

**Minutes of the State Appeals Board**  
**Appeal #13-01**  
**Wednesday, January 23, 2013**  
**Preliminaries: 8:30 AM; Hearing 8:40 AM**

**Preliminaries:**

- Appeals Board Members included Dale Schoeppner, Building Official for the City of Eagan, Dave Scherbel, Building Official for the City of Arden Hills, Thomas J. Downs P.E., FACI, President, Forensic Experts PLLC, Thomas Gray, Building Official for the City of Victoria, Steve Kothman, Hanson Builders. The EX-officio (non-voting) member was Richard Lockrem from Construction Codes and Licensing Division (CCLD). Doug Nord also from CCLD took meeting minutes.
- Richard Lockrem welcomed the board members and thanked them for taking part in the appeal. Richard Lockrem had given each board member a copy of suggested proceedings and went over the rules of procedure with them. Richard Lockrem went over the subject of the appeal: the attachment of an exterior deck on a single family dwelling in regards to the deck rim being attached to an engineered floor system. The applicant also had some question regarding joist spacing on the deck and a cantilever of the deck over a beam.
- Dave Scherbel nominated Thomas Downs as chair of the meeting. Dale Schoeppner seconded the motion. Motion carried.

**Hearing call to order:**

- Thomas Downs called the meeting to order at 8:40 AM. He went over appeal items as to the applicant stating the true intent of the code or the rules have been incorrectly interpreted and an equally good or better form of construction is being proposed. He had the board members introduce themselves and then those in the audience; John Buckley, Building official for the City of Bayport, Christopher Koss, 1<sup>st</sup> Choice Home Improvements, (applicant), Scott Wheeler, CCLD and Jeffrey Lebowski, CCLD. Thomas Downs explained the applicant and building official as well as other interested parties would have time to present and then he would close that off and allow time for the board to have discussion amongst itself before coming to a decision. Thomas Downs asked the applicant to go over his appeal and then the building official would go.
- Steve Kothman asked Chris Koss what was actually being appealed, is it the connection of the deck to the floor system only or are there issues with the joist spacing and cantilever.
- Christopher Koss stated he is really here for the connection of the deck but if time allowed he would like to talk about the building official requiring him to space the deck joist at 12 inches on center instead of 16 inches and would not allow a two foot cantilever and noted these two items are completed and the only issue holding up the completion of this deck is the attachment issue. He'd like to talk about the joist spacing and cantilever for future reference.
- Doug Nord reminded the board members and Christopher Koss that this appeal is site specific and does not set a precedent for other projects.
- Christopher Koss went over the connection of the deck to the engineered floor system and stated the code states it is to be positively attached and designed for both vertical and lateral

loads. Christopher went over technical bulletin 304 from Weyerhaeuser, who according to Christopher is the manufacturer of this engineered floor system, explaining the joist span he had for the deck and fastener spacing on the ledger board using LedgerLOK fasteners and explaining their installation requirements. He went over his pictures with the board explaining blocking he had in place and feels his design meets the 2006 International Residential code (IRC). Christopher then went over his design as to the joist on the exterior deck and cantilever. He states the deck joist are 14 feet long and cantilever over a beam located at 12 feet. He had designed the joist to be 16 inch on center and John Buckley required him to put the joist at 12 inches on center and would only let him cantilever 12 to 18 inches past the beam. He feels the building official exceeded the code and that he had designed to the code. He states John Buckley said the owner was going to install a hot tub on top of the deck which is not true.

- Dave Scherbel asked Christopher Koss how thick the rim board was and if the blocks he installed were tight to the rim.
- Christopher Koss stated he couldn't verify the rim thickness and the manufacturer only offers two thicknesses. He states he defaulted to the thinner of the two for use of the manufacturers table for fastener attachment. He states the blocks were installed tight to the rim, which had been insulated with a spray foam and the foam was scrapped back to allow for placement of the blocks.
- Dale Schoepner asked Christopher Koss how many screws he used to attach the blocks to the web of the engineered joist and what type of screw.
- Christopher Koss went over the number of screws used and stated they were sheet rock screws.
- Steve Kothman asked how this all came about as he had met with John Buckley prior to permit issuance and agreed to an attachment method that satisfied John Buckley and then you chose a different method of attachment.
- Christopher Koss stated his recollection of that meeting was only a recommendation from John Buckley.
- Thomas Downs thanked Christopher Koss for his statements and asked John Buckley to go ahead with his statements.
- John Buckley stated that he had met with Christopher Koss at time of permit application and went over what he expected. He had required there to be a block installed on each side of the engineered joist and that it be through bolted and then the LedgerLOK fastener be used to attach the ledger into the blocks. At the final inspection there was only one block installed which is not what Christopher Koss had agreed to do. John Buckley states he contacted an engineer at Boise Cascade, who according to John is the manufacturer of this engineered floor system, and was sent a repair, designed by this engineer, addressing blocking and other issues. This design also addressed proper nailing of the engineered rim of 2 to 3 inches on center and John Buckley states he talked with the contractor that built this home and they did not follow that recommendation from the manufacturer. John Buckley states he sent this information to Chris Koss and nothing was done so now he is requiring the connection to be designed by a

Minnesota Licensed Structural Engineer or follow the repair designed by the engineer from Boise Cascade which he feels he has the right to do. John Buckley states this is a life safety issue and he won't budge on this. He doesn't feel what is existing would meet a structural engineers design.

- Thomas Downs thanked John Buckley for his statements and asked the board members if they had any further questions.
- Dale Schoeppner asked John Buckley, you stated the rim was not installed properly at 2 to 3 inches on center per the manufacturer and the contractor stated he had attached the rim at 6 to 8 inches on center but not per the manufacturer.
- John Buckley states the Boise Cascade representative told him if it wasn't nailed 2 to 3 inches on center there are other issues to take into consideration.
- Dave Scherbel asked John Buckley about installing clips.
- John Buckley as well as others commented that would be hard to do now.
- Steve Kothman asked John Buckley if he would have accepted the attachment he had come up with at time of application for a permit.
- John stated yes he would have.
- Steve Kothman then asked Christopher Koss if he agreed with that attachment method.
- Christopher Koss stated he only took it as a recommendation.
- Dave Scherbel asked John Buckley where he came up with his design.
- John Buckley states through classes and working with contractors.
- Dave Scherbel asked if it was engineered.
- John Buckley stated that it wasn't.
- Christopher Koss states he calculated lateral load based on fasteners and he could go over that if requested and feels he met the code with his attachment. He states John Buckley's plan review stamp on the plan states it needs to meet the Minnesota code which he feels it does.
- Thomas Downs closed presentations and asked the board if they had any questions.
- Tom Grey stated the code is weak on exact attachment and when choosing an application you just can't pick and choose but have to be specific as to what's there.
- Christopher Koss went over his blocking and attachment and states he didn't just follow one thing and doesn't even feel blocking is required.

- Thomas Downs asked for board member comment.

#### **Board discussion**

- Dave Scherbel feels there may need to engineering but this is a pretty typical deck and by Christopher Koss putting in blocks, that may be alright but the screws used to fasten the blocks concern him.
- Dale Schoeppner commented that mixing and matching is not a good idea. Dale asked both Jim Buckley and Christopher Koss if they agreed on the manufacturer of the engineered floor system.
- Both John Buckley and Christopher Koss answered no.
- Dale Schoeppner commented he was concerned of the blocks being attached to the joist web by sheet rock screws. He asked Christopher Koss what does the manufacturer of the engineered floor system require specifically for attachment.
- Christopher Koss stated nothing under the 2006 (IRC), but they do have more specifics under the 2009 (IRC) and the 2012 (IRC).
- Dale Schoeppner stated there should be a specific design by the manufacturer.
- Christopher Koss stated Weyerhaeuser only has technical bulletin 304.
- Dave Scherbel stated that the rim not being nailed per the manufacturer is an issue that needs to be verified.
- Christopher Koss asked, wouldn't that have been inspected when the home was built two years ago.
- John Buckley stated that would normally be covered up at the time of the framing inspection and if Christopher Koss had installed two blocks at each joist and through bolted the rim would be out of the equation.
- Christopher Koss asked John Buckley what loads are required under the 2006 (IRC).
- John Buckley responded saying that is why he is requiring a structural engineer.
- Christopher Koss stated he calculated loads using LedgerLOK numbers and there is 4,000 pounds of load and admits the sheet rock screws used to attach the blocks to the joist may be a weak point.

- John Buckley states because of the unknown he is requiring a structural engineered design and feels he has the right to ask for that.
- Christopher Koss stated there are no specific numbers in the code and states he talked to other building departments and they would accept his design.
- John Buckley stated he wants a statement from an engineer on the present connection to the engineered floor system.
- Steve Kothman told Christopher Koss he can appreciate inconsistencies in interpretation from different building departments from being in building for 35 years. He believes John Buckley has the right to request engineering and especially when a method was agreed upon prior to construction and you chose to do something different.
- Christopher Koss doesn't disagree but feels John Buckley should not design. He feels most building officials would accept his connection under today's code. When the new code comes into play there will be more requirements but right now he feels he has made a positive connection and it is code complying.
- John Buckley stated he shouldn't design and doesn't anymore. He had gone over this type of connection prior to this project with inspectors in the area and they came up with a consensus to be cost effective and in lieu of requiring engineering. He now realizes the need for design.
- The board talked amongst themselves at this time regarding the deck attachment.
- Steve Kothman asked John Buckley if he would allow Christopher Koss to fix according to what he had received from the Boise Cascade Engineer. John Buckley stated no, now that he has direction from his jurisdictional attorney. He stated he is looking for a design professional at this stage of the game unless he was directed otherwise by the city attorney.
- Tom Gray asked Christopher Koss if he could propose to John Buckley to meet the 2009/2012 (IRC).
- Christopher Koss went over his attachment per LedgerLOK.
- Steve Kothman stated he has the LedgerLOK report with him and the issue may not be a LedgerLOK issue but more of a connection issue.
- Christopher Koss went over his positive connection again.
- Dave Scherbel asked Thomas Downs what he felt.
- Thomas Downs feels it is a positive connection but the sheet rock screws attaching the blocks to the joist are not acceptable. Other than that he feels the job is done. He doesn't feel two blocks on each joist would be required but if there were 2 through bolts you would have a good connection.

- Dave Scherbel stated as to the existing other than the sheet rock screws it may be fine but John Buckley has the right to require engineering.
- Dale Schoeppner stated as it is now he doesn't believe it meets the Boise Cascade design fix as there is nothing prescriptive but feels with modification it could meet code.
- Christopher Koss asked if he has met the present code.
- Thomas Downs stated he believes he may have met the code but is concerned of sheet rock screws being used.
- Christopher Koss states he would gladly add screws.
- Steve Kothman stated with further attachment he would accept. He talked about adding GRK screws.
- Christopher Koss stated he would add 3 GRK screws into each block.
- Dale Schoeppner stated he would also accept with added fasteners.
- Dave Scherbel stated he would also accept with added fasteners.
- Thomas Downs asked Tom Gray what he thought.
- Tom Gray stated aren't we becoming designers.
- Dave Scherbel stated he is concerned if the board takes away John Buckley's right to ask for engineering.
- John Buckley stated he would accept Thomas Downs professional opinion and if the board is comfortable with it he would run that by the city attorney.
- Tom Gray states he would only accept engineering or a national design.
- John Buckley states if the city attorney is not comfortable with the proposal he would then want professional design. He went on to say if the board is comfortable with the added fasteners he is also.
- Christopher Koss stated isn't the board to work this out.
- Thomas Downs made a motion to consider: the deck meets the code for positive connection except for lateral force transfer at the blocking. Christopher Koss will need to provide lateral force transfer between the blocking and the web. Christopher Koss needs to provide John Buckley with the connection device(s) and number he is proposing to John Buckley for his approval. Once approved, move forward with the fix and get the final inspection approved by John Buckley.

- Dale Schoeppner seconded the motion.
- Thomas Downs asked for a vote of those that were in favor of the motion.
- The board voted unanimously for motion approval.
- Thomas Downs asked if there were any more questions.
- Doug Nord asked Thomas Downs if the board was accepting the motion as an alternate to the code.
- Thomas Downs answered yes.
- Dale Schoeppner asked Thomas Downs if the board would be addressing the other two issues.
- Thomas Downs stated they were already off the table for discussion.
- Thomas Downs asked if there was a motion to adjourn.
- Dale Schoeppner made motion to adjourn.
- Steve Kothman seconded the motion.
- All board members were in favor to adjourn.

The board adjourned at 10:05 AM.

Respectfully submitted,

Doug Nord  
Richard Lockrem