

Stair Nosing Guidelines

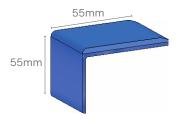
Stair Nosing

There are five main aspects that specifiers should consider when referring to Stair Nosings help create a 'ladder effect' to the stairway when viewed from either the top or bottom. This can help users identify the nose of the steps more safely when descending or ascending. The five main aspects to consider which contribute to the attainment of this 'ladder effect' are:

Dimensions

Building Regs (K&M), BS8300 and BS9266

The recommended tread should measure 55mm and the riser 55mm. This ensures there is a large enough 'band' on the nose of the step.



The LRV colour requirements of the stair nosing tread and riser

Building Regs (K&M), BS8300 and BS9266

The colour of the Stair Nosing is required to differ from that of the floor covering. Every colour has a Light Reflectance Value (LRV) of between 0 (Black) and 100 (White). There should be at least 30 points difference between the Stair Nosing LRV and that of the floor covering, e.g. If the floor covering has a LRV of 50, then the Stair Nosing should have a LRV of between 0-20 or 80-100. This helps create the 'ladder effect'.



Black



Stair Nosing Guidelines

The slip resistance of the tread surface of a stair nosing

Building Regs M and BS8300

The tread material used in a Stair Nosing is important for the safety and performance of a stairway. There are two recommended tests that can be carried out to determine the slip resistance of a flooring material: the pendulum test (PTV) and the shod ramp test (DIN 51130). Either of these can be used to give an indication of the slip resistance of a material.

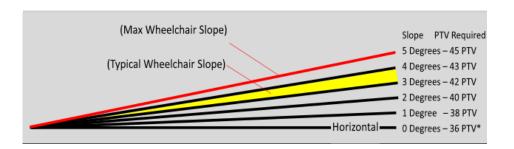
The shod test associates coverings into slip groups: R9, R10, R11, R12 or R13. R9 ratings are subject to the lowest requirements, while the most stringent requirements apply to group R13 coverings. Indoor stairs require an R10 slip rating, while outdoor stairs requires an R11.

PTV classifications:

Pendulum Test Value (PTV)	Classification
0-24	High Slip Potential
25-35	Moderate Slip Potential
36+	Low Slip Potential

Slip resistance on slopes

A slope on a floor requires an increase in the Slip Resistance Value. On a horizontal floor the HSE expects a Pendulum Test Value of 36 PTV on a wet or contaminated floor but for every 1 degree of slope the PTV value must increase by 1.75 PTV. See diagram for more information.



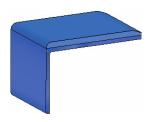


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Coverage of the tread material on the top surface of the stair nosing

IP 15/06

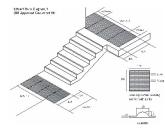
The tread is the surface of the Stair Nosing which receives ascending or descending footfall. The IP states that the Stair Nosing tread material should extend to the front edge to the point at which it meets the vertical face in order to minimise the risk of a slip in descent.



Tactile surfaces at the approaches to a stairway

Building Regs M and BS8300

Corduroy Tactiles (the type used on pavements at crossings) should be installed as a hazard warning surface on the top and bottom approaches of the staircase, which will warn pedestrians that they are approaching a staircase. The regulatory documents give details of the dimensions for these approach tactile areas.



Other considerations:

Bull nosed steps: These can create a trip hazard to partially sighted users, who use their foot to find the nose edge of the step.

Open riser steps: Again these create a trip hazard.

Shiny metal: Can create glare in artificial or direct sunlight.

Double channel Stair Nosings: Too wide to meet the 55mm requirement

In a refurbishment project avoiding these conditions might not always be possible. In such instances the aim should be to ensure there is a good contrast Stair Nosing on the steps – at least creating a positive ladder effect in order to clearly identify each step.

Specifiers should be encouraged to follow the guidelines wherever possible, since Stair Nosings that meet these guidelines help to ensure a safer stairway and thereby reduce the element of risk for users ascending or descending.