

PROPOSED AGENDA FOR THE AUGUST 14TH, 2018 POC MEETING

List of proposed agenda items:

1. Lack of product detail & specification in Engineer Evaluation Method 1D approvals.
2. Method 1A approvals and the growing number of engineer certified documents being uploaded within that are beyond installation instructions.
3. Method 1A approvals with manufacturer supplied non-third party engineer verified installation instructions that include anchoring methods and anchoring to substrates not tested to &/or lack proper anchoring specifications.
4. Method 1A approvals with a single generic listing having multiple certificates uploaded into the "certification entity certificate" section of that listing in lieu of each unit tested requiring its own separate listing and certificate upload.
5. Lack of product approval enforcement.
6. The role local building officials play in the product approval process and its use and their enforcement obligations with product installations and product approval compliance.
7. Plagiarism and miss-use of Florida Product Approvals to achieve local approval for untested & unapproved products.
8. Method 1D approvals becoming too difficult to understand and, as a result, are becoming a danger to use and make it difficult to impossible to accurately distribute, install & inspect product.
9. Clarity and clarifications required in the product approval rule 61G20-3 and the product approval checklists.

Opening statements:

- The intent of this forum is to present issues with the product approval rules & process, have open discussion regarding the issues presented, determine what issues require further action beyond this forum, come up with and propose recommendations as to how to resolve each problem; and better the approval system to insure clarity, correctness, integrity, enforcement and consistency within.
- The issues being presented at this forum are in no way meant to imply any wrong doing by any individual or entity and we urge all to be respectful accordingly. It is the desire of this forum to simply & productively solve issues within the approval rules and process and not point fingers as to any fault or wrong doing.
- In order to present issues with back-up that they actually do exist, examples of applicable approvals have been randomly selected and are given as examples only where necessary. In order to protect all entities within those approvals, the approval numbers and entity information have been removed or blanked out. Reference of approvals in no way implies any wrong doing by those entities listed in the approvals.
- While only window and door approval examples are provided, the issues being addressed apply to all products within the Florida approval system.

Discussion item 1:

Lack of product detail & specification in Engineer Evaluation Method 1D approvals.

Reference addendums 1A & 1B as randomly selected examples of approvals that apply to this issue.

- A. It is suspected that there a disconnect within these approvals between the uploaded engineering documents and the QA? With a lack of detail directly included in the approvals uploaded engineering documents for the QA to plant inspect off of, the engineer is depending on QA to take on liability that they may not be aware of or agree to. Additionally, the engineer is assuming that, during their plant inspections, the QA has ready access to all the documents the engineer references in his/her evaluation report so the question must be asked; Is this assumption accurate and do all the QA entities agree? It should be noted that, unlike with the certification entities in 1A approvals, the engineers and QA are not internally linked.
- B. Limiting detail in an evaluation report and/or drawing based on reasoning that details of a product are proprietary which in turn limits proper plant & job site inspections. "Proprietary", as defined, is something that holds a legal patent, copyright or trademark. It is not a part nor assembly simply owned & produced specifically by a manufacturer. Even proprietary items should be verifiable by each the QA & those purchasing, installing & inspecting the product.
- C. Some assume that with a one time a year QA plant spot inspection, products are immune to wrongful use whether purposeful or by mistake. For proper public protection, there should be enough information in an evaluation 1D approval for the public to verify that what they are getting is what is approved. Note that "public" includes those specifying, selling, purchasing, installing and field inspecting the product. Also note that manufacturers not under an accredited certification entity contract, are typically specialty type manufacturers that predominantly use the 1D approval method. Because they do not generally have a consistent assembly line type process QA'd, there is a definite need for those using the approvals to have the capability of inspecting product as it arrives on the job site. Without the proper detail in the uploaded approval documents, this is not possible.
- D. There is the false assumption by some that local building officials require verified shop drawings with each job where product is being installed and that local building officials are somehow privy to the test reports referenced in an engineer's evaluation report. It is safe to say that shop drawings are not typically required by the building officials & that they do not spend the time necessary to obtain and review test reports.
- E. There is an apparent issue with type written evaluation reports vs. detailed engineering drawings. Engineer's evaluation reports should include product assembly and installation drawing details. All in the construction world typically agree that drawings are much more efficient for use than a type written product description and are much less likely to result in errors, over sights and misinterpretations. It is also safe to assume, building officials do not desire to inspect jobs off lengthy type written descriptions.
- F. Based on an engineer's evaluation, an engineer must be responsible for what he/she is evaluating & certifying and not be dependent on a quality assurance program or any other individual or entity that is not under his/her direct control.

Potential solution options (Discussion item 1):

- Add a statement to the 1D validation check list that requires the validator to confirm that all necessary product assembly and installation detail is included in the uploaded

engineer's evaluation drawings &/or report as necessary to allow for proper Quality Assurance & job-site inspection in a manner that can best insure all components within a product being used are in accordance with what was tested and approved and that all installations are as required.

- Update rule 61G20-3 to clearly state that product detail is required in an engineer's evaluation drawing &/or report, be specific as to what detail is required, and possibly be specific as to how the detail is to be formatted in the approval.
- If the referencing of test reports is deemed acceptable over showing all pertinent detail in the engineer's evaluation drawings or report, require that the test reports and all supporting documents such as test drawings be uploaded with the engineer's evaluation report. Also add an item to the check list that requires the validator to insure that the evaluation engineer has verified all uploaded documents to be correct and consistent with his/her evaluation documents. Note that I do not believe this to be a viable option due to the clutter of documents that would occur and the confusion that would result.
- For true proprietary items within a product being evaluated that are crucial to the product but are not detailed in the evaluation drawings or report, require that those items be minimally specified in a manner that allows those using the approval to confirm accurate use of those proprietary items along with the applicable reference that proves them to be proprietary.
- Meet with the Florida Board of Engineers and propose changes to engineering rule 61G15 to add a separate requirement section for product approval evaluations that clarifies an evaluation engineer's responsibility and minimum document requirements.

Discussion item 2:

Method 1A approvals and the growing number of engineer certified documents being uploaded within that are beyond installation instructions. Reference addendums 2A & 2B as randomly selected examples of approvals that apply to this issue.

- A. Main reason suspected for the growing number of approvals with this situation: To have all the benefits of a 1D evaluation approval, but receive state approval for the evaluated product within the 10 day cycle applicable to 1A approvals.
- B. In any 1A approval, isn't the certification body listed within, considered to be the governing body over the approval with the only exception being with the installation instructions in those approvals that are certified by a 3rd party engineer & validated as part of the approval? The addition of engineering documents into 1A approvals that imply, address or specify other than installation requirements makes it uncertain who the governing body over the approval is and what responsibilities the certification body holds for that approval.
- C. Whether validated by the certification body or a third party validator, are the certification bodies listed on the approvals aware of and thus assuming responsibility for the additional engineering evaluation documents uploaded into the approval?
- D. Whether validated by the certification body or a third party validator, are the QA entities listed on the approvals aware of all uploaded engineer's documents (excluding specific installation instructions) and thus assuming responsibility for plant inspections of the products that are to include inspection based not only on the test reports referenced in the CB's certificate but the engineer's evaluation documents uploaded into the approval? If so, during their inspections, is the QA confirming that there are no inconsistencies between the engineer's documents uploaded and the test reports? Note that the method 1A approval checklist does not require any such verification by the validator so that seems to leave the QA as responsible.
- E. Where is the line drawn between a method 1A approval and a 1D approval if a 1A approval is allowed to include full engineer evaluation documents uploaded within that, unlike a Dade County NOA, are likely not typically verified by the certification body nor their QA?

Potential solution options (Discussion item 2):

- Limit 1A approval uploads to just the Certification bodies certificate, documents specifically verified in writing by the certification body, and installation details/instructions that apply only to the installation.
- Update rule 61G15-3 to require that the 3rd party engineer certified installation instructions/drawings state that the details & specifications within are applicable to installation only and not the products assembly and that the governing design pressure on the product shall be the lesser of that specified in the installation documents or the products approval listing.
- If an impact product and a glazing detail is uploaded in lieu of adding a glazing description to the limits of use, allow only glazing details verified in writing by the certification body to be uploaded.
- Add an item to the 1A validation check list that requires the validator to confirm that, other than installation details/instructions, no documents are uploaded that are not verified in writing by the certification entity.
- Add an item to the 1A validation check list that requires the validator to confirm that the uploaded installation instructions do not include anything above and beyond what is required to specify the installation requirements.

Discussion item 3:

Method 1A approvals with manufacturer supplied non-third party engineer verified installation instructions that include anchoring methods or anchoring to substrates not tested to &/or lack proper anchoring specifications. Reference addendums 3A, 3B, 3C, 3D & 3E as randomly selected examples of approvals that apply to this issue.

- A. Is it acceptable by rule to have manufacturer supplied installation instructions uploaded into a 1A approval that specify substrates other than tested? (See addendums 3A, 3B & 3C)
- B. Is it acceptable to the certification bodies listed on approvals to have manufacturer supplied installation instructions uploaded into the approval that specify substrates other than tested? (See addendum 3A, 3B & 3C as applicable)
- C. Is it the responsibility of the certification body, the validator, or both to verify only those substrates & methods tested to be specified in the installation instructions & that all necessary information is in those instructions?
- D. Regardless of testing, how is it acceptable to specify a product with its anchorage being via a sealant placement in lieu of anchors considering field applied sealants cannot be covered by QA nor are their placements capable of being field inspected? (See addendum 3D as applicable)
- E. Considering code requires that the standards referenced within be met and that anchors are governed by standards referenced in the code which require safety factors to be considered, why is it acceptable for installation instructions to include anchor conditions that do not meet the applicable anchors load standards. Because a window passes a test at a specific pressure does not mean that the anchors supporting that window are not being loaded beyond their rated load. (See addendum 3E as applicable)

Potential solution options (Discussion item 3):

- For 1A approvals where there are manufacturer supplied non 3rd party engineer certified installation instructions, add an item to the 1A validation check list that requires the validator to confirm that the installation instructions do not include installation methods or installation to substrates not tested.
- For 1A approvals with 3rd party engineer certified installation instructions, add an item to the validation check list that requires the validator to confirm that only installation methods tested are specified in the installation instructions.
- Require that all installation instructions be verified by a PE to comply with the minimum tested and with all applicable anchor standards.
- Disallow the use of sealants as a substitute for anchorage of any product to a substrate.

Discussion item 4:

Method 1A approvals with a single generic listing having multiple certificates uploaded into the “certification entity certificate” section of that listing in lieu of each unit tested requiring its own separate listing and certificate upload. Reference addendum 4 as a randomly selected example of this issue.

- A. It is the understanding of most that with 1A certifications, each tested unit is to have its own approval listing with its own certificate uploaded.
- B. Upload of multiple tested unit certificates into a generic listing makes it extremely difficult to impossible for the users of the approval to know what applies to any specific condition or job and should not be acceptable.

Potential solution option (Discussion item 4):

- Add an item to the 1A validation check list that requires the validator to confirm that, unless there is an evaluation report from the certification entity uploaded into an approval listing that covers multiple tested product units, each tested unit has its own listing in the approval and that only the certificate applicable to the specific product listed is uploaded into each individual approval listing.

Discussion item 5:

Lack of product approval enforcement.

- A. Do to the lack of clarity and requirements within validation check lists as to who is responsible for what, many responsible parties are seemingly not insuring that the product approval rule and guidelines are being met with each approval submitted, nor are they insuring that disconnects between the certification, QA & engineering entities do not exist.
- B. Due to lack of clarity in the product approval rule & validation check lists, too many grey areas exist that result in a lack of guidelines for, and thus enforcement by, the approval certification, QA, evaluation & validation entities.
- C. Product approval enforcement is currently solely dependent on public comment, yet there is a less than desirable public comment process that acts as a severe deterrent of its use by the public. There is also no due process that allows for a proper discussion and debate to occur with the posting of public comments nor after the review of public comments. Currently, the POC simply allows the commenter to briefly state their case and then the defendant to briefly state their defense. There is no discussion nor rebuttal process, which is crucial to determine whether or not there truly is an issue, nor is there any proof required to either back up the public comments claims or the claims of those defending the public comments. The words of those speaking is typically all that is taken & considered.
- D. Lack of enforcement by the local building departments/officials which is covered in the next discussion item 6.

Potential solution options (Discussion item 5):

- For “A” & “B”, see potential solutions recommended with discussion items 1-4.
- For “C”, change the way public comments are handled by the staff, POC and possibly the building commission to allow for proper & fair debate in a manner that each side is given the opportunity for proper presentation and rebuttal. Require all possible substantiating data and/ or documents be submitted by each the public commenter and the comment defender in order to prove their claims. Do not simply take someone’s word except in the situation where a public commenter does not have physical evidence, but has justifiable reason for concern. Provide a friendlier system whereby public comments can be issued & debated without unjustified & uncalled for backlash and/or threats from those the comments are applicable to.
- For “D”, see potential solutions for discussion item 6.

Discussion item 6:

The role local building officials play in the product approval process and its use and their enforcement obligations with product installations and product approval compliance.

- A. Building officials play a key role in the approval process in that they are the final link in the chain, yet there is no clear link between product approval rule and the responsibility of the building officials to insure the final link in the chain is secured.
- B. It is the concern of many (contractors, engineers, etc.) involved with the use of product approvals and product installation that building officials, plans reviewers and inspectors are becoming lax with what many perceive to be their product approval job review and on-site inspection responsibilities.
- C. Buck & mullion inspections are currently being ignored by many building officials if not the vast majority.
- D. It is suspected by many that a number of building officials are simply looking to see that a product listed in a jobs permit request documents has an approval and are not following that up with the necessary job plans reviews and job site inspections.
- E. Three reasons suspected of and/or given by some building officials for the lack of on the job product approval review and product inspection: 1) Lack of man power to perform those reviews and inspections. 2) Many approvals have become extremely difficult to review, so rather than delay the permit process, the review of the approval and inspection of the product installed is simply being ignored on the assumption that the approval will make all things right. 3) Building department personnel possibly becoming too trusting of those responsible for specifying and installing products on the job.
- F. Lack of local enforcement is putting extensive & uncontrolled liability on product manufacturers and those approval entities responsible for the products approval.
- G. With the lack of local building department oversight and inspection, install methods and product alterations are being used in the field that are not specified in the approvals nor approved via an engineer's job specific certification.

Potential solution options (Discussion item 6):

- Provide a statement in the Florida Building Code that requires building officials to perform product plans review and inspections necessary to confirm that the supporting substrate and the products installation to that substrate are as specified in the products approval installation instructions, that the product is as labeled and, if there are options specified in an approval, the options applicable to the product units on the job are verified to be correct for that job. Note that verification of options can be easily accomplished via a marked up approval document supplied by the permit holder that circles, highlights or points out the job applicable options in the approval. The building official can require this document to be verified and sealed by a licensed engineer if necessary.
- Provide a statement in the Florida Building Code that requires all product supporting bucking & mullions, including their installations, to be specified and certified by a licensed engineer for each job unless specifically specified in a product approval.
- If an approval is too difficult to review, the building official should simply refuse issuing the permit and then require verification of the proposed product for the job via an engineer's certification or certified statement.

Discussion item 7:

Plagiarism and miss-use of Florida Product Approvals to achieve local approval for untested & unapproved products.

- A. Manufacturer's incur a huge burden and expense to obtain product approval yet the approval rule has no protection implemented within that protects the approvals from plagiarism and misuse by competitors who have no tested or approved product yet willingly use others approvals to gain local approval of their own products. Instead all approvals are considered public record which is the main cause of said abuse.
- B. How can protection be put into place?

Potential solution option (Discussion item 7):

- Place an ownership statement in rule 61G20-3 that states ownership of each product approval & the documents uploaded within are that of the manufacturer listed on the approval and that neither the approval nor the documents within may be used in any way by another to gain local or state approval of their products without proof of consent from the approval listed manufacturer and approval entity.

Discussion item 8:

Method 1D approval documents becoming too difficult to understand, thus making it difficult to impossible to accurately distribute, install & inspect product. As a result, they are becoming a danger to use. Reference addendum 5 as a randomly selected example of this issue.

- A. There are too many conditions and too many variables in the anchor, load, pressure and information tables for efficient use & understanding of the approval.
- B. Load & information tables are being formatted in a difficult to understand and confusing manner.
- C. Input from building officials & those using the approvals would be helpful regarding this issue.

Note: It is not expected that a product approval rule can be put into place to solve this issue. Mentioning of this problem is geared more to bring awareness to all those involved in the product approval process. It is up to the self-awareness of those preparing and certifying these difficult documents & the ability of those individuals to say “NO” when asked by a client to produce or accept such things. Know however that when an engineering document is too difficult for its users to understand, the engineer responsible for that document can be subject to disciplinary action by the FBPE if brought up to the FBPE via a registered complaint and that document is determined to be difficult and confusing to a point of its use being dangerous and neglectful to the public.

Potential solution options (Discussion item 8):

- Building officials refuse issuing job permits for such approvals without proper verification of the proposed product for the job via an engineer’s job specific certification or certified statement.
- Certification bodies accepting such approval documents simply refuse them. If necessary, the certification bodies can allow open discussion with the evaluation engineer to plead his case and come to a compromise that works for all and cleans up the approval before it is uploaded.
- QA entities refuse in-plant inspections where use of these documents is required and makes inspection difficult.
- Manufacturer’s begin realizing that such extreme information in an approval significantly increases their liability and adds difficulty & cost to the entire process of choosing the right product for the job, job applicability verification, distribution, installation, permit review and permit inspection. The likelihood of mistakes also significantly increase, which many times results in added expense from job specific certifications, re-installs, and law suits.
- Engineers simply realize the liability they are taking on with every potential mistake that potentially occurs with use of their documents & advise their clients against the overkill of information.

Discussion item 9:

Clarity and clarifications required in the product approval rule 61G20-3 and the product approval checklists.

- A. Confusion between an administrative and technical validation. There must be better clarification as to what the difference is between an administrative and technical validation and when a technical validation applies.
- B. Item 6 in the 1A administrative validation checklist is unclear. What exactly is it saying and are anchors required to meet allowable loads per their respective standards? Note that many times installation anchors are receiving loads in testing that well exceed their allowable as dictated by their standards, yet installation instructions are being uploaded as tested with no regard to the code required anchor standards.
- C. If an administrative validation, how is it the validators responsibly to comply with item 11 in the 1A administrative check list without a technical review of all documents?
- D. Items 12 & 13 in the 1A administrative check list seem to conflict. 12 implies rational analysis is acceptable while 13 states it is not.
- E. Rule 61G20-3 changes are necessary to address all issues discussed in all discussion items here-in.

Potential solutions (Discussion item 9):

- “A”: Staff to clarify. Recommendations for change to follow.
- “B”: Staff to clarify and give clarity to checklist item 6. Recommendations for change to follow. Note that one recommendation regarding anchor load verification is to require product approval installation instructions be verified by a licensed engineer to meet applicable anchor standards.
- “C” & “D”: Staff to clarify. Recommendations for change to follow.
- “E”: Reference potential solutions stated for discussion items 1-8.

Conclusion statement:

Due to lack of clarity & detail within the rules & validation check lists and the lack of enforcement by all responsible parties within the approval process, some manufacturers and entities involved in the process are continually testing the waters & it has become painfully apparent that when given an inch, too many are taking a mile. This is putting undo stress on approval entities to lower their standards in order to compete and is causing the approval process & those approvals within to become increasingly inconsistent, incomplete, difficult to use, and flawed. It is important that definitive lines be established, drawn and held permanently. It is also important that the issues currently being proposed be addressed and resolved with the full understanding & cooperation of each the POC, Building commission, and all entities involved in the approval process.