Unit 113: Plumbing, heating and ventilation

# Worksheet 3: Copper jointing – capillary and press fittings (tutor)

Complete the following tasks as directed by your tutor:

|  |  |
| --- | --- |
| 1 | Cut the tube, preferably with a tube cutter and deburr the pipe. Ensure the pipe is cut square. |
| 2 | Mark the depth of insertion on the pipe using a marker pen or pencil. |
| 3 | Insert the tube into the fitting all the way to the tube stop and ensure it is up to the mark. |
| 4 | Place the jaws of the press-fit tool over the bead of the fitting, making sure that the jaws of the tool are well lubricated. |
| 5 | Make sure the tool and the fitting are at a 90⁰ angle to each other and square. |
| 6 | Press the trigger on the press-fit tool, making sure fingers are kept away from the jaws. |

1. In the space below, write a step-by-step process describing how a press-fit joint should be made:
2. Identify the fittings shown below:

|  |  |  |
| --- | --- | --- |
|  | **Image** | **Description** |
| A |  | Integral solder ring coupler / socket |
| B | A close up of a device  Description automatically generated | End feed equal tee |
| C |  | Press-fit elbow |
| D | A close up of an object  Description automatically generated | End feed elbow |
| E | A close up of a device  Description automatically generated | Intergral solder ring reducer |
| F |  | Press-fit socket / coupler |

1. What is the correct way to order the fittings shown below?

A close up of a device

Description automatically generated

1. 15mm x 22mm x 15mm end feed tee
2. 15mm x 15mm x 22mm end feed tee
3. 15mm x 22mm x 15mm integral solder tee
4. 15mm x 15mm x 22mm integral solder tee
5. What is the correct way to order the fittings shown below?

A close up of a device

Description automatically generated

a. 35mm x 35mm x 22mm integral solder tee

b. 35mm x 22mm x 35mm integral solder tee

c. 35mm x 35mm x 22mm end feed tee

d. 35mm x 22mm x 35mm end feed tee

1. Why should flux paste be added to the outside of the pipe rather than the inside of the fitting? Explain your answer below:

To ensure an even spread of flux and avoid excessive flux being left on the inside of the pipe and fitting.