

## **1. Introduction**

The purpose of this section is to describe the methods and criteria used in the evaluation of residential and commercial building conditions.

This manual should serve to minimize variances in identifying and evaluating conditions from building to building.

The windshield survey was completed from the curbside vantage point. Therefore, not all angles or sides of the property could be observed, only the property visible from curbside. Persons completing the surveys, though knowledgeable of real estate and the building process and materials, were not certified appraisers, surveyors, or licensed inspectors.

## **2. Building Conditions**

This section discusses the process used for assessing building conditions in a study area, the standards and criteria used for evaluation, and the findings as to the existence of degeneration.

### **Building Components Evaluated**

During a windshield survey, the following components of the buildings evaluated were examined to determine whether it is in a sound condition or has minor, major or critical defects. Building components examined were of two types:

**Primary Components.** These include the basic elements of any building: foundation walls, exterior walls, roof and roof structure.

**Secondary Components.** These are components generally added to the primary structural components and are necessary parts of the building, including porches and steps, windows and window units, doors and door units, chimneys, gutters and downspouts.

### **Criteria for Classifying Defects for Building Components**

Each primary and secondary building component was evaluated separately as a basis for determining the overall condition of individual buildings. This evaluation considers

the relative importance of specific components within a building, and the effect that deficiencies in components will have on the remainder of a building.

The three categories of deficiencies and the criteria used in evaluating building components are described as follows:

**Minor Defects:** These include defective characteristics that appear to be relatively easy to correct and have little or no effect on the remainder of the building. The correction of such defects may be accomplished by the owner or occupants in the course of normal maintenance. Minor defects are not considered in rating a building as structurally substandard; however, on larger structures, including industrial and commercial buildings, widespread minor defects distributed over major portions of a building could result in major deficiency ratings for specific components and the overall building rating.

**Major Defects.** These include defects that appear to be beyond normal maintenance and are difficult to correct, and which have significant effects on the building, although by themselves they do not seriously impair the usefulness of the basic structure. The correction of such defects may require complete replacement of any secondary structural component and partial replacement of any of the primary structural components. The correction of these defects would require assistance from the building trades.

**Critical Defects.** These are limited to primary structural components. A critical defect involves failure, extreme degeneration, or inadequacy of the component to such a degree that it may adversely affect all or a large part of the building. A critical defect is considered non-correctable and appears to require complete replacement or rebuilding of the component.

In general, to be classified as either major or critical, defects must represent conditions that are generally distributed throughout a building or be thought to be so advanced or serious as to affect the entire component. Minor defects reflect conditions that are more limited in extent and severity, and are generally confined to small parts of a building. While minor defects are noted for all structural components, they are not considered in the determination of final building rating.

### 3. Purpose and Defects of Components

#### Primary Structural Components:

Foundation walls above ground. All foundation walls should be maintained plumb and free from open cracks and breaks and should be kept in such condition so as to prevent the entry of rodents and other pests. Foundation walls should:

- Support the loads placed on them without indications of settlement, bulge or buckle, and
- Prevent the entrance of rodents or other pests and water or excess moisture into the basement or crawl spaces.

Cracks or holes in the wall or rotting of the wall that prevent the proper functioning of this component are considered faults.

#### Examples of Critical Defects:

- Crumbling or other degeneration such as that caused by heaving or buckling.
- Crack penetrating entire thickness of foundation wall and extending from its top to base.

#### Examples of Major Defects:

- Numerous cracks not penetrating entire thickness of the foundation wall.
- Foundation wall not extending above grade.
- Flaking or deteriorating mortar over large areas of a stone foundation wall.
- Numerous holes and loose material over large area of foundation wall.

#### Examples of Minor Defects:

- Hairline cracks over small area of foundation wall.
- Chipped, dried mortar in small area.
- Holes or loose material over small area of foundation wall.

Exterior walls. All exterior walls should be free from holes, breaks, and loose or rotting materials; and maintained weatherproof and surface coated where required to prevent degeneration.

#### Examples of Critical Defects:

- Sagging over a large area
- Numerous cracks penetrating entire thickness of the wall and extending from floor to ceiling.

- Bulging or deflection of a wall.

Examples of Major Defects:

- Numerous cracks not penetrating entire thickness of wall.
- Degenerating material over large area. Large holes, loose or missing material over large area.
- Sagging of a limited area.

Examples of Minor Defects:

- Hairline cracks over small area.
- Degenerating material over small area.
- Small holes and loose or missing material over a limited area.
- Weathered exterior coverage.

Roofs and Roof Structure. The roof and flashing should be sound, tight and not have defects that admit rain. Roof drains, gutters and downspouts should be maintained in good repair and free from obstructions. Roof water shall not be discharged in a manner that creates a public nuisance.

Examples of Critical Defects:

- Sagging at gutter line (eaves).
- Degeneration of shingles or sheathing over most of roof area.
- Roof deck that is rotted, broken or missing material over a widespread area.

Examples of Major Defects:

- Loose or missing material over large area.
- Degenerating shingles.
- Vegetation on roof.

Examples of Minor Defects:

- Weathered shingles over small areas.
- Loose or missing material over small areas.
- Degenerating trim.

## Secondary Structural Components:

Porches and Steps: The porches and steps should provide a safe and convenient means of ingress and egress between a building and its exterior and should therefore be properly constructed and in the case of enclosed porches, be sufficiently weather tight.

### Examples of Major Defects:

- Degeneration over extensive area.
- Loose or missing material over extensive area.
- Cracks and holes over extensive areas.
- Lack of adequate support.
- Improper tread and riser size (treads and risers should be consistent all the way upstairs).

### Examples of Minor Defects:

- Degeneration over limited area.
- Loose or missing material over limited area.
- Cracks and holes over limited areas.
- Missing handrails (at least one is required for each flight over three risers).
- Missing railings around stairwells.

Window and Window Units: The windows are to provide required natural light and ventilation in the room or space in which they are located. These units, including sashes, frames, sills, jambs, weights or springs, glazing and hardware, must be intact and operate properly and must be sufficiently tight to keep out drafts and weather elements.

### Examples of Major Defects:

- Degeneration of sash, sills, or frame elements.
- Loose or missing material to an extensive degree.
- Pronounced sagging of sills and/or sash.
- Majority of window panes cracked or broken.

### Examples of Minor Defects:

- Degeneration over a limited area.
- Loose or missing material over a limited area.
- Some broken or cracked window panes.
- Broken or missing hardware.

- Limited wear or weathering.

Door and Door Units. Doors should provide openings adequate in size to admit persons and property into the building and into all rooms and spaces within the building. All exterior doors, door assemblies and hardware shall be maintained in good condition.

Examples of Major Defects:

- Openings that appear to be out-of-plumb/absence of door.
- Degeneration.
- Loose or missing material to an extensive degree.

Examples of Minor Defects:

- Degeneration over a limited area.
- Loose or missing material over a limited area.
- Some broken or cracked windowpanes in door lites.
- Broken or missing hardware.
- Limited wear or weathering.

Chimneys: Chimneys should provide uninterrupted passage for smoke or combustible gases to exhaust outside. This component should be free of defects and in plumb condition on the exterior as well as above the roof line. All chimneys, cooling towers, smoke stacks and similar appurtenances shall be maintained structurally safe, sound and in good repair. All exposed surfaces of metal or wood shall be protected from the elements and against decay or rust by periodic application of weather coating material such as paint or similar surface treatment.

Examples of Major Defects:

- Substantial leaning.
- Combustible material in direct contact with or in dangerous proximity to chimney.
- Loose or missing material, missing cap, or broken flue lining over extensive area.
- Cracks and holes over extensive area.
- Chimney should extend above the highest point of the roof (approximately 2' -3' minimum).
- Tilting, leaning or other support failure.

Examples of Minor Defects:

- Slight leaning.

- Loose or missing material over a limited area.
- Cracks or holes over a limited area.

Gutters and Downspouts. While gutters and downspouts are not integral components of a building and carry little weight in establishing the structural condition of a building, they still perform an important function, particularly on older buildings in high density areas. Degenerated gutters and downspouts, or the lack of gutters and downspouts can have a negative impact on other building components by allowing water run-off to penetrate or cause damage to building surfaces.

Examples of Major Defects:

- Complete lack of gutters and downspouts.
- Degeneration or missing sections.
- Improper connections or slope.

Examples of Minor Defects:

- Missing sections over a limited area.
- Limited degeneration
- Paint blisters.

## 4. Building Condition Evaluation Form

### Form Content

The survey form is designed to provide a detailed description of defects by degree and location. The form contains the following information.

Parcel # or Street Address  
Land Use  
Height of structure  
Construction Type  
Roof Type  
Primary Components  
Secondary Components  
Location of Defect  
Degree of Defect  
Component Rating  
Final Building Rating

## **Field Entries**

Entries on the form are by specific code as highlighted next to the entry description. The vertical columns indicate the type of defects found on primary components and secondary components. Entries for type of defects will be either: (1) minor defect, (2) major defect, or (3) critical defect. Critical defect entries are applicable to primary components only.

Entries for location of a defect will be the most meaningful and appropriate location. Often, when major defects are widespread, such as cracks on three sides of a foundation or exterior wall, the entry "3T," major defect throughout, will appear in the appropriate column. In addition to entering defects by degree and location for components, each individual component will receive an overall rating on the far right column under Component Rating.

The final rating for each component is based on the aggregate impact and number and degree of minor, major, or critical defects. Final rating of components is an important judgment because it impacts the overall condition rating of a building. Consideration was given to the amount of defects, the seriousness of each and the combination of deficiencies.

## **5. Exterior Building Condition**

### **Survey Criteria**

The following criteria were used to complete the detailed Exterior Survey Form.

Components visible on an exterior survey include: three primary components (foundation, exterior walls, roof) and five secondary components (doors, windows, porches and steps, chimneys, gutters and downspouts). On the form, the secondary components are rated and judged in total.

### **Final building ratings are based on the following established criteria:**

#### Final Building Rating

**Sound:** Buildings that contain no defects, are sufficiently maintained and require no treatment other than normal on-going maintenance.

(No deficiencies noted on any visible components.)

Deficient, Requiring Minor Repair. Buildings that contain one or more minor defects which can be corrected through the course of normal maintenance. Defects are related to the structural components visible from the exterior and do not include limited paint blistering or lack of paint over a limited area on good weather-tight surfaces.

(At least one minor deficient rating on any or all components)

Deficient, Requiring Major Repair. Buildings that contain one or more major defects over a wide-spread area and would be difficult to correct through normal maintenance. Buildings in the major deficient category may require replacement or rebuilding of exterior components by skilled building trades construction. (Several minor defects alone do not produce a final rating of major deficient.)

(At least one major deficient rating on any of the primary components or in the combined secondary components)

Substandard. Buildings that contain two or more major defects that are so extensive that the cost of repairs could be excessive in terms of producing a sufficient return on the investment required. Substandard buildings are presumed to be so advanced in deterioration that acquisition and removal is a logical remedy.

(Two or more major deficient ratings on the primary components or in combination with the combined secondary components, or one critical rating on any primary component.)