

Twin Presentations on 12th November 2007

Does it Look Good – Is it Safe? –part 2

Floor Safety at Birmingham City University (BCU)

Chris Peck selected, as his example, one recent experience at the University, previously known as University of Central England, which neatly combined the **Safety** improvements with **Operational** enhancements and **Aesthetic** qualities alluded to in the theme of today's presentations. The events started with a request from the Health and Safety Executive for two Inspectors to demonstrate how slippery the floors were and to research the management of floors in critical areas. This was part of an ongoing HSE national interest in Slips, Trips and Falls and a history of 127 reportable accidents at BCU, of which 33 were in this Category.

From the research standpoint, it was appropriate to examine conditions at the external entrance to the Baker Building although, as Chris pointed out, there had not been any reported Slips, Trips or Falls there for five years! This view shows what happened in the entrance corridor, when it rained, and further inside there was a 'plume' of water on the terrazzo flooring. The existing mat in the door-well was not doing an adequate job! Even further inside the building were vinyl tiles and the HSE Roughness Meter confirmed their slip resistance was particularly low when wet and this constituted a "High Risk" on the HSE's **Slips Assessment Tool (SAT)**. This is a computerised programme that Quantifies these elements of 'Slip Resistance' (<http://www.hsesat.info/>): -



Original Baker Entrance Corridor –
with Leaves and Water when it rains!

- Floor Type
- Surface Roughness Value *
- Contamination Type *
- Contamination Amount *
- Contamination Source
- Footwear
- Floor Cleaning Type *
- Floor Cleaning Frequency *
- Contamination Re-occurrence *
- Surface Usage
- Environment

All the elements marked with a (*) can be influenced directly by the occupier and improvements should produce a reduction in the SAT Rating, initially calculated as a **47 Risk Rating (High)**. The hazards identified were:

- The mat removes dirt but not water from footwear
- The hinged, outer lobby doors are heavy and often held open, so that the entrance corridor fills up with leaves
- When it rains, a 3m plume of water is created inside the inner doors, in the Entrance Hall
- A warning cone and occasional dry wipe does not remove the hazard adequately in this busy entrance accommodating 2,000 pedestrians per day!

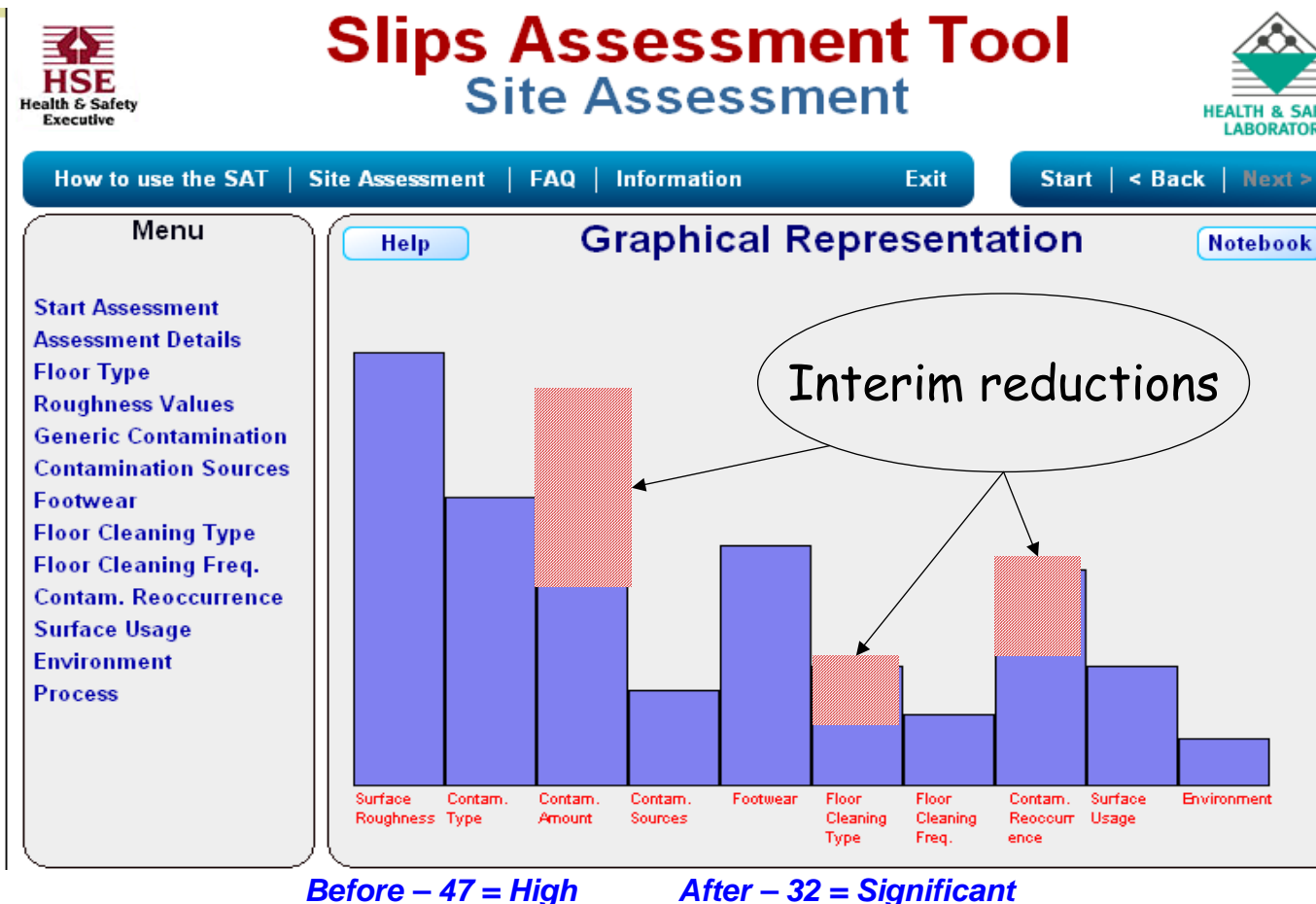
Other findings were that: -

- The Cleaning Contractor had ‘disappointing’ Risk Assessments and need to tighten up on methods of working and training
- The University’s Building Services did supervise their Cleaning Contractor, but did not have a risk assessment for the Entrance. **For that reason, the HSE issued an Improvement Notice!**

The initial response to this was to carry out a Risk Assessment for the Baker entrance. This involved consulting with colleagues on ways of reducing the slip potential – and checking to see if there were similar problems in the other 79 Buildings, with 176 Entrances! Immediate remedial actions were: -

- Improve the Cleaning Methods and Training of cleaners, particularly on wet days
- Purchase loose barrier mats to be inserted after the existing mat well to reduce water contamination. (The resultant trip hazard had to be minimised!)
- Investigate a replacement for the mat in the well. This choice took several months.
- Identify structural improvements to the entrance area.

The immediate effect of these interim actions was to reduce the slip resistance, as follows: -



So, although there had been a tangible improvement, more needed to be done – but that needs MONEY. It was here that the “Slips Fairy” waved her magic wand, because the new Vice-Chancellor had identified the need to refurbish this, the Perry Barr Campus’s ugliest entrance, in keeping with the enhanced image being sought with the change of name!

The benefit was that the needed safety improvements were able to be built-in to an ambitious Project Specification to: -

- Remove the internal steps in the Entrance Hall by raising the floor, including in the adjacent function hall, to the same level
- Replace the vinyl and terrazzo with a ceramic tiled floor having reduced slip
- Provide a refurbished multi-function hall and a new conference suite
- Create an Entrance lobby with Inner and Outer automatic doors and matting surface
- Provide external steps to give access to the higher, internal level of the entrance hall and construct a matching Disabled Access alongside.

The benefits were quite significant: -

- SAT Rating down to **23 – Medium Risk Rating**
- External steps and ramp giving excellent access and a ‘landscaped’ appearance

- A dry interior because the new mat retains the water so well
- Leaves kept on the Outside because of the external steps and better door closing!
- Carpet replaced timber floor in the multi-function hall – much better teaching and examination environment
and THIS: -

It looks **GOOD** and is much **SAFER!**