

Electrical Technician/Building Electrician Gulf Companies Job Interview Questions & Answers



Q. What are GI conduits and type of GI conduits bends?

Ans. Galvanized Iron (GI) conduits are commonly used for electrical wiring installations. Bends are typically used to navigate corners, obstacles, and other situations where a straight conduit run is not feasible.

Here are some common types of GI conduit bends:

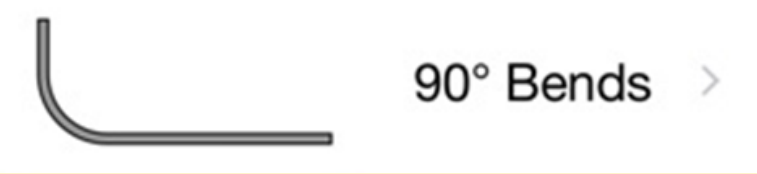
Offset Bend:



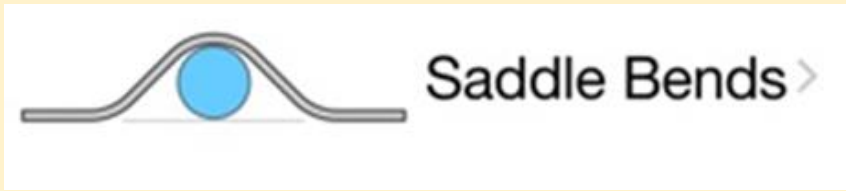
Box Offset Bend



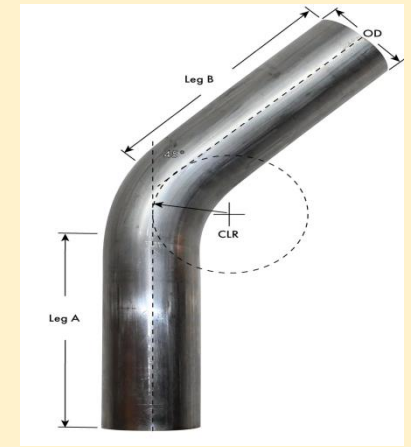
90-Degree Bend:



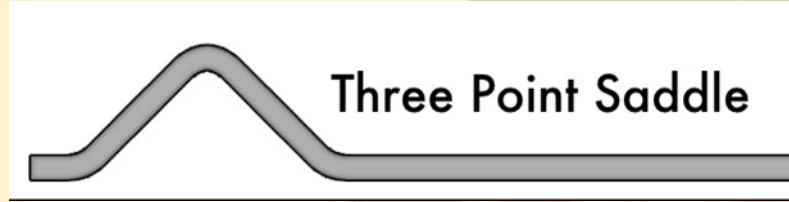
Saddle bends



45-Degree Bend:



Three-Point Saddle Bend:



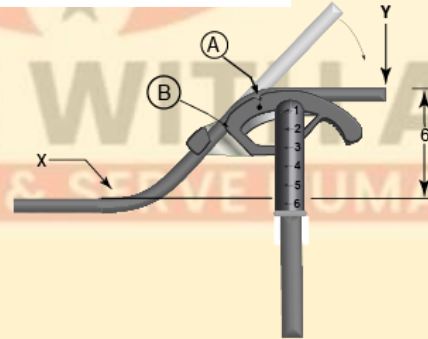
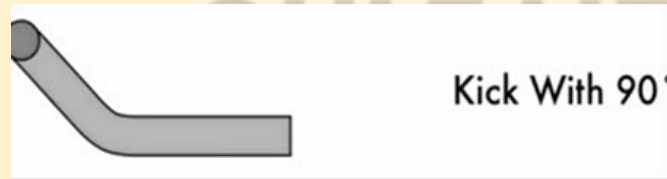
Four-Point Saddle Bend:



U-Bend:



Kick Bend:



Corner Bends



What is fire alarm and fire detection system Types of Fire alarm System?

Ans. Fire Alarm System is designed to alert us to an emergency Fire so that we can take action to protect ourselves, staff and the general public

- **Fire alarms are installed in Offices, Factories, and public buildings.**
- **When a sensor/detector detects fire, alarm is triggered, sounders will operate to warn people in the building that there may be a fire and to evacuate.**
- **It can also incorporate a remote signal fire brigade and auto activate fire fighting.**

Major components of Fire Alarm System.

- **Control Panel – Smoke detectors–Heat detectors-Carbon Monoxide detectors– Multi-sensor detectors– Manual Call Points-Flasher, bells sounder**

Two Primary Types of Fire Alarm system

1: Conventional Fire Alarm

2: Addressable Fire Alarm

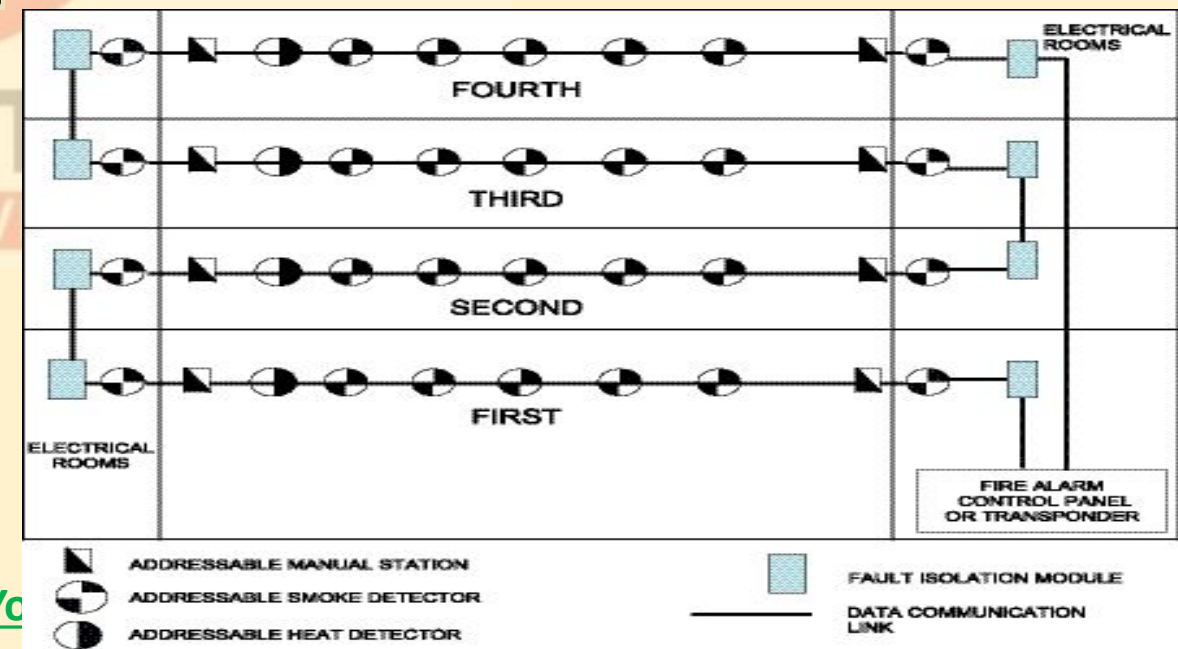
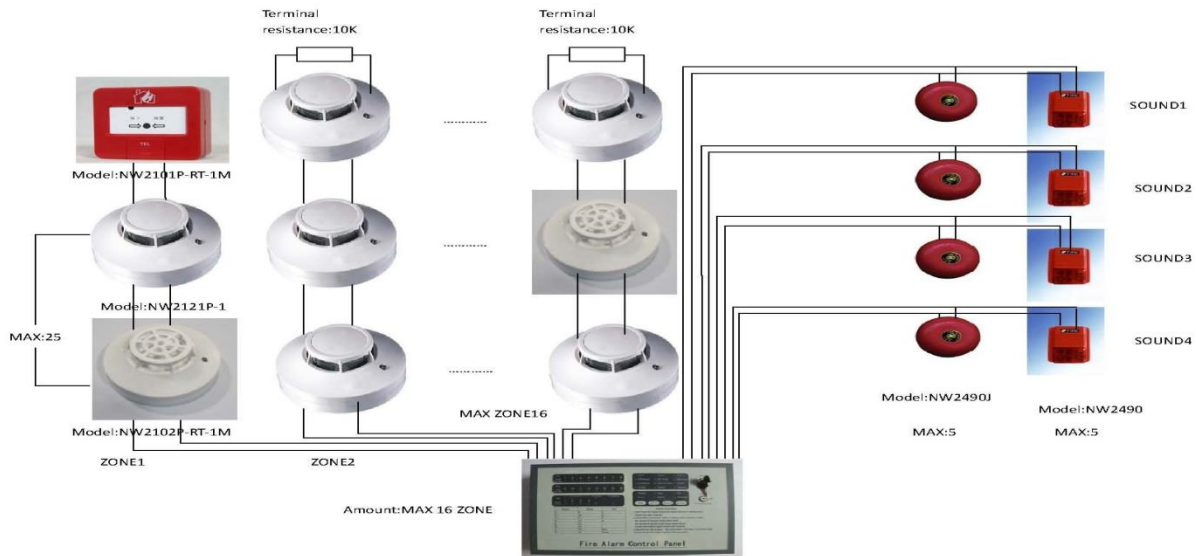
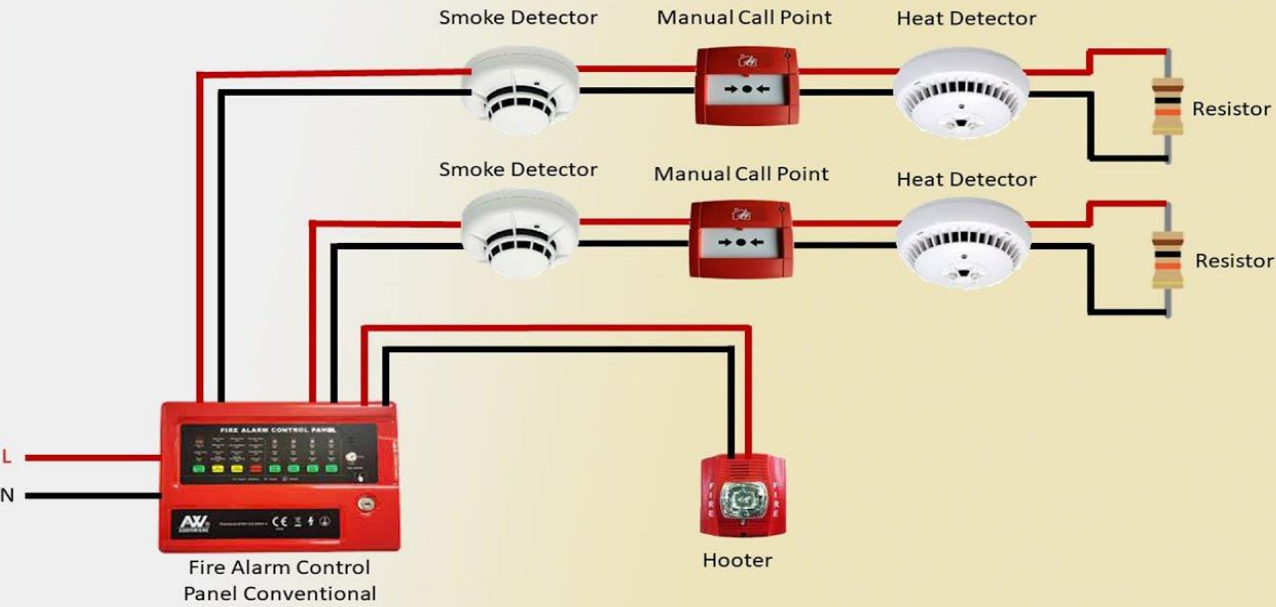
1: Conventional Fire Alarm (Non addressable)

- Components are all wired to the same cable (Loop) that connects them to a fire alarm control panel in zones.
- The control panel displays a signal (zone alarm) when these components activate. We don't know exact location.
- These types of systems are inexpensive and work well in small facilities.

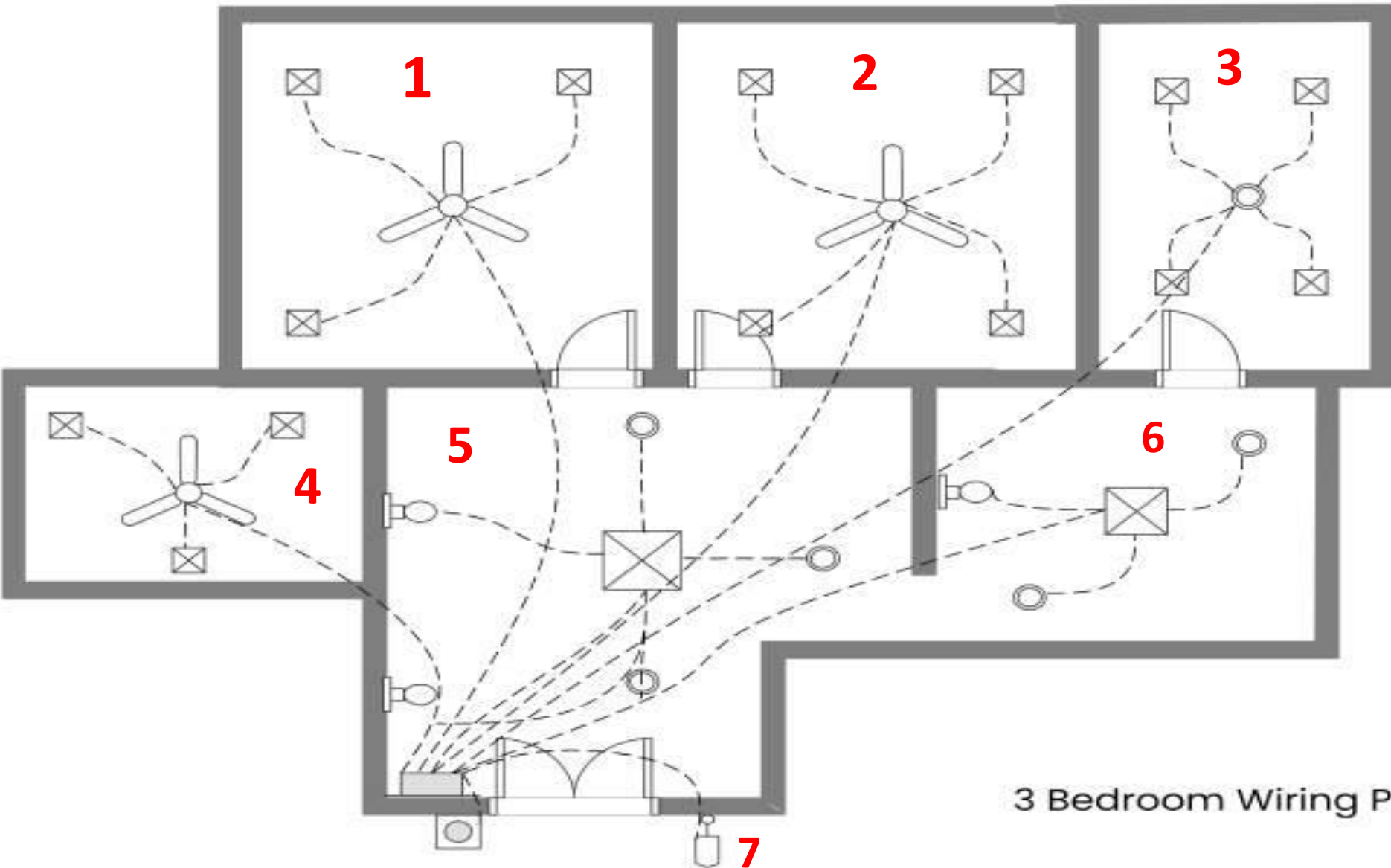
2: Addressable Fire Alarm

- Addressable fire alarm systems are the most modern type of system and its components have individual unique identifiers.
- When one of the system's components initiates, it indicates the component's address on the fire alarm panel.
- Large facilities utilize these systems because they can quickly pinpoint where the trouble signal originated.

Fire Alarm System Conventional Wiring

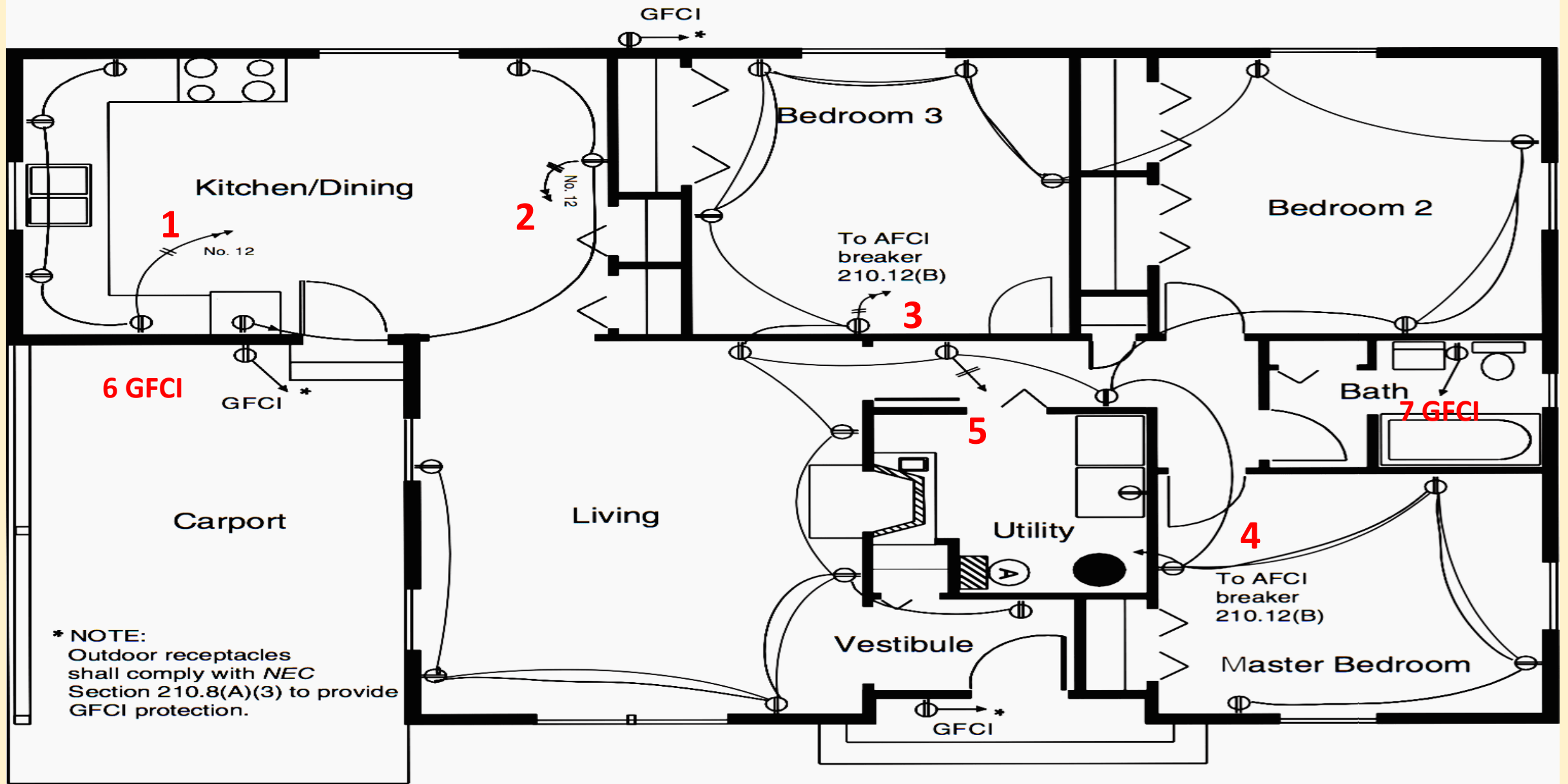


How many Total Circuit are available in below given drawing?



	Distribution Box
	Ceiling Light
	Light
	Fan
	Outdoor
	Doorbell
	Light Bar

3 Bedroom Wiring Plan Diagram



What is mean by ELV,LV & HV voltages range and uses? (MV,LV,EHV,UHV)

ELV (Extra-Low Voltage): below 70v

Common Uses: ELV is commonly used for low-power applications Examples include data communication circuits, doorbell systems, and electronic control circuits.

LV (Low Voltage):70v-600v

Common Uses: LV is used in residential and commercial electrical systems safe for general use. It includes standard power outlets, lighting circuits, and most household appliances.

MV (Medium Voltage) 1kv-33kv

Common uses-Power Distribution Networks, Industrial Facilities, Utility Substations, Large Motors and Machinery, Railway Electrification, Mining Operations & Renewable Energy Systems

HV (High Voltage):33kv-220kv

Common Uses: Power Transmission Networks, High-Voltage Substations, High-Powered Industrial Equipment, Railway Electrification, HVDC (High-Voltage Direct Current) Transmission, Medical Imaging Equipment

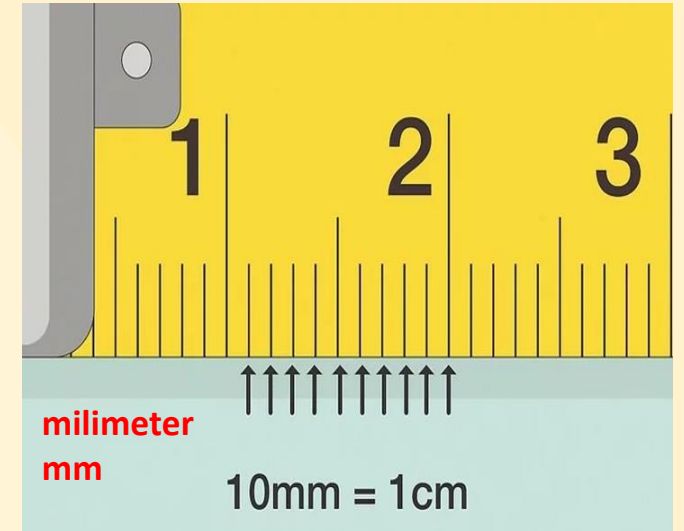
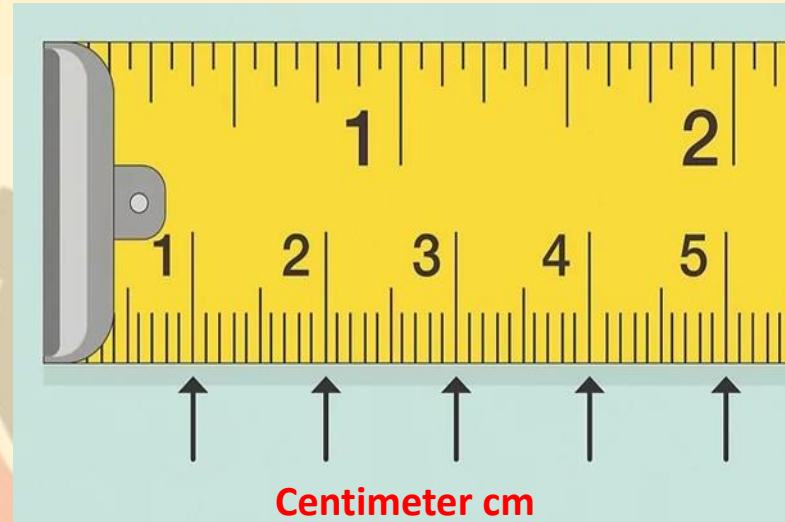
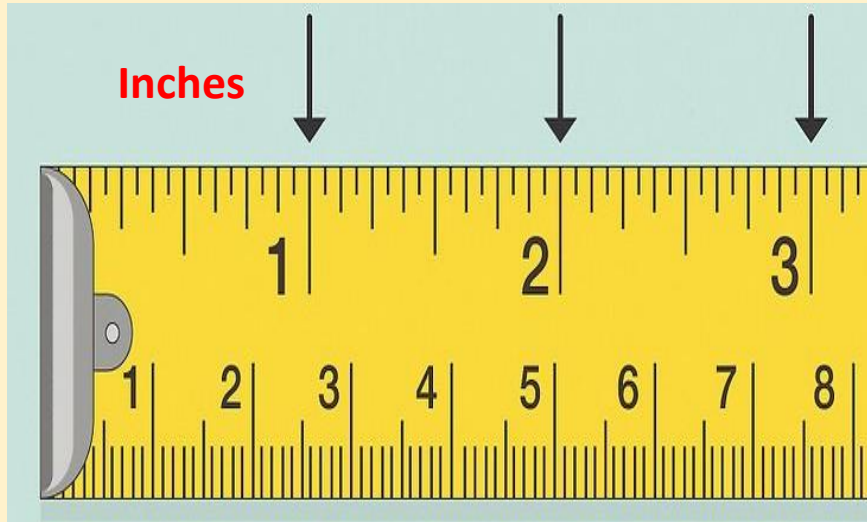
EHV (Extra high voltage) 220kv-760kv

Common uses- Transmission, Interconnection of Power Grids, Long-Distance Power Transmission, Bulk Power Transfer, Grid Stabilization, High-Voltage Research

UHV (Ultra high voltage) above 800kv

Common Uses-Long-Distance Power Transmission, Interconnection of Regional Grids, Cross-Border Power Exchange, High-Capacity Transmission, Renewable Energy Integration, Grid Stability and Reliability

Measuring Tape scales and conversion



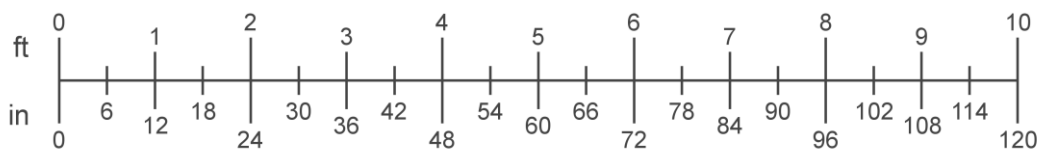
1 inch=2.5cm
1inch= 25mm

1cm=10mm
1foot=30.4cm
1meter=100cm

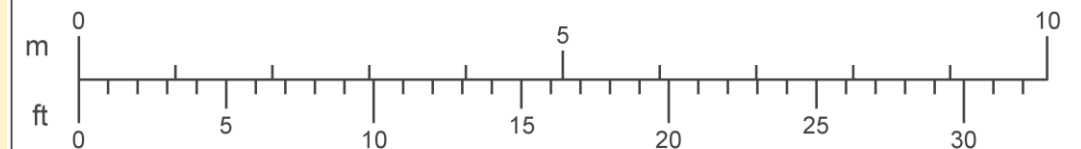
1cm=10mm
1foot= 304mm
1 meter=1000mm

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feet to inches conversion scale



meters to feet conversion scale



Cable Tray, Types of cable tray Size of cable Tray, size measurement of cable Tray?

A cable tray is a structure used in electrical installations to support and organize electrical cables and wires. It supports secure routing of cables in an organized and accessible manner to protect electrical wiring in building or industry.

Standard sizes of cable Trays

Ladder-type



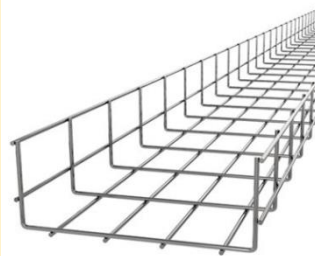
Perforated type



Solid bottom type



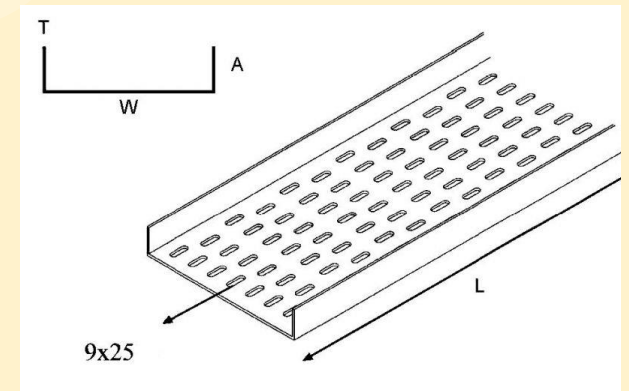
Wire mesh



Channel type



Item	Size(mm)	Width(mm)	Height(mm)	length(m)
1	50*50	50	50	2.44/3
2	100*50	100	50	2.44/3
3	200*50	200	50	2.44/3
4	300*50	300	50	2.44/3
5	100*100	100	100	2.44/3
6	200*100	200	100	2.44/3
7	300*100	300	100	2.44/3
8	150*150	150	150	2.44/3
9	200*150	200	150	2.44/3
10	300*150	300	150	2.44/3



GI Conduit Fittings accessories and names

3 WAY



ANGLE



4 WAY



ELBOW



2 WAY



1 WAY



LONG BEND



SADDLE



SOCKET



DOME



COPPER BUSH



FLEXIBLE ADAPTER



INSPECTION TEE



LID COVER

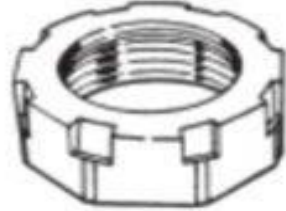


REDUCER

● Rigid and Intermediate Metal Conduit Fittings ●



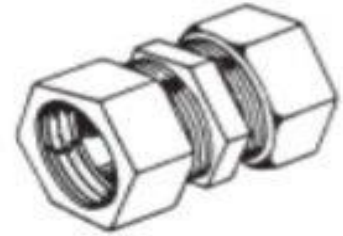
Locknut



Bushing



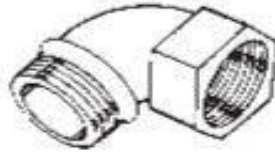
Compression Connector



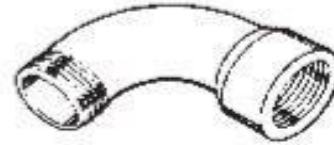
Coupling



Set Screw Connector



Short Elbow



Long Elbow



Three Piece Coupling

● Conduit Support Fittings ●



One Hole Strap



Two Hole Strap



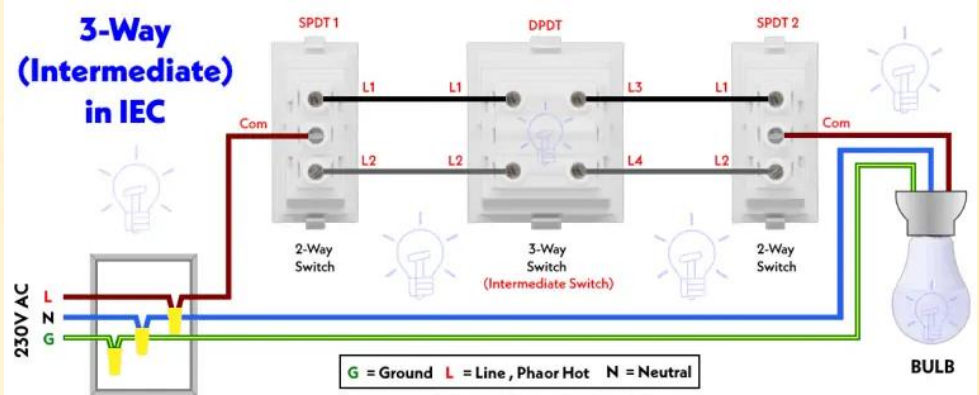
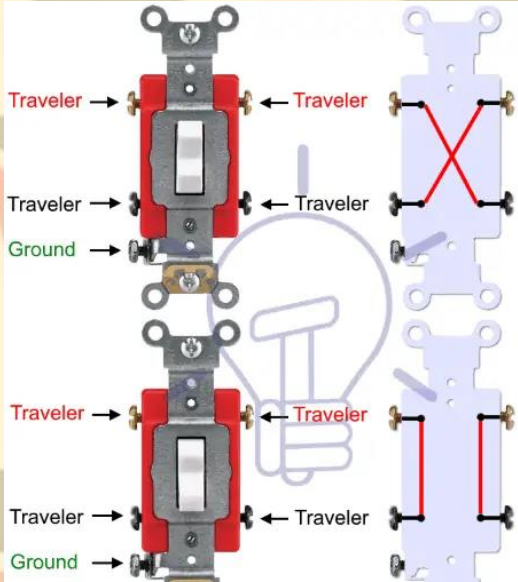
Nail-Up Strap



Conduit Clamp Hanger

Intermediate switch

An intermediate switch is a 4 way type of electrical switch used to control of a light fixture from more than two locations.



Single Way Switch-

A single-way switch is a basic electrical switch that controls a light or appliance from one location only.

