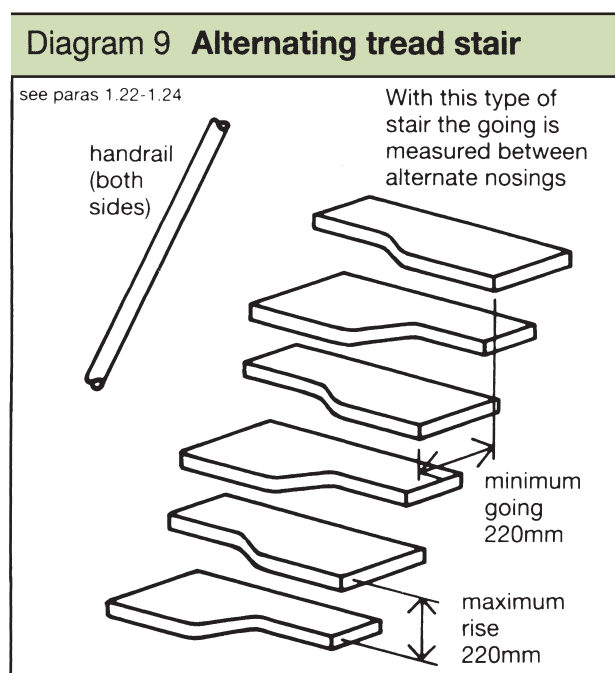


Alternating tread stairs

1.22 This type of stair is one of a number of stair types designed to save space. The general pattern of steps has alternate handed steps with part of the tread cut away; the user relies on familiarity and regular use for reasonable safety (see Diagram 9).

1.23 Alternating tread stairs should only be installed in one or more straight flights for a loft conversion and then only when there is not enough space to accommodate a stair satisfying paras 1.1 to 1.17 above. It should only be used for access to one habitable room, together if desired with a bathroom and/or a WC. This WC must not be the only WC in the dwelling.

1.24 Steps should be uniform with parallel nosings. The stair should have handrails on both sides and the treads should have slip resistant surfaces. The tread sizes over the wider part of the step should be in line with dimensions shown in Table 1 with a maximum rise of 220mm and a minimum going of 220mm. The provisions stated in paragraph 1.9 will apply.



Fixed ladders

1.25 A fixed ladder should have fixed handrails on both sides and should only be installed for access in a loft conversion, and then only when there is not enough space without alteration to the existing space to accommodate a stair which satisfies paragraphs 1.1 to 1.17. It should be used for access to only one habitable room. Retractable ladders are not acceptable for means of escape. For reference see Approved Document B: Fire safety.

1.26 Stairs, ladders and walkways in industrial buildings should, as appropriate, be designed

and constructed in accordance with BS 5395: *Stairs, ladders and walkways: Part 3: 1985 Code of practice for the design of industrial stairs, permanent ladders and walkways*, or BS 4211: 1987 *Specification for ladders for permanent access to chimneys, other high structures, silos and bins*.

Handrails for stairs

1.27 Stairs should have a handrail on at least one side if they are less than 1m wide. They should have a handrail on both sides if they are wider. Handrails should be provided beside the two bottom steps in public buildings and where stairs are intended to be used by people with disabilities. See Approved Document M: Access and facilities for disabled people. Elsewhere handrails need not be provided beside the two bottom steps.

In all buildings handrail height should be between 900mm and 1000mm measured to the top of the handrail from the pitch line or floor.

Handrails can form the top of a guarding if the heights can be matched.

Guarding of stairs

1.28 Flights and landings should be guarded at the sides (see Diagram 11):

- in dwellings - when there is a drop of more than 600mm
- in other buildings - when there are two or more risers.

1.29 Except on stairs in a building which is not likely to be used by children under 5 years the guarding to a flight should prevent children being held fast by the guarding. The construction should be such that:

- a 100mm sphere cannot pass through any openings in the guarding and
- children will not readily be able to climb the guarding.

1.30 The height of the guarding itself should be as shown in Diagram 11.

Access for maintenance purposes

1.31 Where frequent access for maintenance will be required (eg at least once per month), provisions such as those suggested for private stairs in dwellings in this Approved Document, or the guidance in BS 5395: Part 3 on industrial stairs and ladders, will satisfy the requirement.

1.32 Where access will be required less frequently it may be appropriate to use portable ladders etc. Provisions for safe use of such temporary means of access are not covered by Building Regulations, but they are covered by the Construction (Design and Management) Regulations 1994.