STRUCTURAL BUILDING COMPONENTS MAGAZINE

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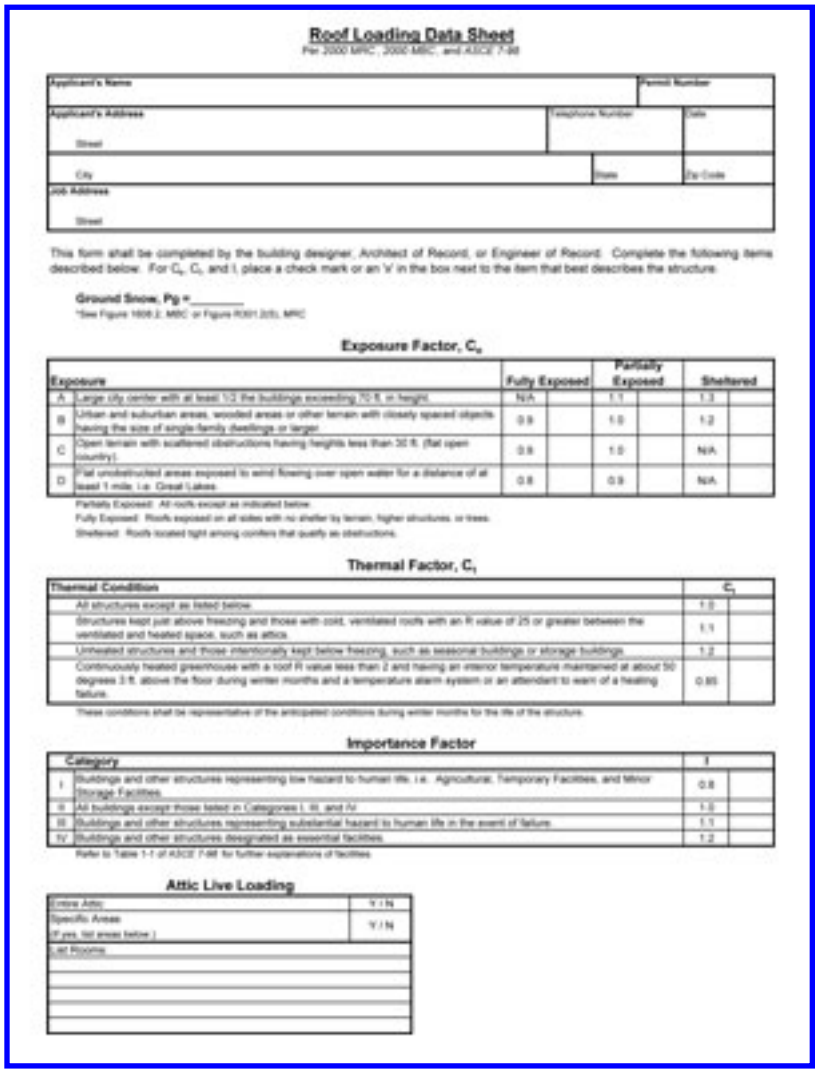
Codes, Loads & Legal Locution (or…How the Michigan Chapter Saved Itself from Well-Meaning Experts & Those Who Oppose Everything) by Phil Luneack, President, Wood Truss Council of Michigan

Contrary to what you may have heard, the component industry is not without its share of drama. Phil Luneack tells the epic tale of a recent Michigan Chapter venture into the land of the codes.

Every once in a while something happens out in the hinterlands that is worth telling. This is not a Paul Bunyan tale, nor is it a made-for-movie story like Escanaba in da Moonlight. But it does have a little David and Goliath, a little Star Wars Episode 2-Attack of the Clones and some True Grit.

The curtain rises on a Wood Truss Council of Michigan (WTCM) meeting. The agenda has to do with new building codes called the International Building Code (IBC) and the International Residential Code (IRC). After we read the chapter Anti-Trust statement (by the way, how is that oil and steel companies seem to act as if they are exempt from Anti-Trust Laws), our conversation centered around what effect, if any, the new codes would have on our businesses. In the chapter, one constant feature of WTCM meetings is a good meal and a very accessible refreshment area. We figured with great food and drink, the good friends stuff would surely follow.



Roof Loading Data Sheet

Applicant's Name | Permit Number

Applicant's Address | Telephone Number | Date

Street

City | State | Zip Code

Job Address

Street

This form shall be completed by the building designer, Architect of Record, or Engineer of Record. Complete the following items described below. For C_e, C_t, and I, place a check mark or an 'x' in the box next to the item that best describes the structure.

Ground Snow, P_g = _____

*See Figure 1608.2, MBC or Figure R301.2(5), MRC

Exposure Factor, C_e

Exposure		Fully Exposed		Partially Exposed		Sheltered	
A	Large city center with at least 1/2 the buildings exceeding 70 ft. in height	N/A		1.1		1.3	
B	Urban and suburban areas, wooded areas or other terrain with closely spaced objects having the size of single-family dwellings or larger	0.9		1.0		1.2	
C	Open terrain with scattered obstructions having heights less than 30 ft. (flat open country).	0.9		1.0		N/A	
D	Flat unobstructed areas exposed to wind flowing over open water for a distance of at least 1 mile. i.e. Great Lakes	0.8		0.9		N/A	

Partially Exposed: All roofs except as indicated below.

Fully Exposed: Roofs exposed on all sides with no shelter by terrain, higher structures, or trees.

Sheltered: Roofs located right among conifers that qualify as obstructions.

Thermal Factor, C_t

Thermal Condition	C_t	
All structures except as listed below	1.0	
Structures kept just above freezing and those with cold, ventilated roofs with an R value of 25 or greater between the ventilated and heated space, such as attics	1.1	
Unheated structures and those intentionally kept below freezing, such as seasonal buildings or storage buildings	1.2	
Continuously heated greenhouse with a roof R value less than 2 and having an interior temperature maintained at about 50 degrees 3 ft. above the floor during winter months and a temperature alarm system or an attendant to warn of a heating failure.	0.85	

These conditions shall be representative of the anticipated conditions during winter months for the life of the structure.

Importance Factor

Category		I	
I	Buildings and other structures representing low hazard to human life, i.e. Agricultural, Temporary Facilities, and Minor Storage Facilities	0.8	
II	All buildings except those listed in Categories I, III, and IV	1.0	
III	Buildings and other structures representing substantial hazard to human life in the event of failure	1.1	
IV	Buildings and other structures designated as essential facilities	1.2	

Refer to Table 1-1 of ASCE 7-98 for further explanations of facilities.

Attic Live Loading

Entire Attic	Y / N
Specific Areas (If yes, list areas below.)	Y / N
List Rooms:	

ROOF LOADING DATA SHEET. THE GREAT STATE OF MICHIGAN CONSIDERS THE USE OF THE ROOF LOADING DATA SHEET TO BE IN THE BEST INTERESTS OF THE BUILDER, THE OWNER, THE MUNICIPALITY, THE ROOF DESIGNER AND THE BUILDING DESIGNER. IT IS A VOLUNTARY FORM CREATED TO ASSIST IN THE PERMIT APPROVAL PROCESS. IT CAN BE DOWNLOADED FROM WWW.MICHIGAN.GOV AND IS INCLUDED IN TECHNICAL BULLETIN 42. THE SHEET INCLUDES DATA ON THERMAL, EXPOSURE,

It quickly became obvious that we were in some rough and treacherous waters with the new codes. Therefore, we did what any self-respecting bunch of capitalists would do when threatened by the “guvmint”: we called our national trade association. We asked WTCA staff,

and Executive Director Kirk Grundahl to advise and help. He did us one better; he flew across the water to attend our meeting. At this stage of the game, Kirk advised a White Paper, which would be sent to the Michigan Codes and Permits office, as well as certain and various code officials. It should be noted that the meeting with Kirk was very well attended. The Chapter asked a couple of member engineers, John Gruber and Ike Sheppard, to write the paper. They set a good example and agreed to collaborate. The White Paper would provide the argument and rationale for the code changes as well as the language to facilitate the desired changes. We set up a code committee to aid our writers and to better control communication with the State of Michigan. Everyone went home well-fed, watered and happy with the meeting's outcome. This was the end of Act One.

AND IMPORTANCE FACTORS, AS WELL AS ATTIC LOADING INFORMATION.

Act Two opens at an extraordinary meeting of WTCM. The Code Committee has had little success. The White Paper has been widely acclaimed as a fine and scholarly document that very competently advances the position of the Chapter. It was applauded by many in Michigan as a very timely, concise and correct effort of WTCM. It was also considered too little, too late by the code writing and regulating community.

One of our code committee members had gone to a national code review committee meeting in Pittsburgh, PA. This committee had the authority to change the code sections of the IBC and IRC, as proposed in the White Paper. Chances looked good that we could get the national document changed, which would put the document coming to Michigan in agreement with our position and the White Paper. WTCA and TPI were supportive and our collaborating engineers were hopeful. The community of code writers granted the floor to the representative from Michigan. A WTCM member presented the Michigan position. A few heads nodded in seeming agreement. But, alas, the people who oppose everything (even if it is good for them) asked for the floor and lashed out against the good member from Michigan with well-rehearsed fury and warnings of the effects that would occur if the request of the good member from Michigan was granted. Eyebrows arched as the community of people who write the codes became concerned that the people who oppose everything might be offended because the people who oppose everything had spent much treasure and had provided many barrels of ale and many tables of fine food in many great houses in order to have their way. So, alas, the good member from Michigan was asked to depart from the community of people who write the codes and was then shunned by the people who oppose everything even if it is good for them. (Yes, I saw Lord of the Rings last week.)

The good member who went to the meeting in Pittsburgh and was subsequently shunned by the various peoples of the code reported his journey to the full chapter. The members of WTCM were a little dazed. Then, the Executive Board of WTCM suggested that we hire a lobbyist to help us advance our cause in Michigan. The loads and forces that our product was now subject to had narrowed our market potential. We were looking at a greatly reduced ability to engineer and build large span trusses, 4' on-center trusses, girder trusses and scissor trusses. We felt our survival as an industry was at stake. Of course, it takes money to buy the services of a lobbyist, and lots of money to engage a very good one. So, the members of the Michigan Chapter looked at one another across the table, stood up, joined hands raised to the heavens, and shouted that age old cry of fraternity and liberty: "all for one and one for all." (Well, maybe not quite that unified.)

The Chapter dialoged with the lobbyist, discussed without reservation and decided in favor of the executive board recommendation without any members dissenting. We were all eager to help, and the lobbyist immediately laid down the law…no one but the lobbyist could speak for or on behalf of the Chapter when communicating with the State of Michigan. Needless to say, they just about had to hog tie the chapter president who thought that was his job. Good sense prevailed. One and all pledged to be true to the cause and promised not to try and profit at the expense of the group by saying one thing and doing another.

Looking back, I don't think there was any deliberate misinformation. We got through without anyone trying to injure or maim anyone else. We did have the foresight to set up an engineering committee for the purpose of peer review and position recommendations in case of disagreements with code officials or each other. This is not nearly as unctuous as it sounds. It was very difficult for all of us at one time or another in this process to turn our engineering over to the committee, especially if the committee disagreed with the position of the member. The process required without exception that no one try to take advantage or make hay on the mistakes and/or errors of another member. And it worked. End of Act Two.

Act Three opens in a meeting of the Department of Consumer Affairs Code Advisory Committee. The meeting was opened by Mr. Henry Green. He charged the committee to do good work for the people of the State of Michigan. The committee then proceeded to review each code book, page-by-page and line-by-line. The locution of code review is simply poetic. "Let us examine R611.6.1. Please note the exception just prior to the sentence beginning with 'In seismic design…'" The R's roll, the iambic pentameter throbs and the more points one has in a sentence, the more glamorous and challenging the section is likely to be. The people who oppose everything (even if it is good for them) appeared at this meeting, ensconced in the rear portion of the room, lurking about ready to pounce on any indication of a code change.

One of the changes that the people who oppose everything pounced on was a document known as the Roof Truss Data Sheet. This is a handy dandy little form that makes everyone smile. It is a great help to code officials as well as the builder and the truss company. It is a time saver for code officials. It is a legal aid to the builder, and it comforts the homeowner. It saves the builder time and can prevent rebuilds by the truss company. If the Roof Truss Data Sheet is used, it cuts down the paperwork the truss company must supply the builder to supply the homeowner to supply the code official. So good readers, in Act 3, we find our heroes facing all the elements: codes, loads, locution, the chapter, well-meaning experts and the people who oppose everything.

At the end of the process, our heroes triumphed. Several things had to happen in order reach that end. One is trust, and the suppression of mistrust. That may seem redundant, but sometimes a knee jerk accusation can cause a lot of damage. A common purpose with a common good is helpful. All should benefit in an equitable manner. Dedication and a willingness to devote and donate some real quality time is another valuable asset. Many of our members put in some real time, and all members repeatedly volunteered. The yoopers got to know us trolls. The sheer size of the state and its fifteen ground snow load designations became more apparent to us all.

The WTCA resources and the team of people that are ready and willing to help is a great asset

for any chapter to have at its disposal. The process demonstrated that there is a certain safety in numbers. All of our members became active in one way or another. Some did not have the people to put in the time, so they put in the money, and all of our members asked if the chapter needed more. Best of all, the process was a showcase of what any chapter can accomplish.

I want to take this opportunity to thank TPI for its concern and support. Sending connector plate company representatives to the chapter meetings was very helpful. WTCM would like to thank the following: Joe Butcher, John Gruber, Ike Sheppard, Denny Metiva, Margie Schaaf, Eric and Pat Lundquist, Al Wheeler, Jim Defoe, Steve Letherer, Mike Kelly, Jack Weaver, Randy and Ron Bergeron, the Lehrs, Larry Wainright, Kelly Plunger, Gord Moir, Murray Dietz, Mike Staples, John Osbun, Paul MacGillivray, Mike Weed, John Kozal, Denny Soule and David Pilkinton. The chapter would also like to thank Sandy Lewis and Pat Harrington at Muchmore, Harrington and Smalley for being professional and patient with our impatience. We would also like to thank Mr. Henry Green, Mr. Irvin Poke, and Mr. Larry Lehman of the State of Michigan for being so cognizant, involved and inclusive. They recognized at once the impact the proposed codes would have on the truss industry in particular and the building industry in general. Competence and professionalism runs rampant in these three fellows. They don't play favorites and they are each valuable public servants. The citizens of Michigan are fortunate to have them.

The saga does not end here. The code cycle will shortly start again, and the process will repeat. But this time, the chapter is prepared, and it has the tools to do what needs to be done.

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SBC HOME PAGE

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