204: Installation of wiring systems and enclosures  
**Worksheet 2-080: Chipboard floor trap**

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

**Technical data**

* In order to correctly carry out this exercise, specialist tools are required.
* Standard joists are 600mm between centres but this must be checked in every case.
* A suitable piece of timber with a straight edge is often used in conjunction with the jigsaw in order to ensure that the cut edge is straight.
* You are to make sure that all your work conforms to the requirements of the Health and Safety at Work Act.
* In order to prevent the floorboards splitting, nail points should be tapped with a hammer to form a blunt end.

**Material required**

|  |  |
| --- | --- |
| 8 off | Countersunk steel woodscrews 75mm x no.10 |
| 4 off | Countersunk steel woodscrews 42mm x no.10 |
| 1.5 m | 50mm x 50mm sawn timber |

**Procedure**

1. Enter the start time on the assessment sheet.
2. From the drawing and site inspection prepare a material requisition.
3. **Have the requisition checked before proceeding.**
4. Obtain the material from the stores.
5. Place a chalk mark on the chipboard floor to indicate which section the Lecturer has indicated to be lifted (see diagram 1).
6. Establish the centre, width and thickness of the supporting joists by sliding a knife in the joint of the floorboards to establish the exact position of the joists.
7. Accurately mark out the required position for the inspection trap.
8. Mark the orientation of the trap to ensure correct relocation later.
9. **Have this work checked by the Lecturer before proceeding.**
10. Carefully drill an 8mm diameter pilot hole in one corner of the inspection trap (see diagram 2).
11. Drill a second 8mm pilot hole in the other corner as indicated on the diagram (see diagram 2).
12. Using the jigsaw, cut out the trap by sawing along each line in turn, starting from the pilot hole each time. This cut-out section **MUST** be retained to form the trap lid.
13. **Have this work checked by the Lecturer before proceeding.**

##### Construction of the trap support frame

1. Cut two off 350mm lengths of timber which are to form the support members of the frame which is secured to the inside of opposing floor joists.
2. Place the timbers together against the inside of one of the joists and measure the distance between the inside timber and the other floor joist.
3. Cut two pieces of timber to this measured length, making sure that the ends are square.
4. Screw the frame together as shown in the diagram (see diagrams 3, 4 and 5), ensuring that the edges are level – drill pilot holes in the outer support members.
5. Drill two 4mm holes in both of the support members to facilitate the screw fixings to the joists to be made.
6. Fix the trap support frame in position.
7. **Have this work checked by the Lecturer before proceeding.**
8. Drill four 4mm diameter holes in the trap lid as shown in the diagram (see diagram 6).
9. Fix the trap lid in position.
10. **Notify the Lecturer that the work is ready for assessment.**
11. Enter the finish time on the assessment sheet.

**NOTE**: Extreme care must be taken when using the electric jigsaw.

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| --- |
| Exercise 02-080 Chipboard Floor Trap.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.** | Correct section used | | **□** | **□** |
| **4.** | Flooring correctly marked out | | **□** | **□** |
| Assessed by: ………....………….. | | |  | |
| **5.** | Tongues correctly sawn | | **□** | **□** |
| **6.** | Flooring all round undamaged | | **□** | **□** |
| **7.** | Flooring cut square | | **□** | **□** |
| **8.** | Joists each side undamaged | | **□** | **□** |
| Assessed by: ………....………….. | | |  | |
| **9.** | Frame correctly installed | | **□** | **□** |
| Assessed by: ………....………….. | | |  | |
| **10.** | Flooring replaced in correct position | | **□** | **□** |
| **11.** | Flooring replaced securely | | **□** | **□** |
| **12.** | Fixings in correct positions | | **□** | **□** |
| **13.** | Overall appearance to a commercially acceptable standard | | **□** | **□** |
| **14.** | Work area conformed to requirements of HASAWA | | **□** | **□** |
| **15.** | Correct safety procedures observed at all times | | **□** | **□** |
| Assessed by: ………....………….. | | |  | |
| Start Date & Time: ………………........………….. | | Finish Date & Time: ……...…...........…………… | | |
| Target Time: 3.5 hours | | Time Taken: …………………….........…………… | | |