Madani, Mo

From: Rick Olson <rolson@tileroofing.org>
Sent: Thursday, October 04, 2018 7:48 PM
To: jcarlson-soforth@comcast.net
Cc: Campbell, Thomas; Madani, Mo
Subject: Florida Building Commision - October 8 2018 Hearing - Topic - Adoption of ASCE-7-16 Industry letters
Attachments: Boral Letter to FBC Re ASCE 7-16 10-4-2018.pdf; ATT00001.htm; FBC 10062018 Comments Crown.ver1.pdf; ATT00002.htm; FBC_Hearing October 8 2018_TRI.pdf; ATT00003.htm; Eagle FBC Letter.pdf; ATT00004.htm

E.J Carlson, Commision Chair

Please find the following letters from the concrete and clay roofing tile industry industry on the concerns and negative impacts from the potential adoption of the ASCE-7-16 Wind Codes that you are considering next week. We are hopeful that through the hearing process, there is the opportunity to move this item to a separate action item that will allow the FBC Staff to perform additional due diligence and cost determinations.

Sincerely,

Rick Olson
President
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October 4, 2018

TO: E. J. Carlson, Chair
Florida Building Commission
P.O. Box 511232
Punta Gorda FL 33951

BY ELECTRONIC MAIL
jcarlson-soforth@comcast.net

FR: Wade Shepherd, Boral Roofing

RE: Adoption of ASCE 7-16 and its impact to the Tile Roofing Industry

Boral Roofing is one of the world's leading manufacturers for concrete, clay and metal roofing products. In Florida we are one of the predominant concrete roof tile manufacturers with production facilities in Lake Wales, Okeechobee and Pompano Beach. Boral Roofing provides roof tile, underlayments and other accessory roofing products to the roofing industry throughout Florida.

As members of the TRI, we support the position and questions raised by the tile industry and others recommending delay of action and implementation of ASCE-7-16. The negative impact of the proposed change has been highlighted by our industry and others. As Boral, would add these additional concerns.

1) Has the commission considered the impact of specifying a new code that conflicts with formal testing and research of affected products?

Boral Roofing, as a global company has performed extensive wind uplift testing in both our UK partner's wind tunnels and in our national research labs. Our formal product approvals and industry-based data are the result of our collaborative efforts. We have not seen the field evidence or formal research on our products to demonstrate the need for such drastic increases. Further, we have participated in additional validations from other research facilities here in Florida that reviewed and replicated our previous testing.

2) Educational Impact - Has the Commission identified the challenges, confusion and significant time and monetary resources to help educate the entire building community?

As an industry and Boral, we work closely with the TRI, our builders and our extensive contractor network to help educate and develop best practices and sustainable solutions for improved performance in all areas. Our contractor network has raised serious concerns for the implementation of the proposed changes in a time where we lack workers to fill the jobs needed today. We are concerned that small businesses will be hurt by the lack of resources to properly train and struggle to comply with the new, more complicated codes.

3) Corner Zone Implications - Has the commission determined the cost implications for addressing only corner zones on steep slope applications that have seen over a 200% increase in pressure?

Some new zones in ASCE 7-16, particularly the corners, have drastically increased uplift pressures that will prevent a single, economical attachment solution for the entire roof, which is common practice in installations today. To meet the higher wind loads, there are three options:

a. Multiple fastening methods on one roof – increases risk of mistakes by the designer or installer and would be more difficult to train

b. One fastening method for the entire roof that is most conservative and more expensive and a significant overall cost increase to the installation and inspection.

c. Alternative roof cladding materials that meet the higher wind loads at higher cost (i.e. standing seam metal), reducing the options available to customers for products that have demonstrated performance. The builder markets are very price sensitive and market shifts will have adverse impacts on the Florida markets.

4) Has the commission considered the cost impacts from accessory and related materials?

As Boral, we offer components and accessories into the market that are packaged with our tile products. The new codes will require delays and inventory issues as the building officials perform review and renewed product approvals to comply with the new standards. Each manufacturer of a component will need to provide Boral the required engineering, testing and research data before we can revise our product approvals for inclusion. This will have an adverse effect in the market for Boral and other companies that provide more than one component.

In summary, Boral joins with the TRI and other trade and construction associations urging the commission to delay implementation of the ASCE-7-16 at this time. We further ask that FBC staff be allowed to perform due diligence, cost analysis and work with those affected in Florida to develop a more efficient and cost-effective alternative for the FBC to consider.

Sincerely,

Wade Shepherd
Sr. Manager, Roof System Components and Technical Services
Boral Roofing, USA

cc: FBC Commissioners
Tom Campbell, Executive Director, Florida Building Commission
Mo Madani, Florida Building Commission

Tyler Allwood
Director of Business Development
tylera@eagleroofing.com

TO: E. J. Carlson, Chair
Florida Building Commission
P.O. Box 511232
Punta Gorda FL 33951

BY ELECTRONIC MAIL
jcarlson-soforth@comcast.net

FROM: Tyler Allwood - Eagle Roofing Products, Florida

RE: Adoption of ASCE 7-16

Eagle roofing is one of the country's leading manufacturers for concrete roofing products. In Florida we are one of the predominant concrete roofing tile manufacturers with production facilities in Sumterville.

As members of the TRI, we support the position and questions raised by the tile industry and others for the delay of action and implementation of ASCE-7-16. The negative impact of the proposed change has been highlighted by our industry and others, but we as Eagle would add these additional concerns.

1) Has the commission determined the cost for the elimination of potential products?
As Eagle Roofing Products and a member of the TRI, we have worked with numerous suppliers of fastening systems to meet the current codes. We have both FBC and Miami Dade County approvals on our products that include numerous components as part of those approvals. The new increased uplift pressures will negatively impact our business and the roofing supply chain as we identify further limitations on various fastener and attachment options. The significant increase of pressures that is in excess of 200% in some roof zones will remove viable options from our approvals. Without valid field data to support the need, we feel the commission should not force the elimination of options in the market place. We have been in dialog with many of the component manufacturers that have indicated they do not have the testing or engineering data in hand to be in compliance.

2) Has the commission determined the costs to the builder for implementation of the new standards?
If the new changes require new fastening alternatives, there will be the potential need for our industry to move from mechanical based systems- that have performed- to newer and more expensive adhesive, clips and hybrid-based programs. As we know, the building community generates efficiencies and improved quality by networking and developing relationships with specific trades to complete projects. The shift in codes will result in early adopters and innovators moving forward and the main stream contractors waiting to assess the final impact of future changes. This will negatively impact the construction industry and raise costs for building construction while raising concern for the lending institutions that fund the projects.

3) Has the commission determined the cost impact if alternative products are required by the manufacturer?
Like other roof cladding manufacturers, we develop company based and product specific designs. The significant increase in this new standard will require us to look at all our product offerings for additional fastening options. This will negatively impact our business as we will be required to re-tool, manufacture and create duplicate inventories of products. In a market where there are over 10,000 color variations offered to meet the consumer and builder demands, this will challenge all manufacturers to remain competitive in the market place.

Tyler Allwood
Director of Business Development
tylera@eagleroofing.com

In summary, we as Eagle Roofing Products and a member of the TRI join with the other trade and construction associations in urging the commission to delay action on the implementation of the ASCE-7-16 at this time. We further ask that FBC staff be allowed to perform due diligence, cost analysis and work with those affected in Florida to develop a more efficient and cost-effective alternative for the FBC to consider.

Sincerely,

Tyler Allwood
Director of Business Development

cc: FBC Commissioners
Tom Campbell, Executive Director, Florida Building Commission
Mo Madani, Florida Building Commission

TO: E. J. Carlson, Chair
Florida Building Commission
P.O. Box 511232
Punta Gorda FL 33951

BY ELECTRONIC MAIL
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October 3, 2018

FR: Jerry Vandewater, Crown Roof Tiles

RE: Adoption of ASCE 7-16

Crown Roof Tiles is a multi-national manufacturer of concrete roofing tile and related components with facilities in Arcadia, Florida, Mansfield, TX in addition to facilities in Mexico and the United Kingdom.

As members of the TRI, we support the position and questions raised by the tile industry and others for the delay of action and implementation of ASCE-7-16. The negative impact of the proposed change has been highlighted by our industry and others, but as much as Crown agrees wholeheartedly with the concerns of our TRI membership regarding the proposed changes we are concerned about the impact that this could have on the contractor base that we work closely with on a daily basis.

I personally have worked for over forty years in this industry as a roofer, manufacturer and building code advocate and I can attest to the impact that the TRI and its members have had on improving the standards and practices in our industry. The testing and training that has been undertaken by the TRI membership has been comprehensive and widespread. The solutions that have been developed to prevent the damage that used to be rampant during high wind events have effectively curtailed many of the previous problems and have been proven to be effective in their current form.

In addition to the extensive wind uplift testing performed by the TRI and its individual members, we have been more active than any other industry in providing ongoing training and certifications for our contractors and related trades. The TRI has worked closely with the FRSA and other roofing organizations around the country to increase awareness of code requirements and valid solutions and methods for improving our industry.

We have been proud of our record and the field evidence that has been compiled to prove the effectiveness of our ongoing efforts. The TRI has earned the confidence and support of the roofing community that has embraced the fastening methods that were developed and employed to great success. To enact unnecessary changes at this time would be immensely disruptive to both the roofers and builders who have been struggling to find enough qualified tradespeople to keep up with current demand.

The Florida building community has long been aware of the unique challenges of our State and have accepted the code changes that have evolved over the years but to introduce expensive new requirements at a time when roofers are finally confident in systems that have been established and shown to be effective, we think is not wise and will undo much of the good that has been accomplished in the past twenty five years.

Some of our specific concerns related to this matter include the following questions:

1. Has the commission considered any credible field data from more recent storms to evaluate the performance of roofs installed to the current ASCE 7-10 standard?

The feedback that we receive from our builders and contractors following these recent storms indicates comfort and confidence in the methods and materials currently being employed.

2. Has the commission done any work to determine the cost implications that would arise from the increased fastening and construction requirements?

While our anticipatory analysis shows some very real and predictable cost increases that would result from the proposed changes, our experience is that quite often there are unseen additional expenses and complications that can arise when due diligence is not fully employed prior to implementation of such broad changes.

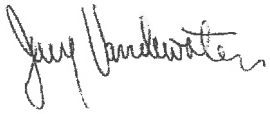
3. Since training and education is a huge function of the TRI and its members, has the commission given any consideration to the cost and complexity of changing our curriculum and the confusion that would likely result in retraining our segment of the roofing industry?

The formal training and certification efforts provided by the TRI and FRSA members has been a critical factor in the improvement of construction practices in Florida. The costs involved in the preparation and dissemination of new information is not often recognized but it represents a significant cost in terms of time and resources required.

In summary, we as Crown Roof Tiles, a member of the TRI join with the other trade and construction associations in urging the commission to delay action on the implementation of the ASCE-7-16 at this time. We further ask that FBC staff be allowed to perform due diligence, cost analysis and work with those affected in Florida to develop a more efficient and cost-effective alternative for the FBC to consider.

Sincerely yours,

Jerry Vandewater



Technical Director
Crown Roof Tiles

cc: FBC Commissioners
Tom Campbell, Executive Director, Florida Building Commission
Mo Madani, Florida Building Commission

TILE ROOFING INSTITUTE

P.O. Box 40337, Eugene OR 97404-0049

TO: E. J. Carlson, Chair
Florida Building Commission
P.O. Box 511232
Punta Gorda FL 33951

BY ELECTRONIC MAIL
jcarlson-soforth@comcast.net

October 2, 2018

FR: Rick Olson - Tile Roofing Institute (TRI) President

RE: Adoption of ASCE 7-16

On behalf of the concrete and clay roof tile industry, we wish to join others in urging the FBC to delay adoption of the ASCE-7-16 codes to allow further discussion and determination of cost impacts that will negatively affect our tile industry and the entire construction industry.

In 1998, the Florida building codes adopted broad changes for wind related roof design requirements that were developed in collaboration of academia, industry and code officials. These changes were created from field performance data, research, code evaluations and in our case full scale wind tunnel testing to determine improved methods for high wind applications of our tile products. The code changes implemented in 1998 and subsequent ASCE-7-10 have successfully performed numerous wind events over time.

The creation of the new ASCE-7-16 for the wind design portions was not the result of any validated field data to demonstrate a need, more the academia decision to raise coefficients that would increase the wind pressures to be more conservative from a design aspect. Industry, construction and even code officials did not play an active role in this process. The revised codes have resulted in a significant increase to all roof claddings that require "Uplift" based pressure design, but allows asphalt shingles which are typically the materials most impacted by high wind events, to escape the affects, as it is the only system allowed on a "wind speed" basis versus uplift pressure design that all other systems must adhere to. The FBC should address that issue and move all products to the same uplift design requirements.

The adoption for the new standard would negatively impact our roof tile industry and the commission is urged to delay this action until it can complete the Florida legislative mandate to determine cost impacts for all those affected. We believe this has not been completed and such a review ill help validate the excessive increase in uplift requirements, costs and confusion in the building markets of Florida.

The greatest impacts of the new ASCE standard will be in areas of higher wind speeds. This makes Florida the hardest hit state in the country, as all areas of Florida are higher wind applications and the significant cost increases will be felt thoughout the entire state.

The following is a short list of some specific areas that the commission should re-evaluate and provide cost impacts for;

1) Has the commission developed credible field data to validate the need for the change and the costs associated?

The adoption of the standard at ASCE-7 and even with ICC was not a unanimous decision and filled with controversy during the hearings. Based upon our field data there are no known issues or deficiencies with tile roofs that are designed and installed to the ASCE 7-10 standard.

2) Has the commission determined the cost implications from increased fastening requirements?

For many roof claddings the proposed codes will require additional fastening that will significantly increase the costs for both new and retrofit markets. The increased fastening will result in additional penetrations in the roof systems that can lead to water intrusion. This affects the cladding, underlayment and substrate in steep slope applications.

In some wind regions, certain code approved products may no longer be able to reach the significantly higher uplift values and be precluded from marketing their products or systems, where they have performed over time. What are the costs when viable options are removed from the open market?

3) Has the commission determined the cost impact of the added roof zones?

The complexity of the new roof zones will confuse and challenge the building industry. The extensive increase in roof zones for Hip and Gable roof designs will be hard to educate, train and enforce in the field during construction. For instance, the most prominent roof design for residential housing is a hip roof. Under the new code provisions there are now six different roof zones that have to be reviewed. The roofing professional is not going to change fastening methods for each of the zones and will default to one method for the entire roof that will unnecessarily increase the project costs, if the highest design is used for the entire roof. The ability to enforce the current designs is not being achieved, and the increase in roof complexity will only further reduce the design and enforcement capabilities.

With the coefficients generating different values for each roof slopes, it will further confuse the design, installation and inspection when specific roof slope, exposure, wind speed and roof height are calculated. This is unfairly impacting the market place when it is not required. Our current ASCE-7-10 standards have been easy to interpret for both installation and inspection.

The ASCE-7 committee already recognizes this challenge and is drafting potential revisions to reduce the number of zones in the next code cycle.

4) Has the commission determined the cost impact for the entire load path?

The proposed increase in pressures will affect the connections from the foundation, through the walls to the roof system. For steep slope roofing this includes the truss, sheathing, underlayment and finally the roof cladding. Our roof tile, as a cladding is dependent upon all of the connections below the tile to be properly designed and installed to meet the entire load path requirements. We are not able to or should be required to determine what the components below the cladding should be.

5) Has the commission determined the cost implications from the building official's perspective to review, inspect and provide certification of compliance for the additional requirements?

In many areas the current best practices, products and system approvals will be significantly affected and will have to be re-engineered, reviewed and re-issued by the state and local code authorities. The costs and delay in the construction process is significant. The current product approval process is already overburdened, and further delays will only increase costs, confusion and the ability to meet the current building demand.

6) Has the Commission considered the costs for the new wind contours?

The ASCE-7-16 includes movement of the wind speed map lines further to the north in Florida. This will require all jurisdictions to re-evaluate and formally adopt new design wind speed designations for permit and compliance.

7) Has the commission determined the new policy and costs for repairs and retrofit for compliance with the code?

Currently, each jurisdiction sets the requirement for when a roof repair will require the upgrade of the full roof to meet the newer codes. If the underlayment, sheathing and truss attachments are in question with the new standards, how will the current conditions be determined and what are the costs implications? The previous compliance that involved just the cladding fastening will no longer be valid. How will the building official know without destructive forensics the full

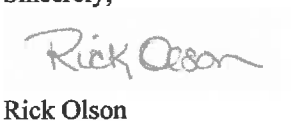
alterations that will be required? This will have a significant impact on the cost to the homeowner. This will adversely affect the re-roof and repair projects that occur with each year's wind events. This will complicate the negotiations and complexity with insurance adjusters who already are challenged by the current codes in place. The long-term effects will be higher insurance premiums for building owners.

8) Has the commission determined the cost increases to the builders and the increased long-term economic impact to the overall housing industry.

The significant increase will be passed on to the consumer. The Florida economy depends upon the housing growth and this will increase costs, delay design phases of building and complicate the contractor's crews and building inspection process.

In summary the TRI and its members join with the other trade and construction associations in urging the commission to delay action on the implementation of the ASCE-7-16 at this time. We further ask that FBC staff be allowed to perform due diligence, cost analysis and work with those affected in Florida to develop a more efficient and cost-effective alternative for the FBC to consider.

Sincerely,



Rick Olson
President
Tile Roofing Institute

cc: FBC Commissioners
Tom Campbell, Executive Director, Florida Building Commission
Mo Madani, Florida Building Commission