204: Installation of wiring systems and enclosures  
**Worksheet 3-040: Right angle bend PVC conduit**

**NB**: Students must not attempt this exercise before the correct use of all tools and materials has been demonstrated.

**Technical data**

* Care must be taken when using PVC conduit in cold conditions to prevent fracture of the tube.
* In order to carry out this exercise, specialist tools are required.
* You are to make sure that all your work conforms to the requirements of the Health and Safety at Work Act.

**Material required**

|  |  |
| --- | --- |
| 1 off | PVC conduit 20mm diameter x 900mm long |

**Procedure**

1. Enter the start time on the assessment sheet.
2. Prepare the material requisition.
3. **Have the requisition checked before proceeding.**
4. Obtain the material from the stores.
5. Ensure that one end of the conduit is cut square and all burrs removed.
6. Place a pencil mark on the conduit 300mm from the squared end.
7. Insert the conduit-bending spring into the conduit so that the middle of the spring is approximately in line with the pencil mark on the conduit.
8. Bend the conduit on the pencil mark across the knee to an angle slightly greater than 90° and then allow the tube to return to the correct 90° angle.
9. Remove the bending spring by twisting in an **anti-clockwise** direction as you pull it out of the tube.
10. Ensure each end is the correct length, with both ends squared and all burrs removed.
11. **Hand the work to the Lecturer for marking and assessment.**
12. Enter the finish time on the assessment sheet.

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| --- |
| Exercise 03-040 Right Angle Bend PVC Conduit.png |

Assessments are based on **observed** safety procedures, and the **quality** and **accuracy** of the completed exercise.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | | **YES** | **NO** |
| **1.** | Material requisition correct first time | | **□** | **□** |
| **2.** | Method statement completed | | **□** | **□** |
| Assessed by: ………....………….. | | |  | |
| **3.** | Used only the given length of conduit | | **□** | **□** |
| **4.** | Formed right angle 90° | | **□** | **□** |
| **5.** | Overall length correct dimension (± 2mm) | | **□** | **□** |
| **6.** | Conduit ends cut square | | **□** | **□** |
| **7.** | Conduit undamaged | | **□** | **□** |
| **8.** | Burrs removed | | **□** | **□** |
| **9.** | Work area conformed to the Health & Safety at Work Act | | **□** | **□** |
| **10.** | Correct safety procedures observed at all times | | **□** | **□** |
| **11.** | Overall appearance to a commercially acceptable standard | | **□** | **□** |
| Assessed by: ………....………….. | | |  | |
| Start Date & Time: ………………........………….. | | Finish Date & Time: ……...…...........…………… | | |
| Target Time: 30 minutes | | Time Taken: …………………….........…………… | | |