

FACILITY CONDITION ASSESSMENTS

WHAT ARE THEY AND WHAT TO EXPECT?



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WHO ARE WE AND WHAT WE DO?

- Started in 1969
- Over 130 staff
- Offices in Calgary, Ottawa and Toronto
- Two divisions: building science and structural
- Actively growing Building Science team
- Award winning Structural team
- Calgary serves Manitoba and West



WHO ARE WE AND WHAT WE DO?

- **Some of our Services:**

- Facility Condition Assessment
- Property Condition Assessments
- Reserve Fund Study
- Lifecycle Planning
- Program Plan
- Building Envelope
- Restoration
- Structural Assessments
- Design and Tendering Services
- Contract Administration
- Barrier-free and code review



FACILITY
LIFECYCLE
ASSESSMENT

FLA

FACILITY CONDITION
ASSESSMENT

PCA

WHAT ARE
THEY?

FCA

PROPERTY CONDITION
ASSESSMENT

BUILDING
CONDITION
ASSESSMENT

RFS



BCA

RESERVE FUND
STUDY

PROPERTY CONDITION ASSESSMENT (PCA)/ OR BUILDING CONDITION ASSESSMENT

- Uses ASTM Standards: *E2018-150 Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process*. Result of S&L failures in USA For RTC.
- Visual review only. Thin guidelines as who qualifies to perform them. Does not require an architect or engineer.
- Not a good tool for capital planning. Financial Institutions require for Commercial Real Estate transactions in tandem with Phase One Environmental Site Assessment (PIESA).
- Focuses on big ticket items. High level review of building components with minimum breakdown.
- Forecasts for 5-10 years.
- No ratings are used but condition and age are considered for replacement/repair of major items.
- Used primarily for people that don't hold the asset for a long time.
- Tend to be lower cost (less than \$2,000-5,000 depending on size of complex).
YOU GET WHAT YOU PAY FOR!



RESERVE FUND STUDY (RFS)

- Visual review only of Exterior and Common areas.
- Mandated by the Condominium Property Act.
- Can be done by any licensed professional or technical professional (e.g. could be an accountant or house inspector)
- Very similar to an FLA but has an added spreadsheet.
- Typically done for condominium corporations.
- Takes into account monthly contributions to the condominium reserve fund for financial analysis.
- Normally done for 25 year forecast.



FACILITY CONDITION ASSESSMENT (FCA)/ OR FACILITY LIFECYCLE ASSESSMENT (FLA)

- Also known as qualified Building Condition Assessment (BCA) with detailed requirements.
- Co-operative Housing Federation has good standards and requirements for RFP Documents.
- Visual review only of **ALL** exterior and interior components, including tenant space.
- Good for capital planning. Provides schedule for needed repairs/replacement of building components due to age and condition rating.
- Detailed breakdown of building components by type and when installed.
- Helps to prioritize Capital Needs.
- Forecasts for 20-25 years. Can be longer.
- Good for Long term building owners.
- Generally performed by licensed Architects and Professional Engineers and **qualified** technicians.

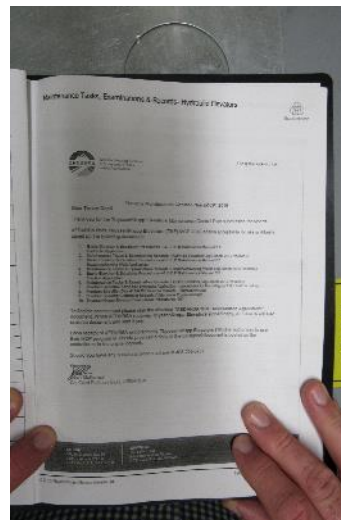


FACILITY LIFECYCLE ASSESSMENT (FLA)

- What are the benefits?
 - Building check-up.
 - How are things and what needs to be fixed or replaced.
 - Help creates priorities.
 - Short term and long term capital planning.
 - Defers older components a maximum of 5 years.
 - Helps to calculating risk and impact of failure or deferment.
 - Considers investment versus replacement of a Facility.
 - Easy to incorporate Reserve Fund Analysis.

FLA Methodology

- **Desktop Review:** drawings, previous reports, maintenance records.
- **Site Representative Interview.**
- **Site Tours of entire facility.**
- **Photographic Records made.**
- **High-level Code Review.**
- **Follow-up questions.**



What do we look at?

- **Site works:** including pavement, landscaping, drainage, etc.
- **Building Structure:** including foundations, structural frame, etc. including underground parking garage.
- **Building Exterior:** including cladding, roofing, windows, doors, etc.
- **Building Interior:** including corridors, amenities, service areas, etc.
- **Mechanical Equipment:** including boilers, make-up air unit, etc.
- **Electrical equipment:** including lighting, distribution systems, etc.
- **Elevators:** including passenger, freight, lifts, etc.
- **Fire-Life-Safety:** fire/alarm detection, egress, etc.
- **High-level code review:** evident code violations.
- **Accessibility:** including parking, access, interior circulation, washrooms.
- **Ancillary structures-** storage sheds, clubhouse.



FLA FORMAT

- Has executive summaries and summary tables for easy reference.
- Broken into sections by division (e.g. mechanical, architectural).
- States where needed follow-up detailed studies are needed.
- Include photos for highlighting conditions and concerns-usually up to about 30-35.
- Has a useable excel sheet for cost planning.
- No special software required (Microsoft Office).
- Easily can have Reserve Fund Spreadsheet added.

Parameters: cost and timeline considerations

- **Length of time:** normally 20 to 25 years, normally decided upon agreement with the Client.
- **Thresholds:** based on size of building, we generally use \$3,000. Sometimes determined by Client as low as \$1,000 for housing.
- Ratings of 1-3 must be dealt with in years 1-5
- Rating of 4 that is past is useful life is placed into year 5 (can be deferred again on next study).
- Priority items can not be deferred past first year.

Condition Ratings (CR)	Priority Markers (Cat.)
1: Critical Unsafe 2: Poor 3: Marginal 4: Acceptable 5: Good 6: Excellent	A: Code & Safety B: Repair & Maintenance C: Capital Expenditure D: Modernization E: Other

Parameters: cost and timeline considerations

A03.0 EXTERIOR WINDOWS

I.D#	SYSTEM/COMPONENT	DESCRIPTION	CR	Cat.	COMMENTS/ASSESSMENT
A03.1	Exterior Windows	~1995: The window units in the tenant space are fixed-over-horizontal slider type of windows. The fixed portion is constructed with double glazed insulated units, while the sliders are constructed with single panes.	4	-	The windows were reviewed from the interior tenant space. Property management reports, and random visual review confirms that no active leakage through the windows. During our cursory review, the window sills were noted to have water stains, which is likely from condensation on the interior surface of the windows.
A03.2	Curtain Wall	~1995: There is a small section of curtain wall directly above the building entrance.	3	B	Failed glazing units were observed during our cursory review. It is recommended that failed glazing units be replaced as part of the maintenance program.

Other considerations

- Estimated Useful Life (EUL)
- Facility Condition Index (FCI): calculation that can give you an overall rating of the building (Poor to Good)
- $FCI = \left(\frac{\text{Maintenance, Repair, Replacement Deficiencies of the Facility}}{\text{Current Replacement Value of the Facility}} \right) \times 100 = ??\%$
- Replacement Costs: provided for a comparison.

Who should do them and how often?

- Federal, Provincial and Municipal Governments and Institutions.
- Long-term owners of buildings- housing is a major one due to a lot of tenants.
- At least every 5 years.
- Be engaged, have information available as much as possible, have someone who knows something about the building present. Can help you get funding.
- Outside set of eyes for review.
- Helps tell you what next steps to take.
- Can pay for themselves by giving you advance data and warnings of items that have deteriorated and pose a risk.

Other parameters

- Demographics: different needs per user groups, one size doesn't fit all.
- Program Needs: playgrounds, common meeting rooms, laundry, gym, are there amenities beyond just housing? Are the ones provided meeting current needs?
- Accessibility: hearing, mobility or visually impaired users. Particular concern for seniors. Is there a goal for each facility?



Reporting

- Draft reports usually are done 3-4 weeks after the site visit is completed.
- You should have a 1-2 week period to review and comment.
- The report should give you a snapshot and guide for what you need to do or indicate what types of follow-up studies are needed.
- If you have the right people completing the work, they can help you on the next stage to make necessary repairs or renovation projects.

Cost Considerations

- **YOU GET WHAT YOU PAY FOR!**
- Make sure the firm you select has extensive experience and technical background completing detailed reporting not PCA. Low cost options are not always the most reliable or helpful. Recommend weighting 20% Price and 80% Qualifications in selection process.
- Cost depends on size, age and complexity of the building, but should be in the range of \$4,000-\$10,000 with a good technical staff working on it.
- Can be simple –does not require expensive software.
- End result is easy to read and use –ask for sample report.
- Can the firm handle the follow-up work?
- Can the relationship be a long term benefit?
- Is this a regular part of their business? –relevant experience with housing

Thank You!

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