



# London Underground (Safety Measures) Act 1991

## 1991 CHAPTER xviii

### PART II

#### WORKS, ETC.

#### 11 General mode as to construction of underground railways

(1) The following provisions shall apply to the construction of the underground railways:

- (a) the works, where constructed in tunnel, shall be constructed in single tunnel;
- (b) the underground railways shall be approached by means of stairs, inclines, subways, electric or other lifts or escalators;
- (c)
  - (i) the tunnels comprised in the underground railways (including the station tunnel) shall be lined throughout with iron or other sufficient metal plates or with concrete or other suitable material;
  - (ii) every permanent shaft shall be constructed either by underpinning or by sinking and shall be lined with cast iron, brick, concrete or other equally suitable and durable material;
  - (iii) the internal diameter of the station tunnel shall not exceed 9 metres, the internal diameter of the cross-over and junction tunnels shall not exceed 12 metres, the internal diameter of the tunnels between stations shall not (except at cross-overs and junctions or where necessary for adjustment at curves or for other constructional purposes) exceed 5 metres, the internal diameter of the shafts shall not exceed 12 metres, and escalator tunnels shall have an internal diameter not exceeding 10 metres;
  - (iv) where the ground is suitable any space between the lining of the tunnels (including station, cross-over and junction tunnels) and the surrounding soil shall be properly filled up with lime or cement grouting placed therein under pressure;

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*Status: This is the original version (as it was originally enacted). This item of legislation is currently only available in its original format.*

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- (d) if water is found to be present in the construction of the underground railways in such quantity as to necessitate the employment of compressed air, the Company shall stop all excavating work at the point where the same is so found, and the further driving of the tunnels at the working face at that point, until air-compressing machinery shall have been provided to produce such a pressure of air as will prevent the inflow of any sand, water, gravel or soil, and such machinery shall be maintained in full working order, and the work at such working face carried on under compressed air, so long as may be necessary; alternatively, instead of the work being carried on under compressed air, the Company may, in any case where it is expedient to staunch or limit any inflow of sand, water, gravel or soil into the tunnels, use chemicals to secure consolidation of the ground or may apply a freezing process for the freezing of the subsoil until the lining of the tunnel is fully erected or secured;
  - (e) except in the case of unforeseen accident or for the purpose of removing rain-water or other trifling amounts of water, no use shall be made of pumping or of other like modes of removing water from the tunnels of the underground railways or from the shafts.
- (2) Nothing in this section shall prejudice or affect the operation of the relevant statutory provisions as defined in Part I of the Health and Safety at Work etc. Act 1974.