

HIP Magazine – Autumn Term 2015 - Answer Sheet

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Site Preparation

This task involves group discussion. If you need any guidance please get in touch with us.

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The advantages of bending copper tube, rather than using manufactured fittings.

Four advantages:

- 1.) It costs less. You don't have the added cost of fittings
- 2.) There is less frictional resistance
- 3.) Time saving, as you can prefabricate the bend prior to installation
- 4.) Less likely to have leaks from a bend than a fitting

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Tools for plumbing

1. Box immersion spanner
2. pad saw / plasterboard saw
3. radiator spanner
4. Tap reseating tool
5. plugging chisel
6. Basin spanner
7. Adjustable spanner
8. Pipe freeze kit
9. Press fit machine
10. Circular saw

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Fixings - screws

1. Torx
2. Slotted
3. Pozi drive
4. Philips
5. Hex socket (allen Key)

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Fixings

1. Spring steel toggle for cavity wall fixings
2. broolly fixing for plasterboard fixings
3. Pan head fixing for plasterboard fixings

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Testing, commissioning & maintenance (4 steps)

This is group work so your lecturer will be able to talk you through the different stages of checks to test, commission and maintain a system. If you're still stuck then email me (celia@sng-publishing.co.uk) and I'll email you a step by step which should help you.

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Cold Water

1. The definition within Part E states that there is a **Material Change of Use** where there is a change in the purpose for which, or the circumstances in which, a building is used.
2. Double check valve
3. Part 1 float operated valve
4. 1 ½ times the system pressure

5. Where new installations for major extensions or alterations to existing systems in properties of multiple occupation, such as hotels, flats, hotels, offices etc, disinfection of the internal plumbing systems is required before use. In addition, where there is any suspicion of contamination of the plumbing installation by sewage, ground water or insects and vermin, disinfection must be carried out.
6. Reclaimed water: **green black green** Wholesome water: **blue**
7. Fluid Categories listed below:

Fluid Category 1

Wholesome water supplied by the undertaker and complying with the requirements made under section 67 of the Water industry Act 1991/ the Water Supply (Water Quality) (Scotland) Regulations 1990 and any amendment

Description given in Schedule 1: of the Water Supply (Water Fittings) Regulations and Scottish Water Byelaws

Fluid Category 2

Water in fluid category 1 whose aesthetic quality is impaired owing to –
a change in its temperature, or

the presence of substances or organisms causing a change in its taste, odour or appearance, including water in hot water distribution systems.

Description given in Schedule 1: of the Water Supply (Water Fittings) Regulations and Scottish Water Byelaws

Fluid Category 3

Fluid which represents a slight health hazard because of the concentration of substances of low toxicity, including any fluid which contains –

ethylene glycol, copper sulphate solution or similar chemical additives, or sodium hypochlorite (chlorox and common disinfectants)

Description given in Schedule 1: of the Water Supply (Water Fittings) Regulations and Scottish Water Byelaws

Fluid category 4

Fluid which represents a significant health hazard because of the concentration of toxic substances, including any fluid which contains –

chemical, carcinogenic substances or pesticides (including insecticides and herbicides), or

Environmental organisms of potential health significance

Description given in Schedule 1: of the Water Supply (Water Fittings) Regulations and Scottish Water Byelaws

Fluid Category 5

Fluid which represents a serious health hazard because of the concentration of pathogenic organisms, radioactive or very toxic substances, including any fluid which contains –

faecal material or other human waste:

butchery or other animal waste: or

pathogens from any other source.

Description given in Schedule 1: of the Water Supply (Water Fittings) Regulations and Scottish Water Byelaws

Fluid category 4

Fluid which represents a significant health hazard because of the concentration of toxic substances, including any fluid which contains –

chemical, carcinogenic substances or pesticides (including insecticides and herbicides), or

Environmental organisms of potential health significance

Description given in Schedule 1: of the Water Supply (Water Fittings) Regulations and Scottish Water Byelaws

Fluid Category 5

Fluid which represents a serious health hazard because of the concentration of pathogenic organisms, radioactive or very toxic substances, including any fluid which contains –

faecal material or other human waste:

butchery or other animal waste: or

pathogens from any other source.

8. A flow switch

9. double check valve

Hot Water

1. 25mm

2. Control thermostat 60-65°C, Energy Cut Out (high limit thermostat) has an maximum setting of 90°C but usually operates at around 85°C and temperature & pressure relief valve 90°C + or - 5°C

3. 600mm max

4. 300mm min

5. 1.4m

6. 85°C

7. Composite valve: line strainer → pressure reducing cartridge → non-return valve

8. BS6700 between 125 litres per person

9. 44-46°C for all a – d with a +/- 2°C tolerance not exceeding 48°C.

10. 1 bar at a flow rate of 9 litres per minute. Most manufacturers will require a minimum of 3 bar.