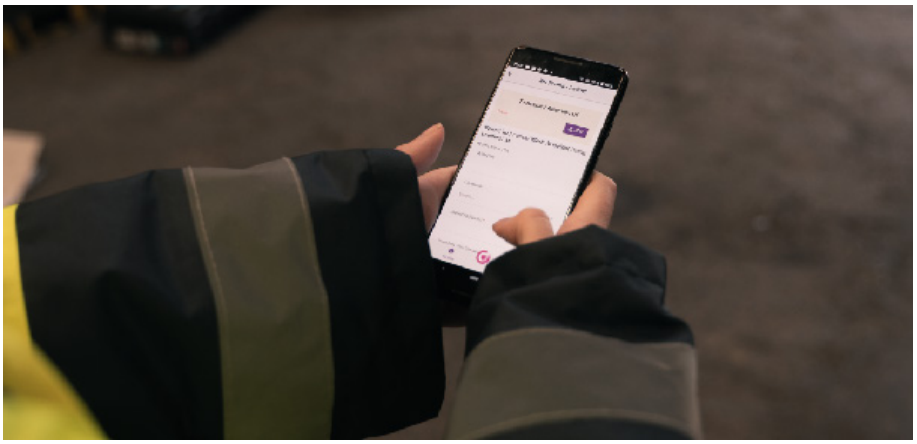
Mace Case Study: Electronic Riser Management

How Mace saved time and improved compliance by working with DataScope to digitalise their Riser permit and booking process at the East Bank; Stratford Waterfront development.



LOCATION
London, United Kingdom

PROJECT
East Bank; Stratford Waterfront

Background

Already providing a suite of workforce, logistics and planning tools to Mace's project team at Stratford Waterfront's East Bank development, DataScope were approached to develop an Electronic Riser Management System to allow the team to manage the end-to-end process both digitally and in the field. With almost 80 risers to manage, at the Stratford Waterfront development, an efficient system was needed to manage the process.

Working closely with the Mace project team, DataScope developed the electronic system to both digitally manage the permit management process specific to the Stratford Waterfront project as well as ensuring that there is an easily auditable visibility of riser occupancy.

The Challenge

Digitising a Manual Process

Working within risers potentially poses major Health & Safety risks to those carrying out the works including falling from height and falling objects. Strict controls must be in place to manage who is working in risers and ensuring they have taken the appropriate safety measures to do so.

System & Process Integration

DataScope designed and developed a fully integrated solution that not only dispensed with paperwork but also allowed for greater visibility of who is working in risers and when and live permits – all from one

Team Engagement and Buy-In

The solution needed to be easy-to-use and efficient for both Mace and the contractors working directly on the project/ within risers to ensure their buy-in.

The Solution

Using purpose-built Field Management software, DataScope's in-house development team digitally replicated the riser permit forms as well automating the Mace workflow and approval process needed for contractors to carry out works in a riser.

DataScope's software development team then worked to create a new system integration between our Field Management and Booking System allowing us to create one fluid approval and booking system that users could access from one login and one app.

How it Works

Prior to commencing works in a riser, subcontractors must first submit a permit request using DataScope's App. Users can complete the permit from their smartphone and submit it electronically for approval. The approver then automatically receives a push notification and the permit on their own device for review and approval. Users can sign electronically and capture photographs as required.

Once approved, the system automatically prompts the subcontractor to request a booking which they can do from their smartphone or via the web. This is then sent to the appropriate manager for approval who can review the booking request against a visual schedule and ensure there are no clashes.
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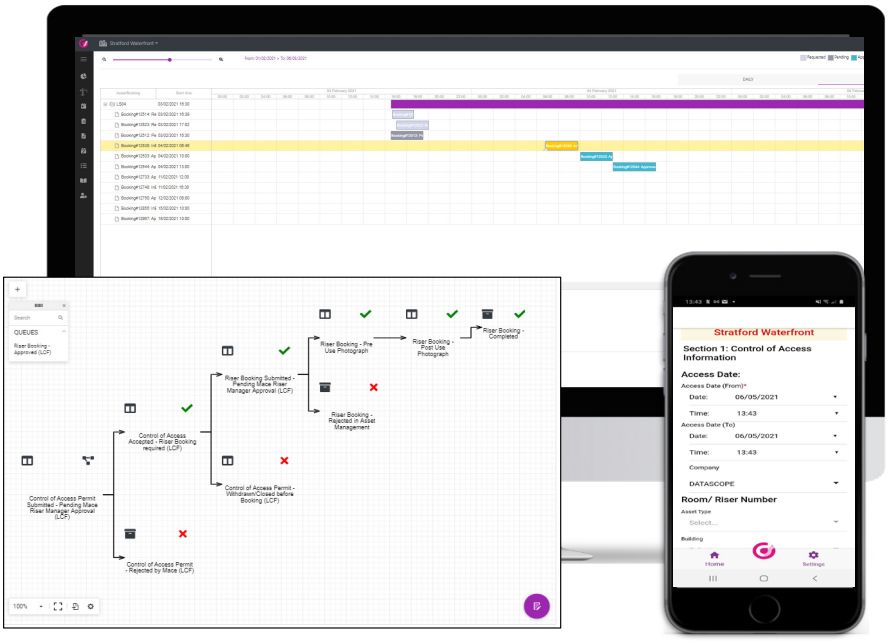


Once all approved, contractors can then commence works in the riser. Once they have finished working within the riser, contractors must then capture and submit a photograph via the app to show the condition of the riser once works have been completed.

The system has been designed to work as one seamless experience for both the project team and the supply chain, making the booking and approval process run as smoothly and painlessly as possible.

All submitted bookings and permits are also viewable on the web system.

Riser bookings are shown in the online schedule, showing clear visibility of who is working in each area. Submitted permits are also available to view on the web system as PDFs which can be interrogated as required.

The Result

The development and implementation of this system has had numerous benefits not only for the Mace project team at Stratford Waterfront but also the subcontractors working on site seeing time, quality, health & safety and sustainability benefits.

Increased Productivity and Enhanced Oversight

2 Hours per Week

Saved time for Mace Manager processing and approving permits and bookings.

The use of the system has saved on average 2 hours per week for the Mace Construction Manager tasked with riser management because it makes the approving and rejecting of riser access permit requests simpler and more efficient as they are able to review and approve/reject bookings directly in the field from their smartphone. It also prevents multiple contractors attempting to book the same space simultaneously, thereby reducing delays and abortive works.

Quality

There is a requirement in the system to provide condition photographs of the riser(s) pre- and post-activity, therefore allowing Mace to track whether contractors are leaving waste, materials, etc within the risers and also holding the contractors more accountable in ensuring a good level of housekeeping is maintained.

H&S

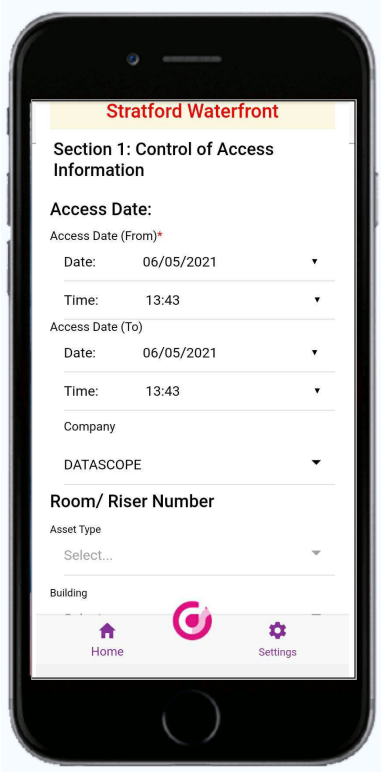
The Datascope Riser Permit Management System allows for a full audit trail of riser occupancy that can be instantly accessed on the web system at any time.

Sustainability:

The riser booking system requires no paper. Therefore, no waste will be generated from this process, with savings on shredding and paper waste removal.

Other

The system ensures riser permits are linked to the site access biometric cards. Access from site is denied unless the permit form is signed off by a Mace riser coordinator. The system can also be utilised electronically during Last Planner coordination meetings.



Future Development Opportunity

The system can be fully integrated with DataScope's Time & Attendance System meaning that operatives carrying out the works can be directly linked to the permit. All operatives on site then have a QR code on their access card which can be scanned to instantly show if they have any live permits associated with their record.

Riser bookings are shown in the online schedule, showing clear visibility of who is working in each area. Submitted permits are also available to view on the web system as PDFs which can be interrogated as required.