Associated Builders & Contractors of WI, Inc.

ELECTRICIAN (CONSTRUCTION)

824.261-010

TRADE INFORMATION

APPROVED: 9/01/2025

TERM OF APPRENTICESHIP: The term of apprenticeship shall be Time Based, which has been established to be **5 years of not less than 8400 hours**. Hours of labor shall be the same as established for other skilled employees in the occupation.

PROBATIONARY PERIOD: The probationary period shall be the first 12 months of the apprenticeship. During the probationary period, this contract may be cancelled by the apprentice or the sponsor upon written notice to the Department.

PAID RELATED INSTRUCTION ATTENDANCE: The apprentice shall attend the Wisconsin Technical College System or other approved training provider, as assigned, for paid related instruction four hours per week or the equivalent and satisfactorily complete the prescribed course material for a **minimum of 576 hours**, unless otherwise approved by the Department. The employer must pay the apprentice for attended related instruction hours at the same rate per hour as for services performed.

WORK PROCESS SCHEDULE: In order to obtain well-rounded training and thereby qualify as a skilled worker in the occupation, the apprentice shall have experience and training in the following areas. This instruction and experience shall include the following operations but not necessarily in the sequence given. Time spent on specific operations need not be continuous.

Work Process Description	**Approximate Hours (Min - Max)**
A. Install Conduit-2" or larger 1. Install various types of conduit (i.e. thin wall, rigid, flexible ridgeways, aluminum, plastic) 2. Plan layout for conduit runs 3. Drill holes through walls, floors, or other structures to route conduit 4. Anchor conduit to surfaces using appropriate fasteners 5. Perform trenching operations trenches for underground conduit installation 6. Create channels in walls or other surfaces to recess conduit within a structure 7. Modify conduit through fabrication to fit specific installation requirements 8. Install support devices (hangers) to hold conduit in place 9. Rig temporary support systems (i.e. pulleys, mechanical aids) to move and install heavy conduit sections	300

B. Install Conduit-1.5" or smaller 1500
1. Install various types of conduit (i.e. thin wall, rigid, flexible ridgeways, aluminum, plastic)
2. Plan layout for conduit runs
3. Drill holes through walls, floors, or other structures to route conduit
4. Anchor conduit to surfaces using appropriate fasteners
5. Perform trenching operations trenches for underground conduit installation
6. Create channels in walls or other surfaces to recess conduit within a structure
7. Modify conduit through fabrication to fit specific installation requirements
8. Install support devices (hangers) to hold conduit in place
9. Rig temporary support systems (i.e. pulleys, mechanical aids) to move and install heavy conduit sections

C. Install Raceways 100
1. Install various Raceway types (i.e. cable trays, square duct, metal molding, ladder racks and pull boxes)

2. Install raceways under floor duct
3. Plan raceway routes
4. Drill holes through walls, floors, or other structures for raceway routes
5. Anchor raceway to surfaces using appropriate fasteners
6. Perform trenching operations trenches for underground conduit installations
7. Create channels in walls or other surfaces to recess raceways within a structure
8. Modify raceways through fabrication to fit specific installation requirements
9. Install support devices (hangers) to hold conduit in place
10. Rig temporary support systems (i.e. pulleys, mechanical aids) to move and install heavy conduit sections

D. Install Distribution Equipment 600
1. Install various Bus Duct Systems types (i.e. trolley duct, service duct, crane rails, distribution bus duct)
2. Plan layout for Bus Duct System
3. Drill holes through walls, floors, or other structures to route Bus Duct Systems
4. Anchor Bus Duct System to surfaces using appropriate fasteners
5. Perform trenching operations trenches for underground Bus Duct System installations
6. Create channels in walls or other surfaces to recess Bus Duct System within a structure
7. Modify Bus Duct System through fabrication to fit specific installation requirements
8. Install support devices (hangers) to hold Bus Duct System in place
9. Rig temporary support systems (i.e. pulleys, mechanical aids) to move and install heavy Bus Duct System
10. Installation and connecting of cubicles, transformers, switch gear, service panels, sub panels, fuse panels and transformers - may include all layout, drilling, anchoring, digging, channeling, fabricating of hangers and rigging pertaining to the installation of the above, etc.

E. Install Equipment 100
1. Install various commercial and industrial equipment (i.e. kitchen, laundry)
2. Set motors
3. Align motors
4. Perform regular and preventative maintenance on motors
5. Perform diagnostics
6. Troubleshoot motor issues

F. Install Wire & Cables 1500
1. Install various wire & cable types (i.e. nonmetallic sheathed cable, armored cable)
2. Install wire & cables in various electrical raceways (i.e. conduit, trays, duct, racks, surface mount channel/trough)
3. Perform fabrication tasks to install wire & cables (i.e. measuring, cutting, stripping, splicing, terminating, bundling and lacing)
4. Set up rigging to support wire & cable installation

G. Install Finish Materials & Trim Devices 1500
1. Assemble fixtures for installation
2. Install fixtures
3. Install switches
4. Install standard and specialized receptacles
5. Install electric heating equipment
6. Perform final device testing

H. Install & Wire Control Equipment 524
1. Install basic motor control equipment (motor control, electronic speed controls, VFDs, Selsyn motors)
2. Install switching & sensing devices (limit, motion, & micro switches; humidity controls, thermostats)
3. Install timing & counting devices (timers, counters, relays)
4. Install measurement & feedback devices (Tach generators, instruments, voltage controls, current & static controls
5. Install process control equipment (process controls, PLCs, HVAC equipment controls)
6. Perform regular and preventative maintenance on control equipment
7. Run regular diagnostics on control equipment
8. Troubleshoot equipment issues

I. Wire Specialized Equipment 1200
1. Install specialized equipment
2. Complete wiring set up for communication and data systems (telephone, data networks, fiber optics, CRT & legacy display)
3. Complete wiring set up for safety & emergency systems (fire alarms, emergency management, nurse call)
4. Complete wiring set up for surveillance & security systems (closed circuit TV, access control)
5. Complete wiring set up for audio-visual systems (sound systems, multi-media presentation systems)
6. Complete wiring set up for outdoor and public lighting (street & highway lighting, outdoor lighting-architectural, sports field lighting)
7. Complete wiring set up for sustainable energy systems (photovoltaic, EV charging stations, energy storage)
8. Adhere to specific industry installation standards, environmental factors and integration requirements
9. Perform system diagnostics and testing on specialized equipment

J. Other 500
1. Perform trenching operations
2. Transport materials using safe handling techniques
3. Maintain stockroom organization and inventory
4. Perform job site clean up

Paid Related Instruction	576
TOTAL	8400

MINIMUM COMPENSATION TO BE PAID:
1st period of 0 – 12 months of 1 – 1680 hours, satisfactory progress* at 45% of the base skilled wage rate
2nd period of 13 – 24 months of 1681 – 3360 hours, satisfactory progress* at least 45 hours of unpaid related instruction at 55% of the base skilled wage rate
3rd period of 25 – 36 months of 3361 – 5040 hours and satisfactory progress* at least 90 hours of unpaid related instruction at 65% of the base skilled wage rate
4th period of 37 – 48 months of 5041 – 6720 hours and satisfactory progress* at least 135 hours of unpaid related instruction at 70% of the base skilled wage rate
5th period of 49 – 60 months of 6721 – 8400 hours and satisfactory progress* at least 180 hours of unpaid related instruction at 75% of the base skilled wage rate

Base skilled wage rate _____ per hour.

*Satisfactory progress is defined as completing the minimum on the job hours; satisfactory progress on the job; satisfactory progress in paid related instruction and unpaid related instruction; current in first aid and CPR; current license; and compliance with the record keeping policy.

If at any time the base skilled wage rate rises, the apprentice's wage shall be adjusted to comply with the higher rate. The wage rate of apprentices employed in this trade and this firm shall be the base skilled wage rate stated above.

If the apprentice does not complete the terms of the contract in the five (5) year period, the apprentice shall be paid at no less than 75% of the skilled rate until completed.

If an apprentice completes the prescribed work hours before completing the required paid related instruction, the apprentice shall be held in the last period of apprenticeship until the apprenticeship is satisfactorily completed.

If the apprentice is not covered under a collective bargaining agreement, the employer may exceed the base skilled wage rate at their discretion.

An apprentice's rate of pay for overtime shall be increased by the same percentage as the journey worker's rate of pay for overtime is increased in the same industry or establishment.

CREDIT PROVISIONS: The apprentice, granted credit at the start or during the term of the apprenticeship, shall be paid the wage rate of the pay period to which such credit advanced the apprentice.

Work Credit: _____

School Credit: _____

Total Credit to be applied to the terms of the apprenticeship: _____

SPECIAL PROVISIONS:
All work processes shall ensure apprentices follow local and/or job specific code requirements and "neat workman-like" standards as per NEC code.

The apprentice shall obtain certification in First Aid and CPR and a minimum of a 10-hour OSHA Construction course during the first year of the apprenticeship. First Aid and CPR certifications must be kept current.

The apprentice is required to take Arc Flash by the end of the **first year** and the Transition to Trainer course in the final year of the apprenticeship.

The apprentice must complete satisfactorily 200 hours of unpaid school hours, as prescribed by the ABC of WI Apprenticeship Advisory Committee. **The apprentice shall obtain at least 45 hours per year in unpaid related instruction.** The 200 hours of unpaid related instruction must include Electrical code (30 hours minimum), Arc Flash (4 hour minimum), and an Electrical Exam Prep Course. The remainder of the 200 hours may include such topics as: PLC, Motor Controls, Photovoltaic, Green Energy, Blueprint Reading, Relay Logic, Computer Skills, Electronics, Instrumentation, Data Communications, Transit & Builders Level, Electrical Circuits, Electrical Safety, Electronic Controls, Fiber Optics, Isometric Drawing, Welding, and Rigging.

Apprentices must obtain a valid credential from the Wisconsin Department of Safety and Professional Services and maintain it throughout the apprenticeship. All registered apprentices in Wisconsin are required to take and pass the State Journey Worker Electrical Exam or the Master Electrician Exam prior to the completion of their Apprentice Contract.

All work shall be performed under direct skilled worker supervision, except fifth year apprentices who can be provided general supervision. Supervision should not be of such a nature as to prevent the development of responsibility and initiative. Under no circumstance shall an apprentice supervise another apprentice. **First year apprentices may not work on or be exposed to live circuits or systems.**

The apprentice is expected to purchase the tools of the trade by the completion of the first year.

The Apprentice must submit an Application for Completion to the ABC of WI Apprenticeship Advisory Committee upon completion of the on-the-job training work hours, paid and unpaid school hours, and passing of the State Journey-Worker Exam. Upon approval by the ABC of WI Apprenticeship Advisory Committee and the BAS, the apprentice will be completed from the apprenticeship program.