

2009 SENATE POLITICAL SUBDIVISIONS

SB 2352

2009 SENATE STANDING COMMITTEE MINUTES

Bill/Resolution No. SB 2352

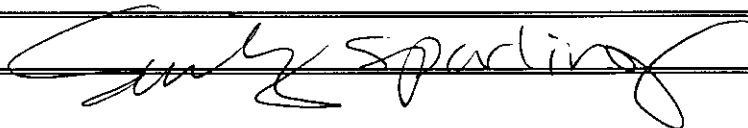
Senate Political Subdivisions Committee

Check here for Conference Committee

Hearing Date: 01/29/2009

Recorder Job Number: 8120

Committee Clerk Signature



Minutes:

Chairman Andrist Opened the hearing on SB 2352

Senator Rich Wardner District #37. Introduced SB 2352. It is a simple bill that takes an obsolete building code off the books. It is an unused code but it is still on the record. There is some concern that if we take this section out, we will not have any energy standards. We still have language in the code stating that we must be consistent with the International/State Building Code. There are a couple of things in the international code that are in debate; that's where we are at. This bill is not a slam dunk, but it is a start.

Doreen Riedman Executive Officer, ND Association of Builders. Spoke in support of SB 2352. See attachment #1.

Chairman Andrist We like the codes we have some say over rather than the federal codes. Tell us briefly a little bit about the state building code?

Riedman I would be happy to but I have members of the state building code who might be able to answer your questions.

Hap Hildebrand Eid Co. Builders, Fargo and ND State Home Builders Association on the state advisory committee. Spoke in support of SB 2352. We would like to see the obsolete

versions removed and have updated energy codes. The vast majority of homes built in ND are up to code or in excess of code regulations. We want to move forward with something fresh.

Senator Lee Can you explain what you do for energy efficiency and particularly in the area of affordable housing?

Hildebrand Enumerated the ways that builders are energy efficient: 2x6 construction, R-19 insulation and R-40-50 vapor barriers, etc. We want them to be not only affordable to buy and build but affordable to live in.

Chairman Andrist Is this kind of construction pervasive in the industry? Is it usually that way in manufactured homes?

Hildebrand Pretty much everyone is on the same page but I cannot answer for manufactured homes.

Senator Anderson Counties and cities have building officials, I am sure not all of those smaller areas have their own building code-they just adopt the state code. Am I right?

Hildebrand Yes, I believe you would be.

Senator Anderson If we make any amendments to this bill, they will follow suit?

Hildebrand That would be correct.

Senator Olafson Can you explain the difference between the previous code and what we are now doing?

Hildebrand A lot of the same requirements as we would have now but it was a little obtuse for the common person to understand. It has been filed away on the public side for years. New codes would be much easier for the common person.

Senator Lee Would you say that the least expensive windows that we are using now are better than the most expensive windows we used back in the 80s when the code was written?

Hildebrand Yes, definitely.

Senator Bakke They talked about an annual review, can you tell me when that happens?

Where is the state building code set out?

Hildebrand This past year we met in September.

Senator Bakke And during those meetings, what do you do?

Hildebrand The way it is handled is anybody on the board, an interest group, or the general public can present amendments prior to the meeting. The amendment is then brought forth to our committee for review at a later date. There is a public meeting similar to this hearing. There is usually another meeting that is the voting meeting.

Chairman Andrist Is your decision final or is it reviewable by someone else?

Hildebrand I believe it is reviewable by the state.

Mary Mitchell Dakota Resource Council. Spoke in opposition to SB 2352. See attachment #2.

Chairman Andrist Has your organization ever appeared before the code board?

Mitchell No, energy conservation is a fairly new topic for us.

Chairman Andrist I think that might be a good idea for you to do.

Senator Lee Are you suggesting that state government is not only more knowledgeable but more interested in energy conservation than the private sector-contractors and buyers?

Mitchell I do think that there needs to be some minimal standards. I do think this will result in a better product for the consumer.

Senator Lee So you have examples in which builders in ND are not building up to standards or is this a solution in search of a problem?

Mitchell I would defer that question to housing inspectors or the Department of Commerce.

Senator Bakke Do you know why those two chapters were deleted from the state building code?

Mitchell I don't know.

Bill Kalanek ND Alliance for Renewable Energy. Spoke in opposition to SB 2352. See attachment #3.

Chairman Andrist Have you ever appeared before the building code? Or made proposals to them?

Kalanek No, we were a part of the interim committee; we are interested in working with them.

Chairman Andrist Do building codes apply primarily to new construction but our energy problems would reside primarily with old homes?

Kalanek I think that is a fair statement.

Senator Olafson Can you explain to me how this bill sets the state back even further if earlier testimony states that the sections we are deleting are obsolete and unused anyway?

Kalanek The point I was making is that without this reference there is no reference to energy efficiency in the statute and we are leaving it up to what is adopted in the building code.

Chairman Andrist So your opposition is that you really don't think the bill goes as far as it should?

Kalanek We feel that there is a need for a next step working with the building commission, etc.

Chairman Andrist But my question is if you think anything is wrong with the bill?

Kalanek I agree with you in that sense, there is nothing wrong with deleting an obsolete code but then there is no reference to energy efficiency.

Senator Olafson Do you fear that if this bill is passed that the state building code advisory committee will take energy efficiency backwards in our state?

Kalaneck We are concerned that there will be no action. We'd like to think that with open discussion that will not be the case.

Senator Olafson If the bill passes, will you make an effort to work with the code committee?

Kalaneck Certainly

Senator Anderson Do you know if most political subdivisions adopt this code that is being wiped out by this bill?

Kalaneck There are 5 counties that have adopted the state building code, approx. 20 cities.

Senator Anderson I would like to know those numbers.

Senator Bakke Are the building codes in the NDCC?

Kalaneck No.

Senator Bakke Do we have energy standards anywhere in the building code?

Kalaneck From what I understand, those sections were amended out.

Senator Bakke If we take this obsolete language out, we have absolutely no energy standards in our building codes at all?

Kalaneck That is correct.

Senator Bakke So it is conceivable that a builder could come along and want to make a bundle on some naive innocent ND citizen and build a house that is not energy efficient and not be liable?

Kalaneck That is a possibility but most of the contractors I know would not do that.

Senator Bakke I agree, but it is conceivable.

Chairman Andrist Surely the state building code must include some energy standards?

Kalaneck My understanding is that the energy efficiency standards have been amended out.

Senator Bakke That was my question.

Senator Lee Do you have any evidence that builders are doing only meeting the minimum standards?

Kalanek I do not have any empirical evidence.

Senator Lee As far as the quality of the standards is concerned, I do not necessarily believe that a low standards means low quality. The private sector has responded to the consumer interest. No one is going to make a pile of money because no one is going to buy under efficient homes.

Kalanek I tend to agree with you comments. The fact still remains though that there is still the possibility of the scenario that Senator Bakke laid out.

Senator Lee I would also like to point out that the more stringent the standards, the less the political subdivision will adopt the codes thus defeating the purpose of those codes.

Chairman Andrist Are we wrong in our assumption that the state building code does have strict energy efficiency standards?

Hap Hildebrand The previous speaker is correct, the energy standards have been amended out from the building code. Speaking as a builder, our biggest critics are our customers.

Senator Olafson Do you find consumers are not paying attention to energy efficiency or that they are completely oblivious to standards?

Hildebrand Only if they are 18 years old, people are very much aware of standards.

John Diem State building code manager, division of community services, ND Department of Commerce. Gave neutral testimony about SB 2352. See attachment #4.

Chairman Andrist Is there a way you can speed up the process to get these energy standards into our state code?

Diem Our department does not have that authority. We can't develop the code, we oversee the amendment process, but the voting is up to the local jurisdictions.

Chairman Andrist With the stimulus, is it not attached to the state codes, not whether or not townships adopt the code?

Diem It is, the details are still not entirely clear. Nevertheless with the Department of Energy they would tie compliance to the whole system—state on down to township.

Chairman Andrist The people who do the state code certainly have a vested interest in this issue, can we not assume they will take care of it?

Diem If we are granted that authority or given that direction... but from the best that I have been able to ascertain there is no state wide building code relating to energy conservation.

Senator Anderson What is SB 2427?

Diem That is subjective sir. They are different but I can't make a value judgment.

Senator Olafson In light of the new neutral testimony and issues with energy standards, is your committee willing to deal with those issues?

Hap Hildebrand Yes, that is certainly something we will consider.

Senator Olafson What sort of time frame will you need to address those concerns?

Hildebrand I don't know that I have the authority to answer that.

Chairman Andrist How big is the code board?

Hildebrand There is representatives from every sector of the industry.

Chairman Andrist So who is going to expedite this thing?

John Diem In that role, we can do that.

Chairman Andrist closed the hearing on SB 2352

2009 SENATE STANDING COMMITTEE MINUTES

Bill/Resolution No. SB 2352

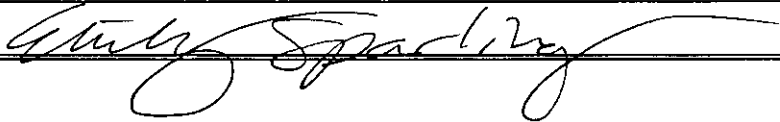
Senate Political Subdivisions Committee

Check here for Conference Committee

Hearing Date: 01/30/2009

Recorder Job Number: 8234

Committee Clerk Signature



Minutes:

Chairman Andrist Reopened the discussion on SB 2352.

Senator Bakke I have no problem deleting obsolete language if we put something in there that says we will delete it as soon as they come up with new codes. Can we do something like that? I am not comfortable leaving us with no energy efficiency language.

Chairman Andrist We could do that, but my sense is that everyone is already doing that. The problem is older houses. If anyone has the wherewithal to buy a home, they are interested in standards.

Senator Bakke I am concerned about someone buying an older home and being told that their home will be brought up to code but there is nothing in the code about energy. Someone could give them a run for their money. I know normal ND people won't do that but we have to be aware of others that might.

Chairman Andrist There could be some unintended consequences. Gave ex. of out of state hunters buying houses.

Senator Olafson Would this be a good bill for a sunset clause to keep the building people motivated to come up with new standards?

Senator Bakke Can you clarify what that means?

Chairman Andrist A sunset clause would simply say that what we do not is not valid in two years.

Senator Lee I agree with Senator Olafson but the problem is that the codes are already obsolete. This bill doesn't really have any teeth to begin with. I would like to see a universal building code adopted but we can't deal with that in this bill.

Chairman Andrist Do you get the sense that they are going to do this?

Senator Lee I do. We have a form asking the seller to provide information about energy costs. We should not underestimate the consumers.

Senator Olafson I would be glad to call Hap Hildebrand if this bill passes as written and encourage them to take this issue up in their next meeting. I move **Do Pass**.

Senator Bakke Second.

Brief discussion about why the 2 sections of the NDCC were amended out of the building code and what the building community will do to address these issues. Doreen Riedman was brought back into the discussion. Also briefly discussed the expense and difficulty of inspecting for energy efficiency in homes. SB 2427 was explained.

The Clerk called the role on the motion to **Do Pass. Yes: 6, No: 0, Absent: 0.**

Senator Bakke will carry the bill.

Date: 1/30/09
Roll Call Vote #: 1

2009 SENATE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2352

Senate Political Subdivisions Committee

Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken Do pass Do not pass Amend

Motion Made By S. Olafson Seconded By S. Bakke

Senators	Yes	No	Senators	Yes	No
Chairman John M. Andrist	/		Senator Arden C. Anderson	/	
Vice Chairman Curtis Olafson	/		Senator JoNell A. Bakke	/	
Senator Judy Lee	/		Senator Jim Dotzenrod	/	

Total (Yes) _____ No _____

Absent 0

Floor Assignment Senator Bakke

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

SB 2352: Political Subdivisions Committee (Sen. Andrist, Chairman) recommends DO PASS (6 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SB 2352 was placed on the Eleventh order on the calendar.

2009 HOUSE POLITICAL SUBDIVISIONS

SB 2352

2009 HOUSE STANDING COMMITTEE MINUTES

Bill No. SB 2352

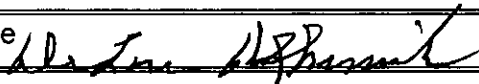
House Political Subdivisions Committee

Check here for Conference Committee

Hearing Date: March 5, 2009

Recorder Job Number: 10254

Committee Clerk Signature



Minutes:

Chairman Wrangham opened the hearing on SB 2352.

Senator Wardner: Introduced the bill. This bill simply takes part of the code out. I have no agenda. This is a code that nobody uses; however, any time you rate the state permits it is used against us. There is a real debate going on between two groups as to a building code as far as efficiency is concerned. Currently they use International Code is what they are using. There are a couple of things in that code that they don't use. For example, one of the things is whether when you build a brand new home do you finish the basement. In ND we usually don't finish the basement unless the people want it finished so the home doesn't cost so much. Usually the people that buy it then when they can afford it they finish the home. This is kind of a bone of contention. My goal as we move forward is to get rid of this obsolete code so it doesn't work against the state code. As far as something for the builders to use; they do use something. They do use the latest in efficiency and sure the homes are built to a certain code. There are people here from the building and contractor people. My goal is just to get it out of there so it doesn't work against the state of ND.

Rep. Koppelman: I can remember setting in this very committee many sessions ago when we were asked to adopt the International Building Code before it was written. I raised concerns

about that and many committee members shared my concern. A couple years later we had a document to look at and people in the building community come in and say this is fine so we adopted it. My question is I get reference as a policy maker to a national document that we really don't control or have say over and yet it subjects us to whatever they tell us to do. Does that concern? Is that what you are getting at here?

Senator Wardner: Basically I would agree with you on that. However, I do think we should have in code some times. If I thought for one minute out contractors and builders were not doing their job that would be a different thing. I know in our community great pride in doing a great job of making sure these homes are efficient. If that motivation wasn't there then I would say let's put some teeth in it. I don't think that is the case. We have some time to allow these groups to get together and come up something that everybody can work with.

Rep. Koppelman: the state building code that is referenced in the new language, is that an entity that exists or that is something that would be created?

Senator Wardner: It would be something that would be created. Right now they are using the International Residential Code with the exception of a few things.

Doreen Riedman: Executive Officer, ND Association of Builders: (see testimony #1). She went through her testimony with the committee.

Rep. Zaiser: Are there a number of folks that might disagree with this statue moving forward within your group?

Doreen Riedman: this came out of our governmental affairs committee and it has been studied at length. We are looking at the IRC. I think there are a few of our members that are a little resistant and probably thinking of our energy efficiency standards and we are going to check into it.

Rep. Zaiser: don't you think that energy efficiency is important since energy prices are going to go up and up; shouldn't it be a high priority?

Doreen Riedman: Absolutely, we could not agree more. The homes we are building are very energy efficient. The stuff that is going up today and the last 5-10 years is quite energy efficient.

Rep. Zaiser: You indicated we are one of 13 states that haven't gone along with fully implementing more energy efficient houses.

Doreen Riedman: The Department of Commerce does not have energy efficiency codes like the homes building industry. Not saying they are not building energy efficient homes, but not mandated and not forced upon them as another regulation. That is where the balancing act is.

Rep. Zaiser: Given the location where we live I think the more critical given the cost of energy and who knows where the future of oil is.

Doreen Riedman: We agree. It comes down to affordability and how much you can do.

Rep. Koppelman: You talked about the 13 states that have been referred to again. Whenever we talk about government regulation coming it is usually to solve the perceived problem and there is something lacking that we need to fix and the government needs to step in. I have lived in BND all my life and I have not shivered in too many houses in ND. I realize we can be more efficient in the way we burn our energy, but I have a brother who lives in Texas and when I go down there you can just about feel the wind blow through the wall. What I am wondering from your industry is that your sense that this is a no brainer that people in ND know we need to be careful and do something about it. I am not saying we don't need standards; but to subscript to some International entity?

Doreen Riedman: the market is driving the energy efficiency. There is more than just the building of the homes that needs energy efficiency. We talk about quiet and other components

that could be put into the homes. We are doing these things already. Some of our resistance along the way has been adding on all these mandated requirements.

Rep. Klemin: What this bill and based on the earlier testimony it is removing obsolete references in the codes and inserting the reference to the State building code. It is just saying the energy standard have to be consistent with state building codes and what you are saying is that this building code advisory committee is the entity that is going to be putting these standards into the state building code. This bill here doesn't require them to do that actually as I see it.

Doreen Riedman: That is correct. It is simply following the process through the state building code to make sure whatever we use in the state is referenced in the next section of law which is 54-21.3. It says that the state building code must consist of the International, building, residential and mechanical code, so within those codes we have sections on energy efficiency and we are saying that using those codes is the way to go and we have a committee to determine what codes they would be in. We have given our assurance we will do whatever we need to for energy efficiency.

Rep. Klemin: I see this bill about the International Energy Conservation Code versus the International Residential Code and that sort of thing. That is really not germane to this particular bill?

Doreen Reidman: You will hear a little later on about the programs. I don't know of anyone who has adopted those standards and most people are using the state building code so this energy standard, I am not sure, we are saying the standards should be in the state building code and I am not sure how necessary this section is because I don't know of any jurisdictions that are using it?

Rep. Hatlestad: At this time do ND state building codes contain energy conservation standards?

Doreen Reidman: They are within the International Residential Code; there is a chapter 11 and it is in there. There has been some resistance to it from the builders because of added liability and responsibility on their part. There are more and more inspections that would go along with a home. Yes they are there, but have been amended out. In Chapter 13 of the International Building Code, which is the commercial side, but they are there. From the residential stand point we will be very accepting of chapter 11.

Rep. Hatlestad: So what you are saying is right now the state building code does not have energy conservation standards.

Doreen Reidman: Correct.

Rep. Klemin: As we just said the State Building Code should include energy conservation standards of some sort? Right now the way the bill reads it is kind of vague.

Doreen Reidman: We are going to be working toward that so that. Right now we are staying now is consistent to what the state building code has in it. So the state building code congress reviews it every year. There are going to have to be standards in there in the future if our state wants to see something.

Rep. Klemin: If we pass this bill the way it is without energy conservation standards in the state building code and you have a law that says you need conservation standards for building construction in the building code it still equals zero.

Doreen Reidman: There will be a meeting of the state building code advisory committee and they will evaluate this.

Rep. Zaiser: I understand that so many states haven't done this, but if there ever were a time for ND to be first in something I think energy conservation might be the area that they should be first. We have this cold weather and clearly heating bills in modest homes are very high.

Doreen Reidman: It is very important whether it is mandated or not. I think with this you will see housing costs rise to in light of some of those mandates. I think what we are doing voluntarily is we are just not getting the credit for what we are doing.

Chairman Wrangham: As I see this bill; this bill is striking out something that actually does not exist. We have nothing today and what this bill does is put in place something that we are and moving forward with which will be included in this; a very thorough ND state building code. I would like to try to stick to those topics. We are not here today to decide whether energy efficiency as put forth by an international group or a national group or any other group are right or wrong so in the interest of letting everyone testify on what this bill does I would ask that the questions and the testimony be restricted to the bill. Try not to repeat things that have already been discussed.

Hap Hildobrand: NDAB. I am on the state advisory code committee. I am in support of this bill. As a member of the code committee we do go through the process of reviewing the IRC and we have amended it. They are very comfortable with what they see and they had concerns over the energy conservation and the homes that are being built in ND today.

Rep. Koppelman: The current law that is being eliminated here references not only the energy conservation code based on a council of American building officials model energy code but it also directs the Department of Commerce to adopt, implement and update and amend the model energy code. Are there rules the Department of Commerce has to govern this?

We have heard testimony that the State Building Code does not have an energy regulation. Are those regulations elsewhere or are they just not being followed at all?

Hap Hildobrand: At this point we are just going by the contracts.

Rep. Koppelman: Your group the state building code advisory committee; the name implies that you are advisory, but are you the ones that actually make the code and if so is that a statutory thing?

Hap Hildobrand: Our group operates similar to this committee. We hear public testimony and the amendments are presented; we vote and have a recommendation. The voting body makes the decisions in addition to the auditors and a lot of building officials throughout the state of ND.

Rep. Koppelman: So they are the ones who actually adopt the update the codes.

Mark Dougherty: Membership Service Director of Association of General Contractors in

ND: I do represent the commercial side. This bill is something in ND that is no longer

acceptable and should be removed and I support that.

Opposition:

Bill Kalanek: ND Alliance for Renewal Energy: (see testimony #2). In the first hearing I did make a plea to the Home Builder's Association asking that they make a concerted effort toward implementing and reinstating Chapter 11 in the residential code for use throughout the state in the state building code. I asked for assurances with regard to that. I feel comfortable saying what we have heard in previous testimony is reassuring to hear that they are going down that path and working on this during public discussion and possibly putting the section back into the code. Based on the information, I don't necessarily support that bill at this point, but I am will to say to say I am moved by the fact that they are going to go down that road with respect to energy efficiency standards for the state.

Rep. Klemin: As was pointed out in previous discussion this amendment here really doesn't do anything other than remove the reference to an obsolete code. There aren't any provisions

for energy conservation in the state building code. This bill as it is doesn't require them to do so. Do you think it would be more appropriate for this statute to say that there should be standards to regulate this in the state building code?

Bill Kalanek: From our orientation we would be supportive of that idea that you are dealing in general terms. Our initial response to this bill was that something specific in regard to a code should be referenced. However, in the current form what we are reviewing because the program reference is obsolete; however the only reference to energy efficiency in the statutes and it is not contained in the state building code. I am hopeful that we can work through the process and get something put into this building code outside of legislation.

Mary Mitchell: Dakota Resource Council: (see testimony #3). I would support an amendment that would require that we do that. I feel it is scary taking this out of the law and I think something should be in place.

Rep. Conrad: If we were to leave this as it is without this reference to this particular manual did you say the policy of the state of ND is that we want to have energy standards and you will find it in our state building code? An amendment might be that after we talked about all these energy things that it would be in the state building code.

Mary Mitchell: I think that would be a good amendment.

Rep. Conrad: We would not say what they are but we want standards in the state of ND. Then we would leave it to our experts on the state building code advisory board.

Neutral:

John Diem: State Building Code Manager: Division of Community Service, ND

Department of Commerce: (see testimony #4). Went over the four points of his testimony.

Rep. Nancy Johnson: How long of a process is this before this would actually be in place in the state building code?

John Diem: We have to give the public notice. I honestly don't know. I would think within two or three months it would be possible. We have to follow the letter of the law.

Rep. Klemin: I think if this bill said this must be in the state building code couldn't you use this law that is enacted as proof and working toward adopting it rather than saying that state law says nothing about it now and trust me we will do something later?

John Diem: It seems logical, but you do give us time to comply so it is not immediate so we certainly are in a certification process and we are working toward it. As I understand we have eight years to comply ninety percent state wide.

Rep. Klemin: what do you mean by compliance? There are two different things here. There is a difference between handling a code and combining a code?

John Diem: The wording as written they are asking for 90% statewide compliance so it ties back into we can have an energy standard that is on the books; it is not actually code until it is adopted by the local jurisdictions. So it has to be adopted by the local jurisdiction. No one is actually used the code. It is only that the model be adopted by the local jurisdiction.

Rep. Klemin: You are saying it is still up to the local jurisdiction to adopt?

John Diem: Yes the participating jurisdiction and the adoption needs to make reference to the building code advisory committee and they make recommendations and they come down to the participating jurisdictions who have adopted the code are able to building on the statues we are talking about.

Rep. Koppelman: current law requires the Department of Commerce to adopt rules to implement, update and amend the model energy code.

John Diem: Yes it does appear so.

Rep. Koppelman: So the problem is not so much what we have in statute, but what is actually happening. Do you know how long it has been in statute, that requirement?

John Diem: No I don't.

Rep. Zaiser: Are those participating participants going to get a uniform energy efficiency in building. You talked about participating jurisdictions? What are they?

John Diem: participating jurisdictions are the local governing entities such as counties, townships and cities who have recommended they adopt this. At this time there are five counties that have adopted the state building code. I think there are 22 local jurisdictions that have also adopted it.

Rep. Zaiser: How would we get to the fact that the energy efficiency policy would impact and exist for the entire state?

Chairman Wrangham: Would you be available to visit with Rep. Zaiser later on particular questions he has later?

Hearing closed.

2009 HOUSE STANDING COMMITTEE MINUTES

Bill No. SB 2352

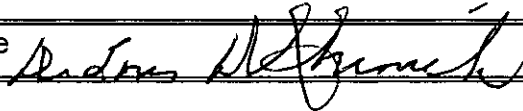
House Political Subdivisions Committee

Check here for Conference Committee

Hearing Date: March 13, 2009

Recorder Job Number: 10908

Committee Clerk Signature



Minutes:

Chairman Wrangham reopened the hearing on SB 2352.

Rep. Klemin: I have a little amendment here. It simply stated that energy codes must be included in the state building code. That amendment did not specify the details of what that would consist of. The intention was that it would be left up to the State Building Code Advisory committee to determine.

Amendment Motion Made By Rep. Klemin: Seconded By Rep. Zaiser.'

Chairman Wrangham: we did not discuss it further after you left. As I recall it was striking the word done, capitalizing the S and down to line 12 instead of be consistent my change was included in the state building code.

Rep. Koppelman: I support where he wants to go with this. When we talk about it being included; this bill when it talks about being consistent and talks about other standards being consistent with the state building code. If we simply say included, I am not sure we are getting to what the bill intends. If we say after the state building code it must include state energy standards or something like that I think then we maintain that.

Rep. Klemin: right now as I understand it there is nothing in the state building code about energy standards. If we say there should be energy standards in the state building code, then

it would be up to that state building code advisory committee to adopt rules to include those standards. Then the local political subdivisions under another section of the law would be able to keep those or not. Then they could choose what they wanted under their own local needs.

Rep. Corey Mock: I have the state building code here and it says that Chapter 11 Energy Efficiency it says to delete this chapter in its entirety this energy efficiency code and relocate the energy as an appendix. If this is relocated in the appendix's would that still be in the building code, but not required and I am not sure if we ask to clarify that?

Doreen Reidman: It is in the appendix check. I still don't know if you would consider that included in the state building code if it is in the appendix. We don't necessarily consider it included unless it is actually other than in the appendix. The Governor's office and the Department of Commerce, we are the appointee and an emergency meeting is being called to include the Chapter 11 so that would work in sync with what Rep. Klemin and Rep. Koppelman concerns are.

Chairman Wrangham: I am going to resist the amendment because I think the bill sponsor's and the Department of Commerce and concerned that I have talked to felt that they way the original language we written was sufficient and I guess we would not want to get into deciding what should be included in the state building code.

Voice Vote Carried.

Do Pass As Amended Motion Made By Rep. Conrad: Seconded By Rep. Koppelman:

Vote: 13 Yes 0 No 0 Absent Carrier: Rep. Zaiser

Hearing closed.

YR
3/13/09

PROPOSED AMENDMENTS TO SENATE BILL NO. 2352

Page 1, line 6, overstrike "The standards" and insert immediately thereafter "Standards"

Page 1, line 12, replace "consistent with" with "included in"

Renumber accordingly

Date: 3/13
Roll Call Vote #: 1

2009 HOUSE STANDING COMMITTEE ROLL CALL VOTES
BILL/RESOLUTION NO. 2352

HOUSE POLITICAL SUBS COMMITTEE

Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken DP DNP DP AS AMEND DNP AS AMEND

Motion Made By Rep Klemin Seconded By Rep Zaiser

Representatives	Yes	No	Representatives	Yes	No
Ch. Wrangham			Rep. Conrad		
Vice Chair Rep. Headland			Rep. Kelsh		
Rep. Hatlestad			Rep. Kilichowski		
Rep. N. Johnson			Rep. Mock		
Rep. Klemin			Rep. Zaiser		
Rep. Koppelman					
Rep. Kretschmar					
Rep. Pietsch					

Total (Yes) _____ No _____

Absent _____

Floor Carrier: Rep.

If the vote is on an amendment, briefly indicate intent:

*Passed -
Voice vote
carried!*

Date: 3/18/09
 Roll Call Vote #: 2

2009 HOUSE STANDING COMMITTEE ROLL CALL VOTES
 BILL/RESOLUTION NO. 2352

HOUSE POLITICAL SUBS COMMITTEE

Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken DP DNP DP AS AMEND DNP AS AMEND

Motion Made By Rep. Conrad Seconded By Rep. Koppelman

Representatives	Yes	No	Representatives	Yes	No
Ch. Wrangham	✓		Rep. Conrad	✓	
Vice Chair Rep. Headland	✓		Rep. Kelsh	✓	
Rep. Hatlestad	✓		Rep. Kilichowski	✓	
Rep. N. Johnson	✓		Rep. Mock	✓	
Rep. Klemin	✓		Rep. Zaiser	✓	
Rep. Koppelman	✓				
Rep. Kretschmar	✓				
Rep. Pietsch	✓				

Total (Yes) 13 No 0

Absent 0

Floor Carrier: Rep. Zaiser

If the vote is on an amendment, briefly indicate intent:

REPORT OF STANDING COMMITTEE

SB 2352: Political Subdivisions Committee (Rep. Wrangham, Chairman) recommends AMENDMENTS AS FOLLOWS and when so amended, recommends DO PASS (13 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). SB 2352 was placed on the Fourteenth order on the calendar.

Page 1, line 6, overstrike "The standards" and insert immediately thereafter "Standards"

Page 1, line 12, replace "consistent with" with "included in"

Renumber accordingly

2009 TESTIMONY

SB 2352



Testimony on Senate Bill 2352
Senate Political Subdivisions Committee
January 29, 2009

Doreen Riedman, Executive Officer
North Dakota Association of Builders

EXECUTIVE COMMITTEE

- PRESIDENT**
John Gunkelman, Fargo
- 1ST VICE PRESIDENT**
Ron Zeller, Dickinson
- 2ND VICE PRESIDENT**
Joel Feist, Minot
- SECRETARY/TREASURER**
Ken Krajsa, Fargo
- PAST PRESIDENT**
Tim Rosencrans, Grand Forks
- BUILD-PAC TRUSTEE**
Don Dabbert Jr., Fargo
- ALTERNATE BUILD-PAC TRUSTEE**
Lori Wilson, Bismarck
- STATE REPRESENTATIVE**
Ralph Applegren, Grand Forks
- ASSOCIATE NATIONAL DIRECTORS**
Ken Krajsa, Fargo
Todd Brady, Bismarck

BOARD OF DIRECTORS

- BISMARCK-MANDAN HOME BUILDERS ASSOCIATION**
Mike Hoplauf, President
Todd Brady
Andy Mizel
Lori Wilson
Vondrachek, Executive Officer

- DICKINSON AREA BUILDERS ASSOCIATION**
Kyle Kuntz, President
Quentin Kitzan
Ron Zeller
Irene Schafer, Executive Officer

- FORX BUILDERS ASSOCIATION**
Loren Abel, President
Nate Applegren
Ralph Applegren, Life Director
Bob Klave, Life Director
Tim Rosencrans
Corey Vreeland
Rusty Wysocki
Betty McDonald, Executive Officer

- HOME BUILDERS ASSOCIATION OF FARGO-MOORHEAD**
Jason Eid, President
Don Dabbert Jr.
Gerald Eid, Senior Life Director
John Gunkeiman
Ken Krajsa
Dan Lindquist
Bryce Johnson, Executive Vice President

- MINOT ASSOCIATION OF BUILDERS**
Joel Feist, President
Mark Boespflug
Joe Stenvold
Bruce Walker, Life Director
Vicky Flagstad, Executive Officer

- OFFICE**
Doreen Riedman, Executive Officer
Lori Wilson, Secretary
Neiss, Administrative Assistant

Chairman Andrisc and members of the Senate Political Subdivisions Committee, the North Dakota Association of Builders (NDAB) asks for your support of Senate Bill 2352 which will remove an out-dated reference to North Dakota's energy standards and update it to be consistent with the State Building Code.

The NDAB represents over 2,000 members statewide with employees numbering approximately 43,000. We are affiliated with five local builders associations in Bismarck-Mandan, Dickinson, Fargo-Moorhead, Grand Forks, and Minot; and are all part of a larger federation, the National Association of Home Builders (NAHB), which has over 200,000 members.

SB 2352: Energy Standards Consistent with State Building Code

- This was an issue that came before the interim Energy Development and Transmission Committee. Most of the sponsors on this bill were members of that committee.
- Removes the outdated reference to the 1989 Council of American Building Officials (CABO) Model Energy Code which is no longer published or maintained.
- Maintains consistency with the State Building Code – one code that is to the benefit of the building industry, state agencies, and consumers.
- State Building Code Advisory Committee reviews the State Building Code annually, holds public hearings and determines amendments to the State Building Code. Is made up of nine representatives of the industry (two building officials, architect, engineer, NDAB - home builder, mechanical contractor, AGC - general contractor, fire marshal, and electrical board).
- North Dakota Century Code (NDCC 54-21.3-03) states that our State Building Code must consist of the International Building, Residential, Mechanical and Fuel Gas Codes. The



IBC and IRC have chapters on energy efficiency, portions of which may someday be adopted by the State Building Code Advisory Committee. Chapter 11 of the International Residential Code, dealing with energy efficiency, has been reviewed closely by our organization, and there are parts of it that may be acceptable in the future. One requirement that would seriously hamper housing affordability would be that of requiring basements to be finished. Many starter homes for young families are built without finished basements so that they can be done later on done the road.

- You will hear that our state will now be without energy standards. There are plenty of energy efficiency standards that can be voluntarily used as guidelines – EnergyStar, National Association of Home Builders (NAHB) Green Home Building Guidelines, U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) standards, and more.
- You'll also hear that it will have an effect on the potential federal stimulus package. If anyone is concerned about that, the home building industry is. We have been in constant contact with our congressional delegation offices and our national association, who is working closely with Congress on this package. All are well-aware of the codes we operate under, and we have good assurances that our current codes will not be detrimental to any stimulus dollars coming to our state.
- New home construction only adds about one percent to the total residential housing stock each year. The new homes being built in our state are being built with good windows, doors, and insulation – it's what consumers demand with the climate we have. We believe more time and energy could be expended into upgrading existing homes and ensuring that they become more energy efficient. New homes are already voluntarily being built with energy efficient products and practices.

We respectfully ask this committee to support Senate Bill 2352 to update the energy standards in our state to be consistent with the State Building Code.



#2

Dakota Resource Council
"Organizing North Dakotans Since 1978"
P.O. Box 1095~~ Dickinson, ND~~ 58602-1095
701-483-2851
www.drcinfo.com

Testimony in opposition of Senate Bill 2352
January 29, 2009

Senator Andrist and Members of the Senate Political Subdivisions Committee,

Dakota Resource Council opposes the change proposed in SB 2352.

Currently, North Dakota state building code does not address energy conservation. At one time, the state had chapters within its code addressing energy conservation, but these 2 chapters were deleted from state building code. Therefore, switching to the state code would leave the state with no energy conservation codes.

If the change to state codes is made, we would like to see an amendment requiring that the 2 chapters be reinstated, which are Chapter 11 of the International Residential Code (IRC) and Chapter 13 of the International Building Code (IBC). We are pleased to note that, according to a 1999 study by the North Dakota Home Builders Association, home construction in North Dakota met or exceeded the Model Energy Code. Therefore, adopting the international standards should be a burden to neither the builder nor the consumer.

Respectfully submitted by

M. R. Mitchell

Mary Mitchell
Dakota Resource Council

"Members of Dakota Resource Council use grassroots actions to influence public opinion and shape public policy to protect agriculture, natural resources, livelihoods and community well-being."

*Same to
House*

**Testimony on Senate Bill 2352
Senate Political Subdivisions Committee
Bill Kalanek
North Dakota Alliance for Renewable Energy**

Good Morning Chairman Andrist and members of the Senate Political Subdivisions committee. My name is Bill Kalanek and I'm here today representing the North Dakota Alliance for Renewable Energy.

NDARE comprises representatives from commodity groups, farm organizations, investor-owned utilities, rural electric cooperatives, state agencies, economic development groups, universities, banks, manufacturers, and conservation and environmental organizations. Partnerships among these stakeholders are central to NDARE's approach. Several of NDARE's members also served on North Dakota's EMPOWER Commission.

Efficiency offers many opportunities to make North Dakota businesses more competitive in national and international markets. Furthermore, using energy efficiently is the most cost effective way to reduce the impact of rising energy costs for North Dakotans. Currently, North Dakota ranks towards the bottom nationally on efficiency standards.

Senate Bill 2352 currently before you, sets the state back even farther as the bill basically removes any efficiency requirements from statute. SB 2352 contradicts the policy recommendations made in the Empower Commission report which states under the Policy section for energy efficiency, "Develop a state energy building code" and prior to that states that "The state energy building code should be reviewed."

The North Dakota Alliance for Renewable Energy (NDARE) supports the adoption of a state energy code for buildings that at least meets current federal standards. The Alliance is concerned that SB 2352 leaves North Dakota without an energy code until the Building Codes Commission convenes in the fall of 2009. If this bill passes, the Alliance hopes the commission would give the state the assurance that it would adopt the appropriate standards at that time.

Thank you.

**DEPARTMENT OF COMMERCE TESTIMONY ON SB 2352
JANUARY 29, 2009, 9:00 A.M.
SENATE POLITICAL SUBDIVISIONS COMMITTEE
RED RIVER ROOM
SENATOR J. ANDRIST, CHAIRMAN**

**John A. Diem – STATE BUILDING CODE MANAGER, DIVISION
OF COMMUNITY SERVICES, NORTH DAKOTA DEPARTMENT
OF COMMERCE**

Good morning Chairman Andrist and members of the Senate Political Subdivisions Committee. I'm John Diem, State Building Code Manager for the Division of Community Services within the Dept. of Commerce.

The Department of Commerce, while neither supporting nor opposing this bill, would like to point out five relevant observations given the information we have at this time.

1.) This bill, as it is written, will have the practical effect of leaving the state with no official energy conservation standards for new building construction. The bill makes the energy conservation standards "...consistent with the state building code." At the present time, the North Dakota state building code does not contain energy conservation standards. Through the building code amendment process the chapters addressing energy conservation were deleted.

2.) The federal Energy Policy and Conservation Act (EPCA) of 1992 requires states to review and adopt the Model Energy Code (and its successor the International Energy Conservation Code, IECC) or submit to the Secretary of Energy its reasons for not doing so. Since the existing statute was adopted the energy code in North Dakota has not been updated. While the potential exists, thus far there have been no consequences associated with non-compliance.

3.) Within the federal stimulus bill, currently making its way through congress, there is language that will tie additional funding from the Department of Energy, for state renewable energy and efficiency programs, to state energy building codes. At this time the details in the proposed legislation are not finalized.

4.) House Bill 1212, currently in the North Dakota House, addresses construction standards for public buildings. The standards relate to energy efficiency and sustainability, more specifically the silver building rating of the LEED design rating system as established by the green building council. The standards only apply to projects over a certain dollar amount (\$2 million for new building construction and five hundred thousand dollars for modification of an existing building). The bill also provides that the Department of Commerce would adopt an exception process.

The LEED standards do go beyond those found in an ordinary building energy code. In addition to reducing energy use, the standards address other items such as water consumption, use of recycled materials in construction, and other factors which impact the long term sustainability associated with a building.

5.) Senate Bill 2427, which the senate introduced yesterday, January 27 and referred it to finance and taxation, makes amendments to the same section of the North Dakota Century Code as the bill being discussed here today.

The Department of Commerce is available to provide additional assistance that may be needed or required.

Thank you and I will try to answer any questions you may have.



*Testimony in Support of Senate Bill 2352
House Political Subdivisions Committee
March 5, 2009*

*Doreen Riedman, Executive Officer
North Dakota Association of Builders*

EXECUTIVE COMMITTEE

- PRESIDENT
John Gunkelman, Fargo
- 1ST VICE PRESIDENT
Ron Zeller, Dickinson
- 2ND VICE PRESIDENT
Joel Feist, Minot
- SECRETARY/TREASURER
Ken Krajsa, Fargo
- PAST PRESIDENT
Tim Rosencrans, Grand Forks
- BUILD-PAC TRUSTEE
Don Dabbert Jr., Fargo
- ALTERNATE BUILD-PAC TRUSTEE
Lori Willson, Bismarck
- STATE REPRESENTATIVE
Ralph Applegren, Grand Forks
- ASSOCIATE NATIONAL DIRECTORS
Ken Krajsa, Fargo
Todd Brady, Bismarck

BOARD OF DIRECTORS

- BISMARCK-MANDAN HOME BUILDERS ASSOCIATION
Mike Hopfauf, President
Todd Brady
Eddy Mitzel
son
ondrachek, Executive Officer

- DICKINSON AREA BUILDERS ASSOCIATION
Kyle Kuntz, President
Quentin Kitzan
Ron Zeller
Irene Schafer, Executive Officer

- FORX BUILDERS ASSOCIATION
Loren Abel, President
Nate Applegren
Ralph Applegren, Life Director
Bob Klave, Life Director
Tim Rosencrans
Corey Vreeland
Rusty Wysocki
Betty McDonald, Executive Officer

- HOME BUILDERS ASSOCIATION OF FARGO-MOORHEAD
Jason Eid, President
Don Dabbert Jr.
Gerald Eid, Senior Life Director
John Gunkelman
Ken Krajsa
Dan Lindquist
Bryce Johnson, Executive Vice President

- MINOT ASSOCIATION OF BUILDERS
Joel Feist, President
Mark Boespflug
Joe Stenvold
Bruce Walker, Life Director
Vicky Flagstad, Executive Officer

- STAFF
iedman,
utive Officer
eiss,
Administrative Assistant

Chairman Wrangham and members of the House Political Subdivisions Committee, the North Dakota Association of Builders (NDAB) asks for your support of Senate Bill 2352 which will remove an out-dated reference to North Dakota's energy standards and update this section of law to be consistent with the State Building Code.

The NDAB represents over 2,000 members statewide with employees numbering approximately 43,000. We are affiliated with five local builders associations in Bismarck-Mandan, Dickinson, Fargo-Moorhead, Grand Forks, and Minot; and are all part of a larger federation, the National Association of Home Builders (NAHB), which has over 200,000 members.

SB 2352: Energy Standards Consistent with State Building Code

- This was an issue that came before the interim Energy Development and Transmission Committee. Most of the sponsors on this bill were members of that committee.
- **Removes the outdated reference** to the 1989 Council of American Building Officials (CABO) Model Energy Code which is no longer published or maintained.
- **Maintains consistency with the State Building Code** - one code that is to the benefit of the building industry, state agencies, and consumers.
- **Reviewed annually by the State Building Code Advisory Committee**, public hearings are held, and amendments are determined for the State Building Code. The State Building Code Advisory Committee is made up of nine representatives of the industry and its regulators (two building officials, architect, engineer, NDAB - home builder, mechanical contractor, AGC - general contractor, fire marshal, and electrical board).



- **North Dakota Century Code (NDCC 54-21.3-03) states that our State Building Code must consist of the International Building, Residential, Mechanical and Fuel Gas Codes.** The IBC (commercial buildings) and IRC (residential) have chapters on energy efficiency, which may be adopted by the State Building Code Advisory Committee in the future. Chapter 11 of the International Residential Code, dealing with energy efficiency, has been reviewed closely by our organization, and we will work with the State Building Code Advisory Committee to include this chapter in the State Building Code at the next review. We do have a concern with one requirement in Chapter 11 that would seriously hamper housing affordability – that of requiring basements to be fully insulated. Many starter homes for young families are built without finished basements so that they can be done later on down the road by do-it-yourselfers when they can afford it.
- Stimulus dollars coming to our state have requirements for greater energy efficiency standards in our State Building Code. We have met with and are working with the ND Department of Commerce and the Governor's office to work toward compliance of these requirements. We have given them our assurance that the home building industry in our state will work cooperatively with them and the State Building Code Advisory Committee, and encourage the adoption of Chapter 11 of the International Residential Code during its next review process.
- Opponents have suggested the International Energy Conservation Code for our energy standards. This is a much more complicated, expensive, and time-consuming code, not designed for the residential construction industry. A bill draft to this effect was killed by the Energy Development and Transmission Committee during the interim. *(A chart explaining the differences in the IRC and the IECC is attached to my testimony, including a sample of the IECC and its complex formulas.)*
- Until the State Building Code is reviewed and updated, **there are plenty of energy efficiency standards that can be voluntarily used as guidelines** – EnergyStar, National Association of Home Builders (NAHB) Green Home Building Guidelines, U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) standards, and the International codes.
- New home construction adds about one percent to the total residential housing stock each year. **The new homes being built in our state are being built with good windows, doors, and insulation** – it's what consumers demand with the climate we have. We believe more time and energy could be expended into upgrading existing homes and ensuring that they become more energy efficient, which is what much of the stimulus dollars will do. **New homes are already voluntarily being built with energy efficient products and practices.**

We respectfully ask this committee to support Senate Bill 2352 to remove the outdated reference to the 1989 Model Energy Code, and work with the existing International Codes that our State Building Code references.

International Residential Code (IRC)

International Energy Conservation Code (IECC)

~~1~~ 1

Compliance Provisions

Prescriptive path for compliance -

Provides charts that indicate insulation R-values, window fenestration levels, U-factors for walls, floors, ceilings based upon which zone you are building in.

Prescriptive and performance paths for compliance -

Formulas based on heating degree days, wall assembly, fenestration levels, windows, skylights, orientation of the home; thermal mass, air leakage, etc. Calculations provided for doing tradeoffs. *Example; if there is a larger percentage of window space in the home, higher insulation R-values can be used to achieve compliance.*

Ease of Use

Specific minimum standards are detailed in the code for builders to use on all houses built in that zone.

Complex calculations are required on each house based upon the factors listed above. Any revisions on the house plan would require further calculations.

Practicality

Geared for builders. Written expressly for the residential construction industry.

Written for engineers. Would require an engineer to do calculations and formulas. Compliance check software is available from the Department of Energy.

Comprehension

Rated at the 17 grade level for comprehension.

Rated at the 23 grade level for comprehension.

Inspections

Both would require more inspection hours and more expensive testing of homes (ex. blower door test). Estimated at 20 extra inspection hours per house. The IECC would be more complex for both the builder and the building inspector, and would add extra cost to the home based on the time expended.

Components and Requirements

Specific code requirements are detailed relating to levels of insulation R-values, window u-factors, etc.

Code requirements vary based on the building components of each house - window area, skylights, etc. The method to getting to those component requirements is much more complicated, expensive, and time-consuming.

SAMPLE OF THE INTERNATIONAL ENERGY CONSERVATION CODE AND THE FORMULAS INVOLVED

RESIDENTIAL — COMPONENT PERFORMANCE APPROACH

TABLE 502.2.1.1.1
F_c VALUES FOR WALL SECTIONS WITH STEEL STUDS
PARALLEL PATH CORRECTION FACTORS

NOMINAL STUD SIZE ^a	SPACING OF FRAMING (Inches)	CAVITY INSULATION R-VALUE	CORRECTION FACTOR
2 x 4	16 o.c.	R-11	0.50
		R-13	0.46
		R-15	0.43
2 x 4	24 o.c.	R-11	0.60
		R-13	0.55
		R-15	0.52
2 x 6	16 o.c.	R-19	0.37
		R-21	0.35
2 x 6	24 o.c.	R-19	0.45
		R-21	0.43
2 x 8	16 o.c.	R-25	0.31
2 x 8	24 o.c.	R-25	0.38

^a SI: 1 inch = 25.4 mm.

Applies to steel studs up to a maximum thickness of 0.064 inches (16 gage)

502.2.1.1.2 Mass walls. When thermal mass credit is desired for an exterior wall having a heat capacity greater than or equal to 6 Btu/ft² · °F [1.06 kJ/(m² · K)], the U_w for such a wall shall be less than or equal to the applicable value in Table 502.2.1.1.2(1), 502.2.1.1.2(2) or 502.2.1.1.2(3) based on the U_w required for an exterior wall having a heat capacity less than 6 Btu/ft² · °F [1.06 kJ/(m² · K)] as determined by Section 502.2.1.1, Equation 5-1 and Figure 502.2(1).

Note: Masonry or concrete walls having a mass greater than or equal to 30 lb/ft² (146 kg/m²) of exterior wall area and solid wood walls having a mass greater than or equal to 20 lb/ft² (98 kg/m²) of exterior wall area have heat capacities equal to or exceeding 6 Btu/ft² · °F [1.06 kJ/(m² · K)] of exterior wall area.

The heat capacity of the wall shall be determined using Equation 5-4 as follows:

$$HC = w \times c \quad \text{(Equation 5-4)}$$

where:

HC = Heat capacity of the exterior wall, Btu/ft² · °F [kJ/(m² · K)] of exterior wall area

w = Mass of the exterior wall, lb/ft² (kg/m²) of exterior wall area is the density of the exterior wall material, lb/ft³ (kg/m³) multiplied by the thickness of the exterior wall, ft (m).

c = Specific heat of the exterior wall material, Btu/lb · °F [kJ/(kg · K)] of exterior wall area as determined from Chapter 24 of the ASHRAE *Fundamentals Handbook*.

502.2.1.2 Roof/ceiling. The combined thermal transmittance value (U_o) of the gross area of the roof or ceiling assembly shall not exceed the value given in Table 502.2. Equation 5-5 shall be used to determine acceptable combinations to meet this requirement.

$$U_o = \frac{(U_R \times A_R) + (U_s \times A_s)}{A_o} \quad \text{(Equation 5-5)}$$

where:

U_o = The average thermal transmittance of the gross roof/ceiling area, Btu/h · ft² · °F [W/(m² · K)].

A_o = The gross area of the roof/ceiling assembly, square feet (m²).

U_R = The combined thermal transmittance of the various paths of heat transfer through the opaque roof/ceiling area, Btu/h · ft² · °F [W/(m² · K)]

A_R = Opaque roof/ceiling assembly area, square feet (m²).

U_s = The combined thermal transmittance of the area of all skylight elements in the roof/ceiling assembly (See Section 502.2.1.2.1), Btu/h · ft² · °F [W/(m² · K)].

A_s = The area (including frame) of all skylights in the roof/ceiling assembly, square feet (m²). (see Section 502.2.1.2.1).

Notes: (1) When more than one type of roof/ceiling and/or skylight is used, the U and A terms for those items shall be expanded into their subelements as in Equation 5-6:

$$(U_{R1} \times A_{R1}) + (U_{R2} \times A_{R2}) + \dots \text{ etc.} \quad \text{(Equation 5-6)}$$

(2) Access doors or hatches in a roof/ceiling assembly shall be included as a subelement of the roof/ceiling assembly.

(3) When the roof/ceiling assembly contains cold-formed steel truss framing, the U_R value to be used in Equation 5-5 shall be determined by Equation 5-7, 5-8, or 5-9. These equations apply to cold-formed steel truss roof framing spaced at 24 inches (609 mm) on-center and where the penetrations of the truss members through the cavity insulation do not exceed three penetrations for each 4-foot (1220 mm) length of the truss.

For constructions without foam between the drywall and bottom chord of the steel truss use Equation 5-7:

$$U_R = \frac{1}{(0.864 \times R_{in}) + 0.330} \quad \text{(Equation 5-7)}$$

where:

R_{in} = The R -value of the cavity insulation, h · ft² · °F/Btu



#3

Dakota Resource Council
"Organizing North Dakotans Since 1978"
P.O. Box 1095 ~ Dickinson, ND ~ 58602-1095
701-483-2851
www.drcinfo.com

Testimony in opposition of Senate Bill 2352
March 5, 2009

Representative Wrangham and Members of the House Political Subdivisions
Committee,

Dakota Resource Council opposes the change proposed in SB 2352.

Currently, North Dakota state building code does not address energy conservation. At one time, the state had chapters within its code addressing energy conservation, but these 2 chapters were deleted from state building code. Therefore, switching to the state code would leave the state with no energy conservation codes.

If the change to state codes is made, we would like to see an amendment requiring that the 2 chapters be reinstated, which are Chapter 11 of the International Residential Code (IRC) and Chapter 13 of the International Building Code (IBC). We are pleased to note that, according to a 1999 study by the North Dakota Home Builders Association, home construction in North Dakota met or exceeded the Model Energy Code. Therefore, adopting the international standards should be a burden to neither the builder nor the consumer.

Respectfully submitted by

Mary Mitchell
Dakota Resource Council

"Members of Dakota Resource Council use grassroots actions to influence public opinion and shape public policy to protect agriculture, natural resources, livelihoods and community well-being."

Handwritten initials

**DEPARTMENT OF COMMERCE TESTIMONY ON SB 2352
March 5, 2009, 9:00 A.M.
HOUSE POLITICAL SUBDIVISIONS COMMITTEE
PRAIRIE ROOM
REPRESENTATIVE DWIGHT WRANGHAM, CHAIRMAN**

**John A. Diem – STATE BUILDING CODE MANAGER, DIVISION OF
COMMUNITY SERVICES, NORTH DAKOTA DEPARTMENT OF
COMMERCE**

Good morning Chairman Wrangham and members of the House Political Subdivisions Committee. I am John Diem, State Building Code Manager for the Division of Community Services within the Department of Commerce.

The Department of Commerce, while neither supporting nor opposing this bill, would like to point out three relevant observations given the information we have at this time.

1. This bill ties the energy conservation standards to the state building code. At the present time, the North Dakota state building code does not contain energy conservation standards. Through the building code amendment process the chapters addressing energy conservation were deleted.
2. The federal Energy Policy and Conservation Act (EPCA) of 1992 requires states to review and adopt the Model Energy Code (and its successor the International Energy Conservation Code, IECC) or submit to the Secretary of Energy its reasons for not doing so. Since the existing statute was adopted the energy code in North Dakota had never been updated.
3. The American Recovery and Reinvestment Act (Federal stimulus bill) will be providing federal funding for the North Dakota State Energy Program. One of the conditions of that funding is that the state must certify that it has or is working toward adopting an energy code.
4. Recently in discussions with some of our industry partners, such as the ND Home Builders Association and the ND Building Officials Association, we have received assurances and agreed to pursue and work toward the incorporation of the energy code provisions into the State Building Code.

The Department of Commerce is available to provide additional assistance that may be needed or required.

Thank you and I will try to answer any questions you may have.