Plumbers: Reducing the cost of waste on site

The Halving Waste to Landfill Commitment
Specialist and SME contractors commit to:
- estimating waste
- finding ways to reduce waste
- avoiding waste on site
- recycling more waste
- recording and reporting waste

Why reduce waste?
Reducing the waste produced on site will benefit both your business and your clients.
- reducing material purchase and waste disposal costs will save you money
- it will help you to meet client requirements for waste reduction, reuse and recycling
- demonstrate you are an informed contractor and enhance your reputation

Common causes of waste
- off-cuts of tube, pipe and insulation
- damage in storage
- damage when moving materials around site
- rework
- packaging

Wastage rates
The wastage rate is the difference between the exact material requirement for the job and the amount ordered. Standard practice and good practice wastage rates for some typical materials are shown below.

<table>
<thead>
<tr>
<th>Material</th>
<th>Standard Practice %</th>
<th>Good Practice %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper pipework</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Iron and steel pipes</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Radiator heating systems</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Water installations</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

Standard practice – typical practice that assumes that no specific actions are taken to reduce waste

Good practice – assumes that some effort has been taken to reduce wastage, like planning to use offcuts prior to cutting pipe lengths.
Returnable box pallets cut fitout costs

For the fitout of St Bartholomew’s Hospital Skanska saved money by getting lighting suppliers to deliver equipment in collapsible plastic box pallets. This kept the site clear and avoided the use and disposal of 8 tonnes of cardboard.

How can I reuse materials?

- try to use suppliers who supply and take back returnable crates or pallets
- don’t throw away materials like fixtures and fittings - return them to the supplier for refund or exchange, or take them with you to use on the next job
- arrange storage space where you can store unused materials for reuse
- make sure you reuse offcuts if you can, e.g. from tube, pipe and insulation
- donate unused materials to local charities and other groups

How can I recycle more waste?

- keep different waste types separate for recycling using separate bins and skips, e.g. copper, brass, steel and plastics
- send your mixed waste skip to a Materials Recovery Facility (MRF) instead of a landfill site – the gate fees are often the same
- use waste contactors who will recycle your waste
- metals can have a high scrap value – check local markets for material prices
- use suppliers who provide recyclable packaging – many will also take your packaging waste away and recycle it for you

Storing offcuts reduces scrappage

One company reduced scrappage of copper pipework from 6% to 2% by storing off-cuts for reuse.

The True Cost of Waste

The cost of waste can be as much as £1300 per skip when you include the value of the wasted materials.

- VAT 20%
- Labour 3%
- Skip hire 12%
- Value of wasted materials 65%

Source AMEC

How can I reduce waste?

- estimate the amount of waste you will produce so you can plan what you could do with it, and communicate this to your client
- try to order only the amount you need for the job, especially perishable materials like sealants
- make arrangements to sell back or return unused materials to your supplier
- make sure you order the right sizes and specifications for the job
- use pre-fabricated pipework and arrange just-in-time delivery to avoid having to store materials
- buy materials with less or no packaging when you can
- make sure materials are delivered, stored and handled carefully to avoid damage
- plan ahead to minimise off-cuts, e.g. from copper tube, plastic pipe and pipe insulation
- work with your client to make sure that the phasing is correct and rework will not be required

Need help?

Helpline freephone 0808 100 2040
www.wrap.org.uk/construction