



Operations Manual for Owners and Managers of Multi-Unit Residential Buildings

CMHC helps Canadians meet their housing needs.

Canada Mortgage and Housing Corporation (CMHC) has been helping Canadians meet their housing needs for more than 70 years. As Canada's authority on housing, we contribute to the stability of the housing market and financial system, provide support for Canadians in housing need, and offer unbiased housing research and advice to Canadian governments, consumers and the housing industry. Prudent risk management, strong corporate governance and transparency are cornerstones of our operations.

For more information, visit our website at www.cmhc.ca or follow us on [Twitter](#), [LinkedIn](#), [Facebook](#) and [YouTube](#).

You can also reach us by phone at 1-800-668-2642 or by fax at 1-800-245-9274. Outside Canada call 613-748-2003 or fax to 613-748-2016.

Canada Mortgage and Housing Corporation supports the Government of Canada policy on access to information for people with disabilities. If you wish to obtain this publication in alternative formats, call 1-800-668-2642.

Operations Manual for Owners and Managers of Multi-Unit Residential Buildings

CMHC offers a wide range of housing-related information. For details, visit our website at www.cmhc.ca

Issued also in French under title:

Manuel des opérations à l'intention des propriétaires et des gestionnaires de collectifs d'habitation 63088

Although this information product reflects housing experts' current knowledge, it is provided for general information purposes only. Any reliance or action taken based on the information, materials and techniques described is the responsibility of the user. Readers are advised to consult appropriate professional resources to determine what is safe and suitable in their particular case. Canada Mortgage and Housing Corporation assumes no responsibility for any consequence arising from use of the information, materials and techniques described.

National Library of Canada cataloguing in publication data

Main entry under title: Operations manual for owners and managers - multi-unit residential buildings

Issued also in French under title: Manuel des opérations à l'intention des propriétaires et des gestionnaires - collectif d'habitation.

ISBN 0-662-33343-8

Cat. no. NH15-406/2003E

1. High-rise apartment buildings - Management - Handbooks, manuals, etc.

2. Apartment houses -- Management - Handbooks, manuals, etc.

I. Efficiency Engineering Inc.

II. Canada Mortgage and Housing Corporation.

TH4820.O63 2003 647:92'068

C2003-980015-6

© 2004 Canada Mortgage and Housing Corporation.

This document, or any discrete portion of this document (such as a chapter or section) may be reproduced for redistribution, without obtaining the permission of the copyright owner; provided that no changes whatsoever (including translation) are made to the text; that the entire document or discrete part is reproduced; that this copyright notice is included in its entirety in any and all copies of the document or any discrete part of the document; and that no use is made of any part of the document, or the name or logo of the owner of the copyright to endorse or promote any product or service. For any use of this document other than reproduction or for the general reference purposes as set out above, please contact: the Canadian Housing Information Centre (CHIC) at chic@cmhc.ca; 613-748-2367 or 1-800-668-2642. For permission, please provide CHIC with the following information: Publication's name, year and date of issue.

Revised 2017

Printed in Canada

Produced by CMHC

Table of contents

1.0	Introduction	1
1.1	Summary	2
2.0	Resources	3
2.1	“Make or buy” policy	4
	Method 1: Rule of thumb	4
	Method 2: Detailed analysis	4
	Method 3: Trial method	5
2.2	On-site staff	5
2.2.1	Scheduling your staff	5
2.2.2	Daily inspections	6
2.2.3	Petty cash purchases	6
2.2.4	Emergency work orders	6
2.2.5	Cell phones	6
2.3	Outside contractors	6
2.3.1	Setting the standards	6
2.4	Workplace hazardous materials information system (WHMIS)	7
2.4.1	Material safety data sheets (MSDSs)	7
	Example of forms for chapter 2—resources	12
3.0	Housekeeping and groundskeeping services	33
3.1	Housekeeping	34
3.2	Groundskeeping	34
3.3	Green initiatives	35
	Example of forms for chapter 3—housekeeping and ground services	36



4.0	Structural, mechanical or electrical maintenance	43
4.1	Maintenance requests	44
4.1.1	Handling maintenance requests	44
4.2	Equipment tags	45
4.3	Mechanical and electrical service contracts	45
4.4	Maintenance issues	45
4.4.1	Parking garage	45
4.4.2	Electrical switchgear	46
4.4.3	Swimming pools	46
4.4.4	Backflow preventers	46
4.4.5	Boiler maintenance	47
4.4.6	Heating and cooling coil maintenance	47
4.4.7	Envelope deterioration	47
4.4.8	Appliances	47
	Example of forms for chapter 4—structural, mechanical or electrical maintenance	48
5.0	Utilities	57
5.1	Utility bills	58
5.1.1	Electricity	58
5.1.2	Fuel	58
5.1.3	Water or sewage	58
5.2	Utility budgets	59
	Typical utility consumptions	59
5.3	Daily recordings	60
5.4	Annual recordings	60
5.5	Energy conservation efforts	61
	Typical energy consumptions and electrical demands in multi-residential buildings	62
	Example of forms for chapter 5—utilities	63
6.0	Budgets and controlling costs	71
6.1	Accounts	72
6.2	Reserve funds	72
	Budgeting capital expenditures	73
6.3	Typical operating expenditures	73
6.4	Property taxes and appeals	73
6.5	Insurance	74
6.6	Mortgage Interest and Amortization	74
	Example of forms for chapter 6—budgets and controlling costs	75

7.0	Emergency and fire safety plans	79
7.1	Emergency preparedness	81
	Example of forms for chapter 7—emergency and fire safety plans	82
8.0	Lease administration	83
8.1	Selecting tenants	84
8.2	Inspecting suites for damage	84
8.3	Changing or terminating a lease	84
8.4	Tracking receivables	85
8.4.1	Late payments	85
8.5	Marketing and advertising	85
8.6	condominium boards and tenant associations	86
	Example of forms for chapter 8—lease administration	87
9.0	Contractors and consultants	97
9.1	Hiring a consultant	98
9.2	Hiring a contractor	99
9.3	Term of service contracts	99
9.4	Additions to contracts	99
9.5	Escalation clauses	100
9.6	Payment schedules	100
10.0	Filing systems	101
	Appendices	103
	Appendix A: The property manager’s responsibilities	105
	Appendix B: The superintendent’s responsibilities	107
	Appendix C: Template for emergency and fire safety plan	111
	Appendix D: Tenant information package (template)	127
	Appendix E: Glossary of terms	137



1.0 Introduction

Operational expenses can make up two thirds of the cost of running a multi-unit residential building (or “MURB”). But unlike other expenses, you have some control over how much you want to spend to operate and maintain your building. By making just a few of your daily tasks a little more efficient, you could cut your annual operating costs by 25% or more.

1.1 SUMMARY

This manual was created to help MURB property owners and managers save money and work more efficiently, while maintaining the quality of their buildings.

The manual is broken into 10 chapters. At the end of each chapter, you'll find some examples of forms and checklists. While much of the manual is about cutting costs, it also has tips you can use to make your building more durable, safer, healthier—and more profitable.

In the following pages, you'll learn how to:

1. create an **Operation and Energy Management Plan** for everything from budgets, staffing and schedules to hiring contractors, managing tenants and dealing with fire and safety;
2. make more effective decisions about your on-site staff and outside contractors; and
3. create an organized and efficient filing system to help you save time and money.





2.0 Resources

Good building management is about getting the right things done, at the right time, by making the best use of your available resources. This means:

- making a list of all the work that needs to be done;
- deciding what skills are needed to complete each task;
- choosing a “make or buy” policy (see *below*);
- assigning each task to either your staff or a contractor;
- setting a schedule for when the work needs to be finished; and
- following up to make sure the work was done properly and on time.

Following this system will give you a clear picture of your needs and expectations, and help you make the best use of your staff.

2.1 “MAKE OR BUY” POLICY

When it comes to managing a building, the first decision for every job is whether you want to assign it to your on-site staff or an outside contractor. This is called your “make or buy” policy.

In general, there are three main ways to create a “make or buy” policy: the *rule of thumb method*; the *detailed analysis method*; and the *trial method*. Each of these has pros and cons in terms of how accurate they are, and how much time and effort they require.

Method 1: Rule of thumb

In most cases, the question of whether you need to hire outside contractors will depend on how many suites there are in your building. As a general rule of thumb:

- Over 150 suites = the superintendent needs a regular assistant.
- 50 to 150 suites = the superintendent can do the inspections, clean vacant suites and the ground floor areas, supervise contractors and handle tenant concerns.
- 50 to 80 suites = the superintendent does all the above plus cleans the hallways.
- Less than 50 suites = the superintendent does all the above plus cuts the grass and handles minor paint jobs.

A single superintendent can take care of several small buildings, but usually only if they're next to each other. For a breakdown of the average time needed to complete all these tasks, take a look at the **Housekeeping Maintenance Hours Guide** at the end of this chapter.

Method 2: Detailed analysis

The detailed analysis method uses a **Master Operational Checklist** (see *example at the end of this chapter*) to assign jobs based on things like how many suites or equipment rooms there are in the building, and how many jobs need to be done each month. A detailed analysis is more accurate than the rule of thumb method. But it also takes more time.



To figure out how much time is needed for each job on your master checklist, use the **Make or Buy Policy** form example at the end of this chapter. This form lets you:

- calculate how many hours it takes to carry out all the day-to-day jobs;
- decide how much staff you need to get all the work done; and
- figure out which other jobs you can give your staff, to bring their hours up to 40 a week.

Any jobs that aren't included on the form (or that your staff members don't have the time for) would have to be contracted out.

Method 3: Trial method

The trial method is the most accurate way to estimate your weekly workload. It's also the most time-consuming. With this method, an experienced superintendent moves into the building for at least a month, and does all the work. This way, the superintendent can figure out first-hand how long everything takes and how many staff members you need, and then give them each a fair and realistic workload.

2.2 ON-SITE STAFF

Your on-site staff members are your most valuable resource. Their skill and commitment can make a big difference in how profitable your building is, and how well it's maintained. Your job is to:

- estimate how many people you need;
- recruit the best candidates; and
- manage their day-to-day activities.

Part of being an effective manager means trusting and delegating to staff. When everyone's duties are clearly defined, it's much easier to assess how well each person is doing.

Once you've listed all the work you need done, you can create detailed job descriptions for each position you need to fill. See the end of this chapter for a sample job description for the position of superintendent.

2.2.1 Scheduling your staff

The next step is to create a schedule that lists all the maintenance tasks, and says how often each one should be done, and who's responsible for doing it. This lets you:

- spread the workload fairly between your staff members;
- remind everyone what they need to do; and
- track how well everyone is doing.

To help you with scheduling, use the **Operational Checklist** example included at the end of this chapter.

The Operational Checklist lists all the jobs that need to be done throughout the year. This includes annual, monthly, weekly, daily and one-time tasks. This checklist is a great way to balance the workload between your staff members, while also letting them know exactly what you expect from them.



2.2.2 Daily inspections

Your staff's biggest job is to inspect the mechanical and electrical systems every day in a systematic and organized way. Your superintendent can use the **Daily Look/Listen/Touch Inspection Form** (see example at the end of this chapter) to record all the important readings, spot any potential problems and make sure the building's systems are working properly.

Allow about 20 minutes for each mechanical room (or 10 minutes for central chilled water) and 10 minutes for rooftop equipment. For example, a 150-unit building with a basement boiler/chiller room, a swimming pool pump room and two rooftop air units would take about 60 minutes to inspect each day.

2.2.3 Petty cash purchases

Your superintendent will probably have to buy a few things from time to time, to replace inventory or fix small problems. To cover these expenses, set up a petty cash system, like a locked box in a secure place with about \$200 in it.

Whenever the superintendent buys something, they just fill in a **Request for Reimbursement** form (see example at the end of this chapter) and attach the receipt. Just remember to enter any petty cash expenses in your bookkeeping system.

2.2.4 Emergency work orders

Emergencies happen. When they do, the superintendent may have to authorize some repairs before they can get in touch with you (see chapter 4 for a list of emergencies). Make sure the superintendent is ready by going over each type of emergency with your superintendent. You can also give them a card with the phone numbers for any specialists they may need to call (see example at the end of this chapter).

2.2.5 Cell phones

The use of cell phones can vary depending on the size of your building and how many staff members you have. Whatever your cell phone policy is, make sure you have a clear procedure in place and that everyone is aware of what it is.

2.3 OUTSIDE CONTRACTORS

It's usually a good idea to hire outside contractors for structural, electrical and mechanical repairs. If your building has more than 130 suites, you may also need to use contractors for things like housekeeping and groundskeeping.

When hiring contractors, use service companies that only employ well-trained, professional staff. Unprofessional contractors only waste your time, materials and supplies. They can also damage equipment and force your staff members to struggle just to do their jobs.

2.3.1 Setting the standards

The first step in choosing a contractor is to clearly define **in writing** everything you want them to do, and the standards you expect them to meet. Don't use any jargon. Just make a bullet list of all the jobs you want done and how often they need to be done.



For housekeeping and groundskeeping contractors, use the following “levels of cleanliness” standards when asking for a quote:

- **Prestige standard:** A standard of cleanliness or groundskeeping that will inspire compliments and make complaints rare. See the sample **Cleaning Guide** and sample **Groundskeeping Guide** at the end of chapter 3 for examples of what it takes to achieve this high a standard.
- **Adequate standard:** A standard that probably won't lead to either compliments or complaints.
- **Minimal standard:** A standard that will probably get regular complaints and may lead to high tenant turnover.

When hiring a contractor, follow these four steps to make sure your standards and budget are realistic:

1. Analyze the standard you want to set and ask yourself: how does your property compare to the rest of the market? What are the expectations of the occupants?
2. Determine how frequently each job needs to be done to meet the standard you want.
3. Explain each job in detail and in writing, including how frequently you want the jobs done.
4. Send the written request to no more than three or four reputable contractors. Many contractors won't make a bid if they don't think they have a good chance of winning the contract. You can find good contractors through referrals from other property managers or at industry association meetings.

2.4 WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

Workplace Hazardous Materials Information System (WHMIS) is a Canada-wide system that requires employers to inform their staff about any hazardous materials or products that are used in the workplace. This includes everything from cleaning products to paint, floor finishes and lubricants.

Basically, WHMIS says that all employees have the “right to know” what they're working with, what the risks are, what precautions they should take and what procedures are in place in case of an accident.

As the owner or manager, it's up to you to make sure all your employees are properly trained according to WHMIS. To find out more, visit the Health Canada website.¹

2.4.1 Material safety data sheets (MSDSs)

A **material safety data sheet (MSDS)** lists the hazardous ingredients, and safety and emergency measures, for all industrial (and some consumer) products that are used in the workplace. According to WHMIS regulations:

- an MSDS must be provided to users of any hazardous commercial products;
- labels must be attached to commercial products that contain hazardous substances above the limits set by WHMIS;
- workers who use WHMIS-controlled products must be properly trained in how to use them; and
- in an emergency, if a doctor asks for an MSDS for a product that's required to have one, the supplier must provide it.

¹ <http://www.hc-sc.gc.ca/ewh-semt/occup-travail/whmis-simdut/index-eng.php>



Suppliers aren't required to provide an MSDS for consumer products. But if you're using one, you may want to ask your supplier if they can give you an MSDS for a similar commercial product, especially if any of your staff members have allergies or asthma. You can also get an MSDS from the Canadian Centre for Occupational Health and Safety or just ask your supplier for a full list of the product's ingredients.

Note that an MSDS only lists hazardous chemicals that make up more than 1% of a product's ingredients. Chemicals that cause cancer, respiratory sensitization or reproductive effects must be listed if they make up more than 0.1% of the product.

Assessing the risk of exposure

There are several factors that determine whether you should be concerned about exposure to a hazardous substance. These include how toxic it is, how much of it is in the product and the length of the exposure. It's also important to know that most of the information on MSDSs was developed in relation to adult males and for each separate chemical in isolation. The effects of mixtures of chemicals or the risks to women and children may be very different.

Technical terms

Below are definitions of some of the terms you might find on an MSDS:

- Carcinogen: a substance that causes cancer.
- Hormonal: a chemical that acts like a hormone.
- Reproductive toxin: chemicals that can damage male or female sex organs, sperm or eggs.
- Sensitization: when you become more sensitive to a substance over time.
- Teratogen: a substance that causes developmental abnormalities in a fetus (unborn child).
- Toxin/toxic: a poison or poisonous substance.

Several guides are available to help you understand MSDSs. Some of the best are:

- The Industrial Accident Prevention Association's (IAPA) *A Users Guide to MSDS*;
- *The Material Safety Data Sheet: A Basic Guide for Users* from the Canadian Centre for Occupational Health and Safety (CCOHS); and
- *The Material Safety Data Sheet: An Explanation of Common Terms*.

Getting an MSDS

Faxed copies of an MSDS can be hard to read. It's usually better to download one from the internet, or have a copy mailed to you.

Canadian MSDSs have nine sections. Other countries use 16 sections. Some suppliers also create their own MSDSs. So don't be alarmed if you get two MSDSs that have different information for the same product.

Remember: very little data exists for some chemicals. But just because a chemical isn't listed on an MSDS doesn't mean it might not be hazardous. Always take great care in using and storing chemical products or substances and training your employees in the use of any chemical product or substance.



MATERIAL SAFETY DATA SHEET (MSDS)

A Canadian MSDS would have the following nine sections:

Section 1: Product information

This section includes:

- product and/or trade name
- Product identification number (PIN)
- chemical formula for required chemicals
- manufacturer or supplier
- addresses and phone numbers, including emergency phone numbers
- descriptions of common or intended uses

Section 2: Hazardous ingredients

This section typically includes:

- the names of the required hazardous ingredients
- their percentages by weight or volume
- the Chemical Abstracts Service (CAS) Registry
- LD50 (lethal dose)/LC50 (lethal concentration) test results
- occupational exposure limits

There may be several names or variations for the same ingredient or chemical. Each chemical is assigned a CAS number by the American Chemical Society. CAS numbers can help you focus on the right chemical and not on any with a similar sounding name. Many chemical names include numbers that must also be the same. LD50 or LC50 tests indicate how much of the chemical is required to kill half of an animal test population. Each LD50 or LC50 result relates to a specific animal type and exposure route. It cannot be compared to another LD50 or LC50 unless it also refers to the same animal type and exposure route. Whenever you try to compare information on two products, it is important that you use equivalent information.

Section 3: Chemical and physical properties

This section includes information on the chemical and physical properties of the product such as:

- if it is a liquid, solid or vapour under stated conditions
- if it has a distinctive appearance or odour
- the freezing and boiling points
- if and how fast it will evaporate
- what it looks and smells like
- if it is an acid or base



Section 4: Fire and explosion

This section describes how to prevent a fire or explosion while storing and using the product. It also recommends how to put out a fire.

Section 5: Reactivity

This section tells you under which conditions dangerous chemical reactions can occur. This information explains how you can avoid dangerous mixtures and how to use appropriate storage methods.

Section 6: Toxicity

This section includes information on acute (short-term) and chronic (long-term) health effects, signs and symptoms. It tells you if the product is irritating or can cause sensitization, allergies, asthma or cancer. It also tells you if the product can interfere with normal cell and organ development (developmental and reproductive effects), and if there are any effects that occur when this chemical is combined with others (additive and synergistic effects).

The information in this section is based on how the product would be used in a workplace setting. It also includes information on workplace exposure limits set by various regulatory agencies. Each exposure is related to the route of entry, which refers to how the chemical can enter your body. For instance, it may enter by skin or eye contact, through lungs (inhalation) or stomach (by swallowing).

MSDSs usually do not include much information on some elements consumers may be interested in, such as neurological (nerves and the brain), hormonal, and cognitive (learning) effects.

This section may be less relevant for residential settings where long-term exposures to low doses and complex chemical mixes are more common. Also, since most of the information was developed in relation to adult male exposures, it may be less relevant in residential settings where at-risk populations such as children, persons with disabilities and older people live.

Section 7: Prevention

This section tells you if you need to wear special clothing or use ventilation and filter masks to protect yourself when using the product.

Section 8: First aid

This section tells you what to do in an accident or emergency situation.



Section 9: Preparation

This section tells you who wrote the MSDS, their address and telephone number, and the date when it was written or last revised. An MSDS is valid for three years after it is produced or last revised.

Additional MSDS information

There may be additional sections in an MSDS with more information on environmental effects. For example, information may include effects on birds, plants, animals and micro-organisms; recommended disposal and transportation methods; regulatory issues and miscellaneous data.

Other information: Sources for chemical ingredients

There are many sources of additional information, including the Canadian Chemical Producers Association, the Canadian Centre for Occupational Health and Safety, industry associations, universities, environmental organizations, federal and provincial ministries, libraries and the internet. As well, there are chemical, health and environmental indexes in the library, on disc or on the Internet.

Many databases are now on the internet. If you do not have home or office access, your local library or educational institution can probably provide access to the Internet for you, even if you do not know how to operate a computer. Some internet sites may charge a fee for services provided.

To perform a general search on the internet, type in “chemical abstracts” or “environmental abstracts.” These searches will provide a list of appropriate information sources. Both libraries and the internet have chemical and environmental abstracts that list most of the available information sources under appropriate categories.

If you cannot get information on regulated or unregulated ingredients in a product, you can look in a chemical formula textbook that lists typical formulas for many products. You can also read consumer versions that highlight both the typical ingredients in consumer products and their health effects. These sources may be helpful but should not be relied upon since there are many ways to make the same product. Once you know the chemical name and/or CAS Registry number, you can search a chemical index. You can call the Canadian Chemical Producers hotline for the names of chemical suppliers if you cannot find information online, or in a library. Keep in mind that some of these agencies are not set up to serve the public and may not be able or willing to provide full service responses.



HOUSEKEEPING MAINTENANCE HOURS GUIDE

This table provides an estimate of the time required to perform various cleaning and maintenance tasks. Use this guide to estimate workloads for on-site staff.

S = Site staff
C = Contractor

Task	By	Time Requirement
Daily		
Clean garbage compactor room	S/C	
Clean interior glass	S/C	27.9 m ² (300 sq. ft.) per hour
Clean common area washrooms/showers	S/C	
- per toilet		4 min
- per door, spot wash both sides		1 min
- mirrors		1 min
- sanitary napkin dispenser		0.5 min
- urinal		3 min
- wash basin and soap dispenser		3 min
- general cleaning		120 min per 92.9 m ² (1,000 sq. ft.)
Clean sauna room	S/C	
Spot cleaning	S/C	
Multiple times per week		
Sweep floors of lobby and entrances (4 times)	S/C	30 min per 92.9 m ² (1,000 sq. ft.)
Wash entrance doors (4 times)	S/C	125 min per 92.9 m ² (1,000 sq. ft.)
Clean lobby glass (4 times)	S/C	125 min per 92.9 m ² (1,000 sq. ft.)
Clean and disinfect intercom system (4 times)	S/C	2 min
Vacuum walk-off mats (4 times)	S/C	30 min per 92.9 m ² (1,000 sq. ft.)
Vacuum and spot-clean carpets in corridors (4 times)	S/C	30 min per 92.9 m ² (1,000 sq. ft.)
Empty trash cans and ashtrays (4 times)	S/C	0.5 min per can or ashtray
Dust chrome fixtures (4 times)	S/C	0.4 min per fixture
Dust lighting lenses or sconces (outside) (4 times)	S/C	0.4 min per fixture
Wash elevator doors (outside) (2 times)	S/C	5 min per door pair
Wash elevator doors (inside) (4 times)	S/C	5 min per door pair
Vacuum and spotclean elevator carpets (4 times)	S/C	5 min per elevator
Clean and disinfect elevator controls (4 times)	S/C	2 min
Clean and polish elevator mirrors (4 times)	S/C	27.9 m ² (300 sq. ft.) per hour
Mop pool deck (4 times)	S/C	100 min per 92.9 m ² (1,000 sq. ft.) (includes rinse)
Vacuum and spotclean lounge carpet (4 times)	S/C	30 min per 92.9 m ² (1,000 sq. ft.)
Vacuum common room carpets (4 times)	S/C	25 min per 92.9 m ² (1,000 sq. ft.)
Spotclean common room carpets (4 times)	S/C	5 min per 92.9 m ² (1,000 sq. ft.)
Clean fitness centre equipment (2 times)	S/C	
Sweep stairs and landings (2 times)	S/C	60 min per 92.9 m ² (1,000 sq. ft.)



HOUSEKEEPING MAINTENANCE HOURS GUIDE (CONT.)

Task	By	Time Requirement
Weekly		
Buff floors	S/C	45 min per 92.9 m ² (1,000 sq. ft.)
Polish chrome fixtures	S/C	2 min per fixture
Wash elevator walls	S/C	30 min per elevator
Dust all common room ledges	S/C	
Sweep floors in mechanical/electrical rooms	S/C	30 min per 92.9 m ² (1,000 sq. ft.)
Clean garbage chute	S/C	10 min per floor
Twice a month		
Mop stairs and landings		100 min per 92.9 m ² (1,000 sq. ft.) (includes rinse)
Wet wash handrails in stairwells		5 min per stairwell per floor
Monthly		
Shampoo walk-off mats and hang to dry	S/C	15 minutes per mat
Mop floors in mechanical/electrical rooms	S/C	100 min. per 92.9 m ² (1,000 sq. ft.) (includes rinse)
Spot-sweep underground parking	S/C	30 min. per 92.9 m ² (1,000 sq. ft.)
Four times per year		
Shampoo carpets	C	60 min per 92.9 m ² (1,000 sq. ft.)
Three times per year		
Power sweep/wash U/G	C	15 to 50 min per 92.9 m ² (1,000 sq. ft.), depends on machine used
Semi-annually		
Major carpet cleaning	C	60 min per 92.9 m ² (1,000 sq. ft.)
Int. catch basin cleaning	C	
Annually		
Inspect benches, planters and tree guards	C	
Perform maintenance on snow blower	C	
Misc. (frequency)		
Clean suite (tenant change)	S/C	



MASTER OPERATIONAL CHECKLIST

This generic list is provided for reference purposes. Most buildings will have fewer items than are listed here. Disregard the ones that do not apply. Some of the items under Work to be completed are self-explanatory, while others require more detail.

Master operational checklist

Building: _____

Building operator: _____

Property manager: _____

Legend:

PM = Property manager

S = Site staff

C = Contractor

X = Suggested month

Work to be completed	By	J	F	M	A	M	J	J	A	S	O	N	D
Daily													
Daily look/listen/touch inspection (DLLT)	S												
Clean garbage compactor room	S/C												
Clean interior glass	S/C												
Clean common area washrooms/showers	S/C												
Clean sauna room	S/C												
Spot cleaning in common areas and hallways	S/C												
Pick up litter on site	S/C												
Check the elevator systems (DLLT)	S												
Check the overhead garage doors (DLLT)	S												
Check all electrical motors (DLLT)	S												
Check fire alarm control panel (DLLT)	S												
Perform checks on fire safety systems (DLLT)	S												
Monitor heating water temperature (DLLT)	S												
Check level of cushion tank (DLLT)	S												
Clean lint screen from laundry exhaust	S												

MASTER OPERATIONAL CHECKLIST (CONT.)

Work to be completed	By	J	F	M	A	M	J	J	A	S	O	N	D
Multiple times per week													
Empty trash cans and ashtrays (4 times)	S/C												
Sweep floors of lobby and entrances (4 times)	S/C												
Sweep stairs and landings (2 times)	S/C												
Mop pool deck (2 times)	S/C												
Vacuum and spotclean elevator carpets (4 times)	S/C												
Vacuum and spotclean lounge carpet (4 times)	S/C												
Vacuum common room carpets (4 times)	S/C												
Spot clean common room carpets (4 times)	S/C												
Vacuum and spotclean carpets in corridors (4 times)	S/C												
Vacuum walk-off mats (4 times)	S/C												
Wash entrance doors (4 times)	S/C												
Clean and disinfect intercom panel (4 times)	S/C												
Dust chrome fixtures (4 times)	S/C												
Dust lighting lenses or sconces (outside) (4 times)	S/C												
Wash elevator doors (outside) (2 times)	S/C												
Wash elevator doors (inside) (4 times)	S/C												
Clean and disinfect elevator controls (4 times)	S/C												
Clean and polish elevator mirrors (4 times)	S/C												
Clean fitness centre equipment (2 times)	S/C												
Clean lobby glass (4 times)	S/C												
Perform routine maintenance on pool (3 times)	C												
Weekly													
Sweep floors in mechanical/electrical rooms	S/C												
Buff floors	S/C												
Polish chrome fixtures	S/C												
Wash elevator walls	S/C												
Dust all common room ledges	S/C												
Clean garbage chute	S/C												
Mow lawn	S/C												
Water lawn	S/C												
Drain drip drums on sprinkler system	S												
Perform weekly check on fire safety system	S												

MASTER OPERATIONAL CHECKLIST (CONT.)

Work to be completed	By	J	F	M	A	M	J	J	A	S	O	N	D
Twice a month													
Mop stairs and landings													
Wet wash handrails in stairwells													
Monthly													
Review daily log books	PM												
Spot-sweep underground parking	S/C												
Shampoo walk-off mats and hang to dry	S/C												
Mop floors in mechanical/electrical rooms	S/C												
Pest control service	C												
Inspect property	PM												
Lubricate weed trimmer	S/C												
Inspect lawn mower	C												
Check underground parking signs	S												
Inspect built-up roof	S			X	X	X	X	X	X	X	X	X	X
Elevator log sheet checked	PM												
Elevator maintenance	C												
Check all lights and ballasts	S												
Test ground-fault interruptors	S												
Check all fire extinguishers	S												
Perform maintenance on air compressors	S												
Inspect fire hose stations	S												
Perform monthly check on fire safety system	S/C												
Water treatment	C												
Inspect electric boilers for leaks	C												
Test glycol solutions	C												
Chiller maintenance	C				X	X	X	X	X	X	X		
Lubricate D/X systems	S/C												
Replace F/A filters	S												

MASTER OPERATIONAL CHECKLIST (CONT.)

Work to be completed	By	J	F	M	A	M	J	J	A	S	O	N	D
Six times per year													
Stock order	PM/S	X		X		X		X		X		X	
Lubricate motors, pumps and fans	C		X		X		X		X		X		X
Perform checks on fire safety systems	C	X		X		X		X		X		X	
Four times per year													
Shampoo carpets	C	X		X				X		X			
Overhead door service	C		X			X			X			X	
Fire drills	PM/S	X			X			X			X		
Three times per year													
Power sweep/wash U/G	C		X			X				X			
Clean catch basins of debris and ice	C/S		X			X					X		
Semi-annually													
Staff appraisals	PM		X										X
Major carpet cleaning	C					X							X
Int. catch basin cleaning	C			X						X			
Power-sweep outside	C			X						X			
Fertilize lawn	C					X				X			
Weed spray (as required)	C												
Prune landscaping (spring and fall)	C				X					X			
Inspect doors and windows	S/C			X								X	
Inspect sloped roof, eavestrough and attic	S				X							X	
Compactor maintenance	C			X						X			
Emergency generator service/report	C				X						X		
Perform checks on fire safety systems	C												
Inspect coils, ducts and dampers	C												
Service and clean clothes dryers	S												
Fan coil maintenance	C				X						X		

MASTER OPERATIONAL CHECKLIST (CONT.)

Work to be completed	By	J	F	M	A	M	J	J	A	S	O	N	D
Annually													
Budget preparation	PM								X				
Revise annual operational checklist	PM	X											
Revise items on monthly planner	PM	X											
Revise daily look/listen/touch form	PM	X											
Staff holiday schedule	PM		X										
Update building inventory	PM	X											
Order salt/calcium	PM										X		
Install Christmas decorations	S											X	
Remove Christmas decorations	S	X											
Insurance renewal	C												
Insurance approval	C												
Inspect benches, planters and tree guards	C												
Perform maintenance on snow blower	CO										X		
Inspect exterior painting	PM					X	X						
Inspect signs/fences	PM					X							
Clean entrance canopy	S					X							
Install nets, inspect tennis courts/playgrounds	S					X							
Clean garage exhaust pits	C							X					
Exterior window cleaning	C							X					
Inspect all water hoses	C		X										
Parking lot line painting	C						X						
Add topsoil	C										X		
Turn lawn sprinkler system on	C					X							
Turn lawn sprinkler system off	C										X		
Replace winter kill	C					X							
Spring cleanup	C				X								
Fall cleanup	C										X		
Plant flowers	C					X							
Inspect paving/concrete	PM					X							
Spring fertilization	C				X	X							
Fall fertilization	C									X	X		
Prune trees and shrubs	C				X	X	X						



MASTER OPERATIONAL CHECKLIST (CONT.)

Work to be completed	By	J	F	M	A	M	J	J	A	S	O	N	D
Annually (cont.)													
Garbage bin/chute cleaning	C						X						
Ramp inspection	C								X				
Ext. catch basin cleaning	C						X						
Inspect roof anchors	C				X								
Inspect all sidewalks	C												
Inspect retaining walls	C												
Inspect stairs and rails	S				X								
Check structural integrity of foundation	S												
Have roof inspected	C												
Turn on ramp heating system	C											X	
Turn off ramp heating system	C				X								
Turn on pipe tracing systems	S										X	X	
Turn off pipe tracing systems	S		X	X									
Tighten over 200-amp connections	C		X							X			
Service video equipment	C	X											
Wash light fixtures													
Turn on power to car block heaters	S											X	
Turn off power to car block heaters	S			X									
Inspect aluminum electrical distribution	C												
Check in-suite aluminum wiring	C												
Vacuum smoke detectors	S												
Fire safety equipment inspection/certificates	C												
Have fire extinguishers inspected	C												
Perform checks on fire safety systems	C												
Connect pool phone	PM						X						
Disconnect pool phone	PM									X			
Flush horizontal/vertical drains	C						X						
Sump pits/catch basin cleaning	C						X						
Open pool	C						X						
Winterize pool	C										X		
Inspect grout/caulking in showers/hot tubs	PM											X	
Drain all exterior hose bibs	S										X		

MASTER OPERATIONAL CHECKLIST (CONT.)

Work to be completed	By	J	F	M	A	M	J	J	A	S	O	N	D
Annually (cont.)													
Power wash horizontal drains	C												
Service backflow preventors	C										X		
Clean hot water tanks	C							X					
Clean heat exchangers	C							X					
Clean pump strainers on all pumps	C							X					
Heating changeover	C									X	X		
Cooling changeover	C				X	X							
Have laundry venting thoroughly cleaned	C				X					X			
Check boiler controls and sensors	C												
Clean all boilers	C						X	X					
Have boilers tested for efficiency	C	X											
Winterize chiller	C										X		
Perform maintenance on chiller	C	X	X										
Perform cooling tower maintenance	C				X	X							
Inspect fire doors and fire dampers	C												
Misc. (frequency)													
Clean suite (tenant change)	S/C												
Perform thermal scan of roof (3 to 4 yrs)	C												
Check suite electrical outlets (tenant change)	S												
Hydrostatically test extinguishers (5 yrs)	C												
Empty and test all fire extinguishers (6 yrs)	C												
Hydrostatically test dry chemical extinguishers (12 yrs)	C												
Test dry pipe system for obstructions (15 yrs)	C												
Hydrostatically test dry pipe standpipe (5 yrs)	C												
Perform checks on fire safety systems (2 yrs)	C												
Replace faucet washers (2 yrs)	S												
Power wash vert. kitchen stacks (5 to 7 yrs)	C												



MAKE OR BUY POLICY

Maintenance requests and supervising contractors

Number of suites _____ x 2 minutes per day = _____ min/day

Daily look/listen/touch inspections

Number of mechanical rooms _____ x 20 min/rm/day = _____ min/day

Number of chilled water rooms _____ x 10 min/rm/day = _____ min/day

Rooftop unit inspection—10 minutes if applicable = _____ min/day

Laundry exhaust cleaning—10 minutes if applicable = _____ min/day

Monthly tasks

Includes all of the tasks in the Operational Checklist that require the superintendent. = _____ 30 _____ min/day

Total: _____ min/day X $\frac{5 \text{ days/wk}}{60 \text{ min/hr}}$ = _____ hrs/wk

If the weekly workload is greater than 40 hours, then a second person is required to help the superintendent complete the required tasks. Tasks should then be added from the Operational Checklist to fill up the remaining hours of the week.

Description of Work	Freq. of Task (per week)	Number of Units	Time per Unit	Req'd Time (hrs/wk)	Cumulative Time (hrs/wk)
Example: Sweep lobby and entrance	4	139 m ² (1,500 sq. ft.)	30 min/92.9 m ² (1,000 sq. ft.)	3	68

OPERATIONAL CHECKLIST

Building: _____

Building operator: _____

Property manager: _____

Legend:

PM = Property manager

S = Site staff

C = Contractor

X = Suggested month

Work to be completed	By	J	F	M	A	M	J	J	A	S	O	N	D
Monthly													
Safety inspection	PM												
Review daily log books	PM												
Pest control service	C												
Inspect property	PM												
Elevator log sheet checked	PM												
Fire system test	PM												
Fire equip. and log entries checked	PM												
Elevator maintenance	C												
Water treatment	C												
Replace F/A filters	S												
Chiller maintenance	C					X	X	X	X	X	X		
Six times per year													
Stock order	PM/S	X		X		X		X		X		X	
Pump and motor fans service	C		X		X		X		X		X		X
Four times per year													
Minor carpet cleaning	C	X		X				X		X			
Overhead door service	C		X			X			X			X	
Fire drills	PM/S	X			X			X			X		
Three times per year													
Power sweep/wash U/G	C		X			X				X			
Semi-annually													
Staff appraisals	PM		X										X
Compactor bins/pump cart service	S		X						X				
Major carpet cleaning	C					X							X
Power sweep outside	C			X						X			
Prune landscaping (spring and fall)	C				X					X			
Weed spray (as required)	C												
Compactor maintenance	C			X						X			
Int. catch basin cleaning	C			X						X			
Emergency generator service/report	C				X						X		
Fan coil maintenance	C				X						X		



OPERATIONAL CHECKLIST (CONT.)

Work to be completed	By	J	F	M	A	M	J	J	A	S	O	N	D
Annually													
Budget preparation	PM								X				
Staff holiday schedule	PM		X										
Update building inventory	PM	X											
Order salt/calcium	PM										X		
Install Christmas decorations	S											X	
Remove Christmas decorations	S	X											
Insurance renewal	C												
Insurance approval	C												
Exterior painting	PM					X	X						
Inspect signs/fences	PM					X							
Clean entrance canopy	S					X							
Install nets, inspect tennis courts/playgrounds	S					X							
Clean garage exhaust pits	C							X					
Exterior window cleaning	C							X					
Check water hoses	C		X										
Line painting	C						X						
Spring fertilization	C				X	X							
Fall fertilization	C									X	X		
Add topsoil	C										X		
Turn lawn sprinkler on	C					X							
Turn lawn sprinkler off	C										X		
Replace winter kill	C					X							
Spring cleanup	C				X								
Fall cleanup	C										X		
Plant flowers	C					X							
Inspect paving/concrete	PM					X							
Garbage bin/chute cleaning	C						X						
Ramp inspection	C								X				
Ext. catch basin cleaning	C						X						
Inspect roof anchors	C				X								



OPERATIONAL CHECKLIST (CONT.)

Work to be completed	By	J	F	M	A	M	J	J	A	S	O	N	D
Annually (cont.)													
Turn on ramp heating	C												X
Turn off ramp heating	C				X								
Turn on pipe tracing	S										X	X	
Turn off pipe tracing	S		X	X									
Tighten over 200-amp connections	C		X							X			
Service video equipment	C	X											
Vacuum smoke detectors	S												
Fire safety equipment inspection/certificates	C												
Connect pool phone	PM						X						
Disconnect pool phone	PM									X			
Flush horizontal/vertical drains	C						X						
Sump pits/catch basin cleaning	C						X						
Open pool	C						X						
Winterize pool	C										X		
Service backflow preventors	C											X	
Inspect grout/caulking in showers/hot tubs	PM											X	
Clean all boilers	C						X	X					
Efficiency test on boilers/reports	C	X											
Clean hot water tanks/heat exchangers/pump strainers	C							X					
Winterize chiller	C										X		
Heating changeover	C										X		
Cooling changeover	C				X	X							
Clean laundry room venting	C				X					X			



DAILY LOOK/LISTEN/TOUCH INSPECTION FORM

Building: _____ **Time of inspection:** _____

Operator: _____

Tag no.	Reading Type	Range	Starting Date (Mon.)						
			Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
System: Building heating									
	Outside temperature								
	Design temperature	<82.2°C							
	Building supply temp.								
	Building return temp.								
B-	Burner on/off								
	Inlet temperature								
	Outlet temperature								
	Inlet pressure								
B-	Burner on/off								
	Inlet temperature								
	Outlet temperature								
	Inlet pressure								
B-	Burner on/off								
	Inlet temperature								
	Outlet temperature								
	Inlet pressure								
B-	Burner on/off								
	Inlet temperature								
	Outlet temperature								
	Inlet pressure								
P-	Pump on/off	on							
	Suction pressure								
	Discharge pressure								
P-	Pump on/off								
	Suction pressure								
	Discharge pressure								
	Expansion tank level	1/4 to 3/4							
	Makeup water PRV pressure								
Property manager's initials:									

DAILY LOOK/LISTEN/TOUCH INSPECTION FORM (CONT.)

Building: _____ **Time of inspection:** _____

Operator: _____

Tag no.	Reading Type	Range	Starting Date (Mon.)						
			Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
System: Misc. heating system									
B-	Burner on/off								
	Inlet temperature								
	Outlet temperature								
	Inlet pressure								
B-	Burner on/off								
	Inlet temperature								
	Outlet temperature								
	Inlet pressure								
P-	Pump on/off	on							
	Suction pressure								
	Discharge pressure								
P-	Pump on/off								
	Suction pressure								
	Discharge pressure								
	Primary heating supply temp.								
	Primary heating return temp.								
	Expansion tank level	1/4 to 3/4							
	Makeup water PRV pressure								
Property manager's initials:									

DAILY LOOK/LISTEN/TOUCH INSPECTION FORM (CONT.)

Building: _____ **Time of inspection:** _____

Operator: _____

Tag no.	Reading Type	Range	Starting Date (Mon.)						
			Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
System: Domestic hot water									
B-	Burner on/off								
	Pump on/off								
	Outlet temperature								
	Outlet pressure								
B-	Burner on/off								
	Pump on/off								
	Outlet temperature								
	Outlet pressure								
P-	Recirc. pump on/off	on							
	Tank temperature								
	Tank temperature								
	Supply water temperature								
System: Corridor supply air									
SF-	Corridor fan on/off								
	Corridor temperature								
	Burner no. 1 on/off								
	Burner no. 2 on/off								
P-	Glycol pump on/off								
	Glycol supply temp.								
	Expansion tank level	1/4 to 3/4							
Property manager's initials:									

DAILY LOOK/LISTEN/TOUCH INSPECTION FORM (CONT.)

Building: _____ **Time of inspection:** _____

Operator: _____

Tag no.	Reading Type	Range	Starting Date (Mon.)						
			Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
System: Chilled water plant									
CH-	Chiller on/off								
	Oil temperature heater on/off								
	Chilled water supply temp.								
	Condenser water temperature								
CT-	Cooling tower high/low/off								
P-	Chilled water pump on/off								
P-	Condenser water pump on/off								
	Room temperature								
	Cooling tower water meter reading	on							
System: Elevator machine room									
EL-	Elevator on/off								
EL-	Elevator on/off								
EL-	Elevator on/off								
EL-	Elevator on/off								
	Exhaust fan on/off								
	Room temperature								
	Fire hose cabinet pressure								
Property manager's initials:									

DAILY LOOK/LISTEN/TOUCH INSPECTION FORM (CONT.)

Building: _____ **Time of inspection:** _____

Operator: _____

Tag no.	Reading Type	Range	Starting Date (Mon.)							
			Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.	
System: Pool mechanical room										
P-	Pump on/off									
MAU-	Makeup air fan on/off									
	Supply air temperature									
EF-	Exhaust fan on/off									
	Return air temperature									
System: Emergency generator										
EG-	Generator block heater on/off	on								
	Room temperature									
	Clock reading									
System: Utility meters										
	Water meter reading									
	Main electrical meter reading									
	Demand meter—red needle									
	Demand meter—black needle									
	Main gas meter reading									
Property manager's initials:										

REQUEST FOR REIMBURSEMENT

Submitted by: _____

Building name: _____

Building address: _____

INSTRUCTIONS

1. Submit this request when one third to one half of the petty cash fund remains.
 2. Prepare reconciliation of fund.
 3. Property or department manager must approve completed request.
 4. Place vouchers in envelope and send to Head Office with this form properly completed.
-

PERIOD FROM: _____ TO: _____

RECONCILIATION OF FUND

Total disbursements, from cheque requisition \$ _____

ADD cash on hand _____

Subtotal \$ _____

Deduct initial fund _____

Difference \$ _____

RECONCILIATION PREPARED BY: _____

STATEMENT

I have counted the cash and verify the accuracy of the reconciliation.

PROPERTY OR DEPARTMENT MANAGER

DATE



3.0 Housekeeping and groundskeeping services



3.1 HOUSEKEEPING

Every year, MURB owners in Canada spend \$500 million and hire half a million people just for housekeeping and sanitation. Up to 25% of that money is wasted because of workers who do their jobs inefficiently.

To keep your costs down, make sure your housekeeping staff members or contractors are clear about what you expect them to do, when you need them to do it—and how high a standard of cleanliness you want them to achieve. This means making sure they understand:

- what jobs they have to do;
- how to do them;
- how often they should be done;
- how to use the right tools, equipment and supplies for each job;
- how clean you expect everything to be; and
- all safety precautions.

It's up to the property manager to set a cleaning schedule, oversee the work and follow up with the superintendent to make sure everything is being done properly and on time. You can use the **Cleaning Guide** at the end of this chapter to create your schedule and as a checklist for quality control.

If you use a contractor, the Cleaning Guide and the **Housekeeping Maintenance Hours Guide** (see *example at the end of this chapter*) can also come in handy when asking for bids. Just fill in these forms and send them (along with information about the property) to three or four reputable companies. Ask them for an estimate of annual person-hours, how many people they'll send to do the job and a few references you can check out.

Remember: make sure the contract can be cancelled if the work isn't satisfactory. If there's anything you don't like, send a written note to the contractor's management to give them a chance to make it right.

When hiring a new contractor, it usually takes two or three months to get up to speed. If you aren't satisfied with their work by the end of the third month, you can always ask for new bids or hire a new company.

3.2 GROUNDSKEEPING

Groundskeeping is a seasonal job that takes much less time than housekeeping. Except for very small buildings, it's therefore usually a good idea to hire a contractor to take care of the grounds.

You can use the **Groundskeeping Guide** at the end of this chapter to set up a groundskeeping schedule and let your staff or contractor know what you expect. When asking for bids, don't forget to include a **Landscape Plot Plan** (see *example at the end of this chapter*) that clearly shows all the lawns, trees, shrubs and flower beds.



3.3 GREEN INITIATIVES

“Going green” is becoming increasingly important for MURB owners and managers across Canada. New laws are being passed every year to protect the environment. There are also growing concerns about the health effects of herbicides and pesticides, and the need to conserve water and energy.

From both a business and PR standpoint, it makes sense to start using more environmentally friendly options wherever possible. This includes things like:

- organic pest and weed control products, instead of chemical pesticides;
- indigenous plants that need less weeding and watering;
- non-toxic cleaning and garden supplies; and
- promoting recycling by setting up bins and establishing pickup areas.



CLEANING GUIDE

This building is to be cleaned to a “Prestige” level, meaning that we will expect unsolicited compliments from building occupants or visitors. We will expect cleanliness complaints to be rare.

	Frequency per		
	Week	Month	Year
Lobby and entrances			
Sweep floors	4		
Wash entrance doors	4		
Buff floors	1		
Clean all front lobby glass	4		
Clean and disinfect intercom station	4		
Vacuum walk-off mats	4		
Shampoo walk-off mats and hang to dry		1	
Corridors			
Vacuum and spot-clean carpets	4		
Empty trash cans and ashtrays	4		
Shampoo carpets			4
Dust chrome fixtures	4		
Polish chrome fixtures	1		
Dust lighting lenses or sconces (outside)	4		
Wash lighting lenses and reflecting surfaces (inside)			1
Elevators			
Wash elevator doors (outside)	2		
Wash elevator doors (inside)	4		
Vacuum and spot-clean carpets			4
Clean and disinfect keypad, intercom and phone	4		
Wash walls	1		
Clean and polish mirrors	4		
Swimming pool room			
Mop pool deck	2		



CLEANING GUIDE (CONT.)

	Frequency per		
	Week	Month	Year
Lounge/party room			
Vacuum and spot-clean carpets	4		
Empty trash cans and ashtrays	4		
Shampoo carpets			4
Dust all windowsills, ledges, picture frames that can be reached without using a ladder	1		
Fitness centre			
Vacuum and spot-clean carpets	4		
Shampoo carpets			4
Clean seats, backrests, benches with a germicidal cleanser	2		
Wash and polish chrome equipment	2		
Back stairwells			
Sweep stairs and landings	2		
Mop stairs and landings		2	
Wet wash handrails		2	
Common area washrooms/change rooms			
Mop floors with germicidal cleanser, buffing as required	4		
Clean bowls, urinals and toilets with a germicidal cleanser	4		
Clean and polish mirrors	4		
Refill all dispensers with supplies furnished by the superintendent	4		
Empty receptacles and disposals	4		
Dust partitions	1		
Spot-wash fingermarks on walls, remove graffiti, wash partitions	-- as required --		
Dust locker exteriors	1		
Wet wash accessible lockers, inside and outside		1	
Mechanical/electrical rooms			
Sweep floors	1		
Mop floors		1	



HOUSEKEEPING MAINTENANCE HOURS GUIDE

This table provides an estimate of the time required to perform various cleaning and maintenance tasks. Use this guide to estimate workloads for on-site staff.

S = Site staff
C = Contractor

Task	By	Time Requirement
Daily		
Clean garbage compactor room	S/C	
Clean interior glass	S/C	27.9 m ² (300 sq. ft.) per hour
Clean common area washrooms/showers	S/C	
- per toilet		4 min
- per door, spot-wash both sides		1 min
- mirrors		1 min
- sanitary napkin dispenser		0.5 min
- urinal		3 min
- wash basin and soap dispenser		3 min
- general cleaning		120 min per 92.9 m ² (1,000 sq. ft.)
Clean sauna room	S/C	
Spot cleaning	S/C	
Multiple times per week		
Sweep floors of lobby and entrances (4 times)	S/C	30 min per 92.9 m ² (1,000 sq. ft.)
Wash entrance doors (4 times)	S/C	125 min per 92.9 m ² (1,000 sq. ft.)
Clean lobby glass (4 times)	S/C	125 min per 92.9 m ² (1,000 sq. ft.)
Clean and disinfect intercom system (4 times)	S/C	2 min
Vacuum walk-off mats (4 times)	S/C	30 min per 92.9 m ² (1,000 sq. ft.)
Vacuum and spot clean carpets in corridors (4 times)	S/C	30 min per 92.9 m ² (1,000 sq. ft.)
Empty trash cans and ashtrays (4 times)	S/C	0.5 min per can or ashtray
Dust chrome fixtures (4 times)	S/C	0.4 min per fixture
Dust lighting lenses or sconces (outside) (4 times)	S/C	0.4 min per fixture
Wash elevator doors (outside) (2 times)	S/C	5 min per door pair
Wash elevator doors (inside) (4 times)	S/C	5 min per door pair
Vacuum and spot-clean elevator carpets (4 times)	S/C	5 min per elevator
Clean and disinfect elevator controls (4 times)	S/C	2 min
Clean and polish elevator mirrors (4 times)	S/C	27.9 m ² (300 sq. ft.) per hour
Mop pool deck (4 times)	S/C	100 min per 92.9 m ² (1,000 sq. ft.) (includes rinse)
Vacuum and spot-clean lounge carpet (4 times)	S/C	30 min per 92.9 m ² (1,000 sq. ft.)
Vacuum common room carpets (4 times)	S/C	25 min per 92.9 m ² (1,000 sq. ft.)
Spot-clean common room carpets (4 times)	S/C	5 min per 92.9 m ² (1,000 sq. ft.)
Clean fitness centre equipment (2 times)	S/C	
Sweep stairs and landings (2 times)	S/C	60 min per 92.9 m ² (1,000 sq. ft.)



HOUSEKEEPING MAINTENANCE HOURS GUIDE (CONT.)

Task	By	Time Requirement
Weekly		
Buff floors	S/C	45 min per 92.9 m ² (1,000 sq. ft.)
Polish chrome fixtures	S/C	2 min per fixture
Wash elevator walls	S/C	30 min per elevator
Dust all common room ledges	S/C	
Sweep floors in mechanical/electrical rooms	S/C	30 min per 92.9 m ² (1,000 sq. ft.)
Clean garbage chute	S/C	10 min per floor
Twice a month		
Mop stairs and landings		100 min per 92.9 m ² (1,000 sq. ft.) (includes rinse)
Wet wash handrails in stairwells		5 min per stairwell per floor
Monthly		
Shampoo walk-off mats and hang to dry	S/C	15 min per mat
Mop floors in mechanical/electrical rooms	S/C	100 min per 92.9 m ² (1,000 sq. ft.) (includes rinse)
Spot sweep underground parking	S/C	30 min per 92.9 m ² (1,000 sq. ft.)
Four times per year		
Shampoo carpets	C	60 min per 92.9 m ² (1,000 sq. ft.)
Three times per year		
Power sweep/wash U/G	C	15 to 50 min per 92.9 m ² (1,000 sq. ft.), depends on machine used
Semi-annually		
Major carpet cleaning	C	60 min per 92.9 m ² (1,000 sq. ft.)
Int. catch basin cleaning	C	
Annually		
Inspect benches, planters and tree guards	C	
Perform maintenance on snow blower	C	
Misc. (frequency)		
Clean suite (tenant change)	S/C	



GROUNDSKEEPING GUIDE

These grounds are to be cleaned to a “Prestige” level, meaning that we will expect unsolicited compliments from building occupants or visitors. We will expect grounds complaints to be rare.

	Frequency per		
	Week	Month	Year
Pick up litter on site	5		
Clean drive areas	1		
Clean benches		2	
Clear debris from area drains			4
Mow lawn	1	-- in season --	
Water lawn	1	-- in season --	
Inspect lawn mower		1	
Lubricate weed trimmer		1	
Prune landscaping (spring and fall)			2
Spray weeds		-- as required --	
Fertilize lawn/trees/shrubs (spring and fall)			2
Add topsoil (fall)			1
Replace winter kill (spring)			1
Edge flower beds			2
Plant flowers (spring)			1
Prune trees and shrubs (summer)			1



LANDSCAPE PLOT PLAN BUILDING PROFILE – GROUNDSKEEPING

Updated on _____

Building name: _____

Building number: _____

Page _____ of _____



4.0 Structural, mechanical or electrical maintenance

Most structural, mechanical, electrical and equipment maintenance should be handled by contractors who specialize in this type of work. Your job as an owner or manager is to choose the right contractors, use the **Operational Checklist** (see example at the end of chapter 2) to ask for bids and set a maintenance schedule, and work with your superintendent to make sure everything is done properly and on time.

Remember: regular maintenance and repairs can go a long way toward prolonging the life of your most expensive systems and equipment, and save you a lot of money over the long term.

4.1 MAINTENANCE REQUESTS

When your tenants need to request maintenance or repairs, make sure you have an easy method in place to help them do it. This will usually involve either the tenant or superintendent filling out a **Maintenance Request Form—General** (see sample at the end of this chapter). You can give tenants a few copies of this form with their Tenant Care Package, along with instructions on how and when to use them, and where they can drop them off.

For heating or rainwater problems, you can also use the special **Maintenance Request Form—Heating** or **Maintenance Request Form—Rainwater Infiltration** that are included at the end of this chapter. When the superintendent receives a Maintenance Request Form, they need to look into the problem and decide how to solve it. This usually involves either:

- fixing the problem, then writing the results on the Maintenance Request Form form and sending it to the property manager to file; or
- if they can't solve the problem themselves, they should forward the Maintenance Request Form to the property manager, who can either issue a **Work Order** to a contractor or (for large jobs) get three bids and issue a **Purchase Order** to the winning contractor. Sample work orders and purchase orders are both included at the end of this chapter.

4.1.1 Handling maintenance requests

When working on a maintenance issue, always try to keep the tenant(s) informed of the progress. This can reduce the number of repeat complaints, especially if there are any delays in fixing the problem. If it's something that could affect other tenants, you can also post a notice to let people know it's being dealt with.

Your superintendent should also use a simple system to rank the urgency of each request. For example, ask them to mark each Maintenance Request Form they send you with one of the following “levels of urgency”:

1. **Service required:** the least urgent jobs, where a delay of a few days won't make the problem worse, affect the building or lead to more complaints;
2. **Urgent:** jobs that could affect tenant comfort or the normal operation of the building and which should be done the same day (or on a Monday after a weekend); or
3. **Emergency:** jobs that need to be done immediately. This includes anything that poses a safety risk or that could cause serious damage to your building or equipment.



With emergency requests, the superintendent must contact the property manager any time of the day or night. In some cases, you may need to call in a contractor without asking for quotes first, or looking into the problem yourself. If the superintendent can't reach the manager, they may have to authorize the emergency repairs themselves.

For examples of some common emergencies (and advice on how they should be handled), read the **Maintenance Scenarios** included at the end of this chapter.

4.2 EQUIPMENT TAGS

All major mechanical and electrical equipment in your building should be tagged to identify what it is, and provide a quick on-the-spot service history. This is a simple and inexpensive way to help you prevent problems from occurring, and make it easier to diagnose them when they do.

To tag your important equipment:

1. use a code to identify them, like letters for the type of equipment and numbers if you have more than one. For example, you could label two heating pumps "HP1" and "HP2";
2. put the tags in plastic pouches, which you can get at most office supply stores;
3. punch holes in the pouches and use a metal shower curtain ring to attach them in a safe spot close to each piece of equipment; and
4. have your staff and contractors record any major maintenance on the tags. When a tag is filled up, put a new one in the same pouch and file the old one away for future reference.

For an example of an **Equipment Tag** (see the forms at the end of this chapter).

4.3 MECHANICAL AND ELECTRICAL SERVICE CONTRACTS

For mechanical and electrical services, you can either use separate contractors or include them both in a single contract. There will probably be more mechanical work than electrical, so check the mechanical experience and credentials of any contractor before hiring them.

If you want to include electrical in the same contract, make sure they have journeyman electricians on staff, rather than subcontractors. This will speed up the response time in case of electrical emergencies.

4.4 MAINTENANCE ISSUES

For a complete list of maintenance tasks, check out CMHC's *Operations Manual for Maintenance and Custodial Staff*. The following is a general overview of some of the more common maintenance items you're likely run into, along with some tips on how to handle them.

4.4.1 Parking garage

Deterioration in concrete parking garages is mainly the result of road salt or moisture rusting the iron reinforcement bars. This can cause the concrete to crack and split. To stop this from happening:

- check the sacrificial anodes and replace them when needed;
- inspect and clean the garage floor drains on a regular basis;
- wash the floor surfaces regularly with water;



- make sure the garage is well ventilated;
- don't store salt (or salt and sand) on the garage floors; and
- have a qualified professional inspect the area at least once a year.

4.4.2 Electrical switchgear

Overheating of electrical switches and breakers can lead to power outages or even start a fire. To prevent your switchgear from overheating:

- have an electrician check and tighten the connecting fasteners in all switchgear over 220 amps once a year;
- have a qualified technician do an annual thermographic scan of the switchgear and breakers in the electrical rooms and panels outside of the suites and repair or replace any oxidized, overloaded or unbalanced components;
- keep all non-metal surfaces clean and free of dust and lubricate the mechanical parts after each cleaning; and
- switch the circuit breakers on and off to test them on a regular basis.

4.4.3 Swimming pools

If your property has a pool, be sure to:

- clean the pool at least three times a week;
- have a qualified contractor (or trained staff member) chemically treat the water three times a week (or more if it's heavily used);
- make sure the heating, lights and filtration equipment are regularly maintained; and
- make sure the pool has all the necessary safety equipment, including life rings and hooks, one lifeguard chair or more, ground fault detectors for underwater lights, safety signs, a phone and First Aid Kit, and safety lines with rope floats, hooks and cup anchors.

For indoor pools, make sure the pool area is well ventilated and the humidity level is under control. High humidity can lead to health problems or damage the property. If you see water condensing on the windows, walls or doors, call an HVAC expert right away.

4.4.4 Backflow preventers

Backflow preventers keep your drinking water safe by stopping non-potable (that is, unhealthy) water from backing up into the supply line. This includes water from a pool, heating/cooling loops or towers, fire or sprinkler systems, and sanitary systems.

The health and safety of your tenants depend on keeping your backflow preventers in good working order. To make sure your backflow preventers are working well:

- have them installed, tested and maintained by a qualified contractor, in accordance with the *CSA Standard CAN/CSA-B64.10-01 Manual for the Selection, Installation, Maintenance, and Field Testing of Backflow Prevention Devices*;
- use a certified backflow prevention device tester to test the preventer whenever it's cleaned, repaired, overhauled or relocated; and
- check all backflow preventers once a year with a certified backflow prevention device tester.



4.4.5 Boiler maintenance

Gas-fired and electric boilers should be checked and cleaned every two years, or once a year for oil-fired boilers (preferably during the summer, for the safety and comfort of your tenants). To service a boiler:

- clean and descale any surfaces that come in contact with water, flames or gases;
- clean the burners, heat exchange surfaces and stack to remove any soot;
- inspect all safety devices, including the high-limit controls, fire safeties, spark ignition and pilot light systems, and gas valves;
- check the symmetry and colour of the burner flame; and
- inspect the refractory, burner fan, primary air, burner blower and secondary air linkages.

During the winter, have a qualified technician test how well the boilers are working and whether the water treatment system is operating correctly. If any suites will have to be without hot water for an inspection or repair, notify the occupants of the date and time, and let them know about how long it will take.

4.4.6 Heating and cooling coil maintenance

To keep your heating and cooling systems working well in every season:

- have all air-handling unit coils and heat exchangers cleaned regularly; and
- hire a qualified contractor to inspect them twice a year, and do any maintenance that's needed.

4.4.7 Envelope deterioration

Over time, exposure to sunlight, moisture or pollution can cause the exterior (that is, “envelope”) of your building to become weak, damaged or discoloured.

Moisture problems can affect the health of your tenants and the integrity of the building. Leaks and other moisture issues should always be dealt with immediately. To prevent these other building envelope problems:

- inspect the exterior of the building at least once a year (preferably in the spring);
- hire a qualified consultant or contractor to take care of any problems; and
- tell your staff and tenants to report any leaks as soon as they spot them, so you can fix the problem before it gets worse.

4.4.8 Appliances

In most rental buildings, the owner supplies and services the stove, refrigerator, and central washers and dryers. The tenants look after all other appliances.

In-suite appliance service should be handled on an “as needed” basis. You can build a good relationship with your appliance technician by checking with your tenants to make sure they're satisfied with the work and always paying the bills promptly.

Refrigerators tend to break down more than other appliances. Try to keep one spare refrigerator on hand for every 50 you have up and running, in case of emergencies.



MAINTENANCE REQUEST FORM—GENERAL

Building address: _____ **Floor:** _____ **Home phone:** _____

Resident's name: _____ **Suite:** _____ **Work phone:** _____

Request: _____

Request received by: _____ **Date:** _____

I, the undersigned, hereby acknowledge that I requested the maintenance described below to be done in my apartment. I expect that this work will be completed as soon as possible. I authorize the management staff or, if necessary, a contractor to enter my apartment during reasonable hours in order to complete the work. Notwithstanding my absence from the apartment at the time of entry, my signature on this request form shall be my consent to enter my apartment to do the work described below. Should more than one visit be necessary to correct the problem I also give my consent.

Resident's signature: _____ **Date:** _____

Resident: Please fill out the above information and submit to the superintendent. Do not fill out beyond this point.

A. Conditions in the suite

Inspected by: _____ **Date:** _____

B. Action taken to fix problem

Problem corrected by: _____ **Date:** _____

C. Recommended action required

Recommended by: _____ **Date:** _____

D. Property manager

Action Taken	Number	Who to Correct	Date Issued
<input type="checkbox"/> Work order			
<input type="checkbox"/> Purchase order			
<input type="checkbox"/> Resident to be invoiced?			
<input type="checkbox"/> Insurance claim No.:			

Work to be done:

Work authorized by: _____

Date: _____



MAINTENANCE REQUEST FORM—HEATING

Building address: _____ **Floor:** _____ **Home phone:** _____

Resident's name: _____ **Suite:** _____ **Work phone:** _____

Request: _____

Request received by: _____ **Date:** _____

I, the undersigned, hereby acknowledge that I requested the maintenance described below to be done in my apartment. I expect that this work will be completed as soon as possible. I authorize the management staff or, if necessary, a contractor to enter my apartment during reasonable hours in order to complete the work. Notwithstanding my absence from the apartment at the time of entry, my signature on this request form shall be my consent to enter my apartment to do the work described below. Should more than one visit be necessary to correct the problem I also give my consent.

Resident's signature: _____ **Date:** _____

Resident: Please fill out the above information and submit to the superintendent. Do not fill out beyond this point.

A. Conditions in the suite

	Yes	No		Yes	No
1. Are the convector isolating valves fully open?	<input type="checkbox"/>	<input type="checkbox"/>	9. Is there an air conditioner or sleeve installed in the suite?	<input type="checkbox"/>	<input type="checkbox"/>
2. Is the suite valve free to turn?	<input type="checkbox"/>	<input type="checkbox"/>	10. Has weatherstripping been installed around the suite entrance door?	<input type="checkbox"/>	<input type="checkbox"/>
3. Does the suite valve operate on demand from the thermostat?	<input type="checkbox"/>	<input type="checkbox"/>	11. Are the exhaust vents in the kitchen and bathrooms operating properly?	<input type="checkbox"/>	<input type="checkbox"/>
4. The resident's thermometer reading is:	_____ °C		12. Is there a humidifier in the suite?	<input type="checkbox"/>	<input type="checkbox"/>
5. The setting on the thermostat is:	_____ °C		13. Is there any heat-generating device near the thermostat (lamp, TV, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>
6. The thermometer reading on the thermostat is:	_____ °C		14. Are there any noticeable cold air drafts from the balcony doors or windows?	<input type="checkbox"/>	<input type="checkbox"/>
7. The dry bulb reading on the sling psychrometer is:	_____ °C		15. Are the openings in the convector covers clear of all window drapes?	<input type="checkbox"/>	<input type="checkbox"/>
- Living room (dry bulb)	_____ °C		16. Are the convector fins free of dust and carpet lint?	<input type="checkbox"/>	<input type="checkbox"/>
- Living room (wet bulb)	_____ °C				
- Bedroom (dry bulb)	_____ °C				
- Bedroom (wet bulb)	_____ °C				
8. Is any part of the convector blocked off by foil, paint, etc.?	<input type="checkbox"/>	<input type="checkbox"/>			

B. Conditions in the heating system

1. Boiler pressure	_____	psi	Comments: _____ _____ _____ _____
2. Boiler supply temperature	_____	°C	
3. Boiler return temperature	_____	°C	
4. Building supply water temp.	_____	°C	
5. Building return water temp.	_____	°C	
6. Outdoor temperature	_____	°C	
			Inspected by: _____

C. Property manager

Action Taken	Number	Who to Correct	Date Issued	
<input type="checkbox"/> Work order				Work to be done: _____ _____ _____ _____
<input type="checkbox"/> Purchase order				
<input type="checkbox"/> Resident to be invoiced?				
<input type="checkbox"/> Insurance claim No.:				
Work authorized by: _____				Date: _____



MAINTENANCE REQUEST FORM—RAINWATER INFILTRATION

Building address: _____ **Floor:** _____ **Home phone:** _____

Resident's name: _____ **Suite:** _____ **Work phone:** _____

Request: _____

Request received by: _____ **Date:** _____

I, the undersigned, hereby acknowledge that I requested the maintenance described below to be done in my apartment. I expect that this work will be completed as soon as possible. I authorize the management staff or, if necessary, a contractor to enter my apartment during reasonable hours in order to complete the work. Notwithstanding my absence from the apartment at the time of entry, my signature on this request form shall be my consent to enter my apartment to do the work described below. Should more than one visit be necessary to correct the problem I also give my consent.

Resident's signature: _____ **Date:** _____

Resident: Please fill out the above information and submit to the superintendent. Do not fill out beyond this point.

A. Conditions in the suite

1. Which room is it leaking in?
2. Where is the leak in the room?

Under window <input type="checkbox"/>	Above window <input type="checkbox"/>	Sides of windows <input type="checkbox"/>	At floor level <input type="checkbox"/>
In corner of suite <input type="checkbox"/>	In closet <input type="checkbox"/>	At ceiling <input type="checkbox"/>	
On wall with no windows <input type="checkbox"/>	Outside wall <input type="checkbox"/>	Inside wall <input type="checkbox"/>	
3. Which direction is the leaking area facing?

East <input type="checkbox"/>	West <input type="checkbox"/>	North <input type="checkbox"/>	South <input type="checkbox"/>
-------------------------------	-------------------------------	--------------------------------	--------------------------------
4. Was there enough water to warrant using

A wet vacuum <input type="checkbox"/>	A mop <input type="checkbox"/>
A cloth <input type="checkbox"/>	
5. Is the leak near hydronic piping/radiators? Yes No
6. Is this the first report of problems? Yes No
7. Does the leak occur every time it rains? Yes No
8. Is the leak near an air-conditioning unit? Yes No
9. Is the condensate drain pan full? Yes No
10. Are there any uninsulated refrigerant lines? Yes No

B. Inspection comments: _____

Inspected by: _____

C. Expert's comments: _____

Inspected by: _____

D. Property manager

Action Taken	Number	Who to Correct	Date Issued
<input type="checkbox"/> Work order			
<input type="checkbox"/> Purchase order			
<input type="checkbox"/> Resident to be invoiced?			
<input type="checkbox"/> Insurance claim No.:			

Work to be done:

Work authorized by: _____ **Date:** _____

WORK ORDER

Cost code: _____ W.O. no.: _____

Building address: _____ Floor: _____ Home phone: _____

Resident's name: _____ Suite: _____ Work phone: _____

Request: _____

Request received by: _____ Date: _____

Work to be done: (from Maint. Req. Form)	See superintendent <input type="checkbox"/>
	Superintendent's day off is: _____
	Consent to enter suite received <input type="checkbox"/>
	Comments:

Internal labour costs:						Material from stock costs:			
Date		Labour				Quantity	Description	Amount	
Month	Day	Personnel	Hours	Rate	Amount				
Internal labour totals:						hrs	\$		

Material costs:			\$	
Outside suppliers/contractors:				
P.O. No.	Outside Suppliers	Amount		
Supplier/contractor cost (less HST):		\$		
Equipment rental total (less HST):		\$		
Subtotal:		\$		
HST		\$		
Total job cost		\$		

Work authorized by: _____

Work is complete: _____

Completion date: _____

MAINTENANCE SCENARIOS

Dealing With	Situation/Action	Category
Housekeeping		
Pest control	Pests are becoming a serious problem. Requires landscaper or lawn care company.	Service required
Apartment cleaning—housekeeping	Repainting or repair of walls or ceilings	Service required
Groundskeeping		
Groundskeeping safety	Icicles are constantly forming on eaves or other overhangs, indicative of improper insulation or poor attic air flow.	Service required
Weed control	Weeds are becoming too prevalent to remove by hand, requiring a lawn care company.	Service required
Plant diseases, insects and pests	Pests and/or disease are infesting grounds and plants. Requires landscaper or lawn care company.	Service required
Structural, architectural and hardware		
Foundation wall hairline cracks	Active hairline crack in foundation (crack is expanding). Requires assessment by a structural specialist.	Service required
Foundation wall hairline cracks	Dormant hairline crack in foundation, not exposed to moisture or abrasive. Requires building envelope specialist to apply correct caulking.	Service required
Foundation wall hairline cracks	Dormant hairline crack in foundation, exposed to water and/or abrasive. Requires protective coating by building envelope specialist.	Service required
Concrete slab-on-grade cracks	Large structural cracks found in slab-on-grade floor, requiring analysis by a structural engineer.	Service required
Concrete suspended slab cracks	Cracks found in suspended slabs, requiring analysis by a structural engineer.	Urgent
Concrete floor slab sinking	Usually due to compacting of soil underneath the slab. Requires inspection by a structural engineer.	Service required
Water leakage into basement	Water is condensing on walls in the basement, damaging the concrete. Requires assessment by a mechanical engineer (humidity removal and control).	Service required
Water leakage into basement	The leak has been carefully investigated and the source has not been discovered or is not easily fixed.	Service required
Cracks in above-grade walls	Exterior patching required to prevent deterioration from moisture penetration	Service required
Cracks in above-grade walls	Settlement cracks (caused by foundation settling) should be repaired by a mason.	Service required
Built-up roof—exposed bitumen	So many areas are exposed that re-roofing may be required. Have a roofer examine the roof.	Service required
Built-up roof—blisters	Have a roofer repair the blisters.	Service required
Built-up roof—splits	Have a roofer repair the split in the roof membrane before more water enters the roof system.	Urgent



MAINTENANCE SCENARIOS (CONT.)

Dealing With	Situation/Action	Category
Structural, architectural and hardware (cont.)		
Built-up roof—alligatoring	Have a roofer repair the alligatoring and cover exposed areas with gravel.	Service required
Inverted roof problems	Have a roofer inspect the problem areas and give suggestions.	Service required
Ponding on roof	Roof drains are not at roof low points, requiring installation of more roof drains.	Service required
Garbage compactor malfunction	Repair is beyond the site staff capability. Requires electrical contractor.	Service required
Garbage compactor operating dangerously	Repair is beyond the site staff capability. Requires electrical contractor.	Urgent
Elevator operating problems	Contact service contractor for repair.	Urgent
Electrical and appliances		
Wall outlet failure	Contact electrician for repair.	Service required
Ground fault interrupter failure	Ground fault interrupter has been tested and is not working. This is a safety hazard if not addressed.	Urgent
Motor problems	Superintendent has detected operating problems with a motor (pump, fan...). Action depends on the exact nature of the problem, but generally would require an electrician.	Urgent
Appliances	Major appliance problem. Requires an appliance repair technician.	Service required
Refrigerators and freezers—unit won't run	Superintendent has gone through basic checkout and unit is not working. Requires an appliance repair technician.	Service required
Refrigerators and freezers—unit runs with inadequate temperatures	Superintendent has gone through basic checkout. Requires an appliance repair technician.	Service required
Refrigerators and freezers—excessive running time	The unit is very noisy and runs for long periods. Requires an appliance repair technician.	Service required
Refrigerators and freezers—excessive frost accumulation	Door adjustment and seal replacement have not fixed the problem (excessive air exchange). Requires an appliance repair technician.	Service required
Electric range—oven will not heat	Superintendent has checked for all the most common problems. Requires an appliance repair technician.	Service required
Electric range—oven not heating properly	Superintendent has checked for all the most common problems and has replaced the heating element. Requires an appliance repair technician.	Service required



MAINTENANCE SCENARIOS (CONT.)

Dealing With	Situation/Action	Category
Electrical and appliances (cont.)		
Electric range—element will not heat	Superintendent has checked for electrical continuity, fuses, control dial and has replaced the element. Requires an appliance repair technician.	Service required
Clothes dryer—machine won't run	Superintendent has checked the most common electrical problems. Requires an appliance repair technician.	Service required
Clothes dryer—machine runs but won't continue	Superintendent has checked fuses and breakers. Requires an appliance repair technician.	Service required
Clothes dryer—machine runs but does not dry clothes	Superintendent has checked lint trap and exhaust duct, and for overloading. Requires an appliance repair technician.	Service required
Clothes dryer—drum will not rotate	Superintendent has checked for obstruction and common drum drive problems. Requires an appliance repair technician.	Service required
Clothes washer—machine won't run	Superintendent has checked for common electrical problems. Requires an appliance repair technician.	Service required
Clothes washer—machine fills but doesn't start	Agitator motor is not running. Requires an appliance repair technician.	Service required
Clothes washer—machine fills but doesn't start	Motor is running and "suds lock" control is ruled out. Requires an appliance repair technician.	Service required
Clothes washer—machine leaks	Leak is coming from the machine itself, not the hoses. Requires an appliance repair technician.	Service required
Television reception	Vertical series of suites is getting poor reception, implicating a suite riser. Call cable company if cable-connected, otherwise contact electronic repair specialist.	Service required
Television reception	Specific suite or entire building is getting poor reception. Call cable company if cable-connected, otherwise contact electronic repair specialist.	Service required





5.0 Utilities



5.1 UTILITY BILLS

Fuel, electricity and water bills can all add up to a significant monthly expense. To keep your costs down, set a budget for each of your utilities, and check them on a regular basis. That way, if any of your bills suddenly go up, you'll be able to find out why and maybe even take steps to bring them back in line.

5.1.1 Electricity

The cost of electricity is based on many different factors. These include the following:

- **Utility rate structure:** Rate structures can vary greatly from one utility to the next. Knowing how yours works can help you decide where and how to cut costs. For example, reducing electricity use might make more sense in Toronto, where power costs \$13.50 per kilowatt, than it would just a few kilometres away in North York, where the rates are closer to \$5.35.
- **Electrical consumption:** The amount of energy that's used during the period when the meters are read. Electrical consumption is measured in kilowatt-hours (kWh).
- **Demand reading:** The point during each month when the most electricity is being used. Utility companies usually charge a higher rate for power during these peak times.
- **Kilovolt-ampere (kVA) reading:** The amount of energy used by motors, transformers and ballast. This is similar to a demand reading, except it's measured in kilovolt-amps (kVA). This type of equipment can be less efficient, so the kVA Reading takes that difference into account.
- **Power factor:** An extra charge that can be added to buildings that aren't using power efficiently. If the power factor on your bill is below 0.90, ask your utility company what you can do to improve it.
- **Transformer allowance:** An amount deducted from your bill if your utility company doesn't own the main transformer.

5.1.2 Fuel

Fuel bills are more straightforward. The only things that affect how much you're charged for fuel are the following:

- **Consumption:** The amount of fuel used in the billing period.
- **Utility rate structure:** A building that uses natural gas with an interruptible supply agreement, for example, will have a lower rate. But the owner might have to switch fuel supplies for a few weeks in the winter.

5.1.3 Water or sewage

In some cities, water is charged at a flat rate. In most others, water charges are based on the following:

- **Water use:** The amount of water used in the reading period;
- **Sewage:** The amount of sewage in the reading period; and
- **The utility rate structure:** Call your utility company to find out more.



5.2 UTILITY BUDGETS

To keep an eye on your utility costs, use last year's bills to estimate how much you should be paying each month. If you don't have the last year's bills, ask your utility company for a copy.

The Electrical Tracking Form, Fuel Tracking Form and Water Tracking Form at the end of this chapter can help you set up a utility budget based on your billing history. You'll find most of the information you need to complete these forms on your bills or by contacting your utility providers.

These forms can also help you see if something's wrong in the building. For example, a sudden increase in the water bill could mean there's a leak somewhere. A higher gas bill could mean your tenants are opening their windows more often, or your boilers are becoming less efficient.

Typical utility consumptions

To give you an idea of what your energy costs should be, the median value for energy intensity (provided by the Energy Star Portfolio manager) for MURBs in Canada is between 23.1 to 78.8 kBtu/sq. ft. ekWh/sq. ft. Nursing homes and residential care facilities usually run from 36.8 to 125.7 kBtu/ft² ekWh/ft².

Just remember that many things besides energy use can affect your bills. This includes the following:

- **Age of building:** Modern buildings tend to be more energy-efficient.
- **Fuel type:** Electric heat usually costs more, while natural gas consumes more energy but often costs less.
- **Mechanical and lighting systems:** Some designs (like using fluorescent lamps instead of incandescent) use less power than others.
- **Level of maintenance:** Well-maintained equipment is more energy-efficient.
- **Operating practices:** How efficiently your staff operates your equipment.
- **Occupancy types:** In general, families use more energy than single tenants.

Taking all these factors into account, the **energy costs** for a well-run MURB would normally be in the range of \$1.75 to \$2.50 per square foot per year. Buildings with electric heat or that use a lot of air conditioning would be on the high end of this range. Buildings with natural gas or no air conditioning would be on the lower end.

If your building costs more than \$1.75 per square foot per year for power and fuel (or \$2.50 with electric heat), it's probably time to start looking at what you can do to save energy and bring your costs down.

Water rates can also vary widely. But if your building is spending more than \$500 on water per suite per year, you (or your tenants) may be using more water than you need to.

If you're thinking about investing in making your building more energy- or water-efficient, you may want to hire a specialized engineering firm to predict the costs and savings, and minimize the risk.

Remember: To track the impact of a change on your utility costs, compare them with last year's bills for the same building, rather than a different building. Even nearly identical buildings can have surprisingly big differences in energy consumption, energy efficiency and the amount they pay for power.



5.3 DAILY RECORDINGS

Many MURBs use an indoor/outdoor reset controller to regulate the water temperature. But these controllers can sometimes fail, especially in cold weather. Since a 1°C (1.8°F) reduction can translate into savings of as much as 5% on your utility bill, your controllers can have a big impact on your bottom line.

To make sure your reset controllers are working correctly, have the Superintendent check the outside and supply water temperatures as part of their daily look/listen/touch inspection. The **Heating Water Temperature Curve** and **Heating Water Control Graph** at the end of this Chapter can also help you set the lowest possible temperature that will keep your tenants happy and your boiler operating efficiently.

If the supply water temperature is consistently higher than the design temperature, adjust the reset controller to lower the temperature until the supply water is about 10°C (18°F) warmer than the return water. Some other easy ways to keep costs down and keep your building from being overheated are the following:

- Check to see if more than 10% of the windows are open during the heating season.
- Take an air temperature reading in suites on a lower floor to be sure the temperature isn't above 25°C (77°F) with the windows closed.
- Adjust the supply water temperature to compensate for unusually cold or windy conditions, and then change it back when the weather returns to normal.
- Investigate any complaints that come in after the water temperature is lowered to see if it's a local problem or an issue with the whole supply water.

If this is your first heating season, experiment with different levels until you find the right balance. If the superintendent notices a big difference between the expected and actual supply water temperatures, they should fill in a Maintenance Request as soon as possible. Early detection of this type of problem can save a lot of wasted energy and maybe even the cost of a new boiler.

5.4 ANNUAL RECORDINGS

In addition to daily recordings, the **Electrical Tracking Chart**, **Fuel Tracking Chart** and **Water Tracking Chart** at the end of this chapter can also be used to set your annual utility budgets, and compare this year's figures to previous years.

Some fluctuation is normal. But if you see a year-to-year increase of over 10%, call your utility company to find out if any of their meter readings were estimated. If they were, have your staff take monthly meter readings instead.

If this doesn't solve the problem, talk to your staff about what could be going on or have your equipment tested to be sure it's working properly.

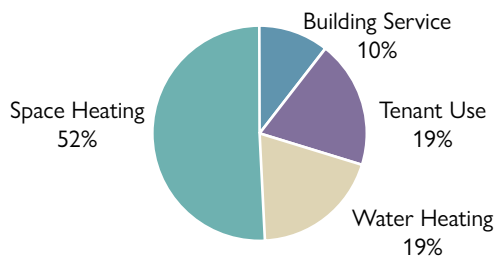


5.5 ENERGY CONSERVATION EFFORTS

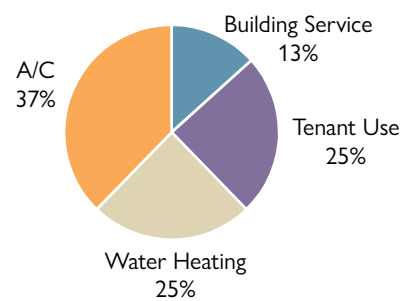
Saving energy is mostly a question of common sense, combined with an understanding of how your building's systems work. If you want to invest in lowering your energy bills, the first step is figuring out if the amount of money you'll save is worth the upfront cost.

A contractor can tell you what any new equipment will cost, while your utility bills can help you figure out the potential savings. If the proposed savings seem higher than some of the examples in the following chart, hire a mechanical or energy management engineer to confirm the numbers:

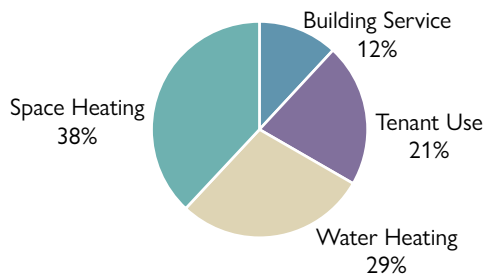
**Winter Demand—
All Electric Building**



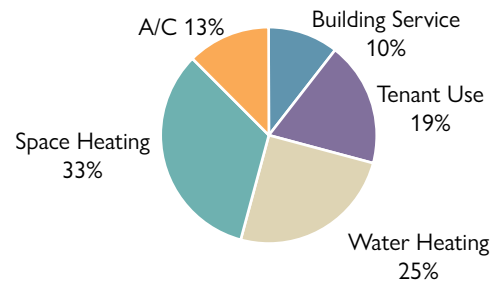
**Summer Demand—
Air-Conditioned Building**



**Annual Consumption—
Non-Air-Conditioned Building**



**Annual Consumption—
Air-Conditioned Building**



Typical energy consumptions and electrical demands in multi-residential buildings

A great way to start looking for places to save energy is with the **Daily Look/Listen/Touch Inspections**. Equipment that isn't operating correctly can waste a lot of energy. Daily inspections can help you flag problems and fix them before they become too expensive.

Another great resource is CMHC's **Energy and Water Efficiency in Multi-Unit Residential Buildings**. This free guide offers more than 60 different ways you can save water, energy and money.

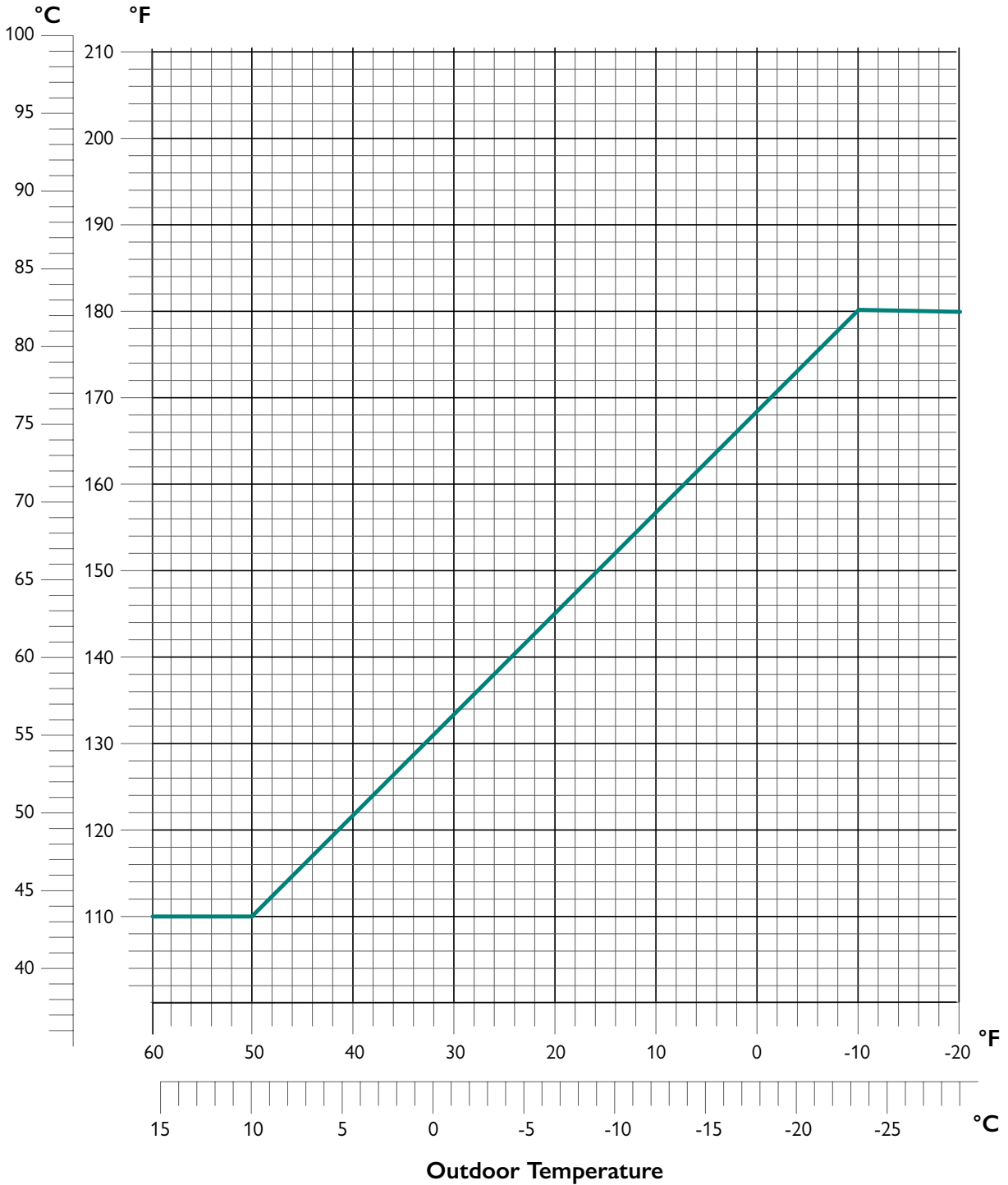
Remember: Being energy- and water-efficient usually starts with good maintenance. Buildings that are well maintained tend to waste less water, use less energy and save their owners a lot of money.



HEATING WATER TEMPERATURE CURVE

Building name: _____

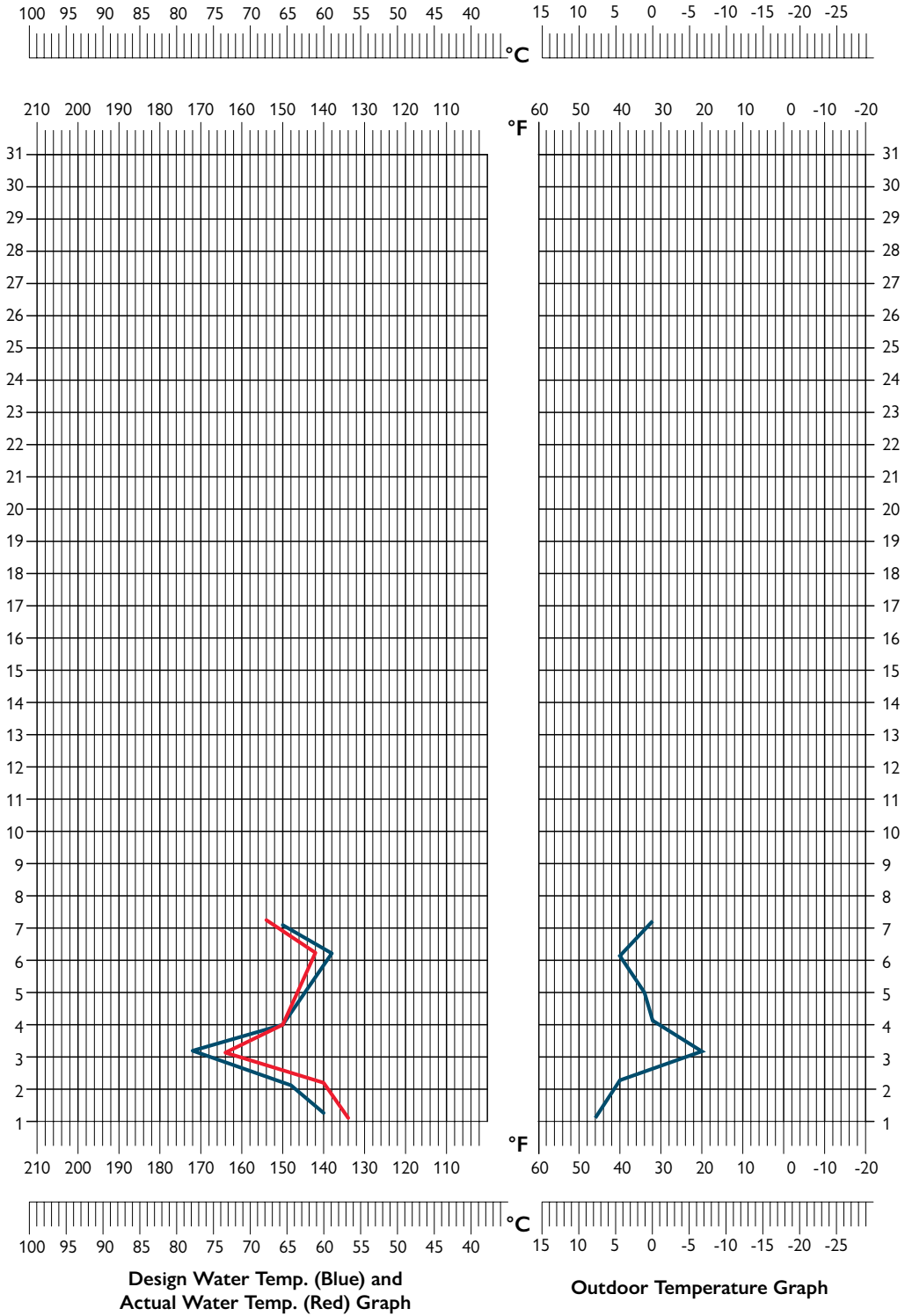
Updated on: _____



HEATING WATER CONTROL GRAPH

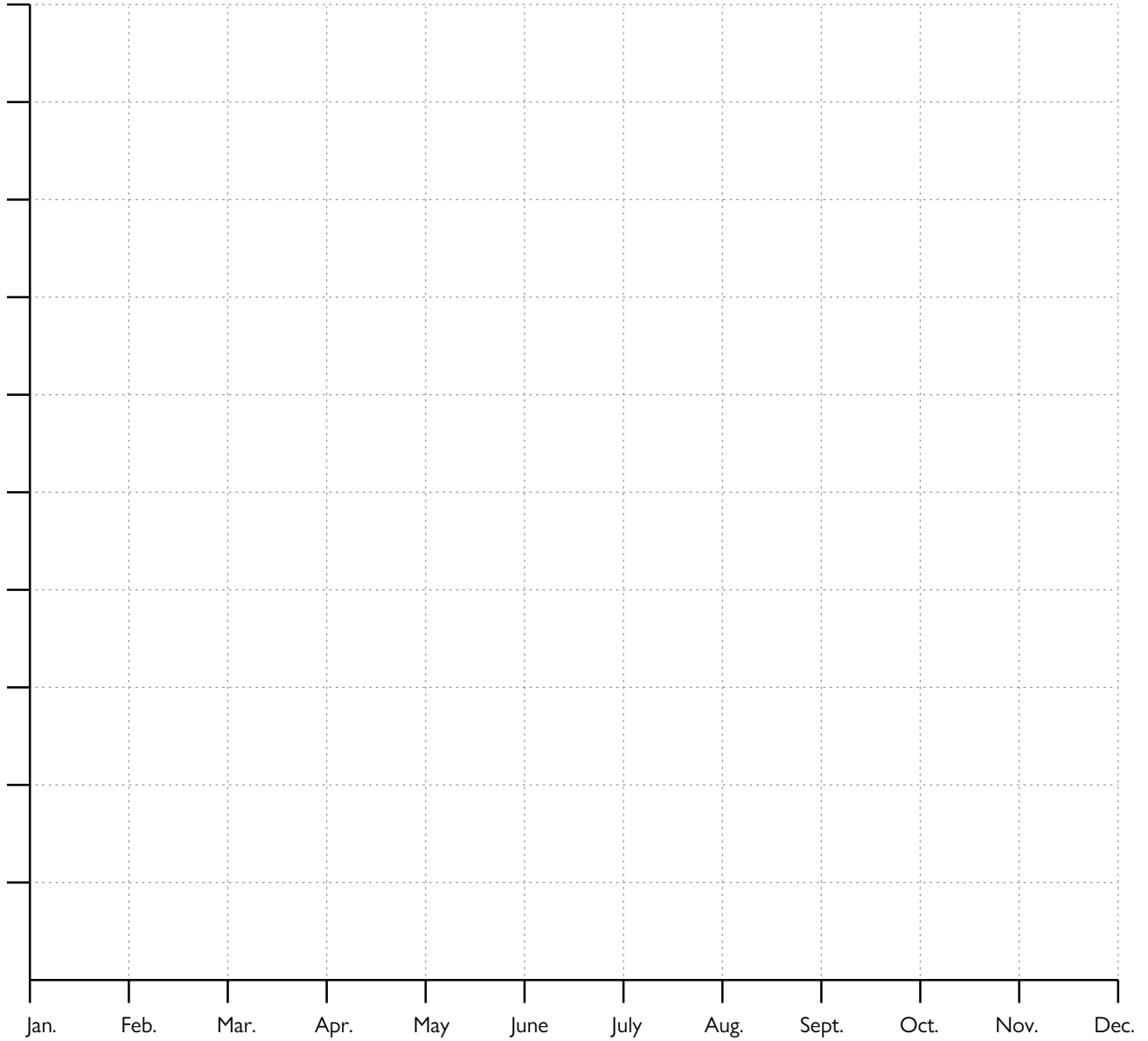
Building name: _____

Month and year: _____



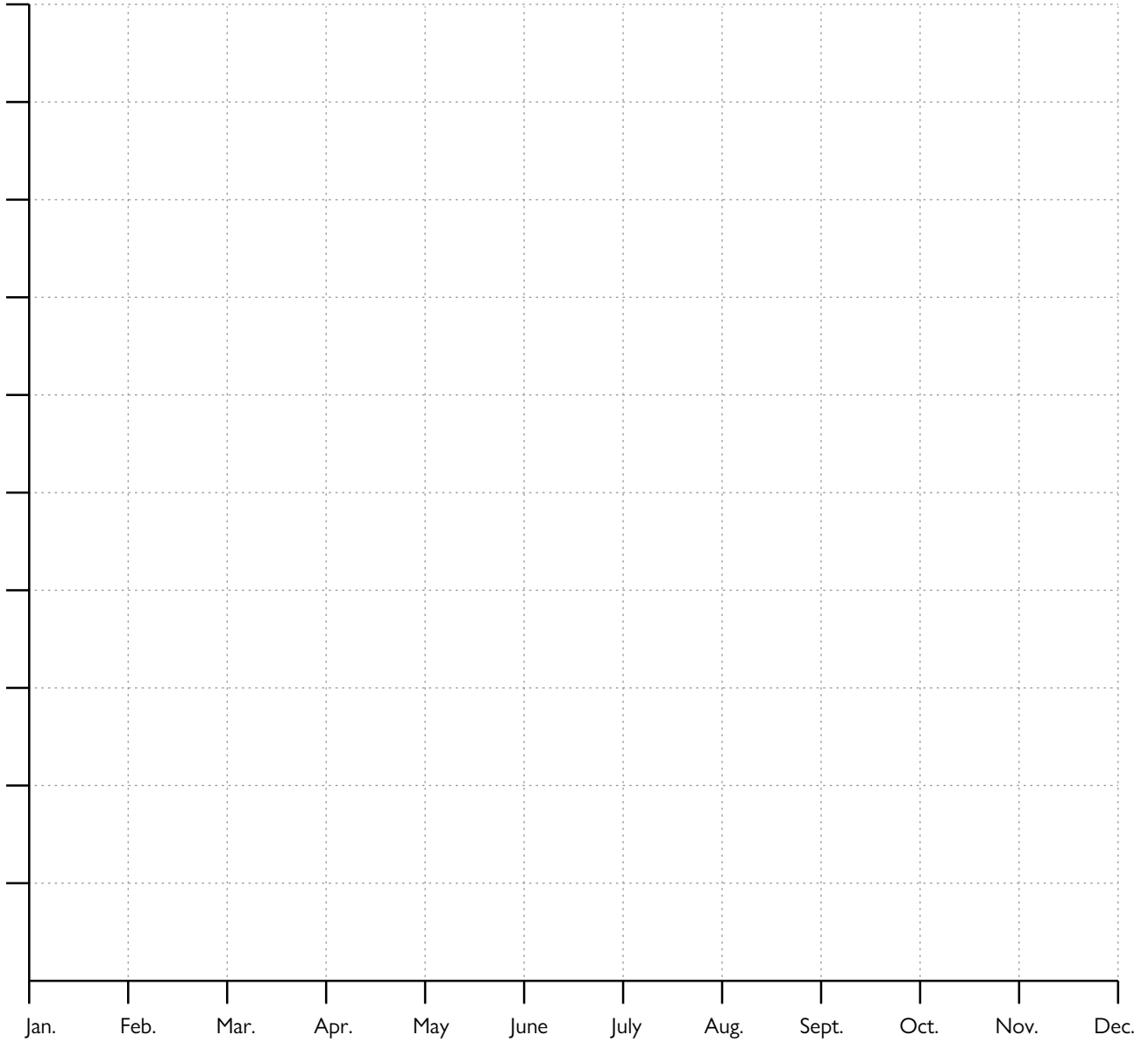
ELECTRICAL DEMAND TRACKING CHART

Monthly
Demand
Charge (kW)



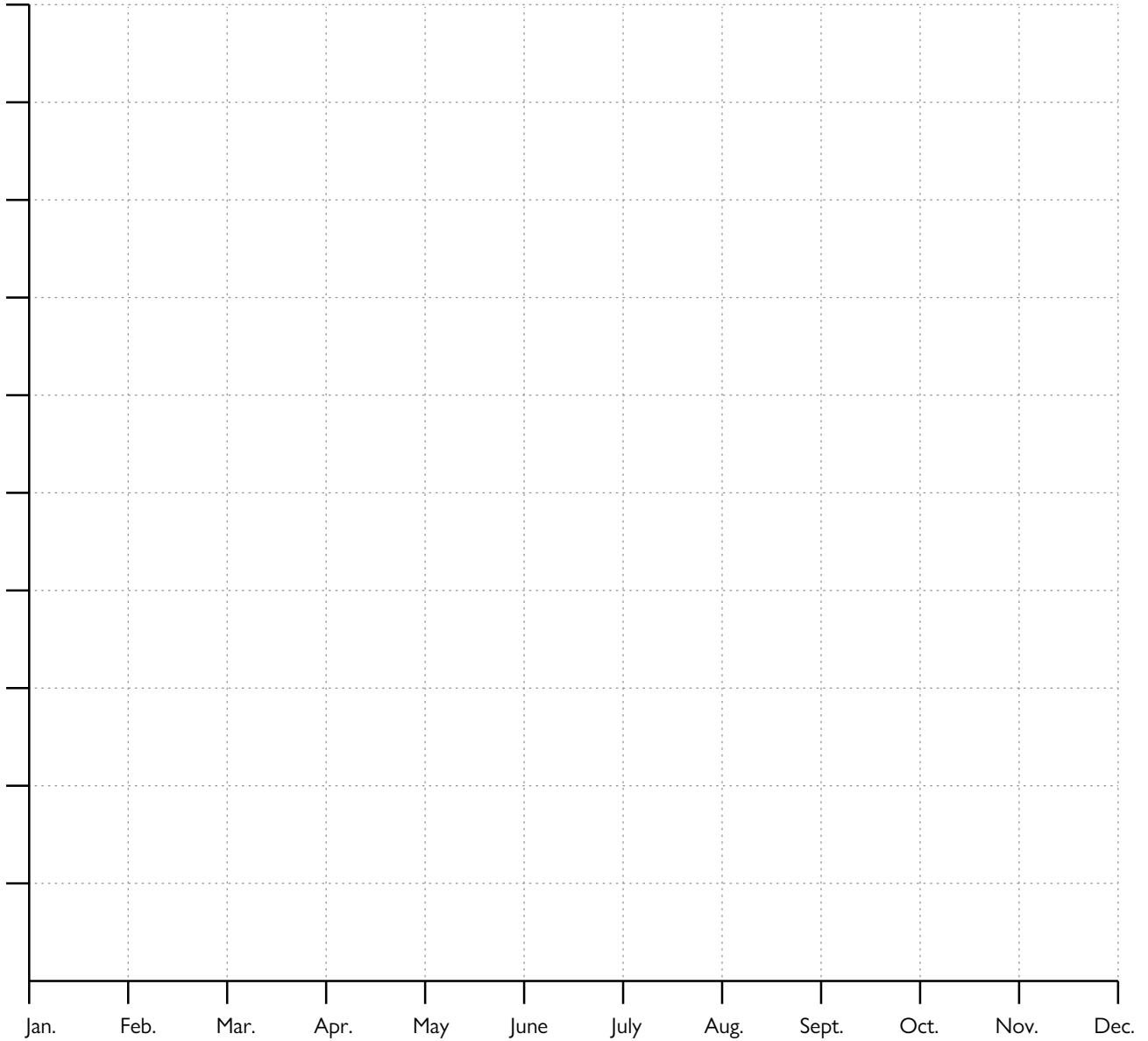
FUEL TRACKING CHART

Daily
Consumption
(ekWh/day)



WATER TRACKING CHART

Daily
Consumption
(m³/day)





6.0 Budgets and controlling costs

A budget is a great way to control your costs. It can also help break your income and expenses into a smaller number of meaningful categories.

You should always use accounting software to set up your budget. Most small business accounting programs cost a few \$100 or less, and they can save you hundreds of hours of work, prevent countless mistakes and give you a much better picture of your finances.

When choosing software, look for one that uses simple terminology and which lets you:

- create accounts for expenses and incomes;
- set monthly or quarterly budgets;
- set up main categories and subcategories for income and expenses;
- make forecasts and year-over-year comparisons;
- delete or modify transactions to correct mistakes (unless your accountant advises against it);
- track delinquent payments; and
- set up a reserve fund for capital projects.

6.1 ACCOUNTS

The **Income and Expense Categories** form at the end of this chapter will give you a good list of the typical income and expense categories used by most MURB owners and managers. You can also add subcategories, like expanding Maintenance and repairs into Housekeeping, Groundskeeping and Building systems.

6.2 RESERVE FUNDS

A reserve fund is a bank or investment account used to set aside money for large capital projects. This includes the cost of replacing most major building components or fixtures, such as:

- roofs;
- windows and doors;
- exterior walls;
- interior finishes;
- roads and sidewalks;
- sewers;
- heating, electrical and plumbing systems;
- elevators; and
- laundry, recreational and parking facilities.



In general, regular “wear and tear” items like window washing, landscaping and pressure washing are included in the operating and maintenance budget rather than the reserve fund.

Reserve funds are more common in condominiums than rental buildings, co-operatives or non-profits housing. But it’s always a good idea to have a reserve fund, regardless of what type of building you own or manage. The reserve fund requirements for condominiums are often set out in the provincial Condominium Acts, so make sure you’re familiar with these (and all other) regulations.

Budgeting capital expenditures

To calculate how much to contribute to your reserve fund, you’ll need to know how much it will cost to replace all the major equipment and fixtures in your building (including inflation) and how many years of usable life they each have left before they’ll need to be replaced.

The **Budgeting Expenditure Chart** and **Lifespans of Major Components** form at the end of this chapter can walk you through these calculations. You should also have your major equipment inspected by a qualified contractor or consultant every five years, to determine its current condition and how many years it has left.

To save yourself a lot of time and headaches, buy a software package that will calculate the Reserve Fund numbers for you. Just be sure the property manager knows how to use the software, and what information to enter.

To make sure your reserve fund can cover all the upcoming capital costs, you may also need to carry out an independent reserve fund review. This will give you a clear idea of how much money you need to put aside to keep your building in good working order for years to come.

6.3 TYPICAL OPERATING EXPENDITURES

The **Typical Operating Expenditures** form at the end of this chapter will give you an idea of the typical operating costs for a few different kinds of MURBs, on both a percentage and per-suite basis. While the costs can vary widely depending on the building age, condition and occupancy type, as a general rule:

- co-operatives have lower operating and maintenance costs than most MURBs;
- public housing has higher costs per suite than co-operatives; and
- private rental apartments usually have the highest per-suite costs.

6.4 PROPERTY TAXES AND APPEALS

Property taxes are another big part of the annual budget for any MURB. While the rates vary from one area to another, property taxes are calculated by multiplying the assessed value of your property (as set by your local municipality) by the mill rate (which is also set each year by the municipality).

If you don’t feel your assessed property value is fair, you can contact your local tax inquiries office to appeal. The best way to do this is to give examples of other buildings in the same area that have lower assessed values. The more similar the other buildings are to yours, the stronger your case will be.



6.5 INSURANCE

There are many kinds of insurance available to Canadian property owners. These include the following:

- **Property insurance:** Covers the cost of damage from disasters like fire or high winds. Building owners are legally required to have property insurance. You can also add additional insurance for things like earthquakes and floods. The standard deductible is around \$1,000, though a higher deductible can help reduce your premiums. For rental buildings, property insurance doesn't cover any of the personal belongings of your tenants. In a condominium, the unit owners are responsible for insuring the interiors of their suites, while the condominium board insures the common elements. See the **Insurance Coverage Table** at the end of this chapter for a quick comparison between two types of property insurance.
- **Liability insurance:** Covers building owners and staff for personal injury or other claims made as a result of "alleged negligence," like someone slipping on an icy sidewalk or burning themselves with centrally supplied hot water. Building owners are legally required to carry at least \$1,000,000 in liability insurance, and preferably more.
- **Boiler and machinery insurance:** Covers the cost of a "sudden and accidental breakdown" of the heating and cooling equipment (like a boiler explosion). This insurance is optional, but your mortgage holder may insist on it. You can also get rental income insurance to cover lost rents until your tenants can move back in.
- **Directors and officers liability insurance:** Covers board members, directors and officers of a condominium corporation from any actions taken against them for how they manage or operate a condominium.

Insurance can be a complex field. It may be in your best interests to have a licensed broker help you choose the right options. Remember that premiums are assessed on a case-by-case basis. Factors like the type, age and location of your property will all influence the final calculations.

6.6 MORTGAGE INTEREST AND AMORTIZATION

A significant portion of your monthly mortgage payments goes toward paying the interest. The exact amount will depend on the term of your mortgage, the interest rate and whether you make any accelerated payments. In Canada, mortgage interest is calculated using strictly controlled formulas and semi-annual compounding.

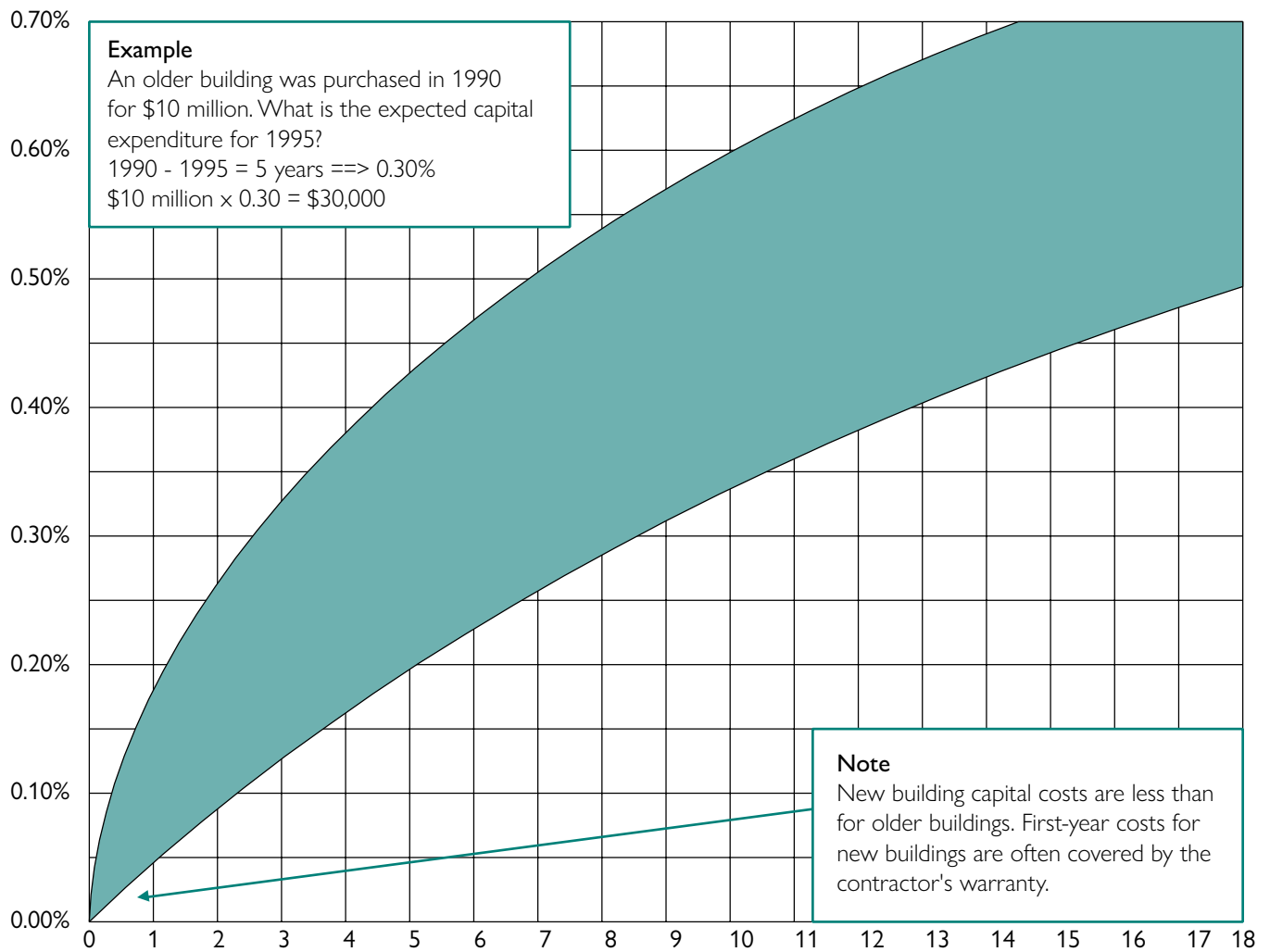


INCOME AND EXPENSE CATEGORIES

Income Categories		Expense Categories	
Accounting Category	Description	Accounting Category	Description
Rental income	<ul style="list-style-type: none"> • Gross potential rent • Total rent collected 	Advertising	
		Insurance	
Other related incomes	<ul style="list-style-type: none"> • Expense recovery <ul style="list-style-type: none"> - Utilities - Taxes - Damages - Water recovery • Defaults • Parking • Interest 	Interest	<ul style="list-style-type: none"> • Interest on mortgage(s)
		Maintenance and repairs	<ul style="list-style-type: none"> • Contracted services • Supplies, tools, etc.
		Management and administration fees	
		Motor vehicle expenses	
		Office expenses	<ul style="list-style-type: none"> • Supplies • Telephone • Equipment • Equipment depreciation
		Legal, accounting, and other professional fees	<ul style="list-style-type: none"> • Legal • Accounting • Consultants • Association dues
		Taxes	<ul style="list-style-type: none"> • Property taxes • GST • PST • Business taxes • Corporate taxes
		Salaries, wages, and benefits	<ul style="list-style-type: none"> • Maintenance staff • Office and management staff
		Travel	
		Utilities	<ul style="list-style-type: none"> • Cable TV • Electricity • Natural gas • Water
Other expenses	<ul style="list-style-type: none"> • Capital upgrades • Building and equipment depreciation 		



BUDGETING EXPENDITURE CHART



LIFE SPANS OF MAJOR COMPONENTS

Item	Years	Item	Years
RECREATIONAL FACILITIES		INTERIOR FINISHES	
Swimming pool	20–25	Carpets—common areas	5
Pool fence	10–20	Carpets—suites	10
Pool deck	15–25	Terrazzo	50
Equipment and change rooms	15	Painter plaster	10
MECHANICAL EQUIPMENT		Wallpaper	10–15
Fans	25	Ceramic tile	30
Chiller and cooling tower	20	Vinyl tile	20–25
Fan coil units	20	Suite entrance doors	35
Fire hoses	30	Kitchen cabinets	20
Sprinkler heads	50	HARD LANDSCAPE	
Stand pipe and distribution piping	50	* Asphalt roads and parking lots	50
Alarm system	25	* Concrete sidewalks and curbs	50
Compactor	20	Ramps to underground	15
Refuse chutes	35	Lamp standards	30
Elevator equipment	50	Signage	30
Elevator cab	25	Fountains	20–25
Pumps	20–25	BUILDING ENVELOPE	
Snow-melting equipment	15	* Masonry	50
Unitary air conditioners	20	Exterior painting	5
Heating boilers	25	Painted flashing	5
Boiler breeching and chimney	20	Balcony slabs	50
Domestic hot water storage tank	20	Balcony railings	15–20
Domestic water heater	15–20	Built-up roofing	20
Valves	20–30	Inverted roofing	50
Pressure reducing valves	15	Entrance doors	20
Cushion tanks	35	Sliding patio doors	25
Compressors	20	Parking garage doors	15–20
Domestic hot water piping		* Windows	25–30
Cast iron	15–20	Roof flashings	20
Copper	50	Metal siding	25
BUILDING ELECTRICAL		Metal gratings	30
Smoke detectors	10	* Front canopies	30–40
Fire alarms	10	APPLIANCES	
Intercom	10	Clothes dryer	10
Emergency lighting	10	Dishwasher	10
Power distribution	30	Stove	20
Transformer	30	Refrigerator	20
		Washing machine	10

Components marked with an asterisk * show a lifespan on this chart; however they should be regularly inspected and repaired as needed. With this kind of maintenance, it should never be necessary to remove and replace them unless the building owner wants to change the design.



TYPICAL OPERATING EXPENDITURES

Typical Operating Expenditures on a Percentage and a Per-Suite Basis

Budget categories	Co-operative Housing						Public Housing		Private Rental Apartments	
	Built 1973 to 1978		Built 1979 to 1985		Built 1986 to 1991		%	Per Suite	%	Per Suite
	%	Per Suite	%	Per Suite	%	Per Suite				
Taxes	30.7	\$793	28.4	\$622	27.3	\$781	22.4	\$780	25.2	\$911
Utilities	14.1	\$364	15.0	\$329	17.7	\$506	20.7	\$721	24.3	\$879
Operations	15.2	\$393	14.5	\$317	14.2	\$407	22.8	\$794	15.1	\$547
Maintenance	18.0	\$464	12.1	\$266	21.6	\$617	11.7	\$409	16.8	\$607
Administration	12.7	\$328	13.0	\$285	11.6	\$332	9.2	\$321	9.4	\$340
Reserves	9.4	\$242	17.0	\$372	7.5	\$214	13.1	\$458	9.2	\$332
Total	100	\$2,584	100	\$2,191	100	\$2,857	100	\$3,483	100	\$3,616

INSURANCE COVERAGE TABLE

Peril	“Named Perils” Insurance	“Broad Form” Insurance
Fire	Covered	Covered
Explosion (with the exception of boiler explosion)	Covered	Covered
Lightning	Covered	Covered
Smoke	Covered	Covered
Impact by aircraft or spacecraft	Covered	Covered
Impact by land vehicles	Covered	Covered
Impact by owned vehicles or employees' vehicles	Not Covered	Covered
Riot	Covered	Covered
Malicious acts	Covered	Covered
Sprinkler leakage	Covered	Covered
Windstorm	Covered	Covered
Hail	Covered	Covered
Water damage from plumbing or water main	Not Covered	Covered
Theft or burglary	Not Covered	Covered
Burglary damage	Not Covered	Covered
Collapse of building	Not Covered	Covered
Snow or ice load	Not Covered	Covered
Falling objects	Not Covered	Covered
Freezing of plumbing	Not Covered	Not covered, but subsequent water damage is covered.

Courtesy Harry Edgar, South Waterloo/ Edgar Insurance Brokers Ltd.





7.0 Emergency and fire safety plans



All MURBs in Canada that are mandated under provincial building codes to have a fire alarm system, must also have a fire safety plan. Failing to prepare a fire safety plan is a serious offence that could result in substantial penalties.

Depending on where your property is located, there may be some exceptions. Contact your local fire marshall's office for the regulations in your area. But no matter where your building is located, all fire safety plans should include:

- relevant building information (like the location of exits and entrances, extinguisher and alarm details, and other details set out in **appendix C: Template for Emergency and Fire Safety Plan** at the end of this manual);
- specific initiatives you and your staff are taking to prepare for emergencies;
- a list of safety practices your staff members will follow in their daily activities; and
- an emergency response plan of action.

Your fire safety plan must be approved by the local fire marshall. Instructions on what to do in case of a fire or other emergency should also be given to every tenant in their **Tenant Information Package (Template)**(see **appendix D** of this manual).

The property manager and staff should carry out fire drills once every three months. They can use the **Fire Drill Record** at the end of this chapter to record the results of each drill, and keep those records in a binder with the Emergency and Fire Safety Plan.

Make sure all staff members are familiar with these plans and know where the air handling system controls are, and how to deactivate or activate them in the event of a fire. The property manager should also ask your local fire and building departments for instructions on how to evacuate occupants and what to tell your tenants to do in case of an emergency, to make sure everyone stays as safe as possible.



7.1 EMERGENCY PREPAREDNESS

A big part of being prepared for an emergency is making sure your critical systems continue to operate, even during a power failure.

The Building Code requires every building in Canada to have enough emergency back-up power for all the occupants to get safely outside within two hours of the start of a power failure. You should also have a secondary power system in place that will let your tenants live safely in their homes for a few days during an extended power failure. To do this:

1. Make sure your emergency and back-up power systems are compliant with all current Codes;
2. Figure out how much power you'll need to supply when the electricity goes out; and
3. Let your insurance company know you're supplying enough backup power to keep your pipes from freezing in an emergency, to see if you qualify for a lower premium.

Consult with a licensed professional engineer to decide which backup options are best for your building. Some of the things you may want to keep working in an emergency could include:

- fire alarms;
- exit and emergency lights;
- firefighter's elevator;
- smoke evacuation fans;
- heating boilers and pumps;
- security systems and CCTV;
- building access FOBs, ADOs, etc.;
- sprinkler pipe heat tracing;
- garage exhaust fans and CO monitoring systems;
- hot water boilers and pumps;
- cold water booster pumps;
- resident manager or rental office;
- party or social room; and/or
- secondary standby power receptacles for each suite to power fridges, lights, charge health equipment, etc.





8.0 Lease administration

8.1 SELECTING TENANTS

It's important to keep your building fully occupied. But you also want to have good tenants. One of the best ways to avoid unpleasant surprises is to go over every rental application you get as closely as possible. You can also:

- use the **Lease Application** and **Verification of Residency Application** forms at the end of this chapter to organize each tenant's information and get authorization for a background check;
- contact their bank and Equifax or TransUnion to check each applicant's credit history; and
- contact their current or previous landlords to ask about what kind of tenants they are.

When you make your choice, create a file for each new tenant with their lease application, verification of residency application and a signed copy of the lease.

Remember: The rules and forms can vary from one region to another. So make sure you're familiar with the *Landlord and Tenant Act* for your province.

8.2 INSPECTING SUITES FOR DAMAGE

New tenants have the right to expect their suite to be clean and in good condition. To protect yourself and your tenants, walk through the apartment with the tenant and complete an **Apartment Interior Inspection Report** (included at the end of this chapter) before they move in. You can use the same form to do another walk-through to record any damage when they move out.

As part of the inspection, test all receptacles, faucets, showers and toilets, and fix anything that isn't working properly. Last, give all new tenants a **Tenant Information Package (Template)** (see **appendix D** of this manual) to let them know their rights and responsibilities, and how to take care of their new home.

8.3 CHANGING OR TERMINATING A LEASE

From time to time, you may need to change the terms of a lease. This could be to change something like an assigned parking spot, or to extend or terminate the lease.

If you need to record any financial changes, fill in the **Resident's Information Report** at the end of this chapter. Have it signed by both parties, keep one copy in your files, and give the other copies to the superintendent and the tenant.

If you're terminating a lease, have the superintendent do a moving-out inspection using the **Apartment Interior Inspection Report**. You can then compare this report to the one that was done when they moved in, to see if there has been any damage.

If there isn't any damage, send a **Resident Information Report** to the tenants along with a cheque for the full amount of their damage deposit (plus interest if applicable) within a month after they move out.

If there is damage, send the tenant a copy of the move-in and move-out inspections along with a cheque for the damage deposit, minus the cost of the repairs. The amounts you can deduct can be taken from a contractor's invoice.



8.4 TRACKING RECEIVABLES

A standard software program is the best way to track rent collection. You can also use the **Monthly Rental and Vacancy Report** at the end of this chapter to track rent payments manually from one month to the next.

8.4.1 Late payments

Most tenants pay their rent on time. But there will always be some that don't. To help you avoid and deal with late payments, do the following:

- Create a fair-but-firm late payment policy based on the *Landlord and Tenant Act* in your province. This should include the date each month when the rent is due, and what will happen if rent is paid late.
- Have your tenants give you enough postdated cheques to take them to the end of their lease, or use preauthorized automatic withdrawals.
- When a rent payment is late (or is returned NSF), give the tenant a friendly written notice that their rent is overdue and ask them to pay it immediately. If they don't respond within 24 hours, visit them in person to ask why they haven't paid their rent.
- Depending on what they say, you may decide to give them some extra time. If their reasons don't sound legitimate, remind them about your policy on late payments, and what will happen if they don't pay their rent.
- If the tenant says they aren't paying their rent because of repairs that need to be done, tell them to fill out a **Maintenance Request Form—General** and that the repairs will be addressed separately. But they still need to pay their rent in full and on time.

Contact the Landlord and Tenant Board in your province to get copies of sample late payment policies and forms you can use to follow up on late payments. But be sure to make every effort to keep relations cordial. Legal action costs time and money, so try to solve any problems by talking with your tenants first.

8.5 MARKETING AND ADVERTISING

Every building appeals to a particular kind of tenant. Your advertising and marketing should therefore focus on your building's unique target market.

Most standard 60-days' notice leases will give you plenty of time to advertise any vacancies online and in local real estate circulars or newspapers. Start placing ads 30 to 45 days before a suite will be available, as furnished suites are usually easier to rent than ones that are empty. If the suite is vacant already, make sure it's in good condition and has a fresh coat of paint before you show it.

If you want to change the kinds of tenants your building attracts, a marketing company can help you change your "brand" and target market. But be aware that this type of change can take a lot of time, money and expertise.



8.6 CONDOMINIUM BOARDS AND TENANT ASSOCIATIONS

Condominiums are like corporations. The condominium board is the board of directors. The suite owners are the shareholders. And the property manager is the employee.

Property managers should usually attend the regular condominium board meetings to brief the directors on the day-to-day operations. It sometimes also falls to them to offer advice, handle disagreements and tell less-experienced boards about the proper legal protocols. So make sure you're fully familiar with both your province's *Condominium Act* and the condominiums charter documents.

For rental MURBs, sometimes the tenants will form a tenant association. These associations have no legal power. But they can give a voice to your tenants' concerns, and a single point of contact for you to address complaints. They can also enhance the feel of community in a building, which increases tenant satisfaction and security and reduces turnover and vacancies.

If your building has a tenant association, consider offering its members a meeting space or other supplies. You should also try to meet with the members every two months or so, to talk about any concerns they (or you) might have.



LEASE APPLICATION

Building rent roll no. _____ **Suite no.** _____ **Suite type:** _____

First period	FROM	TO	RENT	PARKING	TOTAL
Second period	FROM	TO	RENT	PARKING	TOTAL

Building name: _____ **Building address:** _____

City: _____ **Province:** _____ **Postal code:** _____

I agree to pay in advance the prorated amount of \$ _____ to cover the rent period:

From: _____ To: _____

I would like to move in on or about _____

I agree to pay for the following services applicable to the premises being rented:

Electricity Fuel Domestic hot water Other describe: _____

I require parking for _____ car(s). Underground Outside Carport Garage space no(s).

	Year	Make	Colour	Car License No.	Driver's Name
Car:					
Car:					

Applicant's name: _____

SURNAME FIRST NAME

Social insurance number

--	--	--	--	--	--	--	--

Applicant's driver's license number: _____

Names and year of birth of all the occupants of apartment. _____

I HAVE INSPECTED THE ABOVE DESCRIBED APARTMENT AND AGREE TO ACCEPT IT WITHOUT DECORATING

Applicant's signature: _____

History of Present & Previous Residences

	Addresses (include suite number)	Rents Paid	Phone Numbers
Present—how long			
Present landlord			
Previous—how long			
Previous landlord			

LEASE APPLICATION (CONT.)

Building rent roll no. _____ **Suite no.** _____ **Suite type:** _____

Building name: _____ **Building address:** _____

City: _____ **Province:** _____ **Postal code:** _____

History of present and previous residences

	NAME & ADDRESS	PHONE NUMBER	OCCUPATION	ANNUAL INCOME	HOW LONG?
Present employer					YEARS MONTHS
Past employer					TOTAL YEARS MONTHS

Credit references

BANK	BRANCH	ACCT. NO.	TYPE:
BANK	BRANCH	ACCT. NO.	TYPE:
NAME	ADDRESS	PHONE NO.	
1.			
2.			
3.			

Personal references

NAME	ADDRESS	PHONE NO.
1.		
2.		
3.		

In case of emergency call: _____ Phone no. _____

I agree that upon acceptance of this application by the landlord I shall forthwith enter into a tenancy agreement upon the above terms upon the Landlord's usual form, in which event the deposit shall be applied towards the last month's rent. If I should fail to enter into such tenancy agreement, then, in addition to any other rights accruing to the landlord, I agree that the deposit shall be forfeited.

The applicant consents to the obtaining of such information from his or her present, past or future employer; any credit reporting agency; any financial institution or any other person as the landlord may deem necessary at any time in connection with the financial status of the undersigned tenant, in conjunction with the premises hereby applied for or any renewal or extension thereof. The undersigned also consents to the disclosure of any information to any credit reporting agency or to any person with whom the undersigned has or proposes to have financial relations.

Dated at _____ this _____ day of _____ 20 _____

I hereby certify that all the information on this application is true.

Signature of applicant: _____ Signature of witness: _____



VERIFICATION OF RESIDENCY APPLICATION

1. Credit bureau records check	Present address:			
	Present employer:			
	Previous employer			
	Position/occupation:			
	Bank:			
	Bank loans:		Method of payment:	
	Other loans or obligations to finance companies, etc.:			
	Judgments or bad debt collections:			
	Further information:			
2. Check of bank records	Account behaviour			
	Loans - \$		\$	Repayment history:
	Any variations in address, etc.:			
3. Check of finance company's references				
4. Credit reference check	1.		Comments:	
	2.		Comments:	
5. Landlord check	Comments/behaviour	How long	Rent paid	Payment habits
	Present			
	Previous			
6. Employment check	Position	How long	Income	Comments
	Present			
	Previous			
7. Personal references	Known how long		Comments	
	1.			
	2.			
	3.			
8. General comments				
9. Checked by				Date:
10. Accepted by				Date:
11. Rejected by				Date:
12. Explain fully reason for rejection				



APARTMENT INTERIOR INSPECTION REPORT

Date: _____ **Tenant name:** _____

Apartment no.: _____ **Building rep. name:** _____

Building: _____ **Tenant is moving in** **Tenant is moving out**

Building address: _____

Please check the box after the item is inspected and found to be in good condition. If the item is not in satisfactory condition, note the problem and the course of action in the comments box.

Vestibule:

- | | | |
|--|---|-----------------|
| <input type="checkbox"/> Entrance door | <input type="checkbox"/> Floor | Comments: _____ |
| <input type="checkbox"/> Door hinges | <input type="checkbox"/> Walls | _____ |
| <input type="checkbox"/> Door lock | <input type="checkbox"/> Ceiling | _____ |
| <input type="checkbox"/> Safety chain | <input type="checkbox"/> Light fixtures | _____ |
| <input type="checkbox"/> Doorplate | <input type="checkbox"/> Light switches | _____ |
| <input type="checkbox"/> Transom | <input type="checkbox"/> _____ | _____ |

Coat Closet:

- | | | |
|---|---|-----------------|
| <input type="checkbox"/> Doors | <input type="checkbox"/> Ceiling | Comments: _____ |
| <input type="checkbox"/> Floor | <input type="checkbox"/> Shelving | _____ |
| <input type="checkbox"/> Interior walls | <input type="checkbox"/> Rods and hooks | _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | _____ |

Living Room:

- | | | |
|-------------------------------------|--|-----------------|
| <input type="checkbox"/> Floor | <input type="checkbox"/> Doors | Comments: _____ |
| <input type="checkbox"/> Baseboards | <input type="checkbox"/> Light fixtures | _____ |
| <input type="checkbox"/> Walls | <input type="checkbox"/> Electric outlets | _____ |
| <input type="checkbox"/> Ceiling | <input type="checkbox"/> Electric switches | _____ |
| <input type="checkbox"/> Windows | <input type="checkbox"/> _____ | _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | _____ |

Tenant's initials: _____ **Building rep. initials:** _____

APARTMENT INTERIOR INSPECTION REPORT (CONT.)

Date: _____ **Tenant name:** _____

Apartment no.: _____ **Building rep. name:** _____

Building: _____ **Tenant is moving in** **Tenant is moving out**

Building address: _____

Please check the box after the item is inspected and found to be in good condition. If the item is not in satisfactory condition, note the problem and the course of action in the comments box.

Master bedroom

- | | | |
|-------------------------------------|---|---|
| <input type="checkbox"/> Floor | <input type="checkbox"/> Doors (main, closet) | Comments: _____

_____ |
| <input type="checkbox"/> Baseboards | <input type="checkbox"/> Shelves, rods, hooks | |
| <input type="checkbox"/> Walls | <input type="checkbox"/> Light fixtures | |
| <input type="checkbox"/> Ceiling | <input type="checkbox"/> Electric outlets | |
| <input type="checkbox"/> Windows | <input type="checkbox"/> Electric switches | |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | |

Bedroom no.2

- | | | |
|-------------------------------------|---|---|
| <input type="checkbox"/> Floor | <input type="checkbox"/> Doors (main, closet) | Comments: _____

_____ |
| <input type="checkbox"/> Baseboards | <input type="checkbox"/> Shelves, rods, hooks | |
| <input type="checkbox"/> Walls | <input type="checkbox"/> Light fixtures | |
| <input type="checkbox"/> Ceiling | <input type="checkbox"/> Electric outlets | |
| <input type="checkbox"/> Windows | <input type="checkbox"/> Electric switches | |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | |

Bedroom no.3

- | | | |
|-------------------------------------|--|---|
| <input type="checkbox"/> Floor | <input type="checkbox"/> Doors | Comments: _____

_____ |
| <input type="checkbox"/> Baseboards | <input type="checkbox"/> Light fixtures | |
| <input type="checkbox"/> Walls | <input type="checkbox"/> Electric outlets | |
| <input type="checkbox"/> Ceiling | <input type="checkbox"/> Electric switches | |
| <input type="checkbox"/> Windows | <input type="checkbox"/> _____ | |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | |

Tenant's initials: _____ **Building rep. initials:** _____

APARTMENT INTERIOR INSPECTION REPORT (CONT.)

Date: _____ **Tenant name:** _____

Apartment no.: _____ **Building rep. name:** _____

Building: _____ **Tenant is moving in** **Tenant is moving out**

Building address: _____

Please check the box after the item is inspected and found to be in good condition. If the item is not in satisfactory condition, note the problem and the course of action in the comments box.

Dining room

- | | | |
|-------------------------------------|--|--|
| <input type="checkbox"/> Floor | <input type="checkbox"/> Windows | Comments: _____

_____ |
| <input type="checkbox"/> Baseboards | <input type="checkbox"/> Light fixtures | |
| <input type="checkbox"/> Walls | <input type="checkbox"/> Electric outlets | |
| <input type="checkbox"/> Ceiling | <input type="checkbox"/> Electric switches | |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | |

Kitchen

- | | | |
|---|--|--|
| <input type="checkbox"/> Floor | <input type="checkbox"/> Refrigerator | Comments: _____

_____ |
| <input type="checkbox"/> Baseboards | <input type="checkbox"/> Stove | |
| <input type="checkbox"/> Walls | <input type="checkbox"/> Light fixtures | |
| <input type="checkbox"/> Ceiling | <input type="checkbox"/> Electric outlets | |
| <input type="checkbox"/> Shelves, drawers | <input type="checkbox"/> Electric switches | |
| <input type="checkbox"/> Faucet, sinks | <input type="checkbox"/> _____ | |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | |

Storage Closet

- | | | |
|----------------------------------|---|-----------------------------------|
| <input type="checkbox"/> Floor | <input type="checkbox"/> Light fixture | Comments: _____

_____ |
| <input type="checkbox"/> Walls | <input type="checkbox"/> Fuse box | |
| <input type="checkbox"/> Ceiling | <input type="checkbox"/> Hot water heater | |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | |

Tenant's initials: _____ **Building rep. initials:** _____

APARTMENT INTERIOR INSPECTION REPORT (CONT.)

Date: _____ **Tenant name:** _____

Apartment no.: _____ **Building rep. name:** _____

Building: _____ **Tenant is moving in** **Tenant is moving out**

Building address: _____

Please check the box after the item is inspected and found to be in good condition. If the item is not in satisfactory condition, note the problem and the course of action in the comments box.

Washroom

- | | | |
|---|---|-----------------|
| <input type="checkbox"/> Floor | <input type="checkbox"/> Sink, faucet | Comments: _____ |
| <input type="checkbox"/> Baseboards | <input type="checkbox"/> Toilet, toilet roll | _____ |
| <input type="checkbox"/> Walls | <input type="checkbox"/> Bath, shower rod | _____ |
| <input type="checkbox"/> Ceiling | <input type="checkbox"/> Faucets, shower head | _____ |
| <input type="checkbox"/> Closets, shelves | <input type="checkbox"/> Electric outlets | _____ |
| <input type="checkbox"/> Towel rods | <input type="checkbox"/> Electric switches | _____ |
| <input type="checkbox"/> Door, lock | <input type="checkbox"/> Exhaust fans | _____ |
| <input type="checkbox"/> Vanity mirror | <input type="checkbox"/> _____ | _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | _____ |

Balcony/sunroom

- | | | |
|--|--|-----------------|
| <input type="checkbox"/> Floor | <input type="checkbox"/> Screen door | Comments: _____ |
| <input type="checkbox"/> Baseboards | <input type="checkbox"/> Door, lock | _____ |
| <input type="checkbox"/> Walls | <input type="checkbox"/> Overall cleanliness | _____ |
| <input type="checkbox"/> Ceiling | <input type="checkbox"/> Electric outlets | _____ |
| <input type="checkbox"/> Sliding doors | <input type="checkbox"/> Electric switches | _____ |
| <input type="checkbox"/> _____ | <input type="checkbox"/> _____ | _____ |

Tenant's initials: _____ **Building rep. initials:** _____

RESIDENT'S INFORMATION REPORT

Resident's name: _____ Building no.:

--	--	--

Building: _____ Suite no.:

--	--	--	--

- Parking change
 Assignment
 Lease extension
 Other

NEW INFORMATION

EFFECTIVE DATE

Name: _____

Rental: _____ \$ _____

Parking: Space no.: _____

Space no.: _____ \$ _____

Tenancy date: Commencement _____

Expiry _____

AUTHORIZATION
DATE

- Termination (includes sub-lets)
 Skip
 Other _____
- IF OTHER, INDICATE

New rent \$ _____ Apply prepaid rent of \$ _____ To _____ MONTH OF _____

TO BE RETURNED:
 Prepaid rent \$ _____
 Sublet fee \$ _____
 Rent \$ _____

 Interest \$ _____
 Other \$ _____

IF OTHER, INDICATE

TO BE DEDUCTED: **CONSENT TO DEDUCT DAMAGES HAS BEEN RECEIVED:**

Damages: Inv. no.: _____
 Cost no.: _____
 Amount \$ _____

 Inv. no.: _____
 Cost no.: _____
 Amount \$ _____

Name of payee(s) _____

(IF DIFFERENT FROM RESIDENT(S) AND WITH HIS WRITTEN PERMISSION)

Forwarding address: _____

Comments: _____

Approved by _____ DATE _____

PROPERTY MANAGER

MAINTENANCE REQUEST FORM—GENERAL

Building address: _____ **Floor:** _____ **Home phone:** _____

Resident's name: _____ **Suite:** _____ **Work phone:** _____

Request: _____

Request received by: _____ **Date:** _____

I, the undersigned, hereby acknowledge that I requested the maintenance described below to be done in my apartment. I expect that this work will be completed as soon as possible. I authorize the management staff or, if necessary, a contractor to enter my apartment during reasonable hours in order to complete the work. Notwithstanding my absence from the apartment at the time of entry, my signature on this request form shall be my consent to enter my apartment to do the work described below. Should more than one visit be necessary to correct the problem I also give my consent.

Resident's signature: _____ **Date:** _____

Resident: Please fill out the above information and submit to the superintendent. Do not fill out beyond this point.

A. Conditions in the suite

Inspected by: _____ **Date:** _____

B. Action taken to fix problem

Problem corrected by: _____ **Date:** _____

C. Recommended action required

Recommended by: _____ **Date:** _____

D. Property manager

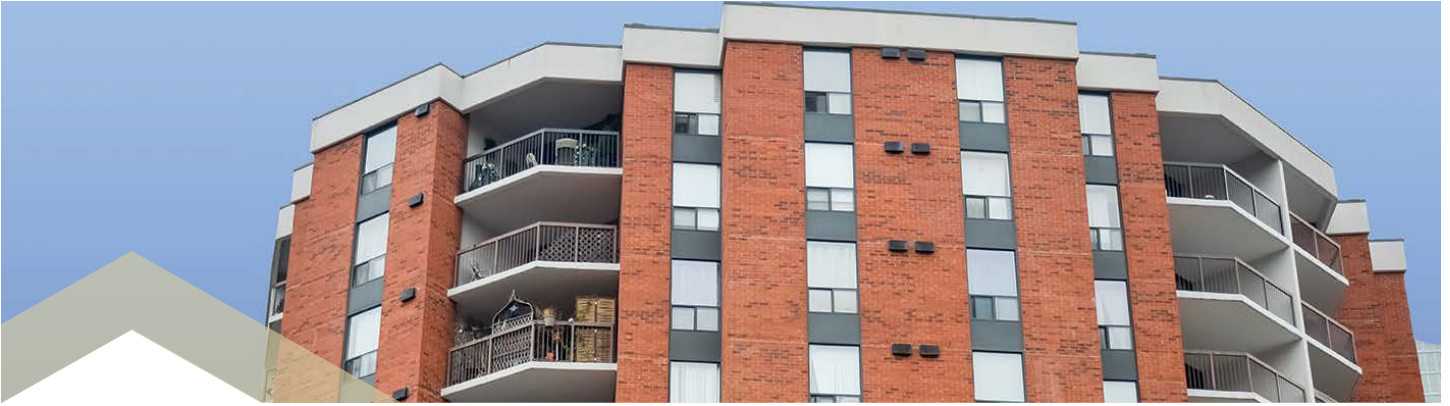
Action Taken	Number	Who to Correct	Date Issued
<input type="checkbox"/> Work order			
<input type="checkbox"/> Purchase order			
<input type="checkbox"/> Resident to be invoiced?			
<input type="checkbox"/> Insurance claim no.:			

Work to be done:

Work authorized by: _____

Date: _____





9.0 Contractors and consultants



Contractors and consultants can be hired for a wide range of specialized work. This includes:

- plumbing;
- electrical;
- elevator service;
- snow removal;
- pest control;
- engineering;
- architecture;
- controls;
- fire alarm monitoring;
- communication wiring;
- carpet and floor installation;
- security systems;
- major renovations;
- internal audits;
- tax planning; and
- legal help with evictions.

For most small jobs, you can hire a contractor directly using a **Purchase Order** (see end of chapter 4). For larger jobs, you may need to get bids and negotiate a contract. The contract should include the financial terms and a very clear description of the products or services to be delivered, and the time frame involved.

Remember: whether it's called an *offer, tender, quote, bid, estimate* or *contract*, any piece of paper you sign is a legally binding document. Make sure all the details are crystal clear before you put anything in writing.

For very big jobs, or when dealing with a new contractor, have a lawyer review the contract for you.

9.1 HIRING A CONSULTANT

Consultants are experts who are hired to give you cost-effective solutions to complex problems. They can be expensive. But for large or costly projects, their advice can also be invaluable.

For major architectural renovations that need a building permit, an architect can help create drawings, outline the specifications and make sure all codes are met. They can also give you advice if you need to bring other experts onto the project, like a structural or mechanical engineer.

For major retrofits, an engineer or architect can help make sure everything is installed properly and professionally. Among other benefits, hiring a professional consultant can help you:

- decide which equipment, materials and systems are best for your needs, building and budget;
- get the best price by sending big jobs out for competing bids; and
- make sure everything is installed correctly and meets the right specifications, codes and industry standards.

When choosing a consultant, ask for references for three similar jobs they've done recently and contact them to get their opinion of the work they had done. And make sure you or your manager are always consulted before any decisions are made. This will help you to stay in control and in the loop.



9.2 HIRING A CONTRACTOR

Contractors are usually hired for a specific job, and paid for their time, expenses and materials. Most contractors use one of the following two main types of contracts:

- **Lump sum contracts:** To provide goods or services for a specified fixed amount. In most cases, this amount shouldn't change. For major renovations, there could be an increase of up to 10% for unforeseen costs. Because it's for a fixed price, the terms and details of the work must be very precise. If anything comes up that couldn't be anticipated when they made their bid, the contractor won't be held to the agreed-upon price. Some contractors will give low bids to get a job, and then look for ways to drive the price up once they start working. To protect yourself, make sure the contract is as clear, specific and complete as possible.
- **Cost-plus contracts:** For jobs where you aren't sure how much work will be needed and can't set a fixed price. In these cases, the contractor will record all the money they spend on labour, materials and subcontractors, and bill you for them along with a set fee you agree to at the start. Cost-plus contracts can also include an **upset sum clause**, where the contractor agrees that the total cost (including their fee and all expenses) won't exceed a set price.

Lump sum contracts are usually best when dealing with a new contractor. They also let you know in advance what the final price will be and help keep costs down.

9.3 TERM OF SERVICE CONTRACTS

When working with a new contractor, the initial term of service should be for one year. Once you're satisfied with their work and prices, you can negotiate a longer term at a discount.

All contracts longer than one year should have a clause that lets either party terminate the contract "with cause" with 30-day written notice. This protects the contractor if they don't get paid. It also lets you cancel a contract for things like poor work or non-performance. Just be sure to give several written warnings first, and keep copies of them in your records.

Over time, your contractors will become very familiar with your building and what it needs. Choosing the right contractors and building a long-term relationship with them can go a long way toward lightening your staff's workload and keeping your building running smoothly and profitably.

9.4 ADDITIONS TO CONTRACTS

If anything changes or comes up that wasn't included in the original bid, the price for those additional expenses should be listed and agreed to as soon as possible. If you feel the costs are fair, you can revise the contract to include them. Don't wait until after the job is finished, or you could leave yourself open to arguments, disagreements or legal action.



9.5 ESCALATION CLAUSES

Contracts are meant to be fair to both parties. If you're negotiating a long-term contract, include a fair rate for price increases in the future if the contractor's labour or material costs go up. This could be due to things like:

- inflation;
- new union contracts; or
- increases in taxes or insurance.

Remember: it's up to the contractor to prove their costs have gone up enough to justify charging you more.

9.6 PAYMENT SCHEDULES

For most service contracts, you'll usually have to make regular payments over time (rather than a single lump-sum payment).

For renovation and retrofit contracts, the payments should be linked to project milestones, like finishing the foundation or installing a particular piece of equipment. If you're using a consulting engineer or architect, they can help you set a reasonable payment schedule.

Most payment schedules will include a "holdback" amount of around 10% of the total budget. This protects you in case any subcontractors aren't paid by the contractor and decide to put a lien on the building to get their money. The holdback (and any other final payments) shouldn't be paid until:

- all the work is completed to your satisfaction;
- the Worker's Compensation Board certifications are received; and
- your lawyer makes sure there aren't any liens on the building.





10.0 Filing systems

Most office workers waste 25% of their time just looking for information. You can save yourself and your staff a lot of time and money by using a simple filing system to keep your records organized in a clear and logical way. This includes:

- buying a commercial-grade filing cabinet for each building;
- using a portable label maker to mark cabinet drawers, binders and individual files;
- getting a sturdy bookshelf for any books or binders that can't be filed; and
- using a computerized filing system (with a reliable backup) for your electronic documents.

To make it easier for your staff members to find what they need, create separate binders (or even separate file cabinet drawers) for all the forms, files and other documents you use regularly. This includes things like:

- blank copies of the **Lease, Maintenance Request** and **Tenant Information Package**;
- your **Emergency and Fire Safety Plan** plus any fire system test and fire drill results;
- **tenant files** for all active tenants, arranged by last name or unit number, and containing the **Lease Application, Verification of Residency Application, Lease, Moving-in Inspection Form, Resident's Information Report** and any **Maintenance Requests**;
- **monthly rental and vacancy reports** for each fiscal year;
- **service contracts** including signed contracts, changes or additions, purchase orders, billing records, payment records, work orders and warranties in separate folders for your mechanical, electrical, housekeeping, groundskeeping, elevator, fire protection, communication, sprinklers, pool maintenance, garbage removal, pest control, snow removal and other contractors;
- **maintenance requests, purchase orders, work orders** and **quotes** for all space heating, water, air conditioning, ventilation, structural, swimming pool, recreation centre, electrical and lighting, housekeeping, groundskeeping and other maintenance categories;
- **utility files** with copies of any **heating water control graphs, electrical tracking forms and charts, fuel tracking forms and charts**, and **water tracking forms and charts** for the year; and
- any **miscellaneous files**, like energy conservation projects, reserve fund projects, security problems, insurance issues, legal issues or computer information (like backup disks, passwords and so on).

Your files should only include active tenants and up to three years for other records. Older files can be archived in cardboard storage boxes.



Appendices

Appendix A: The property manager’s responsibilities	105
Appendix B: The superintendent’s responsibilities	107
Appendix C: Template for emergency and fire safety plan	111
Appendix D: Tenant information package (template)	127
Appendix E: Glossary of terms	137

APPENDIX A: THE PROPERTY MANAGER'S RESPONSIBILITIES

General

The following defines the leasing administration, and maintenance services expected of the property manager. It also sets objectives and standards against which performance can be measured. The property manager reports to the owner(s). He or she is expected to direct the superintendent and manage any other on-site or outside contracting staff performing maintenance or refurbishment in the assigned building.

Objectives

1. Administer and monitor the financial transactions necessary for the operation of the building.
2. Provide safety, security, satisfaction and a general feeling of well-being for people living in the assigned building.
3. Always maintain the assigned building to the owner's standard.
4. Strive to expand the personal and technical skills of the superintendent and the other on-site staff.
5. Provide professional and timely service for the people working in or using the facility.
6. Ensure that preventative, corrective and breakdown maintenance, custodial care, refurbishment, and renovations are handled in a cost-effective and professional manner.
7. Maintain a formal and harmonious relationship with the tenants and visitors to the building.

Accountabilities

1. Hire all workers, trades and professionals as may be required for the proper repair, restoration, operation and maintenance of the property.
2. Lease and license the property to maximize the long-term and maintainable profit of the property.
3. Collect all rents and fees resulting from the property.
4. Attend to the risk management and insurance of the property.
5. Pay municipal taxes, fees and utilities related to the property.
6. Maintain all technical and financial records, agreements, leases, contracts, etc. Required for the management, supervision and control of the property.
7. Report at least quarterly on all aspects relating to the operation of the property, including summary financial statements, tenant leases, reports on non-recurring construction, renovations, repairs, etc. Which affect the general management and operation of the building.
8. Maintain a bank account and ensure that all rents, fees, receipts and other forms of revenue resulting from the related property are deposited to the credit of the bank account, and all expenses related to the property are drawn solely from the bank account.
9. Prepare budgets that disclose anticipated receipts and disbursements for approval by the owner. If the manager is required to incur an expense that have not been accounted for or disclosed in the budget, the manager shall obtain prior written approval for the expense.



Functional performance tasks

1. Collect rents. When required, make and deliver notices for late rents, NSF cheques, charges for damages, termination, etc.
2. Make bank deposits and maintain records. Separate accounting is required for commercial, apartment, shared and prepaid rents, parking, key deposits, laundry revenue, miscellaneous charges and petty cash disbursements. Reconcile deposits and rents received.
3. Report on these activities in owner-specified formats.
4. Show apartments, take applications and have leases prepared.
5. Assess prospective tenants, including credit check.
6. Maintain a list of current and upcoming vacancies to ensure prospective tenants get good advice related to available accommodation.
7. Maintain a list of bad debts, skips, damages for reimbursement, lost revenue, etc. Follow up and report on delinquencies.
8. Ensure advertising listing includes appropriate vacancies. Advertise selected apartment vacancies in the local newspaper and when appropriate in other media. Ensure brochures are available in all target markets. Identify new advertising channels if they become available.
9. Inspect shared units, apartments and other areas. Plan and initiate actions to maintain and improve the condition of the building.
10. Supervise staff activities in the areas of cleaning, maintenance and repair, and staff scheduling.
11. Maintain staff time records and report for payroll purposes.
12. Prepare payroll statements.
13. Plan and manage response to maintenance request forms. Attempt to schedule actions for tenant satisfaction and staff availability.
14. Ensure mail, telephone, telephone answering, stationery and forms, and other activities associated with the operation are suitably handled.
15. Ensure supplies required for office and maintenance functions are available.
16. Monitor contractors working on site.
17. Review invoices and prepare cheques for signing and payment.
18. Check each suite when tenants leave. Shut off all unneeded lights, be sure all water taps are off and do not drip, close all windows and make list of work to be done. Report on action required for unpaid rent, damages, etc.
19. Prepare schedule of units requiring work and recommend action plan.

Acceptance

The conditions and functional accountabilities detailed in the charter are mutually accepted by the undersigned.

Dated at _____ this _____ day of _____ 20____

Property manager

Owner



APPENDIX B: THE SUPERINTENDENT'S RESPONSIBILITIES

General

The following defines the leasing, administration, and maintenance services expected of the on-site building superintendent. It also sets objectives and standards against which performance can be measured. The superintendent reports to the property manager or the owners. He/she is expected to operate and maintain the building(s), systems and equipment to the standards established by the property manager. He/she is also expected to direct and supervise any other on-site or outside contracting staff performing maintenance or refurbishment in the assigned building.

Objectives

1. Provide safety, security, satisfaction and a general feeling of well-being for people occupying the assigned building.
2. Always maintain the assigned building to the property manager's standard.
3. Strive to expand the human and technical skills of the superintendent and the other on-site staff.
4. Provide professional and timely service for the people working in or using the facility.
5. Protect the owner's investment in the property and ensure that the structure is sound and the electrical-mechanical equipment is operating as described in the *Operating by Operations*. To perform a daily look/listen/touch inspection. To ensure that preventative, corrective and breakdown maintenance, custodial care, refurbishment, and renovations are handled in a cost-effective and professional manner.
6. Maintain a formal and harmonious relationship with the tenants and visitors to the building.

Accountabilities

1. Professionally carry out the services required by the tenants, the superintendent must know how to perform the following tasks below.
2. Effectively and efficiently operate the building's electrical/mechanical systems and maintain the interior and exterior of the building, the superintendent must carry out the maintenance and energy management tasks detailed and attached to this charter.

Functional performance tasks

Leasing and administration

1. Obtain and maintain current and future rental vacancy information and keep up-to-date availability signs, including those for sublets, in accordance with information received from the property manager.
2. Have on hand a current price list for the leased space in the building.
3. Be aware of existing policies, the lease and rules and regulations—such things as rental policies, electrical or heat included in rental fee, adult or family building, adult floors only, and assisted rental policies.
4. Be prepared to show available units and be aware of rental features, such as size of suites, amenities and location of nearby schools, churches, shopping and public transportation.
5. Complete applications to rent and accept deposits from prospective tenants.
6. Maintain key, parking and locker control.



7. [OPTIONAL] Collect rents and postdated cheques from the tenants, give receipts for cash, and ensure the safe delivery of all funds to the property manager.
8. Stay aware of move-in and move-out of tenants, and prepare accurate incoming and outgoing inspection reports for the leased space within the tenant information guidelines.
9. Maintain follow-up files of all maintenance requests and work and purchase orders until the work is completed, or goods or services are received. Follow up on goods or services that have not been received in a timely manner. Verify and document on the order the time spent and parts or materials used by a service contractor. Return all completed orders to the property manager.
10. Report to the property manager any unusual activities in the building.

Maintenance and energy management

1. Carry out daily, weekly and scheduled inspections, preventative and breakdown maintenance, custodial housekeeping and groundskeeping care. If any of these services are handled by a contractor, ensure that everyone uses the suppliers and service contractors recommended by the property manager. Monitor the efficiency of the electrical/mechanical equipment by recording the temperature and pressure readings on heating and cooling system logs.
2. Organize other staff provided to help you with your workload. Prepare time cards and schedules of duties for all of these people.
3. Clean and maintain any vacant suites.
4. Know how to use, care for, and maintain all equipment, tools, supplies, chemicals, and materials kept in the building. Maintain current inventory lists and order replenishments.
5. Document all tenant maintenance requests, follow up and correct problems where possible. If not possible, forward to the property manager for completion by a specialist.
6. Report any deficiencies in the building that you may observe or that are brought to your attention.

Cleaning

1. Carry out daily, weekly and scheduled cleaning tasks as assigned by the property manager in the monthly operational planner and the annual operational checklist.
2. Ensure that contracted cleaners undertake tasks as set out in the cleaning contract and the monthly operational planner. Check that tasks are performed at the required frequency and to a high standard.
3. Notify the property manager of any problems with the cleaning processes.

Security, safety and emergencies

1. Respond to all emergencies, such as fire, flood, lack of heat, power failure and other problems that could be considered emergencies.
2. Be aware of all valves and controls and their purposes so that they can be properly activated or turned off as required in the event of an emergency.
3. Maintain, close to the phone, a list of emergency numbers and the names of those persons to call for additional support.
4. Always post a notice of your whereabouts or return time on the door of your apartment or office whenever it is vacant or locked.



5. During the winter season, inspect the walks on a regular basis so that any hazardous conditions can be corrected as soon as possible.
6. Understand and know how to test the fire alarm control system.
7. Ensure that all on-site staff (including yourself) know how to properly use a fire extinguisher.
8. Inspect the fire safety equipment and information in the log books as required by the local fire codes.
9. Carry out a fire drill when requested by the Property Manager.
10. Be qualified to carry out first aid when necessary.

Acceptance

The conditions and functional accountabilities detailed in the charter are mutually accepted by the undersigned.

Dated at _____ this _____ day of _____ 20____

Superintendent

property manager



APPENDIX C: TEMPLATE FOR EMERGENCY AND FIRE SAFETY PLAN FOR {BUILDING NAME AND ADDRESS}

This emergency and fire safety plan is acceptable in accordance with the *Ontario Fire Code*, section 2.8.

Dated: _____ by _____ Chief Fire Official,
City of _____ Fire Department

Phone: _____ Fax: _____ Email: _____

Prepared by: _____

Phone: _____ Fax: _____ Email: _____

Table of contents

1.0	Introduction	112
1.1	Description of building	113
1.2	Building resources (fire safety features)	114
1.3	Human resources and availability	114
2.0	Emergency procedures	115
2.1	Procedures when alarm sounds	116
2.2	Provisions for access for fire fighting	116
2.3	Evacuating endangered occupants	116
2.4	Fire extinguishment, control, or confinement	117
2.5	Fire hazards	117
2.6	All bomb threats are to be taken seriously	117
3.0	Organization, appointment and instruction of staff	119
3.1	Responsibilities of the property manager	119
3.2	General responsibilities	119
3.3	Responsibilities of designated assistants during an emergency situation	120
3.4	Instruction of supervisory staff and tenants	120
4.0	Fire drills	122
5.0	Control of fire hazards in the building	123
5.1	Combustible materials	123
5.2	Electrical equipment and wiring	123
6.0	Maintenance procedures for the fire protection system	124
6.1	“Look/listen/touch” inspections	124
6.2	Maintenance of building facilities	124
6.3	Fire extinguishment, control, or confinement	125
7.0	Alternate measures for safety of occupants	125
8.0	Distribution of records and diagrams	125



1.0 Introduction

To protect the occupants of this facility from fire or other life-threatening risks, the implementation of the Emergency and Fire Safety Plan helps to assure effective utilization of the security and life safety features in the building. This fire safety plan has been designed to suit the resources available at _____.

This fire safety plan was developed to assist the people occupying this facility to become more aware of the essentials for caution, security and safety; to ensure orderly evacuation at the time of an emergency; and to provide a maximum degree of flexibility to achieve the necessary security and fire safety for the building.

Definitions

Check: A visual observation to ensure the device or system is in place and is not obviously damaged or obstructed.

Inspect: A physical examination, to determine that the device or system will apparently perform in accordance with its intended function.

Test: Operation of the device or system to ensure that it will perform in accordance with its intended function.

Important information

The Fire Code: Ontario Regulation 454 is a provincial regulation under section 18a of the *Fire Marshals Act*. This code requires the owners of this facility to be responsible for carrying out the provisions of the Code. It defines the “owner” as “any person, firm or corporation controlling the property under consideration.”

Consequently, the owners include:

	Person or group
1	
2	
3	
4	
5	
6	

A copy of the Fire Code and the *Fire Marshals Act* can be purchased from the Government of Ontario Book Store, 880 Bay Street, Toronto, Ontario, M5S 1Z8 and is kept in _____.

1.1 Description of building

_____, located at _____, is a _____-storey plus penthouse multi-residential building with _____ rooms as detailed in the inventory of rooms chart below. There is a staff of _____ people.

Inventory of rooms {create to suit your building}

Room types	Basement	First floor	Second to Fourth Floors	Penthouse	Total
Electrical room					
Elevator pit					
Janitor's closet					
Common area washroom					
Storage room					
Party room					
Change room					
Sauna					
Swimming pool					
Mechanical room					
Residential suite					
Management office					
Games room					
Fitness centre					
Total					

Submission procedures:

The Fire Safety Plan incorporates the following items:

- Emergency procedures
- Instructions to be given to occupants (fire procedures and good housekeeping)
- Listing of supervisory staff with related duties
- Procedures for evacuation of persons in need of special assistance, if among the occupants
- Method and frequency of training supervisory staff
- Method and frequency of conducting fire drills
- Maintenance procedures for fire protection systems
- Alternate measures for occupant fire safety during shutdown of equipment or systems
- Diagram showing type, location and operation of fire protection systems

The Fire Safety Plan should be prepared and consolidated before submission to the chief fire official and should deal only with matters that pertain specifically to the particular building. Submit two copies to the Fire Department so that, when accepted, one copy will be returned to the building management and the other will be retained for fire department use. The following sections provide guidance in formatting the documentation.

1.2 Building resources (fire safety features)

Fire department access: See included *Fire Department Access Plan*. {draw plans showing how fire department personnel will gain access to the building and floors}

Fire alarm systems: See included *Fire Alarm System Plan*

{Describe the standby power arrangement}

{Explain the type of system and how it is activated}

{draw plans showing the locations of the control panel, annunciator panel, detectors, sounding devices and zone coverage}

Exits: See included *Evacuation Plan*.

{prepare floor plans clearly showing the exit and stairway locations for each floor}

Elevators:

In an emergency, the elevators will default to the _____ floor after returning the current passengers to the ground floor for evacuation. The elevators will then become operable only with a service key.

{describe number, locations, types of elevators}

Extinguishers and sprinklers: See included *Fire Extinguisher and Sprinkler Plan*.

There are _____ ABC extinguishers located as shown on the Fire Extinguisher Plan. There are sprinklers in _____, _____, and _____.

{prepare floor plans showing the locations of extinguishers, sprinklers, control valves, Siamese fittings, hose cabinets}

Emergency lighting: See included *Emergency Lighting Plan*.

{describe the type and power source for emergency lighting}

{prepare floor plans showing the locations of emergency lighting fixtures}

Pumps and motors: See included *Pumps and Motors Plan*.

{describe the function and default emergency operation of each pump and motor}

{prepare floor plans showing the locations of pumps and motors}

1.3 Human resources and availability

The building is owned and managed by _____. The phone number is _____ from 9:00 a.m. to 5:00 p.m., Monday through Friday.

The property manager is _____. He/she can be reached at one of the following numbers:

Work/office: _____ - _____ - _____

Home: _____ - _____ - _____

Pager: _____ - _____ - _____

Mobile/cellular: _____ - _____ - _____

Other: _____ - _____ - _____

The following people have been given fire safety responsibility:

1. _____

2. _____

2.0 Emergency procedures

The actions to be taken by occupants in emergency situations (**Emergency Procedures** sign) are posted near the elevators on each floor, behind a Lucite™ cover. The **In Case of Fire** sign will be fixed firmly to the wall at all fire alarm pull stations and near the elevator on each floor. The *Evacuation Plan* (see EXITS in section 1.2 above) showing the locations of exits and stairwells for each floor will be fixed firmly to the wall beside the “In Case of Fire” sign.

IN CASE OF FIRE

Remain Calm

UPON DISCOVERY OF FIRE

- Initiate fire alarm
- Call fire department at 9-1-1
- Leave building by the nearest exit

UPON HEARING FIRE ALARM

- Leave building by the nearest exit

Caution

If you encounter smoke in the stairway, use another exit

DO NOT USE ELEVATORS!

False Alarm

“Everyone who wilfully, without reasonable cause, in any manner, makes or causes to be made an alarm of fire is guilty of an offence under the Criminal Code of Canada.”

EMERGENCY PROCEDURES

IN CASE OF FIRE—REMAIN CALM

- Leave area immediately
- Close doors behind you
- Pull the fire alarm
- Call fire department at 9-1-1
- Leave building by the nearest exit.
Do NOT use the elevators

UPON HEARING FIRE ALARM

- Leave building by the nearest exit
Do NOT use the elevators
- Close doors behind you
- If smoke is encountered in the stairwell,
use another exit

Caution

If smoke is in the corridor it may be safer to stay in your suite. Close the door and attempt to seal the opening at the base of the door with a wide roll of tape or clothing.

EVACUATION GUIDELINES

- Keep cool
- Follow the instructions of the superintendent
- Remember that you have an evacuation plan
- Follow the rehearsed plan

The fire alarm system will be activated to alert the residents of an emergency and to put into action our fire safety plan. The _____ Fire Department will be notified by the superintendent, given the address of _____ and the exact location of the fire. The superintendent will designate someone to meet the fire department when it arrive to direct the firefighters to the problem area.



2.1 Procedures when alarm sounds

- Designated persons will call the fire department
- The building will be evacuated

Evacuation

A number of important rules will be observed to facilitate a quick evacuation:

1. The exits and alternate exits will be posted in each room and the importance of these exits will be explained to the occupants.
2. Traffic routes in corridors and out-of-doors will be similarly explained to occupants.
3. When a room is evacuated, the staff will close the door. (The staff will ensure that all the occupants of the room are accounted for.)
4. Occupants will be moved quickly and quietly to their designated exit.
5. On leaving the building the staff will ensure that everyone moves at least 15 to 20 meters from the building to a preplanned area. The occupants will be kept together as a group in order to make a head count if necessary.

The responsibilities of the superintendent and designated assistants

1. When the fire alarm is activated, the superintendent and any assistants will move to predetermined stations to assist with the evacuation and to ensure that all persons have been evacuated.
2. All designated assistants will report back to the superintendent when their area is clear.
3. The superintendent and designated assistants will then exit.

Return to the building

The fire department will advise when occupants can re-enter the building.

2.2 Provisions for access for fire fighting

The superintendent will do the following:

1. Upon arrival of the firefighters, inform the fire officer about the conditions in the building.
2. Provide access and vital information to firefighters (for example, master keys for rooms, service rooms, etc.)

2.3 Evacuating endangered occupants

Building occupants must be informed about the procedure to follow when they encounter dangerous conditions while attempting to exit the building. The following actions should be taken:

- Remain in the room.
- Close the door.
- Signal to firefighters by waving.
- Crouch low to the floor if smoke enters the room.
- Move to the most protected area and partially open the window for air – close the window if smoke comes in.
- Wait to be rescued. Remain calm. Do not panic.
- Listen for instructions or information which may be given by authorized personnel over loudhailers.



2.4 Fire extinguishment, control, or confinement

In the event a small fire cannot be extinguished with the use of a portable fire extinguisher or the smoke presents a hazard to the extinguisher operator, then any doors to the area should be closed to confine the fire. Leave the fire area, ensure that the fire alarm has been activated and that the fire department has been notified. Then wait for the fire department. The production of noxious fumes in a modern building fire makes any attempts at firefighting extremely dangerous for untrained personnel.

2.5 Fire hazards

In order to avoid fire hazards, staff and residents will be advised to do the following:

- Keep stairways, landings, hallways, passageways and exits clear of obstructions and combustible refuse at all times.
- Keep the doors to stairways closed at all times.
- Close doors to suites during a fire.
- Ensure that electrically powered equipment, especially coffee makers and hot plates are shut off when the suite or work area is left empty.
- Refrain from using unsafe electrical appliances, frayed extension cords, overloaded electrical outlets or lamp wire for permanent wiring.
- Limit the use of flammable liquids. Practice safe handling and disposal practices.
- Avoid careless smoking. Do not smoke in bed and always use ashtrays.
- Maintain access to portable extinguishers and other fire protection equipment.

In general, the staff and tenants will be advised to do the following:

- Know where the alarm pull stations and exits are located.
- Immediately call the fire department whenever they spot smoke or fire.
- Recognize the audible fire alarm signals and the procedures established to implement safe evacuation.
- Know which building staff are assigned to the floor area being used in the building.
- Report to the building staff any condition which they perceive to be a fire hazard.
- Know the location of the floor area that may be designated as a temporary safe area of refuge.
- Know the crossover floors that lead to alternate exits.

2.6 All bomb threats are to be taken seriously

Above all, remain calm

Written threat:

- Save all material along with envelopes or containers.
- Do everything possible to preserve fingerprints, paper used and postal marks.
- Contact the superintendent immediately.



Phone threat

- Listen.
- Be calm and courteous.
- Do not interrupt the caller.
- Obtain as much information as possible.
- Initiate call trace action if possible and notify others by a pre-arranged signal, while the caller is still on the line.
- As soon as the caller hangs up, try to use the *69 phone company feature to retrieve the source of the call. Write down the phone number.

Information guide when a bomb threat is received

Recorded data

Recorded by:	Date:	Time:	a.m./p.m.	Duration of call:
Exact wording of threat:				

Identifying characteristics

Sex:	Estimated age:	Accent:
Voice (loud, soft, etc.):		
Speech (slow, fast, etc.):		
Diction (good, nasal lisp, etc.):		
Manner (calm, emotional, vulgar, etc.):		
Background noises:		
If voice was familiar, specify:		
Was the caller familiar with the area?		
Trace or *69 results:		

Questions to ask

What time will the bomb explode?
Where is it?
Why did you place the bomb?
What does it look like?
Where are you calling from?
What is your name?
Other comments:

Finding a suspicious package:

- Do not touch or move it.
- Do not assume it is the only one.
- Contact the superintendent immediately.
- Do not use radio communication as it may activate the bomb.

Search guidelines:

- Search the immediate area.
- Do not touch anything - report any unusual objects.
- Help to identify any strange or misplaced objects.
- Unlock all drawers, cabinets, etc. to help the search crews.

3.0 Organization, appointment and instruction of staff**3.1 Responsibilities of the property manager**

1. Establish an emergency procedure to be followed at the time of an emergency.
2. Organize staff to carry out fire safety duties.
3. Ensure that the Superintendent and tenants are instructed and aware of their responsibilities for emergencies and fire safety.
4. Ensure the building's fire protection facilities are maintained.
5. Ensure that alternate measures for the safety of the tenants are in place during any shutdown of the fire protection equipment.
6. Ensure that checks, test and inspections, as required by the Fire Code, are completed on schedule and that the records are retained.

3.2 General responsibilities

- Ensure that a copy of the **Ontario Fire Code** is in the superintendent's office and that the staff are aware of its contents.
- Have a working knowledge of the fire alarm system and other fire control measures.
- Ensure that the fire alarm system and the firefighting equipment installed in the building is regularly tested and maintained. Records of these actions will be kept in operational logs and on equipment tags.
- In the event of any shutdown of the fire protection equipment, ensure that someone has notified the fire department and that someone is patrolling the building once per hour until the situation is corrected. Make provisions for alternate safety measures for the tenants.
- Ensure that all doors to stairways are closed at all times.
- Ensure that stairways, landings, hallways, passageways and exits, both inside and outside, are clear of obstruction at all times.
- Ensure that access roadways and fire routes are clear and accessible for the use of the fire department.
- Ensure that combustible materials do not accumulate in any part of a stairway, fire escape or other means of egress.
- Ensure that combustible materials or waste do not accumulate in quantities in storage areas or other areas that may constitute a fire hazard.
- Ensure that all combustible waste is removed from all areas where waste is placed for disposal.
- Ensure that staff and contractors working in the building are aware of the Emergency and Fire Safety Plan.



- Ensure that the property manager and all the senior staff have a working knowledge of the fire alarm system and how it is reset.
- Appoint and organize designated staff to carry out fire safety duties.
- Ensure that all staff are trained to use the fire extinguishers.
- Ensure that all staff and tenants are aware of the exits available.

3.3 Responsibilities of designated assistants during an emergency situation

- Ensure that the fire alarm has been activated.
- Notify the fire department and inform them of the emergency conditions.
- Supervise the evacuation of the occupants.
- Upon arrival of the firefighters, inform the fire official regarding conditions in the building and coordinate the efforts of the staff with those of the fire department.
- Provide access and vital information to firefighters (for example, master keys to suites).
- Ensure that the fire alarm system is not silenced until the fire department has responded and the fire department has determined that the building is safe.

3.4 Instruction of supervisory staff and tenants

3.4.1 THE PROPERTY MANAGER WILL PROVIDE INSTRUCTIONS REGARDING THE FOLLOWING:

- “In Case of Fire” procedure
- Fire drills
- Control of fire hazard
- Alternative fire safety measures for occupant safety
- Establishing and implementing the Fire Safety Plan
- Building’s fire safety features
- Maintenance and operations of the building’s fire safety features

3.4.2 THE BUILDING’S FIRE SAFETY FEATURES

Fire alarm system

The purpose of the fire alarm system is to alert all staff and tenants that a fire emergency exists. **The alarm is connected to the fire station at _____.** Once the alarm is sounded, management will put into practice the emergency plan. **This plan requires the total evacuation of the building!**

The type of alarm system installed at _____ is activated by {manual alarm pull stations, smoke detectors, or heat detectors}. In case of a power failure {the 110-volt smoke detectors are backed up with batteries on each floor}.

Operating instructions will include the operation of the detection devices, a description of how the signals are sounded, and a description of how the lamp identifying the initiating zone is illuminated.

The staff will be taught how to reset the system and extinguish the alarm indicators by {depressing the reset button for two seconds}.



Fire alarm system inspections and maintenance

The superintendent will check *the central alarm and control facility, the AC power lamp, and the trouble light* every day.

The staff will be taught that the removal of plugs and modules while line or standby power is connected may cause damage and that polarity reversal of battery connections will damage the batteries.

Once a month, the superintendent will test the system, check fire alarm components and check standby power batteries.

If the system indicates that there is a problem, the staff members will be taught to check to ensure that the AC power is on and that the operational switches are in the normal positions. If this is the case, they will be taught to depress the “trouble silence” button momentarily to silence the trouble tone and to call for service.

Emergency exits

The *Evacuation Plan* shows the locations of all exits and will be used to teach staff and tenants the location of the closest exit. Everyone will be taught to lead others to the closest exit.

Fire department access

The Fire Code stipulates that the fire department access routes, fire hydrants and fire department hose connections will be kept clear of parked vehicles, excessive vegetation, snow and other obstructions at all times. These routes and exterior firefighting aids are all suitably identified. Staff will ensure that the driveways designated as fire routes are kept clear for fire department access.

Management will be given the authority to tag or remove, at the owner’s expense, all vehicles blocking fire routes.

Portable extinguishers

_____ has ____ 5-lb dry chemical multi-purpose ABC extinguishers strategically located in the building.

Staff members must be taught that portable extinguishers are intended as a first aid measure to cope with small fires. They must follow the step-by-step user instructions that are clearly shown on the extinguisher label.

The staff will be taught that fires are classified as follows:

- Class A—includes paper, wood, cloth, excelsior, rubbish, etc.
- Class B—includes the burning of liquids, gasoline, oils, paints, cooking fats, etc.
- Class C—includes fires in live electrical equipment such as motors, switch gear, appliances, etc.

An ABC dry chemical multi-purpose extinguishers can be used on all three. It’s stream reaches 10 to 15 feet. Its pressure source is either a pressure cartridge or internal pressurization of the cylinder.

Extinguishers must be recharged after use and kept fully charged at all times.



Extinguisher inspections and maintenance

The fire extinguishers will be visually inspected once per month. Any having defects will be repaired. Extinguisher shells, cartridges or cylinders showing leakage or permanent distortion in excess of specified limits, or which rupture, will be removed from service and replaced. The extinguishers will be maintained every six months by weighing the CO₂, or by visually checking the pressure gauge, and will be hydrostatically tested every 12 months. Retests will be conducted at the original test pressure as stated on the nameplate.

Equipment tags will be securely attached to each extinguisher containing dates, description of maintenance work or recharge, hydrostatic tests, the name of the servicing contractor and the name of the person who did the testing.

Emergency lighting and means of egress

Emergency lighting ensures that exits, corridors and principal exit routes are illuminated in the event of a power loss. Management will ensure that the power for this lighting is always operable.

Management will maintain exit signs to ensure they are clear and legible and inspect them to ensure that they are illuminated and in good repair.

Management will ensure that corridors are free of obstructions. On an annual basis, management will inspect ducts, dampers, chimneys, disconnect switches and electrical/mechanical systems to ensure they are not a fire hazard.

4.0 Fire drills

Purpose, frequency, and procedure

The purpose of a fire drill is to ensure that the staff and residents are totally familiar with the emergency evacuation procedures, resulting in an orderly evacuation with efficient use of the exits.

Fire drills will be held annually. As fire drills are conducted by the building staff, tenants will be advised that the fire department does not have to be notified.

Following each fire drill, all people that have been delegated supervisory responsibility will attend a debriefing, to report on their actions and the reactions of tenants and the management staff to the drill.

Designated assistants will proceed to the stations assigned to them. At the advised time the predetermined pull station will be activated. Staff will be instructed to report any difficulty in hearing the alarm.

When the drill is completed the alarm will be reset and the "All clear" announced.

The superintendent and his designated assistants will then meet to present their reports and discuss any deficiencies with the drill.



5.0 Control of fire hazards in the building

5.1 Combustible materials

To reduce the probability of a fire, _____ will practice a high standard of housekeeping and building maintenance.

To avoid fire hazards in the building, occupants and staff will be advised to do the following:

- Keep storage areas clean and tidy. Never store flammable liquids or materials in those areas.
- Never use candles or matches in a dark storage area.
- Discourage smoking, especially careless smoking. Use large safety ashtrays and only dispose of ashes once they are cold.
- Throw out trash as it is fuel for a fire.
- Avoid all unsafe cooking practices. Never go out and leave cooking food on the stove or in the oven. Always make sure that the stove is off when not being used. Do not overheat cooking oils.
- Familiarize yourself with the building exits, the location of fire alarm pull stations, fire extinguishers, and smoke detectors.

5.2 Electrical equipment and wiring

As defective wiring and appliances rank as one of the major causes of fire each year, the following problems will be eliminated at _____.

5.2.1 MAIN ELECTRICAL DISTRIBUTION PANEL

- Will have a protective cover.
- Will not be overfused.
- Will not bypass the fuses with metal jumpers, pennies or other means.

5.2.2 EXTENSION CORDS

- Will not be spliced.
- Will not be placed under rugs.
- Will not be fastened to walls.
- Will not be used if damaged or deteriorated.
- Will not be used as permanent wiring.
- Will not be octopus wired.

5.2.3 PERMANENT WIRING

- All junction boxes will have protective cover plates.
- Will not be improperly spliced or joined.



5.2.4 APPLIANCES AND ELECTRICAL EQUIPMENT

- Heaters or lamps will not be placed too close to combustibles.
- Appliances or equipment lacking an inspection label will not be installed.
- Will not use a spliced appliance club.

6.0 Maintenance procedures for the fire protection system

6.1 “Look/listen/touch” inspections

The maintenance procedure for the Fire Protection System installed at _____ revolves around a daily “Look/listen/touch” inspection. This ensures that any condition that would lead to breakdown or deterioration would be uncovered and corrected before it failed.

_____ uses a daily operating log to record the results of the inspection. These logs are available for inspection by the fire department.

_____ uses contractors to do the tests on all the electrical/mechanical and the fire protection systems. The contractor will provide management with a record of all tests and corrective measures, and these will be kept available for the fire prevention officers when they visit for their inspections.

6.2 Maintenance of building facilities

Portable fire extinguishers

The portable ABC fire extinguishers are visually checked each month to give reasonable assurance that:

1. they have not been activated—wire seals are intact;
2. hose and horn are free of obstruction; and
3. there is no physical damage or deterioration.

Fire alarm system

- The fire alarm AC power lamp and trouble light will be checked daily.
- The central alarm and control facility will be checked daily.
- All the fire alarm components, including the standby power batteries, will be checked monthly.
- The fire alarm system will be tested monthly.
- The complete fire alarm system will be tested annually by an approved contractor.

Emergency power systems

- Staff will check that the standby batteries are tested to ensure that the power is available during an emergency.



Service equipment, ducting, chimneys

- Ensure that any hoods, filters, and ducts that are subject to accumulation of combustible deposits are cleaned as necessary.
- A mechanical contractor will inspect annually all fire dampers and fire stop flaps to ensure that they will close properly during an emergency.
- A mechanical contractor will annually inspect chimneys, flues and flue pipes and clean as necessary.
- A mechanical contractor will annually inspect the disconnect switches for the _____ HVAC units.
- A mechanical contractor will annually inspect the controls for the _____ air handlers.

Fire department access

The superintendent will ensure that fire paths are kept clear.

6.3 Fire extinguishment, control, or confinement

In the event of a small fire, the staff would try to extinguish it with a fire extinguisher, unless smoke presents a hazard to this operation. If the fire cannot be put out with an extinguisher, the staff has been instructed to do the following:

1. Close any doors to the area to confine and contain the fire.
2. Leave the fire area.
3. Notify the fire department.
4. Guide the fire department to the problem.

7.0 Alternate measures for safety of occupants

In the event of any shutdown of fire protector equipment and systems, or parts thereof, the fire department will be notified. The staff and occupants will be informed of the problem and the alternate provisions or actions that will be taken in case of an emergency. The fire department staff and occupants of _____ will be notified when the problem has been corrected.

8.0 Distribution of records and diagrams

A copy of the _____ Emergency and Fire Safety Plan will be kept in {building management office} and will become part of the Operation and Energy Management Plan prepared for the use of building management and staff.

Records of all log entries will be kept in a separate binder, in {the management office}.

Floor plans and drawings described herein will become part of this Emergency and Fire Safety Plan. Equipment schematics of the fire alarm panel, fire alarm annunciator panel, the emergency power source, and the electrical room will also be attached to this plan. These floor plans and schematics will therefore become a part of the Operation and Energy Management Plan.



APPENDIX D: TENANT INFORMATION PACKAGE (TEMPLATE)

Table of contents

1.0 Introduction	127
Your tenancy agreement	127
Your superintendent	127
2.0 Telephone numbers	128
3.0 Important information about the building	129
4.0 Supplementary information	130
5.0 Suite care	132
6.0 Fire safety information	134
Procedures to follow in case of a fire	135
7.0 Building security	135

1.0 Introduction

Welcome to your new home. This information package is designed to help you become acquainted with the building and what it has to offer. If you have any questions after reading this package, please feel free to contact the superintendent.

Your tenancy agreement

This is an important two-way document that explains your rights and obligations as a resident, and our rights and obligations as the owners and managers of your building. It is a good idea to know and understand all of the provisions herein.

Your superintendent

The superintendent is our official representative in your building, and it is his/her job to see that our responsibilities are fully carried out. If you have any questions or problems not covered in these tips you should contact the superintendent, or call our management office. Attached to these tips, you will find a copy of a Maintenance Request Form. Unless you have an emergency, please document your question or problem on this form, and remember to sign the consent to entry portion of the form. It will be very helpful if you can supply as much information as possible about what you believe is the problem. Slip the document through the mail slot in the superintendent's door, or send it to our management office.



3.0 Important information about the building

Here is some further information designed to help you get acquainted with the community.

Major intersection _____

Neighbourhood shopping _____

Regional shopping centre _____

Public transportation _____

Highway access _____

Local schools

Local churches

Local parks / recreation



4.0 Supplementary information

Moving hours

Laundry facilities

Parking

House insurance

Pets

Window drapes

Use of common areas



Proper attire

Garbage disposal

Recycling

Disturbances

Cable TV

Bicycle storage

Elevator systems

5.0 Suite care

Electrical systems

Maintenance requirements

Maintenance emergencies

Operation of heating / cooling equipment

Appliances

Before reporting an electrical appliance service problem, ensure that the cord is firmly plugged into the wall outlet, or that the fuse is not blown.

If it is a **stove** problem, ensure that the clock is set to the “manual” position. If it is a plug-in type of stove element, ensure that the element is firmly inserted.

If it is a **dishwasher** problem, make sure it is turned to the ON position, the washer door is firmly closed and the water supply valve is turned on.

Enamel surfaces such as those found on appliances seem tough, but they should be cleaned with care. Smooth cloths and liquid detergents are best for appliance surfaces. Stove spills should be cleaned up quickly to avoid hardening. The best advice for ovens is to regularly use a good oven cleaner. Be careful of the temperature-sensing unit or you could make it give a false reading. Steel wool scouring pads are fine for stove elements, but they’ll damage enamel surfaces, as will abrasive cleansers or sharp instruments.



The **refrigerator freezer** should be defrosted when frost is 6 mm (¼ in.) thick, or whenever it interferes with storage capacity or with the door closing.

1. Turn temperature control to the “OFF” position.
2. Leave the door open.
3. After about half an hour, large pieces of ice will loosen and should be removed by hand.

A pan of warm water in the freezer compartment will speed up the process. **Using a boiling kettle or chipping the ice with a sharp instrument can easily result in a costly repair bill!**

Balconies

Small children should always be accompanied by an adult on balconies. Many residents furnish their balconies as if they were an extra room. However, for everyone’s safety and comfort, outdoor cooking cannot be allowed. When washing your balcony, we recommend consideration for those below you.

Taking care of your floors

Use polishing-type paste waxes to protect wood floors and keep them attractive. **Floor tile liquid waxes which contain water will damage them.** For regular maintenance “cleaning” waxes are preferable. For heavy cleaning use a brand name wood floor stripper. Wipe up spills on any floor area as soon as possible. Furniture leg rests can save a lot of scuffing. Use special care when shifting furniture—refinishing floors is very expensive!

Self-polishing waxes are best for vinyl tiles, but wax buildup should be removed periodically with a good vinyl tile wax remover. To avoid wax buildup, only apply fresh wax to the traffic areas. Your superintendent can advise you about the removal of rubber marks or stubborn stains. If you notice the wood or vinyl tiles lifting, notify your management office or your superintendent.

Taking care of your counter tops

Like enamel surfaces, laminated counter tops need to be carefully maintained. Most liquids will not harm counter tops, but bleaches left on them will.

Hot pans, electric appliances, cigarettes, sharp instruments and abrasive cleansers can cause damage that would necessitate the removal and replacement of the counter. This is very expensive!

To avoid this problem always use cutting and insulating boards on your counters.

Cleaning your cabinets

Natural wood finishes need to be cleaned and polished with the same care given to quality wood furniture. Enamel finishes require non-abrasive household cleaners. Laminated plastic finishes can be cleaned with a soapy cloth.

Keeping your walls clean

Your walls are washable, but marks from ball-point pens, crayons and felt pens are almost impossible to wash off. It’s a good idea to keep furniture away from walls to avoid marking them. Your superintendent will be able to advise you about the best type of hangers to use for pictures or other wall hanging objects.



Window drafts

Just because you can feel cold air near the windows does not mean they are leaking. In most cases, the building is designed to have some air coming in through the windows. This provides you with fresh air because the building uses convection radiators, instead of forced air, as a heat source. Convection radiators are placed underneath the windows to heat the fresh (cold) air as it comes in, thus explaining the cold draft you feel. Ensure that the drapes do not obstruct the air flow, which is to the room side of the drapes, to keep your suite at a comfortable temperature.

In apartment buildings, generally speaking, condensation problems on windows are caused by conditions in the suite. Many people find it hard to accept that moisture originates within the unit from such normal activities as washing, bathing, cooking—and even breathing. Plants can also be a major source of moisture. The following are suggestions that can help overcome condensation problems.

1. Ensure that the exhaust fans are operating. A piece of tissue will stay firm against the grille if they are.
2. Turn off any humidifiers or vaporizers.
3. Keep the apartment at the proper temperature.

A silicone spray lubricant (not petroleum-based products) will fix sticking aluminum windows. For sticky wooden windows, rub a candle in the track. If your sliding patio doors will not slide, check the track for foreign objects. If this is not the problem, it could be that the wheels that ride on the track are broken—drop a Maintenance Request at the management office or give it to the superintendent.

For the safety of small children, furniture and large objects that could facilitate climbing should be removed from beneath windows and on patios. Windows are installed with a device that will not allow them to open more than 10 cm (4 in.).

If condensation is still a problem, or the windows are not operating as indicated above, fill out a Maintenance Request Form and forward it to the management office or superintendent.

Plumbing information

If you notice a leaking pipe, dripping faucet, or running toilet, notify the Management office or Superintendent immediately.

Remember, your toilet fixtures were not designed to handle disposable diapers, sanitary napkins or other items that could cause a stoppage and backup.

6.0 Fire safety information

Fire safety is everyone's concern. For increased safety, it is necessary to look at the major causes of apartment (condominium) fires. Studies have shown that smoking is the cause in approximately 25% of all fires, while cooking equipment and appliance wiring are responsible for about 10% each. Therefore, approximately half of all apartment fires can be avoided with proper care.

Also, over half of all fires are initially spread by igniting bedding, clothing, furniture or upholstery. It is therefore wise to check the fire-retarding abilities of different materials before purchasing, especially in blankets and clothing for children.

Only non-combustible artificial Christmas trees with CSA approved lights are permitted in the building.

Fuses should be replaced with the proper sized replacement fuses. If a certain fuse is blowing on a consistent basis, notify the superintendent instead of installing a fuse with a higher amperage rating. (for example, **never** replace a 15A fuse with a 20A fuse)

The superintendent must be informed of any persons with disabilities that would require assistance in the event of a fire.



Procedures to follow in case of a fire

If you discover a fire:

- Leave the area of the fire, closing all doors behind you.
- Activate the alarm at the nearest pull station.
- Telephone the fire department. Never assume that this has already been done.
- Use stairwells to exit the apartment building.
- Do not use the elevators, until the alarm has been turned off and the fire officials have deemed it safe to do so.

If you hear the fire alarm:

- Feel for heat around the door of the suite. If the door is hot, remain in the suite.
- If there is no smoke or fire in the corridor, exit by the nearest stairwell. Stay calm, and do not run down the stairwell.
- If there is smoke or fire in the stairwell, try another stairwell or return to your suite.
- If you encounter smoke, stay low and breath from as close to the floor as possible.
- Close all windows and doors behind you.

If you must stay in your suite:

- Close the door, but keep it unlocked.
- Phone the fire department and tell them where you are located in the building.
- Take damp towels and seal any cracks where smoke may enter your suite. (for example, under the door)
- If the room is smoky, remain low.
- Move to the balcony or any room with a window. If you are on the balcony, close the balcony doors. If you are in a room, seal off the room using wet towels and open the window a small amount for air. If smoke comes in the window, close it.
- Stay calm and wait for instructions or rescue.

7.0 Building security

The following guidelines should be followed to maintain building security:

1. Never let people follow you into the building without using a key to enter. This includes delivery people. All visitors should be forced to be “buzzed” in by the person they are visiting.
2. Never “buzz” in anyone you are unsure of.
3. Immediately report anything suspicious to a security guard or to the superintendent (or other on-site staff).
4. Pick up your mail from your mailbox on a regular basis.
5. Notify the superintendent and cancel all newspaper subscriptions whenever you are planning to be away for an extended period of time.
6. Immediately report any doors that are left open or not working properly to a security guard or to the superintendent (or other on-site staff).



APPENDIX E: GLOSSARY OF TERMS

All risk insurance: All risk coverage insures your building for the most common types of losses. When you have All risk coverage, your building is insured for everything, unless it's specifically excluded from your policy (for example, intentional damage to your own property would not be covered).

Apparent power: The combination of reactive power and true power is called apparent power, and it is the product of a circuit's voltage and current, without reference to phase angle. Apparent power is measured in the unit of volt-ampere (VA) and is symbolized by the capital letter S.

Arrears: Money that is owed and should have been paid earlier.

Backflow preventer: A backflow prevention device that is used to protect potable water supplies from contamination or pollution due to backflow. In water supply systems, water is normally maintained at a significant pressure to enable water to flow from the tap, shower or other fixture.

Benchmark: A standard or point of reference against which things may be compared.

Biodegradable: (of a substance or object) capable of being decomposed by bacteria or other living organisms and as a result, avoiding pollution.

Building condition assessment: A comprehensive report completed by a qualified professional detailing the condition of a building and all of its individual components.

Co-operative housing: A housing project where the tenants take an active role in the day-to-day operation and maintenance of the building.

Corrosion: The gradual destruction of material (usually metal) as it reacts with the environment.

Demand reading: The demand reading is a measure of the peak amount of electrical power that is required during the reading period, and is measured in kilowatts (kW). For example, if ten 100-watt light bulbs run for the entire month, they will add 1,000 W or 1 kW to the peak demand. If they only operate for 15 minutes a month, but the 15 minutes is during the time in which the building is drawing the most electricity, they will also add 1 kW to the peak demand.

Energy intensity: The energy used per unit of area.

Electrical consumption: The electrical consumption is the amount of energy used per reading period and is measured in kilowatt-hours (kWh). For example, if ten 100-watt light bulbs ran for 5 hours, the electrical consumption would be 5,000 watt-hours (10x100x5) or 5 kWh.

Expenditures: An amount of money, energy, time or resources spent.

Holdback: A sum of money withheld under certain conditions.

Infiltration: The unintentional or accidental leakage of outside rainwater typically through cracks in the building envelope.

Insulating: Prevent the passage of electricity to or from (something) by covering it in non-conducting material.



- Interruptible supply agreement:** Firm services, also called uninterruptible services, are services, such as electricity and natural gas supplies, that are intended to be available at all times during a period covered by an agreement. Businesses that can afford to have services interrupted or that can significantly reduce their consumption when notified by the provider can get better rates by having non-firm service. These businesses will have an Interruptible Supply Agreement with the appropriate utility.
- Lien:** A right to keep possession of property belonging to another person until a debt owed by that person is discharged.
- Life cycle:** the length of time from when a piece of equipment is installed until it reaches the end of its useful life or is replaced.
- Life-cycle costing:** A life-cycle cost analysis involves the analysis of the costs of a system or a component over its entire life span. Some of these costs will include the cost of equipment, repairs, maintenance, downtime costs, etc.
- Mill rate:** also referred to as the millage rate, is a figure representing the amount per \$1,000 of the assessed value of a property, which is used to calculate the amount of property tax.
- Oxidation:** Oxidation is the interaction between oxygen and all the different substances they may contact. The secret of preventing oxidation caused by oxygen is to provide a layer of protection between the exposed material and the air. This could mean a wax or polyurethane coating on a car, a layer of paint on metal objects or a quick spray of an anti-oxidant, like lemon juice, on exposed fruit.
- Named perils insurance:** Named perils coverage includes a list of the most common types of things covered under your insurance. Named perils include fire, theft and water damage. Everything is listed very clearly in your policy booklet so you have a complete and thorough understanding of what your insurance policy covers. Named perils building coverage is very rare. After all, your home is probably the largest investment you will ever make—why would you not want it fully protected?
- Peak demand:** A time when electrical power is expected to be provided for a sustained period at a significantly higher than average supply level. An example would be increased daytime use in summer months due to air-conditioning.
- Potable water:** Water that is safe to drink or be used in food preparation.
- Power factor:** The power factor is a calculated value showing how effectively electrical energy delivered to the building is used. The power factor will depend on the type of electrical equipment in use—the more motors and electronic equipment, the lower the power factor and the less effectively power is being used.
- Private rental apartments:** Multi-residential apartment complexes that are privately owned.
- Productivity:** A measure of efficiency measured in terms of the rate of output per unit of input. In other words, the amount of work completed during a given time.
- Profitability:** The amount a business or activity produces profit or financial gain.
- Public housing:** A housing project that is government-funded. The primary goal of public housing is to supply affordable living spaces for low-income families.
- Reconciled:** Balancing and settling accounts to make sure that all transactions agree with your records.
- Reimbursement:** A sum paid to cover money that has been spent or lost.



Repealed: An act of law or Parliament that has been withdrawn.

Reserve fund: The reserve fund is a bank account or investment used to accumulate money for planned capital projects.

Sacrificial anode: Easily corroded material intentionally installed to leave the rest of the system relatively corrosion-free.

Sanitation: Conditions relating to public health, especially the provision of clean drinking water and adequate sewage disposal also including overall cleanliness.

Specification: A detailed description of the design and materials used to make something.

Stack effect: During cold weather, warm air tends to rise to upper levels and out the top of the building. This is known as “stack effect.” The air lost at the top is replaced by cold air leaking in at the bottom.

Switchgear: Switching equipment used in the transmission of electricity.

Tender (retender): Make a formal written offer to carry out work, supply goods, or buy land, shares, or another asset for a stated fixed price.

Thermographic scan: Will measure the surface temperatures of the building by using infrared video and still cameras to detect possible defects.

Transformer allowance: The amount deducted from the bill if the utility company does not own the main transformer that supplies the building.

Ventilation: The delivery of fresh air to a room, building, etc.



Alternative text and data for figures

Energy conservation efforts

	Winter Demand— All Electric Building	Summer Demand— Air-Conditioned Building	Annual Consumption— Non Air-Conditioned Building	Annual Consumption— Air-Conditioned Building
Building service	10%	13%	12%	10%
Tenant use	19%	25%	21%	19%
Water heating	19%	25%	29%	25%
Space heating	52%	-	38%	33%
A/C	-	37%	-	13%

