

CUSTOMER
Land
Development
Services

PROJECT
Elevation drawings,
roof plan and fire
escape survey in
Poole

SOLUTION
Trimble X12 3D Laser
Scanner and T10x
Tablet

One job - two standout reasons to use the Trimble X12 3D Laser Scanner

With an extensive survey fleet to choose from, it was the Trimble X12 3D Laser Scanner that Scan Technician at Land Development Services', Andrew Coggan, selected for a recent Measured Building Survey of a nine-storey landmark building in Poole.

Introduction to LDS Ltd

Experts in the gathering of data since 1969, Wiltshire based Land Development Services is a company known for its professionalism (LDS is an RICS Regulated Firm and also a full member of The Survey Association) and its wide range of experience. Over the years, the team has worked on projects as large and varied as raising the roof on a new construction in London and surveying infrastructure for large international sporting events right down to the smallest jobs such as single building elevation surveys and garden projects.

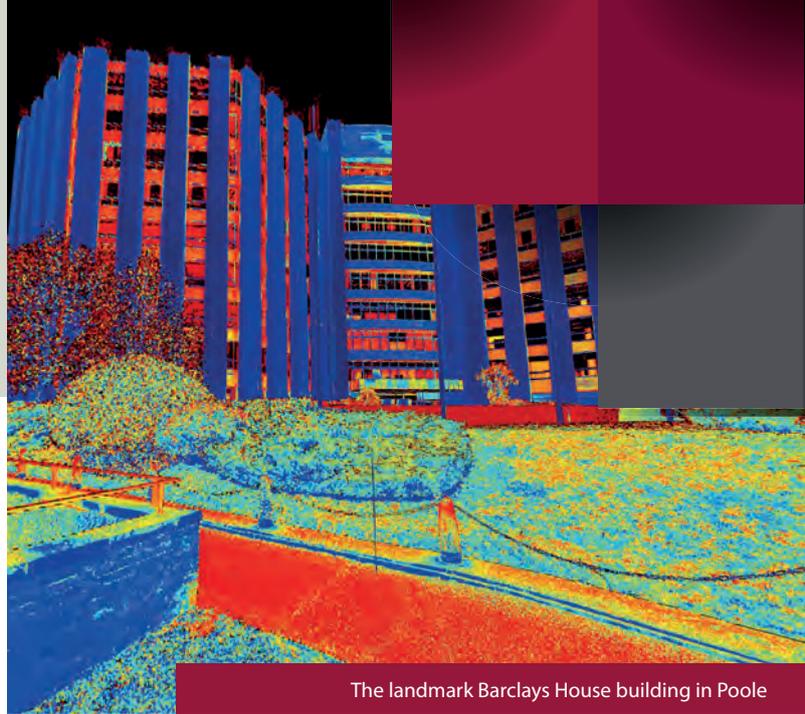
Assisting with the company's successful reputation in such broad ranging areas is its commitment to investing in groundbreaking survey technology and in particular, Trimble 3D Laser Scanning systems. Supplied by KOREC, the LDS 3D laser scanning fleet includes two Trimble TX8s for precise, HD scanning, an SX10 Scanning Total Station, two X7s for fast scanning and most recently, Trimble's highest performing laser scanner, the X12.

Responsible for these systems and the main point of contact for any scanning based enquiries or tricky site work is Scan Technician, Andrew Coggan. Familiar with all the survey fleet, it is Trimble's high-end X12 that Andrew favours for many of the jobs and especially for Measured Building Surveys. Purchased early in 2023, the X12's high precision data at long range, lightness and size for travelling ensure that it is in almost daily use.

One job, two stand out reasons to use the Trimble X12

The landmark nine-storey Barclays House building in the centre of Poole has dominated the town centre's skyline since its opening in January 1976. Subsequent to a decision by the bank to relocate its staff to Bournemouth, LDS was contacted to create elevation drawings of the whole building which is made up of three conjoined octagons.

This was followed up by a further request to deliver a roof plan and detailed plans of the three concrete, spiral staircase fire escapes which run down the centre of each of the octagons from top to bottom. The landings were also requested. Whilst Andrew had access to all of the LDS laser scanning fleet, he felt that the X12 was the only option for this job for two reasons:



The landmark Barclays House building in Poole

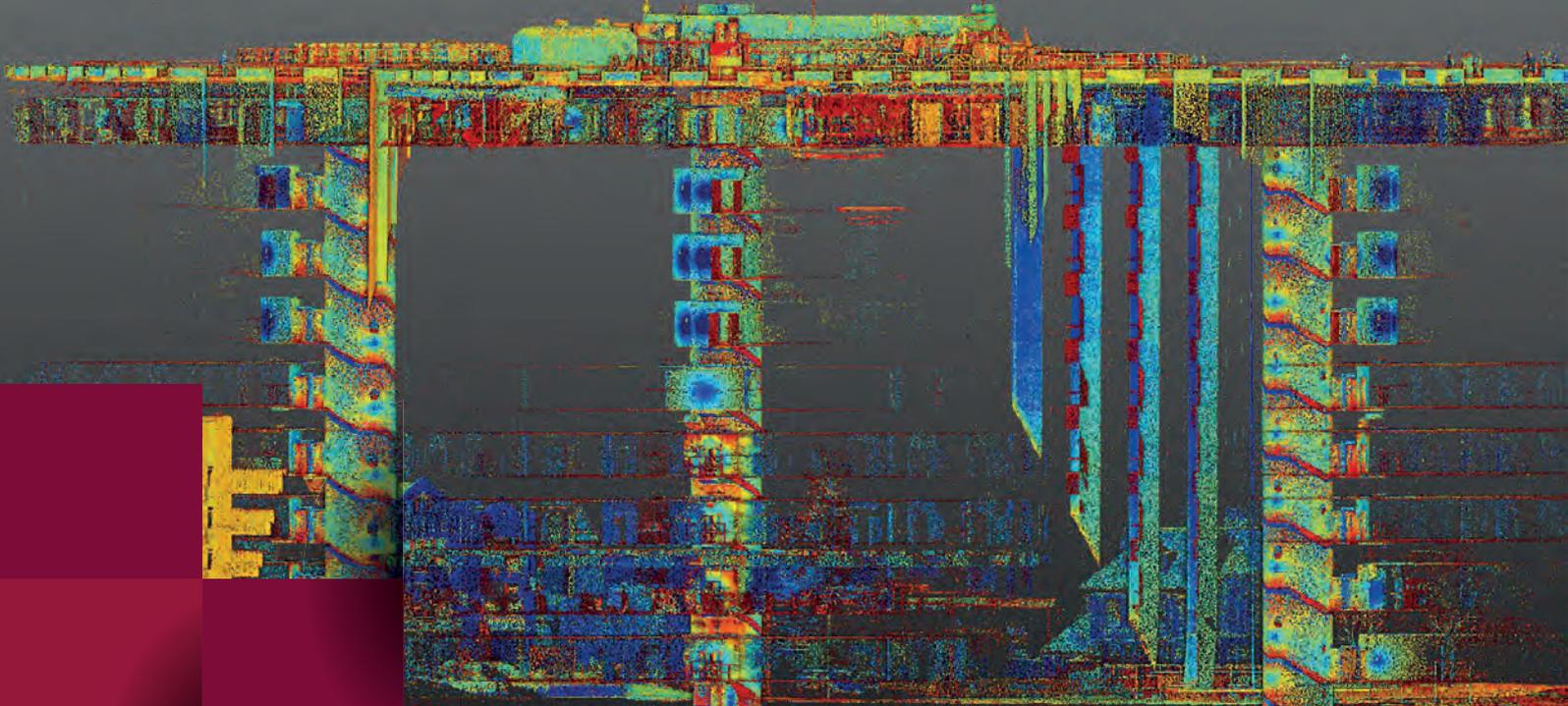
with a mobile Mapping system on a customised trolley

Trimble X12 - LDS benefits for the Poole site

- Long range- whilst still delivering high-quality, crisp data.
- Minimal blind spot for staircase scans (you can see the tripod legs) plus short 0.3m range
- Perspective software for short learning curve and onsite registration
- Good size and weight for easy transportation
- Confidence in KOREC's technical support if required



Andrew Coggan (right) takes delivery of the new LDS Trimble X12 and T10x Tablet with KOREC scan specialist, Melvin Penwill (left)



Point cloud showing the three spiral staircases

The Trimble X12 can scan at a short range of just 0.3m and also has a minimal 'blind spot' which is considerably smaller than that of other scanners, to the extent that you can see the tripod legs. This would mean that Andrew could complete the staircase scans far faster because fewer setups would be required- around half as many compared to using an alternative scanner.

Secondly, for this job, Andrew required the distance that the X12 can measure whilst still delivering high-quality, crisp data. The X12's long range would allow him to link data from the roof to the surrounding buildings at floor level. This would enable registration from the ground to the roof, even on a nine-storey building.

"The distance, speed and smart light features were what attracted me to the Trimble X12."

Andrew Coggan, Scan Technician, LDS Ltd

Additional benefits

Andrew says that crucial to the success of the job was the Trimble Perspective software which is used to manage the X12 via a Trimble T10x Tablet. The alternative would be to undertake the work 'blind' which could have caused a number of problems when processing the data. Instead, onsite registration means that Andrew could check that he had captured all the data he required before leaving the building.

Overall, Andrew completed 157 scans internally (including the roof ones) and a further 127 externally. He used three settings: low-setting (0:46) for the internals, mid-setting (1:34) for the roof with two set ups using the high-setting window scans in each.

Andrew concludes, "The speed of the X12 coupled with the clarity of the scans blows my mind every day and it's exceeded my expectations. Additionally, although we're pretty adept at dealing with any issues we may have on site, KOREC is always there to help us and we have a good rapport with them."



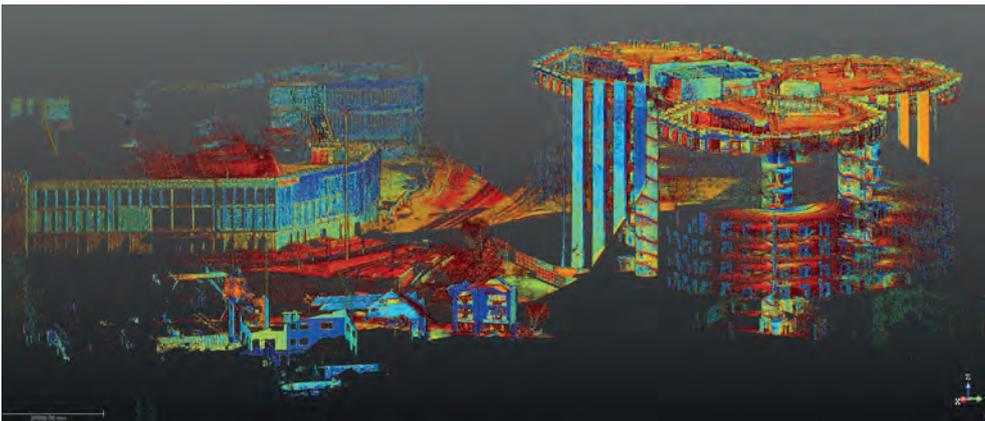
Using the X12's range to link scan data from the roof to a nearby building

“The speed coupled with the clarity of the scans blows my mind every day. The X12 has exceeded my expectations.”

**Andrew Coggan,
Scan Technician, LDS Ltd**



Trimble X12 3D Laser Scanner



Point cloud showing Barclays House and the surrounding area

About the Trimble X12 3D Laser Scanner

Released in July 2022, the Trimble X12 integrates Trimble software for precise data capture and in-field registration (Trimble Perspective) with state-of-the-art 3D laser scanning and imaging hardware technology from Zoller+Fröhlich (Z+F), combining the expertise of two industry leaders into a single solution.

The result is a 'best of both worlds' combination of Z+F technology and a tried and tested Trimble workflow. The outcome is amazingly crisp data.

Small for a scanner of this range (0.3 m–365 m) and precision ($\leq 1 \text{ mm} + 10 \text{ ppm/m}$), the compact unit measures just 150 mm (W) x 258 mm (D) x 328 mm (H) and weighs in at 7.7kg including the batteries. The unit also has a handle and is driven via the Trimble T10x Tablet running Trimble's tried and tested Perspective software which is also common to the Trimble X7 scanner.

CONTACT US

Please do get in touch for further information on any of the products or services mentioned in this case study, a demonstration, support or just a chat about your requirements.

(UK) 0345 603 1214

(IRE) 01 456 4702

info@korecgroup.com

www.korecgroup.com



Measured Solutions
Construction | Surveying | Mapping