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BUILDING INSPECTION REPORT

Prepared for: Buyer
Property: 300 Private Pl., Unit #4
Brooklyn, NY
Inspection Date: April 17, 2005
Report Number: BR-041705-1

The Purchaser, its successors or assigns, understands and agrees that Grams Engineering Building Inspection Report, all content, material, plans and drawings contained herein, including all exhibits and attachments thereto are unique and provided for the sole purpose of the single transaction of evaluating the condition of the home, building, structure or premises listed on the cover of this Report, and that the Purchaser shall use the same only for such purposes. The Purchaser, its successors or assigns, agrees it will treat this report as strictly confidential and will not directly or indirectly use, give, sell, exchange, show, display, exhibit, copy or reproduce this Inspection Report, including all exhibits and attachments thereto to any person, party, or entity, except the real estate agent representing the Purchaser, attorney of the Purchaser, and mortgage banker of the Purchaser without having first obtained the written consent of Grams Engineering.

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Engineer's Certification

We certify that the building and all appurtenances constituting part of the property located at the address identified on the cover of this report, and listed and evaluated in this report, were inspected by a Licensed Professional Engineer (New York license No. 077693, New Jersey license No. 39654). The current certificates of licensure are available for review at the office of Grams Engineering at 30 Mulberry Circle, Staten Island, NY 10314.

Further, we certify that we invested reasonable effort in conducting this limited walk-through visual inspection and in preparation of this report.

Further, we certify that this report does not omit any material fact and does not contain any untrue statement.

Gary Shed, P.E.

April 20, 2005

Limited Warranty

Although reasonable care has been taken in the preparation of this report, Grams Engineering extends no warranty and makes no representation as to the suitability of the information contained herein for the Purchaser's intended purpose or for the consequences of its use. The Purchaser should make a determination as to the suitability of the information for their particular purpose(s).

This report is not a guarantee or warrantee nor is it the implication that the inspected premises construction and electrical, plumbing, heating, and air conditioning systems comply with all applicable federal, state and local building, electrical, environmental and zoning codes, regulations and ordinances in effect on the date of the inspection.

Grams Engineering warrants to the original Purchaser of this report that we will re-inspect a home, building or structure, and revise and reissue the report for a period of one (1) year after the original report has been issued, at no cost to the Purchaser upon notification and verification of typographical errors or omissions. A re-inspection will be made if requested by original Purchaser and a new report issued, at any time at a fee not to exceed half the fee charged for the original inspection.

Grams Engineering agrees to defend original Purchaser of this report in any action against Purchaser to the extent that such action is based on a charge or allegation that the findings listed in this report are incorrect, and further agrees to indemnify Purchaser for any final damages award, or actual damages or costs that may be entered against Purchaser in any such action, but in no event shall Grams Engineering's financial obligations hereunder exceed the inspection fee paid to Grams Engineering by the Purchaser.

Introduction

The engineering inspection is conducted by qualified and experienced registered professional engineer and is intended to provide the Purchaser with a non-biased engineering evaluation of a home, building or structure. This is a limited access walk-through visual inspection requiring obtaining the current owner's permission. The inspection includes examination of the heating and cooling systems, electrical system, plumbing system, the condition of roofing and siding, windows and doors, and the structural integrity evaluation as well as many other items that make part of a home or building, from the roof to the basement.

The nature of the inspection limits engineer from inspecting many items that are hidden inside the walls, under floor, and other inaccessible areas, or obstructed by furniture, floor coverings, and wall decorations. These items include but are not limited to pipes, wires, structural members, etc. Inspecting these items can often result in minor damage to the premises and requires obtaining the current owner's permission and indemnification well in advance and in writing.

This inspection does not include checking inaccessible areas. The inaccessible areas include: underlying soil, underground utilities, crawl spaces, rooftops, upper siding, attic spaces without sub-flooring, interiors of walls, ceilings and fireplaces, locked rooms, and areas obstructed by debris and personal property. The inspection also does not include: reviewing drawings and files at your local Building Department, determination of efficiency and adequacy of appliances and heating and cooling systems, telephone and alarm wiring and jacks, sampling and analytical testing of air and water quality, chemical composition testing of building materials and finishes, and voltage or amperage testing of electrical power feeds.

Although we look for obvious signs of wood destroying organisms (WDO), rodents infestation or treatment, and mold, we are not licensed exterminators or certified mold remediation professionals and do not specifically check for or warrant against these conditions. A wood destroying insects (WDI) inspection can be conducted, and form NMPA-33 issued if required by your lender (for conventional mortgages only, FHA and VA mortgages excluded), if requested by purchaser prior to the inspection at an additional fee of \$150.

The findings in this report are presented as observed by engineer at the time of the inspection. Although the condition of the premises and the systems may be acceptable on the date and the time of the original inspection, the condition may change after the inspection due to seasonal changes, heavy rains, miss-use, abuse, negligence, etc. We recommend that you and/or the engineer of your choice conduct a pre-closing inspection immediately prior to closing.

About This Report

The purpose of the Building Inspection Report is to present specific findings to the Purchaser step-by-step in clear and simple language and to provide the Purchaser with a concise, practical advice based on the knowledge and sound engineering judgment of experienced engineer. Having all the facts enables the Purchaser to make an informed decision about the purchase.

Specifically, the inspection report covers in detail:

- Evaluation of structural integrity.
- Evaluation of roofing, where visible, including the extent and the location of any degraded areas, and pinpointing the specific location of any potential water leaks.
- Evaluation of condition of windows and doors.
- Evaluation of condition of plumbing, electrical, and cooling and heating systems, and major appliances.
- Specific recommendations to repair or replace.

This report is organized into thirteen sections and two appendices. Each of the sections contains information relevant to condition of the premises and the systems that it contains. The paragraphs below present each of the sections and a brief comment on its contents.

Section 1: General Considerations

This section provides important information regarding your responsibilities as a Purchaser. The Purchaser should fully understand this section.

Section 2: Brief Summary of Findings

This section provides inspection summary at a glance.

Section 3: Structure

This section provides the summary of detailed findings regarding the condition of building or structure.

Section 4: Roof Mounted Structures and Projections

This section provides the summary of detailed findings regarding the condition of chimneys, vent stacks, vents, and other items commonly found on the roof.

Section 5: Windows and Doors

This section provides information about windows and doors installed in this building and their condition.

Section 6: The Plumbing System

This section provides information about the building's plumbing system and its condition.

Section 7: The Electrical System

This section provides information about the building's electrical system and its condition.

Section 8: Heating, Ventilation and Air Conditioning

This section provides information about the type of heating and air conditioning systems installed in this building and their condition.

Section 9: Major Appliances

This section provides information about appliances installed in this building and their condition.

Section 10: Life Safety Systems

This section provides information about the building's fire and carbon dioxide detectors, and burglar alarm system.

Section 11: Outside Structures

This section provides information about outside structures such as porches, balconies and decks.

Section 12: Miscellaneous Observations

This section provides the summary of miscellaneous observations about condition of the building and appurtenances.

Section 13: Figures

This section contains the annotated photographs of problem areas.

Appendix A: Maintenance Checklist

This section provides information needed to maintain your building in top shape year after year. It is not intended as a step-by-step procedure, but relies on the knowledge of experienced homeowners and professionals.

Appendix B: Glossary

This section contains explanation of the terms used in this report.

What is Not Covered in this Report

This report does not cover: condition of underground foundation and utilities - drains, piping, wiring, oil tanks, wells, and septic tanks; condition of crawl spaces, interiors of walls, ceilings and fireplaces, inaccessible electrical wiring and plumbing; and specific information about efficiency and adequacy of appliances and heating and cooling systems.

Warnings

Warnings like the sample shown below are inserted throughout the report to bring to the reader's attention the hazardous conditions that exist in this building and could cause personal injury or property damage if not eliminated.



Improper grounding of aerial antenna(s) may result in damage to appliances in the event of a lighting surge.

NOTE

Only the items relevant to Unit #4 are covered within the scope of the inspection and are reported.

General Considerations

It is your responsibility as a purchaser to verify the following:

- a) The Certificate of Occupancy (C of O) is on file with the local Building Department, and confirms that the building was constructed in accordance with the building code and zoning regulations in force at the time of construction, that it is up to date and covers any subsequent alterations or additions, and that the dimensions and number of rooms, bathrooms, garages, etc. as they exist today correspond exactly to the plans on file.

If the Certificate of Occupancy does not exist on file with the local Building Department or is not up to date, you risk incurring a considerable expense for obtaining it or making it current.

- b) The up to date Certificate of Compliance (C of C) exists on file with the local Building Department for furnace or boiler hookup(s), sewer hookup, fireplace (if installed), outdoor structure(s) (if installed), etc.

If the Certificate of Compliance does not exist on file with the local Building Department or is not up to date, you risk incurring a considerable expense for obtaining it or making it current.

- c) There are no outstanding building violations. Obtain an up to date building violations report from the local Building Department.

You risk incurring a considerable expense for satisfying any outstanding building violations.

- d) The lot is zoned for your intended use, and the property address corresponds exactly with the address on file at the local Building Department.

- e) The fire detection and protection devices (smoke and heat detectors, and/or fire sprinklers) are installed and operational.

You risk injury or death in case of fire if fire detection and protection devices are not operational. In many cases, e.g. multi-residence dwellings, it is also the requirement of your local Building or Fire Department and insurance company.

- f) The carbon monoxide (CO) detectors are installed and operational.

*CO is a highly toxic gas. It is the product of the incomplete combustion of fossil fuels such as oil, natural gas, gasoline, wood and coal. The major sources of CO in homes and apartments are fossil fuel burning boilers, furnaces, water heaters, fireplaces and parking garages. CO is very dangerous because it is colorless, odorless, tasteless, and non-irritating. **CO poisoning can be fatal.** You risk injury or death in case carbon monoxide detectors are not installed in your building or are not operational.*

- g) In many instances your mortgage bank will require termite inspection to determine that the house doesn't have termites or other wood boring insects as a prerequisite to loan approval. In case of FHA or VA loans, this inspection has to be performed by a licensed exterminator.

The termite damage is not always obvious and can often result in significant damage to the structure. You risk incurring a considerable expense if you purchase the house without conducting the termite inspection.

- h) The building is lead paint and asbestos-free.

You risk serious health damage from lead poisoning if the building has ever been painted with the lead containing paint, or if asbestos-containing pipe and wall insulation, wall tiles, etc. are in use in this building.

- i) The building is radon gas-free.

You risk serious health damage if radon gas is a problem in this area.

- j) The building is mold-free.

You may experience health problems if mold is present in your home.

- k) Arrange for water test and install water purification equipment if required.

Brief Summary of Findings

The building at 300 Garfield Place, Brooklyn, NY is a six-story, attached, masonry construction, multi-apartment residential dwelling with basement and hookups to city water and sewer. It is reported by realtor to have been built around 1870.

The building is located at between 8th Ave. and Prospect Park West, with the main lobby facing Garfield Place on its Westerly side. The building is bordering on both sides with similar height residential dwellings.

The common areas of the building are sprinklered. There is one principal means of egress from the building: through the main lobby doorway facing Garfield Place. There are no exterior fire escape stairs.

There appear to be six principal apartments, one on each level. Wooden stairs with wooden handrails interconnect the stair well landings. The six apartments each have a doorway leading into the stairwell with a further means of egress through the main lobby doorway and down the exterior steps to the street level.

The basement in this building is not finished and is principally used as utilities, laundry, and storage space. The basement contains the following utilities: common gas-fired boiler, common hot water heaters, common electrical service panels, common and individual electric meters, common and individual natural gas meters, common water meter, and common telephone distribution panel. A laundry area contains several common clothes washers and dryers. The basement is accessible via the descending stairs from the first level. The boiler room is separated from the rest of the basement by a masonry-construction wall and a fire-rated door.

The Unit #4 is located on the 3rd floor and contains several principal rooms: a foyer, master bedroom, one other bedroom, family room with access to roof deck, kitchen, and bathroom.

- ✓ No determination is made with regards to the overall structural soundness of this building. Only the portion of the basement storage area pointed out by realtor as designated to Unit #4 was inspected. Although some cracks are present in the foundation and basement walls as a result of the building settling over time, overall the condition of the accessible foundation and basement walls, and the interior walls and floors appears to be normal for the building of this construction type, size and age.
- ✓ The Unit #4 features a combination of ceramic tile in the kitchen and bathroom, and hardwood flooring elsewhere. All flooring is worn, however it feels sufficiently solid when walked upon, with only minor hardwood floor creaks, and appears to be normal for the building of this construction type, size and age. One notable exception is the perceptible sag in the family room. The amount of sag is evidenced by the crack in the exterior wall base molding (Fig. 5). We recommend professional inspection and repair of sub-floor in the family room when remodeling.

- ✓ All accessible interior and exterior walls within and immediately adjacent to Unit #4 are plumb and appear to be normal for the building of this construction type, size and age. Although the plaster has cracked in several places as a result of building settling over the years, and some walls' paint is peeling, the above is not structurally significant and is mostly a cosmetic damage.
- ✓ Only the roof over the doorway leading to the roof deck belonging to Unit #4 was inspected. The roof's grading is adequate for drainage. There are no signs of past or current water leaks visible when looking from inside the dwelling, however, the coal-tar weatherproofed roof appears to have numerous coats of tar applied over the years, with at least several layers having cracked along the roof ridges (Fig. 7). The cracks are expected to widen with time and ultimately are likely to develop a leak. The current or future owner of the Unit should plan to resurface the roof in the near future.
- ✓ Only the front and rear siding belonging to Unit #4 was inspected. The stone (front) and brick (rear) siding are in generally good condition.
- ✗ With the exception of the rear-facing replacement-grade double-hung vinyl frame windows in the family room and the kitchen, the front-facing windows in Unit #4 are old, thermally inefficient, and worn wood frame double-hung windows. The windows' frames, trim and sashes appear to have multiple coats of paint applied over the years. The window frames are warped, splintered and drafty. Some windows are sticking and many don't have functioning locks. On the interior and exterior, most wooden windows' trim and sashes require painting and new caulking.
- ✓ All exterior and interior doors belonging to Unit #4 are in good condition.
- ✓ The interior wooden steps leading to roof deck are in good condition.
- ✓ The plumbing and drainage systems piping belonging to Unit #4 are in good condition.
- ✓ This building features two 50 gallons each gas-fired water heaters. The water heaters appear to be approximately 3-5 years old and in good condition, with only minor oxidation on the copper piping. The total hot water capacity is believed to be inadequate to meet the demand for hot water in a multi-family building.
- ✗ The electrical system in this building is not in compliance with the New York City Building Department regulations pertaining to exposed electrical distribution panel wiring in the basement (Figs. 1 and 2) and exposed control transformer wiring in the boiler room (Fig. 2). The electrical system in Unit #4 does not meet today's National and local electrical and fire prevention codes pertaining to grounding of aerial antennas (Fig. 7), the exterior electrical wiring, and use of ground fault circuit interrupters (GFCI) outdoors (Fig. 6). Open or unsecure panel-box covers present electrocution hazard. Panel-box covers should be securely in place at all times. Similarly, the door to the boiler room should be securely locked to prevent children and adults from accidentally coming in contact with the high voltage feeding the transformer primary. The seller and the buyer are strongly encouraged to bring this potentially dangerous condition to the attention of COOP association.
- ✓ This building features a one-zone gas-fired steam heating system. The boiler unit appears to be in good condition, however the service sticker was missing and no service records were available for

review. A hallmark of many older homes, steam heating system can operate reliably for many years, provided it is carefully maintained. However, it is inadequate to heat the entire building and even a single apartment uniformly, i.e. it may be uncomfortably hot near the radiators while the remote areas of the apartment may be uncomfortably cold. It should also be noted that the dated thermostat controlling heat level in the entire building is inefficient by today's standards, contributes to higher than necessary heating costs and is inadequate to control temperature in the apartment. Each radiator has to be individually controlled via shut off valves to achieve some level of uniform heating.

- 8 The rooftop deck planks and cross members are in generally good condition, with no excessive movement. However, the side rails are loose and need securing.
- ✘ The Unit #4 does not have a central air-conditioning system. This is a major disadvantage since the window type room air conditioners are inadequate to cool the entire apartment, and often even a single room, uniformly.
- ✘ There appears to be no carbon dioxide detector installed in the building.
- ✓ All major appliances are functional and appear to be in good condition.

Structure

NOTE

This limited time walk-through visual inspection was conducted in all directly accessible and observable areas. This limits the ability of the engineer to detect certain structural problems. It should be expected that there are leaks, cracks, and possibly rot which were not observed during this inspection, that exist in both accessible and inaccessible areas of foundation and structural members.

NOTE

Only structural components belonging to Unit #4 were inspected.

Foundation and Flooring

NOTE

This building is situated on a concrete slab foundation with a sub-level basement, which serves as a supporting structure for the building. The basement floor is a below-grade concrete slab supported by packed earth and concrete footings underneath. No determination is made with regards to the overall structural soundness of the foundation or the building. Only the portion of the basement storage area pointed out by realtor as belonging to Unit #4 was inspected. Although some cracks are present in the foundation and basement walls as a result of the building settling over time, overall the condition of the accessible foundation and basement walls appears to be normal for the building of this construction type, size and age, and the immediate storage area is dry.

The flooring in Unit #4 is hardwood and ceramic tile floor laid over a sub-floor supported by joists and beams, which in turn are supported off the walls at the edges. All flooring is worn, however it feels sufficiently solid when walked upon, with only minor hardwood floor creaks, and overall appears to be normal for the building of this construction type, size and age. One notable exception is the perceptible sag in the family room. The amount of sag is evidenced by the crack in the exterior wall base molding (Fig. 5).

The condition of the sub-floor underneath the finished floor throughout the unit could not be ascertained.

NOTE

Minor floor creaks were heard throughout the building. The creaks are not deemed to be of any significance and are expected for the building of this type, size and age.

We recommend professional inspection and repair of sub-floor in the family room when remodeling.

Roofing and Ceilings

The roof over the doorway leading to the rooftop deck is a traditional sloping roof consisting of a framework of rafters and joists supporting solid plywood sheathing roof deck weatherproofed with coal-tar. Typically, this type of roof can last over 10 years depending on the climate, however regular coal-tar application may be necessary to keep the roof in good condition. The roof appears to have numerous coats of tar applied over the years. Although currently there are no signs of past or current water leaks visible when looking from inside the dwelling, the coal-tar weatherproofing has cracked along the roof ridges (Fig. 7). The cracks are expected to widen with time and ultimately are likely to develop a leak. The current or future owner of the unit should plan to resurface the roof in the near future.

- ✓ **Subroof (sheathing and underlayment):**... Not accessible for evaluation
- 8 **Roof surface:** Recommend resurfacing in the near future.
- ✓ **Roof surface grading:** Adequate for drainage.
- ✓ **Ceilings:** All ceilings are level and are in generally good condition with no signs of past or present water penetration. The plaster has cracked in a few places as a result of building settling over the years, however this is not structurally significant and is mostly easily repairable cosmetic damage.

Walls

The walls in Unit #4 are masonry and wood frame construction with plaster/gypsum wallboard as a backing for interior wall treatments.

Overall, the interior and exterior walls are plumb and appear to be normal for the building of this construction type, size and age. Although the plaster has cracked in several places as a result of building settling over the years, and some walls' paint is peeling, the above is not structurally significant and is mostly a cosmetic damage.

NOTE

There is always a possibility of rot or other damage in the inaccessible areas behind finished walls. The extent of such damage, if any, is impossible to inspect using non-destructive methods.

- ✓ **Signs of water penetration:** None observed.
- ✓ **Bathroom tiled walls:**..... Satisfactory.
- ✓ **Bathtub(s) grout and caulking:** Satisfactory.

Siding

- ✓ **Front stone siding:** Satisfactory overall with only minor cracking. Any chips and cracks appear to have been adequately repaired, although colors don't match.

- ✓ **Rear brick siding:** Satisfactory.

Stairs

The exterior stairs leading to Unit #4 are wood construction with wood handrails and balusters. The steps are creaking slightly, however, this is normal for the age of the building, and overall, the stairs and handrails are sturdy and secure.

The interior wood-construction stairs leading to the outside roof deck are sturdy and secure.

Roof-mounted Structures & Projections

NOTE

Only items belonging to Unit #4 were inspected.

Chimney(s) and Vents

Outside of scope of the inspection

Flashings and Soffits

Outside of scope of the inspection

Gutters and Downspouts

Outside of scope of the inspection

Exterior Trim and Caulking

Satisfactory, except needs new caulking around front-facing windows.

Skylights

None observed in Unit #4

Windows and Doors

NOTE

Only the windows in Unit #4 were inspected.

Windows

With the exception of the rear-facing replacement-grade double-hung vinyl frame windows in the family room and the kitchen, the front-facing windows in Unit #4 are old, thermally inefficient, and worn wood frame double-hung windows. The windows' frames, trim and sashes appear to have multiple coats of paint applied over the years. The window frames are warped, splintered and drafty. Some windows are sticking and many don't have functioning locks.

- ✓ **Windows:** With the exception of the rear-facing replacement-grade double-hung vinyl frame windows in the family room and the kitchen, the front-facing windows in Unit #4 are old, single pane, thermally inefficient, and worn wood frame double-hung windows. The windows appear to have multiple coats of paint applied over the years. The window frames are warped, splintered and drafty. Some windows are sticking and many don't have functioning locks.
- ✓ **Window screens:** Satisfactory, except one window in the master bedroom.
- ✓ **Windows trim:**..... On the interior and exterior, most wooden windows' trim and sashes require painting and new caulking.
- ✓ **Caulking/weather-stripping:**..... Needs new around front-facing windows.

Doors

All exterior and interior doors belonging to Unit #4 are in good condition.

The Plumbing System

NOTE

Only the plumbing system components in and relevant to Unit #4 were inspected.

This building features a combination of black iron, copper and brass water and drain lines, and black iron natural gas lines.

The plumbing and drainage systems piping belonging to Unit #4 are in generally good condition. The radiators need painting.

This building features two 50 gallons each gas-fired water heaters. The water heaters appear to be approximately 3-5 years old and in good condition, with only minor oxidation on the copper piping. The total hot water capacity is believed to be inadequate to meet the demand for hot water in a multi-family building.

The gas meter, the water meter, and the main water shutoff valves are located in the basement.

NOTE

The water meter supports are not in accordance with good plumbing practices (Fig. 4)

Recommend covers be installed over the radiators to prevent accidental contact with hot surface.

The Electrical System

NOTE

Only the electrical system components relevant to Unit #4 were inspected.

Service Entrance Panel(s) and Wiring

This building has a "three-wire service" providing both 110-volt and 220-volt capabilities. The main electrical service entrance panel is located in the basement and is equipped with a 40-Amp main circuit breaker. The circuit breaker panel is located in Unit #4 and is approximately 50% occupied which leaves you with the sufficient expansion capacity to add more circuit breakers in the future. However, any service less than 60 Amps at 110/220 volts is considered inadequate. Additionally, there are no 220-volt receptacles in the unit, which severely limits the kind and how many electrical appliances you can use.

- ✓ **Main service entrance panel:** Satisfactory.
- ✓ **Circuit breaker panel:** Satisfactory.
- ✓ **Wiring:** Satisfactory.
- ✓ **Voltage check:** Satisfactory as measured at 118 Volts at a representative number of outlets.

Only the outlets and switches that had appliances and light fixtures connected to them were checked for proper operation.



The electrical system in this building is not in compliance with the New York City Building Department regulations pertaining to exposed electrical distribution panel wiring in the basement (Figs. 1 and 2) and exposed transformer wiring in the boiler room (Fig. 2). Open or unsecured panel-box covers present electrocution hazard. Panel-box covers should be securely in place at all times. Similarly, the door to the boiler room should be securely locked to prevent children and adults from accidentally coming in contact with the high voltage feeding the transformer primary. The seller and the buyer are strongly encouraged to bring this potentially dangerous condition to the attention of COOP association.



There is an electrical extension cord in use outdoor (Fig. 6). This type of extension cord is not appropriate for outdoor use. Improper use of extension cords may cause personal injury, and result in damage to the electrical circuits and potentially, fire. We recommend the extension cord be removed to avoid fire hazard.

NOTE

It should be expected that electrical insulation on the wires in at least some areas has frayed (became more brittle) due to the age of the building.

Ground Fault Circuit Interrupter(s)

The ground floor circuit interrupter (GFCI) is a special kind of circuit breaker. If there is a current leakage, or “ground fault”, the GFCI opens the circuit instantly, cutting off the electricity. The National Electrical Code (NEC NFPA 70) and the NYC Building Code require ground fault circuit interrupter to be installed in bathroom, outdoor and garage locations of new construction. Although not a retroactive requirement, not complying with this requirement may cause personal injury and result in damage to the electrical circuits and potentially, fire.



The outdoor electric outlet in Unit #4 is not fitted with a ground fault circuit interrupter (Fig. 6). Not complying with this National Electrical and local Building codes requirement may cause personal injury, and result in damage to the electrical circuits and potentially, fire. We recommend that GFCI receptacle be installed outdoor as required by current building code.

Lightning Protection

The electrical system in Unit #4 does not meet today’s National and local electrical and fire prevention codes pertaining to grounding of aerial antenna (Fig. 7). The antenna (satellite dish) cable is improperly grounded to an un-grounded electrical conduit.



Improper grounding of aerial antenna may result in damage to appliances in the event of a lightning surge.

Heating and Air Conditioning System

NOTE

Only components relevant to Unit #4 were inspected.

Heating System

This building features a one-zone steam heating system. A gas-fired boiler located in the basement turns water into steam, which then rises through supply pipes to radiators. In the radiators, the steam gives up its heat and condenses into water, which then returns to the boiler through condensate return pipes. A hallmark of many older homes, steam heating system can operate reliably for many years, provided it is carefully maintained. However, it is inadequate to heat the entire building and even a single apartment uniformly, i.e. it may be uncomfortably hot near the radiators while the remote areas of the apartment may be uncomfortably cold. Each radiator has to be individually controlled via shut off valves to achieve some level of uniform heating.

- ✓ **Boiler:**..... The boiler unit appears to be in good condition, however the service sticker was missing and no service records were available for review.

- ✓ **Thermostat:** The dated single thermostat controlling heat level in the entire building is inefficient by today’s standards, contributes to higher than necessary heating costs and is inadequate to control temperature in the apartment.

Air Conditioning and Ventilation Systems

The Unit #4 does not have a central air-conditioning system. This is a major disadvantage since the window type room air conditioners reportedly in use in the summer are inadequate to cool the entire apartment, and often even a single room, uniformly. Ask the seller to demonstrate how the air conditioning units are installed and supported in the windows.

The wall switch operated exhaust fan in the bathroom is operational.

Major Appliances

NOTE

Only appliances in Unit #4 were inspected.

- ✓ **Refrigerator(s):** Functional
- ✓ **Kitchen range/oven(s):** All igniters function properly.
Recommend venting the range hood outside.
- ✓ **Dish washer:** Functional
- ? **Garbage disposal unit:**..... None observed.

Life Safety Systems

NOTE

Only life safety systems relevant to Unit #4 were inspected.

Fire Protection System

NOTE

The New York City Building Code requires installation of smoke or fire detection devices outside of each separate sleeping area in the immediate vicinity of the bedrooms in all new and existing one- and two-family houses and apartment buildings, as well as in basements and basement recreation rooms in one- and two-family houses.

- ✓ **Fire suppression system:** Sprinklers observed in the common areas of the building.
- ✓ **Smoke detector(s):** 1 installed in the foyer. Appears to be not operational.



The New York City Building Department recommends that smoke detector batteries be changed at six months intervals and tested regularly to make sure it works. You risk injury or death in case of fire if fire or smoke detection devices are not operational.

Carbon Monoxide (CO) Detection System

NOTE

The New York City Building Code requires installation of CO detectors (alarms) within 15 feet of the primary entrance of each bedroom in all new and existing one- and two-family houses and apartment buildings. CO detectors must be “UL” approved. For existing buildings, CO detectors can be battery operated, or can plug into an electrical outlet as long as it has a battery back-up in case of power interruption. New buildings or substantially improved buildings must have detectors that are hard-wired to the building’s electrical systems.

- ✓ **Carbon monoxide detector(s):** None observed.

Burglar Alarm System

Due to the sensitive nature of this system we did not ask if the burglar alarm system is installed/functional. Ask the seller to demonstrate system operation, if installed, prior to closing.

Outside Structures

Unit #4 features rooftop raised wooden deck accessible from the family room. All decking and supports are in generally good condition, with no excessive movement. However, the side rails are loose and need structural reinforcement.



You or your guests risk injury or death from fall if the side rails are not adequately structurally reinforced.

Miscellaneous Observations

- ? Certificate of Occupancy (C of O):** Check with the Brooklyn building department and confirm that C of O for this building exists and is up to date. The C of O should specifically cover:
- Rooftop deck.
- ? Warranty information:** Ask the seller for a copy of warranty still in force for any appliances.
- 8 Fireplace flue:** The fireplace appears to be non-functional, with the burners and burner controls removed. However, the gas line was cut short and left un-capped. If you plan to enable and use the fireplace in the future, hire a competent professional to check the flue condition. If you don't intend to use the fireplace, cap the gas line with an approved pipe cap.
- ? Lead-containing paint and asbestos-containing materials:** Due to the age of the house suspect asbestos-containing materials may have been used in the past, i.e. paint, pipe and wall insulation, floor and wall tiles, etc. Similarly, this building may have been painted in the past with lead-containing paint. These materials are known to cause health problems in humans. The presence of asbestos or lead cannot be ascertained without specialized tests. Ask your realtor for asbestos and lead disclosure information, if available.
- ✓ Kitchen and bathrooms sinks and appliances:** Minor chipping of glazed/enamel surfaces. The bathroom tub stopper is inoperable.
- ✓ Evidence of termites:** No evidence of active infestation or past treatment. Your mortgage company may require independent inspection and certification by a licensed exterminator.
- ✓ Evidence of ants:** None detected
- ✓ Evidence of rodents:** None detected
- ✓ Evidence of mold:** No moldy odor was detected in the basement

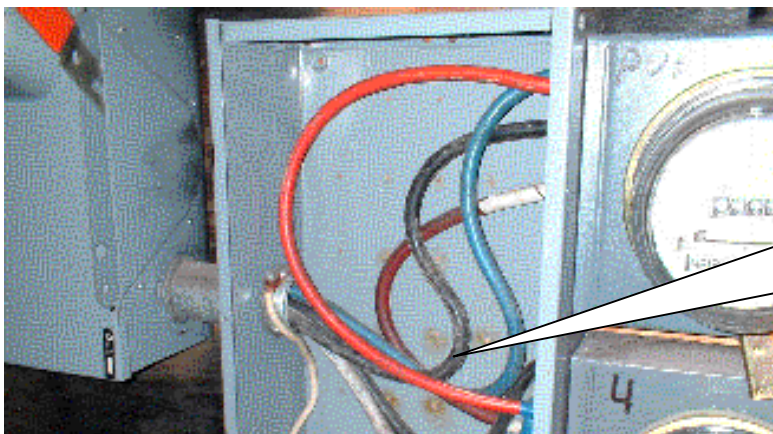
or the apartment.

Figures



Exposed electrical wiring presents electrocution hazard to persons coming in contact with high voltage.

Fig. 1



The unsecured panel-box cover presents electrocution hazard to persons coming in contact with live high voltage wires.

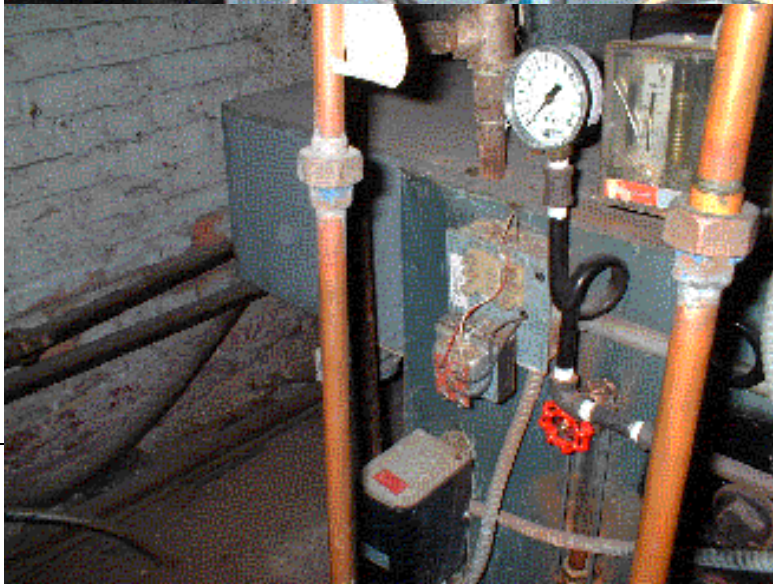
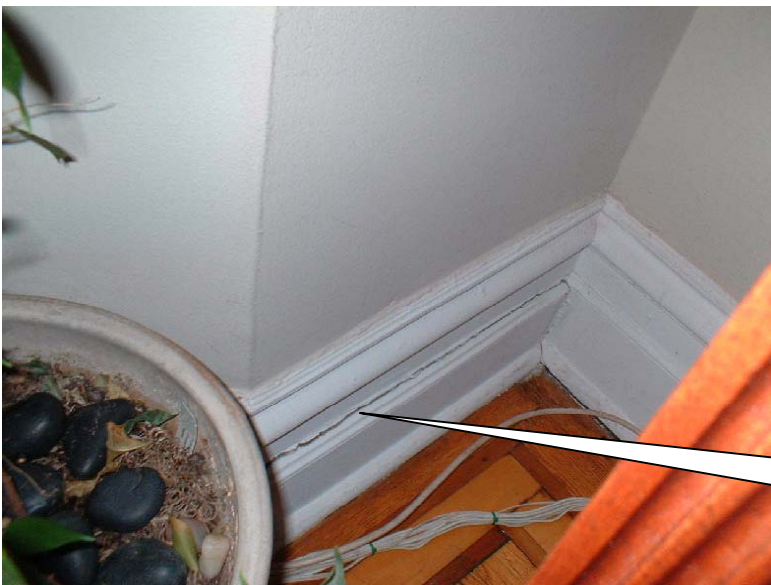


Fig. 3



Water meter is improperly supported by paving stones. Proper pipes supports should be utilized.

Fig. 4



Crack in base molding due to floor settling.

Fig. 5



Fig. 6



Fig. 7

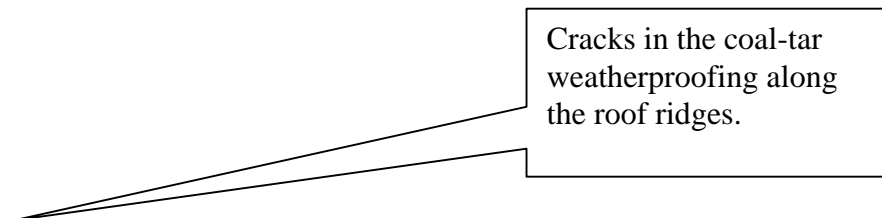




Fig. 8

Appendix A: Maintenance Checklist



Although most of the maintenance tasks needed to be done around a home throughout the year are well within the capabilities of average homeowner, some of these tasks can cause personal injury or damage to equipment and building if not performed properly, and should be left to the professionals.

Check monthly:

Smoke and carbon monoxide detector	Test. Replace batteries if necessary
Sink and tub stoppers	Check for debris and clean if required
Hot water heating system	Test and replace relief valve. Check pressure gauge and drain expansion tank if necessary
Steam heating system	Check safety valve and steam pressure gauge, and replace if necessary. Check water level and add if necessary. Drain out sediment
Forced warm air heating system	Replace air filter. Vacuum registers.
Air conditioning system	Clean or replace filter. Vacuum condenser and evaporator coils (if accessible).

Check every two months:

Gas stove burners	Inspect and clean
Range hood fan	Clean grease filter

Check every three months:

Faucets	Clean aerator
Tub and sink drain	Clean out debris
Floor drain strainer	Clean out debris
Dishwasher	Clean strainer

Check every six months:

Basement and foundation	Check for cracks and moisture and repair if necessary
Toilet	Check for leaks and repair if necessary
Interior caulking	Inspect around tubs, showers, sinks and re-caulk if necessary
Water heater	Clean sediment
Clothes washer	Clean water inlet filter. Check hoses for leaks and replace if necessary
Clothes dryer	Vacuum lint from ducts and surrounding areas
Refrigerator	Vacuum condenser coil. Wash door gasket
Wiring	Check for frayed wires
Exhaust fan	Clean grill and fan blades
Range hood fan	Wash fan blades and housing
Basement and foundation	Check for cracks and moisture and repair if necessary
Range hood fan	Clean grease filter

Check every spring:

Roof	Inspect surface, flashings, eaves and soffits and repair if necessary
Gutters and downspouts	Clean. Check for proper drainage and adjust if necessary. Inspect and repair if necessary
Siding	Inspect, clean and repair as necessary
Exterior caulking	Inspect and replace if deteriorating
Window and door sills, door thresholds	Check caulking and paint. Rework if necessary
Hot water heating system	Lubricate circulating pump and motor
Attic fan	Check operation
Air conditioning system	Check operation. Clean condensate tray drain opening and associated pipe work

Check every fall:

Roof	Inspect surface, flashings, eaves and soffits and repair if necessary
Gutters and downspouts	Clean. Check for proper drainage and adjust if necessary. Inspect and repair if necessary
Siding	Inspect, clean and repair as necessary
Exterior caulking	Inspect and replace if deteriorating
Storm windows and doors	Replace any cracked or broken glass. Tighten or repair any loose or damaged frames. Lubricate door hinges.
Window and door weather-stripping	Inspect and replace if deteriorating
Hot water heating system	Lubricate circulating pump and motor. Bleed air from radiators.
Forced warm air heating system	Vacuum heat exchanger surfaces. Check fan belt tension and adjust if necessary. Replace cracked or worn belt
Gas burner	Clean burners and ports
Oil burner	Service
Thermostat	Clean heat sensor (and contact points and contacts, if applicable). Check accuracy and replace if necessary
Air conditioning system	Lubricate condenser fan motor

Check annually:

Garage doors	Clean and lubricate hinges, rollers and tracks
Septic tank	Have professionally checked
Water heater	Test pressure relief valve and replace if necessary
Gas water heater	Clean burner ports
Range hood	Replace filter
Decks, porches and wood handrails	Check for rot or termite damage. Repair if required

Appendix B: Glossary

The following definitions are applicable to terms used in this report:

Amp.	Ampere. Measurement of electrical current
Asbestos	Fibrous hydrated mineral silicate material
Asbestos-containing material	Any material containing more than one percent asbestos by weight
Asphalt	Petroleum based material widely used in many building material
Blower	Motor-driven fan that moves air through the ducts of a heating or cooling system
BTU	British Thermal Unit, a measurement of heat
Carpenter ants	Ants that tunnel through the wood thus structurally weakening it
Caulking	A flexible silicone-based compound used to fill gaps between two connecting surfaces
Certificate of Occupancy	A certificate issued by local Building Department confirming that the building was constructed in accordance with the building code and zoning regulations in force at the time of construction
Circuit breaker	Automatic safety switch installed in a circuit to break the flow of electricity when the current exceeds a predetermined safe amount
Cornice	The cornice is formed where the eave of the roof meet the side walls
Downspout	A channel made out of aluminum or plastic material designed to carry rainwater away from the building
Duct	Channel through which air passes in heating, cooling or exhaust system
Eave	Lower end of a rafter that extend beyond the building line
Electrical circuit	Two or more wires that provide a path for electrical current from a source to some device using electricity
Electrical conduit	A plastic, rubberized or metal pipe in which electrical wires are installed
Flashing	Sheet metal used to protect windows, doors, etc. from water penetration
Flue	The passage in the chimney through which smoke and fumes are vented outside
Foundation	Portion of the structure at the bottom of the building
Freeze	Part of siding trim

Grout	Mortar used to fit gaps in masonry work or between the edges of ceramic tiles
Gutter	A channel made out of aluminum or plastic material designed to collect and carry rainwater away from the building
Gypsum board	Panel composed of a gypsum core sandwiched between two layers of heavy paper and used as a finish for walls and ceilings, or as a backing for other wall and ceiling materials
Joist	Evenly spaced horizontal length of lumber that provide structural support for floors and ceilings
Load bearing wall	A wall that supports the floor or roof of a building
Mortar	Mixture of cement, sand, water, and some times lime used as an adhesive for laying brick, stone, ceramic tile and concrete blocks.
Purchaser	Homebuyer, real estate professional, attorney or their representatives, original purchasers of this report.
Plumb	To determine if vertical surface is exactly perpendicular to a horizontal plane.
Rake	Extension of gable roof beyond the end wall of the house.
Register	Grill at end of a supply or return duct in a forced worm or cold air system through which air enters or leaves the room
Roof rafter	Evenly spaced length of lumber that provide structural support for roof
Retaining wall	A wall supporting and preventing earth from moving
Roof	The flat slab or sloped deck of a structure including its supporting members, not including vertical supports.
Roof covering	The covering applied to the roof for weather resistance, fire resistance or appearance.
Roof rafter	Evenly spaced length of lumber that provide structural support for roof
Sheathing	Plywood or fiberboard material that provides the nailing base for the roof surface material.
Stringers	Horizontal pieces of lumber serving as the structural support for stair treads.
Stucco	Plaster made from a mixture of cement, sand, and water applied as an exterior finish
Studs	Vertical pieces of lumber forming the structural core of interior and exterior walls of the building.
Subfloor	Boards, planks or plywood nailed to floor joists to provide structural rigidity and a base for finished flooring

Thermostat	A control device signaling a need for heat or cool to the heating and air conditioning system.
Treads	Steps, as in stairs.
Truss	A rigid framework of triangular shapes.
Underlayment	A heavy, fibrous black paper saturated with asphalt.
Volt/Voltage	Unit of measurement of electrical potential/Electric potential at which electric device operates expressed in volts.