

April 19, 2023

North Bay Village Building & Zoning

1666 79th Street Causeway #101 North Bay Village, FL 33141

ATTN: Pedro Martinez, Chief Building Official

RE: Structural Condition Letter

Majestic Isle Condominium

7946 East Drive

North Bay Village, FL 33141 Folio #23-3209-030-0001

Case #CE-042303

Mr. Martinez,

The purpose of this letter is to inform you of conditions observed during a recent inspections at the property. I was retained to perform a Building Recertification, pursuant to County of Miami-Dade Code, Section 8-11. The existing structure is 3 story condominium building constructed in 1960. The structure of the building consists of concrete and concrete-masonry exterior walls, with concrete decking in the common areas and wood decking in the residential units.

I performed an inspection of the property on April 14, 2023 in anticipation of the required Building Certification. Ms. Bouwen had expressed concerns about the sagging floors and termite damage to the floor framing. Also, in light of a recent leak from the roof drain, the . During the inspection, the following observations were made:

- ➤ The floor within Units 309, 310, 308, 209, and 206 raised concerns. A ZipLevel PRO-2000 high-presicision altimeter was utilized to measure the differences in elevations throughout the units.¹ Using a common reference point in the hallway, measurements were taken within the interior.
- In Unit 309, the floor levels had deflected approximately 2.4 inches from the entrance to the lowest spot within the living room. Noting the span of the exposed joist framing above (2x8 at 16" c/c), the presumed span of the joists was more than 13 feet. The termination of the tile floor installation was noted within the closet, which was installed throughout the majority of the interior. See **Figure 1** for photos.
- ➤ Within Unit 310, the floor deflected approximately 1.1 inches from the entrance to the lowest spot in the middle of the living room. The tile flooring was also cracked at this location where the deflections were highest and coincidentally in the middle of the space. See **Figure 2** for photos.
- Within 308, the interior of the living room had deflected approximately 4.0 inches from the front entrance (Figure 3).
- In Unit 307, a ceramic tile flooring installation was observed over the original wood decking (Figure 4).

¹ https://www.ziplevel.com/.



- ➤ Unit 209 had been affected by the recent leak from the roof drain. The ceiling drywall had been removed, exposing the floor joists, which were similarly constructed as 2x8 sections spaced at 16 inches on center. There was visible termite damage on the underside of the floor joists. Given that the inspection consisted solely of visible damage, further investigation would be required to assess the total amount of termite damage to the floor framing (Figure 5).
- In Unit 206, the floors were similarly finished with ceramic tile flooring. However, in the utility closet I noted the tiles terminated and exposed a second layer of ceramic tile flooring underneath (**Figure 6**).

In light of the observations made, it was determined that the floors have deflected beyond the allowable deflection limits set forth in the 2020 Florida Building Code, Building, Table 1604.3.² These conditions therefore meet the physical criteria for an unsafe building, pursuant to the County of Miami-Dade Code, Section 8-5(b)(2)(iv)³: "There is an unusual sagging or leaning out of plumb of the building or any parts of the building and such effect is caused by deterioration or over-stressing." The excessive sagging of the floor decking is due to deterioration from colonization of wood-boring insects and due to over-stressing from installation of ceramic tile flooring.

Because of the existence of these conditions in multiple units, it is my duty to inform you of these conditions. Furthermore, these conditions pose a threat to life safety, in lieu of a completed Building Recertification. The building is not safe for continued occupancy until necessary repairs have been performed to the building.

Should you have any questions, please do not hesitate to contact me.

Felix F. Rodriguez, PE, SE, CGC Florida PE #74481, CGC1530105 Civil / Structural / Mechanical Disciplines Licensed Infrared Thermographer, Level II #14602

CC: Petra Bouwen – President, Majestic Isle Condominium Association, Inc.

² https://codes.iccsafe.org/content/FLBC2020P1/chapter-16-structural-design.

³ http://miamidade.elaws.us/code/coor ch8 arti sec8-5.





Figure 1. Summary of observations made in Unit 309: Collapsed section of ceiling drywall under roof drain (**top-left**); Overview of sagging floor in living room (**top-right**); relative elevation measurements taken with ZipLevel (**middle row**); measurement of presumed joist span of 13 feet (**bottom-left**); ceramic tile flooring installation over wood decking (**bottom-right**).





Figure 2. Summary of observations made in Unit 310: Relative elevation measurements taken with ZipLevel (**top row**); cracks in ceramic tile flooring installation in middle of living room (**bottom row**).



Figure 3. Summary of observations made in Unit 308: Linear crack in ceramic tile flooring installation extending across living room (**left**); relative elevation measurement taken with ZipLevel (**right**);.







Figure 4. Summary of observations made in Unit 307: Installation of ceramic tile flooring within living room (**left**); termination of ceramic tiles at bedroom entrance, noted by ramp constructed (**right**).





Figure 5. Summary of observations made in Unit 209: Exposed ceiling framing below recent water leak from roof drain (**left**); closeup indicating termite damage to floor joists (**right**).



Figure 6. Two layers of tile installed over wood decking (Unit 206).