



June 13<sup>th</sup>, 2024

Abode Communities  
1149 S. Hill Street, Suite 700  
Los Angeles, CA 90015  
Attn: Mark Wermers –  
Director of Facilities

Re: **Roof Consulting**  
Indian Wells Villas  
74800 Village Center Drive  
Indian Wells, CA 92210



Dear Mr. Wermers,

Alliance Consulting & Testing Inc. has completed our initial roof surveys and we have the following report of our findings and opinions regarding the roofing systems on this property. We understand the purpose of the surveys was to determine the overall condition of the roofing systems including past repairs, what repairs still need to be made, the remaining service life of the systems and/or does the roofing systems need to be replaced.

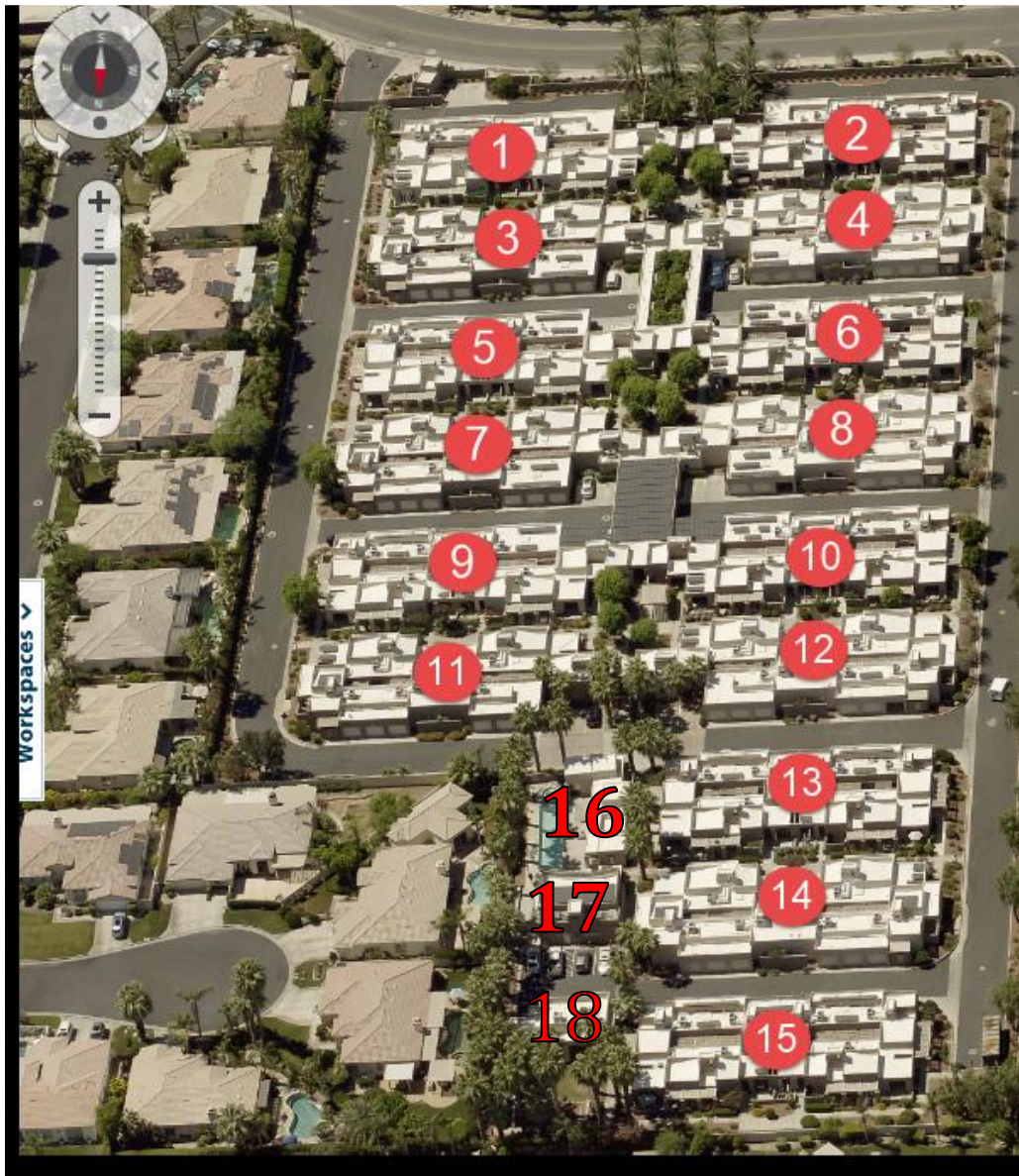
A National Project Manager and a Senior Consultant from our firm inspected this property and performed our analysis on May 14<sup>th</sup>, 2024. Alliance Consulting & Testing Inc. is an independent consulting firm. We do not sell or install roofing materials and are not owned by anyone who does nor are we employees of Abode Communities or Indian Wells Villas.

Our report covers the following items:

- Perimeter details
- Drainage/valley details
- Penetration flashings
- Overall membrane condition
- Wall/Curb flashings
- Insulation
- Other items that would affect the ability of the roofing system to resist water penetration.

## BUILDING LOCATIONS

For the purpose of this report we have numbered the buildings as noted below.



## SUMMARY

Overall, the roofing systems on this property appear to be in good to fair condition. The coatings appear to be holding up well and little deterioration noted at them except at the roof to wall intersection/flashings. The perimeter walls are in need of maintenance and appear to be the chief cause of leaks at the roofs. We noted gapping, cracking and general deterioration at all buildings. Ongoing maintenance of these areas is needed to reduce potential leaks. Some repairs to these issues appear to have been started in some locations. If properly maintained, this roofing system has a life span of 10+ years and likely can be recoated at that time to extend the life span.

ACTION/MONITORING ITEMS	
<b>Specific Action Items</b>	
Building 1 – Reroute Dish wires to ensure curtain wall access door properly opens. Building 3 – Reseal deteriorated coating in scupper. Building 14 – Further investigate and properly repair and seal window with temporary tape repair. Building 15 – Repair/seal large gap noted at membrane in back corner.	
<b>General Action Items</b>	
Further evaluate and repair walls where needed as cracking and deterioration noted at several locations of all buildings. Recoat/repair deterioration at roof to wall intersections (Wall Flashings.) Ensure all wall penetrations are properly sealed. Several holes where noted where items have been removed from the walls (Satellite dishes?). Ensure windows at penthouses are regularly maintained and sealed. Remove debris from roofs and drains where needed. Replace broken and missing drain covers. Ensure sleepers blocks and slip sheets installed where needed. Replace/repair damaged curtain wall foam tops.	
<b>Items to Monitor</b>	
ESTIMATED SERVICE LIFE IF PROPERLY MAINTAINED	ESTIMATED COST OF REPLACEMENT
10+ Years	Coating - \$5-\$7 per Square Foot
	ESTIMATED REPAIR COSTS
	\$25,000-\$50,000



**ROOFING SYSTEM TYPE –**

Coated SPF Foam  
Asphalt Built Up Roof  
Wood Deck  
Internal Insulation

**GENERAL ACTION ITEMS - (THROUGHOUT MANY OR ALL ROOFS)**

Walls show signs of cracking and minor to moderate deterioration especially at corners, windows, wall tops and roof to wall intersections.

Several penetrations at the walls both active and abandoned are not properly sealed.

A variety of issues noted at the drains including: clogged, coated over and broken/missing baskets.

The foam at the curtain walls is deteriorated likely due to animals.



**ROOFING SYSTEM CONDITION****Building 1 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls. Dish wires preventing curtain wall door from opening.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**





**Building 2 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**





**Building 3 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.  Some deterioration noted at scupper coating.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**



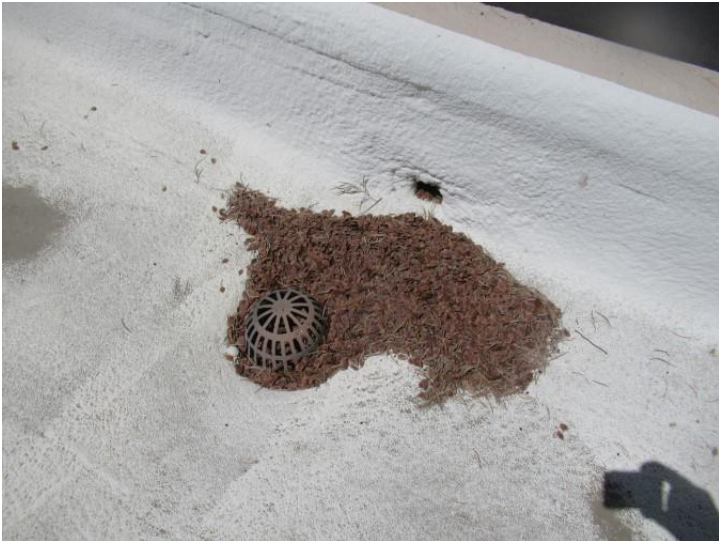
**Building 4 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				Some coating deterioration noted in isolated locations.
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**







**Building 5 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

## GENERAL PHOTOS









**Building 6 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**





**Building 7 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**





**Building 8 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**







**Building 9 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings		X			Deterioration noted at the copper line penetration flashing.
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

## GENERAL PHOTOS





**Building 10 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**





**Building 11 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**







**Building 12 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**





**Building 13 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**





**Building 14 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.  Tape noted at window, likely temporary repair.

**GENERAL PHOTOS**









**Building 15 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition		X			Large gap noted at membrane in back corner.
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.  Ensure satellite dishes have slip sheets.

**GENERAL PHOTOS**





**Building 16 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

## GENERAL PHOTOS







**Building 17 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**





**Building 18 -**

ITEM	Good	Fair	Poor	N/A	COMMENTS
A - Perimeter details		X			Deteriorated foam noted at curtain walls.
B - Drainage		X			Missing covers noted at drains. Debris(leaves) noted at drains.
C - Penetration flashings	X				
D - Overall membrane condition	X				
E - Walls/Curbs		X			Cracking and deterioration noted at walls.
F - Insulation				X	
G - Other				X	Wall penetrations both active and abandoned are not properly sealed.

**GENERAL PHOTOS**

