

Technical Specification

T0409 Trackwork bolts, nuts and washers

Issue: A2

MAYOR OF LONDON

Issue date: November 2014
Review date: November 2017

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1 Purpose

- 1.1 The purpose of this technical specification is to specify the requirements for the material and manufacture of bolts, nuts and washers used to assemble and secure components in trackwork.

2 Scope

- 2.1 This technical specification applies to all bolts, nuts and washers for use with flat bottom and bull head running rail and check rail and conductor rail in plain line track and junctionwork as indicated below:
- a) high-tensile fittings;
 - b) high strength friction-grip fittings;
 - c) mild steel fittings.
- 2.2 This technical specification does not include details of multi-groove locking pins, e.g. 'Huck' bolts, or locking nuts or locking washers, which are proprietary items and are approved on the basis of the relevant manufacturer's own specification.
- 2.3 This technical specification does not include details of the fittings used in proprietary insulated joints. These fittings are approved by LU as part of the overall joint assembly, although they may also be obtained from the joint supplier as separate items.

3 Requirements

3.1 General

- 3.1.1 Bolts, nuts and washers shall be suitable for the traffic loading and track conditions set out in Attachment 1.
- 3.1.2 Nut sizes and types shall be designed and manufactured to suit maintenance tools currently in use on LU.

3.2 High tensile fittings

- 3.2.1 Imperial high tensile fittings shall be as follows:
- a) high tensile steel material to comply with BS 1083, appendix A and in accordance with drawings RE/PW/263 and RE/PW/615;
 - b) bolt heads stamped with code 'V' and LU-approved locking nuts stamped with code 'R';
 - c) circular hard steel washers to conform to EN 14399-5;
 - d) screw threads for bolts and nuts to be BSF with 'medium class' tolerances, in accordance with BS 84.
- 3.2.2 Metric high tensile fittings shall be as follows:
- e) high tensile steel material to comply with BS 3692;
 - f) bolt heads stamped with code "8.8" or "10.9" and LU-approved locking nuts stamped with code "8" or "10" as specified;
 - g) circular hard steel washers to conform to EN 14399-5;