



CSI KNOXVILLE CHAPTER MEETING TUESDAY, SEPTEMBER 8TH, 2015 *DESIGN OF A NET ZERO CONDOMINIUM COMMUNITY IN DOWNTOWN KNOXVILLE*

Presented By: By William (Bill) Miller, Ph.D.

Energy and Transportation Sciences Division of the Oak Ridge National Laboratory
Joint Faculty for the College of Engineering and Lecturer for Architecture and Design at the
University of Tennessee



CALHOUN'S ON THE TENNESSEE RIVER

400 Neyland Drive
Knoxville, TN 37902
(865) 673-3355

Our evening meetings are generally on the 2nd Tuesday of each month and are at Calhoun's on the River in one of the upstairs meeting rooms.



| | |
|---------|---------------------------------|
| Social | 5:30 pm |
| Dinner | 6:00 pm |
| Seminar | 7:00 pm |
| \$0 | CSI Members |
| \$0 | First-Time Guest |
| \$20 | Returning Guest/ Non-Members |

Please RSVP to csiknox@gmail.com by Monday, September 7th, 2015 at 3:00 pm

ORGANIZED SEPTEMBER 1958 - CHARTERED MAY 1959

THE KNOXVILLE CHAPTER MEETS ON THE SECOND TUESDAY OF EVERY MONTH. GUESTS ARE WELCOME!



CSI KNOXVILLE IS A MEMBER OF THE CSI GULF STATES REGION

THE SPECK Editor

Stacy Flick Colbaugh - Editor
scolbaugh@lewisgroup.net

THE SPECK is published monthly by the Knoxville Chapter of the Construction Specifications Institute. Readers are encouraged to submit articles and images of the construction industry interest for our membership. All submittals should be sent via e-mail, in the following formats: PDF, RTF, TIFF, JPEG, DWG, BMP, EPS, & DOC. Deadlines are the 25th of each month.

CALENDAR OF EVENTS

SEPTEMBER 2015

- 01** CSI Board Meeting - Tuesday, September 4th at 5:30 pm at Odle & Young's Office
- 08** CSI Chapter Meeting - Tuesday, September 8th at 5:30 pm at Calhoun's on the River.
"Knoxville Mixed-Use Urban Living Design of a Net Zero Condominium Community in Downtown Knoxville" Presented by William (Bill) Miller, Ph.D.
 As a corporation, the state of Tennessee requires us to hold an annual meeting of the membership. This meeting will be held on Tuesday, September 8, 2015 as part of our September Chapter meeting at Calhoun's. Please join us as we address the 2015-16 budget and other chapter business.
- 23** CSI Lunch and Learn - Wednesday, September 23rd at 11:30 pm at East Tennessee Community Design Center WATE 6 Carriage House
"Insulated Metal Wall and Roof Panels for Sustainability and Energy Efficiency"
 By Mike Weaver, CSI, CDT, MetlSpan
 AIA Credits: 1.0 (AIA/CES and GBCI)
- 30** The CSI National Convention – CONSTRUCT 15 – is being held in St. Louis in starting Wednesday, September 30 through Saturday, October 3. If you are interested in joining the group going from the chapter, contact President Gary Bergeron or Kathy Proctor, Planning Chair.

OCTOBER 2015

- 06** CSI Board Meeting - Tuesday, October 6th at 5:30 pm at Odle & Young's Office
- 13** CSI Chapter Meeting - Tuesday, October 13th, at 5:30 pm at Calhoun's on the River.
"Insulating Coatings Powered By Aerogel Particles" Presented By Mark Goulet, NexGen Coating Resources, Inc. AIA Credits: 1.0 LU/HSW, 1.0 PDH
- 28** CSI Lunch and Learn - Wednesday, October 28th at 11:30 pm at East Tennessee Community Design Center WATE 6 Carriage House
"Low-Rise Machine Room-Less Elevators" By Tim Owens, ThyssenKrupp Elevator Americas AIA Credits: 1.0 LU hour



KNOXVILLE CHAPTER: SEPTEMBER 2015

- 1 EMERGING PROFESSIONAL**
- 2 EMERITUS**
- 2 RETIRED**
- 16 STUDENT**
- 49 PROFESSIONAL**
- 70 TOTAL**



THE PRESIDENT'S MESSAGE

WHAT I LEARNED FROM CSI

MR GARY T. BERGERON, CSI
 Kelso-Regen Associates, Inc.
 CSI Knoxville Chapter President
gary@kelso-regen.com



What is the one item that we all use approximately three times per day in private but seldom talk about? It has been discovered in many ancient ruins but was seldom seen in the middle ages. It is a device that is responsible for helping to prevent the spread of diseases such as dysentery and cholera. An estimated 2.6 Billion people worldwide lack access to proper fixtures and approximately 1.8 Million people per year DIE from lack of access to suitable sanitation. The US patent office received 350 applications for new designs between 1900 and 1932 before the current version we all know was designed.

Whether you call it a toilet, water closet, can, throne, latrine, head, potty, Loo, crapper, john or something else, it is something most of us take for granted. The "modern" toilet was invented for Queen Elizabeth in 1596 by Sir John Harrington, but the ball cock that creates the siphonic action was designed by Thomas Crapper. Various versions of "toilets" have been discovered in the ruins of neolithic Britain, along with India, Egypt, Greece and Rome. The Water Closet or WC was a polite term used to describe the small closets where the first toilets were installed.

Plumbing engineers often talk about flush tanks, flush valves, floor mounted and wall mounted water closets.

Most architectural interns don't make a distinction between the graphic symbols, but there is a difference to most plumbing designers. See the diagrams below for the different symbols.

Tank type toilets are often specified in residential or light commercial buildings. The "working parts" (flapper, ball cock, lever and chain) often need adjustment or maintenance. Tank toilets are less expensive, require smaller water lines, and operate with lower water pressure. Flush valve toilets are usually specified in commercial buildings where frequent use is expected. The working parts of flush valves require much less maintenance provided they are adjusted correctly during the original installation. Flush valve toilets require larger water lines, higher water pressure and cost slightly more than tank toilets.

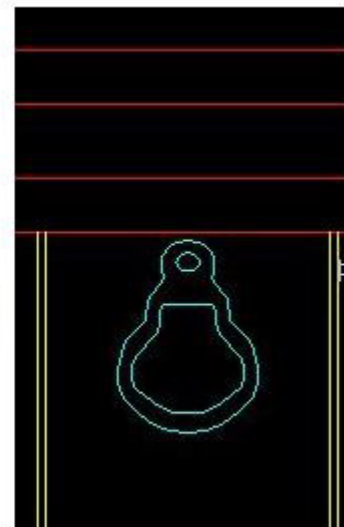


Flush tank floor mount toilet symbol

Floor mounted toilets with bottom outlets are less expensive and require less space than wall hung toilets. They are specified when the building budget is a concern. A floor mounted toilet is difficult to clean around the



Wall hung flush valve toilet symbol




(Toilets... Continued on Page 4)

CSI ANNOUNCEMENTS

The Knoxville CSI chapter will host the 2017 GSR conference. Our chapter also decided to hire a web designer to develop our chapter website since the Institute is no longer supporting micro-sites.

CSI Lunch and Learn - Wednesday, September 23rd at 11:30 pm at East Tennessee Community Design Center WATE 6 Carriage House "Insulated Metal Wall and Roof Panels for Sustainability and Energy Efficiency" By Mike Weaver, CSI, CDT, MetlSpan AIA Credits: 1.0 (AIA/CES and GBCI)

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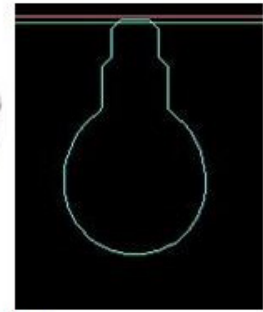
- AVIATION
- RELIGIOUS
- EDUCATION
- ENTERTAINMENT
- GOVERNMENT
- INSTITUTIONAL
- HEALTH
- MANUFACTURING
- OFFICE
- RECREATION
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SUSTAINABILITY, DURABILITY AND ENERGY PERFORMANCE STARTS AT THE BUILDING ENVELOPE



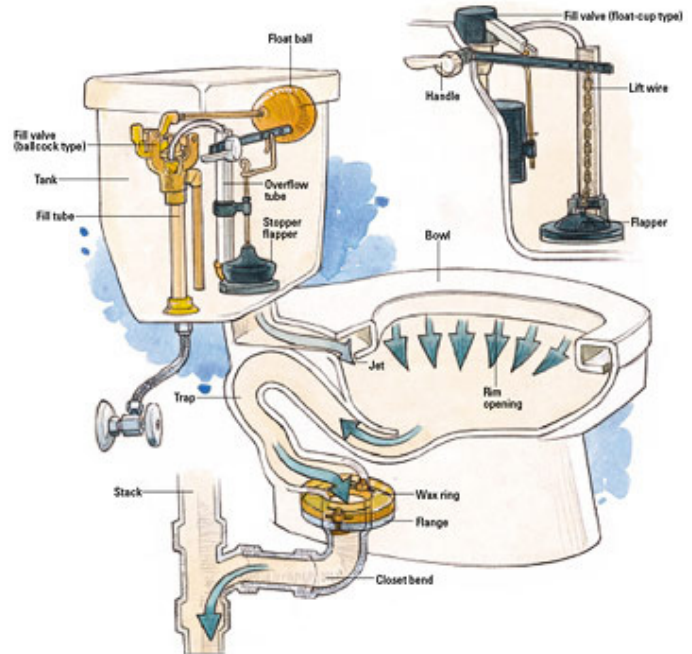


(Toilets... Continued from Page 3)



Flush valve floor mount toilet symbol

base and behind the toilet. Wall hung toilets are usually specified for institutional buildings. The back outlets of wall hung toilets require a deep wall chase for the cast iron wall carrier to support the toilet. The wall hung toilets are much easier to clean around and under the fixture.



All modern toilets include a siphon jet that evacuates the bowl, a hollow flushing rim that washes the bowl, and a glazed trap way that provides an exit for waste and also prevents sewer gases from entering the room. This is a porcelain china fixture that has undergone significant improvements over the years that has become what we all recognize today.

*Gary T. Bergeron
Principal & Co-Owner
Kelso-Regen Associates, Inc.
CSI Knoxville President*

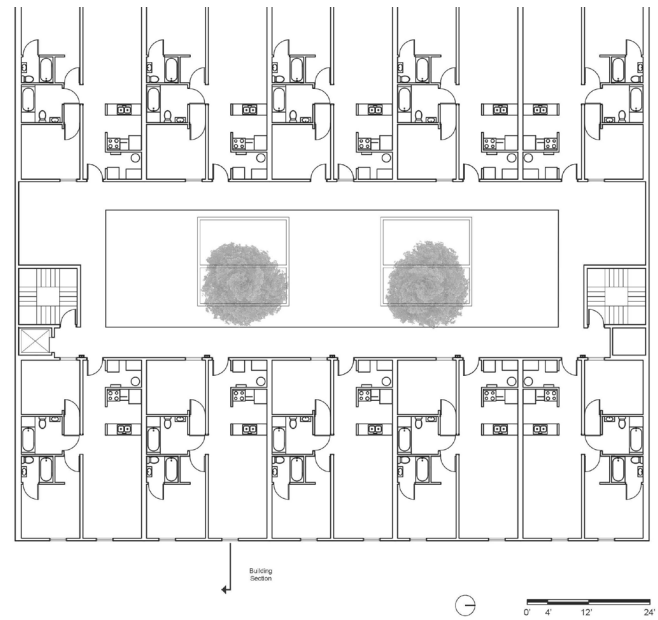


PRESENTATION SUMMARY

William (Bill) Miller, Ph.D.
 Senior Research Scientist, Joint Faculty at UTK



Dr. Miller is a specialist with 36 years of experience in vapor compression refrigeration systems, absorption heat and mass transfer and building science technologies. He has a Ph.D. in Mechanical Engineering. He serves as Joint Faculty for the College of Engineering and Lecturer for Architecture and Design at the University of Tennessee. He is employed by the Energy and Transportation Sciences Division of the Oak Ridge National Laboratory. As Program Manager, Dr. Miller coordinated a team of engineers with the setup of four 50% energy saver homes. He completed a PIER funded cool roof color study in collaboration with Lawrence Berkeley National Laboratory. He investigated sub-tile venting for the Tile Roof Institute, PolyFoam Corporation and the Metal Construction Association. He also investigated the impacts of low-emittance roofs for the Cool Metal Roof Coalition and tested radiant barriers for Louisiana Pacific. He has also conducted studies for SPRI Inc. and for a consortium of metal industries to quantify the energy savings for highly reflective roof products as compared to dark absorptive roof systems in different geographic regions of the U.S. He has expertise in numerical heat conduction for application to forced convection, natural convection and mixed convection finite-difference simulations.

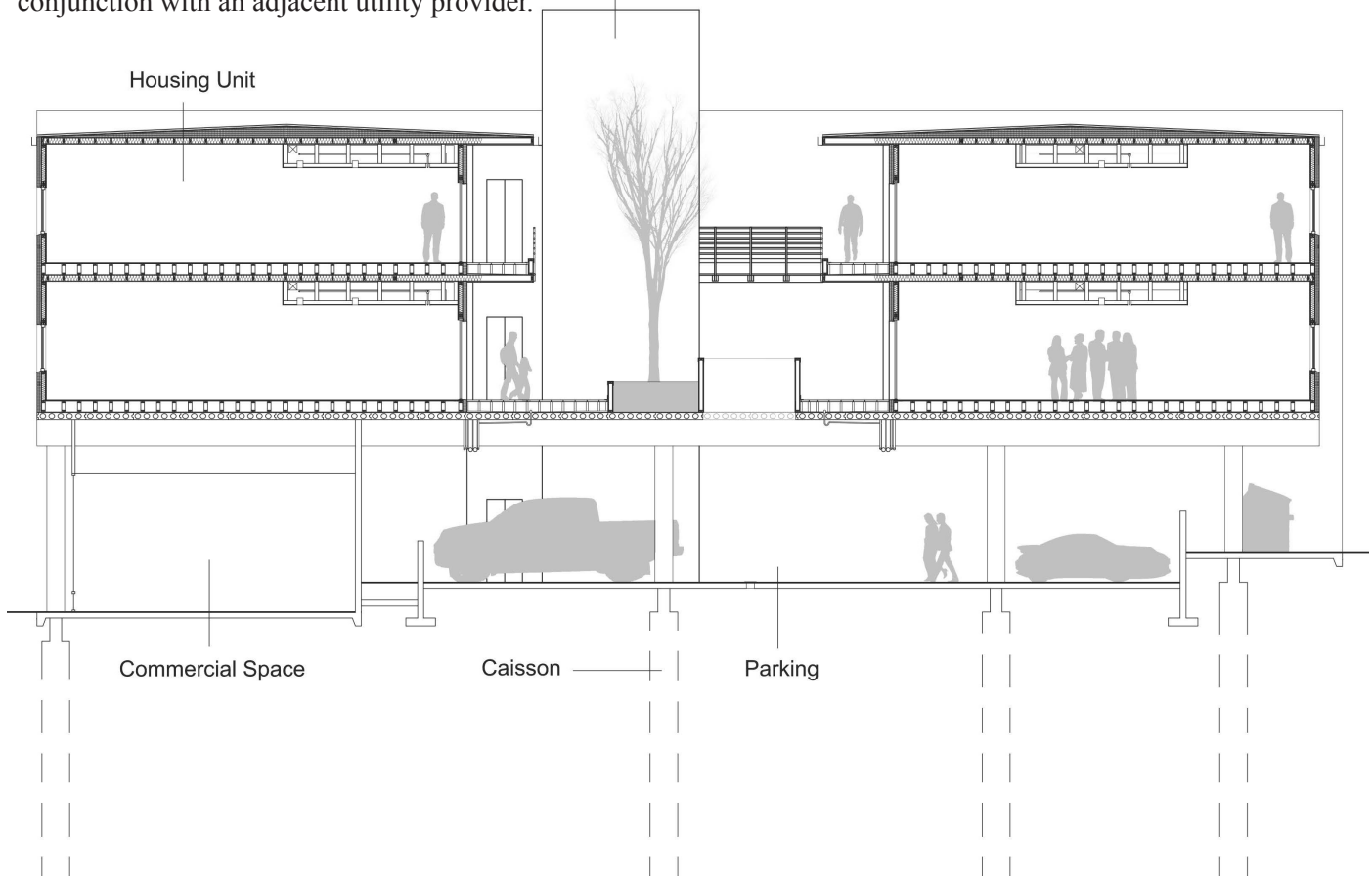
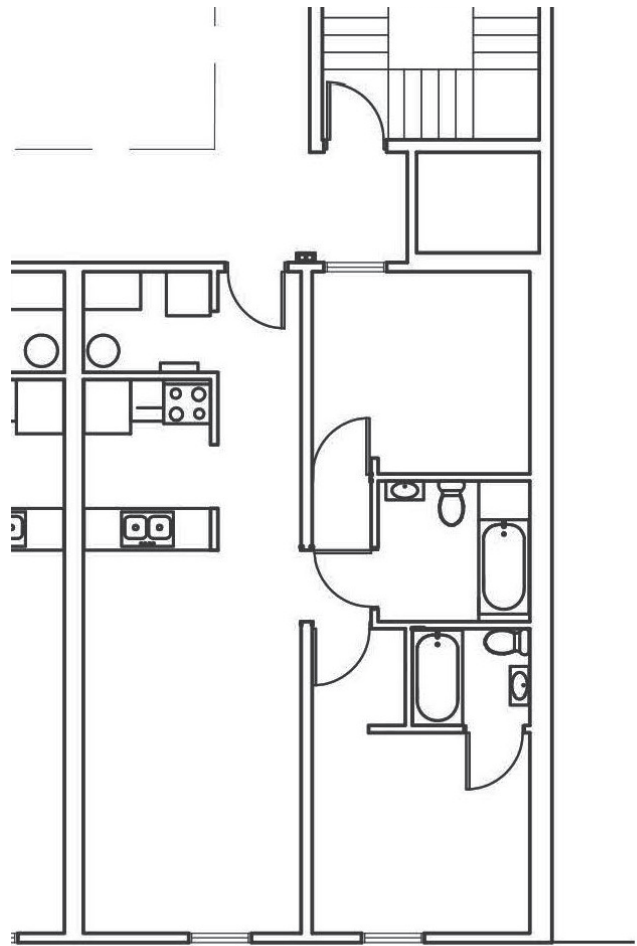



Topic:

Knoxville Mixed-Use Urban Living
 Design of a Net Zero Condominium Community in
 Downtown Knoxville

A team of engineering and architecture students competed in the 2015 DOE Net Zero design competition by developing and defending design plans for a net-zero mixed use condominium complex targeted for downtown Knoxville. The goal was to develop a new residential typology based on the use of an urban site to avoid the use of the automobile for most trips, offsite fabrication to minimize material waste, build dense to minimize exterior surface area, employ decentralized high efficiency HVAC, and create novel public/private ownership solutions for PV power.

The proposed dwellings therefore leverage the sustainable benefits of urban living, modular prefabrication, efficient envelope construction, and high performance HVAC systems. This development of 20 two bedroom units is located in an urban infill site within walking distance of shopping, entertainment, and cultural venues. The building is organized around a central open court set atop a plinth of parking and retail. The efficient unit plans boast minimal exterior surface area and are conditioned with individual high performance heat pumps requiring no external condenser unit. Solar power is provided on the northeast roof of the building and in conjunction with an adjacent utility provider.





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**Darson Buckner, CSI, CDT
LEED Green Associate
Dealers Warehouse Corporation
DuPont Tyvek Senior Certified
Weatherization Specialist
865-556-3140
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CSI BOARD MEETING MINUTES

By Nancy Roberts, CSI, CDT

Edited by THE SPECK Editor, Stacy Colbaugh, CSI, CDT

August 4, 2015

In Attendance:

- Jim Odle, Vice President
- Leslie Fawaz, Treasurer
- Nancy Roberts, Secretary
- Samer Shatara, Director (2014-2016)
- Susan Davis, Director (2014-2016)
- Daniel Smith, Director (2014-2016)
- Kathy Proctor, Director (2015-2017)
- Geoffrey Cavalier, Academic Affairs Chair

These meeting minutes were recorded and are presented as understood by the Secretary, Nancy Roberts, and are outlined as follows:

The meeting was held at Odle & Young's Office and was called to order at 5:40 p.m. by Jim Odle. Meeting generally followed a meeting agenda prepared by Gary.

1. Previous meeting minutes (attached)

The July 7, 2015 meeting minutes had been emailed to board members by Nancy Roberts and accepted by the board.

2. Treasurer's report (attached)

The treasurer's report had been emailed to board members by Leslie Fawaz.

3. President report

Scavenger Hunt is scheduled for September 26th; need at least twenty (20) volunteers on the day of the event. Geoffrey Cavalier suggested publishing this information in the chapter newsletter.

4. President-Elect Report

No report.

5. Vice President report

No report.

6. Board members/committee group reports

- 6.1 Member Services (membership, fun, and house) – Daniel Smith, Director: No report.
- 6.2 Education (education, programs, and special programs) – Will Dunklin, Director: Confirmed lunch and learn programs are: August 26th for FSA Lighting by Kate Hale (CEU); September 23rd for MetlSpan by Mike Weaver (CEU); October 28th for ThyssenKrupp by Tim Owens (CEU); November 17th for Guardian Industries Corp. by Jacob Kasbrick (CEU); and December 15th for Innotek by David Harig (CEU). The (CEU) notation for each lunch and learn refers to the continuing education credits made available for attendees. Board members were asked to forward any suggestions for programs to Jeremy Shipp or Will.

The chapter meeting programs are as follows: August chapter meeting program will be Tom Meador with Land Construction speaking about Foothills Parkway. September chapter meeting program will be Dr. William

Miller, an ORNL research scientist and University of Tennessee Art & Architecture faculty member. October chapter meeting will be Mark Goulet with Nexgen (CEU), as well as announcement of Scavenger Hunt awardees. November chapter meeting will be James Rose, Governor's Chair for Energy and Urbanism and associated studios.

December 8th will be Christmas party – tentative location at Gary & Jill's home in Powell. January chapter meeting will be Phillip Chesser speaking about 3D printing. February chapter meeting will be Sherry Ault speaking about BIM. March 8th will be annual product show at Crowne Plaza. April chapter meeting will be Will Dunklin speaking about church pipe organ design. Jim Odle will speak with Jim Vineyard and Jeremy Shipp about providing CEU for chapter meeting attendees.

6.3 Recognition (technical, certification, and awards) – Susan Davis, Director: BIM Levels of Development 100 through 500 begin planned by Sherry Ault for the BIM/Revit technical group. Board agreed that this should be advertised in the chapter newsletter. Jim acknowledged Daniel Smith's award-winning efforts for the Outstanding Chapter Commendation; Suzan will accept the award on behalf of the chapter at the CONSTRUCT conference in St. Louis.

6.4 Communications (website, publication, and liaison) – Daniel Smith, Director: Suzan regularly updates the Facebook page with chapter activities. There are still problems using the Institute's website for the chapter. Advertising has been proposed for the chapter newsletter; Kathy Proctor will prepare an article for publication.

6.5 Fundraising (product show and golf tournament) – Kathy Proctor, Director: Josh Brock and Darson Buckner passed out "Save the Date" cards at the state AIA convention. Board agreed that Josh should sign the contract with the Crowne Plaza to reserve the space for March 2016. Golf tournament date has been set for October 27th.

6.6 Chapter Administration (planning, historian, bylaws, and operating guide) – Suzan Jordan, Director: Kathy has updated the leader roster (attached) and sent to newsletter editor for publication. Nancy Roberts will prepare proposed revision to bylaws to align with CSI Institute; bylaws need to be adopted by membership before September 1st.

7. Calendar

No changes to calendar.

8. Old business

No old business.

9. New business

Kathy Proctor proposed new travel reimbursement policy. Discussion about bylaws. Note attached revision prepared and emailed by Nancy to governance@csinet.org on August 11th. Institute secretary needs to approve changes before chapter membership can vote on revisions.

Annual meeting was discussed and needs to be advertised in the chapter newsletter. Kathy will send notes about annual meeting newsletter editor.

The meeting was adjourned at 6:35 p.m. Next board meeting will be September 1st.



NATIONAL NEWS

How Will the Clean Power Plan Affect Your Projects?

By Tom Herron,
LEED Green Associate



Building professionals know there are few complications more frustrating than finding out that a project's fenestration fails to meet energy codes. As codes become stricter, the cost of compliance related to window, door, skylight and curtain wall failure will go up, threatening to put projects over budget and behind schedule.

A new challenge looming for building professionals is the Environmental Protection Agency's (EPA) forthcoming Clean Power Plan (CPP). The plan mandates a carbon emissions reduction of 32 percent nationwide by 2030, with individual targets set for each state. State targets are based on "building blocks," including the assumption that demand-side energy efficiency can improve by 1.5 percent *per year* for the next fifteen years. The EPA is encouraging states to tighten building energy codes in order to meet this aggressive goal. Fortunately, the National Fenestration Rating Council (NFRC) rating and labeling program can help architects and builders avoid potential overruns and comply with code changes resulting from new policies like the CPP. For more than 25 years, NFRC has provided building professionals and consumers with fair, accurate and credible fenestration performance ratings that allow them to compare products and meet all applicable building energy codes.

NFRC's ratings procedures appear in model building energy codes like ASHRAE 90.1 and the International Energy Conservation Code. NFRC ratings also determine eligibility for the



National Fenestration
Rating Council®

ENERGY STAR® program for residential windows. Understanding NFRC's ratings will be key to meeting updated energy codes. NFRC's ratings include:

- ☐ **Solar heat gain coefficient**, which measures a product's ability to block heat from the sun;
- ☐ **U-factor**, which measures a product's ability to prevent heat loss; and
- ☐ **Visible Transmittance**, which measures the amount of light that comes through a product.

As state lawmakers seek to comply with the Clean Power Plan by cutting energy usage across the board, building professionals will need to focus on efficient fenestration more than ever. Taking fenestration into account during the earliest stages of design and construction will help ensure that projects comply with building codes and contribute to the state's energy efficiency goals.

Tom Herron is director, communications and marketing, for the National Fenestration Rating Council. You can reach him at therron@nfr.org.



National Fenestration Rating Council

NFRC is the leader in energy performance information, education, and certified ratings for fenestration products



LEWIS THOMASON

CSI AND THE LAW

September 2015

Initial Here: Tennessee's Unique Requirement for Arbitration Clauses Concerning Residential Construction

W. Paul Whitt
Lewis, Thomason, King, Krieg & Waldrop, P.C.
One Centre Square, Fifth Floor
620 Market Street
Knoxville, TN 37902

The Tennessee Arbitration Act (“TAA”), which is found at Tenn. Code Ann. § 29-5-301, *et seq.*, contains a unique provision concerning arbitration provisions related to residential construction. Specifically, Tenn. Code Ann. § 29-5-302(a) provides as follows:

A written agreement to submit any existing controversy to arbitration or a provision in a written contract to submit to arbitration any controversy thereafter arising between the parties is valid, enforceable and irrevocable save upon such grounds as exist at law or in equity for the revocation of any contract; provided, that for contracts relating to farm property, structures or goods, or to property and structures utilized as a residence of a party, the clause providing for arbitration shall be additionally signed or initialed by the parties.

So, any arbitration provision to which the TAA applies **must** be separately “signed or initialed by the parties” in order to be enforceable. This is despite the very clear position of the TAA, and Tennessee courts applying the TAA, in favoring the arbitration of disputes. This is also required regardless of the overall conspicuous nature of the arbitration provision – such as bold font, all upper case font or even underlining. If the provision is not separately “signed or initialed by the parties,” and there is no other signed document between the parties agreeing to arbitrate the particular dispute, a party may avoid the enforcement of the arbitration provision by pointing to the lack of a separate signature or initial of the provision by the party seeking to avoid the enforcement of the provision.

A word of caution: Before relying on the absence of a separate signature or initial for an arbitration provision as a means of avoiding arbitration, make sure that the TAA actually applies. This is because the Federal Arbitration Act (“FAA”), which is found at 9 USC § 1, *et seq.*, preempts the TAA as to any transaction to which the FAA applies, and the FAA merely requires that there be a written agreement to arbitrate – and does not require the arbitration provision itself be separately signed or initialed. *See* 9 USC § 2. This is important because even claims that appear to be solely situated in Tennessee may be subject to the FAA, and not the TAA, simply because, among other reasons, the project in question implicated interstate commerce by involving the use of products purchased and distributed across state lines. *See Hubert v. Turnberry Homes, LLC*, 2006 Tenn. App. LEXIS 648 (Tenn. Ct. App. Oct. 4, 2006).

LEWIS THOMASON

KING KRIEG & WALDROP P.C.

2015 Annual Construction Law Seminar



SUBCONTRACTORS: In the Legal Trenches

OCTOBER 16, 2015

Check In: 8:30 a.m.

Time: 9:00 a.m. - 1:00 p.m.

Registration Fee:

\$30.00 Includes Seminar and Lunch
\$25.00 for Each Additional Company
Attendee Registration

Registration Deadline:

October 12, 2015

Featuring Lunch Guest Speaker:

JIMMY HYAMS | WNML Sports Radio

Contact for Questions:

MARTI MERRELL | LEWIS THOMASON
Phone: (865) 546-4646

Half-Day Seminar and Lunch Location:

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Speakers:



DAVID A. DRAPER, ESQ.
*Project Insurance – Are you
Covered?*



PRESTON HAWKINS, ESQ.
Getting Paid in the Trenches



CHRIS W. MCCARTY, ESQ.
Employment in the Trenches



W. PAUL WHITT, ESQ.
*Lessons from the
Trenches*

Tell me again, part 1

I'm sure you've heard the Army way of presenting information: Tell them what you're going to tell them; tell them; tell them what you told them.



While that may be a practical way of doing some things, it has no place in construction documents. For those, we have a different rule: Say it once in the right place. I think it's safe to say that specifiers believe this rule, though convincing those who create the drawings is difficult; the result often is that the specifications may state things but once, while it's common for drawings to repeat things many times, and it's also common for drawing notes to repeat what is stated in the specifications.

So what's the big deal? Why not repeat things? I believe the intent is good, and that everyone working on drawings or specifications simply wants to make sure the contractor knows what is needed. That's the theory, but what really happens? In the next couple of articles, we're going to look at unintentional redundancies.

Let's start with specifications; it's quite common for a specification section to say the same thing twice. Here's an example I have used when teaching specification writing classes. It's from a specification I found online, but the same problems are found in manufacturers' specifications and in commercial guide specifications.

2.02 Materials

- A. Flat roof board insulation: Extruded polystyrene board to ASTM C578, Type IV, rigid, closed cell type.
1. Thermal resistance (ASTM C518): R-5 per 1 inch of thickness.
 2. Board size: 24" x 96".
 3. Board thickness: As indicated on the Drawings.
 4. Compressive strength (ASTM D1621): Minimum 25 psi.
 5. Water absorption: 0.7% by volume maximum.
 6. Edges: Square.
 7. Water vapor permeance (ASTM E96): Maximum 1.1 perms.

That looks pretty good, right? Not really. Here's the problem: Much of the information in the numbered paragraphs is already required by ASTM C578, and is, therefore, redundant.

2.02A. ASTM C578 – Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation, is, as the title states, for rigid polystyrene insulation. The standard states that the insulation shall "have essentially closed cells." The standard also states the following requirements for Type IV insulation:

- R value: 5 per inch.
- Compressive strength: Minimum 25 psi.
- Water vapor permeance: Maximum 1.1 perms.

The stated water absorption is a bit of a mystery; ASTM C578 allows only 0.3 percent, while the specification allows 0.7 percent. I can't tell if this is a typo, or if it's measured by the same standard.

If we remove the redundancies, along with 2.02A.3 – a needless statement – we're left with this:

-
- A. Flat roof board insulation: ASTM C578, Type IV.
 - 1. Board size: 24" x 96".
 - 2. Edges: Square.

And that could be further reduced to a single statement.

The usual objection I get is, "So what? What's a few extra words? They're correct, aren't they?"

They are, but why are the requirement restated? Doing so adds nothing; more important, one could argue that because only those performance criteria are stated, the specifier doesn't care about the other things required by ASTM C578, such as density, flexural strength, dimensional stability, oxygen index, the test temperature for the R value test, or acceptable defects. Part of the problem is that specifiers often state requirements that don't matter, simply because they're in a manufacturer's specification.

The usual counter is, "Of course we want all that, too. The contractor has to provide it because it's part of the standard." If that's the argument, then why list any of the properties required by the standard?

Another argument is that specifying those properties makes it easier to review submittals. I suppose that's true, but again I ask, what about the other properties?

Another problem with restating parts of the reference standard is that doing so introduces another possibility for conflict. In this case, it's quite possible that the specified water absorption is a typo. Another possible problem arises when a person unfamiliar with the standard changes the Type, say, from Type IV to Type V, and doesn't change the compressive strength.

Virtually any reference standard contains a multitude of requirement, some stated, some incorporated by reference. Their value lies in the fact that requiring compliance with them automatically makes the entire standard part of the contract documents. Selectively restating selected parts of those standards is not only unnecessary, but it suggests that the few things cited are the only ones that are important.

Another redundancy in specification sections is created when a manufacturer's instructions are included in the section. A simple "Comply with manufacturer's instructions" makes those instructions part of the contract documents. It also avoids problems created by incorrect copying, and by changes in the manufacturer's instructions.

Further complicating the issue is the fact that different manufacturers may well have different instructions. If a specification section is based on Really Great Coatings Super Stuff, which is applied at 30 mils, but you get Coatings-R-U's, which goes on at 60 mils, the specification is simply wrong. You could address the problem by specifying requirement for one product, followed by "Or other as required by manufacturer" but why not take it a step further, and simply require compliance with the manufacturer's instructions?

Of course, your personal experience may have been that you want something other than what the manufacturer requires. If that's the case, you may be justified in changing the manufacturer's instructions. Be aware, though, that if something goes awry, the contractor may well blame the problem on you.

Next time, we'll look at how specifications frequently repeat requirements stated in Division 00 and in Division 01.

© 2015, Sheldon Wolfe, RA, FCSI, CCS, CCCA, CSC

Agree? Disagree? Leave your comments at <http://swconstructivethoughts.blogspot.com/>

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- OFFICE
- RECREATION
- RETAIL
- RESTAURANT
- HOTEL
- COLD STORAGE
- LEED / SUSTAINABLE

CSI Lunch and Learn

Wednesday, September 23rd
at 11:30 pm at East Tennessee
Community Design Center WATE
6 Carriage House

"Insulated Metal Wall and Roof Panels for Sustainability and Energy Efficiency"

By Mike Weaver, CSI, CDT,
MetlSpan
AIA Credits: 1.0 (AIA/CES and
GBCI)





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Vendors Presenting:

- 9:00 - 9:30 Welcome Reception
- 9:30 - 10:30 COX "What's new in pressure treated lumber"
- 10:30 - 11:30 Simpson Strong Tie
- 11:30 - 12:30 Lunch/ TYVEK
- 12:30 - 1:30 Fortress Railing
- 1:30 - 2:30 Miratec Trim
- 2:30 - 3:30 Architectural Windows
- 3:30 - 4:30 Neuma Doors ** New Course**

Date:

October 13th, 2015

Location:

Bass Pro Shop
3623 Outdoor Sportsman Place
"117 Top Flite Drive"
Kodak, TN

RSVP:

<http://cox2015classkodak.eventbrite.com>



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