Wst 01 Construction waste management

(All buildings)

Aim

To promote resource efficiency via the effective and appropriate management of construction waste.

Overview

Assessment type	Available credits	Applicable assessment criteria
Fully fitted	5+1 exemplary	All
Shell and core	5+1 exemplary	All
Shell only	5+1 exemplary	All
Residential: Fully fitted	5+1 exemplary	All
Residential: Partially fitted	5+1 exemplary	All
EU Taxonomy	-	See Ref 3.0

Minimum standards

Rating level	Criteria
Outstanding	- Pre-demolition audit OR - Waste management plan One credit

Assessment type specific notes

Reference	Assessment type specific note
-	None

Building type specific notes

Reference	Building type specific note
2.0	**No buildings, structures or hard-surfaces** If there are no buildings, structures or hard-surfaced areas on the site prior to the commencement of works, the credit for material inventory is filtered out.

Issue specific notes

Reference	Issue specific note
3.0	**For EU taxonomy:** A1-7.1-DNSH 4 and A1-7.2-DNSH 4 - At least 70% of the non-hazardous waste is prepared for reuse. The above EU Taxonomy requirements are fulfilled by meeting criteria 9 and 10 of this issue.

Assessment criteria

This issue is split into five parts:

- Pre-demolition audit – one credit
- Waste management plan – one credit
- Waste reduction - two credits
- Increased extent of recycling - one credit
- Exemplary credit – Increased extent of recycling

Pre-demolition audit – one credit

1 Complete a pre-demolition audit of all existing buildings, structures or hard surfaces being considered for demolition. This must be used to determine whether refurbishment or reuse is feasible and, in the case of demolition, to maximise the recovery of material for subsequent high grade or value applications. The audit must cover the content of M1 and:
   1.a Be carried out at Concept Design stage, prior to strip-out or demolition works, by a competent person (see Definitions).
   1.b Guide the design, consider materials for reuse and set targets for demolition waste management.

1 The contractor shall be provided with the material inventory and shall establish documented procedures to maximise high-value re-use and recycling of materials.

2 Refer to the audit in the waste management plan.

3 Compare actual demolition waste arisings and waste management routes used with those forecasted and investigate significant deviations from planned targets.

Waste management plan – one credit

4 Establish a waste management plan covering:
   4.a Appropriate targets (see M2) for non-hazardous and hazardous construction waste produced on site in kg of waste per m2 gross internal floor area (BTA).

4.b Routines to reduce the amount of non-hazardous and hazardous waste in accordance with the targets set in 5.a.
4.c Routines for sorting, reusing and recycling demolition and construction waste into at least the baseline for demolition and production according to the Swedish Construction Federation guidelines.
4.d How waste should be sorted on the construction site.
4.e Procedures for estimating, monitoring and reporting on non-hazardous and hazardous waste from the construction site and, if relevant, demolition.

5 A person from the design or site management team should be assigned to implement the procedures in criterion 5.

6 Report the amount of construction waste generated per m2 gross internal floor area (BTA) in kg from the construction process via the BREEAM-SE reporting tool.

Waste reduction – two credits

7 Achieve criteria 5 to 7

One credit

8 A maximum of 30 kg of construction waste per m² of gross internal floor area (BTA) has been generated within the project.

Two credits

9 A maximum of 20 kg of construction waste per m² of gross internal floor area (BTA) has been generated within the project.

Increased extent of recycling – one credit

10 A minimum of 70% (by weight) of non-hazardous construction and demolition waste (where applicable) generated by the project has been sorted for recycling.

11 Waste materials will be sorted into separate waste groups according to the Swedish Construction Federation guidelines

Exemplary credit - Increased extent of recycling

12 Achieve criteria 1 to 11 (where applicable).

13 A minimum of 90% (by weight) of non-hazardous construction and demolition waste (where applicable) generated by the project has been sorted for recycling.

Checklists and tables

None

Methodology

M1: Pre-demolition audit scope

Prior to the demolition of a building, it is important to carry out a structured pre-demolition audit. The purpose is to promote reuse, material recycling, and the safe handling of hazardous substances in accordance with the waste hierarchy. Swedish Construction Federation guidelines for resources and waste could be used as a guide (see CN4).

The pre-demolition audit must cover:

1. **Preservation Assessment -** An evaluation of whether all or parts of the building can be retained and further developed instead of being demolished.
2. **Re-use Assessment -** A mapping of building elements and materials that can be dismantled and re-used, either within the project or in external applications.
3. **Recycling Assessment -** Identification and quantification of key construction materials that can be separated and recycled in accordance with established industry categories. Energy recovery is not considered an acceptable form of recycling.
4. **Hazardous Materials Assessment -** Identification of potentially environmentally and health-hazardous substances and the development of appropriate measures for their safe handling prior to demolition.
5. **Applications and Constraints -** An analysis of potential applications and any limitations affecting the re-use or recycling of identified materials.
6. **Local Opportunities -** Identification of local actors, such as recycling facilities, reprocessing companies and re-use markets, that can receive and process the materials.

M2: Appropriate targets

These can be set according to best practice (where available) and will depend on the type of waste and the opportunities for reuse on site. Targets could also be set to improve on data from similar past projects or which are working towards a company target. The design team should justify why the targets are deemed appropriate. A target is NOT deemed to be an 'appropriate target' within this issue solely because it is achievable.

Note: Targets and measurements should exclude demolition and excavation waste as this varies from project to project.

M3: Increased intent of recycling

The sorting rate for material recycling shall be calculated in accordance with the guidelines issued by the Swedish Construction Federation attachment 22 section 3.1.2.

Compliance notes

Reference	Terms	Description
Pre-demolition audit		
CN1	Extensions to existing buildings	For assessments of extensions to existing buildings, where only the extension is being assessed, it is only the extension that must comply.
CN2	Multiple pre-demolition audits	The pre-demolition audit may be divided into multiple audits. For example, one audit may focus on the inventory of hazardous waste and hazardous substances, while another may address preservation, reuse, recycling, and overall waste management. These audits may be carried out by two or more individuals, each of whom must meet the relevant competence requirements of chapter 5.4.2 in Swedish Construction Federation guidelines for resources and waste, depending on the type of inventory performed
CN3	Basis for Mat 05	The pre-demolition audit could be adapted and used as basis for the strategy in criterion 1 in Mat 05 - material efficiency.
Diversion from landfill		
CN4	Swedish construction federation guidelines	Swedish Construction Federation guidelines for resources and waste is a publication on their website (Byggföretagens riktlinjer “resurs- och avfallsriktlinjer vid byggande och rivning 2025”). For this criterion the 2025 version or later should be used.
CN5	Limited site space for segregation and storage	Where space on site is too limited to allow waste materials to be segregated, a waste contractor may be used to separate and process recyclable materials off-site. Similarly, manufacturers’ take-back schemes could also be used. Where this is the case, sufficient documentary evidence must be produced which demonstrates that segregation of materials is carried out to the agreed levels and that materials are reused or recycled as appropriate.
CN6	Contractor not yet appointed at the design stage	Where the contractor has not been engaged at the design stage certification, it is acceptable to award the credits based on a commitment. This commitment must be from a suitable member of the design team and must detail the targets and criteria which must be met. Evidence must also confirm that the details in the commitment will form part of the contractual requirements. Note: This does not apply to the requirement for a pre-demolition/pre-refurbishment audit, which must be undertaken at Concept Design Stage.

Evidence

Criteria	Interim design stage	Post construction stage
Pre-demolition audit		
1-4	Copy of compliant pre-demolition audit.	Comparison of forecasted and actual demolition waste.
Resource management plan		
5-7	Copy of compliant waste management plan including appropriate targets for construction waste produced.	Records of actual waste arisings from site.
6	Name on person responsible for recordkeeping	Same as in interim design stage
Waste reduction		
9-10	Documentation of set target	Record of actual waste

Criteria	Interim design stage	Post construction stage
Diversion from landfill		
11-14	Relevant section or clauses of the building specification or contract. OR A letter of commitment from the client or developer. OR Copy of waste management plan which includes relevant commitments/targets and procedures to divert waste from landfill.	Records of actual waste arisings from site, amount diverted from landfill and how this has been processed i.e. recycled, reused, etc. Evidence of waste transfer station recycling rates, where applicable. Confirmation of how waste was sorted into the key waste groups. Data to be separated for demolition and construction waste.

Definitions

Competent person – pre-demolition audit

An individual who has appropriate knowledge of buildings, waste and options for reuse and recycling of different waste streams. The person should comply with the technical competency requirements listed in Swedish Construction Federation guidelines for resources and waste chapter 5.4.2.

Diversion from landfill

Diversion from landfill includes:

1 Reusing the material on site (in situ or for new applications)
2 Reusing the material on other sites
3 Salvaging or reclaiming the material for reuse
4 Returning material to the supplier via a ‘take-back’ scheme
5 Recovery of the material from the site by an approved waste management contractor and subsequently being recycled or sent for energy recovery.

Inert waste

Waste is considered inert if:

1 It does not undergo any significant physical, chemical or biological transformations;
2 It does not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm to human health; and
3 Its total leachability and pollutant content and the ecotoxicity of its leachate are insignificant and, in particular, do not endanger the quality of any surface water or groundwater (taken from the European Community (EC) Directive 1999/31/EC on the landfill of waste).

Additional information

Best practice construction waste management plan

Best practice is a combination of commitments to:

1 Design out waste (materials optimisation)
2 Reduce waste generated on site
3 Develop and implement procedures to sort and reuse and recycle construction and demolition waste on site and off site (as applicable)
4 Follow guidance from Swedish Construction Federation