

Friday, April 24, 2015

Adjuster
Insurance Company
PO Box 123
New York, NY 10001

Re: John & Jenna Smith / 123 Roosevelt St., Queens, NY 11355
Insurance File No. 15-345678

Dear Adjuster,

I inspected the above address on 4/15/2015 for roof damage. The owner, Mr. Smith, was home at the time of my inspection. The structure is a two-story adjoined townhouse with a low slope (flat), granular, asphaltic, roll membrane roof system. The roof appears to be in the range of 20 to 25 years old. There is a steep, mansard, slate roof and lower doorway roof in the front. The slate roofs appear to be more than 50 years old.

The owner reported a roof leak in line with the second floor rear window along the northeast edge of the roof next to the adjoining wall with the neighboring townhouse. Mr. Smith said that there was nothing to see inside so I did not inspect the interior.

I viewed no storm damage to the roof membrane that potentially resulted in the reported leak. The roof membrane was intact without voids or tears. There were numerous asphalt roof cement applications that appear to be an attempt to halt water infiltration.

There are several roof deficiencies due to age, exposure, lack of maintenance, and improper installation that are likely allowing water to seep under the roof membrane. The following are descriptions of the roof deficiencies:

- There is no proper metal or membrane flashing on the parapet walls and roof penetrations. The parapet wall sections have been covered with smooth surface, modified bitumen membrane. The modified membrane on the walls appears to be 7 to 12 years old. The modified membrane on the side walls overlaps the granular roofing on the roof surface. The seal between the modified material and the flat roof material has created a seam that runs down the entire length of the roof. This overlap is likely allowing water to infiltrate beneath the roof system.
- There is no proper metal or membrane flashing at the roof penetrations, such as ducts, vent pipes, and the chimney. These roof penetrations are sealed with unsupported flashing cement. The asphalt cement flashing is failing due to age, exposure, lack of maintenance, and improper installation.

- The granular surface membrane is worn out. The roof membrane is dried out, cracked, blistered, voiding granules, and worn through in numerous locations. The granular surface roof membrane has exceeded its serviceable life due to natural wear and tear, age, exposure, and lack of maintenance.
- All the seams in the granular roll roofing have been repaired years ago. The seams have been covered with asphalt cement and fabric. All the seam repairs are deteriorating and drying out. The seam repairs are all failing. These seam repairs appear to have been installed years ago to repair the original membrane seams that were separating.
- The elevation of the gutter is higher than the back edge for the roof membrane, resulting in standing water and lack of positive drainage. This back edge of the roof has recently been coated with asphalt roof cement in an apparent attempt to stop water seepage. When a gutter that is elevated fills with water, overflow will occur at the back edge of the gutter and allow water to seep under the roof membrane. Overflow on a properly-situated gutter should flow over the outside edge of the gutter and not against the roof system.

There was no visible storm damage. The reported leak appears to be the result of roof deficiencies caused by age, exposure, lack of maintenance, and improper installation.

There were 2 visible missing/dislodged slates on the front of the house. One of the missing slates was a previously replaced slate that was secured with a copper strap. The copper strap failed over time, allowing the slate to slide free. The copper straps will bend and fail naturally due to the weight of the slate acting on the straps over time. The other dislodged slate is from the top of the roof hips over the front door. This slate became dislodged and slid into the gutter. It is common for slate roofs of this age and type to require periodic maintenance including replacement/reinstallation dislodged slates. The 2 dislodged slates on the front roofs have been caused by age, exposure, and natural wear and tear and are not due to wind or storm damage.

Please feel free to contact me if you have any questions regarding this report.

Sincerely,

Ken Laibowitz
Senior Inspector



Ground view, front of house.



Ground view, back of house.



Overview of roof, back to front. All seams have been repaired years ago.



Failed seams and worn out membrane.



Roof membrane has worn through in numerous locations.



Repairs over seams are failing. Membrane is cracked and split.



No proper flashing at duct penetrations. Modified bitumen membrane has been installed over parapet wall along northeast adjoining wall (red).



No proper flashing at conduit penetrations.



No proper flashing at chimney. Failed flashing and membrane at base of chimney.



Modified bitumen membrane on parapet wall. Water can seep under roof system where modified bitumen overlaps granular surface roofing at perimeter of roof.



Overview of back edge of roof with elevated gutter.



Worn out roof above gutter.



Missing slate on front upper roof. Copper strap failed from years of exposure.



Dislodged slate from top of doorway roof. Slate is in gutter (bottom left of photo).