

# Safe passage

Injuries from slips, falls and trips in the workplace are a cause for concern, not only for those who suffer them but, as Brian Wall reports, for employers seeking to avoid the consequences

**U**K employees suffered 10,835 major injuries as a result of slipping and tripping in 2005/06, according to the HSE, so such accidents remain serious problems – accounting for 38% of all major injuries.

These considerations, as well as increased awareness of public liability and the financial implications of lost time at work, mean that judicious selection of working surfaces is vital.

When it comes to taking preventive measures, important factors to consider are the reasons for installing matting or safety flooring, such as: is it to be used in a wet or dry environment? If it is oily, then rubber mats with a Nitrile blend are generally regarded as particularly effective. Will it come into contact with chemicals or be subjected to heavy-duty wear or tear? Is it for a high temperature environment, such as a welding bay? Will users turn regularly, and is wheeled access for trucks or trolleys needed?

## Better materials

These are just a few of the critical questions that COBA, one of Europe's largest matting and flooring manufacturers and suppliers, always asks. "Many of our products are tested for specific conditions," explains sales manager Chris Stanley, "and we are always happy to give customers advice on what's most suitable and offer a trial mat."

Fibreglass Grating's solutions are constructed with gritted, concave anti-slip fibreglass, offering vital traction in wet and icy conditions. Its products are used across many industries, though few customers can subject them to more rigorous testing than the RNLI, whose lifeboat crews face some of the harshest conditions when emergencies arise. "The RNLI entrance gangway on to the lifeboat pontoon at Falmouth in Cornwall is pitched at 45 degrees at low tide," says Burns, "and the crew need to be able to run down that, with all their gear on, without slipping or holding on. That's what our decking product allows them to do."

Fibreglass Grating is also in the process of building sample railway platforms, using materials with a moulded top cover, embedded with grit. These could be used in future to replace solid concrete surfaces where resistance to slippage needs to be improved, such as on platforms that are subject to adverse weather conditions.



The RNLI entrance gangway to the lifeboat pontoon at Falmouth

Peter O'Sullivan, matting sales director, Plastic Extruders, believes the solution that offers the best protection from accidents overall is open grid matting, with a highly etched top surface and underbars to lift it off the floor. "Equally important for people who stand a lot is resilience underfoot in order to reduce fatigue," he stresses. "Reduced tiredness means sustained or increased productivity. Mattings are available with different degrees of cushioning, often combining anti-fatigue properties with slip-resistant performance."

Leading manufacturers of matting and flooring products understand all this, he says, with the best undertaking stringent and independent testing. "For example, DIN 51130 measures slip resistance. The matting specimen is fitted to a board, which is gradually tilted at various angles, with a person standing on the wet surface wearing calibrated footwear. When slipping occurs, an R rating is given, R13 being the highest at more than 35°."

For anti-fatigue testing, ASTM D 2362 is used to measure resilience as a percentage of the 'bounce' it provides for the worker standing on the matting. "Asking a manufacturer for test results, and/or examining existing installations, is a sure way of achieving employee satisfaction and employer peace of mind," suggests O'Sullivan. **PE**

## Pointers

- Is your flooring to be used in a wet or dry environment?
- If oily, rubber mats with a nitrile blend are very effective
- Will the flooring come into contact with aggressive chemicals?
- Will it be subject to heavy duty wear/ tear?
- Is the flooring for high temperature usage, such as a welding bay?
- Will users need to be able to turn regularly?