Gradus Guarantee for Tread Alert
Tactile Warning Surface for Internal Stairs

This guidance is given after consultation with the Joint Committee on Mobility of Blind and Partially Sighted People (JCMBPS).

Gradus Ltd is a leading manufacturer and supplier of contract interior finishes to the UK and European construction markets. With over 40 years experience in the contract flooring market, Gradus Ltd offers a comprehensive range of contract flooring products that have been designed to meet the aesthetic and functional needs of architects, specifiers and contractors.

Tread Alert was developed in conjunction with the Royal National Institute of Blind People (RNIB) and is modelled on the tactile paving detailed in the DTLR publication ‘Guidance on the use of tactile paving surfaces’ (1998).

The Equality Act 2010 contains duties to make reasonable adjustments to physical features of premises. From 1 October 2004, service providers must take reasonable steps to remove, alter or provide a reasonable means of avoiding a physical feature of their premises, which makes it unreasonably difficult or impossible for disabled people to make use of their services.

In support of this deadline guidance, Approved Document M 2004 and BS8300:2009+A1:2010 and have been published. These documents are designed to assist specifiers and building owners by providing guidance on the provision of inclusive environments.

ADM 2004 states:

Internal stairs
Design considerations

3.50 It is not reasonable to require a hazard warning surface at the head of internal stairs since there is no recognised warning surface for use internally which can be guaranteed not to constitute a trip hazard when used alongside flooring surfaces with different frictional characteristics.

Source: Building Regulations - Access to and use of buildings - Approved Document M - 2004 Edition. Crown Copyright material is reproduced with the permission of the controller of HMSO and the Queen’s printer for Scotland.

However, after consultation with the Joint Committee on Mobility of Blind and Partially Sighted People, the following confirmation has been received:

“The Joint Committee on Mobility of Blind and Partially Sighted People believes that blind, deaf blind and partially sighted people should be able to move around safely and independently”.

Tactile surfaces are used to provide information, guidance or a warning to visually impaired people. It is therefore essential that suitable tactile surfaces are provided in appropriate circumstances. JCMBPS endorses, and was involved in developing, the DTLR publication ‘Guidance on the use of tactile paving surfaces’ (1998).

There has been much debate among members of the National Register of Access Consultants (NRAC), and others, about the use of tactile surfaces at the approach to internal stairs.

Approved Document M 2004 states that it is not reasonable to require this internally, as there is no recognised safe surface to specify. However, ADM goes on to say that designers should be aware of the potential risk of having a stair directly in line with an access route. ADM is of course guidance and does not prevent designers going beyond the guidance.

In a new development and possibly major refurbishment, design options could protect the stairs but in existing situations there is often little alternative to the provision of a tactile warning surface at the approach.

To do nothing is to leave visually impaired people at serious risk.
We have called on Communities and Local Government (formerly the Office of the Deputy Prime Minister - ODPM) and the Department for Transport to initiate research into the use of tactile warning surfaces in internal environments with a view to providing recommendations for its safe use.

In the meantime, JCMBPS confirms the recommendation that a tactile warning surface should be used at the approach to internal stairs, as recommended in BS8300:2009+A1:2010.

BS8300:2009+A1:2010 Design of buildings and their approaches to meet the needs of disabled people - Code of practice

5.9.6 Landings

To give advance warning of a step, tactile paving with a corduroy hazard warning surface should be provided at the top and bottom of each flight. Where the approach to the stair is wider than the flight, the tactile surface should extend beyond the line of each edge of the flight.

NOTE Further information on the correct choice of tactile warning surface can be found in the DTLR publication Guidance on the use of tactile paving surfaces.

Diagram 1

Tread Alert tactile surface incorporated into the landing at the top and bottom of the stairs to extend at least 400mm at each side of the stairs and set 400mm from the leading edge of the stair edging. Tread Alert tactile surface should be a depth of 800mm when the approach is straight on and 400mm when a conscious turn is needed to reach the step (A). Tread Alert should contrast in colour with the surrounding floor finish.

This is very important to enable visually impaired people to use stairs safely. It is particularly vital that the surface is provided where stairs are in the direct line of travel or can otherwise be encountered without prior warning.

The installation of the tactile surface should be undertaken with due regard to safety and with careful consideration of the surrounding floor surfaces.

This will include:

- Contrasts of colour and tone, to assist people with impaired vision
- Similar friction characteristics and slip resistance to those of the surrounding floor

The provision of good lighting, highlighted step nosings and appropriately designed handrails are essential.
Andy Shipley of the Disability Rights Commission (DRC) and Peter Barker, Chair of the Disabled Persons Transport Advisory Committee (DPTAC), both visually impaired themselves, are supporting this issue.

Peter Barker: “Clearly additional research would be welcome but until that has been completed and new guidance issued, visually impaired people will be at risk if no warning is provided at internal stairs. I know my colleagues in DPTAC share my view that research is required as a matter of urgency.

Until that research has been completed and to avoid visually impaired people continuing to be at risk, designers should consider providing some tactile warning at the approach to stairs such as a change of floor material - to do nothing is not an acceptable option.

The JCMBPS statement has been issued to avoid the misinterpretation that could arise from the AD of Part M.”

Andy Shipley: “Whilst I recognise the difficulties presented to designers in providing suitable tactile warning at the top of internal stairs and the problems for Building Control surveyors in regulating them, the safety of visually impaired people still remains an issue. Although ADM deems it unreasonable to make the provision on internal stairs it does not prohibit their use. Clearly, where internal stairs are finished in a hard surface, there should be little difficulty in applying the corduroy material appropriate for external use. I would hope that in the spirit of good practice, designers and service providers would adopt an innovative approach and seek to install flooring and tactile warning surfaces of compatible slip resistance”

Note:

The frictional and textural differences between a carpet and a rubber hazard warning surface can differ and therefore, Gradus recommends that Tread Alert, when used with carpet, should be inlaid into resilient flooring. The resilient flooring should be at least two footfalls between the Tread Alert tactile warning surface and the edge of the carpet (see diagram below). Gradus Clip-Top should be used to provide a safe transition between the resilient flooring and the carpet. The Tread Alert tactile warning surface should contrast in colour and tone with the surrounding resilient flooring.

For further details of the Gradus range of products or advice in specifying Tread Alert, contact 01625 428922.