

DESCON ELECTRICAL PVC CONDUIT PIPE

RECOMMENDED INSTALLATION TECHNICAL SPECIFICATION FOR ELECTRICIANS



SAFE &
RELIABLE



DURABLE &
CORROSION
RESISTANT



LIGHTWEIGHT
& EASY TO
INSTALL



SMOOTH
INNER SURFACE
FOR EASY
WIRE PULLING



FLAME
RETARDANT

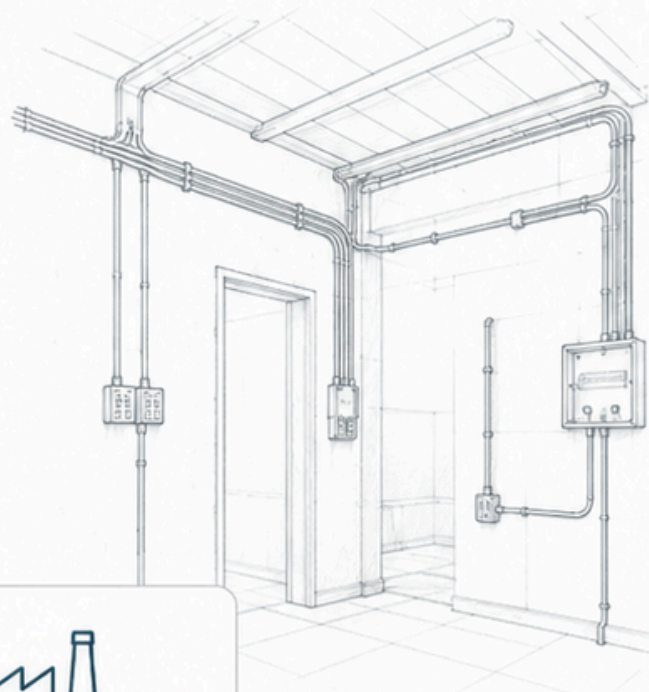


ECO-FRIENDLY
& RECYCLABLE

1. PURPOSE

This installation scheme provides recommended practices for electricians using **DESCON Electrical PVC Conduit Pipes and Accessories** in residential, commercial, and industrial electrical wiring installations.

The objective is to ensure **safe, neat, durable, and efficient** conduit installation while allowing easy wire pulling, inspection, maintenance, and future modifications.



IDEAL FOR APPLICATIONS IN:



RESIDENTIAL



COMMERCIAL



INDUSTRIAL



www.desconpipes.com



SAFE WIRING.
STRONGER PROTECTION.
TRUST **DESCON PIPES**.

MADE IN
INDIA

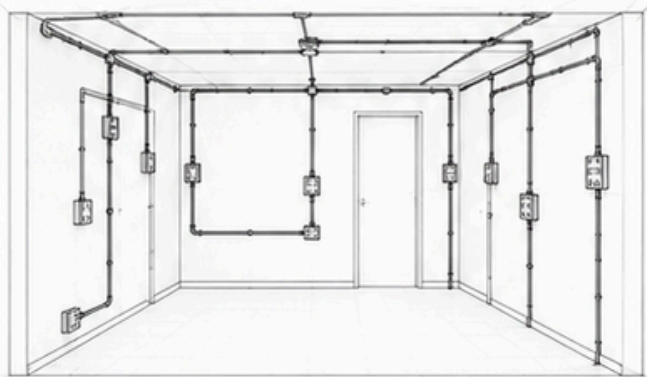


2. RECOMMENDED INSTALLATION SEQUENCE



STEP 1 – PLAN THE WIRING ROUTE

- Study the electrical layout before starting installation.
- Mark conduit routes on walls, ceilings, slabs, and floors.
- Keep wiring routes as straight as practical.
- Avoid unnecessary bends and crossings.
- Maintain separate routes for power, communication, and other low-voltage circuits where required.
- Plan junction boxes and inspection points at accessible locations.



STEP 2 – SELECT THE CORRECT CONDUIT SIZE

Select the **DESCON** conduit diameter according to the number and size of wires/cables to be installed.

Common sizes:

- **20 mm** – Suitable for many standard residential wiring applications.
- **25 mm** – Suitable where additional wires or larger cable capacity is required.

Larger sizes should be selected according to the wiring design and applicable electrical requirements.



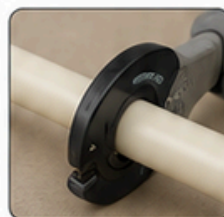
Important:

Do not overcrowd the conduit.
Provide sufficient space for smooth wire pulling and future maintenance.



STEP 3 – CUTTING THE PIPE

- Measure the required length carefully.
- Cut the conduit squarely using a suitable pipe cutter or fine-tooth saw.
- Remove burrs and sharp edges after cutting.
- Ensure the inside of the conduit remains smooth and free from debris.



USE PIPE CUTTER



CLEAN CUT



SMOOTH & CLEAN
INTERIOR



STEP 4 – BENDING THE CONDUIT

- Use the appropriate bending method/tool to achieve a smooth bend.
- Avoid flattening, kinking, cracking, or damaging the conduit.
- Do not make excessively sharp bends.
- Use suitable **DESCON** bends and accessories where required.



Recommended practice:

Provide accessible junction/inspection points where the conduit route contains multiple bends or where wire pulling may otherwise become difficult.



3. RECOMMENDED INSTALLATION SEQUENCE (CONTINUED)



STEP 5 – CONNECTING PIPES AND ACCESSORIES

Use compatible **DESCON** accessories such as:

- Bends
- Couplers
- Junction boxes
- Inspection boxes
- Saddles/clamps
- Adaptors and other required fittings

Ensure every joint is properly aligned and securely connected.



BEND



COUPLER



JUNCTION BOX



INSPECTION BOX



SADDLE / CLAMP



ADAPTOR



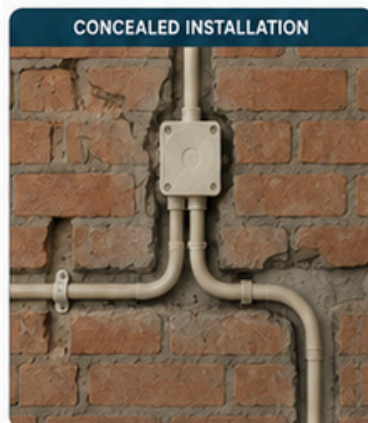
STEP 6 – FIXING THE CONDUIT

For surface installations:

- Align the conduit neatly with the wall or ceiling.
- Secure it using suitable saddles/clamps.
- Provide adequate fixing points to prevent sagging or movement.
- Keep parallel conduit runs properly aligned.

For concealed installations:

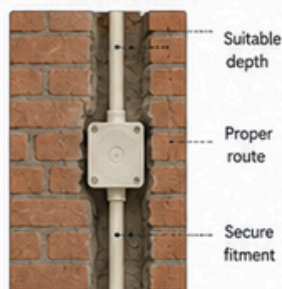
- Fix the conduit securely before plastering.
- Ensure the conduit is adequately protected from mechanical damage.
- Avoid unnecessary joints inside inaccessible areas.



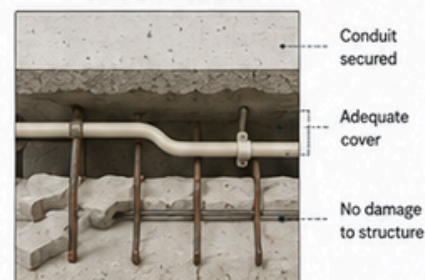
STEP 7 – INSTALLATION IN WALLS AND SLABS

- Mark the conduit route before chasing.
- Keep the depth and route suitable for the building construction.
- Avoid damaging structural members.
- Do not cut or chase structural beams, columns, or other load-bearing elements without approval from the responsible structural professional.
- Secure conduits properly before concreting or plastering.

WALL INSTALLATION



SLAB INSTALLATION



STEP 8 – INSTALLING JUNCTION BOXES

- Position junction boxes at accessible and practical locations.
- Ensure boxes are properly aligned and securely fixed.
- Avoid concealing junctions where future inspection or maintenance would be impossible.
- Use suitable **DESCON** junction boxes and accessories for clean and reliable connections.



✓ ACCESSIBLE LOCATION



✓ PROPERLY ALIGNED & SECURELY FIXED



✗ NOT ACCESSIBLE – AVOID



STEP 9 – WIRE PULLING

Before pulling wires:

- ✓ Confirm that the conduit route is complete.
- ✓ Check that joints and bends are properly connected.
- ✓ Ensure the conduit is free from dust, mortar, water, and other obstructions.
- ✓ Use an appropriate draw wire/fish tape.
- ✓ Pull wires carefully without excessive force.
- ✓ Avoid damaging cable insulation.



STEP 10 – FINAL INSPECTION

Before closing walls, ceilings, or other concealed areas, check:

- ✓ All conduit joints are secure.
- ✓ Pipes are properly fixed.
- ✓ No conduit is crushed, cracked, or kinked.
- ✓ Junction boxes are accessible where required.
- ✓ Wire pulling is smooth.
- ✓ Conduit routes follow the approved electrical layout.
- ✓ Electrical circuits are properly identified.



RECOMMENDED WIRING ROUTE

✓ PREFERRED



Distribution Board



Main Conduit



Junction Box



Switch/Socket Point



Light/Fan/ Equipment

KEEP ROUTES:

- ✓ Straight
- ✓ Accessible
- ✓ Properly supported
- ✓ Clearly separated where required
- ✓ Easy to inspect and maintain

✗ AVOID

- ✗ Excessive bends
- ✗ Unnecessary joints
- ✗ Overfilled conduits
- ✗ Sharp kinks
- ✗ Unsupported long conduit runs
- ✗ Concealed inaccessible junctions
- ✗ Damage to conduit during plastering or concreting

