



Ongoing vetting of contractors

Setting higher standards

Driving quality through a focus on

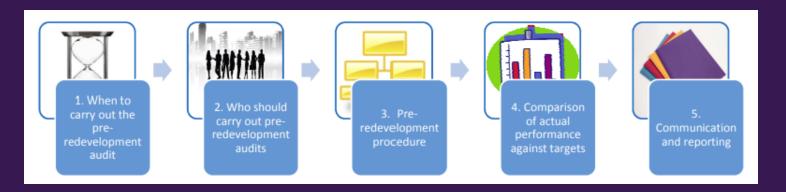
PRODUCT PROCESS PEOPLE

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■ The CIWM code of practice provides clear guidance for predemolition audit, see: https://condemwaste.org/wp-content/uploads/2018/10/Code-of-Practice-Pre-redevelopment-audit-July-17-V1.pdf



This document focuses on the requirements for a pre-fit out audit

Why do it?



- Promote circular economy practices
- BREEAM: <u>BREEAM circularity and resilience BRE Group</u>
- GLA circular economy statement required at planning stage: <u>Circular Economy Statements Guidance</u> | <u>GLA Engagement Portal (london.gov.uk)</u>
- Glasgow circular economy routemap: <u>Climate Emergency Implementation</u> <u>Plan (glasgow.gov.uk)</u>

- Other reasons:
 - To reduce waste to landfill
 - To increase opportunities for high value recycling
 - To identify items that can be reused in a building
 - To reduce the embodied carbon of the new fitout
 - To increase primary resource consumption of new fitout
 - To support earlier engagement of the fitout contractor



Good practice

Focus on reuse

When to do it?



Before all new fit out

Between a Cat A and a Cat B fit out

Prior to the appointment of a strip out contractor and as early as possible in the design process i.e. concept design stage (Riba Plan of Work Stage 2).

Good practice

The pre-fitout audits findings to be included within the pre-construction information pack for the fit-out contractor to consider with the team (including designer)

Ensure the strip out contractor is aware of the potential intention to reuse products when quoting for the work



Who should do it?

The audit should be carried out by someone independent of the client and, if appointed, the design team or project consultants.

Knowledge for auditor – basic knowledge of

- Building and demolition process.
- Material management options available for reusable and recyclable materials.

Good practice

Ideally, a member of a relevant Professional Institute or have appropriate training to ensure competence.





What should the audit contain?

The audit should follow the following steps:

- 1. Collection and examination of available information: age, type, construction method and condition of the space
- 2. Site visit to collect further information, eg: photos, visual examination
- 3. Estimation of types and amounts of materials
- 4. Assessment of suitability of material for reuse/recycling/other waste management method
- 5. Recommendations for materials management and target setting with a focus on reuse

Good practice

- Cost benefit assessment on key materials
- Focus on reuse of key products/materials





Comparison actual versus targets

- Data collected during demolition/ strip out
- Comparison of actual versus targets

Best practice:

- CO₂e of transporting materials from demolition and strip out
- CO₂e of emission from reuse, recycling and recovering (including potential savings)
- Costs/saving of management routes calculated



Example final table reporting (1)

Location	Element/ component	Material	Number of	Length (m)	Depth (m)	Height (m)	m ² or m ³	Tonnes	Condition
Eg: 1 st floor	Plasterboar d	Plasterboar d					100 m ³		
Eg: 2 nd floor	Floor covering	Carpet tiles	100				50 m ²		

<u>Good practice:</u> generate a materials passport for the products that have the potential to be reused, see: <u>How can Material Passports support material re-use of existing buildings? -</u>

<u>Orms</u>



Example final table reporting (2)

Material	Total qty (t)	% reused		% recycled		%	% sent to	%	kgCO ₂ eq avoided ¹
		On-site	Off-site	On-site	Off-site	recovered	energy recovery	landfilled	avoided ¹
Floor covering									
Raised access flooring									
Glazed partition									
Joinery									

To support your decision on the next life of a product, you can use the list of platforms that FIS has published with help from LINK partners – see: ADD LINK TO LIST HERE

Figures for kgCO₂eq/tonne of products can be found here: ICE Database V3 Launched - Circular Ecology

¹ Figures for the $kgCO_2$ eq saving can be calculated for products that will be reused using the following formula: Quantity of product x $kgCO_2$ eq/tonne = $kgCO_2$ eq avoided