PROPERTY CONDITION ASSESSMENT REPORT

The best property inspection experience available.

PREPARED BY:
John Mika

FOR THE PROPERTY AT:
Sample Report
Minnesota, MN

PREPARED FOR:
SAMPLE REPORT

INSPECTION DATE:
Friday, November 6, 2015

Minnesota Inspections, LLC.

Minnesota Inspections, LLC.
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Minnesota Inspections, LLC.

January 10, 2016

Dear Sample Report,

RE: Report No. 1486
Sample Report
Minnesota, MN

Thank you for choosing us to perform your inspection. The inspection itself and the attached report comply with the requirements of the Standards of Practice of our national Association. This document defines the scope of a inspection.

Clients sometimes assume that a inspection will include many things that are beyond the scope. We encourage you to read the Standards of Practice so that you clearly understand what things are included in the inspection and report.

The report has been prepared for the exclusive use of our client. No use by third parties is intended. We will not be responsible to any parties for the contents of the report, other than the party named herein .

The report is effectively a snapshot of the structure, recording the conditions on a given date and time. Inspectors cannot predict future behavior, and as such, we cannot be responsible for things that occur after the inspection. If conditions change, we are available to revisit the property and update our report.

Again, thank you for choosing us to perform your inspection.

Sincerely,

John Mika
on behalf of
Minnesota Inspections, LLC.

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INTRODUCTION

This report is an unbiased opinion of the conditions found at the property and is intended to help the client make informed decisions regarding the purchase and repair of the property.

SCOPE

While a property inspection does not address issues such as code compliance and building permits, we encourage you to have someone search the history of the home with the local building department to determine whether all appropriate permits have been applied for and signed off. Your legal advisers may be able to help with this.

A property inspection analyzes hundreds of features from all systems of a structure. Our focus is on functional items, and we pay particular attention to those components that are expensive to correct, or may create a significant safety problem in the structure. As we look for these major items, we will come across some lesser items as well. As a courtesy, those are documented for you. However, please do not misinterpret this as an exhaustive list of all minor defects in the home. That is not the intent of the inspection.

PRIORITY ITEMS

Items that require immediate action affect life safety, the immediate condition of the structure or are items whose operation was not confirmed during the inspection. The buyer may want to request that these items are addressed by the seller prior to closing.

OUR PHILOSOPHY

Our inspection philosophy separates components that are functional from those that are not. Where components are found to be functional, no recommendations will be offered. Where defects are noted, we will recommend improvements with a time frame. In some cases, components may be functional but clearly near the end of their life cycle. Those circumstances are included in the report as well.

Priority Maintenance Items

Electrical

GENERAL \ Service

Condition: • The occupants indicated no power interruptions have occurred

GENERAL \ Overall condition

Condition: • Good

GENERAL \ Level of Maintenance

Condition: • The electrical system has been well maintained for the most part.

DISTRIBUTION EQUIPMENT \ General condition

Condition: • No major deficiencies noted

DISTRIBUTION EQUIPMENT \ Main distribution conditions

Condition: • Storage within one meter of equipment
Location: East Wall
Task: Improve

Time: Immediate

BRANCH CIRCUIT \ General condition
Condition: • No major deficiencies were noted

BRANCH CIRCUIT \ Outlet conditions
Condition: • Electrical outlets close to a water source - should be protected by a ground-fault circuit interrupter (GFCI)
Location: Exterior Wall
Task: Improve
Time: Less than 1 year

Heating

GENERAL \ Capacity
Condition: • Reported by building management that adequate heat has been available in the past

GENERAL \ Overall condition
Condition: • The overall condition of the heating system is considered to be satisfactory.

GENERAL \ Level of Maintenance
Condition: • The Heating system has been well maintained for the most part.

ROOFTOP UNITS \ Unit #1
Condition: • Approaching end of typical life expectancy
Task: Budget replacement
Time: Less than 5 years

ROOFTOP UNITS \ Unit #2
Condition: • Approaching end of typical life expectancy
Task: Budget replacement
Time: Less than 5 years

ROOFTOP UNITS \ Unit #3
Condition: • Approaching end of typical life expectancy
Task: Budget replacement
Time: Less than 5 years

ROOFTOP UNITS \ Unit #4
Condition: • Approaching end of typical life expectancy
Task: Budget replacement
Time: Less than 5 years

Air Conditioning

General
• Recommend installing hail guards to condenser coils to protect fins from damage.

GENERAL \ Capacity
Condition: • Adequate cooling reported by the building management

GENERAL \ Overall condition
Condition: • The overall condition of the air-conditioning system is considered to be serviceable.

GENERAL \ Level of Maintenance
Condition: • Some deferred maintenance was noted.

ROOFTOP UNITS \ Unit #1
Condition: • Economizer filter is loose
Task: Replace
Time: Immediate

Condition: • Missing condensate trap
Damaged or disconnected
Location: Unit 1 & 2
Task: Repair
Time: Less than 1 year

Condition: • Condenser coil damaged / obstructed / dirty
Moderate hail damage to fins has the potential to reduce the life of the compressors. Recommend combing fins or replacing coils if necessary.
Location: All units
Task: Repair or replace
Time: Less than 1 year

ROOFTOP UNITS \ Unit #2
Condition: • Missing condensate trap
Damaged or disconnected
Task: Repair
Time: Less than 1 year

Condition: • Condenser coil damaged / obstructed / dirty
Moderate hail damage to fins has the potential to reduce the life of the compressors. Recommend combing fins or replacing coils if necessary.
Task: Repair or replace
Time: Less than 1 year

ROOFTOP UNITS \ Unit #3
Condition: • Condenser coil damaged / obstructed / dirty
Moderate hail damage to fins has the potential to reduce the life of the compressors. Recommend combing fins or

replacing coils if necessary.
Task: Repair or replace
Time: Less than 1 year

ROOFTOP UNITS \ Unit #4
Condition: • Condenser coil damaged / obstructed / dirty
Moderate hail damage to fins has the potential to reduce the life of the compressors. Recommend combing fins or replacing coils if necessary.
Task: Repair or replace
Time: Less than 1 year

Ventilation

GENERAL \ Overall condition
Condition: • The overall condition of the ventilation system is considered to be satisfactory.

GENERAL \ Level of Maintenance
Condition: • The Ventilation system has been well maintained for the most part.

ROOF-MOUNT EXHAUST FAN CABINETS \ Operating status and condition
Condition: • No major deficiencies were noted

MAKE-UP AIR UNIT \ Operating status and condition
Condition: • Approaching end of typical life expectancy
Task: Budget replacement
Time: Less than 5 years

Plumbing

GENERAL \ Overall condition
Condition: • The overall condition of the plumbing system is considered to be satisfactory.

GENERAL \ Level of Maintenance
Condition: • The Plumbing system has been well maintained for the most part.

DOMESTIC WATER HEATING \ Operating status and condition
Condition: • No major deficiencies noted

FIXTURES \ General
Condition: • No major deficiencies noted

Roofing

GENERAL \ Overall condition
Condition: • The overall condition of the roofing system is considered to be satisfactory.

GENERAL \ Level of Maintenance
Condition: • The Roofing system has been well maintained for the most part.

EPDM / TPO \ Deficiencies
Condition: • Cement block roof membrane
Task: Remove
Time: Immediate

Condition: • Provide annual roof tune ups to prolong the life of the roof
Task: Service
Time: Annually

DRAINAGE \ Gutters and Downspouts
Condition: • Discharging too close to building structure
Location: North
Task: Below current standards

Interior Components

GENERAL \ Overall condition
Condition: • The overall condition of the interior components system is considered to be satisfactory.

GENERAL \ Level of Maintenance
Condition: • The Interior Components system has been well maintained for the most part.

INTERIOR SURFACES - CEILINGS \ General
Condition: • Water stain
Location: Dinning Area & Area Near Restrooms
Task: Monitor

WATER DAMAGE \ Above grade
Condition: • A water stain was noted. Refer to the relevant sections of the report for discussions of the related systems.
Location: South Entry
Task: Monitor

Structure

GENERAL \ Overall condition
Condition: • The overall condition of the structural system is considered to be satisfactory.

GENERAL \ Level of Maintenance
Condition: • The Structural system has been well maintained for the most part.

Exterior Components

GENERAL \ Overall condition
Condition: • The overall condition of the exterior system is considered to be serviceable.

GENERAL \ Level of Maintenance
Condition: • Some deferred maintenance was noted.

WALLS \ General condition
Condition: • Minor deficiencies noted

WALLS \ Masonry
Condition: • Brick veneer is below grade
Location: Throughout
Task: Below current standards

Condition: • Mortar deterioration
Small area near entry door.
Location: South
Task: Repair
Time: Less than 1 year

Condition: • Cracks
Minor cracks were observed.
Location: South Entry
Task: Repair
Time: Less than 2 years

Condition: • Deteriorated caulking wall expansion joints
Location: Various
Task: Repair
Time: Less than 2 years

DOORS \ General
Condition: • No major deficiencies noted

DOORS \ Personnel doors
Condition: • Corroded

Typical minor to moderate corrosion was observed at rear personnel door frames.
Location: East
Task: Repair
Time: Less than 1 year

SITE WORK \ Grading
Condition: • Unsealed gap at building
Location: North
Task: Repair
Time: Less than 1 year

Condition: • Improper grading
Settled area near the building.
Location: East
Task: Improve
Time: Less than 1 year

SITE WORK \ Sidewalks and Walkways
Condition: • Settled
Potential trip hazard. Recommend grinding flush or replacing the affected areas.
Location: Various
Task: Repair
Time: Immediate

Condition: • Deteriorated
Location: West
Task: Replace
Time: Less than 2 years

SITE WORK \ Asphalt pavement
Condition: • Parking surface in need of repair, seal coating and striping.
Location: Throughout
Task: Repair
Time: Less than 1 year

SITE WORK \ Signs and accessories
Condition: • Worn. Paint or refurbishment needed.
Location: Roof
Task: Repair
Time: Discretionary

This concludes the Summary section.

The remainder of the report describes each of the structures systems and also details any recommendations we have for improvements. Limitations that restricted our inspection are included as well.

The suggested time frames for completing recommendations are based on the limited information available during a pre-purchase inspection. These may have to be adjusted based on the findings of specialists.

Repairs and Improvements - Approximate Costs

Description

General: • Opinions of Probable Cost Tables:

Indicating cost estimates for immediate repairs, short term repairs and replacement reserve costs are included in this report. Based upon observations during our site visit and information received from our interviews with building management and service personnel, which for the purpose of this report was deemed reliable, Minnesota Inspections prepared general-scope, Opinions of Probable Cost based an appropriate remedy for the deficiencies noted. Such remedies and their associated costs were considered commensurate with the Subjects position in the market and prudent expenditures.

These opinions are for components of systems exhibiting significant deferred maintenance, systems or components near or beyond the Expected Useful Life and existing deficiencies requiring major repairs or replacement. Repairs or improvements that could be classified as (i) cosmetic, (ii) decorative, (iii) part or parcel of a buildings renovation program or to reposition the asset in the marketplace, (iv) routine or normal preventative maintenance, or (v) that are the responsibility of the tenants were not included. t is the intent of this report to reflect material physical deficiencies and the corresponding opinion of probable costs that are (i) commensurate with the complexity of the subject property and (ii) not too minor or insignificant. Opinion of probable costs that are either individually or in the aggregate less than a threshold amount of $3,000 for like items are to be omitted from our review. If there are more than four separate items that are separate items that are below this threshold amount, but collectively total over $10,000, such items will be included. Threshold amounts were adopted from ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (ASTM E 2018-08).
Opinions presented in this report are from a combination of sources. The primary sources are from R. S. Means Repair and Remodeling Cost Data and R. S. Means Facilities Maintenance and Repair Cost Data, as well as Minnesota Inspections, LLCs past experience with construction projects. When appropriate, Minnesota Inspections solicited and obtained local subcontractor pricing, or utilized historical cost data provided by the property manager. Information furnished by site personnel or the property management, if presented, is assumed by Minnesota Inspections to be reliable. Replacement and Repair Cost estimates are based on approximate quantities. A detailed inventory of quantities for cost estimating is not a part of the scope of this Report.

General: • Deviations from the Guide:

This property condition assessment was generally carried out as per ASTM E 2018-01. No additional consultants were used in the assessment and preparation of the PCA. The following items were not included:

- Fire and life safety systems were not evaluated
- A Building Code and Fire Code violation inquiry
- Opinions of probable costs
- Flood zone or seismic zone review

General: • Out Of Scope Items:

Refer to the appendix "Out Of Scope Items" for a list of items not included in the scope of an ASTM E2018-08 Property Condition Assessment.

General: • Terms:

The following defined terms are used to describe the condition of components and systems reviewed:

SATISFACTORY/GOOD - Performing its intended function; no major defects noted. Good to Very good condition
SERVICEABLE - Performing its intended function and generally in good to fair condition, but has visible defects or is aging. Items may require minor to moderate repairs.
FAIR - Performing its intended function. Has visible defects or is aging and may require moderate to major repairs in the short term. Item or equipment may be at or near its expected useful life but still functioning as intended.
POOR - Not properly performing its intended function or at the end of its expected useful life. Component requires major repair or replacement.

General: • Reliance:

This report has been prepared for the sole benefit of the client identified on the cover page of the report for the purpose of assessing the condition of the property. The report may not be relied upon by any other person or entity without the express written consent of Minnesota Inspections LLC. We have performed our services and prepared the Report in accordance with applicable, generally accepted engineering, environmental or appraisal consulting practices. We make no other warranties, either expressed or implied, as to the character and nature of such services and product.

General: • Scope:

The PCA carried out by Minnesota Inspections on the Site is based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E 2018-08) and consisted of the following: Interviews Document review Walk-through Site Visit Preparation of Opinions of Probable Costs to Remedy Physical Deficiencies; and, Preparation of Property Condition Assessment Report. This Report is based on a site visit, in which Minnesota Inspections LLC performed a visual, non-intrusive and non-destructive evaluation of various external and internal building components. These systems included the roof, foundations, structural frame, building envelope, HVAC, electrical, and plumbing. The inspection also includes ancillary items such as; site drainage, pavement, sidewalks and landscaping. The Property Condition Report is not a building code, safety, regulatory or environmental compliance inspection. Minnesota Inspections observed the interior spaces to determine its general character and condition. During the site visit we interviewed the available site personnel and/or property managers to add or confirm information. We reviewed available drawings or site documentation to confirm the general character of the construction. Photographs were taken to provide a record of general conditions of the facility, as well as the specific deficiencies observed. If any additional information is encountered concerning the facility, it should be forwarded to Minnesota Inspections for possible re-evaluation of the assumptions, conclusions and recommendations presented herein. The recommendations and opinions of cost provided herein are for observed deficiencies based on the understanding that the facility will continue operating in its present occupancy classification. This Report is based on the evaluators judgment of the physical condition of the components, their ages and their expected useful life (EUL). It is understood that the conclusions presented are based upon the evaluators professional judgment. The actual performance of individual components may vary from a reasonably expected standard and will be affected by circumstances that occur after the date of the evaluation. The Report does not identify minor, inexpensive repairs or maintenance items which are clearly part of the property owners current operating budget so long as these items appear to be taken care of on a regular basis. The report does address infrequently occurring big ticket maintenance items, such as exterior painting, deferred maintenance and repairs and replacements that normally involve significant expense or outside contracting. Only the items specifically addressed in this report were examined. No comment is offered fire regulation, building code and building bylaw compliance, or environmental concerns.

General: • Purpose:

The purpose of the Property Condition Report is to assess the general condition of the buildings, site, and other improvements at the referenced location. The Report will identify those areas that will require remedial repair work and will assign them an associated estimated remedial cost where appropriate. Opinions of probable cost are an optional component of some reports.

General: • General Description:

John Mika was commissioned by Greg Salvato to conduct a Property Condition Assessment (PCA) on the property referred to as the Subject herein. The Subject property consists of a reported 3,879 square foot building and 1.25 acre site. The age of the building was not determined. The building is constructed of concrete masonry unit (CMU) and wood frame construction with exterior finishes consisting of brick veneer, CMU and exterior insulation finish system (EIFS) stucco details. The roof coverings are exclusively EPDM rubber roof membranes. The Subject Property is also improved with asphalt driveways and parking areas, cast in place concrete sidewalks, and landscaped areas bordered by concrete curbing. On-site parking is available for approximately 68 in open asphalt paved lots.

Name of client: • Greg Salvato

Client relationship to this property: • Prospective purchaser

Name of consultant: • John Mika

Purpose of the report: • Inspection

Date of site visit:
• Date:
November 6, 2015

General property description: • Commercial

Approximate size of building: • 3,879 square feet

Approximate age of building: • 15 years old

Number of stories: • 1

Below grade area: • Slab on grade

Approximate date of construction: • Not determined

Attendees:
• None
Tenant

Document review: • A request was made to review available building plans, maintenance records, warranties and equipment lists. • No documents were available for review.

Overall condition: • The building is in satisfactory condition overall.

Overall level of maintenance: • The building has been well maintained for the most part. • Some deferred maintenance was noted.

This report meets ASTM Standard E2018-08, with these exceptions: • ADA compliance items were not evaluated

This report meets ASTM Standard E2018-08, with these exceptions: • Opinions of probable cost are not included. • A Building Code and Fire Code violation inquiry was not undertaken. • Fire and life safety systems were not reviewed.

For the purpose of this report the front of the building faces: • West

Occupancy: • The building was occupied at the time of the inspection.

Weather: • Cloudy • It rained during the inspection.

Approximate temperature: • 50°

Limitations

General: • Building plans were not available for review.

Description

Electrical service to the building: • Underground

Main electrical service transformer: • Pad-mounted transformer

Main building transformer size: • 150 kVA

Main building transformer ownership: • Not determined

Electrical service size: • 800-amps • 600-volt, three phase • four-wire

Service distribution and metering: • There is a single meter for the building

Distribution panels: • Circuit breakers

Predominant wire types: • Copper

Lighting fixture types: • Flourescent

Standby generator: • None

Grounding - electrical system: • at the domestic water service entrance

Electrical supplier: • Not determined

Limitations

General: • Fire protection and alarm equipment is not assessed by the building inspector.

General: • Panel covers were not opened by the inspector

General: • Concealed wiring.

Grounding: • The quality of ground was not determined.

Recommendations

GENERAL \ Service

1. **Condition:** • The occupants indicated no power interruptions have occurred

GENERAL \ Overall condition

2. **Condition:** • Good

GENERAL \ Level of Maintenance

3. **Condition:** • The electrical system has been well maintained for the most part.

DISTRIBUTION EQUIPMENT \ General condition

4. **Condition:** • No major deficiencies noted

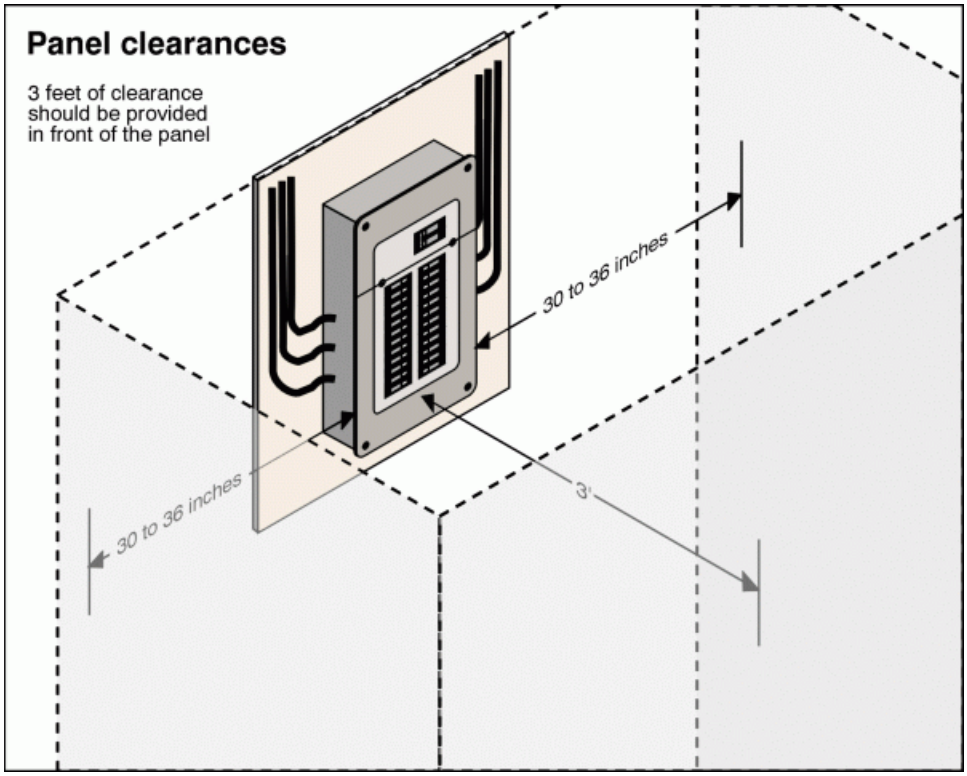
DISTRIBUTION EQUIPMENT \ Main distribution conditions

5. **Condition:** • Storage within one meter of equipment

Location: East Wall

Task: Improve

Time: Immediate



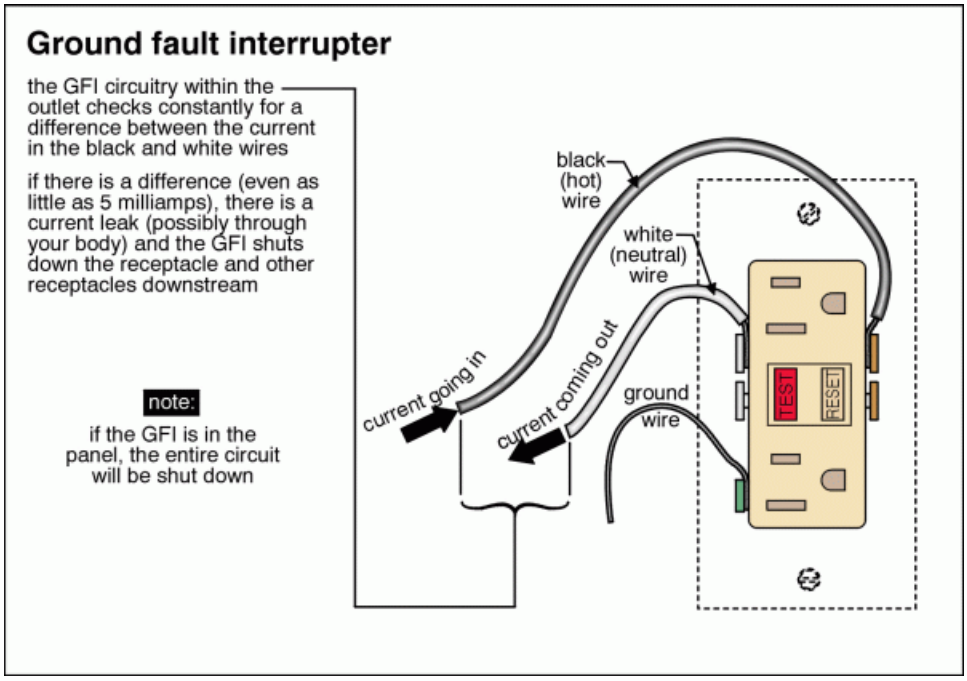
1. *Storage within one meter of equipment*

BRANCH CIRCUIT \ General condition

6. Condition: • No major deficiencies were noted

BRANCH CIRCUIT \ Outlet conditions

7. Condition: • Electrical outlets close to a water source - should be protected by a ground-fault circuit interrupter (GFCI)
Location: Exterior Wall
Task: Improve
Time: Less than 1 year



2. *Electrical outlets close to a water source...*

Description

Rooftop Units - general: • Gas-fired heating (& electric cooling)

Rooftop Unit #1 - Age and type: • 15 years old

Rooftop Unit #2 - Age and type: • 15 years old

Rooftop Unit #3 - Age and type: • 15 years old

Rooftop Unit #4 - Age and type: • 15 years old

Total heating capacity of rooftop units: • 900,000 Btu/hr

Typical Rooftop Unit life expectancy: • 20 years

Forced air heat distribution: • Overhead supply air registers

Forced air return network: • Air return is via grilles in the ceiling

Number of gas meters: • One

Gas supplier: • Not determined

Maintenance contract: • Contract reported to be in effect

Limitations

General: • Carbon monoxide testing and technical analysis of the equipment is beyond the scope of the inspection.

General: • Individual variable air volume (VAV) terminal boxes are not assessed.

General: • Indoor air quality is not assessed by the building inspector.

General: • Limited to functional testing and visual defects of external components.

Recommendations

GENERAL \ Capacity

8. Condition: • Reported by building management that adequate heat has been available in the past

GENERAL \ Overall condition

9. Condition: • The overall condition of the heating system is considered to be satisfactory.

GENERAL \ Level of Maintenance

10. Condition: • The Heating system has been well maintained for the most part.

ROOFTOP UNITS \ Unit #1

11. Condition: • Approaching end of typical life expectancy
Task: Budget replacement
Time: Less than 5 years

ROOFTOP UNITS \ Unit #2

12. Condition: • Approaching end of typical life expectancy
Task: Budget replacement
Time: Less than 5 years

ROOFTOP UNITS \ Unit #3

13. Condition: • Approaching end of typical life expectancy
Task: Budget replacement
Time: Less than 5 years

ROOFTOP UNITS \ Unit #4

14. Condition: • Approaching end of typical life expectancy
Task: Budget replacement
Time: Less than 5 years

Description

Rooftop Unit #1 - Age and compressor type: • 15 years old

Rooftop Unit #1 - Age and compressor type: • Packaged heating and cooling unit • Sealed

Rooftop Unit #1 - Cooling capacity and fresh air intake: • 10-tons • Economizer unit

Rooftop Unit #2 - Age and compressor type: • 15 years old

Rooftop Unit #2 - Age and compressor type: • Packaged heating and cooling unit • Sealed

Rooftop Unit #2 - Cooling capacity and fresh air intake: • 10-tons • Economizer unit

Rooftop Unit #3 - Age and compressor type: • 15 years old

Rooftop Unit #3 - Age and compressor type: • Packaged heating and cooling unit • Sealed

Rooftop Unit #3 - Cooling capacity and fresh air intake: • 10-tons • Economizer unit

Rooftop Unit #4 - Age and compressor type: • 15 years old

Rooftop Unit #4 - Age and compressor type: • Packaged heating and cooling unit • Sealed

Rooftop Unit #4 - Cooling capacity and fresh air intake: • 10-tons

Total cooling capacity of rooftop units: • 480,000 Btu/hr

Typical rooftop unit life expectancy: • 20 years, as noted in the Heating section

Refrigerant type: • R-22

Air Distribution: • Same as described in Heating section

Return air arrangement: • Same as described in Heating section

Maintenance contract: • Contract reported to be in effect

Limitations

General: • Individual variable air volume (VAV) terminal boxes are not assessed.

General: • Indoor air quality is not assessed by the building inspector.

General: • Limited to functional testing and visual defects of external components.

Operating status: • The system was operating in Heating mode. • Severe damage to compressors can result from operating air-conditioning equipment when outside temperature is below 15ºC (60ºF)

Recommendations

General

15. • Recommend installing hail guards to condenser coils to protect fins from damage.

GENERAL \ Capacity

16. Condition: • Adequate cooling reported by the building management

GENERAL \ Overall condition

17. Condition: • The overall condition of the air-conditioning system is considered to be serviceable.

GENERAL \ Level of Maintenance

18. Condition: • Some deferred maintenance was noted.

ROOFTOP UNITS \ Unit #1

19. Condition: • Economizer filter is loose

Task: Replace

Time: Immediate

3.

20. Condition: • Missing condensate trap

Damaged or disconnected

Location: Unit 1 & 2

Task: Repair

Time: Less than 1 year

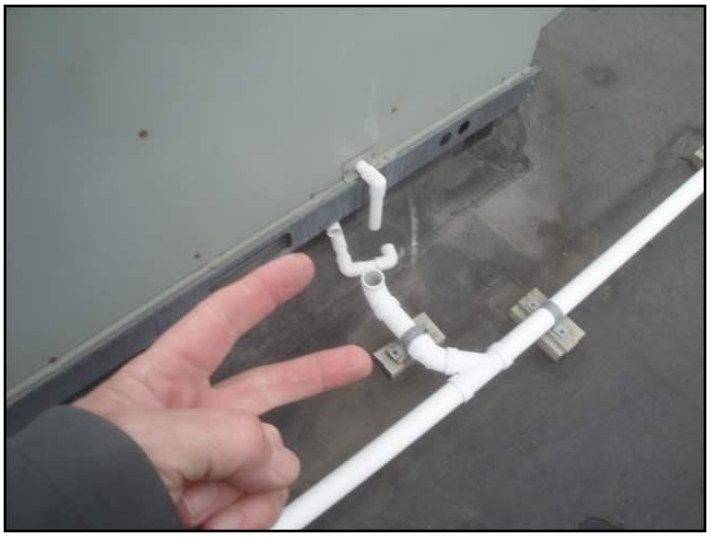
4. *Missing condensate trap*

21. Condition: • Condenser coil damaged / obstructed / dirty
Moderate hail damage to fins has the potential to reduce the life of the compressors. Recommend combing fins or replacing coils if necessary.
Location: All units
Task: Repair or replace
Time: Less than 1 year

5. *Condenser coil damaged / obstructed / dirty*

ROOFTOP UNITS \ Unit #2

22. Condition: • Missing condensate trap
Damaged or disconnected
Task: Repair
Time: Less than 1 year



6. *Missing condensate trap*

23. Condition: • Condenser coil damaged / obstructed / dirty
Moderate hail damage to fins has the potential to reduce the life of the compressors. Recommend combing fins or

replacing coils if necessary.
Task: Repair or replace
Time: Less than 1 year

ROOFTOP UNITS \ Unit #3

24. Condition: • Condenser coil damaged / obstructed / dirty
Moderate hail damage to fins has the potential to reduce the life of the compressors. Recommend combing fins or replacing coils if necessary.
Task: Repair or replace
Time: Less than 1 year

ROOFTOP UNITS \ Unit #4

25. Condition: • Condenser coil damaged / obstructed / dirty
Moderate hail damage to fins has the potential to reduce the life of the compressors. Recommend combing fins or replacing coils if necessary.
Task: Repair or replace
Time: Less than 1 year

Description

Roof-mount exhaust fans - areas serviced: • Kitchen(s) • Bathroom(s)

Roof-mounted exhaust fans - approximate age: • 15 years old

Typical roof-mounted exhaust fan life expectancy: • 20 to 25 years

Range hoods - areas serviced: • Kitchen(s)

Operable doors: • Kitchen area and entry doors

Fresh air make-up duct/Economizer at rooftop unit(s): • Building

Fresh air make-up units:
• Direct, gas-fired
432,000 Btu/hr maximum - 40,000 Btu/hr minimum
• Kitchen(s)

Fresh air make-up air units - approximate age: • 15 years old

Typical fresh air make-up unit life expectancy: • 20 years

Limitations

Process related equipment: • Process related equipment is beyond the scope of our assessment and is not closely examined

Recommendations

GENERAL \ Overall condition

26. Condition: • The overall condition of the ventilation system is considered to be satisfactory.

GENERAL \ Level of Maintenance

27. Condition: • The Ventilation system has been well maintained for the most part.

ROOF-MOUNT EXHAUST FAN CABINETS \ Operating status and condition

28. Condition: • No major deficiencies were noted

MAKE-UP AIR UNIT \ Operating status and condition

29. Condition: • Approaching end of typical life expectancy
Task: Budget replacement
Time: Less than 5 years

Description

General: • The building is not equipped with a fire sprinkler system. A ary type fire suppression system is installed at the exhaust hoods.

Domestic water supply - size and pipe material: • 1-inch diameter • Copper

Domestic water supply - shutoff: • In the mechanical room

Water meters: • One

Backflow prevention device at the main water supply: • None

Supply plumbing pipe material examined: • Mostly copper

Drain, waste and vent piping material examined: • PVC plastic

Washroom locations: • Men's and Women's near main entry

Domestic water heaters:
• Gas-fired
• One

7. *One*

Domestic water heater/boiler - approximate age: • 2 years old

Typical domestic water heater/boiler life expectancy: • 15 years

Domestic water supplier: • City

Limitations

General: • Concealed plumbing is not assessed by the building inspector.

General: • Irrigation system is not assessed by the building inspector.

General: • Water treatment and process related equipment is not assessed by the inspector.

Domestic water supplier: • Not determined

Appropriate vent piping for waste plumbing: • Could not be verified

Recommendations

GENERAL \ Overall condition

30. Condition: • The overall condition of the plumbing system is considered to be satisfactory.

GENERAL \ Level of Maintenance

31. Condition: • The Plumbing system has been well maintained for the most part.

DOMESTIC WATER HEATING \ Operating status and condition

32. Condition: • No major deficiencies noted

FIXTURES \ General

33. Condition: • No major deficiencies noted

Description

General: • Roof Landscape

8.

EPDM (fully adhered): • Building

EPDM approximate age: • Between 10 and 15 years old

Typical EPDM roof life expectancy: • 20 to 25 years - fully adhered/mechanically fastened

Roof warranty or bond: • Not verified

Flat roof drainage: • Scupper drains at the roof perimeter

Chimneys: • None

Recommendations

GENERAL \ Overall condition

34. Condition: • The overall condition of the roofing system is considered to be satisfactory.

GENERAL \ Level of Maintenance

35. Condition: • The Roofing system has been well maintained for the most part.

EPDM / TPO \ Deficiencies

36. Condition: • Cement block roof membrane
Task: Remove
Time: Immediate

9.

37. Condition: • Provide annual roof tune ups to prolong the life of the roof
Task: Service
Time: Annually

DRAINAGE \ Gutters and Downspouts
38. Condition: • Discharging too close to building structure
Location: North
Task: Below current standards

10. *Discharging too close to building structure*

Description

General: • The interior walls, ceiling and flooring vary based on tenant needs. Typical finishes in the tenant spaces consist of the following:

The interior walls and ceilings in the office areas are typically suspended ceiling tiles with painted wallboard/drywall walls. Floors are covered with a combination of resilient tile, ceramic floor tile, and commercial grade carpet. The storage areas typically consist of exposed steel framing and bare concrete floors. Each suite was provided with adequate restroom facilities.

The interior finishes are in good condition overall. Interior refurbishment is the responsibility of the tenant.

General: • Interior Photos:

11. *South Entry*

12. *Typical Restroom*

13. *Dinning Room*

14. *Typical Restroom*

15. *Kitchen*

16. *Order Counter/Buffet*

17. *Order Counter*

18. *Kitchen*

General: • Fire extinguisher inspection tags were current

Note: Inspection due in November

19. *Fire extinguisher inspection tags were...*

Finished area floor coverings: • Ceramic tile

Wall finishes: • Drywall

Ceiling finishes: • Suspended tile

Limitations

General: • ADA compliance items were not evaluated.

General: • Cosmetic defects are beyond the scope of the inspection.

General: • Restaurant, manufacturing, industrial and process related equipment is beyond the scope of the inspection.

General: • Storage, equipment and furnishings limited the evaluation.

Recommendations

GENERAL \ Overall condition

39. Condition: • The overall condition of the interior components system is considered to be satisfactory.

GENERAL \ Level of Maintenance

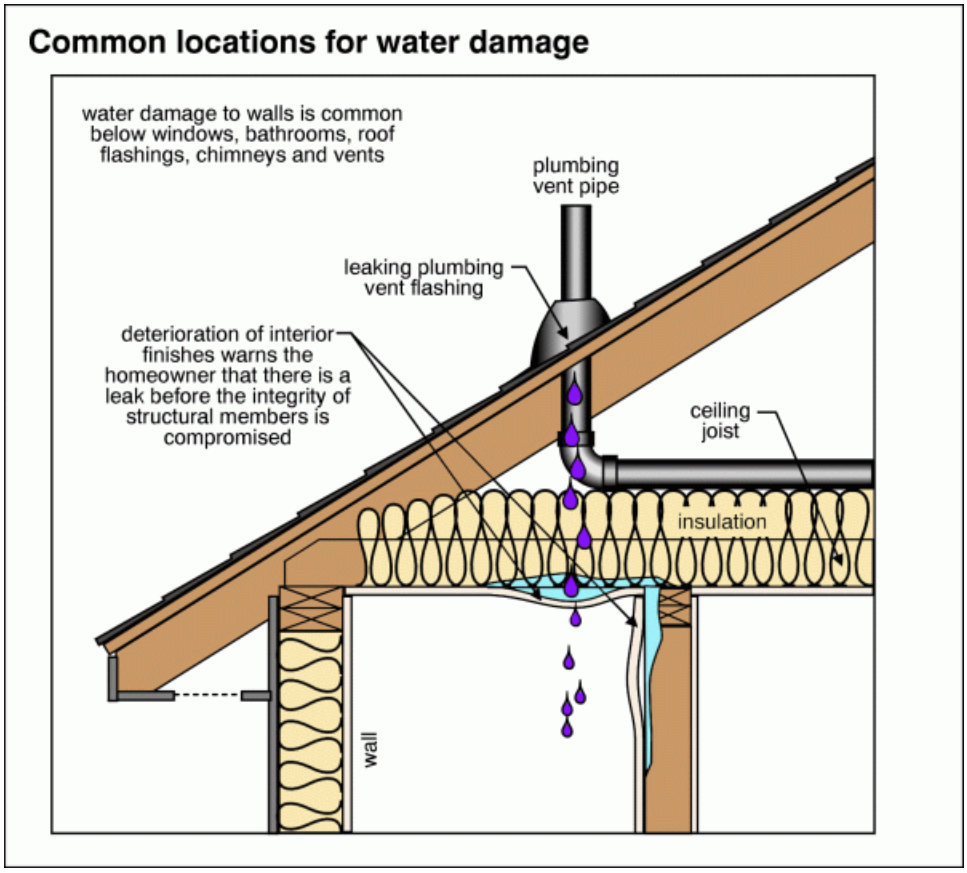
40. Condition: • The Interior Components system has been well maintained for the most part.

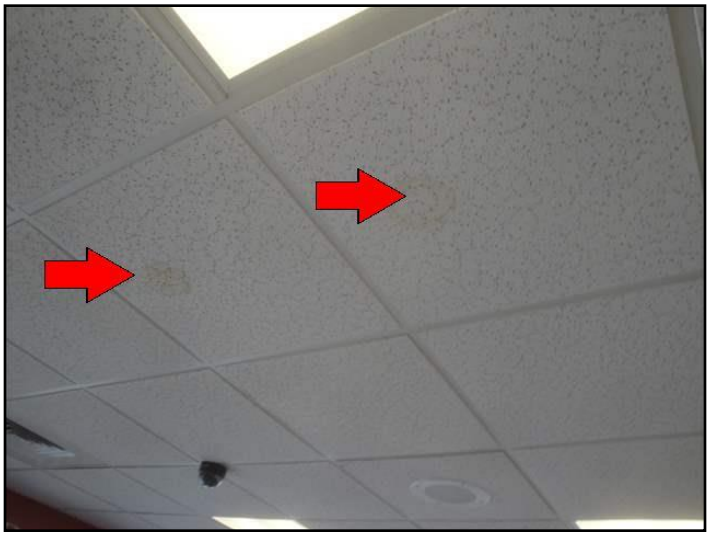
INTERIOR SURFACES - CEILINGS \ General

41. Condition: • Water stain

Location: Dinning Area & Area Near Restrooms

Task: Monitor





20. *Water stain*

21. *Water stain*

WATER DAMAGE \ Above grade

42. Condition: • A water stain was noted. Refer to the relevant sections of the report for discussions of the related systems.

Location: South Entry

Task: Monitor

22. *A water stain was noted. Refer to the...*

Description

General: • It should be understood that a review of the thermal characteristics of the building envelope is beyond the scope of our assessment. Only general information is provided here

Above grade wall insulation and approximate value: • Not visible. Wall surfaces were finished.

Flat roof insulation and approximate value: • Not visible.

Perspective: • It should be understood that increasing insulation levels in a building is an improvement rather than a repair. Energy usage is, however, an ongoing consideration.

Limitations

General: • Since access could not be gained, no comment can be offered on the insulation here

Description

General: • Elevation Photos:

23. *North*

24. *South*

25. *Drive-Thru*

26. *Northeast*

27. *West*

28. *Southeast*

Configuration: • Slab-on-grade

Foundation wall material: • Not determined

Exterior walls: • Concrete-block with brick-veneer

Floors: • Reinforced concrete slabs

Roof: • Wood deck • Supported by wood roof joists

Limitations

General: • Storage, equipment and furnishings limited the evaluation.

General: • Interior and exterior finishes restricted the evaluation of the structure • The examination of the structural components was visual only; a design review was not undertaken

Recommendations

GENERAL \ Overall condition

43. Condition: • The overall condition of the structural system is considered to be satisfactory.

GENERAL \ Level of Maintenance

44. Condition: • The Structural system has been well maintained for the most part.

Description

General: • Site and Building Signage Description:

A ground-mounted, masonry and steel illuminated business sign is located at the main entrance of the property. Ground mounted illuminated traffic flow signs are located at the egress/ingress locations.

29.

30.

General: • Site Lighting Description:

Property pole-top lighting and building-mounted floodlights illuminate the driveways, parking lots and the perimeter of the property. Tenant owned illuminated business signs are present. Photocells and timers control exterior lighting.

31.

32.

33.

General: • Landscaping:

Landscaped areas are provided in beds along the front of the building and perimeters of the Property and consist of turf areas, small trees, and shrubs with mulch on an automatic sprinkler irrigation system.

Soft landscaping was observed to be in good condition during the assessment. No significant deterioration or damaged areas were identified.

General: • Flatwork:

Flatwork consists of concrete walks at the Subject property.

- Concrete Sidewalks and trash pads

General: • Paving, Curbing and Parking:

Paving on the Property consists of asphalt and concrete paved parking areas and driveways. The asphalt paved parking areas appear to be original to the development. The Property provides asphalt-paved parking for approximately 68 vehicles. Two handicapped spaces are provided. Curbing consists of raised concrete curbs throughout the property. No parking garages were observed on-site.

General: • Additional Site Considerations:

Surface Water Bodies: There are no natural surface water bodies on the subject property.

Flood Plain Designation: Not assessed

Seismic Zone: Not assessed

General: • Ingress and Egress:

Vehicular access to the Property is provided from an asphalt-paved ingress - egress at the following locations(s):

- Highway 29 south frontage road

General: • Storm Water Drainage:

Storm-water drainage from the buildings roofs drain to exterior down spouts that discharge to grade.

Storm-water surface drainage on the Property is accomplished via sheet flow throughout the site in various directions away from the subject building to catch basins located in the parking lot and the turf area between the driveways.

General: • Topography

The subject property site grade generally slopes to the west.

Exterior walls: • Concrete block • Exterior insulated synthetic stucco (EIFS) system • Brick veneer

Main entrance doors: • Aluminum-framed • Single-glazed • Double-glazed

Personnel doors: • Steel-framed • Steel

Building windows: • Aluminum-framed • Double-glazed

Retaining walls: • Dry-fitting block

Pavement: • Concrete pavement at drive thru • Bituminous asphalt

Fence:
• 6-foot-high
• Chain link
At dumpster pad

Signs: • Lighted sign boxes on front façade • Lighted sign boxes on side façade • Pole-mounted marquee sign at front of property

Limitations

General: • ADA compliance items were not evaluated.

Storage: • Storage, equipment and furnishings limited the evaluation.

Recommendations

GENERAL \ Overall condition

45. Condition: • The overall condition of the exterior system is considered to be serviceable.

GENERAL \ Level of Maintenance

46. Condition: • Some deferred maintenance was noted.

WALLS \ General condition

47. Condition: • Minor deficiencies noted

WALLS \ Masonry

48. Condition: • Brick veneer is below grade
Location: Throughout
Task: Below current standards

34.

49. Condition: • Mortar deterioration
Small area near entry door.
Location: South
Task: Repair
Time: Less than 1 year

35. *Mortar deterioration*

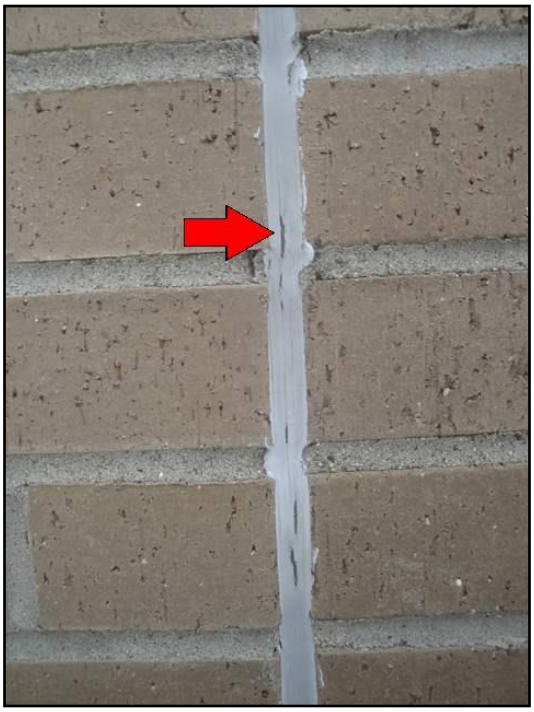
50. Condition: • Cracks
Minor cracks were observed.
Location: South Entry
Task: Repair
Time: Less than 2 years

36. *Cracks*

37. *Cracks*

51. Condition: • Deteriorated caulking wall expansion joints
Location: Various
Task: Repair
Time: Less than 2 years

38. *Deteriorated caulking wall expansion joints*



39. *Deteriorated caulking wall expansion joints*

40. *Deteriorated caulking wall expansion joints*

DOORS \ General

52. Condition: • No major deficiencies noted

DOORS \ Personnel doors

53. Condition: • Corroded

Typical minor to moderate corrosion was observed at rear personnel door frames.

Location: East

Task: Repair

Time: Less than 1 year

41. *Corroded*

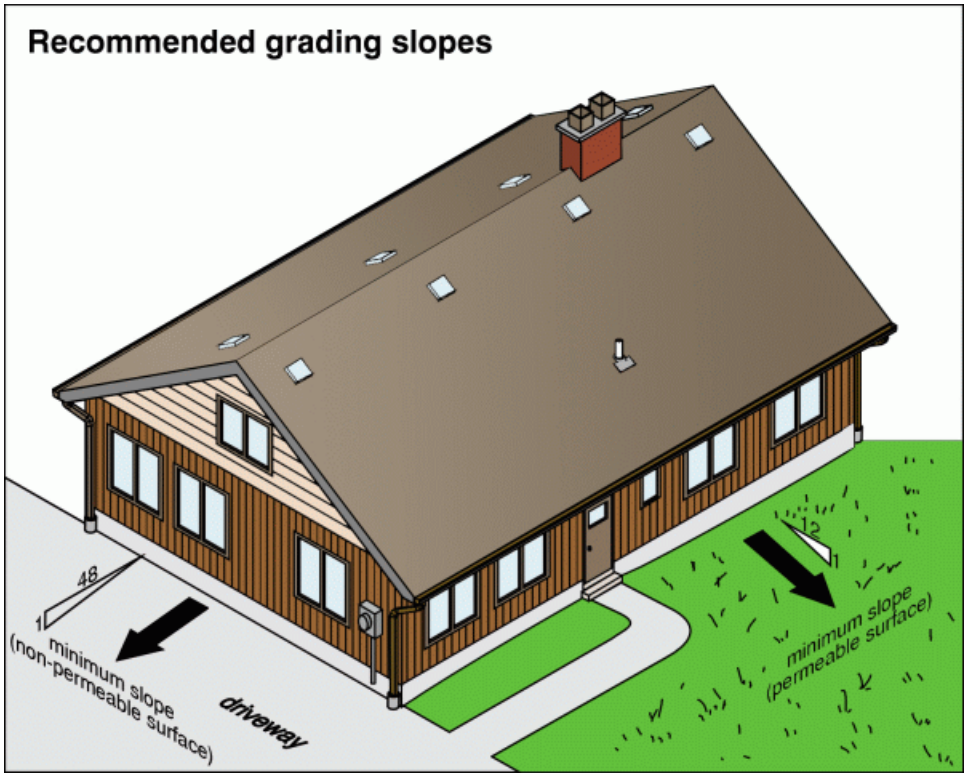
SITE WORK \ Grading

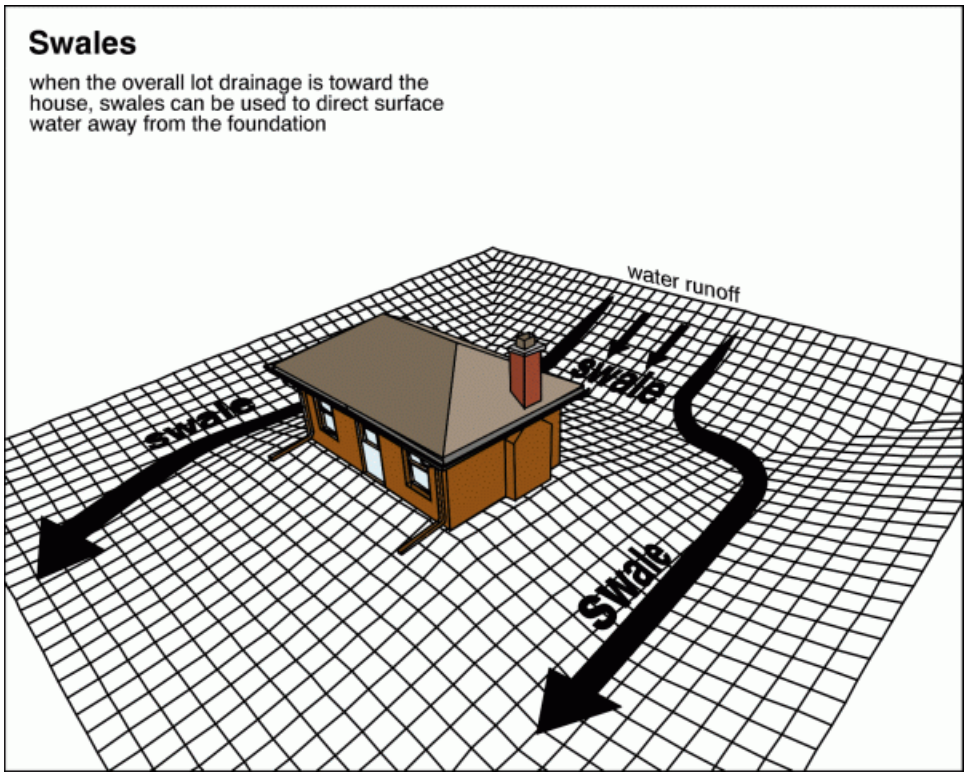
54. Condition: • Unsealed gap at building
Location: North
Task: Repair
Time: Less than 1 year

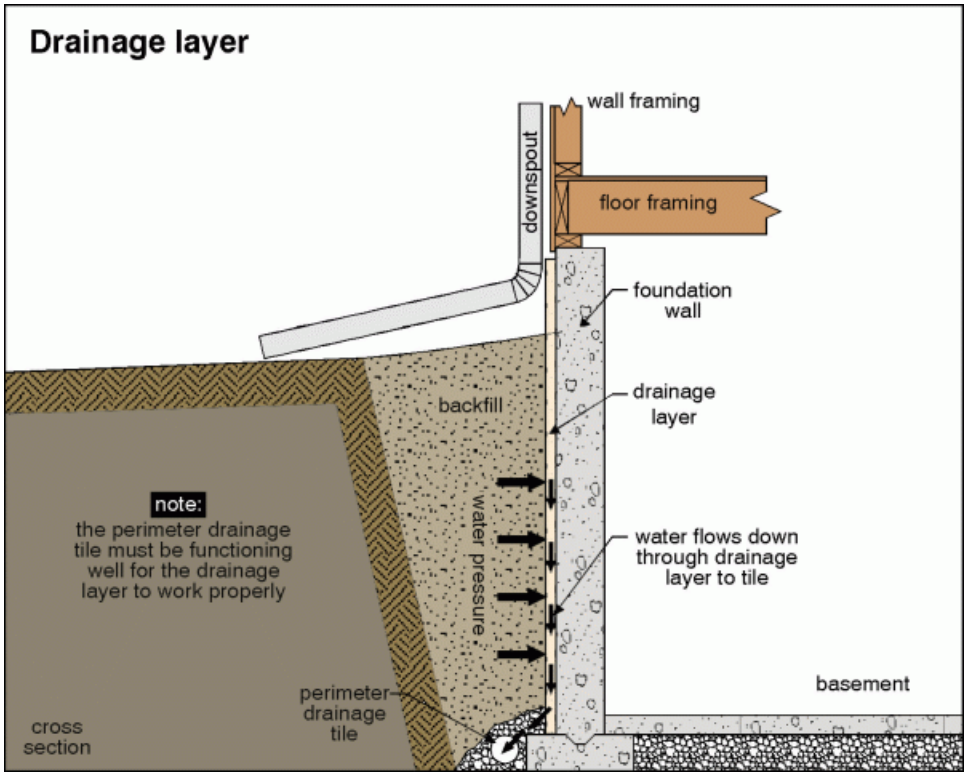
42.

55. Condition: • Improper grading
Settled area near the building.
Location: East

Task: Improve
Time: Less than 1 year







43. *Improper grading*

SITE WORK \ Sidewalks and Walkways

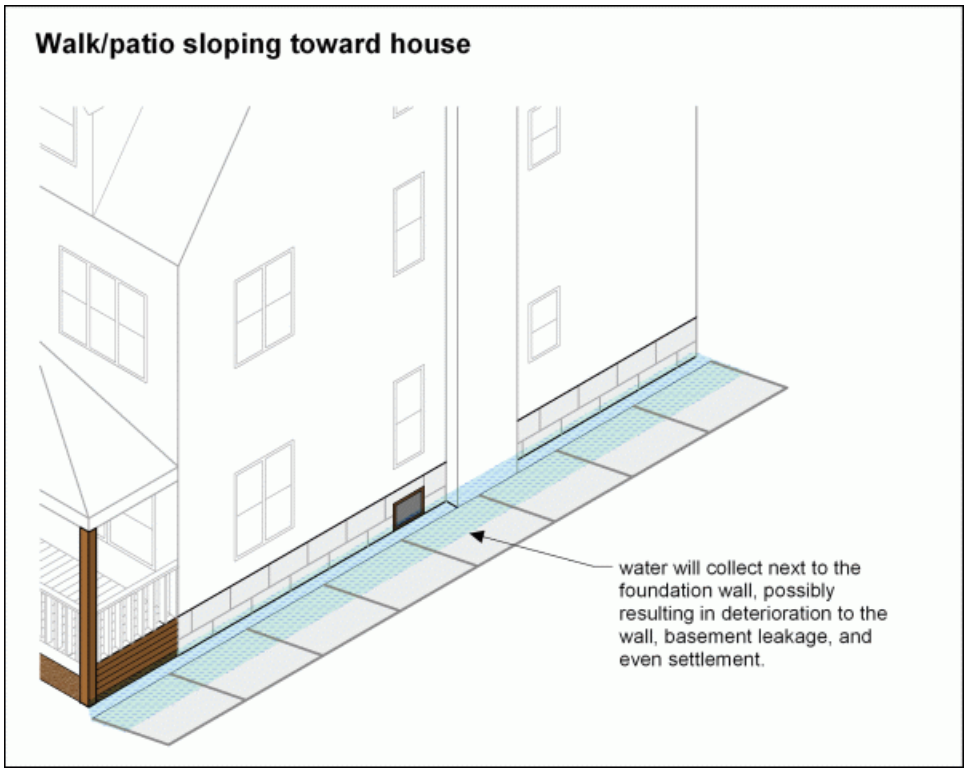
56. Condition: • Settled

Potential trip hazard. Recommend grinding flush or replacing the affected areas.

Location: Various

Task: Repair

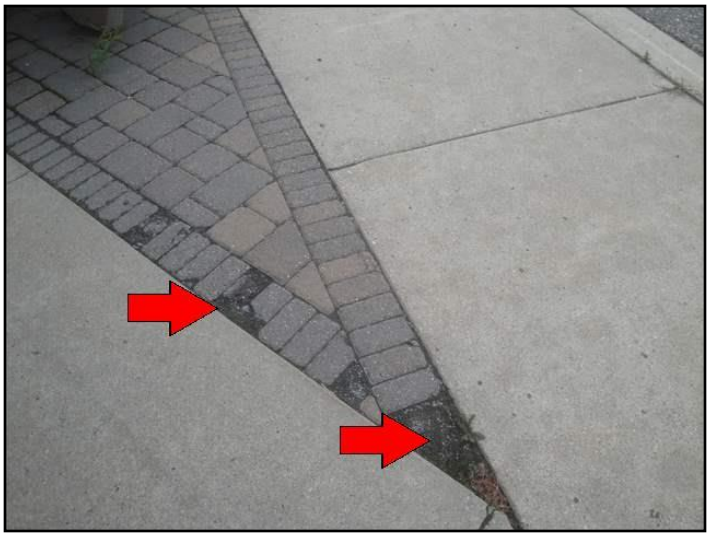
Time: Immediate



44. *Settled*

45. *Settled*

57. Condition: • Deteriorated
Location: West
Task: Replace
Time: Less than 2 years



46. *Deteriorated*

SITE WORK \ Asphalt pavement

58. Condition: • Parking surface in need of repair, seal coating and striping.
Location: Throughout
Task: Repair
Time: Less than 1 year

47. *Parking surface in need of repair, seal...*

48. *Parking surface in need of repair, seal...*

SITE WORK \ Signs and accessories

59. Condition: • Worn. Paint or refurbishment needed.
Location: Roof
Task: Repair
Time: Discretionary

49.

END OF REPORT

LAW ENFORCEMENT 762-8151

ALEX POLICE DEPT 763-6631

WELLS FARGO BANK 762-2181

STORE # 306434
MCLANE 1-800-737-7775

CENTRAL LAKES 762-8435
CURT'S HOME 846-0797
JAY'S CELL 766-4341
CODY'S CELL 491-8665

GT PLUMBING
GARY TERHARK 766-2106

BRETT (ELECTRICIAN) 491-6641

THOMPSON HEATING 763-6634

BORDER STATE ELECTRIC 763-5131
FOR LIGHT BULBS

ECOLAB 1-800-325-1671

PEPSI 1-800-325-6441
EQUIP REPAIR 1-877-386-4567

TOD KNIGHT (co-op) 1-800-444-7868

LDI (vent filters)
SUSAN ERINIE 1-800-366-2001

FALCON FAB 1-800-251-8521
(MK OR KAREN)

STEVE RAY (LAWN EQUIP) 815-5321

ANITA 612-840-6882

KASEY LASOTA (HEALTH INSPECTOR) 808-7759

DO NOT GIVE THESE PHONE NUMBERS OUT TO CUSTOMERS

ALEX STORE
GREGG 762-1182 CELL 760-7553
BB 320-859-4616 808-0549
DAISY 218-380-1726

CONF CALLS 1-626-677-3000
CODE ~~3706585~~

WEST FARGO STORE 701-492-0555
JASON 701-388-2938

MOORHEAD STORE 218-233-5451

DETROIT LAKES STORE 218-847-5525
CRIAG 218-234-9367

WILLMAR STORE 320-235-8440
COZY 320-212-0405

SOUTH STORE 701-237-5451

FERGUS FALLS STORE 218-739-3201
JAMIE

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alundeen@sandhkfc.com

OWNER
JUSTIN STEWART

Purpose

The purpose of the Property Condition Report is to assess the general condition of the buildings, site, and other improvements at the referenced location. The Report will identify those areas that will require remedial repair work and will assign them an associated estimated remedial cost where appropriate.

Scope of Work

The PCA carried out by Minnesota Inspections on the Site is based on the ASTM Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process (E 2018-08) and consisted of the following:

- Walk-through Site Visit
- Preparation of Property Condition Assessment Report.

This Report is based on a site visit, in which Minnesota Inspections LLC performed a visual, non-intrusive and non-destructive evaluation of various external and internal building components. These systems included the roof, foundations, structural frame, building envelope, HVAC, electrical, and plumbing. The inspection also includes ancillary items such as; site drainage, pavement, sidewalks and landscaping.

The Property Condition Report is not a building code, safety, regulatory or environmental compliance inspection.

Minnesota Inspections observed the interior spaces to determine its general character and condition. During the site visit we interviewed the available site personnel and/or property managers to add or confirm information. We reviewed available drawings or site documentation to confirm the general character of the construction if such documents were available.

Photographs were taken to provide a record of general conditions of the facility, as well as the specific deficiencies observed.

If any additional information is encountered concerning the facility, it should be forwarded to Minnesota Inspections for possible re-evaluation of the assumptions, conclusions and recommendations presented herein. The provided herein are for observed deficiencies based on the understanding that the facility will continue operating in its present occupancy classification.

This Report is based on the evaluator's judgment of the physical condition of the components, their ages and their expected useful life (EUL). It is understood that the conclusions presented are based upon the evaluator's professional judgment. The actual performance of individual components may vary from a reasonably expected standard and will be affected by circumstances that occur after the date of the evaluation.

The Report does not identify minor, inexpensive repairs, cosmetic defects or maintenance items which are clearly part of the property owner's current operating budget so long as these items appear to be taken care of on a regular basis. The report does address infrequently occurring big ticket maintenance items, such as exterior painting, deferred maintenance and repairs and replacements that normally involve significant expense or outside contracting.

Only the items specifically addressed in this report were examined. No comment is offered regarding fire regulation, building code and building bylaw compliance, or environmental concerns.

Deviations from the Guide

This property condition assessment was generally carried out as per ASTM E 2018-08. No additional consultants were used in the assessment and preparation of the PCA.

Items not included in a basic PCA assessment or building inspection:

- Document review
- Opinions of probable cost
- Fire protection or fire sprinkler equipment
- Process related equipment – Machinery, tools or restaurant equipment
- Vertical transportation – Elevators, lifts and escalators
- ADA and accessibility items
- Information related to flood zone and seismic zone
- Ingress and egress to the site
- Tenant or building interiors are limited to items documented in the report body and may exclude mechanical, electrical and plumbing items located in tenant interiors.

Reliance

This report has been prepared for the sole benefit of the client named on the title page of this report for the purpose of assessing the condition of the property. The report may not be relied upon by any other person or entity without the express written consent of Minnesota Inspections LLC.

We have performed our services and prepared the Report in accordance with applicable, generally accepted engineering, environmental or appraisal consulting practices. We make no other warranties, either expressed or implied, as to the character and nature of such services and product.

Out-Of-Scope Items

- Identifying capital improvements, enhancements, or upgrades to building components, systems, or finishes. The consultant must be aware of the distinction between repair and replacement activities that maintain the property in its intended design condition, versus actions that improve or reposition the property.
- Removing, relocating, or repositioning of materials, ceiling, wall, or equipment panels, furniture, storage containers, personal effects, debris material or finishes; conducting exploratory probing or testing; dismantling or operating of equipment or appliances; or disturbing personal items or property, that obstructs access or visibility.
- Preparing engineering calculations (civil, structural, mechanical, electrical, etc.) to determine any system's, component's, or equipment's adequacy or compliance with any specific or commonly accepted design requirements or building codes, or preparing designs or specifications to remedy any physical deficiency.
- Taking measurements or quantities to establish or confirm any information or representations provided by the owner or user, such as size and dimensions of the subject property or subject building; any legal encumbrances, such as easements; dwelling unit count and mix; building property line setbacks or elevations; number and size of parking spaces; etc.
- Reporting on the presence or absence of pests such as wood damaging organisms, rodents, or insects unless evidence of such presence is readily apparent and material during the course of the field observer's walk-through survey or such information is provided to the consultant by the owner, user, property manager, etc. The consultant is not required to provide a suggested remedy for treatment or remediation, determine the extent of infestation, nor provide opinions of probable costs for treatment or remediation of any deterioration that may have resulted.
- Reporting on the condition of subterranean conditions, such as soil types and conditions, underground utilities, separate sewage disposal systems, wells; systems that are either considered process-related or peculiar to a specific tenancy or use; or items or systems that are not permanently installed.
- Entering or accessing any area of the premises deemed to potentially pose a threat of dangerous or adverse conditions with respect to the field observer's health or safety, or to perform any procedure, that may damage or impair the physical integrity of the property, any system, or component.
- Providing an opinion on the condition of any system or component, that is shutdown. However, the consultant is to provide an opinion of its physical condition to the extent reasonably possible considering its age, obvious condition, manufacturer, etc.
- Evaluating acoustical or insulating characteristics of systems or components.
- Providing an opinion on matters regarding security of the subject property and protection of its occupants or users from unauthorized access.
- Operating or witnessing the operation of lighting, lawn irrigation, or other systems typically controlled by time clocks or that are normally operated by the building's operation staff or service companies.
- Providing an environmental assessment or opinion on the presence of any environmental issues such as potable water quality, asbestos, hazardous wastes, toxic materials, the location or presence of designated wetlands, mold, fungus, IAQ, etc.
- *Warranty, Guarantee, and Code Compliance Exclusions*—By conducting a PCA and preparing a PCR, the consultant merely is providing an opinion and does not warrant or guarantee the present or future condition of the subject property, nor may the PCA be construed as either a warranty or guarantee of any of the following:
- Any system's or component's physical condition or use, nor is a PCA to be construed as substituting for any system's or equipment's warranty transfer inspection;
- Compliance with any federal, state, or local statute, ordinance, rule or regulation including, but not limited to, fire and building codes, life safety codes, environmental regulations, health codes, zoning ordinances, compliance with trade/design standards, or standards developed by the insurance industry. However, should there be any conspicuous material present violations

observed or reported based upon actual knowledge of the field observer or the PCR reviewer, they should be identified in the PCR;

- Compliance of any material, equipment, or system with any certification or actuation rate program, vendor's or manufacturer's warranty provisions, or provisions established by any standards that are related to insurance industry acceptance/approval, such as FM, State Board of Fire Underwriters, etc.
- *Further Inquiry*—There may be physical condition issues or certain physical improvements at the subject property that the parties may wish to assess in connection with a commercial real estate transaction that are outside the scope of this guide.
- *Out of Scope Considerations*—Whether or not a user elects to inquire into non-scope considerations in connection with this guide is a decision to be made by the user. No assessment of such non-scope considerations is required for a PCA to be conducted in compliance with this guide.
- *Other Standards*—There may be standards or protocols for the discovery or assessment of physical deficiencies associated with non-scope considerations developed by government entities, professional organizations, or private entities, or a combination thereof.

QUALIFICATIONS

John W. Mika – Field Observer, PCR Reviewer, Consultant and Inspector

CERTIFICATIONS/QUALIFICATIONS

- State of Minnesota licensed building contractor: License number BC659325
- 20 year's construction trades experience
- EPA Certified lead-safe firm # NAT-F111676-1
- HUD Green Physical Needs Assessment (GPNA) multi-family housing training
- HUD 203k Loan Consultant – Listed on the HUD 203k consultant roster
- City's of Bloomington, Hopkins and Robbinsdale licensed housing evaluator
- ITA certified home inspector

SELECTED EXPERIENCE

John Mika is the owner of Minnesota Inspections LLC and has completed hundreds of property condition assessments, physical needs assessments and property inspections. He has over 20 year experience as a developer, contractor, project manager and consultant on municipal, industrial, commercial, multi-family and residential projects.

SELECTED CLIENTS

- City of Minneapolis
- City of St. Louis Park
- City of Brooklyn Park
- Culver's Restaurants
- Dalfen America Corp
- Dorsey & Whitney
- Exploratorium - San Francisco Bay Pier 15
- Grey, Plant & Mooty
- McDonald's Restaurants
- Paramount Investment Group
- Waba Financial

Past clients include: Lending institutions, private equity firms, legal firms, municipal entities, national franchises, legal firms, insurance providers and individual investors.

Mr. Mika has also provided expert witness testimony and consulting services pertaining to insurance claims litigation and construction material and installation defects.

MAINTENANCE RECOMMENDATIONS

This Appendix provides maintenance recommendations related to items mentioned in our report. These recommendations are intended to be general and should not be construed as all-inclusive. Maintenance should be undertaken by qualified personnel only.

ELECTRICAL

1. The area in front of electrical panels and disconnects should always be accessible (i.e., no storage or debris).

2. Each circuit should be labeled to identify the area or appliance it controls.

3. Circuit breakers should be manually tripped and reset semi-annually.

4. Dirt deposits on transformers and relays should be cleaned monthly to minimize operating temperature and maintain optimum efficiency.

5. Hardware on all electrical equipment should be checked for looseness semi-annually. Cable connections, fuse clips and circuit breakers are common areas where loose connections can be found.

6. Electrical switches, etc., should not be lubricated unless specified by the manufacturer. The type and grade of lubricant specified should be strictly adhered to. Oil and grease should be kept away from electrical insulation as it may attack this material.

7. Extension cords should not be used as permanent wiring.

8. Electrical modifications should be performed by qualified personnel only.

9. Test buttons on ground fault circuit interrupters should be operated monthly.

10. The main ground fault interrupter should be tested annually.

11. The switchgear internal connections should be checked and retightened annually.

HEATING

1. The heating systems should be serviced annually by a qualified technician.

2. The fans and motors should be lubricated as directed by a serviceperson or the manufacturer.

3. The filters should be inspected monthly and cleaned or replaced as necessary during heating system operation.

4. Electric baseboard heaters should be tested periodically and replaced as necessary. Heating fins should be vacuumed annually.

5. Electric baseboard heaters should be tested periodically and replaced as necessary. Heating fins should be vacuumed annually. Internal wire connectors should be checked for tightness annually. Special service connectors should be used.

AIR-CONDITIONING

1. The air-conditioning system should be inspected and recharged as necessary by a serviceperson, before annual start-up.

2. The fans and motors should be lubricated as directed by a qualified serviceperson or the manufacturer.

3. The outdoor unit should be level. If the supports settle or heave, adjustment should be made by a service person.

4. Debris and vegetation should be kept away from the outdoor (condensing unit) components.

5. An annual oil and refrigerant analysis would be desirable so that operating condition trends can be monitored. Annual oil replacement is advisable.

6. The condenser and evaporator tubes should be mechanically examined every 3 to 5 years.

VENTILATION

1. Exhaust fans should be inspected semiannually.

2. The motors should be cleaned annually, and lubricated as recommended by the manufacturer.

PLUMBING

1. The main shutoff valve for the plumbing system (located in the northwest) should be operated semiannually to ensure that it can be closed in an emergency.

2. Every fall, the inside control valves for outdoor faucets should be closed. The outside pipes should be drained and the exterior faucets left open.

3. The domestic water heater and associated equipment should be serviced annually by a qualified technician.

4. The plumbing fixtures should be inspected monthly for leakage and repairs made promptly.

ROOFING

1. The roof should be inspected semiannually. Particular attention should be paid to the flashings, edges and intersections.

2. The roof should be periodically examined for gravel scouring and improved as necessary.

3. The roof drains should be periodically inspected to ensure that they are free of debris.

4. Metal chimneys and vents should be examined annually for corrosion, leaning and loose or missing rain caps.

INTERIOR COMPONENTS

1. Windows should be inspected at least annually for damage resulting from leakage and condensation.

2. Wall and ceiling surfaces should be periodically examined for evidence of roof or plumbing leakage.

EXTERIOR COMPONENTS

1. Exterior masonry should be inspected annually for deteriorated or missing mortar.

2. The caulking and weather stripping should be inspected every fall.

3. The asphalt paving and sidewalks should be visually examined annually for cracks or depressions. Repairs should be made promptly.

GLOSSARY

ABS — A type of black plastic pipe commonly used for waste water lines.
Aggregate — Crushed rock or stone.
Air chamber — A vertical, air filled pipe that prevents water hammer by absorbing pressure when water is shut off at a faucet or valve.
Air-conditioner condenser — The outside fan unit of the air conditioning system. The condenser discharges heat to the building exterior.
Alligatoring — Coarse checking pattern on the surface of a material. Typically caused by ageing, exposure to sun and/or loss of volatiles.
Ampacity — Refers to the how much current a wire can safely carry. For example, a 12-gauge electrical copper wire can safely carry up to 20 amps.
Asphalt — A bituminous material employed in roofing and road paving materials because of its waterproofing ability.
Backfill — The replacement of excavated earth into a trench or pit.
Backflow — A reverse flow of water or other liquids into the water supply pipes, caused by negative pressure in the pipes
Ballast — A transformer that steps up the voltage in a florescent lamp.
Balusters — Vertical members in a railing used between a top rail and bottom rail or the stair treads. Sometimes referred to as pickets or spindles.
Base sheet — Bottom layer of built-up roofing.
Batt — A section of fiberglass or rock-wool insulation.
Bay window — Any window space projecting outward from the walls of a building, either square or polygonal in plan.
Beam — A structural member transversely supporting a load. A structural member carrying building loads (weight) from one support to another. Sometimes called a girder.
Bearing wall — A wall that supports any vertical load in addition to its own weight.
Bird's-mouth cut — A cutout in a rafter where it crosses the top plate of the wall providing a bearing surface for nailing. Also called a heel cut.
Bitumen — Term commonly applied to various mixtures of naturally occurring solid or liquid hydrocarbons, excluding coal. These substances are described as bituminous. Asphalt is a bitumen. *See Asphalt.*
Blocking — Small wood pieces to brace framing members or to provide a nailing base for gypsum board or paneling.
Board and batten — A method of siding in which the joints between vertically placed boards or plywood are covered by narrow strips of wood.
Bottom chord — The lower or bottom horizontal member of a truss.
Brick tie — Metal strips or wires that are inserted into the mortar joints of the brick veneer. Ties hold the veneer wall to the backer wall behind it.
Brick veneer — A vertical facing of brick used to clad a building. Brick veneer is not a load-bearing component.
Building paper — A general term for papers, felts and similar sheet materials used in buildings without reference to their properties or uses. Generally comes in long rolls.
Built-up roof — A roofing composed of three to five layers of asphalt felt laminated with coal tar, pitch or asphalt. The top is finished with crushed slag or gravel. Generally used on flat or low-pitched roofs.
Butt joint — The junction where the ends of building materials meet. To place materials end-to-end or end-to-edge without overlapping.
Cant strip — A triangular shaped piece of lumber used at the junction of a flat deck and a wall to prevent cracking of the roofing which is applied over it.
Cantilever — Any part of a structure that projects beyond its main support and is balanced on it.
Cap flashing — The flashing covering over a horizontal surface to prevent water from migrating behind the base flashing.
Cap sheet — The top layer in modified bitumen roofing.
Casement window — A window with hinges on one of the vertical sides and swings open like a door.
Ceiling joist — One of a series of parallel framing members used to support ceiling loads and supported in turn by larger beams, girders or bearing walls. Can also be roof joists.
Cement — The grey powder that is the "glue" in concrete. Portland cement. Also, any adhesive.
Certificate of Occupancy — Certificate is issued by the local municipality and is required before anyone can occupy and live within the building. It is issued only after the local municipality has made all inspections and all monies and fees have been paid.
CFM (cubic feet per minute) — A rating that expresses the amount of air a blower or fan can move. The volume of air (measured in cubic feet) that can pass through an opening in one minute.
Chase — A framed enclosed space around a flue pipe or a channel in a wall, or through a ceiling for something to lie in or pass through.
Checking — Cracks that appear with age in many large timber members. The cracks run parallel to the grain of the wood. At first superficial, but in time may penetrate entirely through the member and compromise its integrity.
Cleanout — An opening providing access to a drain line. Closed with a threaded plug.
Closed-cut valley — A method of valley treatment in which shingles
from one side of the valley extend across the valley, while shingles from the other side are trimmed 2 inches from the valley centerline. The valley flashing is not exposed.
Collar tie — Nominal one- or two-inch-thick members connecting opposite roof rafters. They serve to stiffen the roof structure.
Column — A vertical structural compression member that supports loads acting in the direction of its longitudinal axis.
Combustion air and ventilation air — The ductwork installed to bring fresh, outside air to the furnace or boiler room. Normally two separate supplies of air are brought in: one high for ventilation and one low for combustion.
Compressor — A mechanical device that pressurizes a gas in order to turn it into a liquid, thereby allowing heat to be removed or added. A compressor is the main component of conventional heat pumps and air conditioners. In an air conditioning system, the compressor normally sits outside and has a large fan (to remove heat).
Concrete board or **cement board** — A panel made out of concrete and fiberglass, usually used as a tile backing material.
Condensate drain line — The pipe that runs from the air conditioning cooling coil to the exterior or internal building drain, ton drain away condensation.
Condensation — The change of water from vapor to liquid when warm, moisture-laden air comes in contact with a cold surface.
Condensing unit — The outdoor component of a cooling system. It includes a compressor and condensing coil designed to give off heat.
Conduit, electrical — A pipe, usually metal, in which wire is installed. The pipe serves to protect the wire.
Control joint — Tooled, straight grooves made on concrete floors or structures to "control" where the concrete should crack (as a result of shrinkage).
Cooling load — The amount of cooling required to keep a building at a specified temperature during the summer, usually 25° C, based on a design outside temperature.

Corbel— To build out one or more courses of brick or stone from the face of a wall. This may be decorative, or serve to support a structural component.
Counterflashing — A metal flashing usually used to cover another flashing and prevent moisture entry.
Course — A row of shingles or roll roofing running the length of the roof. Parallel layers of building materials such as bricks, or siding laid up horizontally.
CPVC — *See PVC.*
Crawlspace — A shallow space below a building, normally enclosed by the foundation walls.
Cricket — A saddle-shaped, peaked construction connecting a sloping roof plane with a wall or chimney. Designed to encourage water drainage away from the chimney or wall joint.
Culvert — Round, corrugated drain pipe (normally 15 or 18 inches in diameter) installed beneath a driveway and parallel to and near the
street.
Cupping — A type of warping that causes boards or shingles to curl up at their edges. Typically caused by uneven drying or loss of volatiles.
Curb — The short elevation of a supporting element above the deck of a roof. Normally a box (on the roof) on which a skylight or piece of mechanical equipment is attached.
Curtain wall — An exterior building wall that is supported entirely by the building structure, rather than being self-supporting or load bearing.
Damper — A metal "door" placed within the ductwork, typically. Used to control flow of air, etc., in the ductwork.
Damp-proofing — The black, tar-like material applied to the exterior of a foundation wall. Used to minimize moisture penetration into the wall.
Deck — The surface, installed over the supporting framing members, to which the roofing is applied.
Dedicated circuit — An electrical circuit that serves only one appliance or a series of electric heaters or smoke detectors.
Dew point — Temperature at which a vapor begins to deposit as a liquid. Applies especially to water in the atmosphere.
Disconnect — A large electrical ON-OFF switch.
Diverter valve — A device that changes the direction of water flow from one faucet to another.
Dormer — A box-like projection from the sloping plane of a roof that frames a window.
Double-hung window — A window with two vertically sliding sashes, both of which can move up and down.
Downspout — A pipe for draining water from roof gutters. Also called a leader.
Drain tile — A perforated, corrugated plastic pipe laid at the bottom of the foundation wall and used to drain excess water away from the foundation. It prevents ground water from seeping through the foundation wall. Sometimes called perimeter drain.
Drip —A groove in the underside of a sill or drip cap to cause water to drop off on the outer edge instead of drawing back and running down the face of the building.
Ducts — Usually round or rectangular metal pipes installed for distributing warm or cold air from the heating and air-conditioning equipment.
Eaves protection — Additional layer of roofing material applied at the eaves to help prevent damage from water backup (typically caused by ice damming).
EIFS —Exterior Insulation Finish System. An exterior cladding system that employs a relatively thin acrylic stucco coating over insulation panels. (Pronounced "ee-fus")
Elbow — A plumbing or electrical fitting that lets you change directions in runs of pipe or conduit.
Evaporator coil — The part of a cooling system that absorbs heat from air passing through it. The evaporator coil is found within the ductwork.
Expansion joint — A joint that allows for building material expansion and contraction caused by temperature changes.
Exposed aggregate finish — A method of finishing concrete which
washes the cement/sand mixture off the top layer of the aggregate — usually gravel. Often used with precast concrete exterior wall finishes.
Exposure — The portion of the roofing or wall cladding material exposed to the weather after installation.
Fascia — a vertical member attached to the ends of the roof structure
and often the backing of the gutter.
Felt — Fibrous material saturated with asphalt and used as an underlayment or part of a built-up roofing system.
Finger joint — A manufacturing process of interlocking two shorter pieces of wood end to end to create a longer piece of dimensional lumber or molding. Often used in jambs and casings and are normally painted (instead of stained).
Fire stop — A solid, tight closure of a concealed space, placed to prevent the spread of fire and smoke through such a space. Includes stuffing wire and pipe holes in the fire separations.
Flashing — (1) Sheet metal or flexible membrane pieces fitted to the joint of any roof intersection, penetration or projection (chimneys, copings, dormers, valleys, vent pipes, etc.) to prevent water leakage. (2) The building component used to connect portions of a roof, deck, or siding material to another surface such as a chimney, wall, or vent pipe. Often made out of various metals, rubber or tar and is mostly intended to prevent water entry.
Flatwork — Common word for concrete floors, driveways, patios and sidewalks.
Flue — The space or passage in a chimney through which smoke, gas, or fumes ascend.
Fluorescent lighting — A fluorescent lamp is a gas-filled glass tube with a phosphor coating on the inside. Gas inside the tube is ionized by electricity which causes the phosphor coating to glow. Normally with two pins that extend from each end.
Footing — A widened, below-ground base of a foundation wall or a poured concrete, below-ground, base used to support foundations or piers.
Forced air heating — a common form of heating with natural gas, propane, oil or electricity as a fuel. Air is heated through a heat exchanger and distributed through a set of metal ducts.
Form — Temporary structure erected to contain concrete during placing and initial hardening.
Foundation — The supporting portion of a structure below the first floor construction, or below grade, including the footings.
Framing — The structural wood, steel or concrete elements of the building.
Framing, balloon — A system of framing a building in which all vertical structural elements of the bearing walls consist of single pieces extending from the top of the foundation sill plate to the roof plate and to which all floor joists are fastened.
Frost line — The depth of frost penetration in soil and/or the depth at which the earth will freeze and swell. This depth varies in different parts of the country.
Furring — Strips of wood or metal applied to a wall or other surface to even it and normally to serve as a fastening base for finish material.
Gable — A sidewall, typically triangular, that is formed by two sloping roof planes.
Gable roof — A type of roof with sloping planes of the same pitch on each side of the ridge. Has a gable at each end.
Gasket — A device used to seal joints against leaks.
GFI or **GFCI** or **Ground Fault Current Interrupter** — A electrical device used to prevent injury in locations where one might be in contact with a grounded surface and an electrical appliance. Most GFIs are located in a receptacle or circuit breaker and can be identified by the presence of a "test" and a "reset" button.

Glued laminated beam (glulam) — A structural beam composed of wood laminations. The laminations are pressure-bonded with adhesives.
Granules — Crushed rock coated with ceramic material, applied to the exposed surface of asphalt roofing products to add color and reduce ultraviolet degradation. Copper compounds added to these help make them algae resistant.
Groundwater — Water from a subsurface water source.
Grout — Mortar made of such consistency (by adding water) that it will flow into the joints and cavities of the masonry work and fill them solid.
Gusset — A flat metal, wood, plywood or similar type member used to provide a connection at the intersection of wood members. Most commonly used at joints of wood trusses. They are fastened by nails, screws, bolts, or adhesives.
Gutter — The trough that channels water from the eaves to the downspouts.
H-beam — A steel beam with a cross section resembling the letter H.
H-clip — Small metal clips formed like an H that fits at the joints of two plywood (or wafer board) sheets to stiffen the joint. Normally used on the roof sheeting.
Header — A beam placed perpendicular to joists and to which joists are attached in framing for around an opening.
Hearth — The fireproof area directly in front of a fireplace. The inner or outer floor of a fireplace, usually made of brick, tile, or stone.
Heat pump — A device that uses compression and decompression of gas to heat and/or cool a building.
Heating load — The amount of heating required to keep a building at a specified temperature during the winter, based on an outside design temperature.
Hip — The external angle formed by the meeting of two sloping sides of a roof.
Honeycombs — The appearance concrete makes when aggregate in the concrete is visible and where there are void areas in the concrete.
Hose bib — An exterior water faucet.
Hot wire — The wire that carries electrical energy to a receptacle or
other device-in contrast to a neutral, which carries electricity away again. Normally the black wire.
HVAC — An abbreviation for Heat, Ventilation, and Air Conditioning.
I-beam — A steel beam with a cross section resembling the letter I.
Ice damming — The buildup of ice and water at the eaves of a sloped roof. Melting snow on the roof refreezes at the roof overhang, causing the damming. Buildings with inadequate attic insulation or ventilation or with large roof projections beyond the exterior walls are more pronto to ice damming.
Irrigation — Lawn sprinkler system.
Jack post — A type of structural support made of metal, which can be raised or lowered through a series of pins and a screw to meet the height required. Typically used as a replacement for an old supporting member in a building.
Joist — One of a series of parallel beams, usually two inches in thickness, used to support floor and ceiling loads, and supported in turn by larger beams, girders, or bearing walls.
Joist hanger — A metal U-shaped item used to support the end of a floor joist and attached with hardened nails to another bearing joist or beam.
Knob-and-tube wiring — A common form of electrical wiring used before the Second World War. When in good condition it may still be functional for low amperage use such as smaller light fixtures.
Lath — A building material of narrow wood, metal, gypsum, or insulating board that is fastened to the frame of a building to act as a base for plaster, shingles, or tiles.
Lattice — An open framework of crisscrossed wood or metal strips that form regular, patterned spaces.
Leader — *See Downspout.*
Ledger — The wood or metal members attached to a beam, studding, or wall used to support joist or rafter ends.
Lintel — A horizontal structural member that supports the load over an opening such as a door or window.
Load-bearing wall — A wall supporting its own weight and some other structural elements of the building such as the roof and floor structures.
Louvre — A vented opening into a room that has a series of horizontal slats and arranged to permit ventilation but to exclude rain, snow, light, insects, or other living creatures.
Mansard roof — A roof with two sloping planes of different pitch on each of its four sides. The lower plane is steeper than the upper, and may be almost vertical.
Masonry — Stone, brick, concrete, hollow-tile, concrete block, or other similar building units or materials. Normally bonded together with mortar to form a wall.
Modified bitumen roof — A roof covering that is typically composed
of a factory-fabricated composite sheet consisting of a copolymer modified bitumen, often reinforced with polyester and/or fiberglass, and installed in one or more plies. The membrane is commonly surfaced with field-applied coatings, factory-applied granules or metal foil. The roofing system may incorporate rigid insulation.
Mortise — A slot cut into a board, plank, or timber, usually edgewise, to receive the tenon (or tongue) of another board, plank, or timber to form a joint.
Mullion — A vertical divider in the frame between windows, doors, or other openings.
Neutral wire — Usually color-coded white, this wire carries electricity from a load back to the service panel.
Newel post — The large starting post to which the end of a stair guard railing or balustrade is fastened.
Nosing — The projecting edge of a molding or drip or the front edge of a stair tread.
On center — The measurement of spacing for studs, rafters, and joists in a building from the center of one member to the center of the next.
Open valley — Method of valley construction in which shingles on both sides of the valley are trimmed along a chalk line snapped on each side of the valley. Shingles do not extend across the valley. Valley flashing is exposed.
Open web steel joist — One of a series of parallel beams, used to support floor and roof loads, and supported in turn by larger beams, girders or bearing walls. Consists of horizontal top and bottom chords, with diagonal and/or vertical web members connecting the chords together.
Oriented Strand Board or OSB — A manufactured 4-foot-by-8-foot wood panel made out of one- to two-inch wood chips and glue. Often used as a substitute for plywood.
P-trap — Curved, U-section of drain pipe that holds a water seal to prevent sewer gasses from entering a building through a fixtures' drain pipe.
Parapet — The portion of an exterior wall that extends above the edge of a roof.
Parging — A thin layer of cement placed over masonry units.
Partition — A wall that subdivides spaces within any story of a building or room.
Paver — Materials (commonly masonry) laid down to make a firm, even surface on the exterior.
Performance bond — An amount of money (usually 10 percent of the total price of a job) that a contractor must put on deposit with a governmental agency as an insurance policy that guarantees the contractors' proper and timely completion of a project or job.

Perimeter drain — Typically 4-inch perforated plastic pipe around the perimeter (either inside or outside) of a foundation wall (before backfill) that collects and diverts ground water away from the foundation.
Pilot light — A small, continuous flame (in a boiler, or furnace) that ignites gas or oil burners when needed.
Pitch — (1) The degree of roof incline expressed as the ratio of the rise, in feet, to the span, in feet. (2) A thick, oily substance commonly obtained from tar, used to seal out water at joints and seams. Pitch is produced from distilling coal tar, wood tar, or petroleum.
Pitch pocket — A container, usually formed of sheet metal, around supporting connections with roof-mounted equipment. Filling the container with pitch, or better yet, plastic roof cement, helps seal out water even when vibration is present. A pitch pocket is *not* the preferred method of flashing a roof penetration.
Plan view — Drawing of a structure with the view from overhead, looking down.
Plate — Normally a horizontal member within a framed structure, such as: (1) sill plate — a horizontal member anchored to a concrete or masonry wall; (2) Sole plate — bottom horizontal member of a frame wall; or (3) top plate — top horizontal member of a frame wall supporting ceiling joists, rafters, or other members.
Plenum — The main supply air or return air duct leading from a heating or cooling unit.
Plumbing stack — A plumbing vent pipe that penetrates the roof.
Ply — A term to denote the number of layers of roofing felt, veneer in plywood, or layers in built-up materials, in any finished piece of such material.
Point load — A point where a bearing/structural weight is concentrated and transferred to another structural member or component.
Portland cement — Cement made by heating clay and crushed limestone into a brick and then grinding to a pulverized powder state.
Post — a vertical framing member usually designed to carry a beam.
Post-and-beam — A basic building method that uses just a few hefty posts and beams to support an entire structure. Contrasts with stud framing.
Power vent — A vent that includes a fan to speed up air flow.
Pressure relief valve — A safety device mounted on a water heater or boiler. The relief valve is designed to release any high pressure in the vessel and thus prevent tank explosions.
Pressure-treated wood — Lumber that has been saturated with a preservative to resist rot.
PVC or **CPVC** — (Polyvinyl choride) A type of white or light gray plastic pipe sometimes used for water supply lines and waste pipe.
Quarry tile — A man-made or machine-made clay tile used to finish a floor or wall. Generally 6 inches by 6 inches by ¼-inch thick .
R value — A measure of insulation's resistance to heat flow. The higher the R value the more effective the insulation.
Rafter — (1) The framing member that directly supports the roof sheathing. A rafter usually follows the angle of the roof, and may be apart of a roof truss. (2) The supporting framing member immediately beneath the deck, sloping from the ridge to the wall plate.
Rafter, hip — A rafter that forms the intersection of an external roof angle.
Rafter, valley — A rafter that forms the intersection of an internal roof angle.
Rake edge — The overhang of an inclined roof plane beyond the vertical wall below it.
Rebar — Reinforcing bar. Ribbed steel bars installed in concrete structures designed to strengthen concrete. Comes in various thicknesses and strength grades. May be epoxy coated to enhance rust resistance.
Refrigerant — A substance that remains a gas at low temperatures and pressure and can be used to transfer heat. Freon is an example.
Register — A grille placed over a supply air or return air duct.
Reglaze — To replace a broken window.
Reinforcing — Steel rods or metal fabric placed in concrete slabs, beams, or columns to increase their strength.
Relief valve — A device designed to open if it detects excess temperature or pressure. Commonly found on water heating or steam producing systems.
Resilient flooring — A durable floor cover that has the ability to resume its original shape.
Retaining wall — A structure that holds back a slope or elevation of land and prevents erosion.
Ridge — The horizontal line at the junction of the top edges of two sloping roof surfaces.
Riser — A vertical member between two stair treads.
Roll roofing — Asphalt roofing products manufactured in roll form.
Romex — A name brand of nonmetallic sheathed electrical cable that is used for indoor wiring.
Roof deck — The surface, installed over the supporting framing members, to which the roofing is applied.
Roof sheathing — The wood panels or sheet material fastened to the roof rafters or trusses on which the shingle or other roof covering is laid.
Roof valley — The "V" created where two sloping roofs meet.
Roofing membrane — The layer or layers of waterproofing products that cover the roof deck.
Run, stair — The horizontal distance of a stair tread from the nosing to the riser.
Saddle — Two sloping surfaces meeting in a horizontal ridge, used between the back side of a chimney, or other vertical surface, and a sloping roof. Used to divert water around the chimney or vertical surface.
Sanitary sewer — A sewer system designed for the collection of waste water from the bathroom, kitchen and laundry drains, and is usually not designed to handle storm water.
Sash — The frame that holds the glass in a window, often the movable part of the window.
Saturated felt — A felt that is impregnated with tar or asphalt.
Scratch coat — The first coat of plaster, which is scratched to form a bond for a second coat.
Scupper — (1) An opening for drainage in a wall, curb or parapet. (2) The drain above a downspout or in a flat roof, usually connected to the downspout.
Sealer — A finishing material, either clear or pigmented, that is usually applied directly over raw wood or concrete for the purpose of sealing the wood or concrete surface.
Seasoning — Drying and removing moisture from green wood in order to improve its usability.
Service equipment — Main control gear at the electrical service entrance, such as circuit breakers, switches, and fuses.
Service lateral — Underground power supply line.
Shake — A wood roofing material, normally cedar or redwood. Produced by splitting a block of the wood along the grain line. Modern shakes are sometimes machine sawn on one side.
Sheathing — (1) Sheets or panels used as roof deck material. (2) Panels that lie between the studs and the siding of a structure.
Short circuit — A situation that occurs when hot and neutral wires come in contact with each other. Fuses and circuit breakers protect against fire that could result from a short.
Sill — (1) The two-by-four or two-by-six wood plate framing member that lays flat against and bolted to the foundation wall (with anchor bolts) and upon which the floor joists are installed. (2) forming the lower side of an opening, as a door sill or window sill.
Skylight — A more or less horizontal window located on the roof of a building.

Slab-on-grade — A type of foundation with a concrete floor which isplaced directly on the soil. In warm climates, the edge of the slab isusually thicker and acts as the footing for the walls. In cold climates,the slab is independent of the perimeter foundation walls.
Sleeper — Usually, a wood member that serves to support equipment.
Soffit — (1)The finished underside of the eaves. (2) A small ceilinglike space, often out of doors, such as the underside of a roof overhang.
Solid waste pump — A pump used to 'lift' waste water to a gravity sanitary sewer line. Usually used in basements and other locations which are situated below the level of the city sewer.
Spalling — The cracking and breaking away of the surface of a material.
Span — The clear distance that a framing member carries a load without support (between structural supports).
Splash block — A pad placed under the lower end of a downspout to divert the water from the downspout away from the building. Usually made out of concrete or fiberglass.
Stair stringer — Supporting member for stair treads. Can be a notched plank or a steel member.
Starter strip — Asphalt roofing applied at the eaves that provides protection by filling in the spaces under the cutouts and joints of the first course of shingles.
Step flashing — Flashing application method used where a vertical surface meets a sloping roof plane.
Storey — That part of a building between any floor or between the floor and roof.
Storm collar — A metal flashing used to seal around a penetration in a roof.
Storm sewer — A sewer system designed to collect storm water, separate from the waste water system.
Storm window — An extra window usually placed outside of an existing one, as additional protection against cold weather, or damage.
Stucco — An outside plaster finish made with Portland cement as its base.
Stud — One of a series of slender wood or metal vertical structural members placed as supporting elements in walls and partitions.
Stud framing — A building method that distributes structural loads to each of a series of relatively lightweight studs. Contrasts with post and-beam.
Sump — Pit or large plastic bucket/barrel inside a basement, designed to collect ground water (storm water) from a perimeter drain system.
Sump pump — A submersible pump in a sump pit that pumps any excess ground water to the storm sewer.
Suspended ceiling — A ceiling system supported by hanging it from the overhead structural framing.
Tempered — Strengthened. Tempered glass will not shatter nor create shards, but will "pelletize" like an automobile window. Required in tub and shower enclosures, for example.
Termites — Insects that superficially resemble ants in size, general appearance, and habit of living in colonies; hence, they are frequently called "white ants." Subterranean termites establish themselves in buildings not by being carried in with lumber, but by entering from ground nests after the building has been constructed. If unmolested, they eat out the woodwork, leaving a shell of sound wood to conceal their activities, and damage may proceed so far as to cause collapse of parts of a structure before discovery.
Terra cotta — A ceramic material molded into masonry units.
Threshold — The bottom metal, concrete, or wood plate of an exterior door frame. They may be adjustable to keep a tight fit with the door slab.
Toenailing — To drive a nail in at a slant. Method used to secure floor joists to the plate. Not acceptable for securing joists flush to a header or beam.
Tongue-and-groove — A joint made by a tongue (a rib on one edge of a board) that fits into a corresponding groove in the edge of another board to make a tight flush joint. Typically, the subfloor plywood is tongue-and-groove.
Top chord — The upper or top member of a truss.
Trap — A plumbing fitting that holds water to prevent air, gas, and vermin from entering into a building.
Tread — The walking surface board in a stairway on which the foot is placed.
Treated lumber — A wood product which has been impregnated with chemicals to reduce damage from wood rot or insects. Often used for the portions of a structure which is likely to be in ongoing contact with soil and water. Wood may also be treated with a fire retardant.
Truss — An engineered and manufactured roof support member with "zig-zag" framing members. Does the same job as a rafter but is designed to have a longer span than a rafter.
Tube-and-knob wiring — *See knob-and-tube wiring.*
UFFI — Urea Formaldehyde Foam Insulation, a foam insulation blown into existing walls. (Pronounced "you-fee")
Ultraviolet degradation — A reduction in certain performance limits caused by exposure to ultraviolet light.
Underlayment — (1) A one-quarter-inch material placed over the subfloor plywood sheathing and under finish coverings, such as vinyl flooring, to provide a smooth, even surface. (2) A secondary roofing layer that is waterproof or water-resistant, installed on the roof deck and beneath shingles or other roof-finishing layer.
UV rays — Ultraviolet rays from the sun.
Valley — The inward angle formed by two intersecting, sloping roof planes. Since it naturally becomes a water channel, additional attention to waterproofing it is desirable.
Vapour barrier — A building product installed on exterior walls and ceilings under the drywall and on the warm side of the insulation. It is used to retard the movement of water vapour into walls and prevent condensation within them. Normally, polyethylene plastic sheeting is used.
Vent — A pipe or duct allowing the flow of air and gases to the outside. In a plumbing system, the vent is necessary to allow sewer gases to escape to the exterior
Vermiculite — A mineral closely related to mica, with the faculty of expanding on heating to form lightweight material with insulation quality. Used as bulk insulation and also as aggregate in insulating and acoustical plaster and in insulating concrete floors.
Water closet — A toilet.
Weather stripping — Narrow sections of thin metal or other material installed to prevent the infiltration of air and moisture around windows and doors.
Weep holes — Small holes in exterior wall cladding systems that allow moisture to escape and air pressure equalization in the cavity space drained by the weep hole.
Wythe — (rhymes with "tithe" or "scythe") A vertical layer of masonry that is one masonry unit thick.
Zone — The section of a building that is served by one heating or cooling loop because it has noticeably distinct heating or cooling needs. Also, the section of property that will be watered from a lawn sprinkler system.
Zone valve — A device, usually placed near the heater or cooler, which controls the flow of water or steam to parts of the building; it is controlled by a zone thermostat.