### **ROOF, CHIMNEY, GUTTERS INSPECTION**

SCOPE OF THE ROOF INSPECTION: 266 CMR 6.00: STANDARDS OF PRACTICE:

6.02: System: Roofing

- (1) The Home Inspector shall Observe the Readily Accessible and Observable:
  - a. Roof coverings.
  - b. Exposed roof drainage systems.
  - c . Flashings.
  - d. Skylights, chimneys and roof penetrations.
  - e. Signs of leaks on building components.
- (2) The Home Inspector shall Describe:
  - (a) The type of roof covering materials:

Asphalt, Cementious, Slate, Metal, and or Tile Shingles. Built-up type (Bald Asphalt, Tar and Gravel, Mineral Covered Rolled Roofing, Ballasted Rubber Membrane, Adhere Membrane, Mechanically Fastened Membrane, Other).

(b) The roof drainage system:

Gutters (Aluminum, Copper, Wood, Vinyl, Other) Leaders (Aluminum, Copper, Galvanized, Vinyl, Other)

(c) The chimney materials:

Brick, Concrete Block, Metal, Other

- (3) 2) The **Home Inspector** shall **Report on**:
  - (a) The methods used to observe the roofing.
  - (b) Any signs of previous or active leaks. (c) The condition and recommend repair
  - (if needed) of the **Readily Accessible** and **Observable**, roofing **Components** including:

the roof covering exposed roof drainage systems, exposed flashings, skylights, exterior of chimney(s), and roof penetrations.

- (3) The *Home Inspector* shall not be required to:
  - (a) Walk on the roofing unless the *Client* provides *Safe Access* and the *Seller* and or the *Seller's Representative* provide authorization that relives the *Home Inspector* of all liability for possible damage to the roof.
  - (b) **Observe**, **Describe** or **Report on** attached accessories including but not limited to solar systems, antennae, and lightning arrestors.
  - (c) Observe, Describe or Report on the interior of chimney flues.

(PLEASE READ: The Inspector is NOT required to walk on the roof unless the <u>Client</u> provides safe access and the seller and or the seller's representative provides authorization that relives the Inspector of all responsibility of possible damage to the roof. The method of roof inspection is a judgment call based upon access and the inspector's safety. The <u>Client</u> understands that roof coverings often contain hidden defects and that if this is cause for concern, a professional roofer should be brought in prior to the close of escrow to determine such defects. Unless otherwise stated, All roofing, flashing and chimneys are examined and conditions stated are as visible from ground level. Problems and defects may exist which could not be determined, from ground level, and for which the <u>Company</u>, and its inspectors, cannot and do not assume responsibility. The only way to insure that hidden problems or defects do not exist, is to hire a professional roofer to climb and walk on the roof.)

DISCLAIMERS: A. The true condition of roof components covered by SNOW is undetermined and EXCLUDED from this report. B. The inspector is not required to observe attached accessories including but not limited to solar systems, antennae and lightning arrestors. C. Because of the many factors contributing to the adequacy of a roofing installation, the COMPANY cannot warrant such adequacy and can only comment on those installation features that are readily accessible and identifiable by visual inspection - inaccessible areas are EXCLUDED. Any additional investigation would require "destructive testing" of the installation to explore roof decking, under underlayments, nailing schedules and many other factors not evident in a visual examination. D. THIS REPORT IS NOT A GUARANTEE AGAINST ROOF LEAKAGE as climatic conditions such as high winds, wind driven rain, snow loads, winter ice dams and sun degradation can cause unpredictable leakage with any roof. NOTICE: UNLESS THE ATTIC WAS VIEWED DURING RAIN, NO GUARANTY AGAINST ROOF LEAKS IS IMPLIED. YOU should monitor the attic area for signs of roof or flashing leakage after heavy rain or snow conditions. E. THE INSPECTION AND REPORTING ON THE CONDITION OF CHIMNEY FLUE LINERS IS EXCLUDED FROM THIS REPORT AS A FLUE LINER IS NOT READILY ACCESSIBLE

FOR EVALUATION. Only the exterior of the chimney is inspected from the ground, from the attic and from the basement when accessible. We recommend installing proper liners in all unlined chimney flues NOW. Install chimney caps on all chimneys NOW. You should hire a member of the "Chimney Sweep Guild" to perform a "LEVEL II" inspection of each chimney and fireplace NOW, prior to commitment for true determination of condition. F. The type and condition of roof covering fasteners (nails, staples, etc.) are undetermined as they are not readily accessible without destructive testing.

#### **Chimney and Fireplace Inspections:**

The National Fire Protection Association and I, recommend an NFPA 211, Level II inspection of any chimney and fireplace when a home is sold. Such an inspection, performed by a qualified chimney sweep, might uncover additional problems that were not *readily accessible* for me. For safety reasons, all chimney and fireplace problems should be corrected before use. A list of Chimney Safety Institute of America Certified Chimney Sweeps' is available online at <a href="http://www.csia.org/">http://www.csia.org/</a>

#### Differing inspection levels:

<u>Level I</u>: is a visual inspection of readily accessible areas of the chimney structure and flue and basic appliance installation and connection. There must be a lack of obstructions or combustible deposits in the flue.

**Level II:** includes Level I visual inspection. Proper clearances from combustibles in accessible locations, proper construction and condition of accessible portions of the chimney structure and all enclosed flues, all accessible portions the chimney exterior and interior, including areas within accessible attics, crawl spaces, and basements. Most Include inspection by video camera scanning.

**Level III**: includes Level II inspection. Proper construction and condition of concealed portions of the chimney structure and flues (this requires demolition or removal of portions of the building where necessary). This type of inspection is used for cause and origin <u>fire investigations <a href="http://www.inspectionnews.net/home\_inspection/autolink.php?id=9&script=showthread&forumid=7">http://www.inspectionnews.net/home\_inspection/autolink.php?id=9&script=showthread&forumid=7</a> or when a chimney has known damages such as a chimney fire or lightning strike.</u>

**GENERAL COMMENTS:** A. Most asphalt roof coverings have a 20-year life expectancy depending on brand, ventilation, installation and exposure. The roof covering is not designed to last the life of the home, future replacement should be budgeted. Estimates for any repairs or replacement should be obtained from a licensed & insured roofing contractor. B. I recommend that all chimneys be inspected annually by a certified member of the chimney sweep guild. Such safety precaution will ensure that harmful combustion gases are safely vented outside. **All chimneys and fireplace flues should be cleaned and inspected by a chimney sweep annually.** C. Gutters should be cleaned and inspected for proper drainage control annually. Each downspout should discharge water away from the foundation to prevent wet basement problems. D. Be advised that any source of water penetration or ventilation imbalance can cause interior damage and / or mold.

#### 1. ROOF GEOMETRY:

Style: Gable roof structure.

#### 2. HOW ROOF WAS VIEWED?

The roofs were viewed from:

Viewed from ground by eye.

Viewed by 10 x 50 Bushnell brand binoculars from the ground.

**NOTICE:** The roof was **NOT** fully accessible for viewing due to obstructions such as slope, high elevation, architectural details or lot depth. Further close-up evaluation is suggested.

Recent weather conditions have

been: Wet, Snow.

#### 3. ROOF COVERING AREA #1:

TYPE OF MAIN ROOF COVERING:

ASPHALT / FIBERGLASS SHINGLES PRESENT: As viewed, the roof structure appears to be covered with asphalt and fiberglass composition shingles.

Analysis: This material is the most common roof covering used in this part of the country and typically provides many years of service when installed properly and maintained. However, asphalt shingles are NOT designed to last the life of the home and will require eventual routine age replacement. Replacement should be a budgeted item and should be scheduled before leakage occurs. The service life of the material varies and depends on variable such as: the initial shingle weight or quality, the steepness or pitch of the roof, the amount of attic ventilation, the number of roofing layers and the orientation of the home to the sun. (Note: Average weight shingles last approximately 15-20 years, heavy duty shingles last 25-30 years depending on the quality, ventilation, climate and installation. Without knowing the specific manufacturer and model of the shingle, it is impossible to determine the actual expected service life within the scope of this inspection.)

During ownership, you should conduct an annual roofing inspection to make sure that the condition of the roof is functional or fulfilling it's objective of shedding water before leakage occurs. Look for missing or loose materials, split shingles, areas of storm damage, blown-off shingles, curling shingles, loss of granules, exposed felt mat or other age defects and perform repairs as required to extend service life.

Approximate age of roof:

Unknown - further research is advised. You should consult the owner to verify the age of the roof so that a budget can be established for future age replacement.

#### **CONDITION:**

#### \*\* FUNCTIONAL with EXCEPTIONS as noted below:

Observation: The roof covering was 100% covered by **SNOW** at the time of inspection. Analysis: The true condition of the roof covering is undetermined as it was *not readily accessible* for inspection. Further investigation is needed to determine if there are concealed defects.

Recommendation: As I was unable to determine the condition of the roof, a professional roof inspection and certification are advised prior to the close of escrow. The condition of the roof covering requires further research now and also during the first thaw. You should ask the owner the following disclosure questions:

- What type(s) of roof covering(s) is present?
- How old is the roof covering(s)?
- When do you expect that age replacement will be needed?
- Does the roof leak?
- Are there any seasonal performance problems such as ice dams?
- Have the flashings ever leaked?
- Ask if the owner is willing to memorialize in writing that there are no problems with the roof covering.

You should discuss the unknown condition of the roof covering with your attorney NOW, prior to commitment. If the owner is not willing to provide assurance that there are no problems, then perhaps an agreed upon sum of money can be retained in escrow until inspection is possible. Furthermore, you should visit the local building department and perform a "permit search" to determine the last date of roof covering replacement on file. Be advised that roof coverings are NOT designed to last the life of the home. All roof coverings eventually require age replacement at significant expense - such expenses should be budgeted. (Note: Be advised that most

3-tab asphalt / fiberglass shingle roof coverings have a design life of 15-20 years, roll roofing design life = 8-10 years.)

If you have great concerns or your research reveals suspicions of problems, you may want the home inspector to return and evaluate the roof when the roof is bare and weather permits. A TRAVEL FEE AND MINIMUM HOURLY RATE WILL BE CHARGED. Exact pricing and scheduling arrangements can be made by contacting this office.

## VISIBLE PROBLEMS:

Observation: Inspection of the roof covering revealed missing ridge cap shingles of missing shingle parts. Analysis: Be advised that the loss of shingles of shingle parts leaves a roof vulnerable to leakage and the home vulnerable to property damage. Repair is needed NOW and postponed repair may result in additional shingle loss. Recommendation:



You should hire a licensed and insured roofing contractor to repair / replace the roof covering as determined by on-roof inspection.

#### 4. ROOF COVERING AREA #2:

TYPE OF MAIN ROOF COVERING:

#### **RUBBER ROOFING:**

Rubber membrane roofing is present on the low sloped roof under the rear decks. (EPDM - Ethylene Propylene Diene Monomer) Analysis: Rubber membrane or single ply membrane are relatively new products used for flat roof applications. Manufacturer's boast of a 20-30 year design life, but true life expectancy is unknown due to the



limited age of the product on site. In my opinion, this is the material of choice for flat roof applications in terms of weather shedding protection, resistance to the elements and longevity.

Most rubber roofs are contact cemented in place in large sheets with few joints. Joints are heat sealed and uncured rubber is used to form corners or cover other difficult areas.

Problems associated with such rubber membrane roofing products are usually due to workmanship and seam failure rather than product failure.

Ethylene Propylene Diene Monomer (EPDM), or rubber roofing is the most popular single-ply roofing system used nationally and may be black or white in color. Recommendation: Semi annual inspections are advised.

Resource: http://www.epdmroofs.org

Approximate age of roof:

Unknown - further research is advised. You should consult the owner to verify the age of the roof so that a budget can be established for future age replacement.

**CONDITION:** 

\* FUNCTIONAL where *readily accessible* at time of inspection, as viewed, and with wear & tear appropriate for the type of material and estimated age. (Note: A roof covering is a disposable component, not designed to last the life of the home. All homeowners should budget for future roof covering replacement when the material reaches end of service life.)

VISIBLE PROBLEMS:

Observation: The *readily accessible* roof coverings did not exhibit any visible problems at time of inspection.

<u>Analysis</u>: Where accessible and by the method observed, the roof covering appears functional with wear & tear appropriate for it's estimated age.

<u>Recommendation</u>: You should ask the owner to disclose the age of the roof covering for so that you can establish a budget for future age replacement.

#### 6. EXPOSED ROOF DRAINAGE SYSTEM:

TYPE OF GUTTERS:

**Aluminum gutters.** (Note: All gutters should be cleaned annually to protect the home from moisture caused decay, paint failure, soil erosion and wet basement problems.)

TYPE OR LEADERS OR DOWNSPOUTS:

Aluminum downspouts are present.

**CONDITION:** 

\*\* FUNCTIONAL with EXCEPTIONS NOTED:

GUTTER & LEADER PROBLEMS:



Observation: The downspouts empty roof run-off water near or adjacent to the foundation.

<u>Analysis</u>: Dumping excessive water near the home may cause wet basement problems, foundation problems or soil erosion. Drainage control repairs are needed NOW.

Recommendation: I advise that each downspout be studied and corrected as required to discharge all roof drainage by gravity flow away from the building. Downspouts should have properly directed elbows, extensions and splash blocks that complement the natural grade of the property.

<u>Observation</u>: Downspouts which carry roof run-off water enter the ground near the foundation. Beyond this point, the downspouts pass underground to unknown locations.

<u>Analysis</u>: **DISCLAIMER**: The functional condition of these hidden drains is undetermined as they are not accessible.

Recommendation: I advise that you question the owner and ask where the underground drains discharge and if they satisfactorily handle all of the water from the roof. I further advise that you monitor the drains during several seasonal periods of prolonged and heavy rains. The gutters leading to the underground drains should be screened to prevent clogging. The downspouts may empty into buried dry wells or they may run to the lot boundary or area of lower elevation. (A dry well is a covered pit with either an open jointed lining or filled with stone aggregate through which drainage from the roof seeps and leaches into the surrounding soil.) Note: Be advised that faulty downspouts that discharge near the foundation or buried drainage systems that boil over or retain water near the foundation may contribute to wet basement problems.

#### 7. EXTERIOR OF CHIMNEY #1:

**How viewed:** From ground

Viewed by 10 x 50 Bushnell brand binoculars from the ground.

Type of chimney: (DISCLAIMER: MA home inspectors are not required to inspect and report on the interior of the chimney. Any information provided is done so as a courtesy only.)

Brick chimney with multiple clay lined flues where *readily accessible* only.



**Condition:** 

\*\* FUNCTIONAL with exceptions noted below: (Note: Not all parts of a chimney are accessible for inspection.)

## Chimney problems:

Observation: The chimney top is uncapped. Analysis: While a chimney cap is not required, the benefits gained by installing a cap are important. According to the Chimney Safety Institute of America (www.csia.org), "chimney caps are the most inexpensive preventive measure that a homeowner can employ to prevent water penetration and damage to the chimney."



An uncapped chimney is a hole in the roof that readily admits rain, snow, ice, sleet, and wildlife, some carrying infection and disease. Rain water may damage the interior of the chimney and damage the lining system. Water may appear in the fireplace, in a connector pipe from the furnace or in a cleanout door at the base of the chimney. A proper stainless steel cap, incorporating a spark screen, can reduce flue fire damage, by containing pieces of hot, flaming creosote attempting to spew from the chimney and ignite everything it touches. Also, almost all costly chimney restoration projects are the result of water getting inside where it doesn't belong and helping the acids eat the chimney. In short, good chimney caps enhance safety while they're saving you money. Recommendation: I advise that you hire a chimney sweep to clean the chimney, examine the interior for any concealed problems and finally to install an optional protective stainless steel metal cap.

Web resources: www.chimneys.com

www.csia.org

Observation: MA home inspectors are not required to inspect the interior of chimney flues.

<u>Analysis</u>: The condition of the interior of the chimney is undetermined. Further investigation is advised.

Recommendation: Please read the advice provided by the Chimney Safety Institute of America printed below. A Level II inspection is advised.

#### CHIMNEY INSPECTIONS EXPLAINED FOR THE HOMEOWNER

(A Public Safety Bulletin from the Chimney Safety Institute of America www.csia.org)

Until recently, the scope of work performed in the inspection or evaluation of a fireplace, stove or other venting system was generally up to the discretion of the chimney service technician. Professional service technicians now have an industry standard that removes much of that discretion." The National Fire Protection Association (NFPA) has addressed the minimum chimney inspection standards in its latest publication (NFPA 211) concerning home heating appliances.

Inspections are now classified as *Level 1*, *Level 2* or *Level 3*. Each level of inspection covers specific items depending on the individual appliance and venting system. Below is an explanation of the three levels of inspections and what services your chimney service technician should provide for each level.

**Level 1** Inspections - If your appliance or your venting system has not changed and you plan to use your system as you have in the past, then a *Level* 1 inspection is a minimum requirement.

A **Level 1** inspection is recommended for a chimney under continued service under the same conditions and with the continued use of the same appliance.

In a *Level* 1 inspection, your chimney service technician should examine the readily accessible\*\* portions of the chimney exterior, interior and accessible\* portions of the appliance and the chimney connections. Your technician will be looking for the basic soundness of the chimney structure and flue as well as the basic appliance installation and connections. The technician will also verify the chimney is free of obstruction and substantially free of combustible deposits.

\*Accessible: May require the use of commonly available tools to remove doors, panels or coverings, but will not damage the chimney or building structure or finish.

\*'Readily Accessible: Exposed, or capable of being exposed, for operation, inspection, maintenance or repair without the use of tools to open or remove doors, panels or coverings.

**Level 2** Inspections - A Level 2 inspection is required when any changes are made to the system. Changes can include a change in the fuel type, changes to the shape of, or material in, the flue (i.e. relining), or the replacement or addition of an appliance of a dissimilar type, input rating or efficiency. Additionally, a **Level 2** inspection is required upon the sale or transfer of a property or after an operating malfunction or external event that is likely to have caused damage to the chimney. Building fires, chimney fires, seismic events as well as weather events are all indicators that this level of inspection is warranted. A **Level 2** inspection is a more in-depth inspection than a **Level 1** inspection.

A **Level 2** inspection includes everything in a **Level 1** inspection, plus the accessible\* portions of the chimney exterior and interior including attics, crawl spaces and basements. It will address proper clearances from combustibles in accessible' locations. There are no specialty tools (i.e. demolition equipment) required to open doors, panels or coverings in performing a **Level 2** inspection. A **Level 2** inspection shall also include a visual inspection by video scanning or other means in order to examine the internal surfaces and joints of all flue liners incorporated within the chimney. No removal or destruction of permanently attached portions of the chimney or building structure or finish shall be required by a **Level 2** inspection.

**Level 3 Inspections** - When a **Level 1** or **Level 2** inspection suggests a hidden hazard and the evaluation cannot be performed without special tools to access concealed areas of the chimney or flue, a **Level 3** inspection is recommended. A **Level 3** inspection addresses the proper construction and condition of concealed portions of the chimney structure and the flue. Removal or destruction, as necessary, of permanently attached portions of the chimney or building structure will be required for the completion of a **Level 3** inspection.

Level 3 inspection - A Level 3 inspection includes all the areas and items checked in;

**Level 1** and a **Level 2** inspection, as well as the removal of certain components of the building or chimney where necessary. Removal of components (i.e., chimney crown, interior chimney wall) shall be required <u>only</u> when necessary to gain access to areas that are the subject of the inspection. When serious hazards are suspected, a **Level 3** inspection may well be required to determine the condition of the chimney system.

#### The Importance of Annual Inspections

Your chimney systems are an important part of your home heating system. The National Fire Protection Association recommends an annual evaluation of all chimneys, fireplaces and vents. In accordance with this recommendation, your chimneys should be checked annually by a CSIA Certified Chimney Sweep'- and swept as required. Each year unsafe chimneys cause significant numbers of injuries and deaths, and account for more than \$200 million in property losses. Make chimney examinations a regular part of your home maintenance schedule. Don't become a statistic!

#### SITUATION LEVEL OF INSPECTION

- ·Annual Inspection
- -Routine Cleaning of Flue
- Direct Replacement of a Similar Appliance

#### LEVEL 1

- ·Upon any sale or transfer of property.
- After an operating malfunction or an external event is likely to have caused damage to the chimney.
- Addition or removal of one or more connected appliances, or the replacement of an appliance with one of a different type, a different input rating or a different efficiency.
- ·Prior to relining or replacement of the flue lining.

#### LEVEL 2

- ·Where necessary for the investigation of an incident which has caused damage to the chimney or building.
- •Where a hazard is detected or suspected as the result of a Level I or a Level 2 inspection and the suspected hazard cannot be fully evaluated without access to concealed areas.
- ·A Level 3 inspection may be required when the construction of all or part of the chimney is deemed critical to the renewed or continued use of the chimney due to potential concealed defects.

<u>Good resources</u>: Chimney Safety Institute of America www.csia.org Chimney sweep guild www.chimneys.com

#### Additional problems:



Observation: Unplugged openings are present in chimney. In the basement the insulation is not an appropriate means to plug a flue. Also in the first floor there are what appear to be vents in the brick work.

Analysis: The concern is if the flues or brick wythe have been damaged by moisture poisonous combustion gases can enter the home and cause personal injury FIRE.\*\*\*\* **UNSAFE** 

Recommendation: I advise that you hire a mason to perform safety repairs as required and have a level 2 inspection preformed on the chimney liners.

#### 10. ROOF PENETRATIONS:

**TYPES** 

**PVC Vent Pipe OBSERVED:** Chimney, Ridge vent at peak of roof

**CONDITION:** 

\*\*\* NOT FUNCTIONAL as NOTED:

**VISIBLE** 

PROBLEMS:

Observation: As viewed, the flashing at the intersection of the roof covering and the chimney appears to be defective.As seen from the attic I can see day light.

Analysis: The flashing needs further investigation and repair or replacement to prevent leakage and interior water damage.

As explained by the

(www.csia.org):

Chimney Institute of America



"Flashing is the seal between the roofing material and the chimney. Flashing prevents

rainwater or snow melt from running down the chimney into living spaces where it can stain or damage ceiling and walls or wall paneling or cause rot in rafters, joists or other structural elements. In many cases, the flashing is a single L-shaped sheet of metal that is attached to the side of the chimney and the roof. The most effective flashing is made up of two elements, the flashing and the counter-flashing. The flashing or base flashing - an L-shaped element extending up the chimney side and out onto the roof - is attached to the roof and sealed. The counter flashing, which overlaps the base flashing, is imbedded and sealed in the chimney's masonry joints. This two-element flashing allows both the roof and the chimney to expand or contract at their own rates with- out breaking the waterproof seal in either area."

<u>Recommendation</u>: You should ask a tradesman relative to this area of concern to further investigate the flashing and to provide a cost estimate for repairs.

Observation: Due to the condition of the ridge vent, there is a potential leakage.

Analysis: Repair is needed.

Recommendation: Consult a roofer.

Observation: There is a potential leakage point at the plumbing vent pipe.

Analysis: Repair is needed.

Recommendation: Consult a roofer.

#### 11. FLASHINGS:

## TYPE OF FLASHINGS:

- Flashing boot at vent pipe.
- Metal step flashing is present at the chimney / roof intersection.
- Metal drip edge at eaves.
- Metal drip edge at gable rake trim boards.

# CONDITION: FLASHING PROBLEMS:

#### \*\*\* NOT FUNCTIONAL as NOTED:





Observation: The flashing and/or the rubber gasket around the plumbing vent pipe appears to be defective.

<u>Analysis</u>: Repair is needed. Faulty flashing at the vent pipe / roof intersection may allow leakage. Be advised that any source of water penetration or ventilation imbalance can cause interior damage and / or mold. Note: There is a potential for concealed damage.

Recommendation: Hire a roofer to perform repairs.

Web Resource: http://www.ci.bloomington.mn.us/handouts/53/53ccshingles.pdf

Observation: As viewed, the flashing at the intersection of the roof covering and the chimney appears to be defective.

Analysis: The flashing needs further investigation and repair or replacement to prevent leakage and interior water damage. Be advised that any source of water penetration or ventilation imbalance can cause interior damage and / or mold. Note: There is a potential for concealed damage.

As explained by the Chimney Institute of America (www.csia.org): "Flashing is the seal between the roofing material and the chimney. Flashing prevents rainwater or snow melt from running down the chimney into living spaces where it can stain or damage ceiling and walls or wall paneling or cause rot in rafters, joists or other structural elements. In many cases, the flashing is a single L-shaped sheet of metal that is attached to the side of the chimney and the roof. The most effective flashing is made up of two elements, the flashing and the counter-flashing. The flashing or base flashing an L-shaped element extending up the chimney side and out onto the roof - is attached to the roof and sealed. The counter flashing, which overlaps the base flashing, is imbedded and sealed in the chimney's masonry joints. This two-element flashing allows both the roof and the chimney to expand or contract at their own rates with- out breaking the waterproof seal in either area."

Recommendation: You should ask a tradesman relative to this area of concern to further investigate the flashing and to provide a cost estimate for repairs. Web Resource: http://www.ci.bloomington.mn.us/handouts/53/53ccshingles.pdf

#### 12. SKYLIGHTS:

Observation: No visible skylights where readily accessible.

#### 13. SIGNS OF PREVIOUS OR ACTIVE LEAKS:

ROOF LEAKS OR AREAS OF POTENTIAL PROBLEMS:





Observation: Inspection of the roof and related components revealed a potential for leakage at the following locations:

- \*\* Chimney flashing.
- \*\* Plumbing vent pipe flashing
- \*\* Ridge vent.

Analysis: Defects in any of the above roof components may allow leakage, interior

water damage and mold. Note: There is a potential for concealed damage. Recommendation: Prior to commitment, you should ask a roofer to perform an on-roof inspection of all components and to provide an estimate for repair or replacement as required to restore function.

#### 14. OVERALL CONDITION / RECOMMENDATIONS:

Opinions of inspector:

In my opinion, visible conditions indicate that <u>the roof covering is in need of repair to</u> restore complete function and to prevent possible leakage or mold. Consult a roofer for price quotes prior to commitment.

In my opinion, the downspouts are in need of **repair** to restore function.