204: Installation of wiring systems and enclosures  
**Worksheet 3-060: PVC conduit double set**

**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 450mm 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. Make a pencil mark on the conduit 150mm 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. By use of the bending machine or across the knee, bend the tube on the pencil mark to an angle of approximately 45°.
9. Remove the bending spring by twisting in an **anti-clockwise** direction as you pull it out of the tube.
10. With the aid of a straight edge, place a pencil mark on the conduit at a point 50mm vertically above the straight edge.
11. Reinsert the bending spring from the opposite end and bend the conduit at the pencil mark so that it is back into line with the initial piece, as shown in the diagram.
12. Having removed the bending spring again, check that the dimensions of the set and overall length are correct.
13. Ensure that both ends are cut square and all burrs are removed.
14. **Hand the work to the Lecturer for marking and assessment.**
15. Enter the finish time on the assessment sheet.

|  |
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| Exercise 03-060 Double Set 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 off-set correct dimensions (± 5mm) | | **□** | **□** |
| **5.** | Overall dimensions correct (± 5mm) | | **□** | **□** |
| **6.** | Conduit ends cut square | | **□** | **□** |
| **7.** | Conduit undamaged | | **□** | **□** |
| **8.** | Burrs, sharp edges and any vice marks 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: 90 minutes | | Time Taken: …………………….........…………… | | |