

SECTION 219

PERMANENT WAY ANCILLARY ITEMS

Cess walkway

A continuous cess walkway minimum 700 mm wide with a clear headroom of 2.1 metres shall be designed and constructed at the locations specified in the relevant Particular Specification with the edge of the walkway not less than the following minimum distance, as applicable, from the edge of the nearest rail on which trains may pass:

- (i) 1250 mm for line speeds upto and including 100 mph,
- (ii) 2000 mm for line speeds exceeding 100 mph.

The level of the cess walkway shall be not more than 500 mm above or below the level of the top of the sleeper. The longitudinal gradient of the cess walkway shall be not greater than 1 in 20 unless specified otherwise in the relevant Particular Specification. Handrailing shall be provided at the locations specified in the relevant Particular Specification.

A securely fastened smooth handrail 1000 mm high with 150 mm high toe guard shall be provided where there is a risk of a person falling or sliding more than 2000 mm from the cess walkway. The handrailing shall be designed to accommodate a horizontal force of 400 N/m acting at the height of the handrail.

Suitable edging such as precast concrete pavement edging or treated timber in accordance with Section 160: Structural Timber shall be provided to the cess walkway to contain the walkway surface. Where reasonably practical, concrete cable troughing shall not be incorporated into the walkway.

The surface of the walkway shall be non slip, free draining and readily compactable.

Earth retaining (or slope regrading locally) and walkway support arrangements shall be designed as applicable to the location, and shall be compatible with the surroundings.

Where the difference in level between the walkway surface and the existing ground is less than 600 mm high, the design of such arrangement is not required to be certified.

Where the difference in level between the walkway surface and the existing ground is greater than 600 mm high, such arrangements shall be designed to retain the supported soil and to prevent or contain surface erosion, or support an unfactored variable loading of 4 kN/m² and to retain the walkway construction as applicable. Such structures shall be designed and the design checked and certified as specified in the Contract.

Metal work used in the construction of the cess walkway or its supporting structure shall be electrically bonded in accordance with Railway Group Standard GM/TT0107 for 25kV AC electrified lines and Railway Group Standard GM/TT0108 for 750V DC 3rd rail electrified lines.

An outline indication of the proposed means of retaining materials at different levels in connection with walkway construction shall be provided with the Tender. Full details of the proposed walkway design shall be submitted to the Employer's Representative for acceptance a minimum four weeks before walkway construction is due to begin.

Before installation of the cess walkway the existing ground under the walkway surface shall be treated with a residual herbicide approved in accordance with Section 256: Weedkilling.

(219.001)

Buffers

- 2** Buffer stops shall be designed and constructed in accordance with the requirements specified in Railtrack Line Standard RT/CE/S101.

The type of buffer stop to be used, and the sliding distance required shall be determined and calculated for the following rail vehicles:

1. Class of rolling stock: **(INSERT)**,
2. (a) Maximum train weight, include locomotive **(INSERT)** tonnes,
(b) Minimum train weight **(INSERT)** tonnes.

Further details of the particular rail vehicles shall be obtained from:

Rolling Stock Library
B.S. Logistics
Room 180, Derwent House
Railway Technical Centre
London Road
DERBY DE24 8UP

Telephone: 01332 264918
Fax: 01332 264984

3. Maximum impact speed 10 km/h (6mph)
4. Rate of retardation 0.15g average with a maximum of 0.25g
5. Approach Track gradient 1 in **(INSERT)** Falling/Rising
6. Type of buffing on vehicles Side and/or Centre
7. Track gauge 1432 mm/1435 mm
8. Buffer stop to be insulated Yes/No
9. Running rail section BS 95BH/109/110A/113A FB