

AUSTRALIA

Technology driven
solutions for
strata buildings

Technology driven solutions for strata buildings

Due to changing times and the requirements of our clients, Sedgwick has adopted innovative methods to complete our site inspections. Our core services are forensic building inspections for identifying defects, conducting condition surveys, costing activities and project management of remedial projects. Sedgwick is turning the tide on how we do business through the progression of technology and its integration into our day-to-day operations.

Sedgwick has the expertise and resources to assist with the entire strata process — from forensic investigation and identification and reporting of issues/defects to the scoping of works and management of projects from start to finish.

We specialise in:

- Causation (including forensic engineering)
- Scope of works
- Tender management
- Project management
- Defect assessment/identification

We are building our capabilities using artificial intelligence (AI) to capture information and assist in the management of buildings.

Digital twin

Our digital twin inspection method allows for electronically recording site data in a digital twin, which is a 3D replica of a space or object. That data is then indefinitely available for viewing at a desktop position in 2D and 3D virtual reality. The technique combines the use of drones and Matterport technology — an all-in-one platform transforming real-life spaces into immersive digital models — to gather site data and create a digital twin of any building or space within a structure, including confined spaces.

Applications

There are many applications and levels of data captured by this new technology. Portfolios where we have used this technology to date include:

- Preparation of scope of works
- Creation of 2D and 3D floor plans
- Detailed cost estimates
- Building condition reports
- Defect assessments
- Dilapidation surveys
- Insurance valuations
- Maintenance management
- Measurement of building components

Benefits

Utilisation of these technologies offers many benefits to strata managers and owners, including:

- Provision of a permanent digital record of a property at any point in time
- A faster, more time-efficient way to capture information
- Preventing the need for experts to attend every loss site and for multiple-party inspections
- Easy shareability with all stakeholders — including insurers, experts and owners, interstate or internationally — to help them understand building issues and make informed decisions
- Aligns with the cost of manually collecting data
- Measurement functionality within +/- 2MM of accuracy
- Generation of floor plans in both 2D and 3D



AI-powered defect detection

We use specialised drones equipped with cameras and sensors to capture aerial images and videos, providing valuable data for assessment without the need to step onto a roof. The images and videos are uploaded into a trained AI engine to identify defects and anomalies that are then outlined in a detailed defect report to support offsite assessments and rectification. The output is shared and distributed via SyncTech, a secure and encrypted data cloud storage platform.

External building façade assessments

Sedgwick uses Voltin, a first-of-its-kind digitised commercial building façade survey and assessment system. Voltin combines sophisticated imaging and positional technology with an autonomous electro-mechanical device to deliver an innovative service that is more cost-efficient, accurate and safer than other systems in the market. From multi-storey, residential strata apartments to high-rise commercial buildings in central business districts, Voltin allows users to effectively scan a façade and then provides detailed digital reports on all building defects. The technology works on surfaces like concrete, cladding, glass and metallic composites. It can then be used to determine remedial repairs, maintenance and capital works plans. Voltin is the only provider of drone technology approved across Australia by the Australian Civil Aviation Safety Authority (CASA).

The benefits of external building façade assessments include:

- New digital approach can reveal previously unseen flaws and identify precise defect location
- Detection of more than 50 building defect types, including cracks, corrosion and paint peeling
- Safe and low impact
- Accuracy of defect image modelling due to geo-tagging
- Digital representation of 2D and 3D images
- Interactive display of data in the report format
- Cost savings

For more information on our strata solutions, visit [our website](#) or contact:



Edwina Feilen
Manager, business solutions

Sydney
M. +61 424 750 900
E. edwina.feilen@sedgwick.com





Building consultancy services

Sedgwick has provided expert building consultancy services in the local market for the past 23 years. As the largest home warranty consultancy specialist team in Australia, Sedgwick has extensive capability in forensic building consultancy, technical inspection service (TIS), policy assessments, preparing scopes of work, tender validation processes and construction management. We specialise in managing remediation work within the residential, multi-storey residential and mixed-use strata complex landscapes.



Repair solutions

Sedgwick's repair solutions team provides an alternative, competitive restoration model to the insurance industry. Since 2009, our dedicated team of repair solutions experts has invested time and energy in developing relationships with more than 300 certified, professional and quality contractors across Australia. Some of the services we offer include emergency make safes, remediation of contaminants, restoration, building repairs and environmental disaster management.



sedgwick.com/au

