
STRUCTURAL INTEGRITY RESERVE STUDY

FOR

CHALET OF SAN MARCO CONDOMINIUMS

520 SOUTH COLLIER BOULEVARD
MARCO ISLAND, FLORIDA 34145

PREPARED FOR:

THE CHALET OF SAN MARCO CONDOMINIUM ASSOCIATION, INC.

520 SOUTH COLLIER BLVD
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I. STRUCTURAL INTEGRITY RESERVE STUDY DETERMINATION

A. METHODOLOGY AND ASSUMPTIONS

A Structural Integrity Reserve Study (SIRS) is a report giving an estimate of the amount of money that must be put aside to replace or restore structural elements of the building(s) that will require replacement before the community's use expires. Per the Florida Statute Title XXXIII, Chapter 553, Section 899 and in conformance with the scope of work specified in SB 4-D & SB 154 – Building Safety, Dated May 26, 2022, and all other executed amendments to SB 4-D & SB 154, revisions Dated May 04, 2023, and, signed by the governor on June 09, 2023, passed by the state as per the date of this report, this includes the following components: Roof, load bearing walls and other primary structural members, fireproofing & fire safety, common area plumbing, common area electrical systems, exterior painting & waterproofing, and windows/exterior doors if the Association is responsible, as well as any other items that have deferred maintenance expense or replacement cost that exceeds \$10,000 and the failure to replace or maintain such time negatively affects the previously listed components.

The commonly accepted guidelines as established by the previously mentioned governing statutes, the Community Associations Institute, and our engineering judgment and experience have been used as a basis for the reserve schedule in this report. The schedule, when implemented in conjunction with a well-planned preventive maintenance program, will provide adequate funds for the replacement of the community's SIRS elements as they reach the end of their useful lives or are experiencing deferred maintenance. In order to ensure that this schedule remains current, a reassessment of the existing condition and replacement costs for each item is necessary at regular intervals as recommended within the report. Updating the schedule, reduction of the useful lives, and inflation of the replacement costs may be executed with the benefit of re-inspection. The schedule must also be adjusted as common elements are added or modified.

It is important to note that a reserve item is a SIRS component that will require repair or replacement on a recurring basis using a similar cost item. If an upgrade is necessitated due to a cost change or other extraordinary reason, the cost over and above the replacement cost is considered to be a capital improvement rather than a capital

replacement. Capital improvements should not be funded from the reserves. After it has been upgraded, the item will then become part of the reserve schedule.

Method of Accounting

The Method used in the Structural Integrity Reserve Study is the “Cash Flow” Method and the funding plan utilized is the Baseline Funding. The goal of this funding method is to keep the reserve cash balance above zero. This means that while each individual component may not be fully funded, the reserve balance does not drop below zero during the projected period.

Level of Service

The SIRS inventory was established based on information provided by the association’s representative, field measurements, and/or drawing take-offs.

B. SUMMARY OF REPLACEMENT RESERVE NEEDS

1. TECHNICAL DEFINITIONS

This page is a summary of each of the different categories within the detailed schedule. It shows the total dollar amounts for each category and is based on the full funding of each item.

The following are descriptions of the different variables, which are shown on the reserve schedule in the order in which they appear.

Description

This column on the schedule lists all of the components for which we recommend that reserves be accumulated. The basis for the selection of these items includes:

- Review of the governing documents regarding the common and limited common elements.
- Review of all available maintenance contracts.
- The type of component and its anticipated full useful life and condition.
- A review of applicable statutes dealing with reserve requirements.

Quantity

The quantities that are used as a basis for this report are calculated from field measurements and drawings that have been supplied to Ray Engineering, Inc. Ray Engineering, Inc. has not made extensive as-built measurements, and the quantities used are based primarily on the reference materials provided.

Unit Cost

The construction and replacement costs used in this report are based primarily on the various publications written by the R.S. Means Company and the construction-related experience of Ray Engineering. The publications are listed in the Bibliography.

Reserve Requirements Present Dollars

This is calculated by multiplying the “quantity” by the “unit costs.”

Existing Reserve Fund

This is an allocation of the total existing reserve funds to the individual line items using a weighing factor which is based on the total “reserve requirement present dollars,” the “estimated remaining life,” and other factors. An existing balance was submitted to Ray Engineering, Inc. This balance was used in developing our SIRS.

Estimated Useful Life

The useful life values that are part of this report come from a variety of sources, some of which are listed in the Bibliography. In order to ensure that all items attain their anticipated useful lives, it is imperative that a well-planned maintenance schedule be adhered to. If an existing item is replaced with an upgraded product, the estimated remaining life has been listed for the new product.

Estimated Remaining Life

The estimated remaining life is based on both the age of the component and the results of the field inspections conducted in April 2024.

Annual Reserve Funding

The reserve requirement present value was converted to the future value for the time in which each replacement will occur. A 3.5% compounded inflation rate has been assumed. The future value was then converted to an annual reserve fund value. The arithmetic calculations and formulas are indicated later in this report.

C. EXECUTIVE SUMMARY

The Chalet of San Marco is a private condominium complex located on a gulf front lot on Marco Island, Florida. It is a condominium complex located off South Collier Blvd. in Marco Island, Florida. The property includes a 12-story primary residential structure, containing a total of 90 units that are 44 years old. The building is constructed most likely with a piling construction foundation, possibly post-tension, supporting CMU block walls, a flat-style roof, concrete construction, a detached parking garage, and an attached pool facility south of the primary residential structure. The residential portion of the facility has a flat roof with a membrane roof system and collection drains piped internal to the building. The tennis court-covered parking not included in the SIRS. The exteriors are clad with stucco, with trim accenting on the façade. Each unit has balconies, and it is our understanding that the windows and doors are the COA responsibility.

The significant issues we observed during the inspection include interior and exterior water damage, shear failure cracks in the parking deck, cracks in the parking garage floor, and delaminated tiles on the balconies. Based on the construction date of the community and the conditions observed, it appears that the exteriors, roof, and components of the fire and life safety systems are at the end of their useful service life and will need to be replaced.

The current repairs are extensive and thorough, including stucco exterior repair, deck repairs, and railing replacements for the entirety of the living facility. These upgrades include the removal of waterproofing, cutting out spalled concrete, and detailed restoration and repair to yield a new exterior with full painting and waterproofing.

This SIRS is prepared for the fiscal year starting January 1, 2025. It is our recommendation that the annual contribution be increased to \$299,000 in 2025 through the remainder of the reserve. It is equivalent to an average contribution of \$3,322 per year, per residential unit. For a review of the funding requirements for the next 30 years, please refer to the “Cost and Funding Recap” included as a part of this report.

D. REPLACEMENT RESERVE REQUIREMENTS

SCHEDULE I

Exterior/Interior Building

SCHEDULE II

Electrical /Plumbing/Fire Safety

YEAR-BY-YEAR FUNDING RECAP - ALL ITEMS

COST AND FUNDING RECAP

ITEMIZED PROJECT COSTS BY YEAR



PROJECT NAME	CHALET SAN MARCO
INFLATION RATE	3.50%
YIELD ON RESERVE FUNDS	4.00%
BEGINNING YEAR OF FUNDING	2025
PLANNING HORIZON	30 yrs

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RESERVE EXPENDITURES

	COMPONENT DESCRIPTION/INVENTORY	UNITS	UNIT QUANTITY	UNIT COST	TOTAL COST	ESTIMATED USEFUL LIFE	ESTIMATED REMAINING LIFE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
	EXTERIOR/INTERIOR BUILDING MAINTENANCE ITEMS																							
1	TPO ROOF - REPLACE	S.F.	18200	\$83	\$1,510,600.00	20	8									\$1,989,171.7								
2	TOWER MBM ROOF - REPLACE W/ TPO	S.F.	1600	\$35	\$56,000.00	20	20																	
3	PENTHOUSE MBM ROOF - REPLACE W/ TPO	S.F.	3400	\$35	\$119,000.00	20	7								\$151,401.2									
4	METAL PENTHOUSE ROOF - REPLACE	S.F.	2000	\$20	\$40,000.00	30	30																	
5	MISC. ROOF REPAIRS - AS NEEDED	ALLOW.	1	\$25,000	\$25,000.00	10	5						\$29,692.2										\$41,883.7	
6	ROOF DRAINS/LINES - REPAIRS	ALLOW.	1	\$15,000	\$15,000.00	10	5						\$17,815.3										\$25,130.2	
7	EXTERIOR STUCCO - REPAIR/PAINT	S.F.	48324	\$5	\$241,620.00	8	8									\$318,167.4								\$418,965.7
8	EXTERIOR CURTAIN WALL WINDOWS - FLOORS 1,3-5,7,9,11-12 REPLACEMENT	ALLOW.	8	\$11,750	\$94,000.00	30	25																	
9	EXTERIOR CURTAIN WALL WINDOWS - FLOORS 2, 6, 8, & 10 REPLACEMENT	EA.	4	\$11,750	\$47,000.00	30	30																	
10	BALCONIES - COATING	S.F.	36500	\$20	\$730,000.00	15	15																\$1,223,004.6	
11	EAST DECORATIVE BALCONIES - RECOAT	S.F.	2850	\$12	\$34,200.00	15	15																\$57,296.9	
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	TOTAL EXTERIOR/INTERIOR BUILDING MAINTENANCE ITEMS							\$0	\$0	\$0	\$0	\$0	\$47,507	\$0	\$151,401	\$2,307,339	\$0	\$0	\$0	\$0	\$0	\$0	\$1,347,316	\$418,966

RESERVE EXPENDITURES

	COMPONENT DESCRIPTION/INVENTORY	UNITS	UNIT QUANTITY	UNIT COST	TOTAL COST	ESTIMATED USEFUL LIFE	ESTIMATED REMAINING LIFE	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	30 YR TOTAL
	EXTERIOR/INTERIOR BUILDING MAINTENANCE ITEMS																				
1	TPO ROOF - REPLACE	S.F.	18200	\$83	\$1,510,600.00	20	8												\$3,958,031.8		\$5,947,203
2	TOWER MBM ROOF - REPLACE W/ TPO	S.F.	1600	\$35	\$56,000.00	20	20				\$111,428.2										\$111,428
3	PENTHOUSE MBM ROOF - REPLACE W/ TPO	S.F.	3400	\$35	\$119,000.00	20	7											\$301,256.5			\$452,658
4	METAL PENTHOUSE ROOF - REPLACE	S.F.	2000	\$20	\$40,000.00	30	30														
5	MISC. ROOF REPAIRS - AS NEEDED	ALLOW.	1	\$25,000	\$25,000.00	10	5									\$59,081.1					\$130,657
6	ROOF DRAINS/LINES - REPAIRS	ALLOW.	1	\$15,000	\$15,000.00	10	5									\$35,448.7					\$78,394
7	EXTERIOR STUCCO - REPAIR/PAINT	S.F.	48324	\$5	\$241,620.00	8	8								\$551,697.8						\$1,288,831
8	EXTERIOR CURTAIN WALL WINDOWS - FLOORS 1,3-5,7,9,11-12 REPLACEMENT	ALLOW.	8	\$11,750	\$94,000.00	30	25									\$222,145.0					\$222,145
9	EXTERIOR CURTAIN WALL WINDOWS - FLOORS 2, 6, 8, & 10 REPLACEMENT	EA.	4	\$11,750	\$47,000.00	30	30														
10	BALCONIES - COATING	S.F.	36500	\$20	\$730,000.00	15	15														\$1,223,005
11	EAST DECORATIVE BALCONIES - RECOAT	S.F.	2850	\$12	\$34,200.00	15	15														\$57,297
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	TOTAL EXTERIOR/INTERIOR BUILDING MAINTENANCE ITEMS							\$0	\$0	\$0	\$111,428	\$0	\$0	\$0	\$551,698	\$316,675	\$0	\$301,256	\$3,958,032	\$0	\$9,511,618

RESERVE EXPENDITURES

	COMPONENT DESCRIPTION/INVENTORY	UNITS	UNIT QUANTITY	UNIT COST	TOTAL COST	ESTIMATED USEFUL LIFE	ESTIMATED REMAINING LIFE	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
	ELECTRICAL/MECHANICAL/PLUMBING ITEMS																							
1	ELECTRICAL PANELBOARDS AND SWITCHES - REPLACE	EA.	28	\$3,000	\$84,000.00	30	12													\$126,929.8				
2	LIFE SAFETY SYSTEM - REPLACE	S.F.	324800	\$1	\$324,800.00	15	5						\$385,760.5											
3	FIRE STAND PIPE SYSTEM - REPLACE	UNITS	28	\$5,500	\$154,000.00	35	20																	
4	FIRE CONTROL PANEL	EA.	4	\$15,000	\$60,000.00	15	12													\$90,664.1				
5	DOMESTIC WATER LINES/PUMPS - REPLACEMENT	ALLOW.	3	\$40,000	\$120,000.00	35	18																	
6	GENERATORS & TRANSFER SYSTEM - REPLACE	UNITS	1	\$240,000	\$240,000.00	30	0	\$240,000.0																
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	TOTAL ELECTRICAL/MECHANICAL/PLUMBING ITEMS							\$240,000	\$0	\$0	\$0	\$0	\$385,761	\$0	\$0	\$0	\$0	\$0	\$0	\$217,594	\$0	\$0	\$0	\$0
	TOTAL							\$240,000	\$0	\$0	\$0	\$0	\$433,268	\$0	\$151,401	\$2,307,339	\$0	\$0	\$0	\$217,594	\$0	\$0	\$1,347,316	\$418,966

RESERVE EXPENDITURES

	COMPONENT DESCRIPTION/INVENTORY	UNITS	UNIT QUANTITY	UNIT COST	TOTAL COST	ESTIMATED USEFUL LIFE	ESTIMATED REMAINING LIFE	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	30 YR TOTAL
	ELECTRICAL/MECHANICAL/PLUMBING ITEMS																				
1	ELECTRICAL PANELBOARDS AND SWITCHES - REPLACE	EA.	28	\$3,000	\$84,000.00	30	12														\$126,930
2	LIFE SAFETY SYSTEM - REPLACE	S.F.	324800	\$1	\$324,800.00	15	5				\$646,283.4										\$1,032,044
3	FIRE STAND PIPE SYSTEM - REPLACE	UNITS	28	\$5,500	\$154,000.00	35	20				\$306,427.5										\$306,427
4	FIRE CONTROL PANEL	EA.	4	\$15,000	\$60,000.00	15	12											\$151,894.0			\$242,558
5	DOMESTIC WATER LINES/PUMPS - REPLACEMENT	ALLOW.	3	\$40,000	\$120,000.00	35	18		\$222,898.7												\$222,899
6	GENERATORS & TRANSFER SYSTEM - REPLACE	UNITS	1	\$240,000	\$240,000.00	30	0														\$240,000
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	TOTAL ELECTRICAL/MECHANICAL/PLUMBING ITEMS							\$0	\$222,899	\$0	\$952,711	\$0	\$0	\$0	\$0	\$0	\$0	\$151,894	\$0	\$0	\$2,170,858
	TOTAL							\$0	\$222,899	\$0	\$1,064,139	\$0	\$0	\$0	\$551,698	\$316,675	\$0	\$453,151	\$3,958,032	\$0	\$11,682,476

FULLY FUNDED BALANCE				First Replacement			Second Replacement			Third Replacement			Fourth Replacement			Fifth Replacement		
EXTERIOR/INTERIOR BUILDING MAINTENANCE ITEMS DESCRIPTION SCHEDULE I				Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced
1	TPO ROOF - REPLACE			2033	\$1,989,172	\$221019	2053	\$3,958,032	\$197902	2073			2093			2113		
2	TOWER MBM ROOF - REPLACE W/ TPO			2045	\$111,428	\$5306	2065			2085			2105			2125		
3	PENTHOUSE MBM ROOF - REPLACE W/ TPO			2032	\$151,401	\$18925	2052	\$301,256	\$15063	2072			2092			2112		
4	METAL PENTHOUSE ROOF - REPLACE			2055			2085			2115			2145			2175		
5	MISC. ROOF REPAIRS - AS NEEDED			2030	\$29,692	\$4949	2040	\$41,884	\$4188	2050	\$59,081	\$5908	2060			2070		
6	ROOF DRAINS/LINES - REPAIRS			2030	\$17,815	\$2969	2040	\$25,130	\$2513	2050	\$35,449	\$3545	2060			2070		
7	EXTERIOR STUCCO - REPAIR/PAINT			2033	\$318,167	\$35352	2041	\$418,966	\$52371	2049	\$551,698	\$68962	2057			2065		
8	EXTERIOR CURTAIN WALL WINDOWS - FLOORS 1,3-5,7,9,11-12 REPLACEMENT			2050	\$222,145	\$8544	2080			2110			2140			2170		
9	EXTERIOR CURTAIN WALL WINDOWS - FLOORS 2, 6, 8, & 10 REPLACEMENT			2055			2085			2115			2145			2175		
10	BALCONIES - COATING			2040	\$1,223,005	\$76438	2055			2070			2085			2100		
11	EAST DECORATIVE BALCONIES - RECOAT			2040	\$57,297	\$3581	2055			2070			2085			2100		
12				2025	0		2025	0		2025	0		2025	0		2025	0	
13				2025	0		2025	0		2025	0		2025	0		2025	0	
14				2025	0		2025	0		2025	0		2025	0		2025	0	
15				2025	0		2025	0		2025	0		2025	0		2025	0	
16				2025	0		2025	0		2025	0		2025	0		2025	0	
17				2025	0		2025	0		2025	0		2025	0		2025	0	
18				2025	0		2025	0		2025	0		2025	0		2025	0	
19				2025	0		2025	0		2025	0		2025	0		2025	0	
20				2025	0		2025	0		2025	0		2025	0		2025	0	
21				2025	0		2025	0		2025	0		2025	0		2025	0	
22				2025	0		2025	0		2025	0		2025	0		2025	0	
23				2025	0		2025	0		2025	0		2025	0		2025	0	
24				2025	0		2025	0		2025	0		2025	0		2025	0	
25				2025	0		2025	0		2025	0		2025	0		2025	0	
26				2025	0		2025	0		2025	0		2025	0		2025	0	
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28				2025	0		2025	0		2025	0		2025	0		2025	0	
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30				2025	0		2025	0		2025	0		2025	0		2025	0	
31				2025	0		2025	0		2025	0		2025	0		2025	0	
32				2025	0		2025	0		2025	0		2025	0		2025	0	
33				2025	0		2025	0		2025	0		2025	0		2025	0	
34				2025	0		2025	0		2025	0		2025	0		2025	0	
35				2025	0		2025	0		2025	0		2025	0		2025	0	
36				2025	0		2025	0		2025	0		2025	0		2025	0	
37				2025	0		2025	0		2025	0		2025	0		2025	0	
38				2025	0		2025	0		2025	0		2025	0		2025	0	
39				2025	0		2025	0		2025	0		2025	0		2025	0	
40				2025	0		2025	0		2025	0		2025	0		2025	0	

FULLY FUNDED BALANCE ELECTRICAL/MECHANICAL/PLUMBING MAINTENANCE ITEMS DESCRIPTION SCHEDULE II			First Replacement			Second Replacement			Third Replacement			Fourth Replacement			Fifth Replacement		
	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced	Yr Replaced	Adjusted Cost if Inflation is 3.00%	Annual Funding Thru Yr Replaced		
1	ELECTRICAL PANELBOARDS AND SWITCHES - REPLACE			2037	\$126,930	\$9764	2067			2097			2127				
2	LIFE SAFETY SYSTEM - REPLACE			2030	\$385,761	\$64293	2045	\$646,283	\$43086	2060			2075				
3	FIRE STAND PIPE SYSTEM - REPLACE			2045	\$306,427	\$14592	2080			2115			2150				
4	FIRE CONTROL PANEL			2037	\$90,664	\$6974	2052	\$151,894	\$10126	2067			2082				
5	DOMESTIC WATER LINES/PUMPS - REPLACEMENT			2043	\$222,899	\$11732	2078			2113			2148				
6	GENERATORS & TRANSFER SYSTEM - REPLACE			2025	\$240,000	\$240000	2055			2085			2115				
7				2025	0		2025	0		2025	0		2025	0			
8				2025	0		2025	0		2025	0		2025	0			
9				2025	0		2025	0		2025	0		2025	0			
10				2025	0		2025	0		2025	0		2025	0			
11				2025	0		2025	0		2025	0		2025	0			
12				2025	0		2025	0		2025	0		2025	0			
13				2025	0		2025	0		2025	0		2025	0			
14				2025	0		2025	0		2025	0		2025	0			
15				2025	0		2025	0		2025	0		2025	0			
16				2025	0		2025	0		2025	0		2025	0			
17				2025	0		2025	0		2025	0		2025	0			
18				2025	0		2025	0		2025	0		2025	0			
19				2025	0		2025	0		2025	0		2025	0			
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21				2025	0		2025	0		2025	0		2025	0			
22				2025	0		2025	0		2025	0		2025	0			
23				2025	0		2025	0		2025	0		2025	0			
24				2025	0		2025	0		2025	0		2025	0			
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27				2025	0		2025	0		2025	0		2025	0			
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36				2025	0		2025	0		2025	0		2025	0			
37				2025	0		2025	0		2025	0		2025	0			
38				2025	0		2025	0		2025	0		2025	0			
39				2025	0		2025	0		2025	0		2025	0			
40				2025	0		2025	0		2025	0		2025	0			

CHALET SAN MARCO
COST AND FUNDING RECAP
EXISTING FUNDING

	2025 1	2026 2	2027 3	2028 4	2029 5	2030 6	2031 7	2032 8	2033 9	2034 10	2035 11	2036 12	2037 13	2038 14	2039 15
Beginning Reserve Fund Balance	\$417,792	\$505,464	\$836,642	\$1,181,068	\$1,539,271	\$1,911,801	\$1,865,966	\$2,251,564	\$2,501,186	\$604,854	\$940,008	\$1,288,568	\$1,651,071	\$1,810,480	\$2,193,859
Recommended Annual Funding	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000
Annual Interest	\$28,672	\$32,179	\$45,426	\$59,203	\$73,531	\$88,432	\$86,599	\$102,023	\$112,007	\$36,154	\$49,560	\$63,503	\$78,003	\$84,379	\$99,714
Capital Expenditures	\$240,000	\$0	\$0	\$0	\$0	\$433,268	\$0	\$151,401	\$2,307,339	\$0	\$0	\$0	\$217,594	\$0	\$0
Ending Reserve Balance	\$505,464	\$836,642	\$1,181,068	\$1,539,271	\$1,911,801	\$1,865,966	\$2,251,564	\$2,501,186	\$604,854	\$940,008	\$1,288,568	\$1,651,071	\$1,810,480	\$2,193,859	\$2,592,574

Inflation Rate: 3.50%
Interest Rate: 4.00%

TOTAL UNITS: 90

ANNUAL CONTRIBUTION PER UNIT	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322
MONTHLY CONTRIBUTION PER UNIT	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85

CHALET SAN MARCO
COST AND FUNDING RECAP
EXISTING FUNDING

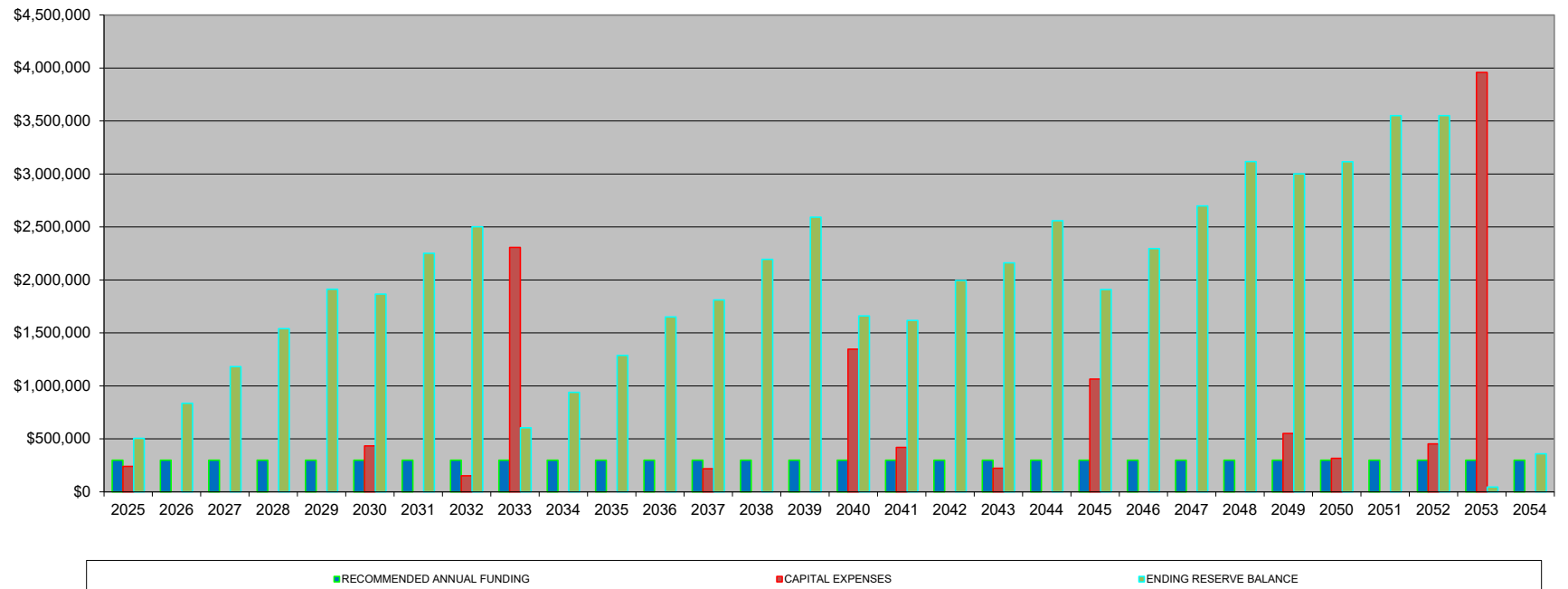
	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Beginning Reserve Fund Balance	\$2,592,574	\$1,659,921	\$1,618,312	\$1,994,005	\$2,161,826	\$2,559,259	\$1,908,450	\$2,295,748	\$2,698,538	\$3,117,440	\$3,001,400	\$3,115,741	\$3,551,330	\$3,551,193	\$46,169
Recommended Annual Funding	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000	\$299,000
Annual Interest	\$115,663	\$78,357	\$76,692	\$91,720	\$98,433	\$114,330	\$88,298	\$103,790	\$119,902	\$136,658	\$132,016	\$136,590	\$154,013	\$154,008	\$13,807
Capital Expenditures	\$1,347,316	\$418,966	\$0	\$222,899	\$0	\$1,064,139	\$0	\$0	\$0	\$551,698	\$316,675	\$0	\$453,151	\$3,958,032	\$0
Ending Reserve Balance	\$1,659,921	\$1,618,312	\$1,994,005	\$2,161,826	\$2,559,259	\$1,908,450	\$2,295,748	\$2,698,538	\$3,117,440	\$3,001,400	\$3,115,741	\$3,551,330	\$3,551,193	\$46,169	\$358,976

Inflation Rate: 3.50%
Interest Rate: 4.00%

TOTAL UNITS: 90

ANNUAL CONTRIBUTION PER UNIT	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322	\$3,322
MONTHLY CONTRIBUTION PER UNIT	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85	\$276.85

PROJECTED CASH FLOW - RECOMMENDED FUNDING



CHALET SAN MARCO**ITEMIZED PROJECTED COST BY YEAR**

(Excluding Capital Improvements)

GENERATORS & TRANSFER SYSTEM - REPLACE	\$240,000
Total 2025 Expenditures	\$240,000
MISC. ROOF REPAIRS - AS NEEDED	\$29,692
ROOF DRAINS/LINES - REPAIRS	\$17,815
LIFE SAFETY SYSTEM - REPLACE	\$385,761
Total 2030 Expenditures	\$433,268
PENTHOUSE MBM ROOF - REPLACE W/ TPO	\$151,401
Total 2032 Expenditures	\$151,401
TPO ROOF - REPLACE	\$1,989,172
EXTERIOR STUCCO - REPAIR/PAINT	\$318,167
Total 2033 Expenditures	\$2,307,339
ELECTRICAL PANELBOARDS AND SWITCHES - REPLACE	\$126,930
FIRE CONTROL PANEL	\$90,664
Total 2037 Expenditures	\$217,594
MISC. ROOF REPAIRS - AS NEEDED	\$41,884
ROOF DRAINS/LINES - REPAIRS	\$25,130
BALCONIES - COATING	\$1,223,005
EAST DECORATIVE BALCONIES - RECOAT	\$57,297
Total 2040 Expenditures	\$1,347,316
EXTERIOR STUCCO - REPAIR/PAINT	\$418,966
Total 2041 Expenditures	\$418,966
DOMESTIC WATER LINES/PUMPS - REPLACEMENT	\$222,899
Total 2043 Expenditures	\$222,899
TOWER MBM ROOF - REPLACE W/ TPO	\$111,428
LIFE SAFETY SYSTEM - REPLACE	\$646,283
FIRE STAND PIPE SYSTEM - REPLACE	\$306,427
Total 2045 Expenditures	\$1,064,139
EXTERIOR STUCCO - REPAIR/PAINT	\$551,698
Total 2049 Expenditures	\$551,698
MISC. ROOF REPAIRS - AS NEEDED	\$59,081
ROOF DRAINS/LINES - REPAIRS	\$35,449
EXTERIOR CURTAIN WALL WINDOWS - FLOORS 1,3-5,7,9,11-12 REPLACE	\$222,145
Total 2050 Expenditures	\$316,675
PENTHOUSE MBM ROOF - REPLACE W/ TPO	\$301,256
FIRE CONTROL PANEL	\$151,894
Total 2052 Expenditures	\$453,151
TPO ROOF - REPLACE	\$3,958,032
Total 2053 Expenditures	\$3,958,032
Total Expenditures	\$11,682,476

II. RESERVE CASH FLOW ANALYSIS

A. INTRODUCTION

The enclosed chart and graph contain a 30-year cash flow projection of the reserve requirements for the Association. The budget should be adjusted at the end of the 30-year period to readjust for changes in the remaining life, inflation, and current costs of replacements. This cash flow analysis is based on the assumption that all of the items that make up the schedule are fully funded. By this, we mean that each item will accumulate its full replacement cost during its life span. At the end of this life, each item would be replaced, and the funding would start aging for items with a long life. For items with a short useful life, the funding for the first replacement is budgeted in addition to future replacements due to the short life span. The future replacement funding is started in the first year; however, payments are less than the first replacement due to the extended time period allowed to accumulate funds. Taking all of the components that make up the reserve schedule, using this full funding analysis, there is typically an ongoing surplus in the reserve fund. This ensures that the Association will have a surplus at the end of the 30-year period. This is called the “pooling effect” and is represented by the upper line on the cash flow chart, which is designated as the “Net Cumulative Fund.” The “Net Cumulative Fund” is calculated by taking the existing amount in the reserve fund at the time the reserve schedule is prepared, adding to it the yearly contribution, and subtracting from it the annual expenditures.

The annual reserve funding required has been calculated by estimating the remaining useful service life based on the current condition, age, and all other known factors of each item description. The present value replacement cost was estimated by either past quotations or other listed methods of estimation. The present value replacement cost was then converted to future value using a 3.5% annual compounded inflation rate. The future cost was calculated for the projected time when replacements will be required.

The future cost was then broken down into annual installments while still considering the 3.5% compounded annual inflation rate. The monthly reserve funding was calculated by a further breakdown of the annual reserve funding required.

1. Formulas

The following economic formulas were used in our calculations:

DISCOUNTING FACTOR	FUNCTIONAL NOTATION	FORMULA
Single Payment Compound Amount	$(F/P, i \%, n)$	$(1+i)^n$
Uniform Series Sinking Fund	$(A/F, i \%, n)$	$i/[(1+i)^{n-1}]$

2. Definitions

Definitions of the above-mentioned terms are as follows:

TERM	DEFINITION
Single Payment Compound Amount	Conversion of present worth to future value
Uniform Series Sinking Fund	Conversion of future value to annual value
F	Future worth of item in n years from present
P	Present Worth
A	Annual worth
I	Interest Rate (4.00% used)
N	# of years until each calculated replacement

The Association should update the reserve schedule a minimum of once every two years. It is especially important to update the schedule when using average contributions due to the fact that even a minor change in the estimated useful service life can have a significant impact on adequate funding.

The Association should review each of the individual line items that make up the reserve schedule to make sure that there is no overlap between what is indicated in the schedule and any other portion of the budget. For example, we may show on the reserve schedule the replacement of fencing, but at the same time, the Association may be replacing the fencing out of their operating budget. If duplication like this exists, the item should either be removed from the reserve schedule or the operation budget. It should not be funded in two different locations.

The Association should review the items on the schedule to ensure that their replacement is not covered under a maintenance contract. An example would be reserving for the replacement of mechanical equipment components while the Association has a maintenance contract for the item at the same time. The reserve schedule should be carefully reviewed to be sure that it does not fund the replacement of any portion of any item whose replacement is covered under a maintenance contract.

The Association should review the items on the schedule to be sure that they are all the Association's responsibility. As an example, if we have included site lighting on the reserve schedule, but at the same time the local municipality is responsible for the maintenance and repair of these connections, they should be removed from the schedule.

The Association should review the individual line items on the reserve schedule carefully to determine if a number of the smaller individual components can be consolidated into one line item that can be continuously funded.

For example, if there are five or six components with a total replacement cost of \$1,000 each, rather than reserving the full \$5,000 or \$6,000 for all of these items, the Association may want to consider funding all six components under one line item for a total of \$1,000. Should one of these six items have to be replaced, that line item would have to be brought current within a year or so after its expenditure. By doing this rather than

funding the full \$6,000, only a portion of the total would be funded. This would reduce the overall yearly contribution to reserves.

Depending on the size of the overall operating budget, the Association may decide that any line item of less than the given amount will be funded directly through the operating budget rather than through the reserve schedule. If this is the case, any item with the given value or less should be removed from the schedule. The schedule would then be footnoted accordingly.

DISCLOSURES

Ray Engineering, Inc. does not have any other involvement with the association, which could result in actual or perceived conflicts of interest.

During our review of the property, visual review, and field measurements, as needed, of each common element were performed. No destructive testing or drawing take-offs were performed.

Material issues that, if not disclosed, would cause a distortion of the association's situation.

Information provided by the official representative of the association regarding financial, physical, quantity, or historical issues will be deemed reliable by the consultant.

The SIRS will be a reflection of information provided to the consultant and assembled for the association's use, not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.

Ray Engineering, Inc. did not perform an audit of the current or past budgets of the association.

Information provided to Ray Engineering, Inc. by the association representative about reserve projects will be considered reliable. Any on-site inspection(s) by Ray Engineering, Inc. should not be considered a project audit or quality inspection.

BIOGRAPHY

CARTER A. NELSON, E.I.T., R.S.

SENIOR ENGINEER

Mr. Nelson received his Bachelor of Science degree in Civil Engineering from the University of Florida in May 2017. He has multiple certifications from the International Code Council, American Concrete Institute, and GASWCC, with a background in forensic testing. He provides civil/structural as well as construction-related consulting services/administration for public works, multi-family, single-family, and commercial property projects of costs above +\$1million. Mr. Nelson specializes in the structural design/analysis, as well as restoration of wood-framed, masonry, reinforced concrete (pre-cast/cast-in-place), and CFS (cold-form-steel) multi-story existing structures and new construction. In addition to engineering experience, Mr. Nelson also performs Property Condition Assessments and Capital Reserve Analyses and is a Reserve Specialist throughout the Southeast. Currently, Mr. Nelson is pursuing his Professional Engineering license in 2024 as well as his special inspector's certification by 2027.

LIMITATION OF RESPONSIBILITY

The report represents a statement of the physical condition of the common elements of the property based on our visual observation, professional analysis, and judgment. The report applies only to those portions of the property and/or items and equipment that were capable of being visually observed. Unless specifically stated otherwise, no intrusive testing was performed nor were any materials removed or excavations made for further inspection. Drawings and specifications were available only to the extent described in the report.

The following activities are not included in the scope and are excluded from the scope of the SIRS described in the National Reserve Study Standards:

- *Utilities* – The operating condition of any underground system or infrastructure; accessing manholes or utility pits; the SIRS does not include any infrastructure with an estimated useful life of more than 30 years unless specified otherwise in the report;
- *Structural Frame and Building Envelope* – Unless specifically defined in the proposal, entering crawl, attic, or confined space areas (however, the field observer will observe conditions to the extent easily visible from the point of access to the crawl or confined space if the access is at the exterior of the building or common space); determination of previous substructure flooding or water penetration unless easily visible or unless such information is provided;
- *Roofs* – Walking on pitched roofs or any roof areas that appear to be unsafe or roofs with no built-in access; determining roofing design criteria;
- *Plumbing* – Verifying the condition of any pipes underground, behind walls or ceilings; determining adequate pressure and flow rate, verifying pipe size, or verifying the point of discharge for underground systems;
- *HVAC* – Observation of fire connections, interiors of chimneys, flues, or boiler stacks, or tenant-owned or tenant-maintained equipment;
- *Electrical* – Removal of any electrical panels or device covers, except if removed by building staff; providing common equipment or tenant-owned equipment.
- *Vertical Transportation* – Examining of cable, shears, controllers, motors, inspection tags or entering elevator/escalator pits;

- *Life Safety/Fire Protection* – Determining NFPA hazard classifications; classifying or testing fire rating of assemblies;
- Preparing engineering calculations to determine any system's components or equipment's adequacy or compliance with any specific or commonly accepted design requirements or building codes; preparing designs or specifications to remedy any physical deficiencies;
- Reporting on the presence or absence of pests or insects unless evidence of such presence is readily apparent during the field observer's walk-through survey, or such information is provided to the Consultant;
- Entering or accessing any area of the property deemed by the engineer to pose a threat to the safety of any individual or to the integrity of the building system or material;
- Providing an opinion on the operation of any system or component that is shut down or not properly operating;
- Evaluating any acoustical or insulating characteristics of the property;
- Providing an opinion on matters regarding the security and protection of its occupants or users;
- Providing an environmental assessment or opinion of the presence of any environmental issues such as asbestos, hazardous wastes, toxic materials, radon, or the location of designated wetlands, unless specifically defined within the scope of work;
- Any representations regarding the status of ADA Title III Compliance.

The report is not a compliance inspection or certification for past or present governmental codes or regulations of any kind. Any reference made to codes in this report is to assist in the identification of a specific problem.

GLOSSARY OF TERMS

<u>Abbreviation</u>	<u>Definition</u>	<u>Abbreviation</u>	<u>Definition</u>
Allow.	Allowance	L.F.	Linear Foot
Avg.	Average	Lg.	Long Length
B.F.	Board Feet	L.S.	Lump Sum
Bit/Bitum.	Bituminous	Maint.	Maintenance
Bldg.	Building	Mat., Mat'l	Material
Brk.	Brick	Max	Maximum
Cal	Calculated	MBF	Thousand Board Feet
C.C.F.	Hundred Cubic Feet	M.C.F.	Thousand Cubic Feet
C.F.	Cubic Feet	Min.	Minimum
C.L.F.	Hundred Linear Feet	Misc.	Miscellaneous
Col.	Column	M.L.F.	Thousand Linear Feet
Conc.	Concrete	M.S.F.	Thousand Square Feet
Cont.	Continuous, continued	M.S.Y.	Thousand Square Yards
C.S.F.	Hundred Square Feet	NA	Not applicable/available
Cu. Ft.	Cubic Feet	No.	Number
C.Y.	Cubic Yard, 27 cubic feet	O.C.	On Center
DHW	Domestic Hot Water	P.E.	Professional Engineer
Diam.	Diameter	Ply.	Plywood
Ea.	Each	Pr.	Pair
Est.	Estimated	PVC	Polyvinyl Chloride
Ext.	Exterior	Pvmt.	Pavement
Fig.	Figure	Quan. Qty.	Quantity
Fin.	Finished	R.C.P.	Reinforced Concrete Pipe
Fixt	Fixture	Reinf.	Reinforced
Flr.	Floor	Req'd	Required
FRP	Fiberglass Reinforced Plastic	Sch., Sched.	Schedule
Ft.	Foot, Feet	S.F.	Square Foot
Galv.	Galvanized	Sq.	Square, 100 Square Feet
Ht.	Height	Std.	Standard
Htrs.	Heaters	Sys.	System
HVAC	Heating, Ventilation, A/C	S.Y.	Square Yard
HW	Hot Water	T&G	Tongue & Groove
In.	Inch	Th, Thk.	Thick
Int.	Interior	Tot.	Total
Inst.	Installation	Unfin.	Unfinished
Insul.	Insulation	V.C.T.	Vinyl Composition Tile
lb.	Pound	Vent.	Ventilator
		Yd.	Yard

BIBLIOGRAPHY

Architectural Drawings
by N/A

Declaration of Covenants, Conditions, and Restrictions
by N/A

Site Work Cost Data
by R.S. Means Company, Inc. & Historical Data

Mechanical Cost Data
by R.S. Means Company, Inc. & Historical Data

Electrical Cost Data
by R.S. Means Company, Inc. & Historical Data

Open Shop Cost Data
by R.S. Means Company, Inc. & Historical Data

PHOTOGRAPHS

CHALET SAN MARCO – STRUCTURAL INTEGRITY RESERVE STUDY



1. View of the subject building.



2. View of the roof line of the building.

CHALET SAN MARCO – STRUCTURAL INTEGRITY RESERVE STUDY



3. View of the work that is being performed on the terrace (middle roof section).



4. View of the observed water damage impacting the wood framing and sheathing of the middle roof section.



5. View of the failing joint sealant at the parapet walls.



6. View of the cladding and failing finishes on the roof.

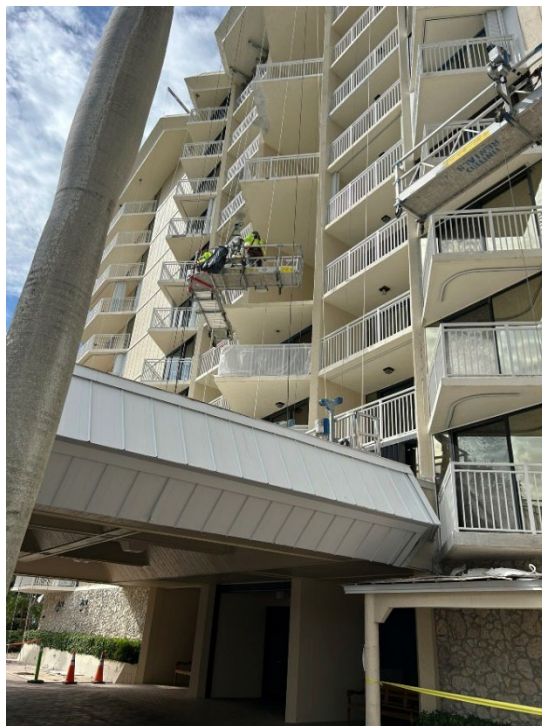


7. View of the repairs being performed on the exteriors and balconies.



8. View of the observed delamination on the stucco.

CHALET SAN MARCO – STRUCTURAL INTEGRITY RESERVE STUDY



9. View of the balconies.



10. View of the balconies being recoated.



11. View of the concrete repairs being performed on the exterior of the building.



12. View of the parking garage.



13. View of the observed cracks that have been repaired.



14. The observed cracks at the shear caps are indicative of a shear failure; therefore, we recommend the stucco be removed to determine the extent of the structural damage.



15. View of the additional shear failure cracks at the shear caps.



16. View of the additional shear failure cracks at the shear caps.



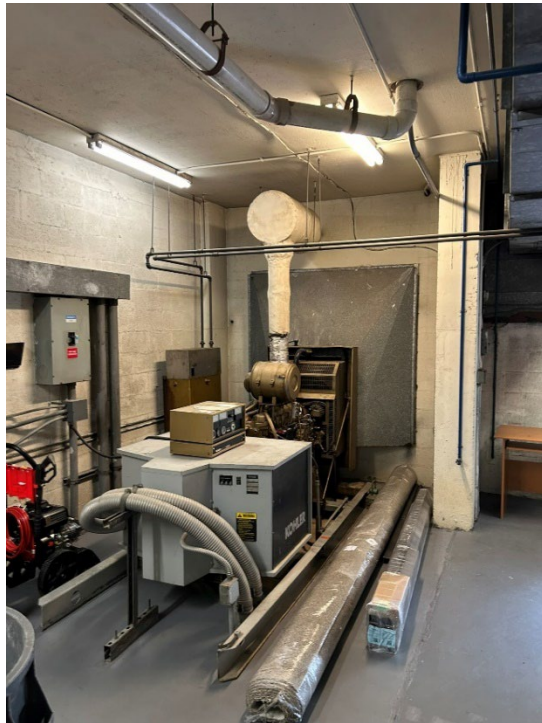
17. View of the domestic water pumps.



18. View of the fire pumps.



19. An Example of the electrical components at the common area.



20. View of the generator located at the bottom floor.



21. View of the generator located at the roof top.