204: Installation of wiring systems and enclosures  
**Worksheet 4-090: Cable tray composite exercise**

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

**Technical data**

* You are to make sure that your work area is clear and safe for work to proceed.
* You are to make sure that all your work conforms to the requirements of the Health and Safety at Work Act.
* All tray joints must be both mechanically and electrically sound.
* When being assessed, the following points will be considered:

1. positioning
2. continuity of cpc
3. standard of assembly
4. appearance
5. safety.

* The work area must be restored to a satisfactory condition on completion.

**Note**: You are required to work on this exercise jointly with the other trainee in the same cubicle. This requires you, first of all, to jointly assess the exercise requirements and to jointly carry them out to the best of your combined capabilities.

**Material required**

* Previous tasks, as detailed on drawing
* 4-way 60 amp metal clad consumer unit.
* Tray fixing pins/nuts, masonry fixings, etc. Sizes and quantities to be determined from previous knowledge and exercise information.

**Procedure**

1. Enter the start time on the assessment sheet.
2. Prepare the material requisition (remember to specify actual quantities required for all items and you will also need fixings for the tray and accessories).
3. **Have the requisition checked before proceeding.**
4. Obtain the material from the stores.
5. Fix the tray to the surfaces, as specified in the diagram. Remember that your tray must join up with your partner’s tray in two places, ie along the back wall adjacent to the consumer unit and also along the ceiling.
6. **Have your work checked and assessed before proceeding.**
7. Enter the finish time on the assessment sheet.
8. Proceed to the next Worksheet (4-100).

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| Task 04-090 Cable Tray Installation Right.png |

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| Task 04-090 Cable Tray Installation Left.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.** | Wore appropriate PPE | | **□** | **□** |
| **4.** | Acquired the correct materials and equipment | | **□** | **□** |
| **5.** | All tray fixed securely and level/vertical | | **□** | **□** |
| **6.** | All tray pieces coupled correctly | | **□** | **□** |
| **7.** | All wall fixings secure and satisfactory | | **□** | **□** |
| **8.** | All burrs and sharp edges removed | | **□** | **□** |
| **9.** | Used only the materials specified in the material requisition | | **□** | **□** |
| **10.** | Overall dimensions correct (± 5mm) | | **□** | **□** |
| **11.** | Cable bearing surface undamaged | | **□** | **□** |
| **12.** | Burrs, sharp edges and any vice marks removed | | **□** | **□** |
| **13.** | Overall appearance to a commercially acceptable standard | | **□** | **□** |
| **14.** | Work area conformed to requirements of HASAWA | | **□** | **□** |
| **15.** | Correct safety procedures observed at all times | | **□** | **□** |
| **16.** | Work area restored to a satisfactory condition on completion | | **□** | **□** |
| Assessed by: ………....………….. | | |  | |
| Start Date & Time: ………………........………….. | | Finish Date & Time: ……...…...........…………… | | |
| Target Time: 6 hours | | Time Taken: …………………….........…………… | | |