

of the preparation of the addition, deletion, or other revision, and, along with such revision, shall become a part of the original.

**History:** 1-2-56; am. (2), Register, April, 1958, No. 28, eff. 5-1-58; r. and recr., Register, March, 1966, No. 123, eff. 4-1-66; am. (1), Register, November, 1966, No. 131, eff. 12-1-66; am. (1), (2)(a), (4)(a) and (b), Register, January, 1971, No. 181, eff. 2-1-71.

**A-E 1.05 Firm and partnership information reports.** When it appears to the board that any person or persons are practicing or offering to practice architecture or professional engineering through a firm or partnership, they shall, upon request, file with the board, on forms provided by the board, a list of the names and addresses of the members of said firm or partnership and a list of the names and addresses of all individuals who are registered architects or professional engineers in this state authorized to practice or offer to practice architecture or professional engineering on behalf of said firm or partnership, and any other information requested by the board which may be necessary to enable the board to determine whether or not such firm or partnership complies with the provisions of Section 443.01, Wis. Stats.

**History:** Cr. Register, November, 1967, No. 143, eff. 12-1-67; am. Register, January, 1971, No. 181, eff. 2-1-71

**A-E 1.06 Branch offices.** (1) Every firm, partnership or corporation maintaining one or more places of business in the state of Wisconsin for the principal purpose of practicing or offering to practice architecture or professional engineering shall have in charge of each separate place of business a resident registered architect or a resident registered professional engineer.

(2) "Resident" shall mean to spend a majority of one's normal working time in said office.

(3) Every such firm, partnership or corporation maintaining one or more places of business in the state of Wisconsin shall inform the board of the name of the resident registered architect or professional engineer in charge of each office.

**A-E 1.15 Examinations.** (1) **ELIGIBILITY.** An applicant to be eligible to enter a scheduled examination must file his application for registration or certification or request for re-examination together with the required fees with the secretary 2 months before the scheduled date for the examination.

(2) **FORFEITURE OF FEES.** In the event an applicant has been notified in writing by the office of the secretary of the board that he has been assigned to a stated examination, and he fails to appear for such examination his fee shall not be refundable unless he has been excused from such obligation 10 days prior to such examination or unless he submits to the board ample proof that he was unable to be present. Such proof must be in the office of the board at least 2 months before a future examination which he may desire to take if his former fee is to be considered for use in connection with such examination.

(3) **RETAKES.** An applicant who upon taking any portion of the board's architects, engineers, designers, or land surveyors examinations for the first time fails a portion or all of that examination may upon request and payment of the re-examination fee retake all of it, or the portions of it failed, at any 3 of the 6 semi-annual examinations

Register, September, 1971, No. 189

next following the first examination written. If the applicant fails to complete passing the entire examination during any 3 of the 6 semi-annual examinations next following the first examination written, the applicant shall;

(a) Be ineligible to take further examinations for a period of one year.

(b) Revert to the status of a new applicant and be required to take all portions of the examination unless otherwise approved in advance by the board.

(c) Be required to furnish proof that since his last failure he has further prepared himself by educational work or practical experience before being admitted to additional examinations.

(4) EXAMINATIONS FOR ARCHITECTS. (a) *Examination required.* The objective of the board is to conduct its examinations for registration as an architect in the manner prescribed by the national council of architectural registration boards. This procedure is of considerable value to one registered on the basis of having passed such an examination if, at some future date, he might find it necessary to obtain reciprocal registration as an architect in another state.

(b) *Place of examinations.* The examinations will be held at sites designated by the board.

(c) *Time of examinations.* To be arranged.

(d) *Scope of examinations.* Examinations will be both oral and written and the final grade will include a rating based on the applicant's architectural training and practical experience. A personal audience before members of the board constitutes the oral portion of the examination. The four-day (36 hour) written examination consists of seven separate parts as follows: history and theory of architecture (3 hours), site planning (5 hours), architectural design (12 hours), building construction (3 hours), structural design (5 hours), professional administration (3 hours), and building equipment (5 hours). Detailed information regarding examinations will be made available upon request to the board's office.

(5) WRITTEN EXAMINATIONS FOR ENGINEER-IN-TRAINING AND PROFESSIONAL ENGINEER. (a) *Examinations required.* 1. For certification as engineer-in-training—fundamentals examination. Total 1 day (8 hours).

2. For registration as professional engineer.

a. If certified as engineer-in-training—principles and practice examination. Total 1 day (8 hours).

b. If not certified as engineer-in-training—fundamentals examination and principles and practice examination. Total 2 days (16 hours).

(b) *Place and time of examinations.* The examinations will be held at sites and on dates designated by the board.

(c) *Grading of written examinations, passing grades and retakes.*

1. Experience ratings will not be weighed as a part of the examinations.

2. On each 8-hour examination the passing grade shall be at least 70%.

(d) *Scope of written examinations.* 1. Fundamentals examination—requires an understanding of the physical and mathematical sciences involved in the fundamentals of engineering.

2. Principles and practice examination—requires ability to apply engineering principles and judgment to problems in general engineering fields such as chemical, civil, electrical and mechanical fields. Questions involving economic analysis will be included.

(e) *Grading of written examinations, passing grades and retakes.*

1. Experience ratings will not be weighed as a part of the examinations.

2. On each examination A or B a successful applicant must average at least 70%. He must not fall below 60% in part I or part II of either examination.

3. If an applicant fails in parts I or II of examination A or B, he may at the discretion of the board be not required to retake the parts he has passed, or he may be required to retake the entire examination.

(f) *Scope of written examinations.*

1. Examination A.

Part I—This portion requires a knowledge of physics, chemistry, mechanics, and materials of construction such as could be acquired from courses which are a part of an accredited engineering curriculum.

Part II—This portion requires a knowledge of the fundamentals of engineering and of the particular field pursued by the applicant such as could be acquired from courses in electrical circuits and machinery, hydraulics, thermo-dynamics, structures, and machine design which are a part of an accredited engineering curriculum.

2. Examination B.

Part I—This portion is in a general engineering field selected by the applicant from a listing specified by the engineering section such as chemical, civil, electrical, mechanical, mining, metallurgical, etc. A separate examination will be offered for each general field.

Part II—Specialty. This portion is in a sub-field selected by the applicant from a listing specified by the engineering section. Questions involving engineering economics, ethics and law may be included. The applicant may be required to prepare an engineering report from a list of assigned topics.

(6) EXAMINATIONS FOR LAND SURVEYOR. (a) *Examinations required.* Parts I, II, III and IV. Each part 4 hours in length. Total 2 days (16 hours).

1. The applicant shall be required to pass the 16-hour written examination.

2. Oral examinations will be at the discretion of the land surveyors' section.

(b) *Place of examinations.* The examinations will be held at sites designated by the board.

(c) *Time of examinations.* To be arranged.

(d) *Grading of written examinations; passing grades.* 1. Experience ratings will not be weighed as a part of the examinations.

2. The applicant must not fall below 60% in part I, part II, part III or part IV, and must average at least 70% in a combination of: part I and part II; and part III and part IV.

3. If an applicant fails in parts I, II, III or IV of the examination he may at the discretion of the board be not required to retake the parts he has passed, or he may be required to retake the entire examination.

(e) *Scope of written examinations.* The examination will be made up of questions covering some phases of the following subjects:

1. Fundamentals of mathematics, algebra, trigonometry and geometry; the history, principles and applications of the U. S. System of Public Land Surveys, Wisconsin plane coordinate surveys, and geodetic surveys; the instructions of the U. S. Land Office relative to the relocation of lost and obliterated corners and the subdivision of sections; the legal essentials of resurveys, including those involving disputed boundaries, defective deed descriptions, riparian rights, adverse possessions, etc.; Wisconsin statutes relative to land surveying, including the preparation and filing of plats; the writing and interpretations of land descriptions; the technical essentials of land surveying and subdivision of lands, including practical problems requiring a knowledge of the basic theory and fundamental concepts in field astronomy, geometry of curves, topography and photogrammetry.

**History:** 1-2-56; r. and recr. (3); am. (5)(e)3., Register, February, 1961, No. 62, eff. 3-1-61; cr. (6), Register, August, 1965, No. 116, eff. 11-1-65; r. and recr. (3)(a), Register, November, 1966, No. 131, eff. 12-1-66; r. and recr. (4)(d), eff. 7-1-67; and r. and recr. (6), eff. 8-1-67; Register, April, 1967, No. 136; am. (5)(d)2, (5)(f)2 and (6)(a)2, Register, July, 1968, No. 151, eff. 8-1-68; r. and recr. (5)(b) and (c) and (6)(5) and (c), Register, February, 1969, No. 158, eff. 3-1-69; am. (3), (6) (a) 2, and (7), Register, January, 1971, No. 181, eff. 2-1-71; r. and recr. (5), Register, September, 1971, No. 189, eff. 10-1-71.

**A-E 1.20 Designer permits, limitations.** (1) Permits for the design of engineering systems shall be issued in the following fields:

- (a) Heating, ventilation and air conditioning systems;
- (b) Plumbing systems;
- (c) Electrical systems;
- (d) Fire protection systems; and
- (e) Industrial systems.

(2) Permits issued in any of the fields designated in subsection (1) shall be further limited to subfields as are determined by the joint board and recognized in engineering design practice.

(3) Permit numbers shall designate the fields and subfields permits are restricted to.

**History:** Cr. Register, March, 1971, No. 183, eff. 4-1-71.