

Technical Specification

T0402 Track: Geotextiles, Geogrids and Geocomposites

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1 Purpose

- 1.1 The purpose of this Specification is to specify the requirements for geotextiles, geogrids and geocomposites.

NOTE: This document has been reclassified and reformatted as a Technical Specification. The requirements are unchanged.

2 Scope

- 2.1 This Specification applies to geotextiles, geogrids and geocomposites for use on ballasted track sections.
- 2.2 This specification relates to materials used as part of the track support system. For materials used specifically as part of track drainage systems reference should be made to the LU Civil Engineer's specifications.

3 Requirements

3.1 General requirements

- 3.1.1 Geotextiles, geogrids and geocomposites supplied to LU or its agents shall be fit for purpose, and shall conform with the requirements of this specification and the performance criteria defined in Attachment 1.
- 3.1.2 Geotextiles, geogrids and geocomposites shall have a current British Board of Agrément Roads and Bridges Certificate.

3.2 Physical properties – strength and durability

NOTE: In addition to the tensile, creep and puncture criteria given below, suppliers of geotextiles, geogrids and geocomposites may propose additional criteria as indicators of strength and durability, when seeking approval for their products.

3.2.1 Tensile strength

- 3.2.1.1 Geotextiles, geogrids and geocomposites shall sustain a tensile load not less than 20kN/m or as otherwise approved by LU for the specific application, determined in a wide-strip tensile test carried out in accordance with BS EN ISO 10319.

3.2.2 Creep characteristics

- 3.2.2.1 The full stress/strain curve for any geotextile, geogrid or geocomposite shall be calculated and submitted by the supplier.

3.2.3 Puncture resistance

- 3.2.3.1 Geotextiles and geocomposites shall have a minimum puncture resistance of 3.5kN or as otherwise approved by LU for the specific application, when tested in accordance with BS EN ISO 12236.

3.3 Physical properties – hydraulic

- 3.3.1 Where geotextiles and geocomposites are required to permit water to pass perpendicular to their plane they shall meet the following requirements: Title: Geotextiles, geogrids and geocomposites
- a) They shall have a size distribution of pore openings such that the O90 value is between 30 μ m and 90 μ m, determined in accordance with BS EN ISO 12956.