

Part 3: GUIDELINE FOR USING THE BUILDING EXTERIOR ASSESSMENT

SCOPE

Buildings of 5 storeys or greater are required to comply with The City of Calgary’s Building Maintenance Bylaw, 33M2016. Intrusive and/or invasive assessments are not required unless a visual assessment reveals maintenance issues that require additional investigation.

The Building Exterior Assessment is to be completed by a qualified person, which is **“a person with the education, training, skills and experience relating to roofs and/or walls sufficient enough that the assessment may reasonably be relied upon.”**

An owner may choose to use multiple consultants to get the most satisfactory results when completing the visual inspection.

SCHEDULE SIGN OFF

Each item on the schedules are to be rated according to the following criteria:

- 1) N/A (not applicable) For items that are not part of this building’s systems
- 2) **Acceptable** When the item is fully functional, properly maintained, and capable of withstanding inclement weather that may occur.
- 3) **Needs Attention** When the item requires general maintenance or replacement before it reaches the point of failure.
- 4) **Not Acceptable** When the item requires repair, maintenance or replacement in the near future (could be subject to failure).

CODES AND STANDARDS

The Alberta Building Code, current at the time of building construction, provides the essential criteria for assessment. Standards such as the NRC (National Research Council) Protocol for Building Condition Assessment and ASTM (American Society for Testing and Materials) International Standard Guide for Property Condition Assessments may be referenced. However, they do not provide a substitute for completing the Building Exterior Visual Assessment as required by the bylaw.

DOCUMENT REVIEW

It is recommended that the Qualified Person who prepares the Building Exterior Visual Assessment undertake a document review. The document review process would involve the review of the design and as-built drawings and specifications to assist the consultant in familiarization with the envelope components. Contact with engineering and consulting firms regularly assigned to envelope problems of the building may help qualify the current state of completeness of the building’s documents.

DOCUMENT RETENTION

Copies of the Building Exterior Visual Assessments are to be made available to The City of Calgary on request at all times. It is recommended that the owner review the Building Exterior Assessments annually to ensure the required repairs have been completed.

APPENDIX Part 1: BUILDING EXTERIOR ASSESSMENT – ROOF DETAILS

Visual assessment of system components to ascertain condition of membrane, insulation, ballast and pavers.

- 1) Membrane
 - a. Check for age of membrane
 - b. Wear, scouring, tearing or cracking
 - c. Blistering, ridging or slippage
 - d. Check the seal around all penetrations and flashings
 - e. Is there any ponding
 - f. Any wear patterns that may show a need for more pavers
 - g. Vent Penetrations
 - i. General deterioration
 - ii. Membrane fastening
 - iii. Base flashing
 - iv. Counter flashing

Ballast

- h. Is there sufficient ballast to prevent uplift, should the wind get under the membrane.
- i. Is it located in the critical locations

- 2) Perimeter flashings (parapets)
 - a. General deterioration
 - b. Flashings secured properly
 - c. Seal to membrane
 - d. Base flashing
 - e. Counter flashing
- 3) Cladding and Securement of penthouse and mechanical rooms
 - a. Differential movement
 - b. Membrane fastening
 - c. General deterioration
- 4) HVAC equipment housing, curbs and securement
 - a. Mechanical pads, general deterioration
 - b. Differential movement
 - c. Membrane fastening
 - d. Flashing
 - e. Counter flashing
- 5) Exhaust fans and other mechanical exterior systems
 - a. Attachment
 - b. Caps and hatches
- 6) Exterior mounted Communications equipment
 - a. Attachment
- 7) Lightning grounding equipment
 - a. Attachment
 - b. Grounding cables attachment
 - c. Condition
- 8) Signage (Both Roof and wall mounted)
 - a. Curbs
 - b. Support framing
 - c. Attachment
 - d. Flashing
 - e. Counter flashing
- 9) Access hatches and doors
 - a. Seals
 - b. General Condition
 - c. Security



BUILDING EXTERIOR VISUAL ASSESSMENT (BEVA) GUIDELINES

PL 1256A (2018-08)

- 10) Swing stage, Davit arms
 - a. General Condition
 - b. Maintenance
- 11) Skylight and Windows
 - a. Condition
 - b. Caulking
 - c. Flashings
 - d. Glass seals
- 12) Exterior mounted electrical Equipment
 - a. Transformers
 - b. Elevator systems
- 13) Materials and tools
 - a. Is everything secured on roof (Min. 2 straps)
- 14) Solar Panels and their supports
- 15) Other:
 - a. List any other component that should be addressed

APPENDIX Part 2: BUILDING EXTERIOR ASSESSMENT – WALL DETAILS

- 1) Cladding systems
 - a. Glass and their seals
 - b. Metal panels c/w flashings
 - c. Flashings (corroded, damaged)
 - d. Seals (age, condition)
 - e. Cracks
- 2) Curtain wall
 - a. Observable differential movement
 - b. Deformations
 - c. Bulging
 - d. Flashings
 - e. Cracks in cladding
- 3) Flashings
 - a. Corroded
 - b. Damaged
 - c. Missing
 - d. Secured
- 4) Air intake grills
 - a. Corroded
 - b. Secured
 - c. Clean
- 5) Stone facades (Brick / Stone/ Sandstone)
 - a. Bearing for brick/stonework
 - b. Visible repairs
 - c. Loose bricks, blocks and panels
 - d. Mortar cracking
 - e. Bricks/blocks cracking
 - f. Spalling, Corroded, desegregated or eroded bricks/blocks
 - g. Corroded ties or anchors
 - h. Corroded reinforcing
 - i. Dampness, wet spots
 - j. Efflorescence
 - k. Cavity wall weep holes plugged
 - l. Flashing deficiencies
- 6) Balconies and railings
 - a. Joist condition, rot and structural condition
 - b. Guards, component structural condition
 - c. Guard attachment, deterioration
- 7) Signage: Wall Mounted
 - a. Attachment
 - b. Integrity
- 8) Windows and Doors
 - a. Flashings
 - b. Frames
 - c. Seals
 - d. Leakage – Air and Water
- 9) Fire Escapes – Exterior
 - a. Condition
 - b. Attachment
 - c. Functioning
 - d. Other: Any other wall components not listed above