

**ROOFING TECHNICAL ADVISORY COMMITTEE  
CONCURRENT WITH THE  
STRUCTURAL TECHNICAL ADVISORY COMMITTEE  
TELECONFERENCE MEETING FROM TALLAHASSEE, FLORIDA  
WEB URL [HTTPS://GLOBAL.GOTOMEETING.COM/JOIN/283621429](https://global.gotomeeting.com/join/283621429)  
AUDIO DIAN IN NUMBER: 1 877 568 4106  
MEETING ID / ACCESS CODE: 283-621-429  
June 26, 2017  
10:00 A.M.**

## **Minutes**

### **ROOFING TAC PRESENT:**

Brian Swope, Chairman  
Jimmy Buckner  
Burt Logan  
Lorraine Ross  
Karen Warseck

Bob Boyer  
Billy Cone  
Gaspar Rodriguez  
William Shultz  
Mark Zehnal

### **ROOFING TAC NOT PRESENT**

Richard Goff

### **STAFF PRESENT:**

Mo Madani  
Justin Vogel  
Joe Bigelow  
Marlita Peters

Thomas Campbell  
Chris Howell  
Jim Hammers  
Robert Benbow

**Welcome:**

**Time: 10:00 am**

Ms. Peters welcomed everyone to the concurrent teleconference meeting of the Roofing TAC and Structural TAC.

**Roll Call:**

Ms. Peters performed roll call for the Roofing TAC. A quorum was determined with 10 members present.

**Agenda Approval:**

Mr. Boyer entered a motion to approve the agenda for today's meeting. Ms. Warseck seconded the motion. The motion passed unanimously with a vote of 10 to 0.

**Approval of the Minutes from April 27, 2017**

Mr. Boyer entered a motion to approve the minutes from the April 27, 2017 meeting as posted. Mr. Logan seconded the motion. The motion passed unanimously with a vote of 10 to 0.

**To review and accept final draft report for the research project titled "Corrosion of Roofing Fasteners":**

Mr. Madani provided a short summary of the report for the TACs. He stated that Dr. Gurley would provide the information on the final draft report.

Dr. Kurt Gurley, UF College of Engineering provided a detailed power point presentation of the final report to include, goals, findings, summaries, and test protocols including sequences with tables and results. He did advise both TACs that the project's fourth item was not completed due to time constraints and that the funds allocated for that portion of the project were not used.

Mr. Madani asked if there was a confirmed problem discovered during the study.

Dr. Gurley stated no, however, there was no field testing completed, all testing was done in an artificial corrosion environment lab.

**To review and accept final draft report for the research project titled “Corrosion of Roofing Fasteners” (cont.):**

**TAC comments:**

Mr. Zehnal explained why the clips were brought into the study and provided examples. He asked if we can determine coastal corrosion and how close to the coast before you have to have a certain fastener.

Mr. Madani stated we need to as a TAC ask have the questions to this project been answered.

Mr. Lavrich questioned what “failure” means. Are fasteners showing corrosion or are they not performing as intended?

Mr. Madani stated the statements from Palm Beach County that indicated the project did not provide levels of failures.

Mr. Boyer stated this statement was from the local roofing industry and saw some failures in the field more on the ridge cap.

Mr. Cone said he remembered this being the ridge vent and that the fasteners were exposed, the heads were gone. He also stated he believed they were exposed fasteners. Mr. Cone said he has the same question are they failing or showing signs of corroding and passing the TSA test.

Dr. Gurley stated this project just examined the amount of corrosion on a fastener.

Dr. Gurley stated the only standard that they tested was the corrosion standard and the samples they tested revealed that the galvanized samples did not pass the standard.

Mr. Zehnal stated this testing started with a letter from Palm Beach County; a survey revealed that this was in other areas of the state also.

Mr. Buckner stated another issue is the no labeling requirement in optional product approval and stated the original reports did not show that they met the standard.

**Public Comment:** None

**To review and accept final draft report for the research project titled “Corrosion of Roofing Fasteners” (cont.):**

Mr. Zehnal entered a motion to accept the report. Mr. Boyer seconded the motion. The motion passed unanimously with a vote of 10 to 0.

**To review and accept final draft report for the research project titled “Phase II: Analytical Assessment of Field Data to Predict Moisture Buildup in Roof Sheathing of Sealed Attics”:**

Mr. Madani provided a short summary of the report for the TAC members. He introduced Dr. Prevatt to provide a detailed update of the final draft report.

Dr. Prevatt provided the background of the project including the purpose, scope and field measured data. He then introduced Dr. Miller to provide results of the Charleston, SC study and how it relates to Florida homes.

Dr. Miller provided the TAC with the study completed on the NET facility in Charleston, SC. He detailed the results of the testing on each roof. Dr. Miller advised how the homes to research in Florida were chosen.

Aravind Viswanathan, UF Graduate Student, provided the TAC with the results of the homes that were used in the study in Florida. He explained the moisture content in sheathing, effect of air leakage on indoor air comfort, condensation potential at roof sheathing, probabilistic risk assessment toolkit (PRAT), probabilistic and deterministic simulations, the measured and simulated attic temperature and relative humidity and the sheathing moisture content. Mr. Viswanathan then spoke on the comparative performance of PRAT, a sensitivity analysis of inputs and the effect of R-Value on moisture content. He advised of the conclusions of the study based on moisture movement by air convection and diffusion.

Dr. Prevatt concluded the report with the following recommendations to the TAC.

- The field data and analysis showed that section R806.5 of the Florida Building Code provides adequate protection against moisture affecting the durability of roof sheathing
- Inclusion of a dehumidifier in the sealed attics would keep attic air moisture levels at safer levels; however, its use was not necessary for the 4 homes reviewed in this study
- If the attic-to-outside air leakage is not well controlled in a sealed attic, then the energy conservation of the home is compromised.

**TAC comments:**

Mr. Zehnal stated with the homes used in the study there seems to be no real issues with proper installment. He asked what happens to homes that are not compliant and should the code reference this issue.

**To review and accept final draft report for the research project titled “Phase II: Analytical Assessment of Field Data to Predict Moisture Buildup in Roof Sheathing of Sealed Attics” (cont.):**

Mr. Madani stated at this time the focus is on the report and it is showing no issues if built to code.

Ms. Ross said she agrees with Mr. Madani, however, she had an issue on the summary second bullet that speaks to dehumidifiers and she feels this should be removed and provided reasons why it should not be there.

Dr. Prevatt stated he agreed with her statement and said he would remove that bullet.

Ms. Ross entered a motion to approve the report with the modification to remove bullet two on the recommendations page referencing dehumidifiers. Mr. Boyer seconded the motion.

Mr. Swope questioned if there was dehumidifier in the attics of the homes.

Dr. Miller explained the usage of the language and also advised no dehumidifiers were located in the attics of the homes used.

**Public Comment:**

Tim Grabowski asked if padding R21 has the same energy efficiency as the Code minimum for zone one as R30.

Dr. Miller stated no and provided explanation.

The motion on the floor to accept the report with modification was passed unanimously with a vote of 10 to 0.

**Recommend and discuss potential research topics for consideration by the Building Commission:**

Mr. Madani provided the research project requirements and the deadline of mid-July for the scope of work so that the recommendation can be sent to the Chair TAC meeting in August. He encouraged the TAC to look at the two research projects and see if there needs to be a continuance. Mr. Madani stated the fourth part of the study on corrosion was not completed.

**Recommend and discuss potential research topics for consideration by the Building Commission (cont.):**

**TAC comments:**

Mr. Boyer stated he felt that the corrosion study part four should be completed for the roofing fasteners.

Mr. Cone stated he agreed that this project needed to be completed.

Mr. Swope stated he also agreed and would like to suggest another topic for consideration. He stated he would like a cost impact study completed on decking systems in reference to the roofing diaphragms and costs to the consumer. Mr. Swope stated he felt this would be beneficial.

Mr. Warseck stated she felt this was a very good item and should be looked at.

Mr. Cone entered a motion to place the cost impact for roof diaphragm as number one priority and then the fasteners as the second rating. Ms. Warseck seconded the motion.

Mr. Zehnal stated that UF has a \$40,000 piece of equipment that should be used. He stated he would like to see the UF project completed and then the roof diaphragm.

Mr. Boyer stated he agreed with Mr. Zehnal.

Mr. Cone provided reasons why he felt the clip project was not a priority, whereas the issue with the diaphragm and the cost to the consumer should be a high priority.

Mr. Madani cleared up the issue that there was no money left; it does not carry over if it is not used.

Mr. Swope stated he feels the impact with the diaphragm is a higher priority and would call the vote.

**Public Comment:**

Mr. Belcher stated that the provision was in the base code that was adopted and the cost of the damage should be considered on non-compliant buildings.

**Recommend and discuss potential research topics for consideration by the Building Commission (cont.):**

**TAC Comment Response:**

Mr. Cone responded that he understands that it is in the base code however, he provided details on the testing. He said he feels this should be removed from the code.

Mr. Zehnal stated the point from Mr. Belcher is correct. He felt that this should be brought before the Structural TAC as it is part of their code.

Mr. Madani stated any TAC can bring in an idea for research. He again explained the process of the research projects.

Mr. Zehnal stated this needs to be clear on this subject. He stated we need to look at the full scope. Mr. Zehnal asked that the cost analysis include the exceptions and any work outside of the exceptions as a friendly amendment.

Mr. Cone asked for Mr. Belcher to restate the exception.

Mr. Zehnal stated he is the one that brought up the exceptions and those imposed by the vote of the Commission.

Mr. Belcher stated he does not see them getting involved in buildings that are non-compliant.

Mr. Cone explained initial cost, and the mandate for the analysis at the beginning for the permit.

Mr. Buckner provided professional engineer insight and that this would be a huge impact and cost to the consumer.

Mr. Cone called the vote once again.

Ms. Peters performed a roll call vote on the motion. The motion as stated is to place the cost impact for roof diaphragm as number one priority and then the fasteners as the second rating.

Mr. Swope	Yes	Ms. Ross	Yes
Mr. Boyer	Yes	Ms. Warseck	Yes
Mr. Buckner	Yes	Mr. Zehnal	No
Mr. Cone	Yes	Mr. Logan	Yes
Mr. Shultz	Yes	Mr. Rodriguez	Yes

The motion passed with a vote of 8 in favor and 1 against.

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**Recommend and discuss potential research topics for consideration by the Building Commission (cont.):**

Mr. Madani advised the group of the requirement of the scope of work from the proponent including costs.

**Final Roll Call:**

Ms. Peters performed the final roll call there were 10 members remaining on the line.

**Adjournment:**

The meeting was adjourned at 12:07 p.m.