NOTE: This bill has been prepared for the signatures of the appropriate legislative officers and the Governor. To determine whether the Governor has signed the bill or taken other action on it, please consult the legislative status sheet, the legislative history, or the Session Laws.

SENATE BILL 13-186

BY SENATOR(S) Tochtrop, Crowder, Heath, Kerr, Schwartz; also REPRESENTATIVE(S) Pettersen, Buckner, Exum, Fields, Hullinghorst, Labuda, Lee, Levy, Melton, Mitsch Bush, Moreno, Primavera, Rosenthal, Ryden, Salazar, Schafer, Singer, Young.

CONCERNING UPDATING REQUIREMENTS FOR NEW BUILDING-INTEGRATED PHOTOVOLTAIC TECHNOLOGIES.

Be it enacted by the General Assembly of the State of Colorado:

**SECTION 1.** In Colorado Revised Statutes, 12-23-104, **add** (2) (f.5) as follows:

**12-23-104.** Board powers and duties - rules. (2) In addition to all other powers and duties conferred or imposed upon the board by this article, the board is authorized to:

(f.5) Regulate a licensed master electrician, journeyman electrician, or residential wireman who, acting within his or her scope of competence, supervises a solar photovoltaic installation pursuant to section 40-2-128, C.R.S.

**SECTION 2.** In Colorado Revised Statutes, 40-2-128, **amend** (1)

Capital letters indicate new material added to existing statutes; dashes through words indicate deletions from existing statutes and such material not part of act.

introductory portion and (1) (a) (I) as follows:

**40-2-128.** Solar photovoltaic installations - supervision by certified practitioners - qualifications of electrical contractors. (1) Effective January 1, 2012, For all photovoltaic installations funded wholly or partially through ratepayer-funded incentives as part of the renewable energy standard adjustment allowed under section 40-2-124:

(a) (I) (A) The performance of all photovoltaic electrical work, the installation of photovoltaic modules, and the installation of photovoltaic module mounting equipment shall be IS subject to on-site supervision by a certified photovoltaic energy practitioner, as designated by the North American board of certified energy practitioners (NABCEP), or another nationally recognized professional organization designated by the Colorado state electrical board by rule. Upon the A LICENSED MASTER ELECTRICIAN, LICENSED JOURNEYMAN ELECTRICIAN, OR LICENSED RESIDENTIAL WIREMAN, AS DEFINED IN SECTION 12-23-101, C.R.S.

(B) IN THE CASE OF BUILDING-INTEGRATED PHOTOVOLTAIC TECHNOLOGY, IF THE TYPE OF BUILDING-INTEGRATED PHOTOVOLTAIC TECHNOLOGY INSTALLED OR THE SCOPE OF THE BUILDING-INTEGRATED PHOTOVOLTAIC INSTALLATION INVOLVED DOES NOT REQUIRE A LICENSED MASTER ELECTRICIAN, LICENSED JOURNEYMAN ELECTRICIAN, OR LICENSED RESIDENTIAL WIREMAN TO PERFORM THE INSTALLATION WORK AND THE INSTALLATION WORK CONCERNS THE INSTALLATION OF ROOFING MATERIALS, THE ON-SITE SUPERVISION MAY BE PERFORMED BY A CERTIFIED SOLAR ENERGY INSTALLER, AS DESIGNATED BY NABCEP OR ROOF INTEGRATED SOLAR ENERGY (RISE).

(C) FOR A BUILDING-INTEGRATED PHOTOVOLTAIC INSTALLATION, A LICENSED MASTER ELECTRICIAN, LICENSED JOURNEYMAN ELECTRICIAN, OR LICENSED RESIDENTIAL WIREMAN MUST PERFORM THE INSTALLATION WORK FOR ANY STAGE OF THE INSTALLATION AFTER THE INSTALLATION MATERIALS PENETRATE THE ROOF, A STRUCTURAL WALL, OR ANOTHER PART OF THE BUILDING, OR ANY STAGE OF THE INSTALLATION IN WHICH THE BUILDING-INTEGRATED PHOTOVOLTAIC MATERIALS TRANSITION TO A SURFACE-MOUNTED JUNCTION BOX AND UTILIZE TYPES OF CONDUIT AND BUILDING WIRE THAT ARE APPROVED BY THE NATIONAL ELECTRICAL CODE, AS DEFINED IN SECTION 12-23-101 (3.2), C.R.S.

## PAGE 2-SENATE BILL 13-186

(D) BY SUBMITTING AN initial application for funding or in the AN initial contract proposal, the applicant shall assume ASSUMES responsibility for employing or contracting with one or more certified energy practitioners OR LICENSED MASTER ELECTRICIANS, LICENSED JOURNEYMAN ELECTRICIANS, OR LICENSED RESIDENTIAL WIREMEN to supervise the installation and as necessary to maintain the three-to-one ratio required by paragraphs (b) and (c) of this subsection (1), including during any off-site, preinstallation assembly. Approval of the Payment of any incentives for the work shall NOT be conditioned upon the applicant's supplying APPROVED UNTIL THE APPLICANT SUPPLIES the name and certification number of each certified energy practitioner OR THE LICENSE NUMBER OF EACH MASTER ELECTRICIAN, JOURNEYMAN ELECTRICIAN, OR RESIDENTIAL WIREMAN who actually provided on-site supervision or was present to maintain the three-to-one ratio required by paragraphs (c) and (d) of this subsection (1).

**SECTION 3.** In Colorado Revised Statutes, 24-38.7-104, **amend** (2.5) (a) introductory portion and (2.5) (a) (I) as follows:

**24-38.7-104. Program administrator - training and certification** of contractors - reporting. (2.5) (a) Effective July 1, 2011, The issuance of OFFICE SHALL NOT ISSUE a clean energy loan under this article for the installation of solar photovoltaic equipment shall be conditioned upon TO A QUALIFIED BORROWER UNTIL the borrower's certification BORROWER CERTIFIES that:

(I) (A) The performance of all photovoltaic electrical work, the installation of photovoltaic modules, and the installation of photovoltaic module mounting equipment shall be IS subject to on-site supervision by a certified photovoltaic energy practitioner as designated by the North American board of certified energy practitioners (NABCEP) or another nationally recognized professional organization designated by the Colorado state electrical board by rule. Upon the A LICENSED MASTER ELECTRICIAN, LICENSED JOURNEYMAN ELECTRICIAN, OR LICENSED RESIDENTIAL WIREMAN, AS DEFINED IN SECTION 12-23-101, C.R.S.

(B) IN THE CASE OF BUILDING-INTEGRATED PHOTOVOLTAIC TECHNOLOGY, IF THE TYPE OF BUILDING-INTEGRATED PHOTOVOLTAIC TECHNOLOGY INSTALLED OR THE SCOPE OF THE BUILDING-INTEGRATED PHOTOVOLTAIC INSTALLATION INVOLVED DOES NOT REQUIRE A LICENSED MASTER ELECTRICIAN, LICENSED JOURNEYMAN ELECTRICIAN, OR LICENSED

## PAGE 3-SENATE BILL 13-186

RESIDENTIAL WIREMAN TO PERFORM THE INSTALLATION WORK AND THE INSTALLATION WORK CONCERNS THE INSTALLATION OF ROOFING MATERIALS, THE ON-SITE SUPERVISION MAY BE PERFORMED BY A CERTIFIED SOLAR ENERGY INSTALLER, AS DESIGNATED BY NABCEP OR ROOF INTEGRATED SOLAR ENERGY (RISE).

(C) FOR A BUILDING-INTEGRATED PHOTOVOLTAIC INSTALLATION, A LICENSED MASTER ELECTRICIAN, LICENSED JOURNEYMAN ELECTRICIAN, OR LICENSED RESIDENTIAL WIREMAN MUST PERFORM THE INSTALLATION WORK FOR ANY STAGE OF THE INSTALLATION AFTER THE INSTALLATION MATERIALS PENETRATE THE ROOF, A STRUCTURAL WALL, OR ANOTHER PART OF THE BUILDING, OR ANY STAGE OF THE INSTALLATION IN WHICH THE BUILDING-INTEGRATED PHOTOVOLTAIC MATERIALS TRANSITION TO A SURFACE-MOUNTED JUNCTION BOX AND UTILIZE TYPES OF CONDUIT AND BUILDING WIRE THAT ARE APPROVED BY THE NATIONAL ELECTRICAL CODE, AS DEFINED IN SECTION 12-23-101 (3.2), C.R.S.

(D) BY SUBMITTING AN initial application for funding or in the AN initial contract proposal, the applicant shall assume ASSUMES responsibility for employing or contracting with one or more certified energy practitioners OR LICENSED MASTER ELECTRICIANS, LICENSED JOURNEYMAN ELECTRICIANS, OR LICENSED RESIDENTIAL WIREMEN to supervise the installation and as necessary to maintain the three-to-one ratio required by subparagraphs (II) and (III) of this paragraph (a), including during any off-site, pre-installation assembly. TO RECEIVE final payment for the work, shall be conditioned upon the applicant's supplying THE APPLICANT MUST SUPPLY the name and certification number of each certified energy practitioner OR THE LICENSE NUMBER OF EACH MASTER ELECTRICIAN, JOURNEYMAN ELECTRICIAN, OR RESIDENTIAL WIREMAN who actually provided on-site supervision or was present to maintain the three-to-one ratio required by subparagraphs (III) and (IV) of this subsection (2.5) PARAGRAPH (a).

SECTION 4. Safety clause. The general assembly hereby finds,

determines, and declares that this act is necessary for the immediate preservation of the public peace, health, and safety.

John P. Morse PRESIDENT OF THE SENATE Mark Ferrandino SPEAKER OF THE HOUSE OF REPRESENTATIVES

Cindi L. Markwell SECRETARY OF THE SENATE Marilyn Eddins CHIEF CLERK OF THE HOUSE OF REPRESENTATIVES

APPROVED

John W. Hickenlooper GOVERNOR OF THE STATE OF COLORADO

PAGE 5-SENATE BILL 13-186