

Why Property Resilience Assessments Aren't Just for Big Buildings

Property Resilience Assessments (PRAs) are often associated with high-rise offices, hospitals, campuses, and industrial facilities. Their size, system complexity, and occupancy make the potential effects of flooding, severe weather, and other natural hazards easy to recognize.

Smaller properties can also face significant operational disruption.

A neighborhood restaurant, family-owned store, independent medical office, apartment building, small warehouse operation, or light manufacturing facility may rely on one location for nearly every part of the business. A damaged roof, flooded entrance, failed electrical system, or inaccessible parking area can interrupt employees, customers, tenants, deliveries, and revenue at the same time.

The building may be smaller. The exposure is not.

When One Failure Affects the Full Operation

Large organizations may have alternate locations, redundant equipment, multiple access points, or space where work can continue. Owners and facility managers of smaller properties often have fewer options.

"The building may be smaller. The exposure is not. One vulnerable system or access point can disrupt the entire operation."

One electrical service may support the full building. A single group of rooftop units may provide all heating, cooling, and ventilation. One loading area may handle every shipment. The primary entrance may be the only practical route for customers, patients, residents, or employees.

This concentration changes the effect of a failure. Floodwater does not need to cover an entire site to stop operations. Water reaching electrical equipment, a loading area, or the main entrance may be enough. Wind damage to one roof section or rooftop unit can

affect all occupied areas. A blocked roof drain can lead to water intrusion that damages equipment, inventory, finishes, or tenant spaces.

The repair itself may be limited, but the business effects can continue. Lost revenue, canceled appointments, damaged inventory, tenant displacement, employee downtime, cleanup, temporary equipment, and delayed reopening can add to the cost.

For a property with little redundancy, the location and function of a vulnerable component may be more important than the building's square footage.

What a Property Resilience Assessment Evaluates

A PRA examines how a building and site may perform when exposed to natural hazards and climate-related stress.

Through PRAs for commercial and residential properties, Intertek evaluates conditions that may contribute to damage, interrupt operations, or delay recovery, including:

- Flooding and stormwater exposure
- Site grading and drainage effectiveness
- Flood pathways and areas where water may accumulate
- Water intrusion and enclosure performance
- HVAC, electrical, plumbing, and storm drainage systems
- Deferred maintenance that may increase exposure
- Operational and recovery effects following an event

The assessment connects existing property conditions with performance during a hazard event.

Deteriorated roof flashing, for example, may already require repair or replacement. During wind-driven rain, that deficiency may create a water intrusion path. A low entrance may function normally during routine weather but allow water into the building during a major storm. Electrical equipment may operate as intended but remain exposed because of its location within a potential flood pathway.

The Property's Function Shapes the Review

Two buildings of the same size may have very different resilience priorities.

Independent restaurants may rely on uninterrupted power, refrigeration, ventilation, water service, and customer access. Small medical offices may have specialized equipment, temperature-sensitive materials, and limited options for relocating patients. Small warehouse operations may depend on roof performance, loading access, site drainage, stored inventory, and material-handling equipment.

A PRA can be scoped around the property's construction, condition, location, occupancy, systems, and operational needs. It may cover one building, a representative group of similar locations, or a larger portfolio.

Similar Properties Can Share Similar Vulnerabilities

Smaller properties within the same portfolio may use common roof assemblies, storefront details, drainage layouts, or equipment configurations. A weakness found at one location may also be present at others.

Location can add another layer of risk. A regional flood, wind event, freeze, heat event, or utility interruption may affect several properties at once.

A portfolio-level review can help owners compare conditions, identify recurring deficiencies, and prioritize repairs, capital improvements, or further evaluation.

A Property Resilience Assessment and a Property Condition Assessment Answer Different Questions

A Property Condition Assessment (PCA) examines the current condition of a building, including system performance, deferred maintenance, and anticipated capital needs. A PRA considers how the property and its systems may perform under hazard-related stress. PRAs may be performed alongside PCAs. Together, they can show how an existing maintenance issue may also increase the potential for damage, downtime, or delayed recovery during a severe event.

The combined findings can support maintenance planning, capital budgets, acquisitions, renovations, and risk-reduction decisions.

When to Conduct a Property Resilience Assessment

Owners do not need to wait for a storm or flood to expose a weakness.

A PRA may support decisions:

- Before purchasing a property
- Before a major renovation or retrofit
- During a capital planning cycle
- As part of a portfolio risk review
- When insurance or reporting requirements change
- During early design for new construction or redevelopment

For a smaller property, an assessment may be particularly useful when the operation has no alternate location, relies on specialized equipment, stores sensitive inventory, or has limited tolerance for downtime.

Resilience Improvements Can Be Targeted

A PRA does not automatically lead to a major retrofit. If the findings point to a need for further study, Intertek also provides building enclosure analysis, testing, commissioning, hygrothermal analysis, material testing, and third-party validation of flood mitigation systems.

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The results can help owners compare potential improvements based on exposure, cost, operational effect, and available capital.

Click here to learn more about Intertek Property Resilience Assessments.

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1.800.WORLDLAB
icenter@intertek.com
intertek.com/building

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