOTES

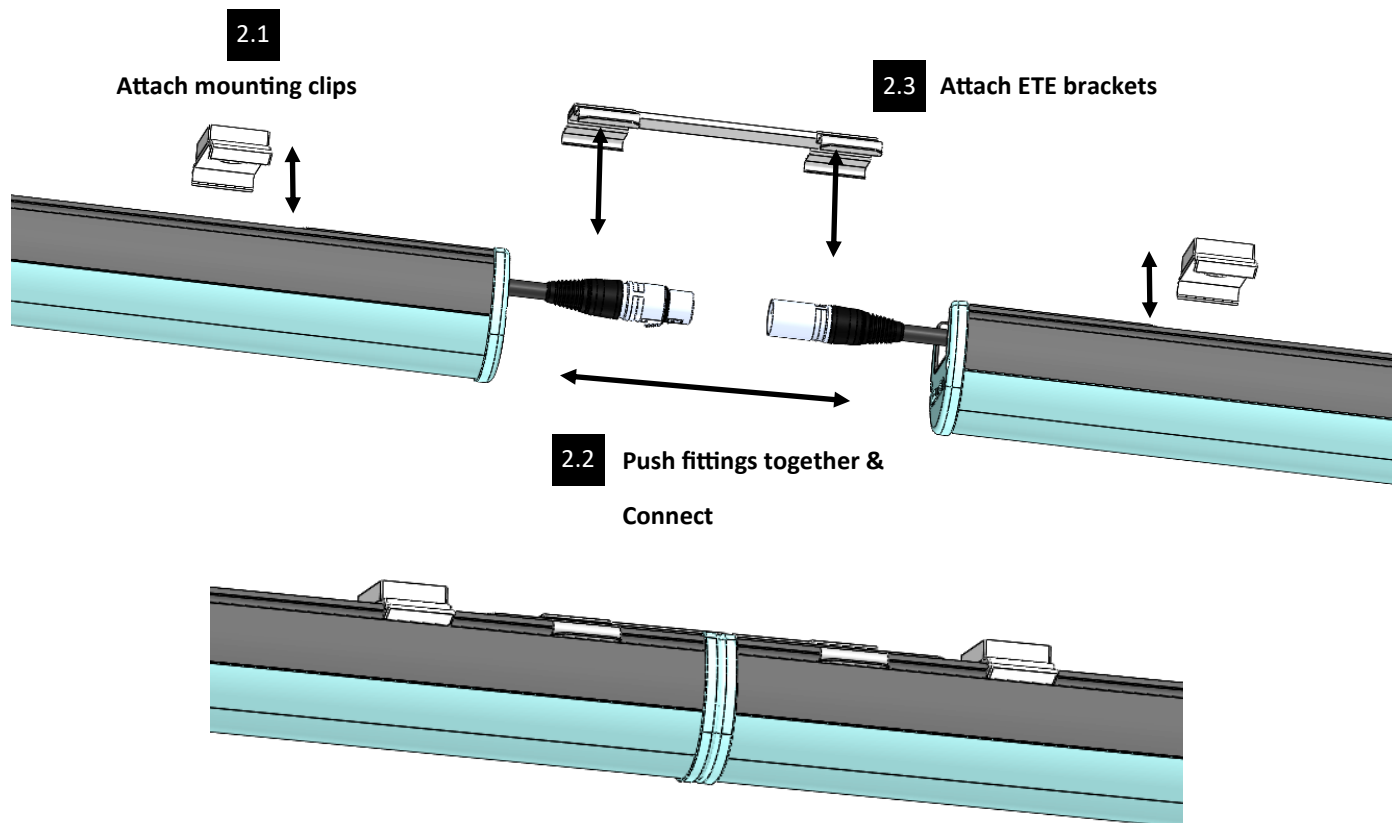
1. KAROO ETE : Not suitable for independent suspension only. Requires trunking support. (EG. P2000)
2. KAROO : Suitable for suspension only as individual fittings, additional support not required.
3. Clip spacing : (refer to table) Ensure correct clip spacing to prevent sagging of fittings

Product	Description	Mounting Options	Comment
KAROO	Single fittings for in-door use	Surface / Suspended / P2000 / TBAR	
KAROO IP	Single fittings for out-door use	Surface / Suspended / P2000 / TBAR	
KAROO ETE	End-To-End / continuous row fittings for indoor use	Surface / P2000 / TBAR	Not suitable for independent suspension

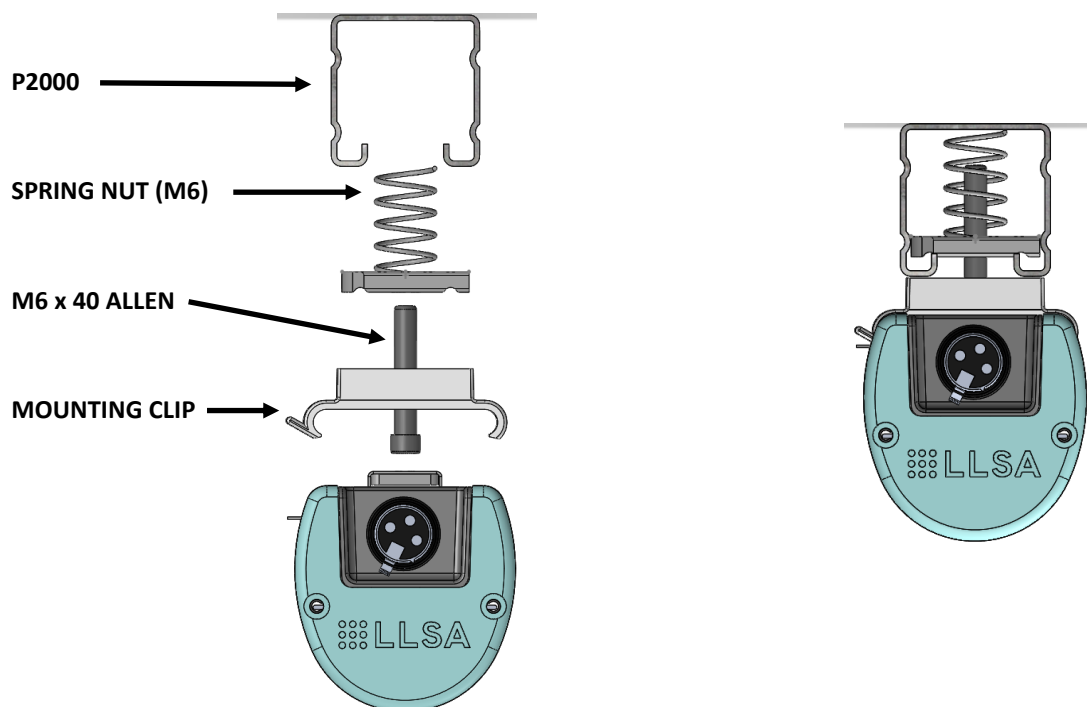
Ensure correct number of brackets and spacing per fitting length :

Product	Brackets	Bracket spacing
KAROO 900	2	700mm
KAROO 1200	2	700mm
KAROO 1500	2	1200mm
KAROO 1700	3	600mm
KAROO 2300	3	650mm

2. Assembly



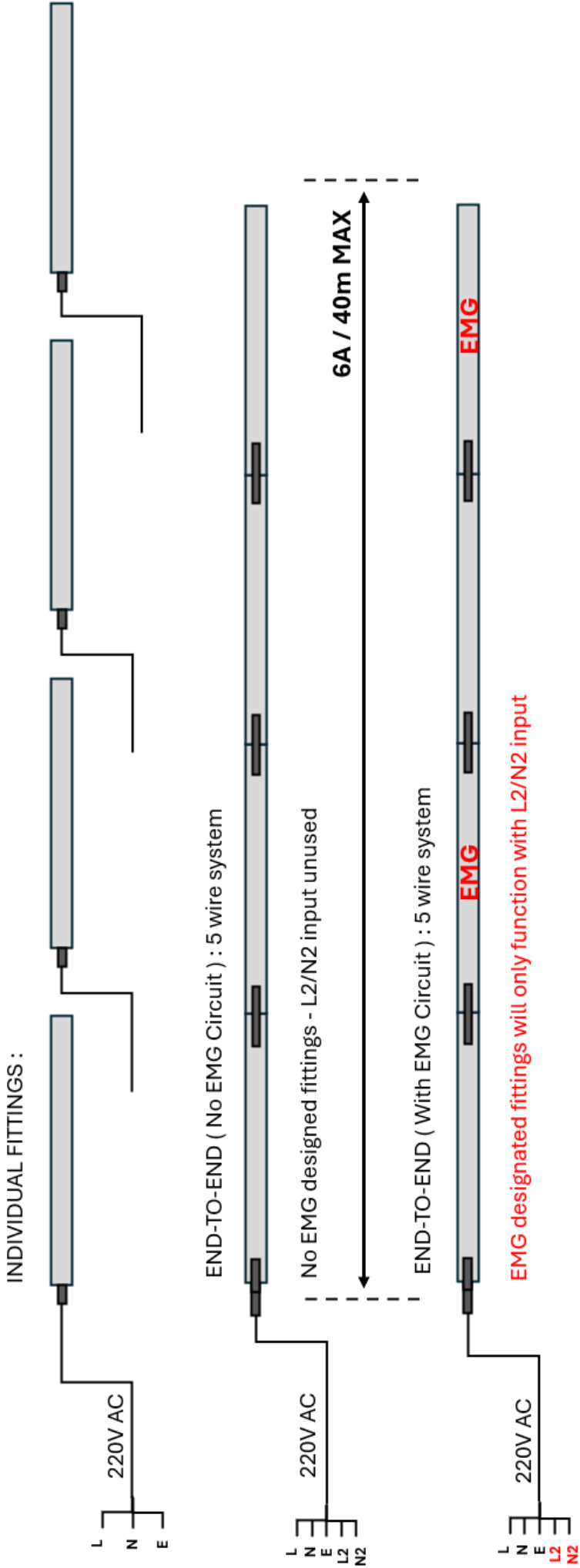
P2000 Mounting Example :



WIREING LAYOUT :

Wiring Layout

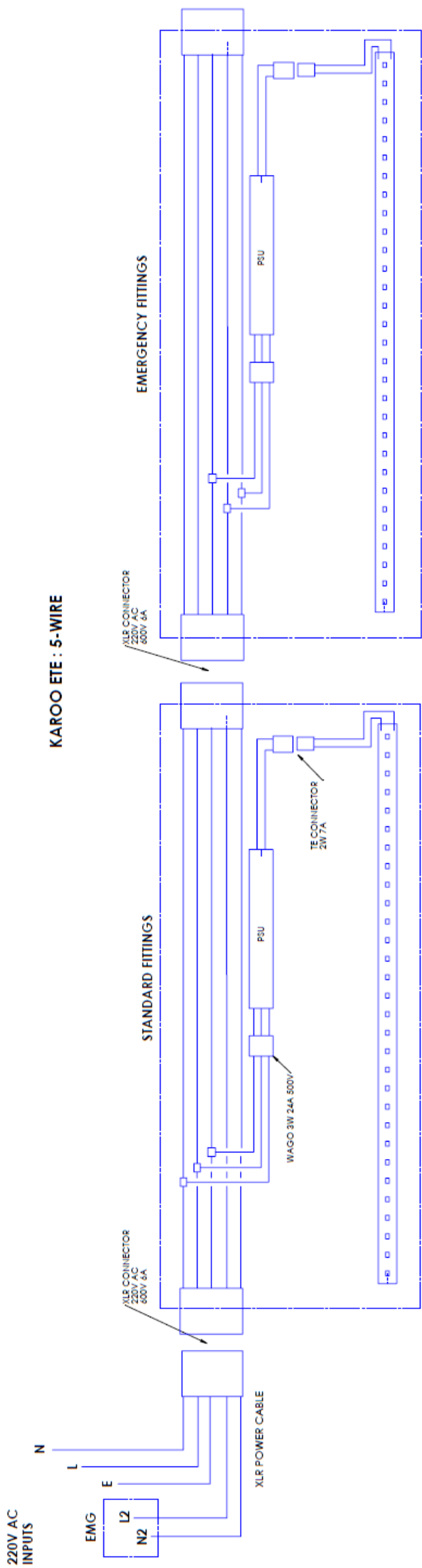
- This product should be installed by a competent person i.e. Qualified electrician.
- This product requires a constant stable electrical supply 220V - 240V VAC 50Hz - alternating current.
- End-to-end system has a 5-wire through feed, with additional L2/N2 circuit for Emergency Power
- **IMPORTANT NOTE : Emergency fittings are pre-wired at factory and cant be changed on-site**
- **Do not mix L2/N2 with L/N, will result in permanent damage to fittings**
- **Do not exceed connected length maximum : 40m**



WIREING LAYOUT :

Wiring Layout

- **IMPORTANT NOTE :** Emergency fittings are pre-wired at factory and cant be changed on-site
- Do not mix L2/N2 with L/N, will result in permanent damage to fittings
- Do not exceed connected length maximum : 40m



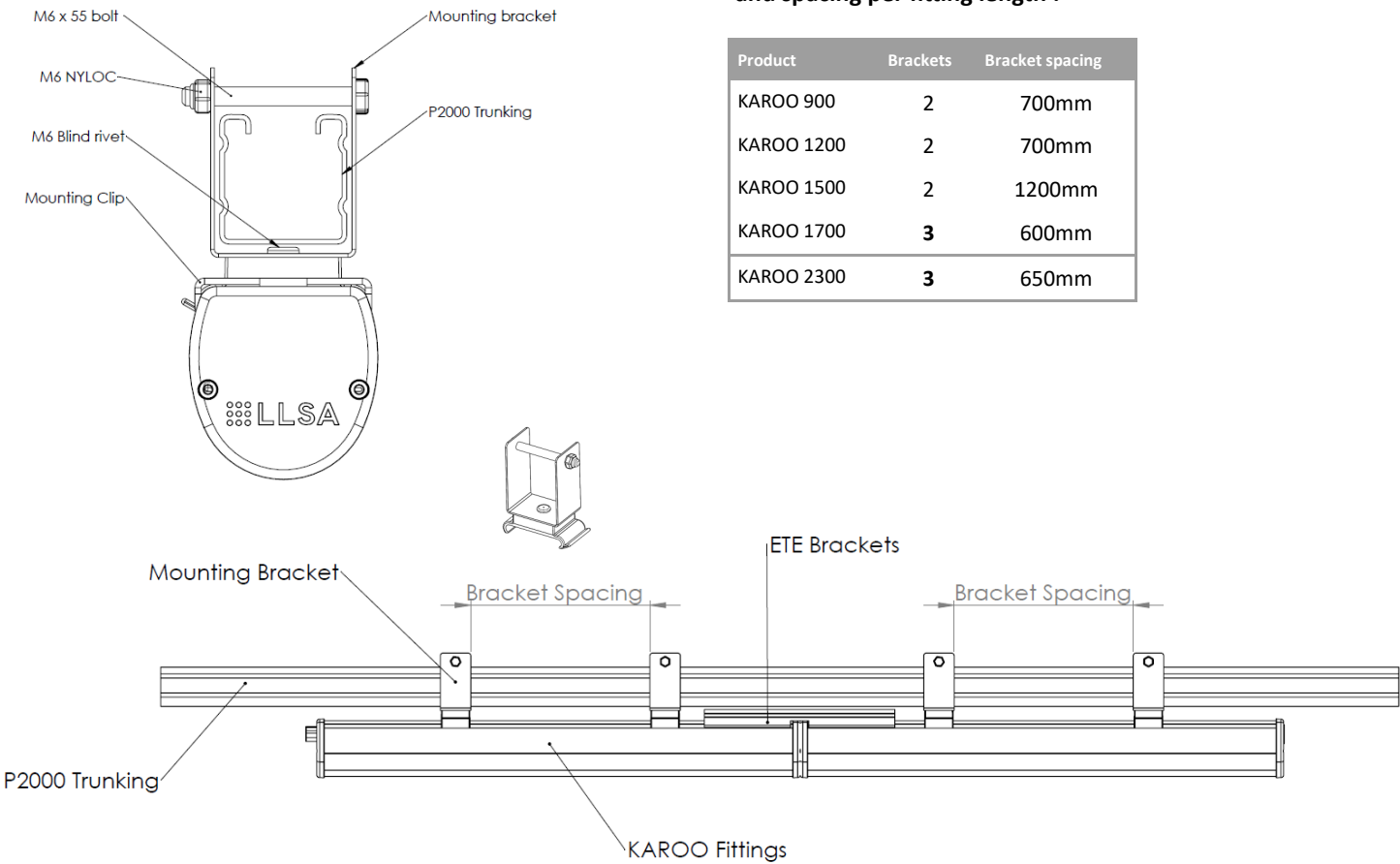
P2000 Mounting

IMPORTANT NOTE :

KAROO ETE System must be SURFACE mounted. Not suited for independent suspension alone.

**Ensure correct number of brackets
and spacing per fitting length :**

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KAROO 900	2	700mm
KAROO 1200	2	700mm
KAROO 1500	2	1200mm
KAROO 1700	3	600mm
KAROO 2300	3	650mm



STEPS

- 1. Install trunking system (e.g. P2000)**
- 2. Assemble Mounting Brackets**
- 3. Mount fittings**
- 4. Assemble ETE Brackets**
- 5. Connect AC power feed cable**
- 6. Switch ON—check all ETE connections properly engaged**

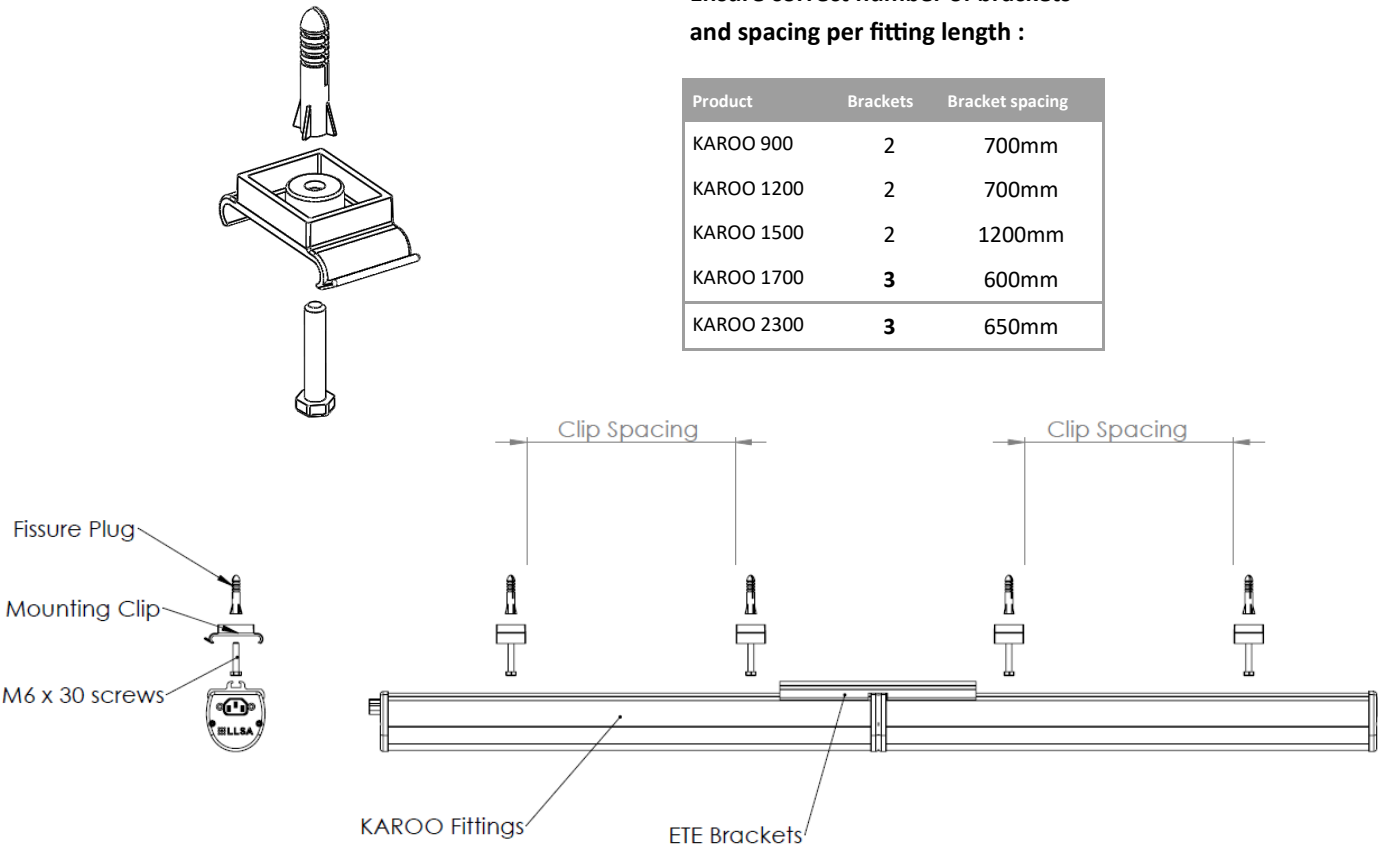
Surface Mounting

IMPORTANT NOTE :

Contractor to supply fixtures depending on mounting material.

Ensure correct number of brackets
and spacing per fitting length :

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KAROO 900	2	700mm
KAROO 1200	2	700mm
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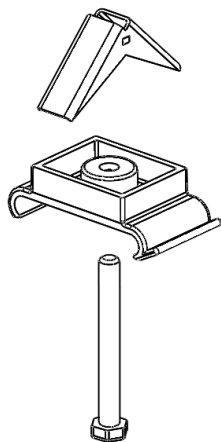


STEPS

1. Mark off holes for mounting clips. Ensure strait alignment between holes.
2. Drill holes
3. Using the appropriate fixtures, assemble mounting clips
4. Install fittings
5. Install ETE brackets
6. Switch ON—check all ETE connections properly engaged

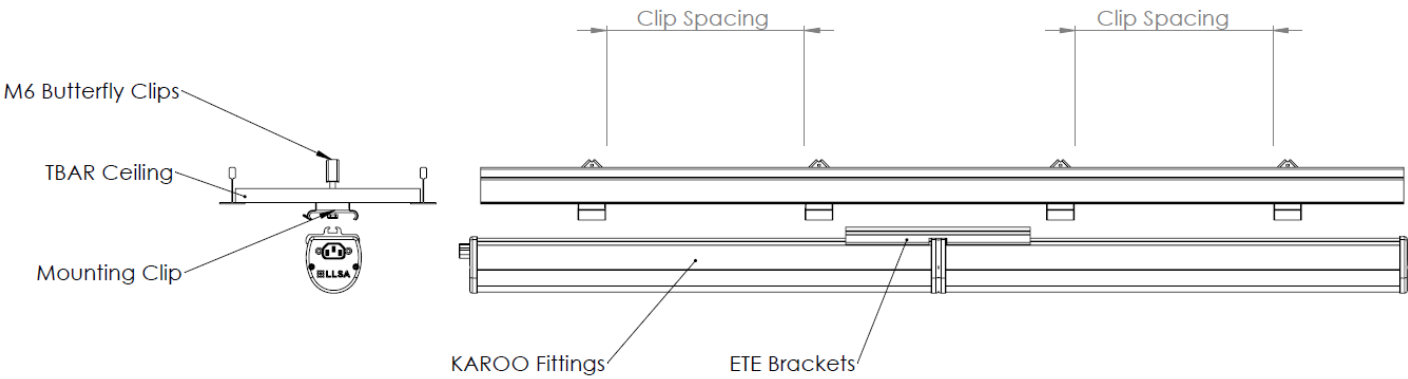
TBAR Ceiling Mounting

IMPORTANT NOTE :



Ensure correct number of brackets
and spacing per fitting length :

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KAROO 900	2	700mm
KAROO 1200	2	700mm
KAROO 1500	2	1200mm
KAROO 1700	3	600mm
KAROO 2300	3	650mm



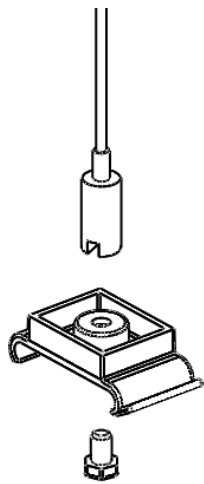
STEPS

1. Mark off holes for butterfly clips. Ensure strait alignment between holes.
2. Drill holes (M18) through ceiling tiles.
3. Assemble butterfly clips with mounting clips. Ensure each clip properly tightened & aligned to the same side. (release tabs)
4. Install fittings
5. Install ETE brackets
6. Switch ON—check all ETE connections properly engaged

Suspension Mounting

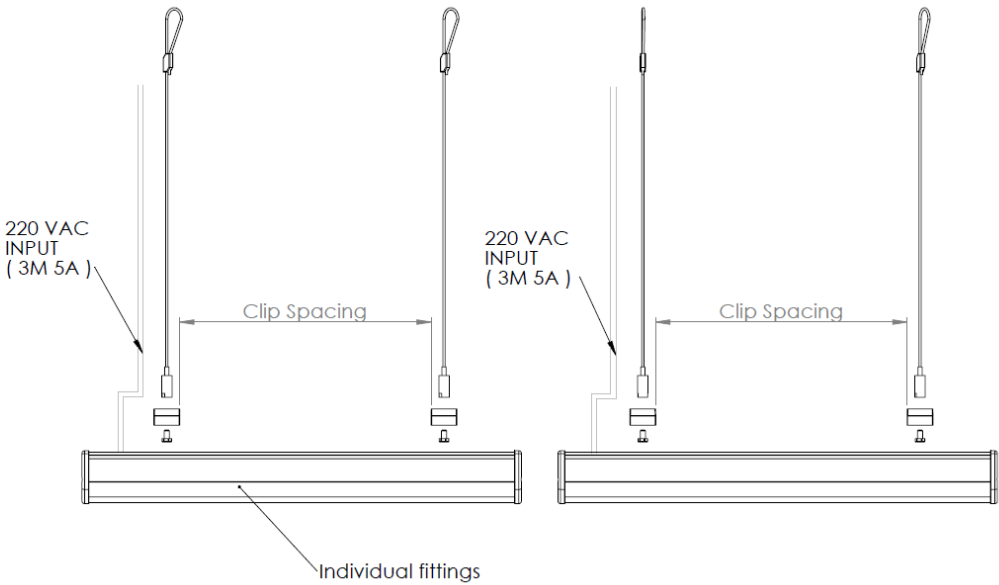
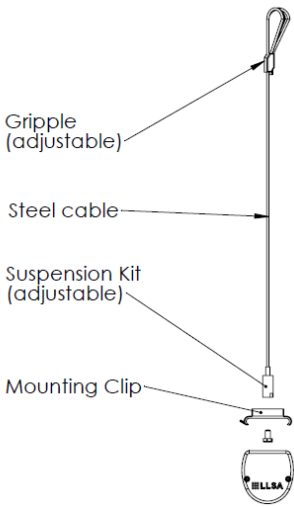
IMPORTANT NOTE :

Suspension mounting only suitable for individual fittings



Ensure correct number of brackets
and spacing per fitting length :

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KAROO 900	2	700mm
KAROO 1200	2	700mm
KAROO 1500	2	1200mm
KAROO 1700	3	600mm
KAROO 2300	3	650mm



STEPS

1. Assemble suspension kits. Ensure each clip properly tightened & aligned to the same side.
(release tabs)
2. Install & level fittings on suspension points.
3. Connect AC feed cables