

THOMAS E. HENZ, PE, INC.

CONSULTING ENGINEERS

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Air Conditioning Engineering
Plumbing Engineering
Fire Protection Engineering
Life Safety Engineering
Electrical Engineering

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Champlain Tower South Condominium
8777 Collins Avenue
Surfside, FL 33154

During the electrical 40 Years electrical inspection and the mechanical systems evaluation inspection at the above-mentioned property, we inspected the conditions of the electrical, mechanical, plumbing, fire alarm and fire sprinkler systems.

We observed that in general all the different systems look in good conditions with some necessary repairs. The major issues we found were with equipment located in the generator room and the roof mounted HVAC equipment. The repairs are required do to corrosion which can be expected for exposed equipment next to the ocean. The generator room has a large intake louver than allows the corrosive salt air from the ocean to get onto the equipment.

Electrical:

The Electrical service is in good conditions with some required minor repairs.

- The path of egress lighting on every typical floor required to be enhanced to accomplish the 1 foot-candle minimum required by code.
- There are no smoke detectors on the typical floors and storage areas
- The pool deck, which is also a path of egress required new lighting (currently there are no lights) and new fire alarm devices.
- The roof mounted AC compressors required some electrical repairs
- The busway for the tenant meter centers is rusted and shall be repainted.
- The emergency generator and some other equipment in the generator room shall be replaced with new.
- The enclosed deck garage at the main level require fire alarm devices.

Mechanical:

The common building owner mechanical systems are showing their age. The individual owner condensing units on the roof are installed are aluminum stands that are not original. These stands are in good condition and the condensing units are tied down. The split AC units for the office and lobby have been replaced this year with new. The rest of the mechanical systems require repair due to corrosion.

- The AC unit for the recreation room AHU-8/CU-8 is at end of its useful life. AHU has rust at base of unit. It is the original Weather King model installed when building was built. It should be replaced with new. The disconnects for AHU-8 don't have the code required clearances.
- Office AC unit AHU-6 has been replaced with new but was installed on the original wood stand. Wood stands are not allowed per code in a return air plenum. Also, no storage is allowed in AC closets.

- The underground garage has exhaust fans for ventilation. 2 of the existing fans require repairs. The SE fan is missing a belt and the NW fan has heavy vibration.
- On the roof the refrigerant lines for the owner's condensing units are not insulated or have insulation that is falling off.
- On the roof only 4 out of the 16 roof exhaust fans are working.
- The primary air handling unit for the common corridors is in fair condition. It was installed in 2010 and is beginning to show signs of rust on the air handler and condensing unit. The exterior ductwork is also rusting. At the rate the equipment is rusting it will have to be replaced within the next 2-5 years.

Plumbing:

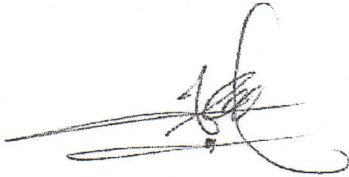
The plumbing systems are in good condition. In the garage the cast iron sanitary and storm drainage piping have been replaced with PVC which will last for many years. The domestic water booster pumps are working. The domestic water supply piping is copper. Piping appears to be in good condition.

- The domestic water booster pumps are mostly original. One motor has been replaced and one of the pump casing/impeller has been replaced. This pump system can continue to work for several years but there are newer more efficient systems.

Fire Sprinkler:

The fire sprinkler piping and sprinklers are in good condition. The only things that need repair are in the generator room due to corrosion.

- The fire pump base frame has severe rusting. The alignment of the pump motor and shaft can become misaligned under load. The fire pump should be replaced.
- The first 10ft of 6" dia. Sprinkler pipe after the fire pump is rusting. This section of pipe should be replaced.
- The rest of the fire sprinkler piping is in good condition. Only touch up painting is required.



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