MINUTES <u>PALM BEACH COUNTY</u> <u>BUILDING CODE ADVISORY BOARD</u> MARCH 16, 2016

1. CALL TO ORDER

Chairman Gary Kozan called the meeting to order at 2:00 p.m. The meeting was conducted in Room 1E-60 at the Vista Center located at 2300 North Jog Road in West Palm Beach, Florida.

A. Roll Call.

Members Present:

Gary Kozan, Chair	Roger Held, Vice Chair
Doug Wise, Building Official	Jacek Tomasik, Building Official
Bill Bucklew, Building Official	Joe Byrne, Roofing Contractor
Tom Hogarth, Engineer	David Chase, Architect
Donald Sharkey, Electrical Contractor	James Carr, HVAC Contractor
Greg Miller, Aluminum Contractor	

Members Absent:

Michael Grimm, Building Official	Michael Fichera, Building Official	
Scott Worley, General Contractor		

Others Present:

Shannon Fox, Assistant County Attorney	Anne Helfant, Assistant County Attorney
Jacquelyn Anderson, Recording Secretary	

2. PLEDGE OF ALLEGIANCE

3. APPROVAL OF MINUTES

A motion was made to approve the November 17, 2015 minutes. The motion was seconded and the motion passed unanimously.

4. ADDITIONS & DELETIONS TO THE AGENDA

Doug Wise requested to add swimming pool barrier checklists to the agenda for discussion.

There were no objections. Chairman Gary Kozan added the item under "New Business" toward the end.

5. COMMITTEE REPORTS

- A. Code Interpretation No report.
- B. Code Amendments No report.
- C. Product Evaluation No report.
- D. Six Pillars Committee No report.
- 6. OLD BUSINESS

Prior to beginning "Old Business" Mr. Kozan welcomed new Board Member Bill Bucklew, Building Official of the Town of Palm Beach to the Board.

A. Heliocol Solar Heating Elements and Adhesives on Roofs – Jeff Torres (Paul Olmezer)

Paul Olmezer thanked the Board for hearing him again, and he stated he brought with him a manufacturer and engineer PE who would be able to answer a lot more of the questions the Board had concerning the glue down method, Jeff Torres.

Mr. Torres submitted engineering documents to illustrate the scope of work for Heliocol tiles. He introduced himself and discussed his qualifications and information about the company UMA Solar for which he works. He presented samples of Heliocol and monolithic panels to the Board.

Mr. Torres discussed the design of the Heliocol product and the methodology used for concrete tiles and the adhesives they typically recommend which have Miami-Dade NOA. He indicated a different methodology was necessary for clay tiles which would require anchoring to the truss.

Mr. Torres presented information about how the company tested different types of tiles, and the results of the testing. He indicated the worst failure rate was among larger tiles due to fracturing of the tiles and the adhesive pulling up.

Joe Byrne asked several clarification questions of Mr. Torres about the testing that was done on the tiles, whether tests were conducted on the fasteners, and the types of fasteners used for testing. Mr. Torres indicated that tests were done on tile and stated the failure point was the tile itself.

Manny Oyola of Eagle Roofing Products asked if there was a photo that showed the apparatus that was used and what safety factor was used for getting the numbers provided. Mr. Torres indicated he could not remember the name of the apparatus and the safety factor is 2.

Thomas Hogarth requested clarification about the purpose of the presentation and what was expected from the Board and whether they were looking for Palm Beach County approval of this particular fastening system. Mr. Torres indicated yes.

Jacek Tomasik stated this topic originated from his Building Department because they had disapproved this system of mounting the solar panel with brackets or fasteners directly to the roof covering or the panels being screwed into the tile with Tapcons. He indicated there were concerns about the warranty of the roof, how manufacturers felt about drilling through the roof coverings, how the Tapcons and adhesives would perform, and the effect on existing roofs. Mr. Tomasik suggested the purpose of bringing the topic to the Board is to find a uniform method of enforcement through Technical Advisory or another statement that this would be acceptable in meeting the Building Code.

Mr. Byrne recalled there were questions in the last meeting about the exposure of the foam and lack of UV resistance and the withdrawal resistance values of the screws in the mechanically attached tiles. Mr. Torres indicated the methodology is both by mechanically attaching to the adhered tiles and ensuring the affected tile and the five tiles around it are adhered.

Mr. Byrne discussed details of the methodology proposed by Mr. Torres and indicated that the type of work proposed would have to be performed by a roofing contractor and not a solar contractor.

Mr. Wise stated that there is a provision at the state level that says a solar contractor can do any roofing work within 18 inches of a solar panel.

Board Members discussed concerns regarding roof warranties, testing methodologies, and tile manufacturers' responses to this product.

David Chase inquired as to the purpose of the drawing that was submitted to the Board since it was a generic drawing. He also suggested Mr. Torres bring back a system NOA rather than NOA's for adhesive products.

Bill Bucklew expressed concerns about the weight of the water on the tile.

Mr. Kozan indicated that the previous recommendation of the Board is still the best way to proceed which includes getting support and documentation from manufacturers prior to bringing the product to the Board for approval.

Mr. Byrne recalled Eagle Tile offered to work with Mr. Olmezer at the last meeting, and Mr. Oyola stated they were still willing to assist.

Mr. Oyola discussed the methods of testing used for the installation of tile including TAS 102 and 102A for mechanically fastened system and TAS 101 for adhesive for static uplift resistance values.

Additional discussion ensued among the Board Members.

Mr. Kozan reiterated that bringing the product before the Board was the last step in the process for approval in Palm Beach County. He suggested working through the recommendations from the previous meeting before bringing back to the Board.

B. Fastener Corrosion – Joe Byrne

Mr. Byrne presented a Corrosion of Roofing Fastener Systems report dated March 2, 2016. He stated the report indicated the electrogalvanized nails failed the TAS and ASTM requirements even the ones that are Miami-Dade County approved. He stated everything failed except the tile screws that were domestically manufactured.

Mr. Byrne summarized the fasteners tested were from South Florida, Central Florida, North Florida, and the West Coast and the results were not good. He pointed out the corrosion scales in the report. He stated he tried to determine the life expectancy of the fasteners versus the life expectancy of the roof systems. He stated the manufacturers could not give a definitive answer on the life expectancy.

Mr. Byrne stated manufacturers also could not provide timeline for the testing they did on the fasteners, but according to the tests done, they all passed. He stated the tests at the University Florida resulted in a failure for all fasteners except the hot dipped galvanized and the mechanically galvanized tile screw which were both made in the United States.

Discussion ensued among the Board Members.

Mr. Byrne stated the next step will be to drive the fasteners into shingles and tiles and withdraw them to complete the field testing. He said the purpose is to answer the life expectancy question.

Additional discussion was held among the Board Members.

7. NEW BUSINESS

A. Sealed Attics (SFP) – Joe Byrne

Mr. Byrne presented an interim report of a field study conducted with Oak Ridge National Laboratory in Tennessee and the University of the Florida. He stated study was conducted to determine the cause of problems with roofs plywood deteriorating. He said it appeared the commonality among the roofs was the spray polyurethane foam in the attics.

Mr. Byrne indicated that it was found that the spray was affecting the deterioration of the roof sheathing and attacking the sheathing nails in the plywood and the fasteners connecting the straps to the trusses. He stated the study consisted of mock ups of different types of roof systems that had the spray polyurethane foam with humidity indicators to determine the cause of the deterioration of the plywood.

Mr. Byrne summarized the testing procedure and stated during testing more moisture was discovered in the plywood with anchor sheets with the peel and stick on top than those without anchor sheets. He stated the results determined the moisture problems were not from leaks, but from the product itself because it wasn't allowing anything to breathe. He also indicated that testing included sealed and unsealed attics.

Mr. Byrne said the conclusion was that with vented attics posed no problem, but problems were found with sealed attics. He indicated that the new tests will be conducted on actual homes that people are living in and the occupied space will include cooking, showers, et cetera with moisture that will go into the attic. Mr. Byrne stated the duct blaster test and the blower door test will be done in conjunction with the whole house testing.

Discussion ensued among the Board Members.

B. Condensate Drains – Doug Wise

Mr. Wise stated an email was received at BOAF about changes in the code and inspections failing for Condensate Drains, which is an emergency float switch that goes in the primary drain. He stated it has a UL approval on it. He indicated the intent in bringing the topic to the

Board was to synthesize a consensus statement as to whether the product meets code or not and offer a technical advisory.

Mr. Wise indicated that Mike Fox stated Condensate Drains meet code and are approved for use, but Palm Beach County's Chief Mechanical and Plumbing Inspector Ken Nida said it violates provision 1411.3.1 regarding auxiliary and secondary drain systems, specifically the section of the code which states:

A water level detection device conforming to UL 508 shall be installed that will shut off the equipment served in the event that the primary drain is blocked. The device shall be installed in the primary drain line, the overflow drain line or the equipment supplied drain pan, located at a point higher than the primary drain line connection and below the overflow rim of such pan.

Mr. Wise indicated that Mr. Nida's position is that the device is not located at a point higher than the primary drain line connection. He asked if the consensus of the Board was the device meets the intent of the code.

Jim Carr stated the phraseology indicates the device has to above the bottom so it picks up water at the lowest level in the drain pain and below the top of the drain pain.

Board Members discussed T-Switches and the differences and similarities of the Condensate Drains and UL listings.

Mr. Hogarth suggested a BOAF interpretation would be advisable for clarification. Mr. Kozan agreed and suggested Mr. Wise have his mechanical person send the item to BOAF for interpretation.

Mr. Carr stated he would like to see some temporary affirmation because summer is approaching and this will be coming into question.

Mr. Wise polled the Building Officials if they allow Condensate Drains in their jurisdictions. Mr. Held, Mr. Tomasik, and Mr. Bucklew all stated they would allow the device.

Mr. Tomasik suggested Mike Fox draft a technical advisory for the Board's approval.

Mr. Wise stated there were enough Building Officials to agree that they would allow it. He also stated he would send the item to BOAF for interpretation.

C. Swimming Pool Barrier Checklist – Doug Wise

Mr. Wise stated there had been some issues with swimming pools and barrier requirements. He stated the County requires contractors and owners to sign an affidavit affirming the type of barrier that will be installed. He suggested that part of the challenge is that the pool contractor is affirming something that is outside of the scope of his license, and sometimes there are changes such as the owner decides to do something different. Mr. Wise stated it creates a hardship for the County and for the pool contractor.

Mr. Wise suggested the Board propose a standardized process for all the building departments in the County incorporating the best practices of the jurisdictions.

Roger Held stated his jurisdiction does the same thing with an acknowledgment and they have similar problems. He said they do not allow the pool to be filled until barrier has been put up and inspected. Mr. Held stated the owner signs the affidavit, but not the contractor.

Mr. Wise stated the County's challenge is that the contractor signs, and then the County will not allow it to be revised later if the owner decides to change contractor.

Mr. Tomasik stated Wellington has contractors sign the affidavit, but he did not see any problems. He said they do not allow the pool to be filled until the fence is in place, and they will not CO the pool or approve final inspection until the fence is inspected. He stated the pool barrier fence permit is a separate permit. He said the owner does not get involved with it, and only the contractor is responsible. He stated it works for Wellington.

Mr. Bucklew stated the Town of Palm Beach is similar to Wellington in that it is the contractor's responsibility to take care of it. He said they also do not allow the pool to be filled until the barrier is in place and do not final the pool until the barrier is in place. He stated they are also required to specify on the drawings submitted for the pool what type of barrier they will use.

Mr. Wise stated he will review and follow up next month under Old Business if there is more discussion or a need for a standardized process. He stated he was looking to make the process easier, but still safe.

Mr. Bucklew stated another issue for consideration when a pool is resurfaced to make sure the barrier remains intact or to ensure a temporary safety barrier is in place around the pool being resurfaced. He discussed a recent incident in which a man was injured because there was no barrier in place.

Mr. Tomasik stated the pool barrier is designed for children up to five years old, and they are not designed for older children or elderly. He stated Wellington does not require permits for resurfacing.

Mr. Wise stated the County also does not require permits for resurfacing, but he stated there is some compelling ground to consider it due to recent events of death and injury.

8. FUTURE BOARD MATTERS

Mr. Wise stated the Board may want to discuss what has happened during this legislative cycle and the code changes that were legislated.

9. BOARD COMMENTS

Mr. Tomasik said Wellington was struggling with windows, and he sent email requests to fellow Building Officials to discuss permitting windows and replacing existing windows with new impact windows. He stated the struggle is with egress that is supposed to be there, but is not there. He also stated the installations are not per the product approvals, and NOA's are not

being met.

Mr. Tomasik stated Wellington is doing pre-inspections, in-progress inspections and water tests, and they are having a lot of issues with the impact windows and the way the windows are installed. He asked if the Board thought it would be beneficial to bring it up for future discussion for a technical advisory for uniformity of enforcement within Palm Beach County.

Mr. Wise stated the County was also experiencing issues on customer service after the fact where customers are calling and complaining about leaking. He stated he would like to see standardization, including buck inspections.

Greg Miller stated there has been an increase in activity of window installation businesses, and there has been a new category created in licensing. He discussed some of the necessary requirements for window installations including changing window bucks.

Mr. Chase stated another thing to look at is the FHA ADA requirements of clear opening which are overlooked when the sliding glass doors are replaced.

Discussion ensued among the Board members.

Mr. Bucklew thanked the Board for an opportunity to serve on the Board.

Mr. Wise mentioned training opportunities on March 30, 31 and April 1st to be held at the Vista Center. He also stated there will be training at Gaines Park Community Center on May 6th in conjunction with the Florida Home Builders Association. He stated the BOAPBC picnic will be held on May 14th at Ocean Reef Park on Singer Island.

Mr. Wise stated County-wide contractor registration that came from the Board a few years ago. He stated there is a modification to the State Statute in Senate Bill 704 legislative proposal stating that jurisdictions cannot charge money for registering a contractor's credentials as of July 1st. He encouraged the Building Departments to look at the bill.

Mr. Wise stated that the County may be allowed to continue charging for enhanced registration services. He said if the County's service is also included in the legislation then the County will not be able to continue to provide that service because County permit dollars cannot be used to fund registration activities in the municipalities.

Discussion ensued among the Board members.

Mr. Kozan stated he liked the 1E-60 room better than the formal hearing room. The other Board members agreed to have future meetings in the 1E-60 hearing room.

10. STAFF COMMENTS

There were no staff member comments.

11. ADJOURNMENT

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Chairman Kozan adjourned the meeting at approximately 3:50 p.m.

Signed for the board by,

Gary Kozar, Chairman

Respectfully submitted,

Jacquelyn Anderson, Recording Secretary