

SUBSTITUTE FOR  
HOUSE BILL NO. 5582

A bill to amend 1956 PA 217, entitled  
"Electrical administrative act,"  
by amending section 3d (MCL 338.883d), as added by 1990 PA 246.

**THE PEOPLE OF THE STATE OF MICHIGAN ENACT:**

1           Sec. 3d. (1) The department of ~~labor~~-**LICENSING AND REGULATORY**  
2 **AFFAIRS** shall issue an electrical journeyman's license to ~~a person~~  
3 ~~not less than~~-**ANY INDIVIDUAL WHO IS AT LEAST** 20 years of age **AND**  
4 who does all of the following:

5           (a) Files a completed application form provided by the  
6 department of ~~labor~~-**LICENSING AND REGULATORY AFFAIRS**.

7           (b) Pays the examination fee ~~prescribed in~~-**REQUIRED UNDER**  
8 section 3 and passes an examination provided for by the board and  
9 the department of ~~labor~~-**LICENSING AND REGULATORY AFFAIRS**.

10           (c) Pays the license fee ~~prescribed in~~-**REQUIRED UNDER** section

1 3.

2 (d) **MEETS EITHER OF THE FOLLOWING:**

3 (i) Has ~~not less than~~ **AT LEAST** 8,000 hours of experience  
4 obtained over a period of ~~not less than~~ **AT LEAST** 4 years related to  
5 electrical construction or maintenance of buildings or electrical  
6 wiring or equipment under the direct supervision of ~~a person~~ **AN**  
7 **INDIVIDUAL** licensed under this act.

8 (ii) **WHILE ON ACTIVE DUTY AS A MEMBER OF THE ARMED FORCES,**  
9 **SERVED AS AN INTERIOR ELECTRICIAN OR IN AN EQUIVALENT JOB**  
10 **CLASSIFICATION; WAS HONORABLY DISCHARGED FROM THAT MILITARY SERVICE**  
11 **IN THE 1-YEAR PERIOD PRECEDING THE DATE THE LICENSE APPLICATION IS**  
12 **FILED; AND HAS, AND PROVIDES WITH HIS OR HER APPLICATION AN**  
13 **AFFIDAVIT SIGNED BY A COMMANDING OFFICER, SUPERVISOR, OR MILITARY**  
14 **SUPERIOR WITH DIRECT KNOWLEDGE OF THE APPLICANT'S SERVICE THAT**  
15 **STATES THAT HE OR SHE HAS, AT LEAST 8,000 HOURS OF ENTRY-LEVEL**  
16 **EXPERIENCE IN AND BASIC KNOWLEDGE OF EACH OF THE FOLLOWING:**

17 (A) **GENERAL KNOWLEDGE OF THE ELECTRICAL TRADE, INCLUDING**  
18 **TERMINOLOGY AND THE ABILITY TO MAKE PRACTICAL CALCULATIONS.**

19 (B) **THE DETERMINATION OF SYSTEM AND CIRCUIT GROUNDING AND**  
20 **DESIGN AND USE REQUIREMENTS FOR GROUNDING, INCLUDING CHOOSING**  
21 **PROPER SIZE GROUNDING CONDUCTORS.**

22 (C) **KNOWLEDGE OF CIRCUIT CLASSIFICATIONS AND RATINGS AND**  
23 **DESIGN AND USE REQUIREMENTS FOR CIRCUITS, INCLUDING BRANCH CIRCUIT**  
24 **LOADS.**

25 (D) **THE DETERMINATION OF AMPACITY, TYPE OF INSULATION, USAGE**  
26 **REQUIREMENTS, METHODS OF INSTALLATION, PROTECTION, SUPPORT, AND**  
27 **TERMINATION.**

1 (E) KNOWLEDGE REGARDING THE INSTALLATION OF MOTORS AND CONTROL  
2 CIRCUITS.

3 (F) THE CALCULATION OF ELECTRICAL LOADS AND DETERMINATION OF  
4 PROPER SIZE, RATING, AND TYPE OF SERVICE AND FEEDER CONDUCTORS.

5 (G) KNOWLEDGE REGARDING FUSES, CIRCUIT BREAKERS, AND ALL TYPES  
6 OF PROTECTIVE DEVICES FOR CONDUCTORS AND EQUIPMENT.

7 (H) KNOWLEDGE OF ALL TYPES OF RACEWAYS AND THEIR USES,  
8 INCLUDING DETERMINING PROPER SIZE, CONDUCTOR FILL, SUPPORT, AND  
9 METHODS OF INSTALLATION.

10 (I) KNOWLEDGE OF CIRCUITS AND EQUIPMENT CHARACTERIZED BY USAGE  
11 AND ELECTRICAL POWER LIMITATIONS, INCLUDING DIFFERENTIATING THEM  
12 FROM ELECTRIC LIGHT AND POWER CIRCUITS.

13 (J) KNOWLEDGE OF ALL TYPES AND APPLICATIONS OF LIGHTING  
14 FIXTURES, RATINGS, REQUIREMENTS FOR OCCUPANCIES, SPECIAL  
15 PROVISIONS, AND CLEARANCES.

16 (2) IF AN APPLICANT WHO OTHERWISE MEETS THE REQUIREMENTS OF  
17 SUBSECTION (1) (D) (ii) HAS NOT ATTAINED 8,000 HOURS OF ENTRY-LEVEL  
18 EXPERIENCE OR DOES NOT HAVE BASIC KNOWLEDGE IN EACH OF THE AREAS  
19 DESCRIBED IN SUBSECTION (1) (D) (ii) (A) TO (J), HE OR SHE MAY PROVIDE  
20 WITH HIS OR HER APPLICATION AN AFFIDAVIT SIGNED BY A COMMANDING  
21 OFFICER, SUPERVISOR, OR MILITARY SUPERIOR WITH DIRECT KNOWLEDGE OF  
22 THE APPLICANT'S SERVICE THAT STATES THE AMOUNT OF EXPERIENCE THE  
23 APPLICANT HAS ATTAINED AND OF WHICH OF THE AREAS DESCRIBED IN  
24 SUBSECTION (1) (D) (ii) (A) TO (J) THE APPLICANT HAS BASIC KNOWLEDGE,  
25 AND THE DEPARTMENT MAY IN ITS DISCRETION GRANT THE APPLICANT CREDIT  
26 TOWARD THE 8,000-HOUR EXPERIENCE REQUIREMENT OF SUBSECTION (1) (D) (i)  
27 BASED ON THE APPLICANT'S EXPERIENCE.

1           (3) ~~(2) Upon failure~~ **IF AN APPLICANT FAILS** to pass the  
2 electrical journeyman examination 2 times within a period of 2  
3 years, ~~an~~ **THE** applicant ~~shall be~~ **IS** ineligible to sit for another  
4 examination until a period of ~~not less than~~ **AT LEAST** 1 year ~~from~~  
5 **AFTER** the date of failure of the second examination, at which time  
6 he or she ~~shall~~ **MUST** present to the board proof of the successful  
7 completion of a course on code, electrical fundamentals, or  
8 electrical theory, approved by the board, in order to **AGAIN** become  
9 eligible ~~again~~ to sit for an examination.

10           (4) ~~(3)~~ As a condition of renewal of an electrical  
11 journeyman's license, the electrical journeyman shall demonstrate  
12 the successful completion of a course, approved by the board,  
13 concerning any update or change in the code within 12 months after  
14 the update or change in that code. This requirement applies only  
15 during or after those years that the code is updated or changed.

16           (5) **AS USED IN THIS SECTION, "ARMED FORCES" MEANS THAT TERM AS**  
17 **DEFINED IN SECTION 2 OF THE VETERAN RIGHT TO EMPLOYMENT SERVICES**  
18 **ACT, 1994 PA 39, MCL 35.1092.**