

CR 92-9

CERTIFICATE

STATE OF WISCONSIN

DEPARTMENT OF REGULATION AND LICENSING

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Peter Eggert, Director, Bureau of Business and Design Professions in the Wisconsin Department of Regulation and Licensing and custodian of the official records of the Examining Board of Architects, Professional Engineers, Designers and Land Surveyors, do hereby certify that the annexed rules were duly approved and adopted by the Examining Board of Architects, Professional Engineers, Designers and Land Surveyors on the 10th day of December, 1992.

I further certify that said copy has been compared by me with the original on file in this office and that the same is a true copy thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the board at 1400 East Washington Avenue, Madison, Wisconsin this 10th day of December, 1992.



**Peter Eggert, Director
Bureau of Business and Design
Professions
Department of Regulation and
Licensing**

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**Revisor of Statutes
Bureau**

2-1-93

STATE OF WISCONSIN
EXAMINING BOARD OF ARCHITECTS, PROFESSIONAL
ENGINEERS, DESIGNERS AND LAND SURVEYORS

IN THE MATTER OF RULE-MAKING	:	ORDER OF THE
PROCEEDINGS BEFORE THE	:	EXAMINING BOARD OF ARCHITECTS,
EXAMINING BOARD OF ARCHITECTS,	:	PROFESSIONAL ENGINEERS,
PROFESSIONAL ENGINEERS, DESIGNERS	:	DESIGNERS AND LAND SURVEYORS
AND LAND SURVEYORS	:	ADOPTING RULES
	:	(CLEARINGHOUSE RULE 92-9)

ORDER

An order of the Examining Board of Architects, Professional Engineers, Designers and Land Surveyors to renumber A-E 6.06 (a) to (d) to 6.06 (1) to (4) and as renumbered amend 6.06 (2); to amend A-E 3.03 (the version effective on January 1, 1993), A-E 3.05 (2) and (7), A-E 4.03, A-E 5.05 (1) and A-E 6.05 (6); and to create A-E 2.02 (7), A-E 3.03 (2), (3) and (4), A-E 3.06, A-E 4.05 (3) and A-E 4.09 of the administrative code relating to seals and stamps, experience required for architectural registration, requirements for entrance to the examination and application contents.

Analysis prepared by the Department of Regulation and Licensing.

ANALYSIS

Statutes authorizing promulgation: ss. 15.08 (5) (b) and 227.11 (2), Stats.

Statutes interpreted: s. 443.03, 443.04, 443.06 and 443.17, Stats.

In this rule-making order, the Examining Board of Architects, Professional Engineers, Designers and Land Surveyors proposes the following:

1) Section A-E 2.02 (7). New technology in the fields of design as evidenced by computer-aided-design (CAD) require the administrative code to address practices currently occurring in the professions. The rule clarifies an acceptable stamp and signature requiring an original seal or stamp in contrasting inks. Computer generated images are not permitted.

2) Section A-E 3.03. This section, which will become effective on January 1, 1993, is corrected to reflect changes in the intern development program (IDP) as modified by the National Council of Architectural Registration Board and the American Institute of Architects. The administrative code provides the candidate with 2 routes in which to acquire the necessary pre-registration experience. The formal IDP is voluntary; therefore, it would be less confusing to candidates to have the ability to choose between the IDP which accurately reflects the national program rather than a "Wisconsinized" version and the existing route.

Hours in Category A are decreased by 80 which is removed from Construction Documents. Category C is modified to add project management and reduce time spent in office procedures. Professional activities are moved into a newly-created Category D.

3) Section A-E 3.05 (2). The amendment to this subsection allows candidates to begin the examination process in the final year of work toward completing their academic and experience requirements. This will allow candidates the eligibility to apply for registration immediately upon completion of education experience and the examinations.

4) Section A-E 3.05 (7). Prior language restricted a candidate's ability to retake sections of the examination to a 4 year window after which the candidate was required to begin again, taking all sections of the examination over at great cost in time and expense. This amendment removes the 4 year window restriction and allows the candidate to retake failed sections of the examination until all sections have been successfully completed. This removes a barrier to registration that most other state boards have previously removed.

5) Section A-E 3.06. The administrative code for architect applicants has not been as clear regarding the application contents as some of the other design sections. This language models language contained in the administrative code applicable to other professions governed by the board.

6) Section A-E 4.03. This language restores that requirement contained in the administrative code which calls for experience in engineering to demonstrate progressive development in competence. The language had been deleted from the code at an earlier rewrite of A-E 4.

7) Section A-E 4.05. Presently the board is responsible for determining whether degrees from foreign institutions are substantially equivalent to recognized engineering programs in the United States. With the rising number of engineering applicants with foreign degrees the board believes it has neither the time nor the expertise to attempt to make this determination and hereby delegates that evaluation to evaluation services specializing in this area.

8) Section A-E 6.05 (6). The amendment to this subsection adds a reference to the statutes.

9) Section A-E 6.06 (2). This language makes the administrative code governing the experience verification for land surveyors similar to that of the other sections within the joint board.

TEXT OF RULE

SECTION 1. A-E 2.02 (7) is created to read:

A-E 2.02 (7) All seals or stamps affixed to drawings to be filed as public documents shall be original. No stickers or electronically scanned images shall be allowed. All seals and stamps on drawings shall be signed and dated by the registered professional in a permanent ink contrasting with the seal and the background. If other standards are prescribed by statute, the statutes shall govern.

SECTION 2. A-E 3.03 (the version effective on January 1, 1993) and Figure A-E 3.03 are amended to read:

Note: The following version of A-E 3.03 will go into effect on January 1, 1993.

A-E 3.03 ARCHITECTURAL EXPERIENCE. (1) In satisfaction of the 2 year experience requirement of s. 443.03 (1) (b) 1., Stats., or in satisfaction of 2 years of the 7 year requirement of s. 443.03 (1) (b) 2., Stats., applicants for registration as an architect shall complete the intern architect development program sponsored by the national council of architectural registration boards and the American institute of architects, or shall submit evidence of experience in architectural work which the board finds is substantially equivalent to the experience obtained by completing the intern architect development program.

FIGURE A-E 3.03

TABLE OF TRAINING REQUIREMENTS
INTERN ARCHITECT DEVELOPMENT PROGRAM

	Minimum Hours Required	
Category A		
Design and Construction Documents		
Programming--Client Contact	80	
Site and Environmental Analysis	80	
Schematic Design	120	
Building Cost Analysis	80	
Code Research	120	
Design Development	320	
Construction Documents	1240	<u>1160</u>
Specifications and Materials Research	120	
Document Checking and Coordination	120	
Elective Hours Required <u>Within Category A</u>	600	
<u>Minimum Hours Required, Category A</u>	<u>2880</u>	<u>2800</u>
Category B		
Construction Administration		
Bidding and Contract Negotiation	80	
Construction Phase--Office	120	
Construction Phase--Observation	120	
Elective Hours Required <u>Within Category B</u>	240	
<u>Minimum Hours Required, Category B</u>	560	

Category C
Office Management

<u>Project Management</u>	<u>120</u>	
<u>Office Procedures Management</u>	<u>120</u>	<u>80</u>
<u>Professional-Activities</u>	<u>80</u>	
<u>Elective Hours Required Within Category C</u>	<u>80</u>	
<u>Minimum Hours Required, Category C</u>	<u>280</u>	

Category D
Related Activities

<u>Professional and Community Service</u>	<u>80</u>
<u>Minimum Hours Required, Category D</u>	<u>80</u>

NOTE: Description of Training Requirements.

Category A: Design and Construction Documents.

1. Programming--Client Contact. Programming is the process of setting forth in writing the owner's requirements for a given project. Steps in this process include establishing goals; considering a budget; collecting, organizing and analyzing data; isolated and developing concepts; and determining needs in general.

2. Site and Environmental Analysis. Site analysis includes land planning, urban design and environmental evaluation. Land planning and urban design are concerned with relationships to surrounding areas and involve consideration of the physical, economic and social impact of proposed land use on the environment, ecology, traffic and population patterns.

3. Schematic Design. The architect develops alternative solutions to satisfy technical and aesthetic requirements.

4. Building Cost Analysis. An important responsibility is to evaluate the probable project construction cost. Accurate estimates are crucial. They influence decisions involving basic design, selection of building products and systems and construction scheduling.

5. Code Research. Codes promulgated by building inspectors, officials in zoning, environmental and other agencies relating to the health, welfare and safety of the public have a direct bearing on the total design process, and thorough knowledge of all requirements is essential to the satisfactory completion of any project.

6. Design Development. Based on the schematic design, the architect fixes and details, for the owner's further approval, the size and character of the entire project, including selection of materials and engineering systems.

7. Construction Documents. The working drawings phase of construction documents preparation describe in graphic form all of the essentials of the work to be done: location, size, arrangement and details of the project. It is extremely important that the documents be accurate, consistent, complete and understandable. This requires thorough quality control including constant

review and cross-checking of all documents. In addition, effective coordination of consultants' drawings is essential to avoid conflicts between the various trades during construction.

8. Specifications and Materials Research. Well-grounded knowledge of specification writing principles and procedures is essential to the preparation of sound, enforceable specifications. Specification writing requires the architect to understand the relationship between drawings and specifications, and to be able to communicate in a logical, orderly sequence, the requirements of the construction process. Many factors must be considered in the selection and evaluation of material or products to be used in a project: appropriateness, durability, aesthetic quality, initial cost, maintenance. It is extremely important that the architect recognize the function of each item to be specified. The architect must carefully assess new materials as well as new or unusual applications of familiar items.

9. Document Checking and Coordination. Before final release of construction documents for construction purposes, the drawings must be checked and cross-checked for accuracy and compatibility.

Category B: Construction Administration.

1. Bidding and Contract Negotiation. The architect assists in establishing and administering bidding procedures, issuing addenda, evaluating proposed substitutions, reviewing the qualifications of bidders, analyzing bids or negotiated proposals, and making recommendations for the selection of the contractor(s). The construction contract and related documents detail the desired product and the services to be provided in its construction, as well as the consideration to be paid for the product and the services.

2. Construction Phase-Office. During the construction phase there are many related tasks which do not directly involve field observations: processing contractors' applications for payment, change orders, shop drawings and samples, adjudicating disputes. The handling of these matters will usually have a direct bearing on the smooth functioning of the work in the field.

3. Construction Phase-Observation. The architect's function is to determine if the contractor's work generally conforms to the requirements of the contract documents. The architect must be thoroughly familiar with all of the provisions of the construction contract. Periodic reports on the stage of completion of scheduled activities are collected and compared to the overall project schedule at job site meetings. These meetings produce a detailed project record. The architect must determine through observation the date of substantial completion and receive all data, warranties and releases required by the contract documents prior to final inspection and final payment. The architect also interprets contract documents when disagreements occur and judges the dispute impartially.

Category C: Office Management.

1. Project Management. The economic and professional health of a firm depends on the orderly, trackable method of project execution. A clearly defined project work plan, the key to the efficient management of project tasks, requires participation and input from team members, consultants, client representatives and other key decision-makers (financial experts, developers,

lawyers and contractors). The project manager defines consensus goals, and coordinates tasks and scheduling. Team building depends on clear goals and good communication, with particular attention to decisions that influence the work of multiple team members. A project file initiated and maintained by the project manager is the comprehensive record of the project's life and a useful resource for future endeavors. The work plan must be congruent with all project-related contractual agreements (which are normally maintained in the project file). Scheduled quality control reviews are identified in the work plan; the project manager may request interim reviews in advance of established submittal dates. It is the project manager's responsibility to measure actual schedule/budget progress against the work plan "yardstick," assess all discrepancies and take the corrective action necessary to maintain project control. The project manager also maintains design quality during bidding, contract negotiation and construction phases through administration of the project file, oversees the construction representative and monitors scheduled on-site quality reviews. Finally, the project manager closes out project records and agreements and sets up future post-occupancy evaluation procedures.

12. Office Procedures Management. Steady income must be generated and expenses carefully budgeted and monitored so that economic stability can be maintained. Accurate records must be kept for tax purposes and for use in future work. Established office requirements and regulations are essential to maintaining a smooth operation. The architect's relationship to the owner is established by contractual agreement, which establishes the duties and obligations of the parties. Effective public relations plays an essential role in the practice. The architect must learn marketing techniques which are effective while remaining within legitimate rules of professional conduct.

~~2. Professional Activities. The architect must participate in public service programs and must also maintain a supportive role with others involved in the construction industry.~~

Category D: Related Activities.

Professional and Community Service. The architect must participate in public service programs and must also maintain a supportive role with others involved in the construction industry.

SECTION 3. A-E 3.03 (2), (3) and (4) are created to read:

A-E 3.03 (2) Satisfactory experience in architectural work shall consist of related practical training including at least one year of experience in the design and construction of buildings under the supervision of a registered architect, professional engineer, or exempt person as defined in s. 443.14, Stats., prior or subsequent to acquisition of approved educational equivalents.

(3) To qualify as satisfactory experience in architectural work, employment shall consist of at least 2 or more continuous months.

(4) Not more than one year of credit for satisfactory experience in architectural work may be granted for any calendar year.

SECTION 4. A-E 3.05 (2) and (7) are amended to read:

A-E 3.05 (2) REQUIREMENTS FOR ENTRANCE TO THE EXAMINATION. To be eligible to take a scheduled examination, ~~an~~ the applicant shall ~~have 4 years academic credit or 4 years of~~ submit documentation certifying he or she has all but one year of academic credit and qualifying architectural work experience, as specified in s. 443.03 (1) (b) 1, Stats., or ~~a combination of academic credit and all but one year of qualifying architectural work~~ experience ~~which totals 4 years~~, as specified in s. 443.03 (1) (b) 2, Stats.

(7) REEXAMINATION PROCEDURE. An applicant who began the examination procedure in or after June of 1983 for an architect examination who fails an examination or any part of an examination may retake any part of the examination failed at a regularly-scheduled administration of the examination. ~~If an applicant fails to pass on reexamination of the parts failed, or the current examination parts equivalent to the parts failed, within 4 years from the date of receipt of the results of the first failure of the examination or any part of the examination, the applicant is required to take and pass the entire examination. If the applicant retakes the entire examination, the applicant shall pay the original examination fee under ch. RL-4.~~ The board shall determine which parts of a current examination are equivalent to the examination parts failed by an applicant.

SECTION 5. A-E 3.06 is created to read:

A-E 3.06 APPLICATION CONTENTS. An application shall include:

- (1) Transcripts or apprenticeship records verifying the applicant's education and training;
- (2) References from at least 5 individuals having personal knowledge of the applicant's experience in the practice of architecture, 3 of whom are licensed architects;
- (3) A chronological history of the applicant's employment; and
- (4) Any additional data, exhibits or references showing the extent and quality of the applicant's experience that may be required by the architect section.

SECTION 6. A-E 4.03 is amended to read:

A-E 4.03 ENGINEERING EXPERIENCE. To qualify as satisfactory experience in engineering work for the purpose of meeting requirements of s. 443.04, Stats., an applicant's experience shall include the application of engineering principles and data and shall demonstrate an applicant's progressive development of competence to do engineering work. The experience shall be acquired in the areas of engineering practice listed in subs. (1) to (7) or in other areas of engineering practice or academic course work which in the opinion of the board provides the applicant with a knowledge of engineering principles and data at least equivalent to that which would be acquired by experience in the areas of practice listed. Experience in all areas listed is not required.

SECTION 7. A-E 4.05 (3) is created to read:

A-E 4.05 (3) If the degree is from an international educational institution, the applicant must provide an official evaluation by a transcript evaluation service acceptable to the board which shows that the degree is equivalent to a B.S. or higher degree in an engineering program accredited by the accreditation board for engineering and technology (ABET). The board may approve the degree if it finds such equivalence.

SECTION 8. A-E 4.09 is created to read:

A-E 4.09 APPLICATION CONTENTS. An application shall include:

- (1) Transcripts or apprenticeship records verifying the applicant's education and training;
- (2) References from at least 5 individuals having personal knowledge of the applicant's experience in professional engineering, 3 of whom are licensed professional engineers;
- (3) A chronological history of the applicant's employment; and
- (4) Any additional data, exhibits or references showing the extent and quality of the applicant's experience that may be required by the professional engineers section.

SECTION 9. A-E 5.05 (1) is amended to read:

A-E 5.05 (1) Transcripts or apprenticeship records verifying the applicant's education and training;

SECTION 10. A-E 6.05 (6) is amended to read:

A-E 6.05 (6) EXAMINATION AND REFUND FEES. The fee for land surveyor examinations and requirements for refund of fees are specified in s. 440.05, Stats., and ch. RL 4.

SECTION 11. A-E 6.06 (a) to (d) are renumbered A-E 6.06 (1) to (4) and, as renumbered, A-E 6.06 (2) is amended to read:

A-E 6.06 (2) References from at least 5 individuals having personal knowledge of the applicant's experience in land surveying, 3 of whom have personal knowledge of the applicant's experience in land surveying are licensed land surveyors;

(END OF TEXT OF RULE)

The effective date of A-E 3.03 and A-E 3.05 (2) is January 1, 1993; the remaining rules adopted in this order shall take effect on the first day of the month following publication in the Wisconsin administrative register pursuant to s. 227.22 (2) (intro.), Stats.

Dated 10 Dec 92

Agency William Hal
Chairperson, Examining Board of
Architects, Professional Engineers,
Designers and Land Surveyors

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CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

DATE: December 11, 1992

TO: Gary Poulson
Assistant Revisor of Statutes

FROM: Pamela Haack, Administrative Assistant
Department of Regulation and Licensing

SUBJECT: Final Rulemaking Order

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**Agency: EXAMINING BOARD OF ARCHITECTS, PROFESSIONAL ENGINEERS,
DESIGNERS AND LAND SURVEYORS**

Clearinghouse Rule: 92-9

Attached is a copy and a certified copy of a final order adopting rules.
Would you please publish these rules in the code.

Please stamp or sign a copy of this letter to acknowledge receipt.

Thank you.