



Joining Cable Trays

Program: Electrician Technician

Course: EL160 – Low Voltage Applications

Objectives: Under the supervision of your instructor, you should be able to do the following:

- Describe the components that make up a cable tray assembly (Objective 1).
- Explain the methods used to hang and secure cable tray (Objective 2).
- Select the proper cable tray fitting for the situation (Objective 4).
- Explain the National Electrical Code® (NEC®) requirements for cable tray installations
- Join two straight, ladder-type cable tray sections together

Lab Equipment:

- One section of ladder-type horizontal cable tray
- One ladder-type cable tray fitting (elbow, tee, cross, or wye)
- Cable tray joining/splicing hardware

Required Tools:

- Set of socket wrenches
- Screwdriver set
- Adjustable wrench
- Tape measure

Materials:

- Cable tray joining/splicing hardware

Safety (PPE):

- Safety glasses

Resources:

- N/A

Time Required: 120 Minutes

Shop Maintenance:

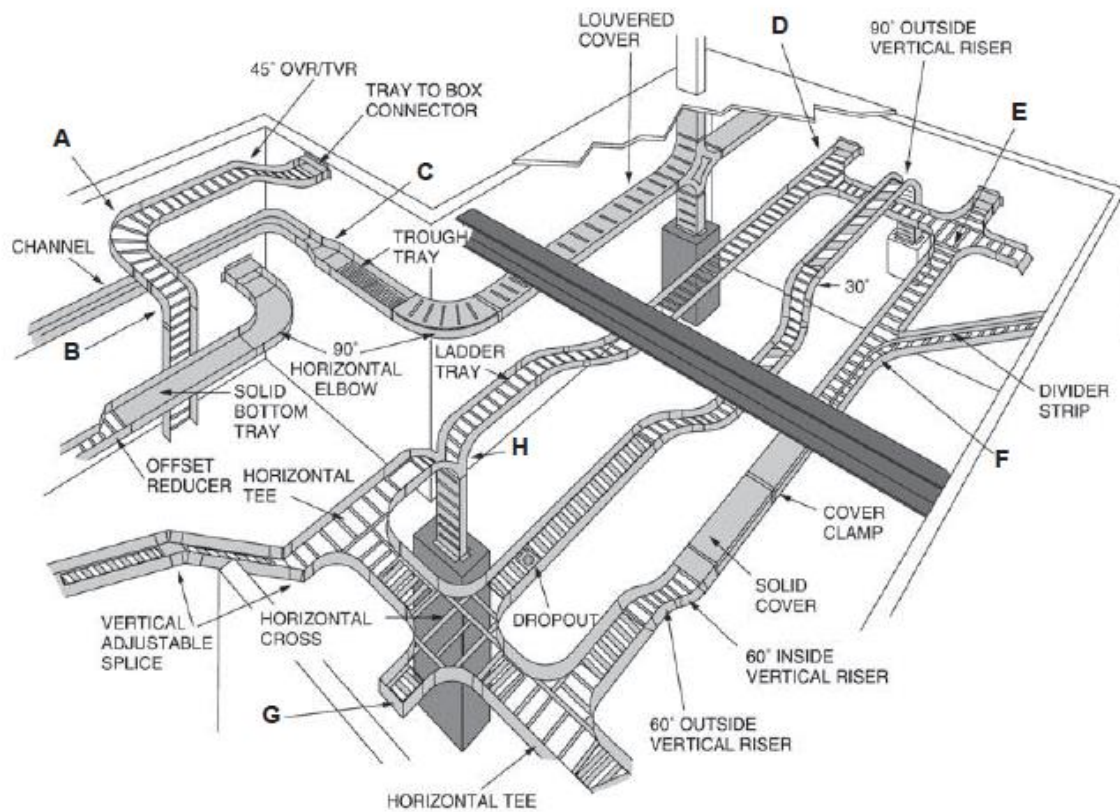
- All work will cease 20 minutes prior to the end of class.
- All work areas must be cleaned.
- Tools and equipment must be cleaned and returned to the designated areas (cage, tool room, cabinets etc.)
- Any broken or missing tools must be reported immediately.
- Tools and equipment are student's responsibility



Procedures:

This performance project requires the trainee to assemble at least two pieces of cable tray on a flat surface. *Figure 1* shows a typical cable tray assembly.

1. Acquire cable tray pieces, hardware, and tools required.
2. Lay the tray pieces on a flat, ground-level surface.
3. Assemble cable tray pieces.
4. Identify the cable tray pieces indicated in *Figure 1*.
5. Have your instructor check your work.



A. _____ B. _____ C. _____ D. _____

E. _____ F. _____ G. _____ H. _____

Figure 1 ■ Name the Cable Tray Pieces