

BULLETIN 98 - 03**Date: February 19, 1998**

U.S. Department of Labor Employment and Training Administration Office of Apprenticeship Training, Employer Labor Services (OATELS) Washington, D.C. 20210	<u>Distribution:</u> A-541 Headquarters Staff A-546 All Field Staff A-547 SD + RD + SAC; Lab. Com	<u>Subject:</u> New Apprenticeable Occupation -Residential Wire <u>Code:</u> 200r
Symbols: DNIP:JM		Action: Immediate

PURPOSE: To inform Office of Apprenticeship Training, Employer Labor Services (OATELS), Bureau of Apprenticeship and Training (BAT) Staff of a new apprenticeable occupation:

Residential Wirer
 O*NET Code: 47-2111.00
 RAIS Code: 1022
 Training Term: 4,800 Hrs. (3 yrs)
 Type of Training: Time - based

BACKGROUND: This occupation was submitted by the National Joint Apprenticeship and Training committee for the Electrical Industry (NJATC).

The description for this occupation exceeds the description in the Dictionary of Occupational Titles (DOT). This job is concerned with installing of lighting, control and security systems, communications and sound systems, terminal transformers material handling and pre- fabrication.

Every sponsor will develop their own work process and related instruction outline to meet their needs; therefore, all of the outlines will have unique characteristics. To assist Field Staff, we have attached one example of the outlines for this occupation.

Attachments

NOTE: State Directors, please share this information with our SAC partners where appropriate.

**WORK PROCESSES
RESIDENTIAL WIRER**

O*NET Code: 47-2111.00 RAIS Code: 1022

<u>WORK PROCESS</u>	<u>APPROXIMATE HOURS</u>
PROJECT LAYOUT AND PLANNING	200
Reading and interpreting blueprints and specifications	
Coordination between crafts, general contractor and home owner	
Layout services and branch circuits	
UNDERGROUND INSTALLATIONS	200
Trenching and ditch digging	
Direct Burial	
Installing PVC/Rigid Conduit	
Installing grounding electrode systems	
THIN WALL CONDUIT RACEWAY SYSTEMS	200
Fastening and supporting devices	
Conduit fabrication	
Installation of conduit, fittings and boxes	
RIGID CONDUIT RACEWAY SYSTEMS	200
Fastening and supporting devices	
Conduit fabrication	
Installation of conduit, fittings and boxes	
INSTALLING SERVICES, AND PANELS	500
Mounting devices	
Breaker installation	
Fuse installation	
Terminations and Bonding	
INSTALLING, SPLICING & TERMINATING WIRES AND CABLES	1200
Installing Non-metallic Sheath cable	
Establishing temporary power	
Feeders and branch circuits	
Control wiring	
Splices, taps and terminations	
LIGHTING SYSTEM INSTALLATION	400
Installing outlet boxes and conductors	
Installing fixtures	
Control devices	
TESTING AND TROUBLESHOOTING SERVICES, MOTORS AND BRANCH CIRCUITS	100
Checking circuit continuity	
Identifying fault current to ground	
Certifying system operation	
Repair and maintenance	

Ground Verification	
FIRE ALARM INSTALLATION	100
Blueprint and specification interpretation	
Layout and circuit installation	
Control panel and device installation	
Programming and testing	
CONTROL SYSTEM INSTALLATION	150
Blueprint and specification interpretation	
Layout and circuit installation	
Distributed control	
SECURITY SYSTEM INSTALLATION	100
Blueprint and specification interpretation	
Layout	
Box and circuit installation	
Terminations	
Testing	
INSTALLING COMMUNICATION AND SOUND SYSTEMS	150
Blueprint and specification interpretation	
Layout	
Conduit and box installation	
Installing panels and network devices	
Circuit installation	
Terminations and testing	
INSTALLING AND TERMINATING TRANSFORMERS	100
Mounting and Installation	
Primary and secondary terminations	
Testing and troubleshooting	
SERVICE AND TROUBLESHOOTING	100
Testing, analysis and repair of: motors, transformers, electrical devices, electronic devices, magnetic devices, lighting and power circuits, control circuits and devices.	
MATERIAL HANDLING AND PRE-FABRICATION	100
Material/equipment awareness	
Fabricating for field installation	
OTHER SPECIALIZED AREAS	<u>200</u>
TOTAL MINIMUM HOURS	4,000

OFFICE MANAGER/ADMINISTRATIVE SERVICES

O* NET CODE: 11-3011.00 RAIS CODE: 1033

RELATED INSTRUCTION

Each apprentice shall be required to participate in a minimum of 160 hours of related classroom training per year.

- Air Conditioning
- Blueprint Reading
- Conduit Fabrication
- Digital Electronics
- Electrical Theory
- Electrical Grounding
- Electronics
- Fiber Optics
- Fire Alarm
- Industry Orientation
- Job Information
- Low Voltage Circuitry
- Mathematics
- Basic Motors and Transformers
- National Electrical Code
- OSHA/Safety Awareness
- Security Systems
- Electrical Circuit Analysis, Repair & Certification