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News about Slips and Trips

Raised plinths cause trips at electrical retailer



A major electrical retailer has been fined for two tripping accidents that occurred in one of their stores.

In Summer 2002 a member of the public tripped over one of 21 unmarked plinths and fractured their arm. The plinths are a serious tripping hazard as they are covered in a similar carpet to the rest of the floor, which makes them difficult to distinguish. An improvement notice was served on this company for all raised areas to be clearly identified. An extension was granted due to a refurbishment of the store, yet later in the year further inspection still identified tripping hazards within the store.

In early 2003 there was a further accident involving a trip caused by one of these plinths. Legal proceedings were instigated by the Local Authority (LA) and as a result the group were fined £9000 + costs at the end of last year.

Misused tactile paving could cause accidents

Tactile paving is used to help the visually impaired to identify certain hazards, for example, dropped curbs at pedestrian crossings. However, HSE have come across examples of the "blister" pattern, which is to identify a dropped curb, being used at the top of a flight of stairs. Someone relying on these

tactile pavings would not be expecting a step, and could fall down a whole flight of stairs - a frightening prospect.

Slips and trips as causes of other accidents:

Although slip and trip accidents account for a significantly high percentage of injuries each year we believe the true picture to be much worse. In a recent study conducted by HSE which looked at a sample of accidents that had been reported as a fall from height, over 30% were actually caused by a slip or trip. This raises the importance of implementing adequate control measures in environments where a slip or trip may lead to a fall from height because this type of accident often results in a serious injury or fatality.

Man that slipped under fork-truck wheel loses leg

A man had to have his right leg amputated below the knee when it was run over by the front right wheel of a fork lift truck.

At the time of the accident the man was helping to move a bundle of four 2m steel girders. The bundle had been slung from the left fork of the fork lift truck (i.e. two chain 'slings' had been joined together with one end looped around the fork and the other end looped around the middle of the load). The man was holding one end of the girders, to balance them, and was walking near to the front right wheel of the fork lift truck as it was being driven towards the loading area. It is believed that he either slipped or tripped and caught his right foot under the wheel. This method of moving steel was commonly used by the company and was inherently unsafe. In addition, the driver of the fork lift truck had not been trained and tested in accordance with HSC's Approved Code of Practice & guidance "Rider-operated lift trucks: Operator training". The company was prosecuted under section 2(1) of the Health and Safety at Work etc. Act 1974. The company was fined £12,000 and ordered to pay full costs of £2032.60.

Guarding open fat frying ranges

There has recently been a number of slipping accidents within the catering industry resulting in burn injuries following contact with open frying ranges (particularly hot oil). HSE has identified this as a potential risk and is now reviewing guidance with regard to the guarding of open frying ranges.

Slip fatality in kitchen

A mother of two died in a tragic accident recently as she worked alongside her daughter in a residential care home. The 51 year old woman slipped or tripped on the kitchen floor and a large knife she was carrying severed an artery in her neck.

Derwentside District Council are investigating the incident assisted by technical experts from the Health and Safety Executive and the Health and Safety Laboratory.

'Slips assessment tool (SAT) formerly Pedestrian Slipping 'Expert System'



HSE and the Health and Safety Laboratory (HSL) are developing the new Slips Assessment Tool (SAT) - formerly called Pedestrian Slipping Expert System. The SAT is a PC based package which allows 'non-experts' to assess the slip risk of pedestrian walkways/surfaces. The system prompts the user for information regarding the floor surface type, the cleaning regime used, the condition of the floor (both in terms of its cleanliness and history) and human factors relating to pedestrian use. On completion, a 'slip-risk' rating is supplied to the user. The system is also a valuable source of training information, which aims to increase awareness of the scale of the slips problem, and to familiarise the user with common 'slip-resistance' test methods.

The system is currently being field tested by some HSE and Local Authority Inspectors. Our long-term aim is to make the system more widely available depending upon the outcome of our evaluation.



Slips and trips - live issues

More information about the Slips Assessment Tool - formerly called Pedestrian Slipping Expert System

What is the SAT?

The HSL/HSE Slips Assessment Tool (SAT)- formerly called Pedestrian Slipping Expert System CD-Rom is a PC-based package. It allows 'non-experts' to assess the slip risk potential of pedestrian walkways/surfaces. Furthermore, the system contains training information, targeted to increase the user's awareness of the scale of the slips problem, and to familiarise the user with common 'slip-resistance' test methods.



The system is designed to take a holistic approach in assessing the risk of slipping in a given location. Many traditional slip test methods have only considered the physical nature of the floor, however this is only half the story. Research has shown that there are a number of contributory factors that cause pedestrians to slip. The SAT has been designed to consider the known causes of slips and to quantify the risk of slipping. Once the program has calculated the 'slip risk factor', this can then be used to determine if there is a high or low risk of slipping in any given situation.

Using the SAT

Why was it developed?

The SAT was originally designed for HSE Inspectors to assess slips risks in the food and drink industries. This sector has a high slips injury rate. It soon became apparent during development of the prototype that the SAT may be just as applicable for a wider range of inspectors from HSE and local authorities and also to a wider public.

Using SAT

Firstly, a series of measurements of floor roughness are made at the test location using a small hand-held surface roughness meter. These measurements are then inputted into the SAT software. The system then prompts the user for information regarding the floor surface type; the cleaning regime used; the condition of the floor (both in terms of its cleanliness and history); nature and extent of contamination (e.g. water, oil, dust); the type of footwear being used onsite (e.g. sole type); human factors; use by elderly, carrying loads, etc and other relevant information. On completion, a 'slip-risk' factor 'score' is calculated to the user. This will assist the user in determining whether site conditions are likely to give rise to a high or low risk of slipping.

The data can be inputted into a laptop computer (pre-loaded with the SAT software) on site for an immediate assessment of slip risk. This is the preferred mode of operation. Alternatively, surface roughness data and other information can still be easily recorded on site using a proforma. The completed proforma information can then be inputted into a PC later. The assessment can then, if desired, be repeated using alternative data such as different floor type, different shoe sole type, no floor contamination, better cleaning regime etc.



Slip risk factor

New information sheet on slip test methods

It has been estimated that worldwide, there are between 80 and 100 different tests for measuring the slip resistance of floors. HSE has identified the need

to provide clear information about common slip test methods in order to help designers, facilities managers and those having responsibility for specifying flooring.

A new information sheet, which aims to demystify the confusion surrounding the many different slip tests, will soon be available.

Footwear

Slip resistant footwear can play an important role in reducing slip accidents. Recent laboratory research and workplace trials involving innovative new styles of footwear have resulted in a marked reduction in slipping accidents in certain industrial sectors.

Further research is being carried out to identify and test a range of slip resistant footwear currently available in the UK market. The results of this research will help HSE to better inform industry about slip resistant footwear.

And finally

Boulevard project - London

This project was initiated because of the high costs of civil claims for damages caused by slips and trips on broken pavements, kerb edging etc. in the London borough of Islington. In the three years up to the summer of 2000, when the Boulevard Project began, total claims on the first fourteen streets to be overhauled amounted to £367,496 for 152 trips or falls. It was decided to take a proactive approach and radically upgrade the street scene rather than instigate piecemeal repairs as notified, usually after an incident. In the period since each of these streets had a makeover, claims have dropped to zero. This is an impressive outcome, and one that financially justifies the improvement in quality of paving in the borough.

