



Structural Integrity Reserve Study
(Project #23-022)
for
Lakeridge Condominium Association, Inc.
1776 Sixth Street NW, #106
Winter Haven, FL 33881

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<p>Andreas M. Sager, PE 300 S Ramona Ave Lake Alfred, FL 33850 Phone: 863-398-3847 Email: andreas.sager@gmail.com</p>	<p>Andreas M. Sager, State of Florida, Professional Engineer, License No. 54568. This item has been digitally signed and sealed by Andreas M. Sager on the date indicated here. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copies.</p>	<p>Signature:</p>
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**Lakeridge Condominium
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Abbreviations:

The following are abbreviations associated with this report.

aka – also known as

Association - Lakeridge Condominium Association, Inc.

EI - Expert Inspectors, Inc.

FS – Florida Statute(s)

SIRS – Structural Integrity Reserve Study

SF – Square Feet

LF – Linear Feet

SQ – Square

Purpose:

The purpose of this study is to provide reserve funding information as required by Chapter 718 of the Florida Statutes for the Lakeridge Condominium Association (Association). This report contains information to act as a guideline to assist in budget preparation for specific components and in no way constitutes a complete budget or any opinion regarding the implication of such and consists of suggested contributions for reserves.

Background

After the collapse of the Champlain Towers South in Miami, the state of Florida established new laws in an effort to avoid similar events. As a result, new condominium requirements were incorporated in numerous statutes including Florida Statutes 553 titled Building Construction Standards and Florida Statute 718 titled Condominiums. The laws pertain to all condominium buildings that are three-stories or higher. The law requires mandatory building inspections, obliges structural reserve studies, and spells out how reserve budgets are to be funded.

Florida Statutes:

Chapter 718 of the Florida Statutes provides provisions for condominiums and speaks to the requirements of structural integrity reserve studies (SIRS). The following are applicable to this study.

Section 718.404 of the Florida Statutes states that a SIRS is a study of the reserve funds required for future major repairs and replacement of the common areas based on a visual inspection of the common areas.

Section 718.112(2)(g) of the statutes provides additional guidance about SIRS and states:

A Association must have a SIRS completed at least every ten years after the condominium's creation for each building on the condominium property that is three stories or higher in height which includes, at a minimum, a study of the following items as related to the structural integrity and safety of the building:

- Roof.
- Structure, including load-bearing walls or other primary structural members.
- Fireproofing and fire protection systems.
- Plumbing.
- Electrical systems.
- Waterproofing and exterior painting.
- Windows and doors.

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- Any other item that has a deferred maintenance expense or replacement cost that exceeds \$10,000 and the failure to replace or maintain such item negatively affects the items listed in sub-subparagraphs above, as determined by the inspector performing the visual inspection portion of the structural integrity reserve study.



Report Requirements

This report will:

- Identify the common areas (a.k.a. common elements) being visually inspected,
- State the estimated remaining useful life,
- State the estimated replacement cost or deferred maintenance expense of the common areas being visually inspected, and
- Provide a recommended annual reserve amount that achieves the estimated replacement cost or deferred maintenance expense of each common area being visually inspected by the end of the estimated remaining useful life of each common area.

Inflation

It is known that some reserve studies utilize straight line accounting formulas which are based on current costs and neither interest nor inflation are factored into the calculations. Since straight line accounting formulas work well for projects conducted within a few years, it does not work well for projects which may be schedule more than five or ten years in the future.

Since F.S. require SIRS be conducted every ten years, it is prudent to include inflation in the calculations to ensure adequate funds are available at the end of a component's useful life. As such, future estimated costs are calculated in this report by adjusting amounts 3% annually.

Assessment Calculations

The following describes how the annual assessments for each individual component line item are developed.

- The **current estimated cost** is the cost of the project if conducted this year and is developed from information contained in recently completed reserve studies, from market research, or a combination of both reserve studies and market research.
- The **future estimated cost** is calculated by multiplying the current estimated cost by 3% annually for each year of useful life remaining.
- The **estimated unfunded balance** is determined by subtracting designated (i.e. assigned) available reserve funds from the future estimated cost.
- The **annual assessment** for each component line item is developed by dividing the estimated unfunded balance by the number of years of useful life remaining.

The goal of this report is to ensure the Association has funds available before a project is scheduled to commence.



Other Reserve Studies

In 2022, Expert Inspectors, Inc. (E.I.) completed a reserve study; this was not a structural integrity reserve study. One goal of this SIRS report is to complement the information contained in the most recent reserve study.

Common Elements

The following paragraphs and subsequent tables describe various projects which should be conducted, the year they should be conducted, and the recommended annual assessment to be collected to fund the project. It is suggested the reader refer to the SIRS Component Funding Tables when reviewing the following information.



Roof:

The building has a flat roof, and the size is approximately 18,214 square feet. Current inspections indicate the roofing system is a bitumen roof with silicone coating.

The most recent E.I. Reserve Study recommends the roof should be replaced in 2027, and the estimated cost to replace the roofing system in 2022 was \$406,875. Market research indicates this is a reasonable amount.

In January 2024, a report recently authored by Cool Roofing Network was received and key points of the roofing report are:

- The roof was put on 5/29/2018. So that is 2019, 2020, 2021, 2022, 2023. 5 years ago.
- The roof has a floor of concrete then ½" in mod bit, then 1" of perlite, then 2 ½" of ISO board, then acrylic coating then silicone coating on top.

- We found very small areas, approximately 25 SF of very low wet moisture readings. They were in two areas, well below FBC allowable limits.
- You should recoat the roof with a thicker silicone roofing application. Sherwin Williams has a thicker system that is available for roofs that have heavy equipment on their roofs like your roof now has. The cost of that would be around \$125,000.00. There will be some small repairs and the cost of silicone has gone up. The silicone would have a 15-year thickness even though I would still suggest in 10 years recoating. I believe the thicker product will help greatly with the vibrations and thermal shock your roof is experiencing. Your roof will continue to get in a worst condition due to the issues I listed above. This is why I would suggest sooner is better than later.
- If the roof needs more than 25% replacement, then we need to tear it off and go down to the deck (concrete). That project would cost about \$ 457,000.00. The tear off and disposal of trash alone is a major project. We would need cranes and a chute along the side of the building.
- Code criteria: according to the Florida building code (FBC) 2017, chapter 15, section 1521.4 not more than 25% of the total roof area or roof section of any existing building or structure so be repaired replaced or recovered in any 12-month period unless the entire existing roof system or roof section is replaced or repaired to conform to requirements of this code.
- Code criteria: the Florida building code sets allowable minimum limits of moisture in the roof system as 5% in the roof membrane and 8% in the insulation (see chapter 15 section 1521.12)



This report recommends obtaining reserve funds to recoat the roof in 2027 and to obtain reserve funds to replace the roof in 2037.

Load-Bearing Walls or Other Primary Structural Members:

The building has reinforced concrete walls and reinforced concrete columns which are the building's main support system. The exterior walls are visible and easily inspected. Interior walls are only visible in stairways, utility rooms, and storage rooms. An inspection indicates the concrete walls and columns are in good condition and do not have any significant signs of failure or degradation. Since these items do not show any type of failure or deterioration and are expected to remain functional until the building is at the end of its lifecycle, a replacement cost or a deferred maintenance cost is not recommended at this time.

Fireproofing and Fire Protection Systems

This common element includes fireproofing, fire prevention system, and fire pump system. Fireproofing includes fire retardant applications on structural members of the building. The fire prevention system includes fire extinguishers, sensors, alarms, speakers, and fire panels. The fire pump system includes the fire pump, valves, controllers, fittings, piping, and sprinkler heads.

The E.I. Reserve Study recommends reserved funds for the fire prevention system and the fire pump system. The E.I. Reserve Study recommends the Association use \$38,000 for a fire prevention system to be conducted in 2035. It also recommends the Association use \$74,000 for a fire pump system project to be conducted in 2034.

This SIRS report recommends providing similar funding reserves for the same periods. The current estimated costs and future estimated costs for these projects were developed by adjusting the cost annually for inflation. Since the

building does utilize structural steel members, funding reserves for fireproofing is not required.

Plumbing:

The plumbing system includes the potable water distribution system, the sewer collection system, and the drainage system located within and under the building.

The water distribution system includes the water pipes and fittings located under and within the walls of the building. The potable water system is composed of copper water piping and valves, is about fifty years old, and occasionally experiences pin-hole leaks.

The sewer system includes the sewer lines and fittings under and within the walls of the building. The sewer system is also about fifty years old and is mainly composed of cast iron pipes and some PVC pipes. These pipes and fittings will eventually experience failures due to internal abrasion, corrosion, lightning strikes, and grease accumulation.

The drainage system includes the stormwater system under and within the walls of the building. The drainage system is about fifty years old, appears to be composed of ductile iron pipe, and will eventually experience failures due to corrosion, abrasion, and lightning strikes.

It is recommended that the Association obtain reserve funds to video and clean some or all the drainage and sewer piping in 2030 to effectively determine the condition of these systems. Additionally, it is recommended that the Association also obtain reserve funds to replace or conduct major maintenance on one or more of the plumbing systems in 2040.

Electrical System:

The electrical system includes the conductors (wires), switches, breakers, and breaker boxes located in and around the building. The power company is responsible for the conductors feeding the main transformer, the main transformer, and the electrical meters. The Association is responsible for the

remaining electrical components located between the transformer and the private units.

An inspection indicates the electrical system is in good condition. It is recommended that operational funds be used annually or biannually to hire an electrician to inspect the electrical system. This should include a thermal inspection of components. Thermal inspections will identify components which are not operating properly and may fail in the near future. Since operational funds should be used to conduct such inspections and repairs, the SIRS report does not recommend funds be reserved for a replacement project or major maintenance project.



Waterproofing and Exterior Painting:

This common element includes preparing, caulking, and painting the exterior of the building.

The E.I. Reserve Study addresses this common element. The study recommends painting the building in 2023 with a current estimated cost of \$146,637 and every ten years thereafter. Market research indicates this is reasonable.

Staff indicates that the Association has funds to paint the exterior of the building in 2024.

This report recommends the Association obtain reserve funds to coat the exterior of the building again ten years thereafter in 2034 and 2046. The estimated costs and assessments are presented in the SIRS Component Funding Tables.

Windows and Doors:

Windows:

It is understood the Association is responsible for all exterior windows and doors in the building, including the window walls. A window wall is a window with a non-structural window and wall and may be used to enclose a balcony or screen room.

A review E.I. Reserve Study and inspection of the building's windows indicates the windows have an estimated useful life of 35 years and should be replaced in 2025. Market research indicates this is reasonable. The study also indicates the current (2022) estimated cost of this project is \$811,680.

An inspection of the windows indicates they are single-pane windows, have aluminum frames, and have very poor insulation efficiency. It is reasonable to assume many windows no longer open and close effectively. The previously signed SIRS recommends that the Association obtain \$886,945 in 2024 to replace all the exterior windows. Since it is understood that the Association is commencing this project, the report does not recommend obtaining future reserve funds for windows.



Doors:

The building has approximately 110 exterior doors. All doors have metal frames. Some doors are composed of wood, some of metal, and some of glass with aluminum frames. Most doors are in very good condition. It appeared that some doors which are composed of wood and some doors which are exposed to direct weather show some degradation.

As such, this report recommends the Association obtain funds to repair and/or replace about ten doors (and possible frames) every 12 years.



Available Reserve Funds

The Association does not have any “assigned” reserve funds for this study.

SIRS Component Funding Table Description

A SIRS Component Funding Table is provided below, and it provides key reserve funding information in table format. The table provides the following information.

Common Elements:

These are the items which are delineated in the Florida Statutes

Component:

These are specific projects; they are a subset of the Common Element. If a Component is scheduled to be completed within the next ten years, the Component may be listed twice in the SIRS Component Funding Table. One is for the first project, and the other is for the second project.

Current Year:

The year of the evaluation; the year of the report.

Estimated Remaining Useful Life:

Number of years remaining before the component should be replaced or maintained.

Replacement or Maintenance Year:

This is the year the item may be replaced or maintained.

Current Estimated Cost:

The cost of the Component Element during the current year.

Future Estimated Cost:

The future estimated cost assuming 3% annual increase; the cost of the Component Element (project) in the future year.

Assigned Reserves:

The reserve funds that are assigned to the component.

Future Estimated Cost Minus Assigned Reserves:

This is the future estimated cost reduced by the amount of reserve funds currently assigned to the Component Element (project).

20XX Assessment:

The proposed annual amount of funds to be collected for each Component Element (project) in 20XX.

Total (bottom row):

This is the total amount of annual funds recommended each year; this is the amount of reserve funds which should be assessed annually.

SIRS Component Funding Table – In Chronological Order

Common Element	Component	Current Year	Estimated Remaining Useful Life (Years)	Replacement or Maintenance Year	Current Estimated Cost (2024)	Future Estimate Cost	Assigned Reserves	Future Estimated Cost Minus Assigned Reserves	2025 Assessment	2026 Assessment	2027 Assessment	2028 Assessment	2029 Assessment	2030 Assessment	2031 Assessment	2032 Assessment	2033 Assessment	2034 Assessment	
Roof	Recoat	2024	2	2027	\$125,000	\$136,591	\$0	\$136,591	\$68,295	Project	\$4,299	\$4,299	\$4,299	\$11,050	\$11,050	\$11,050	\$11,050	\$11,050	Project
Plumbing	Drainage & Sewer - Video	2024	5	2030	\$18,000	\$21,493	\$0	\$21,493	\$4,299	\$4,299	\$4,299	\$4,299	\$4,299	\$11,050	\$11,050	\$11,050	\$11,050	\$11,050	Project
Fireproofing and Fire Protection System	Fire Pump System	2024	9	2034	\$74,000	\$99,450	\$0	\$99,450	\$11,050	\$11,050	\$11,050	\$11,050	\$11,050	\$11,050	\$11,050	\$11,050	\$11,050	\$11,050	Project
Waterproofing and Exterior Painting	Waterproof & Paint -1	2024	9	2034	\$146,637	\$197,068	\$0	\$197,068	\$21,896	\$21,896	\$21,896	\$21,896	\$21,896	\$21,896	\$21,896	\$21,896	\$21,896	\$21,896	Project
Windows & Doors	Door Replacement	2024	12	2034	\$25,000	\$33,598	\$0	\$33,598	\$2,800	\$2,800	\$2,800	\$2,800	\$2,800	\$2,800	\$2,800	\$2,800	\$2,800	\$2,800	\$2,800
Fireproofing and Fire Protection System	Fire Prevention System	2024	10	2035	\$38,000	\$52,601	\$0	\$52,601	\$5,260	\$5,260	\$5,260	\$5,260	\$5,260	\$5,260	\$5,260	\$5,260	\$5,260	\$5,260	\$5,260
Roof	Replace	2024	15	2037	\$457,000	\$671,120	\$0	\$671,120	\$44,741	\$44,741	\$44,741	\$44,741	\$44,741	\$44,741	\$44,741	\$44,741	\$44,741	\$44,741	\$44,741
Plumbing	Plumbing Maintenance	2024	2	2040	\$225,000	\$361,059	\$0	\$361,059						\$36,106	\$36,106	\$36,106	\$36,106	\$36,106	\$36,106
Waterproofing and Exterior Painting	Waterproof & Paint -2	2024	19	2044	\$146,637	\$264,843	\$0	\$264,843											\$26,484
Total:								\$113,600	\$113,600	\$90,046	\$90,046	\$90,046	\$90,046	\$121,854	\$121,854	\$121,854	\$121,854	\$121,854	\$115,391

