

News Release



Waterloo revisited

Richard Burgess Sales and Marketing Director of Lonsdale Metal Company visits Waterloo rail station to check out the glazed roof system his company provided nearly four years ago.

The original Waterloo station was opened by LSWR in July 1848 and for several years expanded and developed. A complete rebuilding programme was carried out between 1900 and 1922, but it was to be another seventy years or so before any further major changes were made to the building with the addition of the Eurostar terminal in the 1990s.

The original transverse ridge and furrow roof construction was designed by J.W. Jacomb-Hood & his successor A.W. Szlumper and measured 520ft x 540ft on plan covering 19 platforms. This is an area equivalent to seven football pitches; 26,000 sq/m using today's metric equivalent. Serving the busy South coast mainline route into London, the station copes with thousands of passengers a week and hundreds of trains.

The roof coverings were approaching the end of their life and significant maintenance was being undertaken by Network Rail. Despite being in need of blasting and re-painting the original steelwork was found to be in good condition, so it was only necessary to install a new patent glazing system with modern glass panels.

Over 26,000sq/m of glazing was replaced with the station fully operational

Capital Projects, the main contractor, decided to suspend a 'safety-deck' from the steel trusses immediately under roof. This allowed the contractors to remove old materials and carryout the new installation. A rolling rig was constructed enabling operatives to slide a set of work platforms under the curved trusses from one end of the roof to the next, obviating the need for traditional style scaffolding as they moved to a new work area. Tony Ingram, Roofing Construction Manager, commented at the time, 'Passengers have only been vaguely aware of something going on over-head; most people don't know we're here'. All nineteen platforms remained open and functioning for the duration of the project with minimum inconvenience to passengers.

Such an operation needs a 'rapid-fix' patent glazing system

To the layman the roof's nine barrels all look the same, in-fact each one varies in size so the new glazing system had to take this into account. A flexible system was essential which would accommodate the tolerance and variance of the site conditions. Lonsdale's SkyGard with standard mill finish was chosen due to the systems flexibility. Despite SkyGard being a tried and tested product, we developed specially extended fixing brackets to permit ventilation at the

bottom of each tier of glazing. This was to allow air-circulation without undue ingress of water from driving rain, so diesel exhaust could escape, carrying with it dirt and grime detrimental to the to the glass and aluminium system. The standard mill finish option will provide significant savings to Network Rail as a painted finish would require regular cleaning to maintain Lonsdale's warranty agreements. 6.4mm laminated glass was fitted, having been specially cut to size by The Dorset Glass Company, Poole using state of the art computer aided machinery.

Swift solution on target to finish in 2003

Roofing contractor, Kelsey Roofing Industries, have kept their promises and consistently delivered on time. Steve Arthurs, Kelsey's Project Manager commented at the completion of the project, 'We made surprising progress with the Lonsdale system, as metre for metre, we are glazing in two thirds of the time that we achieved during our last major station at Glasgow Central'.

Richard Burgess, Sales & Marketing Director for Lonsdale comments, 'We are delighted Lonsdale has made a difference and Waterloo, happily we have had no reports of any problems with the roof so it stands as an excellent testimony to what our design and fabrication team can achieve. However, all credit to Kelsey Roofing Industries, as their excellent organisation of this contract and professionalism ensured every component was fitted to specification, resulting in a low maintenance structure that should look good and perform for years to come.



Platform view at Waterloo Station, London



London Eye overlooks Waterloo Station

Note to Editorial Teams

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