Abacus®

Leaders in Lighting

Part No: INS-FXT

Fixed Tubular Columns

- TB (Range)

Product Manual

November 2022

WE STRONGLY RECOMMEND THAT THESE INSTRUCTIONS ARE READ CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE AND MAINTAIN THIS EQUIPMENT

Product Manual

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1. Installation

1.1. General

The columns are used for and general lighting applications typically up to 6m in height. Each column is supplied in kit form for on-site assembly. Columns are constructed from steel to EN10025 grade S275 and S355. The columns can either be root mounted or flange plate mounted.

1.2. Flange plate column installation

i) Before commencement of installation examine the items and ensure that there are no missing or damaged parts. The following items of equipment will be required (not Abacus supply). Timber supports and packers, a mobile crane for erection, typically 1.0 tonne and a torque multiplier and wrench.

ii) Ensure the lid and base are secure and cannot move.

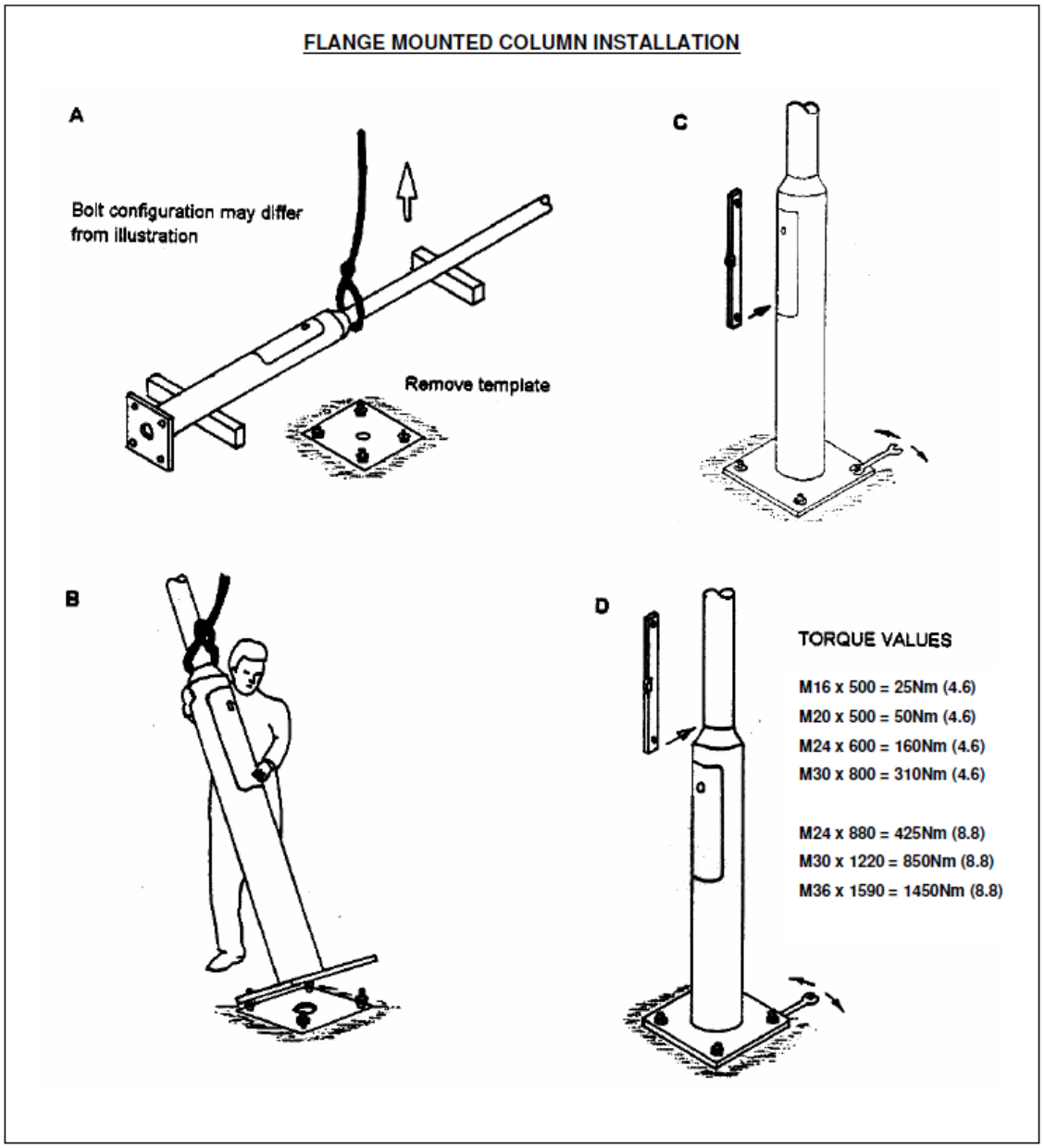
iii) Assemble the bracket to the top shaft section and secure with the screws provided. It should be noted that the power supply cable can be installed during assembly or, if preferred after assembly is completed, but prior to fixing the bracket.

iv) The holding down bolts are each fitted with two nuts and washers. The upper nut and washer and template should be removed. The threads should be examined for any damage and rectified using a die nut if necessary. The nuts should be set in level plane using a steel bar and spirit level across each opposing pair of nuts.

v) Using a crane lift the column and place over the foundation bolts and on to the lower set of nuts. Ensure that the orientation of the door opening is as required. Secure the column with the upper set of retaining nuts and washers and roughly plumb up the base section.

vi) After completion of the installation check for vertical alignment. This can be adjusted using the upper and lower nuts as necessary. Once the alignment is satisfactory all bolts should be tightened to the required torque setting. If the gap below the flange is to be grouted it is essential that adequate provision is made for ventilation and drainage of any water collecting inside the base.

vii) The column can then be commissioned.



1.3.Root mounted column installation

i) Before commencement of installation examine the items and ensure that there are no missing or damaged parts. The following items of equipment will be required (not Abacus supply). Timber supports and packers, a mobile crane for erection, typically 1.0 tonne and a lump hammer and adjustable spanners.

ii) Ensure the lid and base are secure and cannot move.

iii) Assemble the bracket to the top shaft section and secure with the screws provided. It should be noted that the power supply cable can be installed during assembly or, if preferred after assembly is completed, but prior to fixing the floodlight bracket.

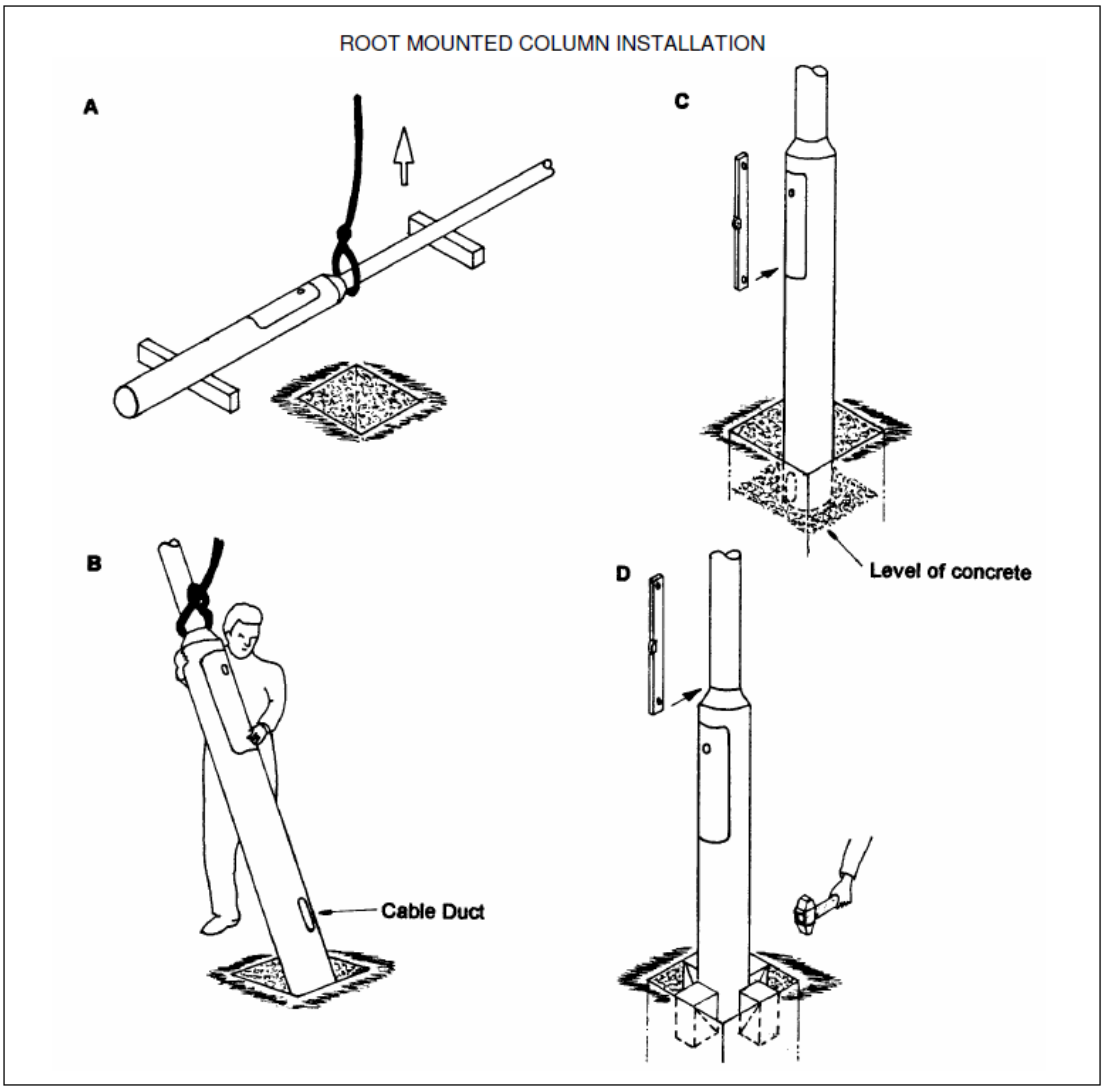
iv) Using a crane lift the column and place the root section in the previously prepared foundation hole. Fig: A & B. Ensure that the orientation of the door opening is as required. Roughly .plumb up. the base section and back fill the hole either with concrete or excavated material to just below the cable entry slot. Fig: C. All back filling using excavated material should be placed in 150mm thick layers and must be well compacted.

v) Chock the column using wooden wedges in the space between column and foundation side wall. Fig: D. By adjusting these wedges accurately .plumb up. the column using the shaft as the reference plane, not the base section.

vi) Back fill the remaining hole with either concrete or excavated material and ram well in, removing wedges as encountered.

vii) A duct, equal in size to the cable entry slot, should be formed through the back fill material using a suitable pre formed lining tube to allow for the insertion of electric cables.

viii) Leave the column for a minimum of four days for any concrete to harden. The column can then be commissioned.



2. Maintenance

2.1. Every 12 Months

1. Check that all components are present and undamaged.

2. Check that the foundation bolts have not worked loose. The foundation bolt torque setting is 50Nm (M20, grade 4.6).

2.2. As Required

Paint the shafts and base. Aesthetically the galvanised finish will typically last 5 - 7 years before painting is required. In polluted or saline environments this may be shorter and in a mild climate considerably longer.

3. In-Situ Column Drilling Guidance

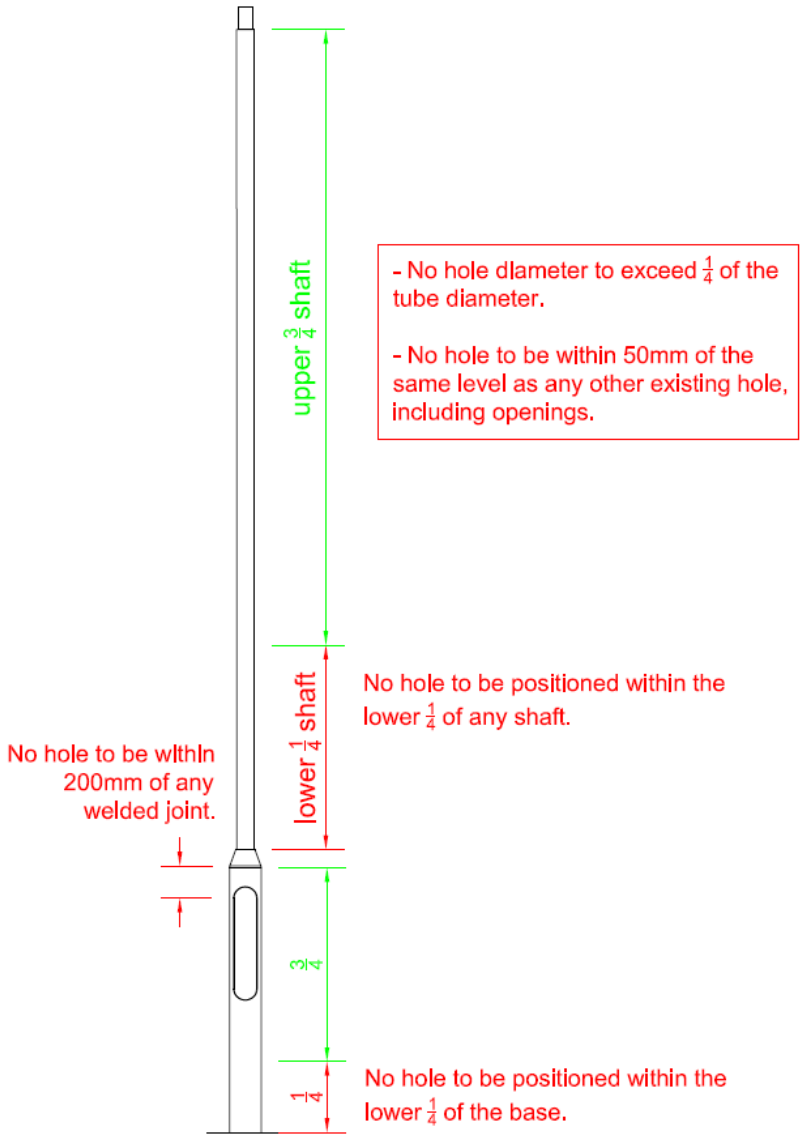
It is always preferable that all requisite cable entry holes in columns are formed at the time of manufacture thus ensuring that structural integrity is not compromised and full corrosion protection is maintained.

Possible problems caused by on site drilling are as follows;

- Loss of material weakens column.
- Poorly formed holes can act as fatigue cracking initiation points.
- Galvanizing protection is broken potentially leading to corrosion issues.
- Unsealed holes can lead to water ingress.

If there is no alternative however then the guidelines below should be followed before drilling;

- Hole sizes and positions must be strictly within the limits identified in the adjacent diagram.
- Holes shall only ever be drilled and all burrs and nicks removed.
- Any exposed steel shall be treated with a zinc rich paint system applied in accordance with the product manufacturer's instructions.
- Holes shall be sealed against water ingress by using suitable cable glands or similar.



Any in-situ drilling undertaken remains the owner's responsibility. Any future issues arising as a result of such a modification will not be covered by any Abacus warranty that may be in place.

4. EN40 Certificate of Constancy of Performance

Certificate of Constancy of Performance GB13/89393.00

In compliance with the Construction Products Regulation 2011 (retained EU law EUR 2011/305) as amended by the Construction Products (Amendment etc.) (EU Exit) Regulations 2019 and the Construction Products (Amendment etc.) (EU Exit) Regulations 2020, this certificate applies to the construction product(s)

Fixed, Based Hinged & Tapered Steel & Aluminium Lighting Columns.

Note: All products must have a valid ITT report

placed on the market under the name or trademark

Abacus Lighting Ltd

Oddicroft Lane Sutton in Ashfield Nottinghamshire NG17 5FT United Kingdom

and produced in the manufacturing plant

Abacus Lighting Ltd

Oddicroft Lane Sutton in Ashfield Nottinghamshire NG17 5FT United Kingdom

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard(s)

EN 40-5:2002, EN 40-6:2002

under system 1 for the performances set out in this certificate are applied and that the construction product(s) fulfils all the prescribed requirements for these performances.

This certificate is valid from 01 August 2022 until 01 August 2025 and will remain valid as long as the test methods and/or factory production control requirements included in the designated standard, used to assess the performances of the declared essential characteristics, do not change, and the construction product and the manufacturing conditions in the plant are not modified significantly, unless suspended or withdrawn by the factory production control certification body

Issue 9. Certified since 01 August 2013.

Authorised by

H. Crick – UK Business Manager

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UKAS PRODUCT CERTIFICATION 0005

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