

10 essential steps towards waste-free construction

Before you start

Measure how much of each type of waste is being produced. According to WRAP you are probably chucking away twice as much material as you think, which should help focus the mind. Once you know how much of each type of material is being produced, then you can put this 10-point plan into action.

1 Minimise waste with prefabrication

Off-site manufacture cuts site waste to virtually nil. And it is easier to optimise a factory's production process and recycle offcuts than it is on site.

2 Standardise room layouts and components on large schemes

Design the job to accommodate standardised components. Alternatively, work with manufacturers to produce components, such as plasterboard, that are specially made to fit the design.

3 Minimise waste on site

Begin training programmes to raise awareness of waste minimisation among the team, including specialist contractors. Stress the importance of handling materials carefully.

4 Don't over-order materials just in case they might be damaged, or because the specification might be wrong

Instead, talk to the designer to ensure the specification is as accurate as possible.

5 Order materials just before they are needed to minimise the risk of damage

If possible store materials on site in a dry, secure place.

6 Work with suppliers to minimise waste, for example by getting them to take back pallets for reuse and minimise packaging

Do concrete blocks really need to be shrink wrapped in plastic?

7 Recycle site waste

Select a waste contractor that recycles as many types of waste as possible and check that it actually has the tools and processes in place to do this properly.

8 If there is space, segregate materials on site rather than using mixed-waste skips

This makes recycling easier and cheaper; indeed disposal of some types of segregated waste can be free.

9 Make sure workers sort waste properly

If you can't afford full-time marshals, label skips clearly and locate them carefully – a skip outside the site canteen will inevitably end up contaminated with food waste.

10 Once you have done the above, start again at the beginning, but this time specify products made from recycled materials to complete a virtuous loop

Once you have got the hang of that, why not design for reconstruction? For example, clearly label steel sections with their structural properties and make disassembly easier by using bolts rather than welding.

