Structural Integrity Law s2760

An ‘EKG’ for your building

- Non-invasive, 1 day test
- Overall Structure tested
- Get Structural Capacity
- Verify assumptions
- Reveal Repairs

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ASCE 11-99 - Load Test methods

STEP 1) Visual inspection – inspect structural elements where visible

STEP 2) Testing to Verify Assumptions and Indicate Repairs

Only 5 acceptable load tests per ASCE 11-99 (referenced by s2760)

a. Analysis and interpretation of data
b. Dynamic Load Tests
c. **Monitoring Dynamic Response – STRAAM**
d. Monitoring stress/strain
e. Static Load Tests

STRAAM's load testing is quick, easy and effective.

STRAAM is the only test of the building as a whole.

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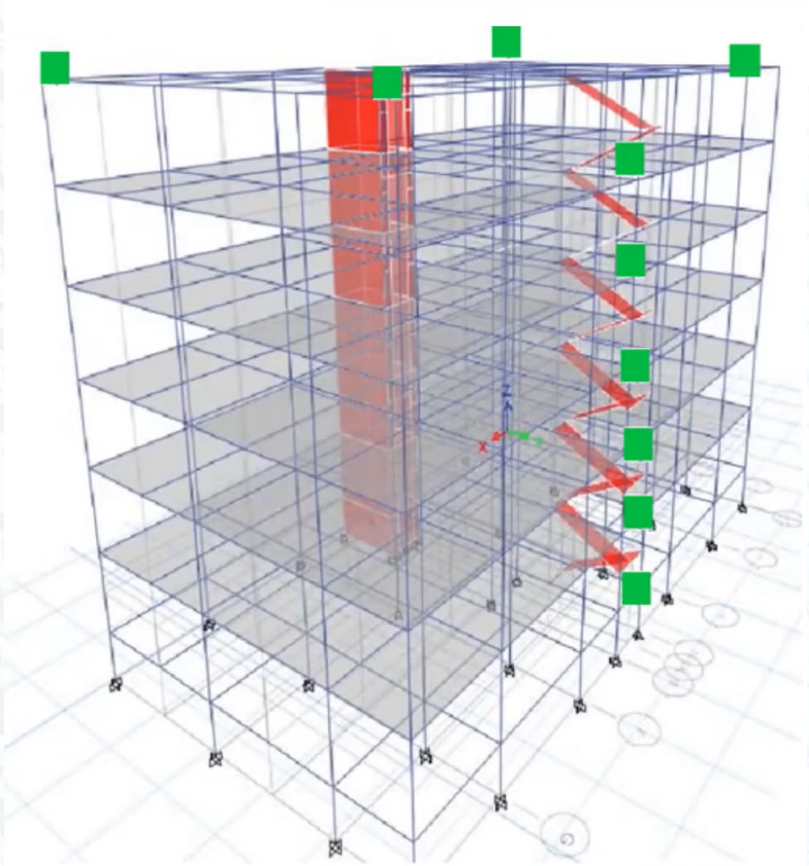
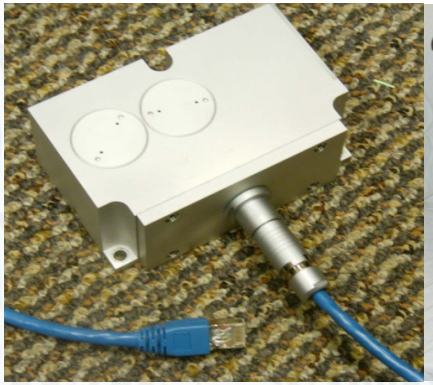
How it's done

- Take Measurements on roof and stairwells.
- Process data into a detailed analysis of structure.
- Produce report
- Repeat test after repairs





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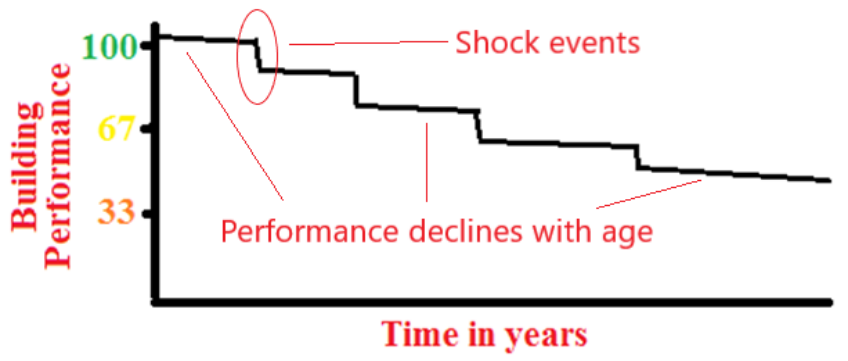
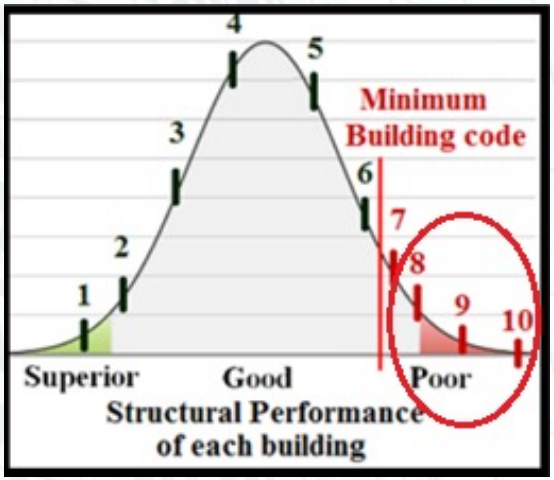
Risk ratio calculator for random process			
Risk ratio	Return Period	Probability of Occurrence in Any Year	Rating
1.40	2137.9	0.05%	
1.30	743.5	0.13%	
1.20	279.6	0.36%	
1.10	113.7	0.88%	
1.00	50.0	2.00%	
0.95	34.1	2.93%	
0.90	23.8	4.21%	
0.88	20.7	4.83%	<----- D
0.86	18.1	5.54%	
0.84	15.8	6.33%	
0.82	13.9	7.20%	
0.80	12.2	8.18%	

Reporting Requirements

1. **Structural Rating**
2. **Identify repairs (if any)**
3. **Time to recheck**
4. **Structural Baseline**





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Case Study

Assess a 19-story condominium for Structural Integrity

STRAAM Assessment:

- Dynamic Assessment compared measures to code
- Accurately memorialize dynamic characteristics
- Identify potential weaknesses

Result:

- Building had sufficient capacity, but showed aging
- Found geotechnical anomalies leading to damage
- No catastrophic problems found.
- Assured residents.
- Data used for **60-day** damage retest.

Data used as **baseline** for next test cycle.

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