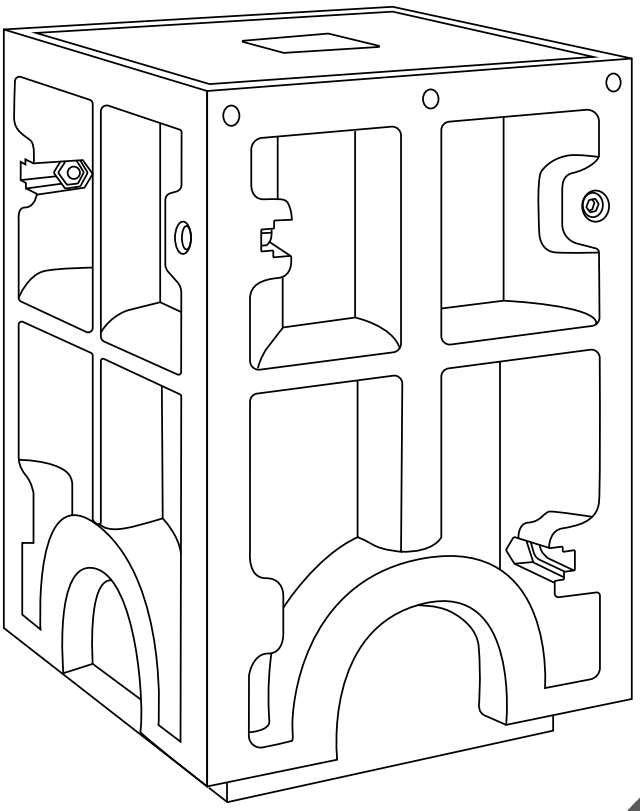
Charge-M8 EV KUBE

Ground Anchor Block



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PATENT PENDING

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Specification and Installation Manual

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Pre-Installation Notes

Thank you for purchasing a Charge-M8 EV Kube®

Please read the installation and operating instructions carefully, to ensure correct installation and configuration, and a trouble-free experience.

This manual serves as a guidance document, and every reasonable effort has been made to ensure the accuracy of the information provided at the time of publication. Installers are advised to follow appropriate manual handling procedures as outlined by the HSE when assembling components. Additionally, a sound understanding of groundwork is essential, as the method used to secure the Kube will depend on the ground substrate in which it is installed. Installers should carefully assess site-specific factors—including the risk of ground heave or soil movement—that could affect long-term stability. The choice of fill and anchoring method must be suited to the local conditions to ensure safe and secure installation.

If you have any queries regarding Charge-m8® charging equipment, please contact us.

WARRANTY

Charge-M8 Limited provide a 3 year manufacturers warranty from the date of purchase.

Technical support can be obtained by contacting the customer team on sales@charge-m8.com or calling +44 333 242 3328

Signed on behalf of Charge-M8 Limited:

J Smith

Name: Julian Smith

Position: Managing Director

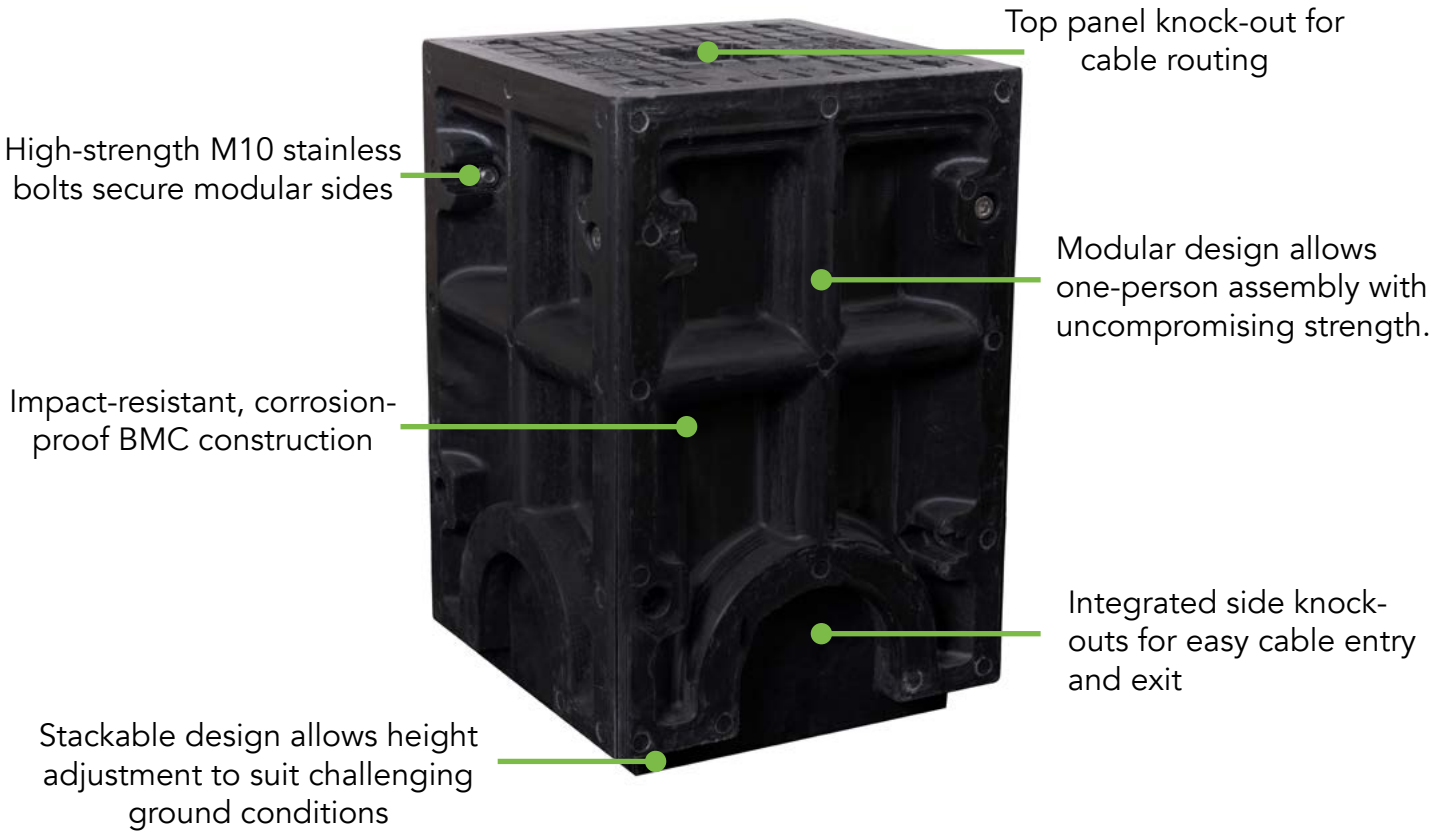
Date: 01st August 2025

1. Introduction

The Charge-M8 EV Kube® is a ground anchor block for post-mounted EV chargers and payment terminals. Its robust construction delivers a secure foundation without the need for wet-pour or heavy pre-cast concrete—cutting installation time, cost, and site disruption. The Kube's modular design allows fast, tool-efficient assembly with integrated fixings and alignment guides. For the small Kube, lightweight components enable single-person installation without lifting gear*—ideal for domestic or commercial use.

**All Charge-M8 EV Kube® models are designed for single-person assembly, with all individual components weighing under 20kg. This is based on in-trench assembly as specified in the installation methodology detailed within this manual. However, site-specific factors such as access, terrain, and health and safety considerations may necessitate additional personnel.*

a. Product Appearance



b. Box Contents

1. Kube side panels x 4
2. Kube lid x 1
3. 8 x M10 side panel bolts
4. 4 x M12 lid bolts

c. Kube Specification

Side panels - Bulk Moulded Compound (BMC)

The four side panels of the Charge-M8 Kube® are moulded from high-performance Bulk Moulding Compound (BMC), a composite material known for strength and durability in demanding environments.

Key material properties:

- 30% Unsaturated Polyester Resin: Excellent mouldability, chemical/weather resistance
- 26% Fibreglass Reinforcement: Structural strength and wear resistance
- 34% Calcium Carbonate (CaCO□): Reinforces mechanical strength and stability
- 10% Additives: Includes shrink agents, styrene, curing agents, and mould-release compounds

Top Lid - Dough Moulded Compound (DMC)

The top cover is made from Dough Moulding Compound (DMC), a thermosetting resin with chopped glass fibres and mineral fillers.

Advantages:

- - High surface finish and dimensional stability
- - Excellent thermal, UV, and moisture resistance
- - Strong dielectric and mechanical properties

Fixings & Fasteners

All fixings are AISI 304 stainless steel (A2 grade), suitable for outdoor applications.

- - Side Panel Bolts: M10 x 45mm Hex Socket, 8mm key, 50g per set
- - Lid Bolts: M12 x 65mm Torx55 security pin, 80g per set

Component Weights & Packaging

SKU	Kube w x d x h - mm	Total Weight (kg)	Contents
470-0300	300 x 300 x 450	35.5	4 sides + 1 lid (3 Packages)
470-6300	600 x 300 x 450	56.00	4 sides + 1 lid (4 Packages)
470-6601	600 x 600 x 450	80.50	4 sides + 1 lid (5 Packages)

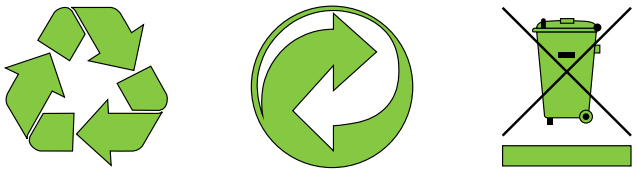
d. Storage, Transportation & Recycling

The Charge-M8 Kube is robust and well-suited for transportation; however, to maintain its structural integrity, care should be taken to minimise excessive handling and avoid impact damage. When unpacking, inspect all components and fixings to ensure they are complete and undamaged before installation.

Packaging materials should be recycled where facilities exist.

The Kube's side panels are manufactured from Bulk Moulding Compound (BMC), which can be recycled by crushing and reused as filler in new production. Up to 15% recycled BMC can be reintroduced into the manufacturing process without compromising strength or performance.

Approximately 66% of the Kube's raw materials are inorganic, locally sourced, and non-scarce, making it less reliant on crude oil. In addition, some resin content is now being replaced with bio-based alternatives, retaining all the physical and mechanical properties of traditional oil-based resins.



2. Installation

a. Before You Start

Before commencing installation, it is essential that the installer assesses the suitability of the proposed installation area. A competent person should evaluate the ground conditions to ensure they are appropriate for anchoring the Kube and for supporting the intended EV charging or payment terminal.

Once ground conditions have been assessed and deemed appropriate, the installer should carry out all preparatory excavation works to the required depth and dimensions, taking into account factors such as ground stability, drainage, and potential for ground heave or movement.

The installer must also ensure that a suitable backfill material is selected in line with the ground substrate. This is critical for ensuring long-term stability and load-bearing performance. Options for fill may vary depending on soil type, moisture content, and site-specific requirements.

Charge-M8 is not responsible for assessing site suitability or undertaking groundwork. It is the responsibility of the installer to ensure that all preparatory works are compliant with industry best practices and any applicable local regulations.

b. Installation Guide

Site preparation

1. Site Risk & Ground Condition Assessment

- Evaluate the suitability of the installation area, taking into account:
    - Ground stability
    - Ground stability
    - Drainage

2. Locate and Mark All Underground Services

- Use appropriate detection equipment to identify and clearly mark the location of:
    - Electrical cables
    - Gas lines
    - Water mains
    - Communication or fibre optics

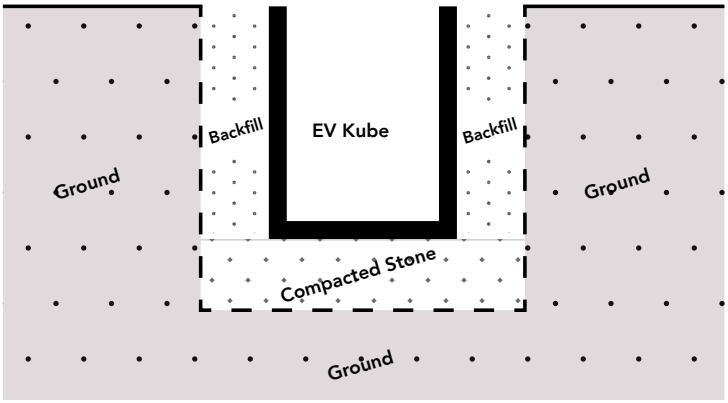
Always refer to updated utility plans and seek formal clearance from relevant authorities when required.

3. Excavate to the Required Dimensions

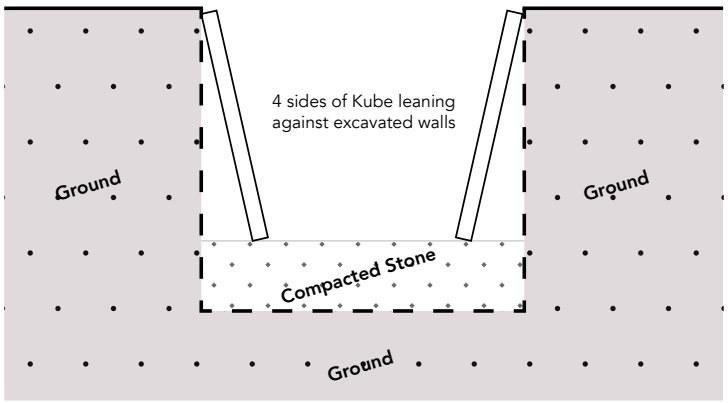
- Excavate the area to suit the dimensions of the selected Charge-M8 Kube model, allowing extra width and depth to accommodate the chosen backfill material. To avoid frost-related ground movement (frost heave) it is suggested that depth of excavation should be around 600mm (if the site is exposed or known for hard frosts, increase to 750mm)

- The size of the excavation may vary depending on site conditions, but must ensure adequate space for:

    - Assembly of Kube within trench*
    - Positioning of the unit
    - Ensure the excavation base is flat, level, and well-compacted with crushed stone to a minimum depth of 150mm.



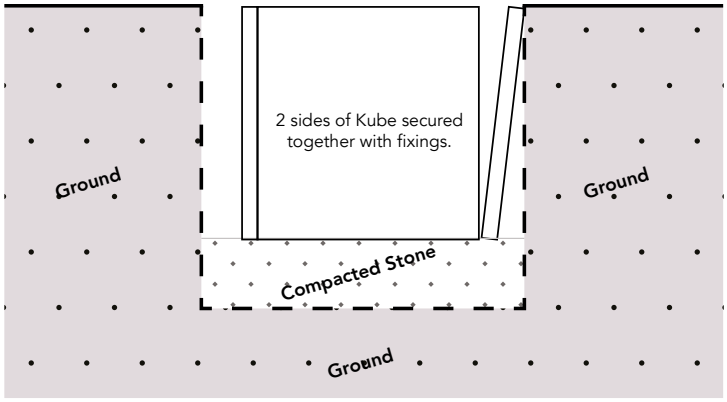
6. Assemble the Charge-M8 Kube in the Trench
    - Carefully unpack all Kube components and ensure all parts and fixings are present.
    - Position the four side panels of the Kube into the trench, leaning each one against the bank of the excavation in preparation for assembly.
    - Once all four sides of the Kube have been positioned against the trench bank, identify which panels require cable entry or exit. Use a hammer to carefully 'knock out' the pre-marked sections located at the base of the Kube.



Assembly Process:

i. Form the first corner by bringing two side panels together at their mitred edges.
ii. Secure the joint using the two supplied fixing bolts to lock the panels firmly in place.
iii. Repeat the process for the remaining two sides, bringing the remaining mitred joints together and fastening to complete the Kube's rectangular form.
iv. Once fully assembled, adjust the Kube's position within the trench as needed, ensuring it is:
v.

- Square and properly aligned
- Correctly orientated so that the removed 'knock-out' sections align with the intended cable entry points
- Centrally located within the excavation prior to backfilling or pouring concrete



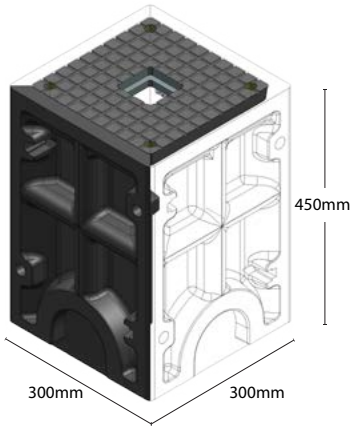
4. Select a Suitable Backfill Material for Your Ground Type

- Choose an appropriate backfill to suit the ground conditions and application — such as wet-pour concrete, post mix, MOT Type 1, or compactable gravel — ensuring proper compaction and adequate drainage.
- Avoid using excavated spoil as backfill unless it meets performance criteria and is free from contaminants or debris.

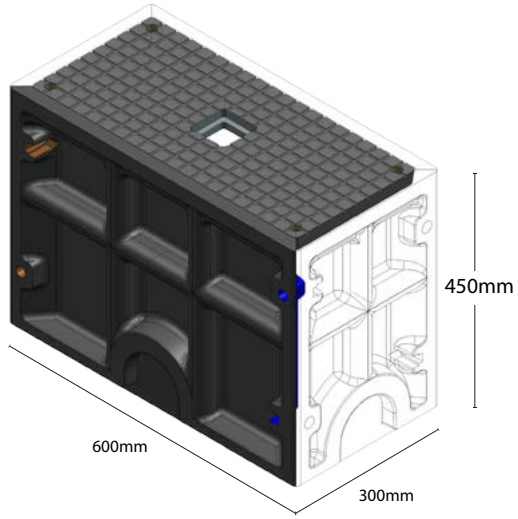
3. Technical Information

a. Dimensional drawing

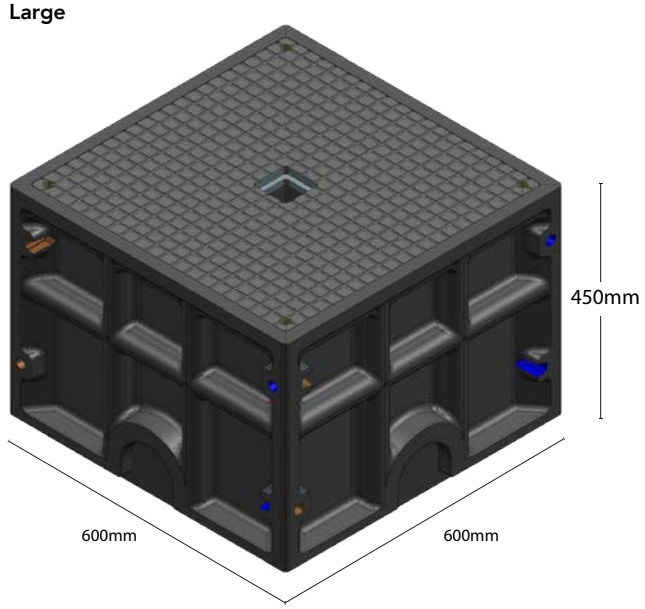
Small



Medium



Large



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