

4.4.2.4.3.1 General

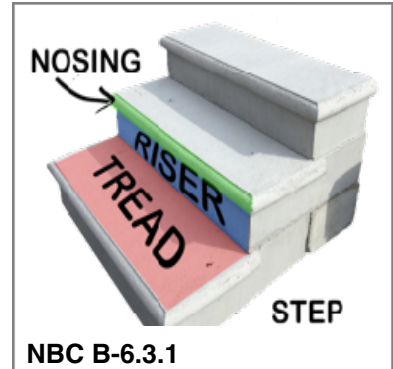
A staircase shall not be arranged round a lift shaft.

Steps (NBC B-6.3.1)

All steps should be equal height and without any variation of width. Step size should be a minimum **1500 mm wide x 300 mm deep** tread. The height of a step should be a maximum of **150 mm**.

The surface should be non-slip. The front edge strip should be in high contrast to the step itself. The strip should be **40 - 50 mm** with contrast of **>30% LRV**.

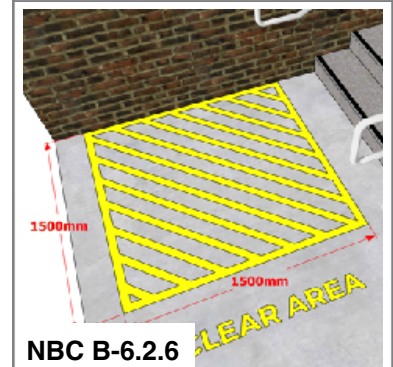
The material should be a uniform colour and non-slip. A maximum of **12 steps** are allowed in a single flight. If there are more than 12 steps then the 13th step should be a resting landing (or any other interval less than 12).



NBC B-6.3.1

Resting Landing and Clear Areas (NBC B-6.3.1.e & NBC B-6.2.6)

If a flight of stairs has a rise of more than 12 x 150 mm steps then it must have an intermediate landing preferably with an even number of steps above and below the landing. The resting landing should be at least 1500 mm long. All stairs should have a clear area at the top and bottom of 1500 mm.



NBC B-6.2.6

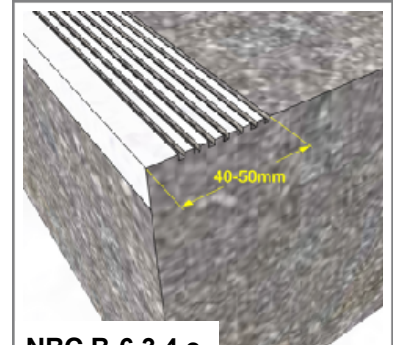
Handrails (NBC B-2.2.4)

All stepped level changes must be accompanied by handrails. All buildings having stepped level changes around them, such as raised plinths, must have handrails next to the entrances, ATMs, and other features like seating areas etc.

Handrail Dimensions (NBC B-5.5.2.)

- The handrails should be on **both** side of the steps at two heights.
- The **lower 650 - 750 mm** and **upper 850 - 950 mm** in height.
- Handrail thickness should be **38 - 45 mm** in diameter and circular in shape.

If the steps are very wide, like at old railway stations or raised building plinths, then there should be more handrails at regular intervals or adjacent to facilities available at either end of the stairs such as entrances, ticket counters, ATM etc. If a handrail is attached to a wall there should be a clearance gap of a minimum of **50 mm** between the wall the hand-rail.



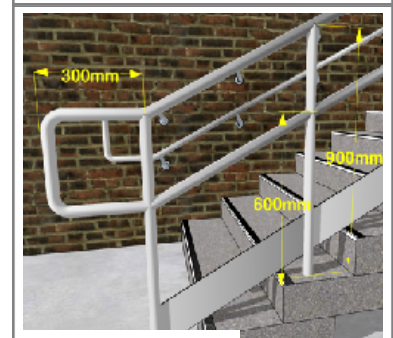
NBC B-6.3.4.e

Handrail Features (NBC B-5.5.2.2.b & c)

- They should be continuous even at landings.
- The extension of the handrails should be **300 mm** at both ends beyond the first step and last step.

Material & Colour (NBC B-5.5.2.1.d, e & f)

- Handrails should be smooth throughout the length without any sharp edges and preferably round or oval in cross-section.
- They should be in contrast to the background colours by at least **LRV 30%**.
- Braille can be used on the ends of the handrail to tell the person where they are.



NBC B-5.5.2.2.e

Tactile Ground Surface Indicators (NBC B-6.3.2)

"Warning", dotted TGSI tiles, should be at distance of **300 mm** from the top and bottom of steps.

Prohibited Types - Turning Step and Spiral Stair (NBC B-6.3.1.h)

These are not allowed and neither is any other type of uneven depth/height step.

Open Steps (NBC B-6.3.1 d)

Are dangerous and not allowed in any part of any public building.

Protruding Objects (NBC B-6.3.3)

Any objects protruding more than **100 mm** between **300 to 2100 mm** above ground level into an access route shall be clearly visible and detectable with a cane



NBC B-6.3.2

Establishment Name Building Name		Address			
Sn	Description	Required	Y/N	Actual	Notes
01. 07. 01	Flights of steps are not more than maximum	Not more than 12 steps in any one flight.			
01. 07. 02	Handrails on both sides?	Both sides of steps require handrails.			
01. 07. 03	Handrails at two heights	Lower 650-750 mm Upper 850-950 mm			
01. 07. 04	Handrails have extensions on both ends.	300 mm extension on each handrail.			
01. 07. 05	Staircase width is compliant	Staircase width is minimum 1500 mm			
01. 07. 06	Step Colour	Uniform colour, unpolished and not reflective.			
01. 07. 07	Step Surface	Non-glossy, mat and non-slip surface.			
01. 07. 08	Front edge strip of all steps.	40 - 50 mm 30% LRV			
01. 07. 09	Non-slip front edge of step.	40 - 50 mm minimum non slip traction strip			
01. 07. 10	Step run (depth from front to back)	Minimum 300 mm			
01. 07. 11	Step rise (height)	Maximum 150 mm			
01. 07. 12	TGSI provided at either end	300 mm before top and bottom of flight.			
01. 07. 13	Step is closed	No open Step.			
01. 07. 14	Step is even depth on both sides	No triangular or kite shaped steps			
01. 07. 15	Stairway is straight without curves or turning	No curved or spiral stairways.			
01. 07. 16	Other				