

# Illinois Roof Inspections

June 7<sup>th</sup>, 2015

## **Sample Property Management Co**

### **C/O Property Manager**

Mailing Address

Skokie, IL 60076

Re: Inspection report for the Sample Condominium roof at 1234 Sample Ave., Chicago, IL.

As you had requested we inspected your building on or about Saturday June 6th to assess the overall condition of the roofing system and make recommendations. Please be advised that this inspection did not address any code requirements or structural issues of the building. All comments and recommendations are based on the conditions that existed on the day of the inspections.

### Existing conditions

1. Your low slope roof is currently multiple layers with the top layer being a built up roof with gravel that has been applied over another layer of built up and gravel with tapered insulation installed over the original smooth built up roof. The existing roofing system is in very poor condition having no serviceable life remaining.
2. Your low slope roof has good slope for drainage which was accomplished with tapered insulation included within a previous roofing installation.
3. Your roof has drains which appear to be adequate in size though one strainer basket is missing.
4. The perimeter of your walls have metal coping panels which are in poor condition and were improperly installed. There is also gravel stop metal perimeter flashing which appears to have been either improperly installed or recently repaired.
5. The low slope roofing system appears to have trapped moisture based on core samples observed at the time of inspection plus numerous vapor blisters present.
6. There is a sloped asphalt shingle mansard roof in fair condition which is mostly excluded from this inspection report.

### Recommendations

1. The existing low slope roofing system should be replaced as soon as budget allows. As part of the new roofing system a fully tapered insulation system is required to improve drainage and reduce the likelihood of standing water.
2. Replacement of the metal copings and perimeter flashing is also required for a long term complete roofing system.
3. If the roof is not replaced, immediate repairs are necessary, and an ongoing Routine Maintenance Program is recommended to help keep the roof in a serviceable condition.

- 4. Additional work will be required by other trades including plumbers and carpenters when the roof is replaced.
- 5. Please see below images for additional recommendations.

Roof overview Image





The access door to the roof appears to have been repaired numerous times. This door should be replaced by a qualified carpenter at the time of roof replacement.



Asphalt siding on the stairway pent house is in very poor condition. Recommend replacement of this siding at time of roof replacement.



Plumbing vent pipes are very low to the roof surface. This is due to the tapered insulation installed as a secondary roof to alleviate issues with standing water on the original roof. It will be required that numerous plumbing vent pipes be raised by a qualified plumbing contractor at time of roof replacement.



Cracks at sealant was observed at nearly every vent pipe allowing water to infiltrate into the roofing assembly. This is likely due to lack of fabric reinforcement in the applied mastic and failure to remove gravel before applying mastic sealant. When the roof is replaced each vent pipe should be properly flashed.



Lack of mechanical termination at parapet walls and observed previous repair indicating roofing has begun to fall from wall. When new roof installed membrane should completely wrap up and over the top of the parapet wall.



Existing metal coping was improperly installed back pitched so that water drains away from the roof. Industry standard is for water to drain to the roof at approximately 1/4" per foot. When new roof is installed copings should be replaced.



Holes in the metal coping was observed at time of inspection. Previous repair attempts were made at these holes.



Gravel stop at roof edge appears to be improperly sealed with mastic and no fabric reinforcement. The seam has cracked and is allowing water to enter into the roofing assembly.



Alligatoring in the roofing membrane was observed throughout the roof. This is likely due to excessive asphalt application when the roof was installed or more likely due to inadequate gravel installation or gravel erosion. Membrane has begun to crack at areas of alligatoring due to UV exposure.



Numerous Vapor blisters were observed at time of inspection. This is a separation of layers likely caused by trapped moisture within the roofing assembly.



Some existing drain pipes were observed with blockages. Recommend a Sullivan Total Maintenance Package to periodically clear drains of debris.



Asphalt shingles were left on the roof at the time that the asphalt shingle mansard roof was replaced. Recommend remove debris from roof.



No mechanical termination was observed at the elevator over run and previous repair with mastic is visible likely an indication that membrane has fallen off the wall in the past. When the new roof is installed a mechanic termination such as metal termination bar and/or counter flashing must be installed.



Improper drainage detail at elevator over run roof. Recommend installation of new self flashing gutter at two sides of elevator shaft roof, and two sides of pent house stair roof.



Improper installation of kitchen or bathroom exhaust vent. This vent is designed for use on shingle roofs. Furthermore sealant at fasteners has begun to fail. A qualified ventilation contractor will be required to install proper ventilation so that roofers may install a proper water tight detail at this vent.



Installation of membrane patch at parapet wall flashing.



Roofing membrane has fallen from the parapet wall due to lack of mechanical termination. Also evident is the previous repair attempts. At parapet wall, membrane should wrap up and over the top of the parapet walls. At elevator shaft and stair pent house, a metal termination bar and/or counter flashing will be required.



Existing strainer basket at drain installed up side down allowing debris to enter into the drain pipe.



Numerous Vapor blisters were observed at time of inspection. This is a separation of layers likely caused by trapped moisture within the roofing assembly.



The asphalt shingle mansard roof appears to be in fair condition. Though a thorough inspection of this roof was not completed, some possible minor sagging of the shingles may exist on the West side.



Disclaimer:

The means and methods by which I conducted this inspection conform to current practices being utilized within the industry. There may exist conditions within the roofing system and/or the building structure that are not apparent or detectable based upon the inspection means, methods and samplings I employed. Accordingly, we disclaim any responsibility to you and other persons who may rely upon the contents of this report for any and all damages, liability, expenses and costs of any kind that result from or arise because of any latent, hidden or undetected condition. This report does not constitute a warranty or guarantee of any kind.

**Inspected by:**  
**Illinois Roof Inspections**

**Thomas C. Kral**