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Details:

(FORM UPDATED: 08/11/2010)

**WISCONSIN STATE LEGISLATURE ...  
PUBLIC HEARING - COMMITTEE RECORDS**

**2009-10**

(session year)

**Senate**

(Assembly, Senate or Joint)

**Committee on ... Labor, Elections, and Urban  
Affairs (SC-LEUA)**

**COMMITTEE NOTICES ...**

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**

**INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL**

- Appointments ... **Appt** (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... **CRule** (w/Record of Comm. Proceedings)
- Hearing Records ... bills and resolutions (w/Record of Comm. Proceedings)
  - (**ab** = Assembly Bill)                      (**ar** = Assembly Resolution)                      (**ajr** = Assembly Joint Resolution)
  - (**sb** = Senate Bill)                              (**sr** = Senate Resolution)                              (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

## Senate

### Record of Committee Proceedings

#### **Committee on Labor, Elections and Urban Affairs**

##### **Assembly Bill 288**

Relating to: education and work experience requirements for registration as a professional engineer and examinations for professional engineering credentials.

By Representatives Molepske Jr., Gottlieb, Townsend, Zepnick, A. Ott, Jorgensen, Kerkman, Danou, Petrowski and Gunderson; cosponsored by Senators Plale and Taylor.

November 03, 2009 Referred to Committee on Labor, Elections and Urban Affairs.

March 16, 2010 **PUBLIC HEARING HELD**

Present: (5) Senators Coggs, Wirch, Lehman, A. Lasee and Grothman.

Absent: (0) None.

##### Appearances For

- Glenn Schwalbach — Wisconsin Society of Professional Engineers
- Martin Hanson
- Tom Walther — ASCE
- Charles Kopplin

##### Appearances Against

- None.

##### Appearances for Information Only

- None.

##### Registrations For

- Frederick Grath
- Jeffrey Russell
- Jeff Plale — Senator
- Carol Godiksen — American Council of Engineering Companies
- Morna Foy — Wisconsin Technical College System
- Paul Gabriel — Wisconsin Technical College District Boards

##### Registrations Against

- None.

##### Registrations for Information Only

- None.

April 8, 2010

**EXECUTIVE SESSION HELD**

Present: (5) Senators Coggs, Wirch, Lehman, A. Lasee and Grothman.

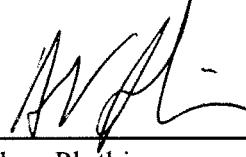
Absent: (0) None.

Moved by Senator Lehman, seconded by Senator Wirch that **Assembly Bill 288** be recommended for concurrence.

Ayes: (5) Senators Coggs, Wirch, Lehman, A. Lasee and Grothman.

Noes: (0) None.

CONCURRENCE RECOMMENDED, Ayes 5, Noes 0



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Adam Plotkin  
Committee Clerk

**Vote Record**  
**Committee on Labor, Elections and Urban Affairs**

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Date: Thursday, April 8, 2010

Moved by: LEHMAN      Seconded by: WIRCH

AB 288      SB \_\_\_\_\_      Clearinghouse Rule \_\_\_\_\_  
 AJR \_\_\_\_\_      SJR \_\_\_\_\_      Appointment \_\_\_\_\_  
 AR \_\_\_\_\_      SR \_\_\_\_\_      Other \_\_\_\_\_

A/S Amdt \_\_\_\_\_  
 A/S Amdt \_\_\_\_\_ to A/S Amdt \_\_\_\_\_  
 A/S Sub Amdt \_\_\_\_\_  
 A/S Amdt \_\_\_\_\_ to A/S Sub Amdt \_\_\_\_\_  
 A/S Amdt \_\_\_\_\_ to A/S Amdt \_\_\_\_\_ to A/S Sub Amdt \_\_\_\_\_

Be recommended for:  
 Passage       Adoption       Confirmation       Concurrence       Indefinite Postponement  
 Introduction       Rejection       Tabling       Nonconcurrence

<u>Committee Member</u>	<u>Aye</u>	<u>No</u>	<u>Absent</u>	<u>Not Voting</u>
<b>Senator Spencer Coggs, Chair</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Senator Robert Wirch</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Senator John Lehman</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Senator Alan Lasee</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Senator Glenn Grothman</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Totals:</b>	<u>5</u>	<u>0</u>	_____	_____

Motion Carried       Motion Failed

**David A. Atkins, PE, SE  
1969 Spring Creek Circle  
Green Bay, WI 54311**

November 9, 2009

Senator Spencer Coggs, Chair  
Committee on Labor, Elections and Urban Affairs  
Room 123 South  
State Capitol  
PO Box 7882  
Madison, WI 53707-7882

RE: Assembly Bill 288, Professional Engineer Registration and Licensing

Dear Senator Coggs:

I am a Wisconsin resident and a licensed Professional Engineer (PE) in the State of Wisconsin. It is my understanding that Assembly Bill 288, which requires applicants for PE licensure to have an accredited engineering degree, has passed the Assembly and will be up for a vote in the Senate Committee on Labor, Elections and Urban Affairs in the near future. **I strongly urge you to vote against this unnecessary piece of legislation.**

Proponents of this bill claim continuation of current law is jeopardizing Wisconsin professional engineers' ability to practice in other states, and licensure reciprocity is being denied. This is simply not true. Each state sets its own licensing laws—nothing about current Wisconsin law prevents licensure in other states.

Proponents also claim current law does not protect the public to the degree that this new proposal would. I strongly disagree with this. I do not hold an accredited engineering degree, but have been a successful, practicing PE in Wisconsin since 1994. I know several competent PE's who, like me, do not hold accredited engineering degrees. For the most part, an engineer's ability to protect the public health, safety and welfare is obtained through EXPERIENCE, not college background.

Only a licensed PE can start up a new engineering business. This bill, if passed, would be harmful to the Wisconsin economy by preventing qualified individuals from obtaining a PE license. I respectfully urge you to vote against AB 288 when it comes up for a vote.

If you have any questions, please don't hesitate to call me at (920)468-9503. I look forward to hearing from you regarding the outcome of the vote on AB 288.

Sincerely,



David A. Atkins, PE, SE



Jim Doyle  
Governor

WISCONSIN DEPARTMENT OF  
REGULATION & LICENSING

1400 E Washington Ave  
PO Box 8935  
Madison WI 53708-8935  
Email: [web@drl.state.wi.us](mailto:web@drl.state.wi.us)  
Voice: 608-266-2112  
FAX: 608-267-0644  
TTY: 608-267-2416

Celia M. Jackson  
Secretary



January 11, 2010

Honorable Spencer Coggs  
Room 123 South  
State Capitol  
P.O. Box 7882  
Madison, WI 53707-7882

Re: AB 288

Dear Senator Coggs:

I am writing to you to ask that your move forward with AB 288 which is currently referred to your committee on Labor, Elections and Urban Affairs.

As chairman of the Examining Board of Architects, Landscape Architects, Professional Engineers, Designers and Land Surveyors, I have worked hard with the industry and educational interest to reach a compromise on the language of this bill—we are all strongly in support of this change. At the assembly committee hearing there was no opposition.

I have sent you information on this bill previously, if you need additional information, please contact me.

Thank you in advance for your prompt attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Martin J. Hanson".

Martin J. Hanson, P.E.  
Chairman, Wisconsin Joint Board of Architects, Landscape Architects, Professional  
Engineers, Designers & Land Surveyors  
Chairman, Engineers Section of the Wisconsin Joint Board of Architects, Landscape  
Architects, Professional Engineers, Designers & Land Surveyors

cc: Senator Robert Wirth  
Senator John Lehman  
Senator Alan Lasee  
Senator Glenn Grothman





**Heath T. Bielefeldt**

3011 W Frank Street • Eau Claire, WI 54703

Phone 715-379-3490

heathbielefeldt@gmail.com

February 7, 2010

To: Members, Senate Committee on Labor, Elections and Urban Affairs.

**Subject: Public Hearing on AB-288**

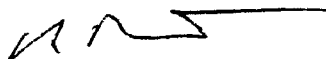
I am writing to voice my opposition to 2009 Assembly Bill 288, in its current form.

Past legislatures have essentially offered a "promise" to me and many others that it was a legitimate career path to obtain a P.E. license through work experience. I personally have based many career and personal life decisions on this offer. Now, with less than two years left in a 12 year requirement, I simply cannot believe the injustice that is before you now in the form of AB-288.

Supporters of AB-288 have called the experience path to P.E. a "loophole", but that could not be further from the truth. There is no special interpretation needed to see that it is currently a legal and legitimate option.

A reasonable implementation schedule for AB-288 would be a minimum of two years after the bill is passed and signed. Please consider the impact to persons who trusted previous legislatures and don't ignore the potential wrongdoing. Thank you.

Sincerely,



Heath T. Bielefeldt



Senate  
**PUBLIC HEARING**  
Committee on Labor, Elections and Urban Affairs

Tuesday, March 16, 2010  
11:05 AM

State Capitol

**Assembly Bill 288**

Relating to: education and work experience requirements for registration as a professional engineer and examinations for professional engineering credentials.

By Representatives Molepske Jr., Gottlieb, Townsend, Zepnick, A. Ott, Jorgensen, Kerkman, Danou, Petrowski and Gunderson; cosponsored by Senators Plale and Taylor.

Testimony  
Of

**Martin J. Hanson, PE**

Past-Chairman—Examining Board of Architects, Landscape Architects,  
Professional Engineers, Designers and Land Surveyors  
And  
Past-Chairman—Professional Engineers Section

**Committee on Labor, Elections and Urban  
Affairs**

Senator Spencer Coggs (Chair)  
Senator Robert Wirch  
Senator John Lehman  
Senator Alan Lasee  
Senator Glenn Grothman

Mr. Chairman Coggs and members of the Senate Committee on Labor, Elections and Urban Affairs:

My name is Martin Hanson and I am a professional engineer.

I am presenting testimony on behalf of myself as a Professional Engineer.

I have recently served two four-year terms as the state as the chairman of the Examining Board of Architects, Landscape Architects, Professional Engineers, Designers and Land Surveyors, and chairman of the Engineers Section of the Joint Board. I served on these boards for eight years. I am a registered/licensed Professional Engineer in seven states and have been in the profession for over thirty years. I am also a member of several professional organizations who also support this legislation.

I would like to thank the chairperson for scheduling the hearing on this important legislation. I worked hard on this legislation last year with Representative Gottlieb and others, but the bill stalled on the floor of the Senate. Today, I intend to provide testimony on this legislation to inform and answer your questions to convey the purpose behind the changes included in Assembly Bill 288.

I have been working on some of these changes since I was first appointed to the board. This legislation is strongly supported by the Engineers Section and is likewise strongly supported by the Examining Board of Architects, Landscape Architects, Professional Engineers, Designers and Land Surveyors.

I am also happy to report that this bill has received the support of members of the American Society of Civil Engineers, Wisconsin Section, the Wisconsin Society of Professional Engineers (WSPE), and the American Council of Engineering Companies of Wisconsin (ACEC WI). I have also received letters and phone calls in support of this bill from my many colleagues in the industry.

Let me take a moment to explain the practice of engineering. Engineer is a broad term that covers people who may design anything from toys to the space shuttle. Engineers may be Electrical, Mechanical, Software, Civil, Transportation, and others, and each practice in a discipline specialty.

Not all engineers are licensed professional engineers; in fact many are not.

The mission of the Examining Board is to protect the public health, safety and welfare by granting a professional engineering license to only those most qualified. Many engineering projects are designed by a team of engineers and technicians; only one of those team members has the professional engineer license and he/she is designated to be in responsible charge for the engineering on the project. Therefore, this credential is not a prerequisite for working in the engineering field as some of the other credentials administered by the Department of Regulation and Licensing. Let me say that again. The professional engineer credential is intended for one member of the project team who assumes responsible charge for the project and will have a staff of engineers and technicians working on the project.

This bill does three simple things. First, it streamlines the licensure process for engineers; second, it eliminates the review of examinations; and thirdly, it eliminates the statutory need for testing in a specific area. All of these changes in the statutes for professional engineers and are long overdue. I will address each change separately.



This bill eliminates all the alternate paths to licensure and prescribes a single path, one set of requirements, and one standard for all applicants.

That path will be, in sequential order:

1. Obtain an engineering degree from an ABET or Board approved institution
2. Pass the 8-hour Fundamentals of Engineering exam (national exam)
3. Obtain 4/6 years of qualifying engineering experience
4. Pass the 8-hour Principles and Practice exam (national exam)

Currently, the most problematic path to licensure in the current law is the approved degree plus 8 years of qualified experience. This path forces the board, two of whom are public members with limited technical qualifications and knowledge, to make subjective judgments on applicants' qualifications for licensure. We do not believe this is good public policy and obstructs the board's mission of protecting public health, safety, and welfare. This path is sometimes referred to as the "grandfather" clause or path, as it was likely enacted in very early licensure legislation to allow current practitioners the ability to become licensed.



This path, and all other paths in the current law, are repealed by Assembly Bill 288. Applicants will all have a consistent and standardized path to licensure. The Board will evaluate each candidate against the same criteria.

Examinations by themselves do not ensure the competency of any engineer. But we believe the exam is a far better and more consistent measure than a subject review of a resume of experience. The path to licensure is structured in three parts, education, experience, and examination.

In the spirit of compromise, we have worked with the Wisconsin Technical Schools to include a 2 year program of engineering study as an option for the educational requirement. Many engineers are uncomfortable with this 2-year option because there are many studies moving the industry to require more than a four-year degree to satisfy the educational requirement. In fact, all our neighboring states require the 4-year degree; Wisconsin will stand alone allowing the 2-year program. This bill preserves this path; it does not create a new path to licensure.

Professional Engineers who obtain their license in Wisconsin by this “grandfather” clause or the 2-year engineering program will be severely disadvantaged in other states when applying for licensure by comity. Most states do not recognize or accept the Wisconsin license granted by experience because it was not obtained by examination.

With this bill, Wisconsin professional engineers must take the national Principles and Practice exam which is common to all fifty states. Requiring all Wisconsin engineers to obtain licensure by examination will make it easier for them to obtain licenses in other states. This will provide more opportunities for Wisconsin professional engineers.

The Engineer Section predominately sees applications for licensure in this path in two scenarios.

*Applicants who Fail to Pass Principles and Practice Exam*

We have seen a number of applicants who have failed the Principles and Practice examination, once or several times. Some simply wait an additional four years and re-apply under the “grandfather” clause. Some of these applicants will even state in their application that they are applying

because they have failed the exam. Furthermore, some of those who have been denied licensure under the “grandfather” clause, on appeal during their hearing freely state that they don’t want to take the exam or believe they cannot pass the exam. The “grandfather” path is unquestionably the easier path to licensure. It is also the most subjective and therefore we believe an inappropriate process to grant a professional engineer license with its critical responsibilities. The board should have evidence sufficient to support a strong recommendation for licensure for all applicants who are granted a license to practice. We can only have this sufficient evidence by having consistent criteria to measure against. We believe the criteria should be the ability to pass the Principal and Practice examination. The inability of an applicant to pass the exam raises doubt as to their competence, regardless of the applicant’s experience. The board’s duty is to eliminate doubt in the consideration of candidates for licensure.

#### *Applicants from out-of-state*

We are seeing an increase in the number of applicants under the “grandfather” clause who are residents of states other than Wisconsin. This is because Wisconsin may be the only state that still has this experience path to licensure. Our lower application and renewal fees also

make Wisconsin an attractive state to obtain licensure. Many of these applicants have significantly more experience than the required eight years. These are typically persons who are looking to simply add a credential to their resume for compensation, status, or other reasons outside the interests of the objective of licensure. Granting licenses in this manner is not within our mission to protect public health safety and welfare and extends our intended jurisdictional reach far beyond the borders of Wisconsin. We believe this to be an inappropriate use of our resources and not a good path to a professional credential.

It is not surprising that engineers in the industry across the country generally regard those who have obtained licensure by examination to have met a higher standard than those who have obtained the credential by experience only.

#### EXAM REVIEW

The second change included in this bill relates to applicants reviewing exam questions they answered incorrectly.

This bill eliminates the opportunity for an applicant to review their incorrect answers to exam questions.

The tests we use for Fundamentals of Engineering and Principles and Practice are developed by The National Council of Examiners for Engineering and Surveying (NCEES) and are used across the country. An enormous amount of effort goes into developing the test question bank. The questions are tested for ambiguity, accuracy, and other measures to ensure they are a fair and objective measure of breadth and depth of knowledge. To facilitate testing and scoring, these tests are now multiple choice and machine scored.

The existing legislation was enacted when the examinations were written long-hand. Applicants would develop the solution on paper and submit their answers with supporting logic and calculations. These questions were then graded, and partial credit was granted appropriate to the correctness of the solution strategy contained in the applicant's presentation. In this method of examination, it was logical to allow an opportunity for the applicant to review his or her answer and potentially appeal for additional partial credit.

Multiple choice questions with single unique correct answers eliminate the opportunity to score any partial credit and therefore eliminate any need for post-exam review. Currently if an applicant requests to review a question, we have to seek approval from NCEES and have a board member present during the review. The applicant is shown the question text, the answer choices, and his or her answer. The applicant is NOT shown the correct answer. An unscrupulous applicant could review multiple questions in multiple exam administrations, all for the purpose of harvesting questions for either his or her own benefit (some questions are repeated in each administration of the exam to measure exam difficulty and consistency) or for unauthorized and illegal distribution and/or sale of test questions.

NCEES is concerned, and rightly so, about the security of the exam questions. There is considerable time and money expended in the development and maintenance of the test bank. To allow post-exam review of questions opens the state of Wisconsin to the risk of exam security breach. NCEES has indicated it may hold states liable for the cost of development and testing of replacement questions where the state's process did not ensure the security of the exam. In a recent security

breach, NCEES was successful in a lawsuit were they were awarded a \$1M judgment. Wisconsin can ill afford this expense.

We believe that there is no real purpose for reviewing exam questions in the current format, and we want to reduce the risk to the state of Wisconsin for defense of any claims against the state by NCEES or breach of exam questions. In addition, the Department of Regulation and Licensing and the board can use their time more wisely in tasks other than proctoring an applicant's review of test questions.

#### SPECIFIC AREA TESTING

The third change included in this bill relates to specific area testing. The current statute contains language requiring the examination to "include questions which require applicants to demonstrate knowledge of the design needs of people with physical disabilities and of the relevant statutes and codes."

This legislation was likely enacted in the spirit of Americans' with Disabilities Act implemented in 1973 and 1990. The intent was logically to

raise awareness among newly licensed engineers of the changes to codes and design standards dealing with people with physical disabilities.

The need to specifically test for this attribute no longer exists. The International Building Code has been adopted by many states and local governments. This document, over 700 pages, is revised every three years. It contains a section on accessibility, defining the term as the accommodation of disabled persons in structures. This includes parking spaces, elevators, and restrooms. Local governments may pass ordinances to supplement these requirements. There are extensive resources available to design professionals dealing with the Americans with Disabilities Act including the ADA.gov website.

We believe that the design professions and educators have been working within the requirements of ADA for more than 30 years, and it has become the standard of practice. The examination prepared by NCEES contains information on all subjects that will include ADA impacts where appropriate. Having the statute refer to a specific test area requires the state to prepare and administer these questions separately from the national exam—an



additional burden of state resources with no corresponding benefit to the public.

I want to assure the committee that the removal of this language and requirement in no way whatsoever is intended to diminish the need for design professionals to work within design statutes, codes, and ordinances to accommodate the needs of those with physical disabilities. My uncle, an Architect for years in Arizona, was a polio victim and was confined to a wheelchair for most of his practicing years; I am indeed deeply sensitized to this issue. I again assure the committee that the removal of this requirement does not change the methods and practices of design professionals with regard to accommodations and accessibility issues for persons with disabilities.

We believe that it is no longer necessary to have the statutes specially call out specific engineering areas for questions in the examination. To do so raises questions about other technical areas that should be considered to be included in the examination. The board has confidence in the national exams prepared by NCEES to achieve an appropriate breadth and depth of questions. This is a difficult exam and requires substantial serious

preparation as demonstrated by the overall 54% pass rate in Wisconsin (first-time takers have a higher pass rate of 74%).

Madam Chairperson, this bill include includes provisions that were controversial during the last legislative session; specifically in regard to the educational requirements in this bill. I would like to take just a moment to address this issue.

This bill includes a provision that allows graduates of technical school 2-year engineering programs and experience satisfactory to the board, to apply to sit for the professional engineer examination.

The professional engineer credential should be reserved for those most qualified to supervise and be in responsible charge. The board's function is to determine who among the many professionals in the engineering industry are most qualified. To assist us make that decision, we rely on basically three things. First a degree from an ABET accredited engineering program, second at least four years of qualifying experience, and third, examinations. No system is 100% accurate—some who can pass the test may not be truly qualified. However your and my responsibility is to

manage a system that has a reasonable assurance of a high degree of accuracy. In more cases than not, an education of four years in an ABET accredit program prepares and engineer more than a two year degree in a technical college—both programs serve a critical and useful purpose, but they have different outcomes. The public safety is better served with the higher standard.

This is not a debate about which is better, college/university programs versus technical school programs. They are just different. One issues here is that technical school credits are not always accepted by the University of Wisconsin system for credit when students transfer to seek an engineering degree. I'm not familiar enough with the courses and equivalency to have an opinion on who is right, but the fact that there is a difference under debate only strengthens my argument that the two degrees and the information learned is substantially different.

There is current active debate on educational requirements for licensure. There are several credible studies and recommendations that increase educational requirements beyond the recommended four-year ABET degree. NCEES is in the process of adopting a new model law that

includes this increased educational requirement beyond a bachelor's degree. ASCE released a study, Civil Engineering Body of Knowledge for the 21st Century, further documenting the need for additional educational requirements because the technical component of an engineering degree has eroded over time.

Last session, this bill was also framed as a “fencing out” proposition—IT IS NOT. There are many unlicensed persons productively working for engineering companies and government agencies. The license is only required, and appropriately so, for those who are in responsible charge of projects. Project teams are always composed of a variety of technical specialists, engineers and technicians, licensed and unlicensed; all vital members of the team; all with potential for rewarding careers. This field is not like cosmetology or barbering whereby you must have a license to practice. The professional engineer credential is reserved for those who have demonstrated a level of competence such that they are reasonably competent to accept professional liability for the protection of public health, safety, and welfare. This credential is not required to be a member of an engineering or project team. This is not an issue about who can do **what work**, it is an issue about who is the **responsible person** for public

projects and how the state assures the public of those persons competence.

The bill also enhances Wisconsin engineers ability to compete for projects nationwide—an economic gain for Wisconsin

AB 288 generally brings Wisconsin in alignment with other states. We don't want to have the "easy path" that is less valued (which is it by other states) and will tend to attract those who may not be qualified.

This is a critical time to move this bill. In the design and construction industry, there is a new procurement method called design-build that you may have heard of. In this procurement, the owner signs a contract that contains the design and construction of the facility—as opposed to a separate contract for the design and a separate contract for the construction. In design-build, contractors are looking to have licensed professional engineers on their staff so they do not have to hire a design firm. The public health, safety and welfare concern needs to be addressed by having that licensed professional engineer in responsible charge of the work. It would be inappropriate, but we have seen cases, where

construction foremen, superintendents, and others are seeking professional engineer credential under the experience clause so they can sign drawings on design build projects where there may have been minimal engineering work done. In no way am I inferring that all contractors are so motivated in this way, in fact I think most are not. However, we need to protect the public against the possibility of misuse of the credential in his way.

Madam Chairperson, although I am not in favor including the 2-year degree option, we will still support this bill. The two-year degree option is currently law and the amendment does not create new law, it merely preserves the status quo for that path to licensure. This bill does in fact; increase the ability of the board to protect the public health, safety and welfare; that is why we support it.

Madam Chairperson, in summary, the Engineer Section of the Joint board and the Joint Board strongly support Assembly Bill 288 and urge its passage at the earliest opportunity.

This bill is needed to update the statues regarding professional engineers. We need to have all engineers measured against the same standard to

ensure the protection of public health, safety, and welfare, and we need to make Wisconsin engineers competitive in the national economy.

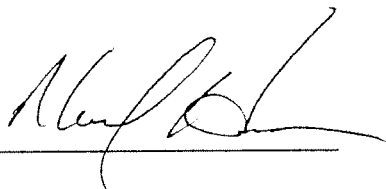
We need to eliminate the opportunity for applicants to review test questions—this practice is outdated and no longer serves any real purpose. It does subject the state to a risk of liability for breaches of exam security.

Finally, we can eliminate the statute requirement for single, specialized topics because it also has outlived its purpose.

This new legislation should be enacted immediately, and there should be no phase-in of the new process.

Thank you again for the opportunity to testify today. I appreciate your consideration of this matter.

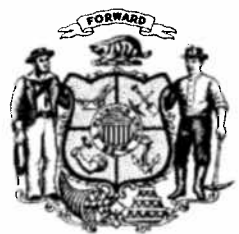
I would be happy to answer any questions for the committee.

A handwritten signature in black ink, appearing to read "Martin J. Hanson", written over a horizontal line.

Martin J. Hanson, PE



# WISCONSIN STATE LEGISLATURE





Wisconsin Senate Hearing  
Committee on Labor, Elections and Urban Affairs  
Testimony for AB 288-Professional Engineer Licensure  
Frederick W. Groth, P.E.  
March 16, 2010

I am Frederick W. Groth and reside at 5703 Running Deer Tr., McFarland, Wisconsin. I am a Wisconsin-licensed Professional Engineer (P.E.) with over thirty years of experience practicing as a structural engineer. I am licensed in eleven other states as a professional engineer and Illinois as a licensed structural engineer. I am a member of the American Society of Civil Engineers (ASCE) and Wisconsin Society of Professional Engineers (WSPE).

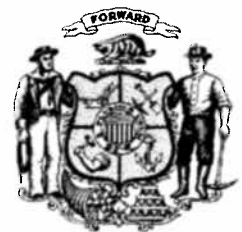
I support the AB 288 with its two amendments. The bill removes an existing provision that allows an individual to become licensed as a Professional Engineer without having passed an examination. I feel it is important that this loophole be closed.

As a practicing professional engineer (structural discipline), I would like to provide supporting reason or analogy why it is important that practicing engineers be qualified. If you have an operation you assume the doctor is a licensed MD and has experience and has passed an examination to test that he is qualified to practice. If a doctor makes a mistake he will likely kill or affect the life of just one patient. If a professional engineer practicing as a structural engineer makes a mistake and the building collapses 10, maybe 100, or maybe 1000 people are affected or killed. If a professional engineer practicing as a water municipal engineer makes a mistake 1000, maybe 10,000 people can be affected or killed. This is the reason why we need to make sure that professional engineers are qualified. This bill closes a loophole and makes sure that all licensed professional engineers must pass an examination that tests an engineer to practice in his or her field of professional engineering.

Thank you for your time.



# WISCONSIN STATE LEGISLATURE





American Society of Civil Engineers

4506 S. Oakwood Hills Pkwy.  
Eau Claire, WI 54701  
Home: (715) 835-4511  
E-mail: walthertr@charter.net

**Thomas R. Walther, P.E., F.ASCE**  
Past Region 3 Director

March 16, 2010

TO: Members  
Senate Committee on Labor,  
Elections and Urban Affairs

RE: AB-288  
Professional Engineer  
Licensing Requirements

Gentlemen,

I am a resident of Eau Claire and a Registered Professional Engineer in the States of Wisconsin and Iowa. I am also the Immediate Past Region 3 Director of the American Society of Civil Engineers representing 14,600 ASCE members from around the upper Midwest including 2,100 ASCE members within the State of Wisconsin. I am offering this testimony from the dual perspective of a Wisconsin Professional Engineer and as a past ASCE national officer.

The American Society of Civil Engineers, through several of its policies, recommends among other things that holding a baccalaureate degree in engineering plus 4 years of acceptable experience plus passing the written Fundamentals of Engineering and the Principles and Practice exams should be the minimum level of professional competence required in order to be granted a license as a professional engineer. Although AB-288 does not fully equate to the recommendations of ASCE the bill is such a significant step forward that ASCE supports the adoption of AB-288. Similarly, the National Council of Examiners for Engineering and Surveying, of which the State of Wisconsin engineering registration board is a member, has put forth recommended Model Laws relating to registration requirements for Professional Engineers. Again, this Bill does not fully mirror the suggested Model Law but AB-288 takes a major step toward embracing the Model Law.

Additionally, AB-288 will make significant strides to protect the public health, safety and welfare of the citizens of the State of Wisconsin. The time has long passed when granting a professional engineering license to someone who has simply worked in a particular field of engineering for multiple years without taking the written exam would be acceptable. The depth and breadth of basic knowledge needed to adequately practice the profession of engineering has changed greatly over the years. This relates to not only the areas of technical expertise but also to obtaining the "soft skills" or business and people skills that are so critical to develop a successfully engineered project. Because of all the changes over time the current law is not only poor public policy but it also does not insure adequate protection of the health, safety and welfare of the citizens of Wisconsin. This updated law is a significant step forward to properly protect the public.

As a result of the major improvements set forth in this bill I am here to offer my support for AB-288. This bill will take much needed steps forward to clear up the educational requirements needed to take the Professional Engineering exam and will eliminate the long antiquated system of allowing persons to obtain a Professional Engineer license without taking any examination what so ever to prove their competency.

I strongly encourage you to vote for adoption of AB-288.

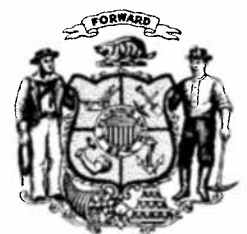
Sincerely,

A handwritten signature in cursive script that reads "Thomas R. Walther". The signature is written in black ink and is positioned above the typed name.

Thomas R. Walther, P.E., F. ASCE  
Past Region 3 Director



# WISCONSIN STATE LEGISLATURE



**Wisconsin Senate Hearing  
Committee on Labor, Elections and Urban Affairs  
Testimony for AB 288-Professional Engineer Licensure  
Glen R. Schwalbach, P.E.  
March 16, 2010**

I am Glen R. Schwalbach and reside at 1090 Moonriver Dr., De Pere, Wisconsin. I am a Wisconsin-licensed Professional Engineer (P.E.) and today represent the Wisconsin Society of Professional Engineers (WSPE).

WSPE supports AB 288 with its two amendments. The primary reason for our support is reflected in our Engineers' Creed to which we pledge to put public safety and welfare above our own. This bill is long in coming.

Current P.E. licensure law in Wisconsin, when considered in its entirety, is one of the weakest in the nation. One of the reasons for that is that it provides a path to licensure in which the applicant may avoid taking the national standard exam or any other exam. Written engineering exams are the most objective measure of an applicant's qualifications.

I think the last time this bill was before your committee there was some confusion as to the impacts on the workforce. This bill does not reduce any job opportunities for graduates from our technical colleges. The reason is that jobs which these graduates may seek and which may have titles such as boiler engineer, maintenance engineer, or communication engineer have no requirement for licensed P.E.'s.

In fact, only about 10% of graduates from a four-year engineering program and who are now practicing engineering are in jobs where the law requires a licensed P.E. These are positions in which the engineer is in responsible charge of true engineering services offered to the public. This is a critical group of engineers who are often in charge of engineering teams of other engineers, engineering technologists, and technicians who are working on projects which directly affect the safety and health of the public. This fact reflects how important and urgent it is to pass AB 288. Such engineers must be required to demonstrate their competence in an objective manner before they are granted a license.

WSPE and other engineering societies have worked with the Wisconsin Technical College District Boards Association and the Wisconsin Technical College System to better understand the impact of this bill. With Amendment 1, these groups now jointly support passage of AB 288.

This bill, with its requirement for an exam for all applicants, also will make it easier for Wisconsin P.E.'s to achieve comity in other states since our current law leads other states to question the credibility of the Wisconsin P.E. license. Attached is a matrix of the licensure requirements of our five neighboring states. In effect, this bill should positively increase job opportunities for Wisconsin engineering firms, their engineers and the members of their teams which include technical college graduates.

Thank you for your time.

# STATE MINIMUM REQUIREMENTS FOR P.E. LICENSURE APPLICANTS

September 2009

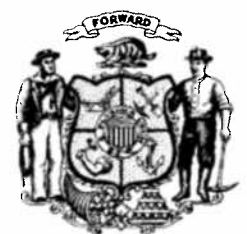
	EDUCATION	ENGINEERING EXPERIENCE	EXAMINATIONS	EXCEPTIONS	SPECIAL NOTES
Illinois	4-year bachelor's in eng'g/ ABET-accredited or meets specified criteria/pre-approved or not.	4 yrs if B.S. degree is ABET or pre-approved. 8 yrs if B.S. not pre-approved. master's=1 yr, doctorate=1yr	8-hour F.E. 8-hour P.P.E.	None	4-yr degree in eng technology is not accepted.
Indiana	4-yr bachelor's in eng'g/ ABET-accredited or meets specified criteria.	4 yrs if B.S. degree is ABET or pre-approved. 6 yrs if B.S. not pre-approved. 5 yrs if degree is M.S. and B.S. is not pre-approved.	8-hour F.E. 8-hour P.P.E. Take-home exam on IN licensing law.	None	
Iowa	4-yr bachelor's in eng'g judged by board to properly prepare applicant.	4 yrs of character satisfactory to board.	8-hour F.E. 8-hour P.P.E.	None	In 1991 eliminated acceptance of any associate degree in eng'g technology. Had allowed such if approved and w/ 6 yrs. experience.
Michigan	4-yr bachelor's in eng'g ABET-accredited or equivalent.	4 yrs with B.S. degree 3 yrs with M.S. degree 2 yrs with doctorate degree	8-hour F.E. 8-hour P.P.E.	If doctorate, waive F.E.	
Minnesota	4-yr bachelor's, ABET- accredited or meets specified criteria for eng'g credits.	4 yrs with ABET B.S. degree 6 yrs with non-ABET B.S. degree 5 yrs with master's eng'g degree and non-eng'g bachelor's 3 yrs with master's eng'g degree and ABET B.S.	8-hour F.E. 8-hour P.P.E.	If 40 yrs of age and 20 yrs eng'g experience and B.S. eng'g degree, waive F.E.	
Wisconsin	.....See flowchart.....				







# WISCONSIN STATE LEGISLATURE





WISCONSIN LEGISLATIVE COUNCIL  
AMENDMENT MEMO

<b>2009 Assembly Bill 288</b>	<b>Assembly Amendments 1 and 2</b>
<i>Memo published:</i> November 2, 2009 <i>Contact:</i> Jessica Karls-Ruplinger, Staff Attorney (266-2230)	

**2009 Assembly Bill 288** modifies the education and experience requirements for registration as a professional engineer under current law by providing that an applicant for registration as a professional engineer must submit satisfactory evidence to the Examining Board of Architects, Landscape Architects, Professional Engineers, Designers, and Land Surveyors of one of the following:

- A diploma of graduation or a certificate from an engineering school or college approved by the examining board as of satisfactory standing in an engineering course of not less than four years *and* a specific record of four or more years of experience in engineering work of a character satisfactory to the examining board and indicating that the applicant is competent to be placed in responsible charge of engineering work.
- A diploma of graduation or degree from a technical college in an engineering-related course of study of not less than two years *and* a specific record of six or more years of experience in engineering work of a character satisfactory to the examining board and indicating that the applicant is competent to be placed in responsible charge of engineering work.

**Assembly Amendment 1** provides that a diploma of graduation or degree from a technical college must be from a technical college ***approved by the examining board as of satisfactory standing***.

**2009 Assembly Bill 288** also removes a requirement under current law that the examination for registration as a professional engineer include questions which require applicants to demonstrate knowledge of the design needs of people with physical disabilities and of the relevant statutes and codes. In removing a cross-reference to this requirement, the bill also removes a separate provision in current law regarding form of examination.

The bill's removal of the provision in current law regarding form of examination was in error. **Assembly Amendment 2** corrects this error and keeps the provision intact.

**Legislative History**

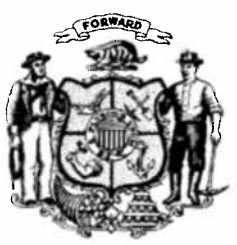
Assembly Amendments 1 and 2 were offered by Representative Molepske, Jr. On October 20, 2009, the Assembly Committee on Labor recommended adoption of Assembly Amendment 1 and recommended passage of Assembly Bill 288, as amended, on votes of Ayes, 9; Noes, 0.

On October 29, 2009, the Assembly adopted Assembly Amendments 1 and 2 and passed Assembly Bill 288, as amended, on voice votes.

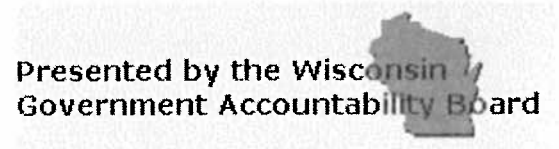
JKR:ksm



# WISCONSIN STATE LEGISLATURE



- ▶ Home
- ▶ Lobbying in Wisconsin
- ▶ Organizations employing lobbyists
- ▶ Lobbyists



as of Thursday, March 11, 2010

**2009-2010 legislative session**  
**Legislative bills and resolutions**

(search for another legislative bill or resolution at the bottom of this page)

**Assembly Bill 288**

education and work experience requirements for registration as a professional engineer and examinations for professional engineering credentials. (FE)

<p><b>TEXT</b> sponsors LRB analysis</p>	<p><b>STATUS</b> committee actions and votes text of amendments</p>	<p><b>COST &amp; HOURS</b> of lobbying efforts directed at this proposal</p>
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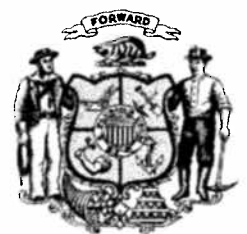
Organization		These organizations have reported lobbying on this proposal:	Place pointer on icon to display comments, click icon to display prior comments		
Profile	Interests		Date Notified	Position	Comments
●	●	American Council of Engineering Companies of Wisconsin	6/19/2009	?	
●	●	DirectBuy, Inc.	6/3/2009	↔	💬
●	●	Milwaukee Area Technical College	8/28/2009	↑	
●	●	Wisconsin Technical College District Boards Association Inc	6/9/2009	↑	
●	●	Wisconsin Transportation Builders Association	6/30/2009	↑	

Select a legislative proposal and click "go"

<b>House</b>	Assembly Senate
<b>Proposal Type</b>	Bill Joint Resolution Resolution
<b>Proposal Number</b>	288 (enter proposal number)
<b>Legislative Session</b>	2009 Regular Session ▼
	Go



WISCONSIN STATE LEGISLATURE



# LEVA Exec + Hearing

Tue. Mar. 16, 2010

EXEC

AB 288

AB 560  
AB 567  
SB 522 } nothing

SB 479 - Grothman explains amendment  
Rush explains more  
SC asks ?'s

SB 540 - Rush describes both amendments

HEARING

SB 585

SC & Rep. Van Alkoven

- SC reads written testimony
- IVA brief remarks
- GG 2 on preemption
  - Rush answers that it's hard to predict
- Danny McGowan
  - no written testimony
- John Metcalf & Jonathan Swain
  - missed most of Swain's verbal testimony

①

SB545 cont.

- BW? on balance of fairness in speech
  - doesn't matter what we think, it's Congress' decision
- SC? on state law interaction w/ federal law
  - Runs - hard to say what might happen
- BW? - we're not constitutional experts, we're here to address concerns in our districts
- GG? - any employee ever won on this?
  - most recent case he could find was from '60's
- Fred Begare
  - no written testimony
  - responds to Jonathan Swain comments
  - SC story on machinist job he had
- Tom Brickland
  - has written testimony + 2 guys w/ stories on organizing
  - Chad Peters
    - story on organizing
  - Kelly Maloney
    - story on organizing
  - Charles?
- Tom Kanack - brings people
  - Jim Dillon
  - Paul Brzezinski - "captive audience meetings"
  - Patrick Puffer
- Tom Mollanzi - brings guy
  - Ron Falkowski

(2)



8/5/85 cont.

- Wesley Gable - brings two people
  - Debra Christensen
  - Christine Ballew
- David Boetcher
  - diminishes preemption argument
  - emphasizes trend setting nationwide
  - not regulation on employer free speech, regulation on right of employee to be in room
- John Huebscher
  - affirms right to religious freedom
  - might want language clarifying
- Tom Kruskowski
  - south side NKE atty.
  - talking about NLRB preemption
  - bow tie guy
  - we're in the wrong forum, should be national debate
  - management labor lawyer
- Dave Vandenberg
  - Sheetmetal Workers Local 18
  - has mostly off the cuff remarks in response to other comments
- Vungie Moreno
  - Among workers in Waldo, WI cheese shop
- Gene Gasey
  - wishes NLRB didn't exist
  - memories of people who have died in labor movement
  - interesting that NLRB didn't show up

SB 586

- Andy Feldman & Howard Bernstein
  - Andy gives background on process (that's written, ~~the way~~)
  - brief overview of bill by Andy
  - Howard provides scant more info
- Scott Hamilton, Plumbers Local 75
  - talks about process
  - background on his involvement
- Terry Hayden, WI Apprenticeship Council
  - ~~attempt~~
  - Plumbers Local 344
  - co-chair of Apprenticeship Council
  - overview of changes
  - changes endorsed by council on Jan. 7, 2010
  - WI Pipetraders approved on March 5
- Robert Ribberich, ABC of WI
  - served on council for 13 years
- Wayne Belanger, ABC of WI
  - has written testimony

AB 288

- Glen Schwalbach
  - has written testimony
- GG has ?'s
- Martin Hanson
  - has (2 pages) of written testimony
- GG concerned about limiting by education requirements

(4)

AB 288 cont.

- Tom Walther
  - has written testimony
- Charles Kaplin
  - no written testimony
  - representing a section at DRL

AB 417

Cory Greenfield & Andrew Welhouse (Sen. Hopper)

- some written testimony from Hopper
- Cory tells his story
- SL? - are the other schools willing to do that?