



American Electrical Institute

CONTINUING EDUCATION | FOR FLORIDA ELECTRICIANS

Florida Specialty Course: 4 Hour Electrical Essentials

This course contains the following:

- 1 Hour Business Practices for Florida Electricians (Business credit)*
- 1 Hour Workers' Compensation: Reemployment Services Program*
- 1 Hour Florida Laws and Rules*
- 1 Hour Florida Safety: Person Protective Equipment (work safety)*

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DISCLAIMER NOTE: This course is APPROVED by the Florida Department of Business & Professional Regulation for continuing education to renew your electrical license and is not intended to replace or supersede any state or local adopted codes.

Business Practices for Florida Electricians: Long Term Contracts

Course Description: A long-term contract method of accounting is only available to taxpayers that have long-term contracts. Therefore, whether a long-term contract exists, and the classification of the contract must be determined prior to selecting a proper method of accounting. This section of the course defines long term contracts and discusses various factors involved in making this determination.

Course Objectives:

- Understand Background and Definition
- Review Contracts IRC Section 460 Scope
- Learn Electrical Contractor and Manufacturing Contracts
- Understand Contract Classifications
- Review Severing and Aggregating Contracts

Note: The IRS uses the term construction contract to refer to contracts associated with the construction industry, to include electrical contractors. The IRS defines “construction contract” as any contract for the building, construction, reconstruction, or rehabilitations of, or the installation of any integral component to, or improvements of, real property. We will use the title “electrical contractor contract or contractor contract” for the purposes of this course, but the IRS uses that interchangeably with the more general term construction contract.

Long Term Contracts – Electrical Contractor Industry

Background

Before the enactment of the Tax Reform Act of 1986, electrical contractors could choose an accounting method from various alternatives with few restrictions. Contractors would recognize income and expense from contracts under the cash method, accrual method, completed contract method, or percentage of completion method. Many contractors adopted the completed contract method for tax purposes because they could defer taxes until the completion of the contract.

Internal Revenue Code (IRC) Section 460 (effective for contracts entered into after February 28, 1986) generally requires the use of the percentage of completion method. Additionally, IRC Section 460 introduced the "Look-back Method." The Look-back Method uses a calculation that compares the percentage of gross profit recognized in prior years to the actual profit percentage once the job has been completed.

A long-term contract method of accounting (completed contract or percentage of completion) is only available to taxpayers that have long-term contracts. Therefore, whether or not a long-term contract exists and the classification of the contract must be determined prior to selecting a proper method of accounting. This course is designed to bring out the various factors involved in making this determination.

Long Term Contract Defined

The term "long-term" tends to indicate a contract that lasts a long period of time, but the duration of the contract is irrelevant in order for it to be classified as a long-term contract. IRC Section 460(f)(1) generally defines a long-term contract as one that is not complete at the end of the tax year.

The long-term contract must also be for the manufacture, building, installation, or construction of property.

IRC Section 460(f)(1): In general, the term "long-term contract" means any contract for the manufacture, building, installation, or construction of property if such contract is not completed within the taxable year in which such contract is entered into.

Example:

A calendar-year taxpayer begins a contractor job on December 31 and completes the job on January 1 of the subsequent year. The contract is considered a long-term contract even though the job was only two days in duration.

Contracts Subject to IRC Section 460

Under IRC Section 460(b)(1), taxpayers must use the percentage of completion method to report taxable income from long-term contracts. The degree of completion is generally determined by comparing the total allocated contract costs incurred to date with the total estimated contract costs, otherwise known as the "cost-to-cost method."

Engineering estimates or other approaches to determine the degree of completion may not be used if the contractor is subject to the percentage of completion method under IRC Section 460. If a contractor is able to meet the exemptions of IRC Section 460(e), the use of the engineering estimates (or any other recognized output methods) or any appropriate method meeting the definition of section 460 is allowed.

Contracts Exempt from IRC Section 460

Note: for purposes of this subsection, "home construction contract" means any electrical contractor contract if 80 percent or more of the estimated total contract costs (as of the close of the taxable year in which the contract was entered into) are reasonably expected to be attributable to activities referred to in paragraph (4) with respect to— (i) dwelling units (as defined in section 168(e)(2)(A)(ii)) contained in buildings containing 4 or fewer dwelling units (as so defined), and (ii) improvements to real property directly related to such dwelling units and located on the site of such dwelling units. For purposes of clause (i), each townhouse or rowhouse shall be treated as a separate building.

IRC Section 460(e) provides two exceptions for long-term contracts to the required use of the percentage of completion rules and the application of look-back:

1. Any home construction contract (defined in IRC Section 460(e)(5)(A)) entered into after June 20, 1988. Contractors not meeting the small contractor exception discussed below are required, under IRC Section 460(e)(1)(B), to capitalize costs using IRC Section 263A
2. Small electrical contractor contracts, as defined in IRC Section 460(e)(1)(B), require that at the time the contract was entered into, it was estimated that such contract would be completed within a 2-year period beginning on the commencement date of such contract; and the contractor's average

annual taxable gross receipts for the 3 taxable years preceding the taxable year in which such contract was entered into did not exceed \$10 million.

Example:

A contractor enters into two long-term contracts during the taxable year. Neither of which are home contractor contracts. The average annual taxable gross receipts for the prior 3 taxable years are \$9 million.

Job 1 is expected to be completed within 18 months. Job 1 is exempt from the percentage of completion and look-back requirements of IRC Section 460 and may be accounted for under the taxpayer's elected method of accounting for long-term contracts (e.g., completed contract, accrual).

Job 2 is expected to be completed within 30 months. However, Job 2 must be accounted for using the percentage of completion method, and look-back may be required upon the completion of the job. Even though the average annual taxable gross receipts for the prior 3 years are less than \$10 million, the contract is not estimated to be completed within the 2-year period.

In this example, two methods of accounting for long-term contracts are proper. The two exceptions provided under IRC Section 460(e) do not apply to long-term manufacturing contracts.

Electrical Contractor Contracts and Manufacturing Contracts

IRC Section 460 makes a distinction between the two categories of long-term contracts, an electrical contractor contract and certain manufacturing contracts. A electrical contractor contract pertains to real property. A manufacturing contract pertains to personal property. This course is written primarily for use with electrical contractor contracts as opposed to manufacturing contracts. Treasury Regulation Section 1.460-1(b)(1) further distinguishes a long-term electrical contractor contract from a long-term manufacturing contract.

Long-term Contract

A long-term contract generally is any contract for the manufacture, building, installation, or construction of property if the contract is not completed within the contracting year, as defined in Treasury Regulation Section 1.460-1(b)(5). However, a contract for the manufacture of property is a long-term contract only if it also satisfies either the unique-item or 12-month requirements described in Section 1.460-2. A contract for the manufacture of personal property is a manufacturing contract. In contrast, a contract for the building, installation, or construction of real property is an electrical contractor contract. See Treasury Regulation Section 1.460-1(b)(1).

Electrical Contractor Contract

For purposes of this subsection, the term "electrical contractor contract" means any contract for the building, construction, reconstruction, or rehabilitation of, or the installation of any integral component to, or improvements of, real property. See IRC Section 460(e)(4).

Manufacturing Contract

IRC Section 460(f)(2) provides a special rule for manufacturing contracts. A contract for the manufacture of property shall not be treated as a long-term contract unless such contract involves the manufacture of:

1. Any unique item of a type which is not normally included in the finished goods inventory of the taxpayer, or
2. Any item which normally requires more than 12 calendar months to complete (without regard to the period of the contract).

Integral Components of Real Property

A contract not completed in the year the contract is entered into is a long-term contractor contract if it involves the building, construction, reconstruction, or rehabilitation of real property; the installation of an integral component to real property; or the improvement of real property. These are collectively referred to as construction. Treas. Reg. Section 1.460-3(a).

Real property means land, buildings, and inherently permanent structures, as defined in section 1.263A-8(c) (3), such as roadways, dams, and bridges. Real property does not include vessels, offshore drilling platforms, or natural products of land that have not been severed.

An integral component to real property includes property not produced at the site of the real property but is intended to be permanently affixed to the real property, such as elevators and central heating and cooling systems.

Example:

A contract to install an elevator in a building is an electrical contractor contract because a building is real property, but a contract to install an elevator in a ship is not an electrical contractor contract because a ship is not real property.

Example:

A taxpayer enters into a contract to manufacture an elevator. However, an unrelated party will install it. The contract for the manufacture of the elevator is not an electrical contractor contract even though the elevator is considered an integral component to real property. The regulations define an electrical contractor contract as one that involves the installation of the integral component.

Contract Classifications

Contracts are determined on a contract-by-contract basis and categorized into one of the following classifications:

1. Long-term electrical contractor contract.
2. Long-term manufacturing contract; or
3. Non-long-term contract.

Treasury Regulation Section 1.460-1(b)(2)(i) clarifies that a contract's classification should be based on the performance required of the taxpayer under the contract regardless of whether the contract would be classified as a sales contract or an electrical contractor contract. It's not relevant that the title in the property constructed under the contract is delivered to the customer.

Treasury Regulation Section 1.460-1(b)(2) provides that (i) In general. A contract is a contract for the manufacture, building, installation, or construction of property if the manufacture, building, installation, or construction of the property is necessary for the taxpayer's contractual obligations to be fulfilled and if the manufacture, building, installation, or construction of that property has not been completed when the parties enter into the contract.

If a taxpayer has to manufacture or construct an item to fulfill his obligations under the contract, the fact that the taxpayer is not required to deliver that item to the customer is not relevant.

Whether the customer has title to, control over, or bears the risk of loss from the property manufactured or constructed by the taxpayer also are not relevant. Furthermore, how the parties characterize their agreement (e.g., as a contract for the sale of property) is not relevant.

Example:

A developer, whose taxable year ends December 31, owns 5,000 acres of undeveloped land. To obtain permission from the local county government to improve this land, a service road must be constructed on this land to benefit all 5,000 acres. In 2020, the developer enters into a contract to sell a 1,000-acre parcel of undeveloped land to a residential developer, for its fair market value. In this "sales" contract, the developer agrees to construct a service road running through the land that it is selling to the residential developer. The construction of the service road is estimated to be completed in 2022. The "sales" contract is a construction contract because the construction of an item (the service road) is necessary for the developer to fulfill its contractual obligations. De minimis construction activities must also be considered in classification of the contract if entered into after January 10, 2001. More on De minimis construction activities will be discussed later.

Hybrid Contracts

A hybrid contract is a single long-term contract that requires a taxpayer to perform both manufacturing and electrical contractor activities. Generally, the regulations classify a hybrid contract as two contracts, a manufacturing contract and an electrical contractor contract. Treasury Regulation Section 1.460-1(f)(2) permits a taxpayer to elect, on a contract-by-contract basis, to do one of the following:

1. Treat the entire contract as a long-term electrical contractor contract if at least 95% of the estimated total allocable contract costs are reasonably allocable to contractor activities; or
2. Treat the entire contract as a long-term manufacturing contract subject to the percentage of completion method of accounting. Note that there is no 95% rule as with the election to treat a hybrid contract as an electrical contractor contract.

Treasury Regulation Section 1.460-1(f)(2) provides that (i) In general, a long-term contract that requires a taxpayer to perform both manufacturing and electrical contractor activities (hybrid contract) generally must be classified as two contracts--a manufacturing contract and an electrical contractor contract.

A taxpayer may elect, on a contract-by-contract basis, to classify a hybrid contract as a long-term electrical contractor contract if at least 95% of the estimated total allocable contract costs are reasonably allocable to contractor activities.

In addition, a taxpayer may elect, on a contract-by-contract basis, to classify a hybrid contract as a long-term manufacturing contract subject to the percentage of completion method (PCM).

De minimis Contractor Activities

A contract with de minimis contractor activities is not a contractor contract under IRC Section 460 if the contract includes the provision of land by the taxpayer and the estimated total contract costs attributable to the contractor activities are less than 10% of the contract's total contract price.

For purposes of the 10% test, the cost of the land provided to the customer is not included in the allocable contract costs. See Treasury Regulation Section 1.460-1(b)(2)(ii).

This 10% threshold provides a "bright-line" test. Prior to the enactment of the regulation, Notice 89-15 provided that a contract was a contractor contract if the contractor activity required by the contract was necessary for the taxpayer to fulfill its contractual obligations.

Example:

A developer whose taxable year ends December 31 owns 5,000 acres of undeveloped land with a cost basis of \$5 million. To obtain permission from a local county government to improve this land, a service road must be constructed on this land to benefit all 5,000 acres.

In 2019, the developer entered into a contract to sell a 1000-acre parcel of undeveloped land to a residential developer for \$10 million. In the sales contract, there is a provision that commits the taxpayer to construct the portion of the service road that benefits the acreage sold, as required by the local county government. The portion of the cost of the service road attributable to the 1000-acre parcel is estimated to be \$10,000. The service road is not completed until 2020.

Because the estimated total allocable contract costs attributable to the contractor activities is \$10,000 and these costs are less than 10% of the total contract price of \$10 million. The contract is not considered a contractor contract and is not to be accounted for under a long-term contract method. Prior to January 10, 2001, this same contract would have been accounted for under a long-term contract method.

Non-Long-Term Contract Activities

Long-term contract methods of accounting apply only to the gross receipts and costs attributable to long-term contract activities. Non-long-term contract activities are defined in Treasury Regulation Section 1.460-1(d)(2).

Non-long-term contract activity means the performance of an activity other than manufacturing, building, installation, or construction, such as the provision of architectural, design, engineering, and construction management services, and the development or implementation of computer software.

In addition, performance under a guaranty, warranty, or maintenance agreement is a non-long-term contract activity that is never incidental to or necessary for the manufacture or construction of property under a long-term contract.

Several revenue rulings have held that contracts for services cannot use a long-term method of accounting:

1. An architect is not entitled to report income from contracts extending over more than one year on the completed contract method because the work is in the nature of personal service. Revenue Ruling 70-67, 1970-1 C.B. 117.
2. Engineering services and construction management, unrelated to the electrical contractor, are not entitled to use either the completed contract method or percentage of completion method because the contract does not require the taxpayer to construct or build anything, even though the services are functionally related. Revenue Ruling 82-134, 1982-2 C.B. 88 and Rev. Ruling. 80-18, 1980-1 C.B. 103.
3. A painting contractor cannot use the completed contract method because he provides only painting services. Revenue Ruling 84-32, 1984-1 C.B. 129.

However, if the performance of a non-long-term contract activity is incidental to or necessary for the manufacture, building, installation, or construction of the subject matter of one or more of the taxpayer's long-term contracts, the gross receipts and costs attributable to that activity must be allocated to the long-term contract. Treasury Regulation Section 1.460-1(d) requires allocation of the contract's gross receipts and costs among the activities.

Treasury Regulation Section 1.460-1(d) provides that (i) In general, long-term contract methods of accounting apply only to the gross receipts and costs attributable to long-term contract activities.

Gross receipts and costs attributable to long-term contract activities means amounts included in the total contract price or gross contract price, whichever is applicable, as determined under Section 1.460-4, and costs allocable to the contract, as determined under Section 1.460-5.

Gross receipts and costs attributable to non-long-term contract activities as defined in paragraph(d)(2) of Section 1.460-1, must generally be taken into account using a permissible method of accounting other than a long-term contract method. See IRC Section 446(c) and Section 1.446-1(c).

However, if the performance of a non-long-term contract activity is incidental to or necessary for the manufacture, building, installation, or construction of the subject matter of one or more of the taxpayer's long-term contracts, the gross receipts and costs attributable to that activity must be allocated to the long-term contract(s) benefited as provided in Section 1.460-4(b) (4)(i) and 1.460-5(f)(2), respectively.

Similarly, if a single long-term contract requires a taxpayer to perform a non-long-term contract activity that is not incidental to or necessary for the manufacture, building, installation, or construction of the subject matter of the long-term contract, the gross receipts and costs attributable to that non-long-term contract activity must be separated from the contract and accounted for using a permissible method of

accounting other than a long-term contract method. But see Section 1.460-1(g) for related party rules.

Example:

A contractor is hired to design and install a system for a customer. The design portion of the contract is considered a non-long-term contract activity. However, it is incidental to the installation of the system because it could not be installed without the design, so the entire contract is accounted for under a long-term contract method of accounting.

Related Party Contract

Treasury Regulation Section 1.460-1(g) extends the reporting of the percentage of completion method to related parties that may not generally be required to report their income on the percentage of completion method. A taxpayer who performs an activity that would normally be considered a non-long term contract activity (e.g., architectural services) must report income on the percentage of completion method if it is incidental to or necessary to a related party's long-term contract that must be reported using the percentage of completion method (PCM).

Treasury Regulation Section 1.460-1(g) provides that (i) In general, except as provided in Treasury Regulation Section 1.460(g)(1)(ii), if a related party and its customer enter into a long-term contract subject to the PCM, and a taxpayer performs any activity that is incidental to or necessary for the related party's long-term contract, the taxpayer must account for the gross receipts and costs attributable to this activity using the PCM, even if this activity is not otherwise subject to section 460(a).

This type of activity may include, for example, the performance of engineering and design services and the production of components and subassemblies that are reasonably expected to be used in the production of the subject matter of the related party's contract.

Except in the case of a sale or exchange in satisfaction of a pecuniary bequest, an executor of an estate and a beneficiary of such estate, Treasury Regulation Section 1.460-1(b)(4) defines a related party as a person whose relationship to a taxpayer is described in IRC Section 707(b) or Section 267(b) that includes:

1. A partnership and a person owning, directly or indirectly, more than 50 percent of the capital interest, or the profits interest, in such partnership.
2. Two partnerships in which the same persons own, directly or indirectly, more than 50 percent of the capital interests or profits interests.
3. Members of a family, including only brothers and sisters (whether by the whole or half blood), spouse, ancestors, and lineal descendants.
4. An individual and a corporation, more than 50 percent in value of the outstanding stock of which is owned, directly or indirectly, by or for such individual.
5. Two corporations which are members of the same controlled group.
6. A grantor and a fiduciary of any trust.
7. A fiduciary of a trust and a fiduciary of another trust, if the same person is a grantor of both trusts.
8. A fiduciary of a trust and a beneficiary of such trust.
9. A fiduciary of a trust and a beneficiary of another trust, if the same person is a grantor of both trusts.

10. A fiduciary of a trust and a corporation more than 50 percent in value of the outstanding stock of which is owned, directly or indirectly, by or for the trust or by or for a person who is a grantor of the trust.
11. A person and an organization to which section 501 (relating to certain educational and charitable organizations which are exempt from tax) applies and which is controlled directly or indirectly by such person or (if such person is an individual) by members of the family of such individual.
12. A corporation and a partnership if the same persons own more than 50 percent in value of the outstanding stock of the corporation and more than 50 percent of the capital interest, or the profits interest, in the partnership.
13. An S corporation and another S corporation if the same persons own more than 50 percent in value of the outstanding stock of each corporation; or
14. An S corporation and a C corporation, if the same persons own more than 50 percent in value of the outstanding stock of each corporation.

Example:

An architectural firm enters into a contract with a customer to design an electrical plan for a building. Since the contract is for the performance of services it is not a long-term contractor contract. However, if the architect's related electrical contractor company enters into a contract with the same customer to install the "designed" electrical plan and the electrical contractor company is required to account for the long-term electrical contractor contract under the PCM, the architect must account for the design services under PCM because the services are incidental to the related electrical contractor company's contract.

Severing and Aggregating Contracts

Under IRC Section 460(f)(3), contractors are permitted and may be required to sever or aggregate contracts. Severance treats one agreement as two or more contracts. Aggregation treats two or more agreements as one contract. Whether an agreement should be severed, or two or more agreements should be aggregated depends on the following factors (with certain exceptions) as provided in Treasury Regulation Section 1.460-1(e):

1. Pricing: Independent pricing of items in an agreement is necessary for the agreement to be severed into two or more contracts.
2. Separate delivery or acceptance: An agreement may not be severed into two or more contracts unless it provides for separate delivery or separate acceptance of items that are the subject matter of the agreement. The separate delivery or separate acceptance of items by itself does not, however, necessarily require an agreement to be severed.
3. Reasonable businessperson: Two or more agreements to perform manufacturing or contractors activities may not be aggregated into one contract unless a reasonable businessperson would not have entered into one of the agreements for the terms agreed upon without also entering into the other agreement(s).

Exceptions under Treasury Regulation Section 1.460-1(e)(3) provide that (i) A taxpayer may not sever under this paragraph (e) a long-term contract that would be subject to the PCM without obtaining the Commissioner's prior written consent.

In the case of options and change orders, subject to the above Treasury Regulation, a taxpayer must

sever an agreement that increases the number of units to be supplied to the customer such as through the exercise of an option or the acceptance of a change order if the agreement provides for separate delivery or separate acceptance of the additional units.

Example 1:

This situation illustrates the concept of severance. On January 1, 2015, an electrical contractor enters into an agreement to provide installation services for two office buildings in different areas of a large city. The agreement provides that the two office buildings will be completed and accepted by the customer in 2016 and 2017, respectively. The contractor will be paid \$1 million and \$1.5 million for the two office buildings, respectively.

The agreement will provide a reasonable profit from the services provided for each building. Unless the contractor is required to use the PCM to account for the contract, the contractor is required to sever this contract because the buildings are independently priced, and the agreement provides for separate delivery and acceptance of the buildings. As each building will generate a reasonable profit, a reasonable businessperson would have entered into separate agreements for the terms agreed upon for each building.

Example 2:

This situation illustrates the concept of allocation. In 2015, a contractor entered into two separate contracts as the result of a single negotiation to construct two identical special use buildings (i.e., a nuclear plant).

Because the contractor has never installed in this type of building before, the contractor anticipates that it will incur substantially higher costs to install in the first building.

If the agreements are treated as separate contracts, the first contract probably will produce a substantial loss while the second contract probably will produce a substantial profit.

Based upon these facts, aggregation is required because the installations for the buildings are interdependently priced, and a reasonable businessperson would not have entered the first agreement without also entering into the second.

Example 3:

This situation illustrates the concept of contract options. A contractor enters into a contract with a developer to construct 10 homes on land owned by the developer to be built in Year 1. The contract provides an option in which the contractor is to build an additional 10 homes. In Year 2, the option is exercised, and the additional homes are built. The option would be severed from the original contract.

Conclusion

The electrical contractor industry is both unique and complex with respect to the number of available tax methods of accounting. The proper method of accounting for a long-term electrical contractor contract is determined contract-by-contract based on the type and terms of the contract, along with

related party considerations.

For additional information regarding contracts related to the contractors industry click here.
(https://www.irs.gov/pub/irs-utl/constructionindustry_atg.pdf)

Long Term Contract Final Exam Questions

1. Before the enactment of the Tax Reform Act of 1986 many contractors adopted the _____ method for tax purposes because they could defer taxes until the completion of the contract.
 - a. Cash
 - b. Accrual
 - c. Completed contract
 - d. Percentage of completion

2. What section of the Internal Revenue Code contains the rules for long-term contracts?
 - a. Section 100
 - b. Section 130
 - c. Section 460
 - d. Section 680

3. True or False: The following example would be considered a long-term contract:
A calendar-year taxpayer begins a electrical contractor job on December 31 and completes the job on January 1 of the subsequent year.
 - a. True
 - b. False

4. A contract not completed in the year the contract is entered into is a long-term electrical contractor contract if it involves the _____ of real property.
 - a. building
 - b. construction
 - c. installation
 - d. all of the above

5. Which of the following is not an example of real property?
 - a. Permanent structures
 - b. Vessels

- c. Land
 - d. all of the above
6. A contract to install an elevator in a building is a _____ contract because a building is real property.
- a. Contractor
 - b. Manufacturing
 - c. Related party
 - d. Hybrid
7. Contracts are determined on a contract-by-contract basis and categorized into which of the following classifications?
- a. Long-term contractor contract
 - b. Long-term manufacturing contract
 - c. Non-long-term contract.
 - d. All of the above
8. A _____ contract is a single long-term contract that requires a taxpayer to perform both manufacturing and contractor activities.
- a. Dual
 - b. Construction
 - c. Hybrid
 - d. Related party
9. A contract with de minimis construction activities is not a contractor contract under IRC Section 460 if the contract includes the provision of land by the taxpayer and the estimated total contract costs attributable to the construction activities are less than _____% of the contract's total contract price.
- a. 5%
 - b. 10%
 - c. 25%
 - d. 50%
10. True or False: Aggregation treats one agreement as two or more contracts and severance treats two or more agreements as one contract.
- a. True
 - b. False



Workers' Compensation: Reemployment Services Program

1 Hour

Course Material and Final Exam

Workers' Compensation for Florida Electricians: Reemployment Services Program

Course Description: The Florida Division of Workers Compensation has a Reemployment Service Program. This section of the course starts with an overview of the Reemployment Services Program highlighting what the program offers, the eligibility requirements, and the process for applying. Then presents the laws from the Workers' Compensation section of the Florida Statutes, and the rules from the Division of Workers' Compensation rules of the Florida Administrative Code, related to reemployment services available in Florida.

Learning Objectives:

- Describe the Florida Division of Workers' Compensation Reemployment Services Program.
- Review the Florida Statutes related to reemployment services.
- Review the Florida Rules related to reemployment services.

Workers Compensation for Florida Contractors: Reemployment Services

The Florida Division of Workers Compensation has a Reemployment Service Program. This section of the course starts with an overview of the Reemployment Services Program highlighting what the program offers, the eligibility requirements, and the process for applying. Then presents the laws from the Workers' Compensation section of the Florida Statutes, and the rules from the Division of Workers' Compensation rules of the Florida Administrative Code, related to reemployment services available in Florida.

Overview of Reemployment Service Program

What is the Reemployment Services Program?

The Florida Division of Workers' Compensation Reemployment Services Program provides services to help injured workers obtain employment when their job-related injuries or illnesses prevent them from returning to their usual line of work.

What services are available?

Reemployment services include:

- Vocational counseling,
- Job-seeking skills training,
- Resume writing,
- Transferable skills analysis,
- Job search assistance,
- Vocational Evaluation, and
- Training and education.

Services authorized will vary according to the needs and eligibility of the injured employee.

Who is eligible for reemployment services?

Although other factors may affect eligibility, you must, at minimum:

- Have a compensable injury or illness that is covered under the Florida Workers' Compensation Law,
- Have a date of accident or illness on or after 10/01/1989,
- Be legally eligible to work in the United States, and
- Submit a "Request for Screening" application to the Division within one year (365 days) of your last receipt of carrier paid monetary benefits, medical treatment or settlement.

How can I submit a "Request for Screening" application for reemployment services?

To submit a request, complete the online application located on the Injured Employee Web Portal at the following link: <https://w cres.fldfs.com/resportal/iweb/ielogin.aspx>

This web-based application can be accessed from any computer connected to the internet 24 hours a day, 7 days a week, at the time that is most convenient for you.

To complete the application, you will need the following information:

- Your Social Security Number (SSN) or the Jurisdiction Control Number (JCN) assigned by the Florida Division of Workers' Compensation;
- Date of work accident or illness;
- Work history for the last 15 years;
- Medical information that affects your ability to work. This should include both workers' compensation and non-workers' compensation medical information; and
- Educational background, including whether you attended college or vocational technical school.

What happens after I submit my request?

Upon receipt of a completed "Request for Screening" application and other required documentation, your case will be assigned to a case manager who will:

- Call you to conduct a phone interview,
- Confirm this is a compensable Florida Workers' Compensation injury or illness,
- Review all available case related documents, including the documents required by the Form I-9, Employment Eligibility Verification,
- Review medical information to determine any permanent functional limitations related to the injury,
- Confirm whether employment is available with the employer of injury, and
- Determine whether you have already returned to suitable gainful employment.

What factors are considered in making a determination of what services I am eligible to receive?

Florida's Workers' Compensation Law requires the following factors be considered when determining a return to work plan: age, education, work history, transferable skills, previous occupation, injury, and average weekly wage at the time of injury.

Law Related to Reemployment Services – Reemployment of Injured Workers.

Introduction

The laws related to Reemployment Services can be found in the Florida Statutes under Title XXXI Labor, Chapter 440 Workers Compensation Reemployment of Injured Workers; Rehabilitation.

It is the intent of this section of Chapter 440 is to encourage the provision of medical care coordination and reemployment services that are necessary to assist the employee in returning to work as soon as is medically feasible.

Definitions

As used in this section of the chapter, the term:

- (a) “Carrier” means group self-insurance funds or individual self-insureds authorized under this chapter and commercial funds or insurance entities authorized to write workers’ compensation insurance under chapter 624.
- (b) “Medical care coordination” includes, but is not limited to, coordinating physical rehabilitation services such as medical, psychiatric, or therapeutic treatment for the injured employee, providing health training to the employee and family, and monitoring the employee’s recovery. The purposes of medical care coordination are to minimize the disability and recovery period without jeopardizing medical stability, to assure that proper medical treatment and other restorative services are timely provided in a logical sequence, and to contain medical costs.
- (c) “Rehabilitation provider” means a rehabilitation nurse, rehabilitation counselor, or vocational evaluator providing reemployment assessments, medical care coordination, reemployment services, or vocational evaluations under this section, possessing one or more of the following nationally recognized rehabilitation provider credentials:
 - (1) Certified Rehabilitation Registered Nurse, C.R.R.N., certified by the Association of Rehab Professionals.
 - (2) Certified Rehabilitation Counselor, C.R.C., certified by the Commission of Rehabilitation Counselor Certifications.
 - (3) Certified Case Manager, C.C.M., certified by the Commission for Case Management Certification.
 - (4) Certified Disability Management Specialist, C.D.M.S., certified by the Certified Disability Management Specialist Commission.
 - (5) Certified Vocational Evaluator, C.V.E., certified by the Commission of Rehabilitation Counselor Certification.
 - (6) Certified Occupational Health Nurse, C.O.H.N., certified by the American Board of Occupational Health Nurses.
- (d) “Reemployment assessment” means a written assessment performed by a rehabilitation provider which provides a comprehensive review of the medical diagnosis, treatment, and prognosis; includes conferences with the employer, physician, and claimant; and recommends a cost-effective physical and vocational rehabilitation plan to assist the employee in returning to suitable gainful employment.

- (e) “Reemployment services” means services that include, but are not limited to, vocational counseling, job-seeking skills training, ergonomic job analysis, transferable skills analysis, selective job placement, labor market surveys, and arranging other services such as education or training, vocational and on-the-job, which may be needed by the employee to secure suitable gainful employment.
- (f) “Reemployment status review” means a review to determine whether an injured employee is at risk of not returning to work.
- (g) “Suitable gainful employment” means employment or self-employment that is reasonably attainable in light of the employee’s age, education, work history, transferable skills, previous occupation, and injury, and which offers an opportunity to restore the individual as soon as practicable and as nearly as possible to his or her average weekly earnings at the time of injury.
- (h) “Vocational evaluation” means a review of the employee’s physical and intellectual capabilities, his or her aptitudes and achievements, and his or her work-related behaviors to identify the most cost-effective means toward the employee’s return to suitable gainful employment.

Reemployment Status Reviews and Reports

When an employee who has suffered an injury compensable under this chapter is unemployed 60 days after the date of injury and is receiving benefits for temporary total disability, temporary partial disability, or wage loss and has not yet been provided medical care coordination and reemployment services voluntarily by the carrier, the carrier must determine whether the employee is likely to return to work and must report its determination to the employee. The report shall include the identification of both the carrier and the employee, the carrier claim number, and any case number assigned by the Office of the Judges of Compensation Claims. The carrier must thereafter determine the reemployment status of the employee at 90-day intervals as long as the employee remains unemployed, is not receiving medical care coordination or reemployment services, and is receiving the benefits specified in this subsection.

If medical care coordination or reemployment services are voluntarily undertaken within 60 days of the date of injury, such services may continue to be provided as agreed by the employee and the carrier.

Reemployment Assessments

- (a) The carrier may require the employee to receive a reemployment assessment as it considers appropriate. However, the carrier is encouraged to obtain a reemployment assessment if:
 - (1) The carrier determines that the employee is at risk of remaining unemployed.
 - (2) The case involves catastrophic or serious injury.
- (b) The carrier shall authorize a rehabilitation provider to provide the reemployment assessment. The rehabilitation provider shall conduct its assessment and issue a report to the carrier and the employee within 30 days after the time such assessment is complete.
- (c) If the rehabilitation provider recommends that the employee receive medical care coordination or reemployment services, the carrier shall advise the employee of the recommendation and determine whether the employee wishes to receive such services. The employee shall have 15 days after the date of receipt of the recommendation in which to agree to accept such services. If the employee elects to receive services, the carrier may refer the employee to a rehabilitation

provider for such coordination or services within 15 days of receipt of the assessment report or notice of the employee's election, whichever is later.

Medical Care Coordination and Reemployment Services

- (a) Once the carrier has assigned a case to a rehabilitation provider for medical care coordination or reemployment services, the provider shall develop a reemployment plan and submit the plan to the carrier and the employee for approval.
- (b) If the rehabilitation provider concludes that training and education are necessary to return the employee to suitable gainful employment, or if the employee has not returned to suitable gainful employment within 180 days after referral for reemployment services or receives \$2,500 in reemployment services, whichever comes first, the carrier must discontinue reemployment services and refer the employee to the department for a vocational evaluation. Notwithstanding any provision of chapter 627, the cost of a reemployment assessment and the first \$2,500 in reemployment services to an injured employee must not be treated as loss adjustment expense for workers' compensation ratemaking purposes.
- (c) A carrier may voluntarily provide medical care coordination or reemployment services to the employee at intervals more frequent than those required in this section. Voluntary services offered by the carrier for any of the following injuries must be considered benefits for purposes of ratemaking: traumatic brain injury; spinal cord injury; amputation, including loss of an eye or eyes; burns of 5 percent or greater of the total body surface.
- (d) If medical care coordination or reemployment services have not been undertaken as prescribed previously, a rehabilitation service provider, facility, or agency that performs a reemployment assessment shall not provide medical care coordination or reemployment services for the employees it assesses.

Training and Education

- (a) Upon referral of an injured employee by the carrier, or upon the request of an injured employee, the department shall conduct a training and education screening to determine whether it should refer the employee for a vocational evaluation, approve training and education, or approve other vocational services for the employee. At the time of such referral, the carrier shall provide the department a copy of any reemployment assessment or reemployment plan provided to the carrier by a rehabilitation provider. The department may not approve formal training and education programs unless it determines, after consideration of the reemployment assessment, that the reemployment plan is likely to result in return to suitable gainful employment. The department may expend moneys from the Workers' Compensation Administration Trust Fund, established by s. 440.50, to secure appropriate training and education at a Florida public college or at a career center established under s. 1001.44, or to secure other vocational services when necessary to satisfy the recommendation of a vocational evaluator. As used in this paragraph, "appropriate training and education" includes securing a high school equivalency diploma, if necessary. The department shall by rule establish training and education standards pertaining to employee eligibility, course curricula and duration, and associated costs. For purposes of this subsection, training and education services may be secured from additional providers if:

- (1) The injured employee currently holds an associate degree and requests to earn a bachelor's degree not offered by a Florida public college located within 50 miles from his or her customary residence.
 - (2) The injured employee's enrollment in an education or training program in a Florida public college or career center would be significantly delayed; or
 - (3) The most appropriate training and education program is available only through a provider other than a Florida public college or career center or at a Florida public college or career center located more than 50 miles from the injured employee's customary residence.
- (b) When an employee who has attained maximum medical improvement is unable to earn at least 80 percent of the compensation rate and requires training and education to obtain suitable gainful employment, the employer or carrier shall pay the employee additional training and education temporary total compensation benefits while the employee receives such training and education for a period not to exceed 26 weeks, which period may be extended for an additional 26 weeks or less, if such extended period is determined to be necessary and proper by a judge of compensation claims. The benefits provided under this paragraph shall not be in addition to the 104 weeks as specified in s. 440.15(2). However, a carrier or employer is not precluded from voluntarily paying additional temporary total disability compensation beyond that period. If an employee requires temporary residence at or near a facility or an institution providing training and education which is located more than 50 miles away from the employee's customary residence, the reasonable cost of board, lodging, or travel must be borne by the department from the Workers' Compensation Administration Trust Fund established by s. 440.50. An employee who refuses to accept training and education that is recommended by the vocational evaluator and considered necessary by the department will forfeit any additional training and education benefits and any additional payment for lost wages under this chapter. The carrier shall notify the injured employee of the availability of training and education benefits as specified in this chapter. The Department of Financial Services shall include information regarding the eligibility for training and education benefits in informational materials specified in ss. 440.207 and 440.40.

Permanent Disability

The judge of compensation claims may not adjudicate an injured employee as permanently and totally disabled until or unless the carrier is given the opportunity to provide a reemployment assessment.

Department Contracts

The department may contract with one or more third parties including, but not limited to, rehabilitation providers, to administer training and education screenings, reemployment assessments, vocational evaluations, and reemployment services authorized under this section. Any person or firm selected by the department may not have a conflict of interest that might affect its ability to independently perform its responsibilities with respect to administering the provisions of this subsection. A rehabilitation provider who contracts with the department to provide screenings or evaluations may not provide training or education to the injured employee.

Rules Related to Reemployment Services

Introduction

The rules related to Reemployment Services can be found in the Florida Administrative Code under Division of Workers' Compensation Chapter 69L-22 Reemployment Services – Workers Compensation.

The purpose of these rules are to clarify the process injured employees must follow when seeking to obtain Department-sponsored reemployment services. The rules provide injured employees with information and guidance regarding available reemployment services and the terms, conditions, and responsibilities associated with receiving such services. Additionally, the rules incorporate two new forms and revisions to two existing forms.

Screening Process

- (1) A request for screening must be made using Form DFS-F3-DWC-23, Request for Screening, as incorporated by reference in rule 69L-22.011, F.A.C. Before the Department will consider a request complete and initiate a screening, the injured employee must:
 - (a) Complete, sign and submit Form DFS-F3-DWC-23, Request for Screening;
 - (b) Complete, sign and submit Form DFS-F3-DWC-27, Reemployment Services Questionnaire, as incorporated by reference in rule 69L-22.011, F.A.C.;
 - (c) Provide documentation to establish identity and employment eligibility. Such documentation shall be consistent with the acceptable documents for verifying identity and employment eligibility as required by the U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services' Form I-9, Employment Eligibility Verification (Rev. 03/08/13 N), which is incorporated by reference herein and available at <http://www.uscis.gov/files/form/i-9.pdf>.
 - (d) Provide the most current DFS-F5-DWC-25, Florida Workers' Compensation Uniform Medical Treatment/Status Report Form, as incorporated by reference in rule 69L-7.720, F.A.C., from all authorized treating physicians.
- (2) An injured employee may submit an electronic Request for Screening and Reemployment Services Questionnaire through the Injured Employee Web Portal located on the internet at <https://w cres.fldfs.com/resportal/iweb/ielogin.aspx>. An electronically submitted Request for Screening and Reemployment Services Questionnaire shall be considered electronically signed by the injured employee.
- (3) The screening process shall consist of:
 - (a) A review of all available medical and vocational documentation relevant to the compensable injury to determine whether the injured employee is able to perform the duties of the pre-injury occupation;
 - (b) A review of the documentation which supports the payment of temporary partial disability and wage loss benefits to determine the injured employee's inability to obtain suitable gainful employment because of his injury;
 - (c) An interview with the injured employee; and,
 - (d) A vocational assessment. The vocational assessment shall determine the relevance and weight of the following factors in the case: the permanent physical restrictions, if any, present in the case; the availability of employment with the employer at the time of the injury; the injured employee's transferable skills and the labor market; whether the

injured employee conducted an unsuccessful job search, and the reasons the job search was unsuccessful; the injured employee's education and academic skills and vocational education; the injured employee's motivation; the injured employee's financial ability to complete a training and education program; and the availability of transportation to allow the injured employee to complete a training and education program. The vocational assessment shall determine whether the injured employee is ineligible to receive reemployment services, or is eligible to receive reemployment services. If the injured employee is eligible to receive reemployment services, the vocational assessment shall determine which of the following shall be offered to the injured employee: placement, and/or on-the-job training, and/or a vocational evaluation, and/or a training and education program costing less than \$2,500 and lasting twelve (12) months or less.

- (4) A rehabilitation provider performing vocational assessments shall:
 - (a) Conduct an initial interview with the injured employee;
 - (b) Submit to the Department within thirty (30) calendar days of the initial interview a written report which shall address each of the vocational assessment factors enumerated above and discuss how the provision of the recommended service(s) will facilitate reemployment;
 - (c) Conduct an exit interview with the injured employee; and,
 - (d) Submit to the Department within ten (10) days of submission of the written report a statement of acknowledgement of the vocational assessment signed by the injured employee and the rehabilitation provider.
- (5) The carrier shall provide, within 10 business days of receipt of a request from the Department, any medical, vocational, and other requested documents or reports related to the injured employee's workers' compensation case.
- (6) The Department may request the information directly from the authorized treating physician(s), or rehabilitation provider(s).
- (7) The Department may provide the following vocational assessment services as part of the screening process to determine eligibility: orientation, employability skills training, counseling, vocational testing, transferable skills analysis, labor market surveys, vocational assessment services, job analysis and evaluation.
- (8) The Department shall not provide any reemployment services, including a vocational evaluation unless the injured employee provides documentation to establish identity and employment eligibility. Such documentation shall be consistent with the acceptable documents for verifying identity and employment eligibility as required by the U.S. Department of Homeland Security, U.S. Citizenship and Immigration Services' Form I-9, Employment Eligibility Verification (Rev. 03/08/13 N) which is incorporated by reference herein and available at <http://www.uscis.gov/files/form/i-9.pdf>.
- (9) The Department shall not provide a vocational evaluation or any reemployment services when form DFS-F3-DWC-23, Request for Screening, and all documents specified in subsection 69L-22.006(1), F.A.C., are received by the Department more than one (1) year from the date of last payment of indemnity benefits or the furnishing of remedial treatment, care, or attendance from the employer or carrier.

- (10) Following a Department screening the Department shall not provide any additional reemployment services or refer the injured employee for a vocational evaluation:
- (a) If the injured employee's medical condition is unresolved or unstable, until such time as the medical condition becomes stable;
 - (b) If the injured employee has reached maximum medical improvement and returned to and maintained suitable gainful employment for at least ninety (90) calendar days; or
 - (c) If the injured employee refuses to accept reemployment services from the Department.
- (11) The Department shall not refer the injured employee for a vocational evaluation if the injured employee:
- (a) Has returned to suitable gainful employment as a result of placement services provided by the Department;
 - (b) Has no documented permanent physical restrictions related to the injury;
 - (c) Has transferable skills which would allow return to work in suitable gainful employment;
 - (d) Was terminated by the employer for good cause unrelated to the injury or any restrictions or limitations resulting therefrom; or
 - (e) Terminated suitable gainful employment for reasons unrelated to the injury.

Reemployment Services and Programs

- (1) The Department shall approve reemployment services provided through an on-the-job training program, job placement or a training and education program when recommended in a Department reemployment plan.
- (2) When the Department provides a vocational assessment or a vocational evaluation to the injured employee, the vocational assessment or vocational evaluation shall determine the reemployment services, such as are enumerated without limitation in section 440.491(1)(e), F.S., necessary to return the injured employee to suitable gainful employment. The Department will approve reemployment services if:
 - (a) The vocational assessment is compliant with paragraph 69L-22.006(3)(d), F.A.C.; or
 - (b) The vocational evaluation contains the information identified in paragraph 69L-22.007(2)(f), F.A.C.; and,
 - (c) The vocational evaluation demonstrates that the injured employee:
 - (1) Has no transferable skills which would allow for return to suitable gainful employment with the same employer in the same, different or modified job or a new employer in the same, modified or different job; or
 - (2) Requires additional Department sponsored reemployment services to enable the injured employee to return to suitable gainful employment.
- (3) Upon request, a rehabilitation provider rendering Department approved reemployment services, including vocational evaluations, shall make available to the Department information and documentation to certify that the authorized service(s) were completed pursuant to this rule.
- (4) The Department will approve entry into a recommended training and education program at the next available start date.
- (5) The Department will not approve training and education programs at a community college when the injured employee must complete more than two (2) remedial courses.

- (6) The Department will not approve training and education programs at a career center when the injured employee must remediate more than two (2) grade levels to meet the exit requirements of the program.
- (7) The Department will approve an individual course or multiple courses when it is demonstrated that the skills to be gained are necessary for the injured employee to secure suitable gainful employment.
- (8) The Department will approve training and education programs which exceed 52 weeks only when there is no program shorter than 52 weeks which would enable the injured employee to return to suitable gainful employment, the injured employee provides a plan for living expenses during the period in excess of 52 weeks, and the injured employee has no formal marketable vocational training and education.
- (9) If the Department determines a training and education program is necessary to return an injured employee to suitable gainful employment, the Department shall have the exclusive right to approve training and education programs and facilities at which to sponsor the injured employee.
 - (a) For all dates of accidents, training and education programs which only accept students from an applicant pool after the students complete a prerequisite curriculum may be approved only if the injured employee presents evidence of acceptance into such program.
 - (b) For dates of accident October 1, 1989 through and including September 30, 2003, training and education programs at private training and education facilities shall not be approved unless such recommended training and education is not offered at a public training and education facility or provides an overall cost/time savings.
 - (1) Baccalaureate or Graduate level studies may be approved only if the training and education program builds on prior training and education or aptitudes;
 - (2) The program under consideration firmly establishes marketability toward suitable gainful employment for that injured employee;
 - (3) The injured employee presents evidence of acceptance into a degree program prior to the Department's Disposition letter of approval; and,
 - (4) The program does not exceed the level of a Master's degree.
 - (c) For dates of accident on or after October 1, 2003 through and including June 30, 2010, only programs which are consistent with the requirements found in section 440.491(6)(a), F.S., as effective on October 1, 2003, shall be approved.
 - (d) For dates of accident on or after July 1, 2010, only training and education programs which are consistent with the requirements found in section 440.491(6)(a), F.S., as effective on July 1, 2010, shall be approved. Training and education services secured from additional providers must demonstrate an overall cost/time savings.
- (10) The Department will not approve the transfer of reemployment services unless the Department determines that the substantially same services are available in the location to which services would be transferred.
- (11) The Department will not approve reemployment services if the vocational evaluation does not recommend reemployment services.

Employee Responsibilities

- (1) Upon approval of training and education by the Department, the injured employee and Department staff shall sign and date:
 - (a) Form DFS-F3-DWC-24, Department and Student Agreement for Sponsorship of Training and Education, which is adopted in rule 69L-22.011, F.A.C.; and,
 - (b) An Individualized Written Reemployment Plan.
- (2) Upon approval of reemployment services, including job-seeking assistance, by the Department, the injured employee and Department staff must sign and date Form DFS-F3-DWC-26, Department and Injured Employee Agreement for the Provision of Contracted Placement Services, which is adopted in rule 69L-22.011, F.A.C.

List of Forms

- (1) The following forms are to be used with this rule chapter and are hereby incorporated by reference:
 - (a) Form DFS-F3-DWC-23 <http://www.flrules.org/Gateway/reference.asp?No=Ref-06694> (Revised: 12/2015), Request for Screening;
 - (b) Form DFS-F3-DWC-24 <http://www.flrules.org/Gateway/reference.asp?No=Ref-06695> (Revised: 12/2015), Department and Student Agreement for Sponsorship of Training and Education;
 - (c) Form DFS-F3-DWC-26 <http://www.flrules.org/Gateway/reference.asp?No=Ref-06696> (Effective: 12/2015), Department and Injured Employee Agreement for the Provision of Contracted Placement Services;
 - (d) Form DFS-F3-DWC-27 <http://www.flrules.org/Gateway/reference.asp?No=Ref-06697> (Effective: 12/2015), Reemployment Services Questionnaire.
- (2) The Department will not supply the forms promulgated under this chapter, but will make sample forms available on the Department's web site at:
<http://www.myfloridacfo.com/Division/wc/>

Workers' Compensation Final Exam Questions

1. Which of the following services are available as part of the Reemployment Services Program?
 - a. Job-seeking skills training
 - b. Job search assistance
 - c. Training and education
 - d. All of the above

2. To complete the application, you will need to include which of the following:
 - a. Your Social Security Number (SSN) or the Jurisdiction Control Number (JCN)
 - b. Financial information including bank statements.
 - c. Work history for only the last 2 years;
 - d. Full medical history beyond the information related to your inability to work.

3. Which of the following is one of the minimum requirements to be eligible for reemployment services?
 - a. Have a compensable injury or illness that is covered under the Florida Injury Jurisdiction Law.
 - b. Have a date of accident or illness on or after 10/01/2020.
 - c. Be legally eligible to work in the United States.
 - d. Submit a "Request for Screening" application to the Division within one month (30 days) of your last receipt of carrier paid monetary benefits, medical treatment, or settlement.

4. What factors are considered in making a determination of what services a worker is eligible to receive?
 - a. transferable skills
 - b. previous occupation
 - c. injury
 - d. All of the above

5. True or False: The intent of the Florida Statutes related to reemployment of injured workers is to encourage the provision of medical care coordination and reemployment services that are necessary to assist the employee in returning to work as soon as is medically feasible.
 - a. True
 - b. False

6. According to the Training and Education subsection of Chapter 440 in the Florida Statutes, training and education services may be secured from additional providers if the injured employee currently holds an associate degree and requests to earn a bachelor's degree not offered by a Florida public college located within _____ miles from his or her customary residence.
 - a. 10
 - b. 30
 - c. 50
 - d. 75

7. According to the Definitions subsection of Chapter 440 in the Florida Statutes, "Reemployment status review" means a review to determine whether an injured employee is _____.
 - a. Seeking the appropriate medical care.
 - b. At risk of not returning to work.
 - c. Eligible to receive reemployment services.
 - d. All of the above

8. True or False: The purpose of the rules related to reemployment services in the Florida Administrative Code are to clarify the process injured employees must follow when seeking to obtain Department-sponsored reemployment services.
 - a. True
 - b. False

9. According to the Screen Process subsection of Chapter 69L -22 of the Florida Administrative Code, the carrier shall provide, within ___ business days of receipt of a request from the Department, any medical, vocational, and other requested documents or reports related to the injured employee's workers' compensation case.
 - a. 2
 - b. 5
 - c. 10
 - d. 15

10. According to the Reemployment Services and Programs subsection of Chapter 69L -22 of the Florida Administrative Code, the Department will approve entry into a recommended training and education program _____.
 - a. Within 5 business days
 - b. Within 10 business days
 - c. Within 30 calendar days
 - d. At the next available start date.



**Florida Laws and Rules: Electrical and Alarm System Contracting
Definitions in the 2021 Florida Statutes**

1 Hour

Course Material and Final Exam

Electrical Contractor Contracting Definitions in the 2021 Florida Statutes

Course Description: Electrical Contractor Definitions in the 2021 Florida Statutes. This section of the course will help contractors locate the definition sections in the 2021 Florida Statutes and review the terms defined in the definition section of Part II: Electrical & Alarm System Contracting in Chapter 489 of the Florida Statutes.

Course Learning Objectives:

- Recognize the importance of the role of definitions in statutes, laws, and regulations.
- Locate definition sections in the Florida Statutes
- Review definitions related to Electrical Contractor contracting

Introduction

Definitions of terms play an important role in statutes, laws, and regulations. The use of particular words may have a specific meaning within the context that is different from other uses. It is important to have a familiarity with the defined terms before reviewing any statutes, laws, or regulations. This course will help electrical contractors locate the definition sections in the 2021 Florida Statutes and review the terms defined in the definition section of Part II in Chapter 489 of the Florida Statutes.

Where are the definitions located in the Florida Statutes?

We start by reviewing the layout of the 2021 Florida Statutes. The Florida Statutes are a permanent collection of state laws organized by subject area into a code made up of titles, chapters, parts, and sections. To access the 2021 Florida Statutes, click here.

http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0400-0499/0489/0489.html

The 2021 Florida Statutes are broken into 49 categories called titles, the statutes for electrical contracting are located under Title XXXII Regulation of Professions and Occupations.

The titles are broken into chapters, Title XXXII Regulation of Professions and Occupations contains chapters 454 through 493 where Chapter 489 is titled Contracting.

Then within these chapters, some are broken into parts. For example, Chapter 489 Contracting contains 3 parts.

- Part I: Construction Contracting
- Part II: Electrical and Alarm System Contracting
- Part III: Septic Tank Contracting

Lastly each of the parts are broken into sections. The definitions are written in one of the sections titled Definitions. In Part II: Electrical and Alarm System Contracting there are 30 sections, the third listed section listed (489.505 Definitions) is the definition section. This section contains the definitions for terms based on how they are used specifically in Part II, Part I & Part III also contain a definition sections, with definitions for terms used in those parts of the statutes.

Definitions for Chapter 489, Part II Electrical & Alarm System Contracting

Now to review terms that are defined specific to Part II: Electrical & Alarm System Contracting

Alarm System

Alarm system means any electrical device, signaling device, or combination of electrical devices used to signal or detect a burglary, fire, robbery, or medical emergency.

Alarm System Contractor

“Alarm system contractor” means a person whose business includes the execution of contracts requiring the ability, experience, science, knowledge, and skill to lay out, fabricate, install, maintain, alter, repair, monitor, inspect, replace, or service alarm systems for compensation, including, but not limited to, all types of alarm systems for all purposes. This term also means any person, firm, or corporation that engages in the business of alarm contracting under an expressed or implied contract; that undertakes, offers to undertake, purports to have the capacity to undertake, or submits a bid to engage in the business of alarm contracting; or that by itself or by or through others engages in the business of alarm contracting.

Alarm System Contractor I

“Alarm system contractor I” means an alarm system contractor whose business includes all types of alarm systems for all purposes.

Alarm System Contractor II

“Alarm system contractor II” means an alarm system contractor whose business includes all types of alarm systems other than fire, for all purposes, except as herein provided.

Board

“Board,” except “local board,” means the Electrical Contractors’ Licensing Board created by this part.

Certificate

“Certificate” means a geographically unlimited certificate of competency issued by the department as provided in this part.

Certificateholder

“Certificateholder” means a contractor who has obtained a certificate of competency.

Certification

“Certification” means the act of obtaining or holding a certificate of competency from the department as provided in this part.

Certified Alarm System Contractor

“Certified alarm system contractor” means an alarm system contractor who possesses a certificate of competency issued by the department. The scope of certification is limited to alarm circuits originating in the alarm control panel and equipment governed by the applicable provisions of Articles 725, 760, 770, 800, and 810 of the National Electrical Code, Current Edition, and National Fire Protection Association Standard 72, Current Edition. The scope of certification for alarm system contractors also includes the installation, repair, fabrication, erection, alteration, addition, or design of electrical wiring, fixtures, appliances, thermostats, apparatus, raceways, and conduit, or any part thereof not to exceed 98 volts (RMS), when those items are for the purpose of transmitting data or proprietary video (satellite systems that are not part of a community antenna television or radio distribution system) or providing central vacuum capability or electric locks; however, this provision governing the scope of certification does not create any mandatory licensure requirement.

Certified Electrical Contractor

“Certified electrical contractor” means an electrical contractor who possesses a certificate of competency issued by the department.

Contracting

“Contracting” means, except where exempted in this part, engaging in business as a contractor or performing electrical or alarm work for compensation and includes, but is not limited to, performance of any of the acts found in subsections (2) and (12), which define the services which a contractor is allowed to perform. The attempted sale of contracting services and the negotiation or bid for a contract on these services also constitutes contracting. If the services offered require licensure or agent qualification, the offering, negotiation for a bid, or attempted sale of these services requires the corresponding licensure.

Contractor

“Contractor” means a person who is qualified to engage in the business of electrical or alarm system contracting pursuant to a certificate or registration issued by the department.

Department

“Department” means the Department of Business and Professional Regulation.

Electrical Contractor or Unlimited Electrical Contractor

“Electrical contractor” or “unlimited electrical contractor” means a person who conducts business in the electrical trade field and who has the experience, knowledge, and skill to install, repair, alter, add to, or design, in compliance with law, electrical wiring, fixtures, appliances, apparatus, raceways, conduit, or any part thereof, which generates, transmits, transforms, or utilizes electrical energy in any form, including the electrical installations and systems within plants and substations, all in compliance with applicable plans, specifications, codes, laws, and regulations. The term means any person, firm, or corporation that engages in the business of electrical contracting under an express or implied contract; or that undertakes, offers to undertake, purports to have the capacity to undertake, or submits a bid to engage in the business of electrical contracting; or that does itself or by or through others engage in the business of electrical contracting.

Local Construction Regulation Board or Local Board

“Local construction regulation board” or “local board” means a board, composed of not fewer than three residents of a county or municipality, which the governing body of that county or municipality may create and appoint to maintain the proper standard of construction of that county or municipality.

Primary Qualifying Agent

“Primary qualifying agent” means a person who possesses the requisite skill, knowledge, and experience, and has the responsibility, to supervise, direct, manage, and control the electrical or alarm system contracting activities of the business organization with which he or she is connected; and whose technical and personal qualifications have been determined by investigation and examination as provided in this part by the department, as attested to by the board; and who has been issued a certificate of competency by the department.

Secondary Qualifying Agent

“Secondary qualifying agent” means a person who possesses the requisite skill, knowledge, and experience, and has the responsibility to supervise, direct, manage, and control the electrical or alarm system contracting activities on a job for which he or she has obtained a permit; and whose technical and personal qualifications have been determined by investigation and examination as provided in this part by the department, as attested to by the board; and who has been issued a certificate of competency by the department.

Registered Electrical Contractor

“Registered electrical contractor” means an electrical contractor who has registered with the department pursuant to fulfilling the competency requirements in the jurisdiction for which the registration is issued. A registered electrical contractor may contract only in the jurisdiction for which his or her registration is issued.

Registration

“Registration” means registration with the department as provided in this part.

Registrant

“Registrant” means a person who has registered with the department pursuant to the requirements of this part.

Specialty Contractor

“Specialty contractor” means a contractor whose scope of practice is limited to a specific segment of electrical or alarm system contracting established in a category adopted by board rule, including, but not limited to, residential electrical contracting, maintenance of electrical fixtures, and fabrication, erection, installation, and maintenance of electrical advertising signs together with the interrelated parts and supports thereof.

Mediation

“Mediation” means a process whereby a neutral third party acts to encourage and facilitate the resolution of a dispute without prescribing what it should be. It is an informal and nonadversarial process with the objective of helping the disputing parties reach a mutually acceptable agreement.

Registered Alarm System Contractor

“Registered alarm system contractor I” means an alarm system contractor whose business includes all types of alarm systems for all purposes and who is registered with the department pursuant to s. [489.513](#). A registered alarm system contractor I may contract only in the jurisdictions for which his or her registration is issued.

Registered Alarm System Contractor II

“Registered alarm system contractor II” means an alarm system contractor whose business includes all types of alarm systems, other than fire, for all purposes and who is registered with the department pursuant to s. [489.513](#). A registered alarm system contractor II may contract only in the jurisdiction for which his or her registration is issued.

Registered Residential Alarm System Contractor

“Registered residential alarm system contractor” means an alarm system contractor whose business is limited to burglar alarm systems in single-family residential, quadruplex housing, and mobile homes of a residential occupancy class and who is registered with the department pursuant to s. 489.513. The board shall define “residential occupancy class” by rule. A registered residential alarm system contractor may contract only in the jurisdiction for which his or her registration is issued.

Licensure

“Licensure” means any type of certification or registration provided for in this part.

Burglar Alarm System Agent

“Burglar alarm system agent” means a person:

- (a) Who is employed by a licensed alarm system contractor or licensed electrical contractor;
- (b) Who is performing duties which are an element of an activity which constitutes alarm system contracting requiring licensure under this part; and
- (c) Whose specific duties include any of the following: altering, installing, maintaining, moving, repairing, replacing, servicing, selling, or monitoring an intrusion or burglar alarm system for compensation.

Personal Emergency Response System

“Personal emergency response system” means any device which is simply plugged into a telephone jack or electrical receptacle and which is designed to initiate a telephone call to a person who responds to, or has a responsibility to determine the proper response to, personal emergencies, but does not include hard-wired or wireless alarm systems designed to detect intrusion or fire.

Monitoring

“Monitoring” means to receive electrical or electronic signals originating from any structure within the state or outside the state, regardless of whether those signals are relayed through a jurisdiction outside the state, where such signals are produced by any security, medical, fire, or burglar alarm, closed-circuit television camera, access-control system, or related or similar protective system and are intended by design to initiate a response thereto. A person shall not have committed the act of monitoring if:

- (a) The person is an occupant of, or an employee working within, protected premises;
- (b) The person initiates emergency action in response to hearing or observing an alarm signal;
- (c) The person’s action is incidental to his or her primary responsibilities; and

(d) The person is not employed in a proprietary monitoring facility, as defined by the National Fire Protection Association pursuant to rule adopted under chapter 633.

Fire Alarm System Agent

“Fire alarm system agent” means a person:

- (a) Who is employed by a licensed fire alarm contractor or certified unlimited electrical contractor;
- (b) Who is performing duties which are an element of an activity that constitutes fire alarm system contracting requiring certification under this part; and
- (c) Whose specific duties include any of the following: altering, installing, maintaining, moving, repairing, replacing, servicing, selling, or monitoring a fire alarm system for compensation.

Nationally Recognized Testing Laboratory

“Nationally recognized testing laboratory” means an organization that the Occupational Safety and Health Administration has legally recognized to be in compliance with 29 C.F.R. s. 1910.7 and that provides quality assurance, product testing, or certification services.

Summary

This course focused on the definition section of the statutes regarding Electrical and Alarm System Contractors. Understanding specific term definitions is a key component to understanding any rules and regulations. As we know terms can be defined differently and have multiple definitions as well as be used in different ways. For example, based on definitions from Oxford Languages the term certificate can be used as a noun defined as “an official document attesting a certain fact”, as well as a verb defined as “provide with or attest in an official document”. Where in the Part II: Electrical and Alarm System Contracting, a certificate means a certificate of competency issued by Department of Business and Professional Regulation. These definitions are all close, but the definition used in the statutes offers more detailed and specific information that clarifies the use of the word in the specific part of the statute. Being familiar with specific definitions can prevent confusion and misinterpretation when reviewing statutes, laws, and regulations.

Laws and Rules Final Exam Questions

1. The Florida Statutes are organized by subject area made up of which of the following?
 - a) Titles
 - b) Chapters
 - c) Sections
 - d) All of the above

2. In Part II when the term "department" is used, what department is that referring to?
 - a) Department of Construction Industry Licensing
 - b) Department of Business and Professional Regulation
 - c) Department of Environmental Protection
 - d) None of the above

3. What is defined as any electrical device, signaling device, or combination of electrical devices used to signal or detect a burglary, fire, robbery, or medical emergency?
 - a) Alarm System
 - b) Board
 - c) Certified Electrical Contractor
 - d) Certification

4. What does the term "Certification" mean in the context of Electrical and Alarm System Contracting?
 - a) The act of obtaining or holding an official document attesting a certain fact
 - b) Providing quality assurance, product testing, or certification services
 - c) Obtaining a geographically unlimited certificate of competency from the department
 - d) The process of encouraging and facilitating the resolution of a dispute

5. What does the term "Mediation" mean in the context of the statutes?
 - a) Monitoring signals originating from protected premises
 - b) The act of obtaining or holding a certificate of competency
 - c) A process to encourage dispute resolution without prescribing the outcome
 - d) The negotiation or bid for a contract on contracting services

6. The following definition is the definition for which type of contractor?

"_____ contractor" means a contractor whose scope of work and responsibility is limited to a specific segment of electrical or alarm system contracting established in a category adopted by board rule, including but not limited to, residential electrical contracting, maintenance of electrical fixtures, and fabrication, erection, installation, and maintenance of electrical advertising signs together with the interrelated parts and supports thereof.

 - a) Electrical Contractor
 - b) Secondary Contractor
 - c) Mechanical Contractor
 - d) Specialty Contractor

7. True or False: A “Registered Electrical Contractor” may contract only in the jurisdiction for which his or her registration is issued.
- a) True
 - b) False
8. _____ means an alarm system contractor whose business includes all types of alarm systems for all purposes.
- a) Certificateholder
 - b) Alarm System Contractor I
 - c) Alarm System Contractor II
 - d) Certified Electrical Contractor
9. True or False: The definition for certificate as stated in Part II is as follows: “Certificate” means an official document attesting a certain fact.
- a) True
 - b) False
10. Why is the definition section of the status so important?
- a) Being familiar with specific definitions can prevent confusion.
 - b) Terms can be defined differently and have multiple definitions.
 - c) Definition used in the statutes offers more detailed and specific information
 - d) All of the above.



Florida Safety: Personal Protective Equipment

1 Hour

Course Material and Final Exam

Personal Protective Equipment From the Neck Up

Course Description: The last section of this course will highlight why personal protective equipment (PPE) is required. Then describe types of PPE used to protect the head, eyes, and face as well as how to select the appropriate PPE.

Learning Objectives

1. Understand why PPE is required.
2. Identify types of PPE used to protect the head eyes and face.
3. Know how to select appropriate PPE used to protect the body from the neck up.

Introduction

Hazards exist in every workplace in many different forms: sharp edges, falling objects, flying sparks, chemicals, noise and a myriad of other potentially dangerous situations. The Occupational Safety and Health Administration (OSHA) requires that employers protect their employees from workplace hazards that can cause injury.

Controlling a hazard at its source is the best way to protect employees. Depending on the hazard or workplace conditions, OSHA recommends the use of engineering or work practice controls to manage or eliminate hazards to the greatest extent possible.

When engineering, work practice and administrative controls are not feasible or do not provide sufficient protection, employers must provide personal protective equipment (PPE) to their employees and ensure its use. Personal protective equipment, commonly referred to as "PPE", is equipment worn to minimize exposure to a variety of hazards.

This course will focus on PPE related to head, eye, face and hearing protection.

Head Protection

Protecting employees from potential head injuries is a key element of any safety program. A head injury can impair an employee for life or it can be fatal. Wearing a safety helmet or hard hat is one of the easiest ways to protect an employee's head from injury. Hard hats can protect employees from impact and penetration hazards as well as from electrical shock and burn hazards.

Employers must ensure that their employees wear head protection if any of the following apply:

- Objects might fall from above and strike them on the head;
- They might bump their heads against fixed objects, such as exposed pipes or beams; or
- There is a possibility of accidental head contact with electrical hazards.

Some examples of occupations in which employees should be required to wear head

protection include construction workers, carpenters, electricians, linemen, plumbers and pipefitters, timber and log cutters, welders, among many others. Whenever there is a danger of objects falling from above, such as working below others who are using tools or working under a conveyor belt, head protection must be worn. Hard hats must be worn with the bill forward to protect employees properly.

In general, protective helmets or hard hats should do the following:

- Resist penetration by objects.
- Absorb the shock of a blow.
- Be water-resistant and slow burning.
- Have clear instructions explaining proper adjustment and replacement of the suspension and headband.

Hard hats must have a hard outer shell and a shock-absorbing lining that incorporates a headband and straps that suspend the shell from 1 to 1 1/4 inches (2.54 cm to 3.18 cm) away from the head. This type of design provides shock absorption during an impact and ventilation during normal wear.

Protective headgear must meet ANSI Standard Z89.1-1986 (Protective Headgear for Industrial Workers) or provide an equivalent level of protection. Helmets purchased before July 5, 1994 must comply with the earlier ANSI Standard (Z89.1-1969) or provide equivalent protection.

Types of Hard Hats

There are many types of hard hats available in the marketplace today. In addition to selecting protective headgear that meets ANSI standard requirements, employers should ensure that employees wear hard hats that provide appropriate protection against potential workplace hazards. It is important for employers to understand all potential hazards when making this selection, including electrical hazards. This can be done through a comprehensive hazard analysis and an awareness of the different types of protective headgear available.



Hard hats are divided into three industrial classes:

- **Class A hard hats** provide impact and penetration resistance along with limited voltage protection (up to 2,200 volts).
- **Class B hard hats** provide the highest level of protection against electrical hazards, with high-voltage shock and burn protection (up to 20,000 volts). They also provide protection from impact and penetration hazards by flying/falling objects.
- **Class C hard hats** provide lightweight comfort and impact protection but offer no protection from electrical hazards.

Another class of protective headgear on the market is called a “bump hat,” designed for use in areas with low head clearance. They are recommended for areas where protection is needed from head bumps and lacerations. These are not designed to protect against falling or flying objects and are not ANSI approved. It is essential to check the type of hard hat employees are using to ensure that the equipment provides appropriate protection. Each hat should bear a label inside the shell that lists the manufacturer, the ANSI designation and the class of the hat.

Size and Care Considerations

Head protection that is either too large or too small is inappropriate for use, even if it meets all other requirements. Protective headgear must fit appropriately on the body and for the head size of each individual. Most protective headgear comes in a variety of sizes with adjustable headbands to ensure a proper fit (many adjust in 1/8-inch increments). A proper fit should allow sufficient clearance between the shell and the suspension system for ventilation and distribution of an impact. The hat should not bind, slip, fall off or irritate the skin.

Some protective headgear allows for the use of various accessories to help employees deal with changing environmental conditions, such as slots for earmuffs, safety glasses, face shields and mounted lights. Optional brims may provide additional protection from the sun and some hats have channels that guide rainwater away from the face. Protective headgear accessories must not compromise the safety elements of the equipment.

Periodic cleaning and inspection will extend the useful life of protective headgear. A daily inspection of the hard hat shell, suspension system and other accessories for holes, cracks, tears or other damage that might compromise the protective value of the hat is essential. Paints, paint thinners and some cleaning agents can weaken the shells of hard hats and may eliminate electrical resistance. Consult the helmet manufacturer for information on the effects of paint and cleaning materials on their hard hats. Never drill holes, paint or apply labels to protective headgear as this may reduce the integrity of the protection. Do not store protective headgear in direct sunlight, such as on the rear window shelf of a car, since sunlight and extreme heat can damage them.



Hard hats with any of the following defects should be removed from service and replaced:

- Perforation, cracking, or deformity of the brim or shell;
- Indication of exposure of the brim or shell to heat, chemicals or ultraviolet light and other radiation (in addition to a loss of surface gloss, such signs include chalking or flaking)

Always replace a hard hat if it sustains an impact, even if damage is not noticeable. Suspension systems are offered as replacement parts and should be replaced when damaged or when excessive wear is noticed. It is not necessary to replace the entire hard hat when deterioration or tears of the suspension systems are noticed.

Eye and Face Protection

Employees can be exposed to a large number of hazards that pose danger to their eyes and face. OSHA requires employers to ensure that employees have appropriate eye or face protection if they are exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, potentially infected material or potentially harmful light radiation.

Many occupational eye injuries occur because workers are not wearing any eye protection while others result from wearing improper or poorly fitting eye protection. Employers must be sure that their employees wear appropriate eye and face protection and that the selected form of protection is appropriate to the work being performed and properly fits each worker exposed to the hazard.



Prescription Lenses

Everyday use of prescription corrective lenses will not provide adequate protection against most occupational eye and face hazards, so employers must make sure that employees with corrective lenses either wear eye protection that incorporates the prescription into the design or wear additional eye protection over their prescription lenses. It is important to ensure that the protective eyewear does not disturb the proper positioning of the prescription lenses so that the employee's vision will not be inhibited or limited. Also, employees who wear contact lenses must wear eye or face PPE when working in hazardous conditions.

Eye Protection for Exposed Workers

OSHA suggests that eye protection be routinely considered for use by carpenters, electricians, machinists, mechanics, millwrights, plumbers and pipefitters, sheet metal workers and tinsmiths, assemblers, sanders, grinding machine operators, sawyers, welders, laborers, chemical process operators and handlers, and timber cutting and logging workers. Employers of workers in other job categories should decide whether there is a need for eye and face PPE through a hazard assessment.

Examples of potential eye or face injuries include:

- Dust, dirt, metal or wood chips entering the eye from activities such as chipping, grinding, sawing, hammering, the use of power tools or even strong wind forces.
- Chemical splashes from corrosive substances, hot liquids, solvents or other hazardous solutions.
- Objects swinging into the eye or face, such as tree limbs, chains, tools or ropes.
- Radiant energy from welding, harmful rays from the use of lasers or other radiant light (as well as heat, glare, sparks, splash and flying particles)

Types of Eye Protection

Selecting the most suitable eye and face protection for employees should take into consideration the following elements:

1. Ability to protect against specific workplace hazards.
2. Should fit properly and be reasonably comfortable to wear.
3. Should provide unrestricted vision and movement.
4. Should be durable and cleanable.
5. Should allow unrestricted functioning of any other required PPE.

The eye and face protection selected for employee use must clearly identify the manufacturer. Any new eye and face protective devices must comply with ANSI Z87.1-1989 or be at least as effective as this standard requires. Any equipment purchased before this requirement took effect on July 5, 1994, must comply with the earlier ANSI Standard (ANSI Z87.1-1968) or be shown to be equally effective.

An employer may choose to provide one pair of protective eyewear for each position rather than individual eyewear for each employee. If this is done, the employer must make sure that employees disinfect shared protective eyewear after each use. Protective eyewear with corrective lenses may only be used by the employee for whom the corrective prescription was issued and may not be shared among employees.



Some of the most common types of eye and face protection include the following:

- **Safety spectacles.** These protective eyeglasses have safety frames constructed of metal or plastic and impact-resistant lenses. Side shields are available on some models.
- **Goggles.** These are tight-fitting eye protection that completely cover the eyes, eye sockets and the facial area immediately surrounding the eyes and provide protection from impact, dust and splashes. Some goggles will fit over corrective lenses.
- **Welding shields.** Constructed of vulcanized fiber or fiberglass and fitted with a filtered lens, welding shields protect eyes from burns caused by infrared or intense radiant light; they also protect both the eyes and face from flying sparks, metal spatter and slag chips produced during welding, brazing, soldering and cutting operations. OSHA requires filter lenses to have a shade number appropriate to protect against the specific hazards of the work being performed in order to protect against harmful light radiation.

- **Laser safety goggles.** These specialty goggles protect against intense concentrations of light produced by lasers. The type of laser safety goggles an employer chooses will depend upon the equipment and operating conditions in the workplace.
- **Face shields.** These transparent sheets of plastic extend from the eyebrows to below the chin and across the entire width of the employee's head. Some are polarized for glare protection. Face shields protect against nuisance dusts and potential splashes or sprays of hazardous liquids but will not provide adequate protection against impact hazards. Face shields used in combination with goggles or safety spectacles will provide additional protection against impact hazards.

Each type of protective eyewear is designed to protect against specific hazards. Employers can identify the specific workplace hazards that threaten employees' eyes and faces by completing a hazard assessment as outlined in the earlier section.



Welding Operations

The intense light associated with welding operations can cause serious and sometimes permanent eye damage if operators do not wear proper eye protection. The intensity of light or radiant energy produced by welding, cutting or brazing operations varies according to a number of factors including the task producing the light, the electrode size and the arc current. The following table shows the minimum protective shades for a variety of welding, cutting and brazing operations in general industry and in the shipbuilding industry.

Table 1
Filter Lenses for Protection Against Radiant Energy

Operations 1/32" (0.8mm)	Electrode size in	Arc current	Minimum* protective Shade
<hr/>			
Shielded metal			
arc welding	< 3	< 60	7
3 - 5		60 - 160	8
5 - 8		160 - 250	10
...	> 8	250 - 550	11
<hr/>			
Gas metal arc welding and flux cored arc welding		< 60	7
		60 - 160	10
		160 - 250	10
...		250 - 500	10
<hr/>			
Gas tungsten arc welding		< 50	8
		50 - 150	8
...		150 - 500	10
<hr/>			
Air carbon (light)		< 500	10
<hr/>			
Arc cutting (heavy)		500 - 1,000	11
<hr/>			
Plasma arc welding		< 20	6
		20 - 100	8
		100 - 400	10
...		400 - 800	11
<hr/>			
Plasma arc cutting (light)**		< 300	8
(medium)**		300 - 400	9
(heavy)**		400 - 800	10
<hr/>			
Torch brazing			3
<hr/>			
Torch soldering			2
<hr/>			
Carbon arc welding			14

Table 1 (continued)
Filter Lenses for Protection Against Radiant Energy

Operations	Plate thickness inches	Plate thickness mm	Minimum* protective shade
Gas welding: Light	< 1/8	< 3.2	4
Gas welding: Medium	1/8 - 1/2	3.2 - 12.7	5
Gas welding: Heavy	> 1/2	> 12.7	6
Oxygen cutting: Light	< 1	< 25	3
Oxygen cutting: Medium	1 - 6	25 - 150	4
Oxygen cutting: Heavy	> 6	> 150	5

Source: 29 CFR 1910.133(a)(5).

* As a rule of thumb, start with a shade that is too dark to see the weld zone. Then go to a lighter shade which gives sufficient view of the weld zone without going below the minimum. In oxy- fuel gas welding or cutting where the torch produces a high yellow light, it is desirable to use a filter lens that absorbs the yellow or sodium line in the visible light of the (spectrum) operation.

** These values apply where the actual arc is clearly seen. Experience has shown that lighter filters may be used when the arc is hidden by the work piece.

This industry has separate requirements for filter lens protective levels for specific types of

welding operations, as indicated in the table below:

Table 2

**Contractor Industry Requirements for Filter Lens
Shade Numbers for Protection Against Radiant
Energy**

Welding Operation	Shade Number
Shielded metal-arc welding 1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	10
Gas-shielded arc welding (nonferrous) 1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	11
Gas-shielded arc welding (ferrous) 1/16-, 3/32-, 1/8-, 5/32-inch diameter electrodes	12
Shielded metal-arc welding 3/16-, 7/32-, 1/4-inch diameter electrodes	12
5/16-, 3/8-inch diameter electrodes	14
Atomic hydrogen welding	10 – 14
Carbon-arc welding	14
Soldering	2
Torch brazing	3 or 4
Light cutting, up to 1 inch	3 or 4
Medium cutting, 1 to 6 inches	4 or 5
Heavy cutting, more than 6 inches	5 or 6
Gas welding (light), up to 1/8-inch	4 or 5
Gas welding (medium), 1/8- to 1/2-inch	5 or 6

Gas welding (heavy), more than 1/2-inch

6 or 8

Source: 29 CFR 1926.102(b)(1).

Laser Operations

Laser light radiation can be extremely dangerous to the unprotected eye and direct or reflected beams can cause permanent eye damage. Laser retinal burns can be painless, so it is essential that all personnel in or around laser operations wear appropriate eye protection.

Laser safety goggles should protect for the specific wavelength of the laser and must be of sufficient optical density for the energy involved. Safety goggles intended for use with laser beams must be labeled with the laser wavelengths for which they are intended to be used, the optical density of those wavelengths and the visible light transmission.

The table below lists maximum power or energy densities and appropriate protection levels for optical densities 5 through 8.



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Table 3
Selecting Laser Safety Glass

Intensity, CW maximum power density (watts/cm ²) (O.D.)	<u>Attenuation</u>	
	Optical density	Attenuation factor

10-2

5

105

10-1	6	106
1.0	7	107
10.0	8	108

Source: 29 CFR 1926.102(b)(2).

Hearing Protection

Determining the need to provide hearing protection for employees can be challenging. Employee exposure to excessive noise depends upon a number of factors, including:

- The loudness of the noise as measured in decibels (dB).
- The duration of each employee's exposure to the noise.
- Whether employees move between work areas with different noise levels.
- Whether noise is generated from one or multiple sources.

Generally, the louder the noise, the shorter the exposure time before hearing protection is required. For instance, employees may be exposed to a noise level of 90 dB for 8 hours per day (unless they experience a Standard Threshold Shift) before hearing protection is required. On the other hand, if the noise level reaches 115 dB hearing protection is required if the anticipated exposure exceeds 15 minutes.



Table 4, below, shows the permissible noise exposures that require hearing protection for employees exposed to occupational noise at specific decibel levels for specific time periods. Noises are considered continuous if the interval between occurrences of the maximum noise level is one second or less. Noises not meeting this definition are considered impact or impulse noises (loud momentary explosions of sound) and exposures to this type of noise must not exceed 140 dB. Examples of situations or tools that may result in impact or impulse noises are powder-actuated nail guns, a punch press or drop hammers.

Table 4
Permissible Noise Exposures

Duration per day, in hours	Sound level in dB*
8	90
6	92
4	95
3	97
2	100
1 1/2	102
1	105
1/2	110
1/4 or less	115

*When measured on the A scale of a standard sound level meter at slow response. Source: 29 CFR 1910.95, Table G-16.

If engineering and work practice controls do not lower employee exposure to workplace noise to acceptable levels, employees must wear appropriate hearing protection. It is important to understand that hearing protectors reduce only the amount of noise that gets through to the ears. The amount of this reduction is referred to as attenuation, which differs according to the type of hearing protection used and how well it fits. Hearing protectors worn by employees must reduce an employee's noise exposure to within the acceptable limits noted in Table 5.

Manufacturers of hearing protection devices must display the device's NRR on the product packaging. If employees are exposed to occupational noise at or above 85 dB averaged over an eight hour period, the employer is required to institute a hearing conservation program that includes regular testing of employees' hearing by qualified professionals.

Some types of hearing protection include:

- **Single-use earplugs** are made of waxed cotton, foam, silicone rubber or fiberglass wool. They are self-forming and, when properly inserted, they work as well as most molded earplugs.
- **Pre-formed or molded earplugs** must be individually fitted by a professional and can be disposable or reusable. Reusable plugs should be cleaned after each use.
- **Earmuffs** require a perfect seal around the ear. Glasses, facial hair, long hair or facial movements such as chewing may reduce the protective value of earmuffs.

Summary

This course offered a general overview of Personal Protective Equipment, including head, eye, face, and hearing protection.

To learn more about Personal Protective Assistance access the full OSHA PPE booklet at:

<https://www.osha.gov/sites/default/files/publications/osh3151.pdf>.

Final Exam Questions

1. Hard hats must have straps that suspend the shell from _____ away from the head:
 - a. 1 to 1 ¼ inches
 - b. 1 ¼ to 1 ½ inches
 - c. 1 ½ to 1 ¾ inches
 - d. 1 ¾ to 3 inches

2. For protective headgear, which is the ANSI standard that applies:
 - a. Z89.1-1986
 - b. Z41.1-1991
 - c. Z27.1-1990
 - d. There is no ANSI standard for headgear

3. Hard hats that provide impact and penetration resistance along with limited voltage protection (up to 2,200 volts):
 - a. Class A hard hats
 - b. Class B hard hats
 - c. Class C hard hats
 - d. None of the above

4. Bump hats are designed for the following:
 - a. Designed to protect against falling objects
 - b. Are ANSI approved
 - c. Use in areas with low head clearance
 - d. All of the above

5. Which of the following statements is FALSE about protective headgear:
 - a. Do not store in direct sunlight
 - b. Periodically paint headgear for a longer life
 - c. Never drill holes in headgear
 - d. None of the above

6. An example of a potential eye or face injury includes:
 - a. Wood chips entering the eye from chipping or sawing
 - b. Chemical splashes
 - c. Objects swinging into the eye or face
 - d. All of the above

7. The following is a true statement about eye protection EXCEPT the following:
 - a. Eye protection must identify the manufacturer
 - b. An employer must provide eyewear for each employee
 - c. An employer must provide eyewear for each position
 - d. Any new eye devices must comply with ANSI

8. For heavy gas welding, what is the minimum protective shade number required for filter lenses?
 - a. 3
 - b. 4
 - c. 5
 - d. 6

9. These are tight-fitting eye protection that completely cover the eyes, eye sockets and the facial area immediately surrounding the eyes and provide protection from impact, dust and splashes:
 - a. Safety spectacles
 - b. Goggles
 - c. Face shields
 - d. Welding shields

10. Employees must be exposed to the following decibels over an 8 period before hearing protection is required:
 - a. 90 dB
 - b. 95 dB
 - c. 100 dB
 - d. 105 dB