# **Public Building Operation and Maintenance Manual for Architectural and Structural Parts**

#### 1. Introduction

The information contained in this Public building operation and maintenance manual for architectural and structural parts describes the intended operation for which this public building was designed and is intended to guide operating personnel in the operation and maintenance of the public building. The Manual has two major parts: Architectural and Structural. Another two parts: Mechanical and Electrical are not a scope of present research. Architectural and Structural parts will discuss the required operating system operations and other problems areas which are incorporated into the public building design.

Effective operation and ongoing maintenance are critical to the long term viability of any public building. By using Operation and maintenance manual (OMM) easier to understand - especially by outlining what to do when, OMM can help ensure that public building is efficiently operated and well maintained long into the future. An Operation and maintenance manual describes key components and systems within the public building(s) and explains how they should be operated and maintained will help ensure that the project fulfills its promise to its occupants and to its community. The team that designs and develops the public building, especially if the team includes the property manager, is in the best position to describe its efficient operation and maintenance, and to create the Operation and maintenance manual over the course of the entire development process. Operation and maintenance manual should be done by the owner/developer, the design team, the contractor and the property manager after construction is complete but before the public building is occupied.

### 2. Main stages of the development of an Operation and maintenance manual for public building

Main stages of the development of an Operation and maintenance manual for public building are as follow:

- Identification of key public building design elements, systems and materials that are critical to long term quality and performance of the project: exterior wall and roof materials, windows, exterior doors, landscaping, key mechanical equipment, etc.
- Development or collection of any available operation and maintenance information/manuals on each of the components (exterior wall and roof materials, windows, exterior doors, landscaping, key mechanical equipment, etc.). Much of this information will already exist and simply needs to be assembled.
- Ensuring that all materials as-built drawings, final finish schedules and plans, and all warranties, guarantees and certifications that are contractually owed to you are collected from your design team and your contractor before final payments are made.
- Aggregation of above information into a single resource that can be used by occupants and management personnel to guide overall operation and maintenance manual activities.
- Creation one or more "to do" checklists that synthesize key recommendations in the collected material; i.e. what to do and when.

- Printing out the Operation and Maintenance Manual Checklist Form (see Appendix 1), listing all the operation and maintenance materials and manuals that you have collected and include it in the Operation and maintenance manual.
- If a "to do" list has been developed, add it to the Operation and maintenance manual as well.
- If possible, development of e-Operation and maintenance manual for public building.

## 3. Some examples of the Public building operation and maintenance manual for architectural and structural parts

Public building operation and maintenance manual for architectural and structural parts should cover the system components and should be explicit. OMM should be developed to supplement drawings, equipment and other manuals. OMM should describe how and why the public building functions and what will happen if it is not operated as intended. Some examples of the Public building operation and maintenance manual for architectural and structural parts are discussed below.

#### **Architectural part**

- Exits. All exterior and exit doors should be kept in operable condition at all times. All exterior doors, and particularly fire exit doors, should be kept free
- Roofs and roof drains. Roofs and roof drains should be kept clean and clear of debris at all times to prevent water ponding of the roof. All debris (such as the cans, lumber, bottles, cardboard boxes, paper, rope, broken glass, etc., which have been found on many roofs) should be removed and periodic examinations should be performed. Nonessential foot traffic should be prohibited.

#### Structural part

- Building design loadings. The design loadings for the building (wind, snow, floor loadings, etc.) should be stated in the Operations and maintenance manual. If personnel do not know the design capacities, they sometimes become alarmed when the structure is subjected to a heavier than normal loading. Heavy snow should not be removed unless it is clearly detrimental (overloading the roof or endangering personnel or equipment).
- Foundation. The integrity of the building foundation must be preserved.
- Paint and protective coatings. Protective coatings such as paints and rust inhibitors should be maintained to prevent structural deterioration or other adverse effects.

### Appendix 1

## Public Building Operation and Maintenance Manual Checklist Form for Architectural and Structural Parts

Information about public building:		
Internet address of OMM:		
No:	Public building component (material,	Type of information collected (warranty,
	system, product, equipment)	operations manual, etc.)
Structure, Roof and Facade		
1	Facade, roof, windows, gutters, doors	Color, style, replacement and repair information
		for facade, roof, windows, gutters, doors
2	Window parts	Instructions for assembly/replacement of
		window parts
3	Architectural and structural parts	Preventative maintenance information
4	Facade	Color chips for facade
5	Bearing walls	Location of lead bearing walls
6	Materials	Weatherproofing materials and guidelines
•••		
Locks		
1	Locks	Key and cylinder codes for all locks
2	Lock types	Map marking all lock types
3	Key system	Map coordinating to key system
•••		
Interiors		
1	Paint	Paint chips with name and brand
2	Wall	Wall cleaning information
3	Carpet/floor	Carpet/floor covering swatches with name and
		brand
4	Carpet/floor	Carpet/floor covering cleaning information
5	Appliances	Make model of all appliances with warranty and
		repair information

Date:

Responsible person:

Signature: