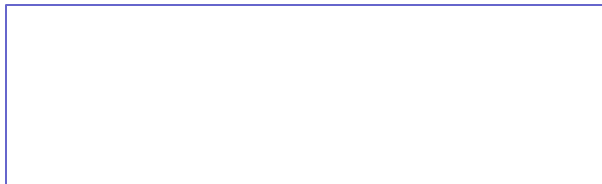


Sign-Up

FLORIDA
MASONRY APPRENTICE & EDUCATIONAL
FOUNDATION, INC.
P.O. Box 457—Boca Raton, FL 33432



CONTREN® LEARNING SERIES
NATIONAL CENTER FOR CONSTRUCTION EDUCATION AND RESEARCH



Principles of
Masonry Construction

TRAINING MASONS TO BUILD FLORIDA ... ONE BLOCK AT A TIME!

Course Curriculum & Classes

The “Principles of Masonry Construction Program” is designed to provide the student a foundation in masonry construction and how to build with masonry.

Courses include:

Introduction to Masonry
Masonry Tools and Equipment
Measurements, Drawings and Specifications
Mortar
Masonry Units and Installation Techniques
Residential Plans and Drawing Interpretation
Residential Masonry
Metal Work in Masonry
Advanced Laying Techniques

Course descriptions detailing the time involved per course follow in this brochure. These courses are accredited through the NCCER (National Construction Center for Education Research) and the instructors are certified and dedicated to the continued professionalism of the masonry industry.

Class Modules:

Introduction to Masonry

(20 hours)

Introduces the trainee to the historic and current materials and processes used in the masonry trade and covers safety concerns specific to the trade. The uses of brick and concrete block are explained, along with basic techniques for mixing mortar and laying masonry units. Opportunities in the trade are also covered. The trainee will mix mortar and perform basic bricklaying.

Masonry Tools and Equipment

(12.5 hours)

Describes the hand and power tools and equipment used in mixing mortar, and in cutting, laying, and finishing masonry units. Explains the safe operation of masonry saws and mortar mixing machines.

Measurements, Drawings, & Specifications

(10 hours)

Guides the trainee in using mathematics to calculate distances, areas, and volumes common in masonry work. Describes the information typically found on residential construction drawings and specifications.

Mortar

(10 hours)

Explains the types and properties of mortar and the materials used in the mixture, including admixtures. Includes instructions for mixing mortar by hand and machine and describes how to properly store mortar.

Masonry Units and Installation Techniques

(60 hours)

Covers all types of concrete and clay masonry units and their applications. Explains the use of ties and reinforcing materials. The processes used in placing masonry units are covered in detail, including layout and setup, spreading mortar, cutting brick and block, laying to the line, making corners, tooling joints, patching, and cleanup.

Residential Plans and Drawing Interpretation

(12.5 hours)

Covers information the mason will need to work with residential plans and construction drawings and be able to convert that information into action on the job. This includes understanding the organization and format of plans; dimensioning and scaling; and estimating materials quantities from information on the plans.

Residential Masonry

(25 hours)

Covers the construction techniques for residential and small structure foundations, steps, patios, decks, chimneys, and fireplaces. Work activities that the mason must perform as well as those that tie into the masonry work are described.

Grout and Other Reinforcement

(15 hours)

Focuses on the use of grout and other types of reinforcement such as reinforcing steel to strengthen and support masonry structures. It describes the locations where grout can be used and the techniques for placement. The use and application of various types of reinforcing steel bars is also discussed.

Metal Work in Masonry

(15 hours)

Many types of metal accessories and attachments are used in masonry construction. This module acquaints the mason with the various types of metal components and how they are installed. These items include metal rods, joint reinforcements, plates, anchors, fasteners, and hollow metal frames for doors and windows.

Advanced Laying Techniques

(50 hours)

Contains detailed information that directs the mason in accomplishing the actual construction of walls, arches, and other useful structures. Construction techniques, safety requirements, and interaction with structure components are explained. Skill is gained through construction of small projects.

Construction Techniques and Moisture Control

(20 hours)

Describes techniques used to construct openings in masonry walls, the application of insulation, and methods of moisture control as they relate to the mason's trade. Properties and uses of materials used in moisture control are explained. Various methods of insulating structures are described.

Construction Inspection and Quality Control

(15 hours)

Introduces the quality control requirements for masonry construction. Procedures for inspection and testing of masonry materials and finished masonry construction are presented.