204: Installation of wiring systems and enclosures  
**Worksheet 3-070: Steel trunking internal right angle**

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

**Technical data**

* All metal edges and holes must be burr-free.
* Trunking fabrications may be secured with 6mm trunking pins and nuts.
* 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 | Metal cable trunking 50 x 50 x 320mm complete with lid |
| 8 off | M6 x 12mm Pan head steel trunking pins |
| 8 off | M6 hexagon steel full nuts |

**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. Letter-stamp your initials on to the trunking for identification.
6. Square off and cut one end of the trunking and remove any burrs.
7. From the squared end, measure a distance of 200mm and mark both sides of the trunking.
8. Scribe a line through these marks at 90° to the trunking edge.
9. **Have the work checked before proceeding.**
10. Cut through the marked lines on the sides only.
11. Form the bend as shown in the diagram, ensuring that the edges of the 200m section are **inside** the bend.
12. Ensure that all burrs and sharp edges are removed.
13. **Have the work checked before proceeding.**
14. Clamp the trunking so as to form the 90° bend.
15. Mark and drill suitable sized fixing holes on both sides of the trunking.
16. Secure both sides of the trunking together in the correct position using the M6 pins and nuts.
17. Check the overall length of the second leg of the trunking bend and cut to size.
18. Mark and drill the correct sized end, fixing holes in both ends to complete the bend.
19. Remove any burrs and sharp edges.
20. **Hand the work to the Lecturer for marking and assessment.**
21. Enter the finish time on the assessment sheet.

|  |
| --- |
| Exercise 03-070 Trunking Internal Right Angle.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.** | End 1 of trunking square- and burr-free | | **□** | **□** |
| **4.** | Bend marked out correctly from squared end | | **□** | **□** |
| **5.** | Bend marked out correctly on both sides | | **□** | **□** |
| **6.** | Work correctly identified on first presentation | | **□** | **□** |
| Assessed by: ………....………….. | | |  | |
| **7.** | Used only the given length of trunking and lid | | **□** | **□** |
| **8.** | Bend securely fixed using pins and nuts | | **□** | **□** |
| **9.** | Overall dimensions correct (± 5mm) | | **□** | **□** |
| **10.** | Completed angle 90° | | **□** | **□** |
| **11.** | End fixing holes correct position and size | | **□** | **□** |
| **12.** | Lid correctly made and fits trunking bend correctly | | **□** | **□** |
| **13.** | Trunking and lid ends square and undamaged | | **□** | **□** |
| **14.** | Burrs, sharp edges and any vice marks removed | | **□** | **□** |
| **15.** | Work area conformed to the Health & Safety at Work Act | | **□** | **□** |
| **16.** | Correct safety procedures observed at all times | | **□** | **□** |
| **17.** | Overall appearance to a commercially acceptable standard | | **□** | **□** |
| Assessed by: ………....………….. | | |  | |
| Start Date & Time: ………………........………….. | | Finish Date & Time: ……...…...........…………… | | |
| Target Time: 3 hours | | Time Taken: …………………….........…………… | | |