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Amend. DCA203

January 11, 2006

Mr. Mo Madani
Building Codes and Standards Office
Florida Building Commission
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399

via email mo.madani@dca.state.fl.us

Subject : ***Addendum to Petition for Declaratory Statement before the Florida Building Commission"***

Dear Mr. Madani:

Per your request, please find attached one of many projects that our company is working on. Specifically, this project is located in Miami-Dade County in a high-velocity hurricane zone and is currently under our investigation.

This particular owner hired an independent roof expert to investigate the condition of this roof. The attached report *(see Exhibit – Benchmark Consulting Group's Roof Condition Report)* indicates that seven (7) percent of the roof was blown off and the other twenty-four (24) percent of the roof has been lifted from it's substrate.

Madsen, Kneppers & Associates, Inc. (MKA) has already investigated the entire property for damage claimed as a result of Hurricane Wilma. The roof covering has received a patch in an area that is smaller than the alleged damage. We are arranging for uplift testing to be performed on the alleged uplift area. If this testing confirms that the twenty-four (24) percent figure is an accurate calculation, the total area to be rehabilitated on this roof could total or exceed twenty-five (25) percent.

My questions are as follow:

1.) Would the actual damage would be classified as roof covering repair or alteration (Level 1) as described in the 2004 Florida Existing Building Code (Orange Book)?

2.) If the restoration of the claimed damage (yet to be confirmed on this project) is deemed to be a repair and the extension of that is beyond twenty-five (25) percent of the total roof covering area, would the owner need to replace the entire roof covering as per Section 1521.4 of the 2004 Florida Building Code Commercial Buildings?

Sincerely,

Madsen, Kneppers & Associates, Inc.

Joaquim Medeiros

Joaquim S. Medeiros, P.E.
Project Consultant

copy: Joe Bigelow of FBC (via email: Joe.bigelow@dca.state.fl.us)

(B)

Roof Condition Report	Facility: Doral Corporate Center I	Facility Inspection Report

INTRODUCTION

November 2, 2005

To: Jones, Lang & Lasalle, LLC.
3750 NW 87th Avenue, Suite 150
Miami, Florida 33178

Re: Doral Corporate Center I - 8750 NW 36th Street, Miami, FL 33178
Hurricane Damage Inspection

Attn: Mr. Michael Godoy

Per your request, Benchmark Consulting Group, Inc. inspected the hurricane damage at the Doral Corporate Center I located at 8750 NW 36th Street, Miami, Florida 33178. The inspection was performed on November 2,, 2005. Present at the inspection was Mr. Michael Godoy with Jones Lang & LaSalle, Mr. Joe Gody with Laumar Roofing Services and the writer, Richard Simons with Benchmark Consulting Group. The purpose of the inspection was to analyze the damage to the existing roof caused by Hurricane Wilma. Our observations and conclusions are as follows;

Observations:

The existing roof system consist of a lightweight concrete substrate, a fiberglass base sheet mechanically attached to the lightweight concrete and a (2) ply SBS Mineral Surfaced Modified built-up roof system. Our visual and physical inspection of the existing roof system revealed that the existing roof system was mechanically attached to the lightweight concrete with 1" LWC (LightWeight Concrete) fasteners.*Approximately 7% of the roof system was blown-off by the high winds of the hurricane and approximately 24% of the roof was lifted by the high winds of the hurricane. Most of the damage from the high winds was located in the south side of each roof section. (See attached Roof Plan). The scupper openings in the parapet walls may have allowed the high winds to get between the lightweight concrete substrate and the roofing membrane causing the roof system to be lifted. Our examination of the roofing debris revealed that most of the LWC fasteners were still embedded in the lightweight concrete but had ripped from the roof assembly or were pulled out of the lightweight concrete substrate. (See attached photographs).

There is evidence that foreign objects may have impacted the roof. Impact marks in the field of the roof was observed in a few areas. There is one large ventilator hood system that was blown off. The ventilator hood could have caused the impact damage to the roof.

* ***The 7% figure that was used for the roof area that was blown-off, is based on the measurements taken on the roof. The 24% figure that was used for the roof area that was lifted, was based on measuring the field of the roof where fasteners were lumped under the roofing membrane. (See attached Roof Plan for locations).***

Conclusion:

Roofs are subjected to wind forces from many directions. Direct wind pressure can loosen roof top equipment. Suction forces on the surface of the roof and vortices in the roof corners can lift the roof assembly. Internal pressure generated when windows, doors, or sections of the roof itself are breached can lift and separate the roof from the rest of the structure.

Roof assemblies that use individual fasteners to attach the roof to the substrate, such as the Doral Corporate Center I roof, are more susceptible to failure from these types of wind pressures and wind uplift forces. If one fastener fails to hold , then that fastener's load is transferred to the adjacent fasteners causing more force to be exerted on them. This additional force will cause a domino effect increasing the chances that the other fasteners will also fail and the roof assembly will release from the substrate.

It is in our opinion that this has occurred on the Doral Corporate Center I. There is physical evidence that the roof system failed in along the south side of the roof. The roof system was blown-off in one area and the roof system was lifted from the substrate in other areas extending out from the parapet wall. (It could not be determined, without removing all of the roof and exposing the substrate, how much of the roof assembly was actually lifted by the storm). Only approximate quantities could be established as to the extent of the damage.

This roof systems ability to withstand direct wind pressures and wind uplift forces during a major storm has been greatly reduced. The damage caused by Hurricane Wilma makes this roof assembly highly susceptible to blow-off during the next major storm. We recommend that Jones, Lange and LaSalle consider replacing this roof immediately.

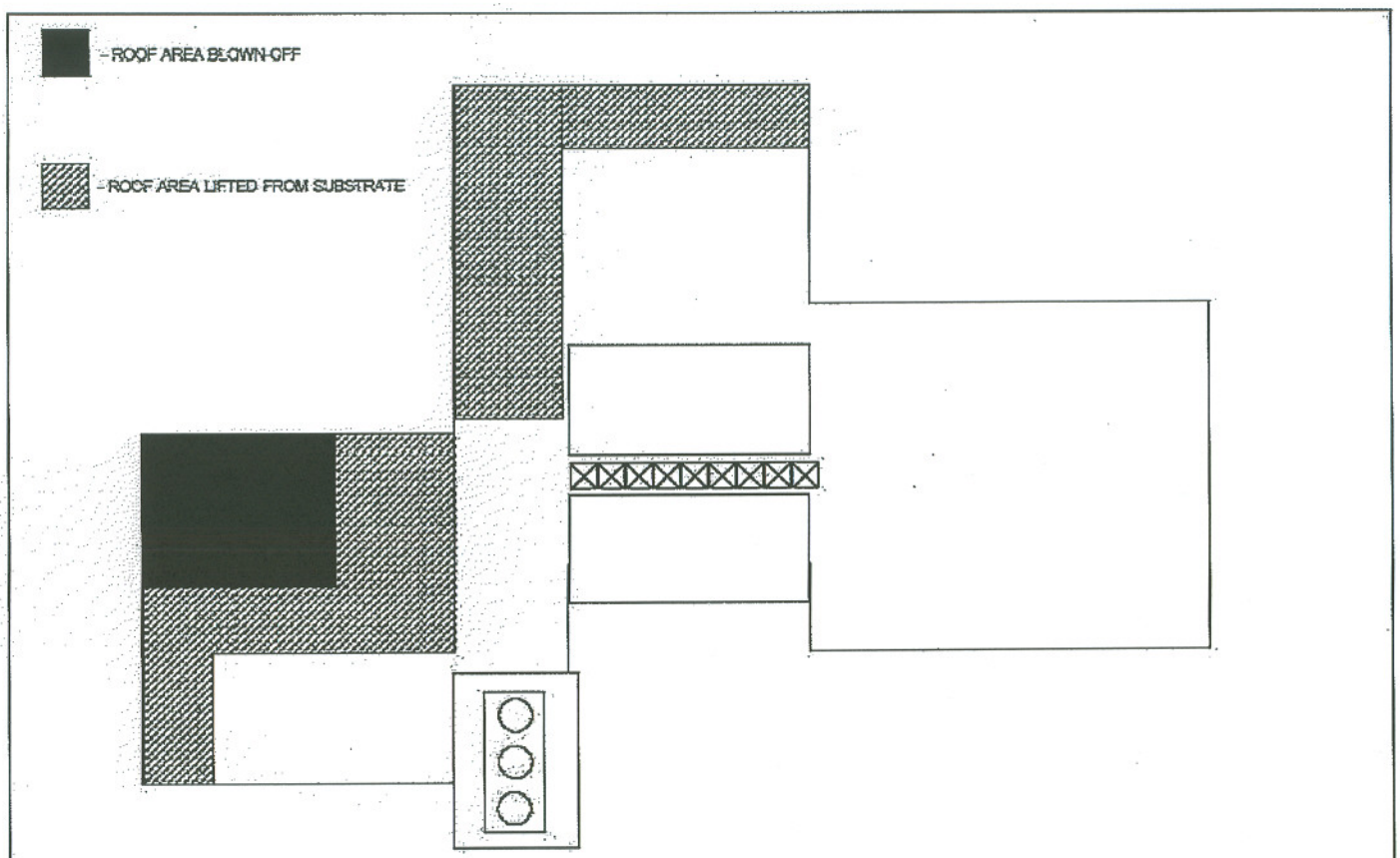
Disclaimer:

The contents of this report are based on the visible conditions existing on the day of the inspection. No warranty is made that the existing conditions will not change before repairs are implemented or that hidden conditions will be the same as those that were observed. The observations and conclusions made are based on our professional opinion. This report is not to be used as a substitute for plans and specifications for use by contractors to perform the corrections needed.

Sincerely,

Richard Simons
Senior Consultant

Roof Condition Report	Facility: Doral Corporate Center I	Facility Inspection Report



DORAL CORPORATE CENTER I 8750 N. W. 36th STREET MIAMI, FLORIDA 33178	NO SCALE DATE: 11/02/05	BENCHMARK CONSULTING GROUP, INC. 2771 S. W. 86th WAY DAVIE, FLORIDA 33328 PHONE: (954) 476-0801 FAX: (954) 880-0070