

Building Trades and Construction Design Technology

Equipment List 2

The following equipment list was submitted by a Florida instructor. The contents of this program list are not mandated by the Florida Department of Education. This is only for your reference.

Inventory of Equipment and Supplies
<u>MODULE 68101-09 – SITE LAYOUT I: DISTANCE MEASUREMENT AND LEVELING</u>
Overhead projector and screen
Transparencies
Blank acetate sheets
Transparency pens
Whiteboard/chalkboard
Markers/chalk
Pencils and scratch paper
Appropriate personal protective equipment
Site plot plans for selected construction sites
Assortment of hubs, stakes, and laths
Assortment of different colored flagging tape
Permanent markers for marking stakes
Field notebooks for recording data
2" x 4" or 2" x 6" ledger boards
2" x 4" batter boards
Nylon string
Calculator
100 foot steel tape
Range poles
Plumb bobs/gammon reels
Hand sight levels
Tension spring

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Chaining pins
Builder's level
Transit level
Tripods
Laser level
Assortment of leveling rods and accessories
Quick Quizzes
Module Examinations
Performance Profile Sheets
MODULE 68102-09 – INTRODUCTION TO CONCRETE, REINFORCING MATERIALS, AND FORMS
Transparencies
Markers/chalk
Blank acetate sheets
Transparency pens
Pencils and scratch paper
Overhead projector and screen
Whiteboard/chalkboard
Appropriate personal protective equipment
Hand calculator
Concrete calculator
Copies of a concrete table
Form boards, stakes, braces, ties, and spreaders
16-gauge tying wire
Samples of various aggregates
Samples of concrete mix
Various bar supports and accessories

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Equipment List 2

Inventory of Equipment and Supplies
Various mechanical splices for reinforcement steel
Various sizes, types, and grades of reinforcement materials
Samples of various types and sizes of wire fabric
Exterior plywood or plyform
Steel tape or rule
Basic carpenter's toolbox
Level
Plumb bob
String line
Duplex nails
Plan for simple form
Circular saw and extension cord
Copies of Worksheet 1
Module Examinations
Performance Profile Sheets
<u>MODULE 68103-09 – HANDLING AND PLACING CONCRETE</u>
Overhead projector and screen
Transparencies
Blank acetate sheets
Transparency pens
Whiteboard/chalkboard
Markers/chalk
Pencils and scratch paper
Appropriate personal protective equipment
Equipment for moving, placing, and consolidating concrete, including:
Moveable chutes (such as used with mixer trucks)

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Drop chutes
Elephant trunk
Wheelbarrow
Power buggy and/or carts
Crane and bucket
Belt conveyor
Concrete pump
Pneumatic gun
Internal vibrator
Rollerbug tamper
Equipment for screeding, leveling, and finishing concrete, including:
Manual/power screeds
Knee boards
Darby floats/bullfoats
Pointed trowels
Edgers
Jointers (groovers)
Power saws
Hand floats
Hand trowels
Finishing machines
Brooms
Assortment of combination tools
Pointing and margin trowels
Cement hammers
Carborundum rubbing stones

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Sprayers
Power grinders
Properly-constructed concrete formworks
Sand
Boxes to contain wet sand
Copies of Quick Quiz*
Module Examinations**
Performance Profile Sheet**
<u>MODULE 68104-09 – INTRODUCTION TO MASONRY</u>
Overhead projector and screen
Transparencies
Whiteboard/chalkboard
Markers/chalk
Blank acetate sheets
Transparency pens
Pencils and scratch paper
Appropriate personal protective equipment:
Various types of eye and respiratory protection
Safety harness and hardware
ASTM standards on concrete block and masonry mortar
Various types of brick
Various types of concrete blocks
Various trowels
Mortar mix
Mortar mixing pan
Mortar hoe

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Wheelbarrow
Standard bricks
Standard concrete blocks
Module Examinations
Performance Profile Sheets
<u>MODULE 68105-09 – MASONRY UNITS AND INSTALLATION TECHNIQUES</u>
Overhead projector and screen
Transparencies
Whiteboard/chalkboard
Markers/chalk
Blank acetate sheets
Transparency pens
Pencils and scratch paper
Appropriate personal protective equipment
ASTM standards for CMUs
ASTM standards for concrete bricks
Bricks
Chalkline
Crayons or wax markers
Medicine dropper
Spacing jigs
Concrete blocks
Brick set chisels
Block set chisels
Hammers
Mason's hammers

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Mason's lines
Line blocks
Line pins
Line trigs
Masonry saw
Masonry power saw
Mashes
Mortar mix
Mortar pans
Trowels
Mason's levels
Plumb bobs
Rakers
Jointers
Sledrunners
Splitters
Masonry brushes
Tuckpointers
MSDS for masonry cleaning solution
Module Examinations
Performance Profile Sheets
<u>MODULE 68106-09 – FLOOR SYSTEMS</u>
Transparencies
Markers/chalk
Blank acetate sheets
Transparency pens

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Pencils and scratch paper
Overhead projector and screen
Whiteboard/chalkboard
Appropriate personal protective equipment
Floor adhesive (optional)
Beam material
Grout
Plywood or OSB butt-joint panels to cover floor area
Plywood or OSB (tongue-and-groove, 1 1/4") to cover floor area
Shim materials
Sill sealer
Steel bridging and instructions
Termite shield
2 3 6s for sills
2 3 10s for joists and headers
1 3 4s or 2 3 10s for bridging
8d box nails for bridging
8d box, screw, or ring shank nails for flooring
16d box nails for joists and headers
8d doublehead box nails
Pictures, photographs, etc., showing braced, balloon, platform, and post-and-beam framing
Sets of building working drawings and specifications
Examples of several floor plans and specifications
Pictures/photos of building damage that resulted from defective floor and sill framing (optional)
Tool box consisting of standard carpenter's hand tools
Chalkline

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Electric drill and assorted drill and flat bits
Framing square
Level
100' tape
Power circular saw and extension cord
Reciprocating saw
Tin snips
Copies of Worksheets 1 through 3
Copies of Job Sheets 1 through 5
Module Examinations
Performance Profile Sheets
MODULE 68107-09 – WALL AND CEILING FRAMING
Transparencies
Markers/chalk
Blank acetate sheets
Transparency pens
Pencils and scratch paper
Overhead projector and screen
Whiteboard/chalkboard
Appropriate personal protective equipment
8d common nails
16d box nails
Floor plan
2 3 4 or 2 3 6 framing lumber for studs and joists
2 3 12 header material
¼" CD plywood for header spacers

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
1/2" CD plywood
Stock for blocking
Metal brace material
Sheathing material
Joist lumber
Chalkline
25' tape
Steel tape
Framing hammer
Framing square or speed square
Circular saw
Extension cord
4' level
6' stepladder
Copies of Job Sheets 1 through 5
Module Examinations
Performance Profile Sheets
<u>MODULE 68108-09 – ROOF FRAMING</u>
Transparencies
Markers/chalk
Blank acetate sheets
Transparency pens
Pencils and scratch paper
Overhead projector and screen
Whiteboard/chalkboard
Appropriate personal protective equipment

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Scientific calculator
8d common nails
8d box nails
16d box nails
16d common nails
Roof framing plan
2 3 4 or 2 3 6 framing lumber for rafters and ridgeboards
Joist and header material for roof opening
½" CD plywood or other sheathing material
Nails for sheathing
H-clips
Roof trusses
1 3 6 lumber or plywood for catwalk
2 3 4 lumber for braces and stakes
Sample blueprints
Chalkline
String line
Steel tape with markings at 16" OC
Framing hammer
Claw hammer
Spreader for lifting trusses (if applicable)
Crane for lifting trusses (if applicable)
Rafter framing square
Sawhorses
Speed square and booklet
Circular saw

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Extension cord
Handsaw
4' level
6' stepladders
Plumb bob and line
Copies of Job Sheets 1 through 6
Module Examinations
Performance Profile Sheets
<u>MODULE 68109-09 – ROOFING APPLICATIONS</u>
Overhead projector and screen
Transparencies
Blank acetate sheets
Transparency pens
Whiteboard/chalkboard
Markers/chalk
Pencils and scratch paper
Appropriate personal protective equipment
Composition shingles
Architectural shingles
Roll roofing material
Wood roofing shingles
Wood roofing shakes
Wood shingle panels
Hardboard simulated shingle panels
Metal simulated shingle panels
Slate shingles

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Roofing tiles
Metal roofing
Synthetic tiles, shakes, and shingles
Membrane roofing
Corrugated metal roofing
Installation literature on standing-seam metal roofing
Scaffolding tags
Roofing brackets
Metal drip edge
Flashing
Fiberglass shingles
Torch-down roofing material
Single-ply roofing material
Ice edging
Prepared roof deck for composite shingles with a valley, hip roof intersection, horizontal abutment, and
sidewall (all sheathed and with underlay in place)
Prepared roof deck for wood shingles with spaced sheathing and hip roof intersection
Prepared low-pitch (flat roof) roof with sheathing in place
2 x 4s to build saddle
Roofing nails
Plastic cement
Felt underlayment
Weatherproof membrane
Prefabricated soil pipe flashing
Backsaw
Power circular saw

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Crowbar
Handsaw
Carpenter's level
Nail apron
Sliding T-bevel
Keyhole saw
Pop riveter
Chalkline
Power saber saw
Angle square
Power drill
Caulking gun
Tin snips
Pry bar
Utility knife
Scribing compass
Drill bit set (regular and masonry)
Framing square
Claw hammer
Pneumatic nail guns
Shingle hatchet
Straightedge
Composition shingle knife
Roofing hammer
Slater's tools
Score and snap tile cutter

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Hand grinder with diamond wheel
Portable metal brake
Margin trowel
Scaffolding
Materials moving equipment
Ladders and jacks
Full body harness with lanyard and decelerations device
Damaged personal fall protection equipment
Propane torch and tank
Copies of the Quick Quiz
Module Examinations
Performance Profile Sheets
<u>MODULE 68110-09 – EXTERIOR FINISHING</u>
Overhead projector and screen
Transparencies
Blank acetate sheets
Transparency pens
Whiteboard/chalkboard
Markers/chalk
Pencils and scratch paper
Sample of building wrap
MSDS
Samples of aluminum and vinyl fascia and soffits and installation instructions
2 □ 4s with different types of tail rafter cuts
2 □ 4s for lookouts
2 □ 4s for lookout ledger

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
2 □ 6s for false fascia
1 □ 8s for fascia
1 □ 2s for frieze
Plywood for soffit
Galvanized 4d box nails for soffit
Galvanized 8d casing nails for fascia
8d box nails for lookout ledger
16d box nails for lookouts
Samples of various types of wood siding
Nails used to secure wood siding
Samples of vinyl or metal siding
Manufacturer's installation instructions for metal and vinyl siding
Various manufactured vinyl or metal siding trim and starter components
Metal and PVC trim coils
Samples of various stucco, brick, stone, and synthetic stone veneer
Samples of DEFS/EIFS wall cladding
1 □ 3s for story poles
6 bevel wood siding and or wood lap siding
Board-and-batten siding
Tongue-and-groove siding
Shiplap siding
Shingles and shakes
Panelized shake or shingle siding
4 □ 8 plywood siding
4 □ 8 panel and lap-style hardboard/particleboard siding
Lap and panel styles of fiber-cement siding

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
<u>MODULE 68110-09 – EXTERIOR FINISHING (continued)</u>
Manufacturer's installation instructions for fiber-cement siding
Manufacturer's installation instructions for plywood siding
Caulk
Inside and outside corner materials
Furring strips for starter course
Spacing gauges (fabricated)
Siding gauges (fabricated)
Drip caps
Flashing
Building paper
Nails
Radial arm saw
Framing square
Steel measuring tape
Claw hammer
4 level
Handsaw
Chalkline
Combination square
Water level
Circular saw or table saw
Fine-toothed, carbide-tipped, circular saw blade
Dry-diamond circular saw blade
Sawhorses or cutting table
Electric/pneumatic carbide-tipped power hand shears

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Score-and-snap knife with tungsten carbide tip
Caulking gun
Pliers
Tin snips
Aviation shears
Steel awl
Putty knife
Utility knife
Snaplock punch
Vinyl siding unlocking tool
Nail hole punch
Flat-blade screwdriver
Portable brake
Copies of the Quick Quiz
Module Examinations
<u>MODULE 68111-09 – BASIC STAIR LAYOUT</u>
Transparencies
Markers/chalk
Blank acetate sheets
Transparency pens
Pencils and scratch paper
Overhead projector and screen
Whiteboard/chalkboard
Appropriate personal protective equipment
Basic carpenter's toolbox
Framing square

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Level
Circular saw and extension cord
Hand saw
Stair gauges
Calculator 2 3 12s for stringers
2 3 12s for treads
1 3 8s for risers
Handrail and brackets
8d box nails
16d box nails
16d casing nails
Stair plans
Copies of Job Sheet 1
Module Examinations
Performance Profile Sheets
<u>MODULE 68112-09 – ELECTRICAL SAFETY</u>
Overhead projector and screen
Transparencies
Blank acetate sheets
Transparency pens
Whiteboard/chalkboard
Markers/chalk
Pencils and scratch paper
Copy of the latest edition of the <i>National Electrical Code</i> ®
<i>OSHA Electrical Safety Guidelines</i> (pocket guide)
<i>NFPA 70E</i>

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Various types of personal protective and safety equipment, including:
Rubber gloves
Insulating blankets
Hot sticks
Fuse pullers
Shorting probes
Safety glasses
Face shields
Company safety manual
GFCI device
Company lockout/tagout procedures
Step ladders
Straight ladders
Solvent MSDS
Fall arrest system
Safety harnesses
Lockout/tagout devices and labels
Access to eye wash station
TV/DVD/VCR player (optional)
Safety videos (optional)
Module Examinations
Performance Profile Sheet
Transparencies
Blank acetate sheets
Transparency pens
Whiteboard/chalkboard

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Markers/chalk
Pencils and scratch paper
Appropriate personal protective equipment
Copy of the latest edition of the <i>National Electrical Code</i> ®
Calculator
Residential floor plan
Blank worksheet
Various types of GFCIs
Panelboard
Examples of cable, including:
Type NM
Type AC
Type UF
Type SE/USE
Examples of raceways, including:
Rigid
IMC
EMT
Flexible
PVC
Various grounding devices
Examples of made-type grounding electrodes
Assortment of metallic and plastic outlet boxes
Assorted types of electrical receptacles
Assortment of switches, including:
Single-pole

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Three-way
Four-way
Photoelectric switches
Dimmer
Relays
Module Examination
Performance Profile Sheet
Overhead projector and screen
Transparencies
Blank acetate sheets
Transparency pens
Whiteboard/chalkboard
Markers/chalk
Pencils and scratch paper
Appropriate personal protective equipment
HVAC drawings for a commercial building (optional)
Air conditioner
Commercial drawing set
Building codes
Copy of an employee manual
Job announcements for HVAC technicians from local newspapers (want ads)
NCCER Apprentice Training Recognition Forms
<u>MODULE 68115-09 – INTRODUCTION TO DRAIN, WASTE, AND VENT (DWV) SYSTEMS</u>
Transparencies
Markers/chalk
Blank acetate sheets

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Transparency pens
Pencils and scratch paper
Overhead projector and screen
Whiteboard/chalkboard
Appropriate personal protective equipment
Copies of your local code
DWV system design drawings
P-traps
Copies of <i>Figure 8</i> with the callouts covered
Drainage fittings made from a variety of materials
DWV fittings, including:
Bends
Adapters
Cleanouts
Tees
Wyes
Increasesers
Offsets
Torpedo level
Plans for a municipal waste treatment plant
Plans for a private waste disposal system
Module Examinations
Performance Profile Sheets
<u>MODULE 68116-09 – PLASTIC PIPE AND FITTINGS</u>
Transparencies
Markers/chalk

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Blank acetate sheets
Transparency pens
Pencils and scratch paper
Overhead projector and screen
Whiteboard/chalkboard
Appropriate personal protective equipment
Copies of your local code
Flexible pipe
Pipe labels
Sections of plastic pipe:
ABS (acrylonitrile-butadiene-styrene)
PVC (polyvinyl chloride)
CPVC (chlorinated polyvinyl chloride)
PE (polyethylene)
PEX (cross-linked polyethylene)
PB (polybutylene)
Sample material safety data sheets (MSDS) for plastic pipe
Tools for measuring
Tools for cutting pipe
Deburring tools
Miter box
Plastic saw for cutting PVC pipe
CPVC or PVC cement or all-purpose cement conforming to <i>ASTM F-493</i> standards
PVC bell-and-spigot pipe
Lubricant
Tools used to join PEX tubing:

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Insert and crimp-ring system
Tubing cutter
Hand-crimping tool
Go-no-go gauge
Cutter designed for plastic tubing
PEX ring
Expander tool
Mechanical joints and clamps
Compression collars
Tools for the butt-fusion method:
Temperature indicator stick
Heating tool
Fusion timer
Socket face
Cold ring
<i>Manufacturers Standardization Society's MSS40 hanger standard</i>
<i>National Fire Protection Association (NFPA) Chapter 13</i>
Module Examinations
Performance Profile Sheets
Copies of Quick Quiz
<u>MODULE 68117-09 – COPPER PIPE AND FITTINGS</u>
Transparencies
Markers/chalk
Blank acetate sheets
Transparency pens
Pencils and scratch paper

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies
Overhead projector and screen
Whiteboard/chalkboard
Appropriate personal protective equipment
Copies of your local code
Access to a fire extinguisher
Sections of copper pipe
Tee-pulling tool
Fittings and valves:
Water supply fittings
Water supply valves
DWV fittings
Alternative fittings
Tools for measuring copper pipe
Copper cutter
Handheld tube cutter
Internal tube cutter
Sizing tool
Tools to form sweat joints, compression joints, and flare joints
Variety of soldering tools, including an acetylene torch
Tools to roll groove and cut groove copper pipe
Pipe attachments for wood-frame construction
<i>National Fire Protection Association (NFPA) Chapter 13</i>
<i>Manufacturers Standardization Society MSS40 hanger standards</i>
Pressure gauge
Test plug
Module Examinations

Building Trades and Construction Design Technology

Equipment List 2

Inventory of Equipment and Supplies

Performance Profile Sheets