The Town received the following unverified report at 5:35 PM on June 24, 2021 from Frank P. Morabito, PE SI. This report was not formally submitted or authorized by the property owner Champlain Towers South Condominium Association, Inc., as required by Section 8-11(f)(iv) of the Miami-Dade County Code.

BUILDING DEPARTMENT

MINIMUM INSPECTION PROCEDURAL GUIDELINES FOR BUILDING'S STRUCTURAL RECERTIFICATION

PERMIT NUMBER:

INSPECTION COMMENCED:

DATE 08/01/2018

INSPECTION COMPLETED:

DATE 09/06/2018

INSPECTION MADE BY:

SIGNATURE

Frank P. Morabito, PE SI

PRINT NAME

President

TITLE

206 Via Condado Way
Palm Beach Gardens, FL 33418

ADDRESS

1. DESCRIPTION OF STRUCTURE

a. Name on Title: Champlain Towers South Condominium

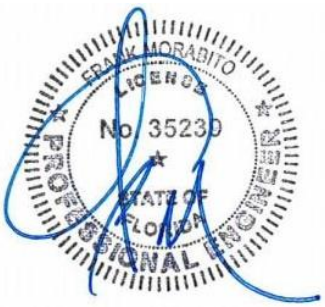
b. Street Address: 8777 Collins Avenue, Surfside, FL 33154 (Only Bldg on Site)

c. Legal Description: Champlain Towers South Condominium

d. Owner's Name: Champlain Towers South Condominium Association, Inc.

e. Owner's Mailing Address: 8777 Collins Avenue, Surfside, FL 33154

f. Folio Number of Property on which Building is Located: 14-2235-025-0001



g. Building Code Occupancy Classification: R-2

h. Present Use: Residential

i. General Description: 12-story plus Penthouse concrete framed condominium towers with 136 residential units.

Addition Comments: MC inspected a total of 68 units which is approximately 50% of the total number of units plus commons areas, pool deck, and parking garage structure.

j. Additions to original structure: N/A

2. PRESENT CONDITION OF STRUCTURE
a. General alignment (Note: good, fair, poor, explain if significant)
1. Bulging: Good – no bulging observed.
2. Settlement: Good – no building settlement observed.
3. Deflections: Good – deflections observed were minor in nature and within accepted industry standards
4. Expansion: Good – Existing slabs appear to be adequate to accommodate building and plaza thermal and moisture/volume effects
5. Contraction: Good – Existing slabs appear to be adequate to accommodate building and plaza thermal and moisture/volume effects
b. Portion showing distress (Note, beams, columns, structural walls, floor, roofs, other)
Concrete columns: ~2% of exterior columns have experienced concrete spalling
Exterior walls: ~1% of exterior masonry walls have experienced masonry cracking spalling
Balcony floor slabs: ~5% of the balcony structural floor slabs showed hairline cracking at underside of the slab. The balcony edges have experienced concrete spalling in ~25% of their length.
Roof: approximately 2% of perimeter masonry parapet walls have experienced concrete spalling
Garage/Plaza slab: ~8% of the soffit of these slabs have experienced concrete deterioration
Structural steel beams/connections: isolated rusting identified at existing mechanical unit support steel
c. Surface conditions – describe general conditions of finishes, noting cracking, spalling, peeling, signs of moisture penetration and stains.
Concrete columns: ~2% of exterior columns have experienced concrete spalling measuring 3 sf or less in each location.
Exterior walls: ~5% of exterior masonry walls have experienced stucco spalling (mostly aligning with the floor elevation) and 2% of the stucco wall has experienced some minor stucco cracking.
Balconies: 90% of the balconies are covered with tile. Only 2% of the balconies have cracked tile and/or cracked mortar joints between the tile units.
Garage/Plaza slab: ~8% of the soffit of these slabs have experienced concrete deterioration with the majority of areas being adjacent to or under the pool and planters. There is also some isolated slab cracks in the soffit of these slabs.
Residential units: ~3% of the units exhibit drywall cracking at partitions, bulkheads, or ceilings and/or cracking in crown molding which are purely cosmetic in nature and are not a structural concern.
d. Cracks – note location in significant members. Identify crack size as HAIRLINE if barely discernible; FINE if less than 1 mm in width; MEDIUM if between 1 and 2 mm width; WIDE if over 2 mm.
Slabs: the majority of cracking found in the underside of the balcony and plaza/pool concrete slabs was classified as hairline cracks with several instances of fine and medium cracks. Appendix A shows examples of each case.
Columns: The majority of cracking found in the exterior concrete columns was classified as fine or medium cracks with one instance of a wide crack. Appendix A shows examples of each case.
Exterior walls: The majority of stucco wall cracking can be classified as fine.

e. General extent of deterioration – cracking or spalling of concrete or masonry, oxidation of metals; rot or borer attack in wood.

The extent of deterioration / distress is described in item 2.b.

The plaza and planter waterproofing membranes are beyond their useful life and need to be removed and replaced with new waterproofing, protection board, drainage board. The planters also need root mat installed.

The pool and jacuzzi are leaking and need to have the plaster removed, all discovered concrete spalling/cracking repaired, and a new plaster finish installed.

f. Previous patching or repairs

It appears that the concrete framed slab that supports the plaza/pool above the garage slab-on-grade parking has undergone some previous concrete patching and epoxy injection of cracks. This work has performed less than satisfactorily and needs to be completed again

g. Nature of present loading indicate residential, commercial, other estimate magnitude: Residential

3. INSPECTIONS

a. Date of notice of required inspection: No notice has been received as of this writing.

b. Date(s) of actual inspection: 08/01/2018 – 09/06/2018

c. Name and qualifications of individual submitting report: Frank Morabito, PE SI; Steven J. Troxel.

d. Description of laboratory or other formal testing, if required, rather than manual or visual procedures: N/A

e. Structural repair-note appropriate line:

1. None required

2. Required (describe and indicate acceptance): ✓ Items to be repaired and standard of acceptance listed below:

Balconies: Repair of cracked/spalled exterior concrete columns, soffits, edge slab, loose top rails/pickets.

Exterior Walls: Repair of cracked/spalled masonry stucco wall at floor line and other isolated areas.

Garage/Plaza slab: Repair of cracked/spalled concrete slabs, columns, and walls.

Structural Steel: Exposed structural steel at rooftop cooling towers to be recoated with a galvanizing finish.

Waterproofing: Remove/replace all plaza and planter waterproofing.

4. SUPPORTING DATA

a. Cover Sheet sheet written data

b. Appendix A photographs

c. N/A drawings or sketches

5. MASONRY BEARING WALL = Indicate good, fair, poor on appropriate lines:
a. Concrete masonry units: Good
b. Clay tile or terra cota units: N/A
c. Reinforced concrete tie columns: Good
d. Reinforced concrete tie beams: Good
e. Lintel: Good
f. Other type bond beams: N/A
g. Masonry finishes -exterior: Satisfactory
1. Stucco: Satisfactory
2. Veneer: N/A
3. Paint only: Satisfactory
4. Other (describe): N/A
h. Masonry finishes - interior
1. Vapor barrier: N/A
2. Furring and plaster: N/A
3. Paneling: N/A
4. Paint only: Satisfactory
5. Other (describe): Stucco Finish - Satisfactory
i. Cracks
1. Location – note beams, columns, other: Isolated cracking in stucco wall finish
2. Description: Portions of stucco finish on the exterior masonry wall and slab edges are showing spalling/cracking at the floor elevation that is leading to isolated moisture penetration at the interior faces of the wall. It is recommended that the spalled/cracked stucco be repaired; all spalled masonry shall be patched with repair mortars; all cracks be routed out and repointed with type N mortar; and all affected areas painted.
j. Spalling
1. Location – note beams, columns, other: Very isolated.
2. Description: Difficult to determine location of spalled masonry due to stucco finish.
k. Rebar corrosion-check appropriate line
1. None visible ✓
2. Minor-patching will suffice
3. Significant-but patching will suffice

4. Significant-structural repairs required
l. Samples chipped out for examination in spall areas
1. No ✓
2. Yes – describe color, texture, aggregate, general quality

6. FLOOR AND ROOF SYSTEM
a. Roof
1. Describe (flat, slope, type roofing, type roof deck, condition)
Flat, concrete roof with waterproof membrane top coating. Membrane appears to be in good condition with no immediate repairs noted or required.
2. Note water tanks, cooling towers, air conditioning equipment, signs, other heavy equipment and condition of support:
For information on the condition of the structural steel supporting rooftop mechanical equipment – see Section 7b.
3. Note types of drains and scuppers and condition:
Flat roof drains showing moderate corrosion but generally in good condition. No scuppers were noted on the structure.
b. Floor system(s)
1. Describe (type of system framing, material, spans, condition)
The building is a concrete framed structure with flat-plate floor slabs, concrete columns spaced at ~22’ o/c and 2 concrete shearwalls located at stair towers and elevator/stair cores. The typical floors are 8” thick and the lobby floor is 9.5” thick.
c. Inspection – note exposed areas available for inspection, and where it was found necessary to open ceilings, etc. for inspection of typical framing members.
Underside of structural floor slabs are visible from floor below. Condition of roof membrane was surveyed from above.

7. STEEL FRAMING SYSTEM
a. Description
Steel framing only noted at the rooftop mechanical equipment units for equipment support.

b. Exposed Steel- describe condition of paint and degree of corrosion
Majority of exposed structural steel members and connections are in satisfactory condition with some members experiencing corrosion. It is recommended that the entirety of the steel be recoated with a galvanizing finish.
c. Concrete or other fireproofing – note any cracking or spalling and note where any covering was removed for inspection: N/A
d. Elevator sheave beams and connections, and machine floor beams – note condition: N/A

8. CONCRETE FRAMING SYSTEM
a. Full description of structural system
Reinforced concrete flat-plate floor slabs supported by reinforced concrete columns on a driven pile foundation.
b. Cracking
1. Not significant
2. Location and description of members affected and type cracking: ✓ Please see section 2.b, 2.c, 2.d, 2.e, 2.f
c. General condition: Overall, concrete framing is in good condition, with the aforementioned items requiring attention.
d. Rebar corrosion – check appropriate line
1. None visible
2. Location and description of members affected and type cracking:
Signs of rebar corrosion was noted in the underside of the 9.5” thick plaza/lobby concrete flat in the area under the pool and planters.
3. Significant but patching will suffice ✓
4. Significant – structural repairs required (describe)
e. Samples chipped out in spall areas:
1. No ✓
2. Yes, describe color, texture, aggregate, general quality
f. Additional Comments: N/A

9. WINDOWS
a. Type (Wood, steel, aluminum, jalousie, single hung, double hung, casement, awning, pivoted, fixed, other)
Aluminum-framed windows and aluminum-framed sliding doors for balcony access.
b. Anchorage- type and condition of fasteners and latches: Approximately 2% of sliding door latches were difficult to operate, but were secure once in position.
c. Sealant – type of condition of perimeter sealant and at mullions: Sealant at perimeter or windows and doors are beyond their useful life and need to be replaced.
d. Interiors seals – type and condition at operable vents: Good – Few locations showing water damage, possibly from condensation.
e. General condition: Windows and sliding doors are in good condition.
f. Additional Comments:

10. WOOD FRAMING
a. Type – fully describe if mill construction, light construction, major spans, trusses: N/A
b. Note metal fitting i.e., angles, plates, bolts, split pintles, other, and note condition: N/A
c. Joints – note if well fitted and still closed: N/A
d. Drainage – note accumulations of moisture: N/A
e. Ventilation – note any concealed spaces not ventilated: N/A
f. Note any concealed spaces opened for inspection: N/A

APPENDIX A

Figure 1: Cracking at balcony floor slab at sliding door threshold

Figure 2: Hairline cracking at underside of floor slabs in garage

Figure 3: Column damage at ground floor

Figure 4: Delaminated concrete garage entrance

Figure 5: Delaminated stucco

Figure 6: Water intrusion at rail posts

Figure 7: Balcony soffit deterioration

Figure 8: Rusted steel beam on roof 1

Figure 9: Repaired roof area