Roof Assessment Report

1/9/2025

Client Information	Project Information
Name: Riversbend Owners Assoc. Ranch 2 Address: N97W17770 Riversbend Circle W Germantown, WI 53022	Site: 105 primarily side-by-side units Address: Ranch 2 Sub-section Germantown, WI
Requested By Name: Vicky Ostry Email: VickyOstry@proton.me Phone: 414-517-8427	Inspection Details Inspector: Ron Dorszynski, RRO Inspection Date(s): 11/13/24 – 11/26/24 Conditions: Various

Background

This condominium complex was comprised of 53 buildings with a total of 105 living units. There were 2 side-by-side units per building and one single unit building. There were four building types. The roofs were not original to the buildings. The inspection of the roofs was performed at the above project address to determine their condition, remaining service life, need for alterations or immediate repairs, and the order of replacement. This report was based on discussions with members of the Board or individual unit owners, and my observations on site. The term ‘owners’ will often be used generically; however, Board member’ or ‘unit owner’ will also be referenced specifically when appropriate.

A separate Building Recap, with information on individual buildings, a separate Roof Summary Table summarizing the conditions and values included in the Building Recap, and Specifications for recommended roof and component replacements accompany this Roof Assessment Report. The evaluations of existing construction details and roof conditions were based on material manufacturers’ specifications, industry recommendations, and in some cases may have been affected by field conditions and structural limitations. A list of industry resources accompanies this report.

Aerial View



Findings and Recommendations

1- One attic had been inspected in each of the four building types to check for signs of moisture-related damage due to inadequate attic ventilation. No signs of damage from elevated moisture conditions were noted on the underside of the roof decking or roof framing in any of the four attics. The existing ventilation of these four attics with individual soffit vents, gable vents and conventional roof vents, while not meeting current standards, appeared to be adequate. The recommendation is to retain and possibly enhance the existing ventilation configuration. Building D79/80 did have a ridge vent installed in place of the roof vents. The attic access hatches should also be weatherstripped.
2- The owners of unit D43 reported periodically seeing slightly darkened areas on the painted drywall ceiling/upper sidewall, sometimes referred to as ghosting, within their unit. This condition often results from issues with the insulation and/or air and vapor control layers exterior to the drywall. The details of the condition are described below. A similar configuration, absent the cold-side vapor retarder, in unit D87 did not have the ghosting issues. The recommendation is to remove the vapor retarder(s) and fiberglass insulation, and then apply a spray-applied layer of closed cell polyurethane insulating foam over the affected vertical wall section(s) within the attic space. The foam will provide the insulation and vapor control required for this detail
3- The siding and trim boards, collectively referred to as cladding, were generally sound on the sidewalls, gables, dormers and chimneys. Localized deterioration was observed. Cladding deterioration related to defects in the roof, gutters or metal flashing components were called out in this report. The repair or replacement of deteriorated cladding components can typically be accomplished most expeditiously when the associated roof-related component is being replaced. Therefore, the owners may choose to perform some cladding repairs in conjunction with the earliest roof replacements. On buildings where roofs are not expected to be replaced in the near-term, then owners may wish to correct the cladding and roof/gutter/flashing at the same time and in advance of the eventual roof replacement.
4- A large percentage of the original steel gutters have already been replaced with 5” or 6” seamless aluminum gutters. Leaking seams in some of the remaining steel gutters have resulted in damage to some of the fascia boards below. Gutter leakage should be corrected when it occurs, and the wood trim components can be repaired or replaced as needed according to the recommendations in #3 above.
5- The older steel gutters still seemed to performing reasonably well with no current issues being reported. Future gutter replacements would ideally be performed in conjunction with the roof replacements since the gutters will need to be loosened and/or removed to properly overlap the new ice & water barriers over the top of the wood fascia boards. New gutter aprons/flashings would also be installed at that time.
6- Replacement of the current aluminum gutters at the point of roof replacement would not be required based on their current condition. However, if new prefinished seamless gutters are available in a matching or compatible color that would eliminate the need to continue painting the existing gutters, the one may wish to swap out the old gutters with new gutters.
7- While the 5” gutters appeared to have handled the waterflow, 6” gutters would be appropriate for the large roof areas as they can carry-off water and debris more effectively than 5” gutters. 5” gutters could still be utilized for the smallest roof sections. 3”x4” aluminum downspouts should be paired with the 6” gutters. While 2”x3” downspouts are acceptable for the smallest roof sections, it would be appropriate to uniformly use the larger downspouts at all locations. A few downspouts are currently in need of spot repair.

8- The current roofs were all generally sound with no issues with missing or wind damaged shingles, and with flashings and other metal roof components that were still performing. Only a handful of spot repairs were required.
9- Granule erosion was the primary type of deterioration, and the granule loss was greatest on the roof slopes that received the greatest amount of sunlight. AS the granule erode, the base asphalt becomes exposed and begins to dry out. As the asphalt begins to diminish the fiberglass reinforcement becomes exposed. There were instances on numerous buildings of more excessive wear and granule loss from foot traffic where painting and roof repairs had been performed.
10- The estimated remaining service life (RSL) values listed for these shingle roofs are expressed as a range in years based on the current and projected condition of the most weathered roof slope. The lower number represents a time at which the roof, while still performing and possibly not being esthetically pleasing, is deteriorated enough to be replaced. The higher number represents a time at which the roof may start to suffer wind damage, flashings may begin to leak and/or portions of the roof definitely start looking poorly. At the higher number, the roof will likely really need to be replaced to avoid leakage and corresponding damage to the interior of the building. RSL values ranged from 1-3 years to 5-7 years.
11- An Order of Replacement for the roofs is included below. The condition of the cladding and metal components, along with the presence of steel gutters, can affect the ranking of roofs with similar RSL values.
12- New high-performance ice & water barriers and breathable synthetic shingle underlayments would be installed along with the new shingles. The bottom several inches of cladding, at the point where the shingle roofing meets the sidewalls of dormers and chimneys, would be removed so the ice & water barrier could be extended up the sidewall and new metal step flashings could be installed.
13- Metal flashing components were generally sound, with the same amount of weathering and wear as the roofing, and also in need of some spot repairs. These components would be replaced when the new roofing gets installed since the current metal components could not be expected to perform for the life of the new shingle roofing. Kick-out flashings would be added where gutters and eave edges meet sidewalls.
14- The flat skylights and vertical light tube skylights (Solatubes) generally did not appear to have remaining service lives in excess of the surrounding shingles. For this reason, it is recommended that these components get replaced when the balance of their roofs get replaced.
15- The galvanized steel gas exhaust vent components had mild to severe corrosion. It is recommended that the exposed vent pipe, tall cone flashing, storm collar and cap all get replaced when the balance of their roofs get replaced. It would be advisable for an HVAC contractor to be responsible for the replacement of these components, either working directly for the owners or as a sub-contractor to the roofer. A few of the gas vent stack caps were damaged or missing and were in need of replacement.
16- Some of the flat metal caps that cover the tops of the chimney chases have already been replaced. The remainder of the caps have varying degrees of corrosion. It is recommended that these remaining caps, along with any defective flue caps or storm collars, get replaced when the roofs get replaced.

Typical Building Information

Type of Occupancy: Side-by-side condominiums
Type of Construction: Wood Frame
Number of Floors: One
Type of Wall Cladding: Cedar and LP SmartSide siding
Type of Trim: Painted wood
Other Features: Flat and tubular skylights

Typical Roof Construction

Roof Deck: Oriented Strand Board (OSB)
Primary Roof Pitch: 6/12 and secondary pitch of 10:12
Underlayment: #15 asphalt-saturated felt
Roof System: Fiberglass-based dimensional asphalt composition shingles
Flashings: Steel
Roof Ventilation: Individual roof vents
Gable Vents: Yes
Eave Ventilation: Individual undereave vents
Gutters: 5” and 6" K-style seamless aluminum box gutters and 5” painted steel gutters
Other Features: Sewer vent pipe(s), roof cap(s) and B-vent (gas) stacks

General Observations & Commentary

Observation #1 - No signs of damage from elevated moisture levels in the attic space were noted.

Inlet air for the attic entered the individual soffit vents and passed through the extruded plastic vent baffles into the attic space. Some baffles appeared to be partially blocked with insulation. The baffles should be checked and cleared as needed.







Observation #2 - Outlet venting was provided by the gable vents and the individual roof vents.

Metal screens should be covering the gable vent louvers to prevent entry of little critters and insects.

Slant back roof vents are more weather resistant and would replace the existing mushroom style vents.

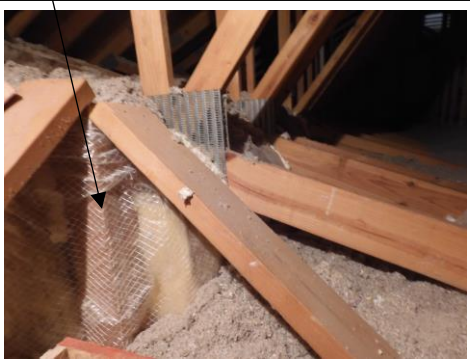






Observation #3 - Faint dark ghosting was noted in D43 near the top of the wall. In this instance, a cold-side vapor retarder had been incorrectly layered over the fiberglass insulation on the short wall section exposed in the attic.







This condition created the potential for interior moisture to collect and periodically condense on the inside face of the cold side vapor retarder. There may have also been issues with the presence or effectiveness of a warm-side vapor retarder, typically polyethylene sheeting, on the outside of the drywall. The situation is complicated by the need to work around the associated wood framing. Any air gaps or thin spots in the insulation may have also created cold spots on the ceiling that may have created condensation on the inside of the drywall.

Observation #4 - A similar configuration, absent the cold-side vapor retarder, in unit D87 did not have the ghosting issues. The recommendation for D43 is to remove the vapor retarders from the short vertical wall section(s) and spray apply a layer of closed cell insulating polyurethane foam over the exposed wall/ceiling and wood framing.



Observation #5 - Issues with the gutters had resulted in damage to the fascia.







Observation #6 - Improper detailing at the base of some of the metal valley liners had resulted in leakage into the eaves.

At the dormers, valley liners that did not extend far enough out from the wood trim resulted in water damage to the wood trim and siding below.







Observation #7 - The cladding at the bases of some chimneys was deteriorated and in need of eventual replacement along with the roofs. The typical issue was with the cladding being too close to the roof surface.

The cladding on many of he chimneys had already been replaced







Observation #8 - Many of he old steel gutters had already been replaced with new 5” or 6” wide seamless aluminum gutters. In most cases the back of the old high-back (one-piece with roof flashing) was cut at the bottom of the gutter, left in place and utilized as a gutter apron. With a roof replacement, a new aluminum gutter apron is installed as was done with this short gutter replacement.







Observation #9 - The shingle roofs were generally sound as were flashings such as the metal valley liner and roof-to-wall step flashings. These flashings would be replaced when the shingles get replaced.







Observation #10 - Erosion of the surface granules gradually exposes the base asphalt portion of the shingles.

The granule loss and deterioration of the shingles progresses at an increasing rate as the asphalt dries out and releases the granules. Eventually the fiberglass reinforcement becomes exposed.







Observation #11 - Some shingles were heavily damaged by foot traffic adjacent to past repair work.

Some loose and missing shingles were in need of spot repair.







Observation #12 - The flat skylights and vertical light tube skylights (Solatubes) generally did not appear to have remaining service lives in excess of the surrounding shingles. The gaskets that seal the glass into the frame deteriorate with age and weathering. New units, if desired, would typically be installed when the roofs are replaced.







Observation #13 - Most of the PVC plumbing vent pipes had newer rubber boot-type flashings. These boots would get replaced when the roofs eventually get replaced.



Observation #14 - A couple of the gas vent flue pipe caps were partially crushed and in need of replacement.



Observation #15 - One gas vent cap was missing.

Numerous tall cone base flashings and vent pipes were heavily corroded and need to be replaced when the new roof is installed.







Observation #16 - Some chimney chase covers had been replaced and were listed as being in good condition in the Roof Summary Table. Others with moderate corrosion were listed as being in fair condition. Heavily corroded covers were listed as being in poor condition.







Observation #17 - The same qualifiers were used for the new, mildly corroded and heavily corroded chimney saddles and base flashings.







Suggested Order of Replacement 1-3 years 2-4 years 3-5years 4-6 years 5-7 years

1- Building #97
2- Building #101
3- Building #75
4- Building #89
5- Building #77
6- Building #105
7- Building #73
8- Building #83
9- Building #59
10- Building #61
11- Building #25
12- Building #15
13- Building #01
14- Building #103
15- Building #95
16- Building #31
17- Building #41
18- Building #27

19- Building #49
20- Building #37
21- Building #43
22- Building #53
23- Building #63
24- Building #65
25- Building #47
26- Building #17
27- Building #35
28- Building #39
29- Building #21
30- Building #03
31- Building #33
32- Building #55
33- Building #29
34- Building #67
35- Building #69
36- Building #71

37- Building #05
38- Building #79
39- Building #85
40- Building #87
41- Building #81
42- Building #51
43- Building #23
44- Building #93
45- Building #45
46- Building #07
47- Building #57
48- Building #99
49- Building #13
50- Building #09
51- Building #19
52- Building #91
53- Building #11

I offer these professional opinions to you and to others, with the representation that they are opinions which I hold to a reasonable degree of certainty. I reserve the right, however, to reconsider any of these professional opinions if additional, relevant information is made available to me.

Please feel free to call with any questions on this report.

Sincerely,



Ron Dorszynski, RRO

Feel free to visit our website at www. skylinetechnical.com

Sources of Industry Technical Information

ARMA – Asphalt Roofing Manufacturers Association
NRCA – National Roofing Contractors Association Roofing & Waterproofing Manual
NRCA Architectural Sheet Metal & Metal Roofing Manual
SMACNA – Sheet Metal & Air Conditioning Contractors National Association
APA – The Engineered Wood Association

Limitations

This report is based on conditions that were readily observable at the time of the inspection. Invasive testing and inspections were performed only as described in this report. Skyline Technical LLC does not accept responsibility for deficiencies not evident during an investigation of this type.

This report is intended to inventory existing conditions of the observed areas. Repair recommendations provided in this report are conceptual in nature and are not intended for construction. Skyline Technical LLC can provide construction details and specifications for repair at your request. Any cost estimates are advisory only and fixed contractor pricing is recommended.

Conditions observed on the date of investigation may change if noted deficiencies are not corrected.