4.3 Internal waste and recycling storage

Waste and recyclables generated by activities undertaken in a building is known as operational waste. The amount of this material generated depends on the building use, (e.g. office, residential) and should be managed proficiently. This can be achieved by following the "Reduce, Reuse, Recycle" principle to minimise economic costs and environmental impacts.

A building-level management strategy for waste and recyclables should be created by the design team and implemented by the facilities management team to achieve the minimum requirements of the Pearl Building Rating System. The strategy must:

1. Estimate the quantities anticipated using the building waste calculator tool available from the Estidama web site.
2. Review the existing and planned materials collection and treatment infrastructure for the building location by contacting, the Centre of Waste Management (www.cwm.ae)
3. Document the intended waste collection company or companies and the recycling or disposal facilities
4. Provide enough space to segregate waste into:
   - Green container for recyclable plastics, glass and metals;
   - Blue container for recyclable paper and cardboard;
   - Black container for non recyclable and non compostable waste; and
   - An optional container may be provided for compostable organic waste (if there is suitable treatment available)

   Where the above recycling measures meet the mandatory requirements for landfill and incineration diversion, the remainder residual waste can be allocated to landfill and incineration.
5. Describe the logistics of materials movement within the building to ensure the residents maximum carrying distance is less than 30 m and is optimised for every building user.
6. Describe how waste and recyclables will be collected by external collection vehicles for transportation to adequate treatment or disposal facilities.

Waste and recyclables generated in the building should be stored on each building floor before being taken to a central storage facility for the whole building. From there it will be collected for transport to the appropriate treatment or disposal facility.

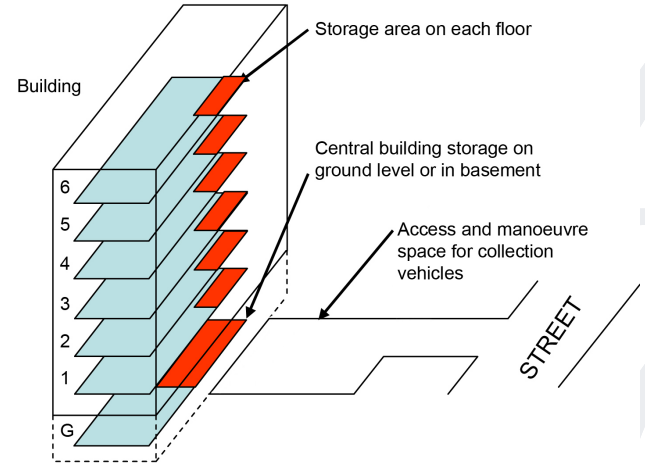
The floor transfer rooms should be clearly indicated, well ventilated, easy to clean and located near service lifts or waste chutes, in common areas of the buildings but separated from them. Each room should be sized according to:

1. Expected generation on each floor. This can be worked out by apportioning the total building waste and recyclables generation to each floor area.
2. Container type. Typically these have capacities of 120 to 240 litres;
3. Collection frequency to the central storage room. This will be defined by the building's facilities manager and it is typically daily or even more often.

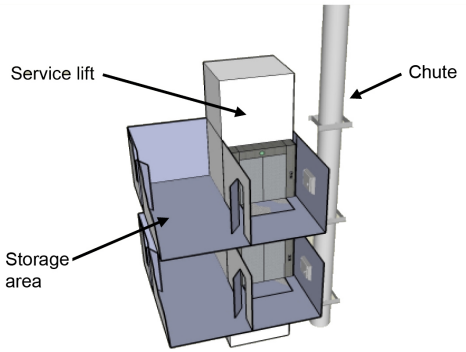
Related Credits

- SM-R3: Basic Operational Waste Management

Example 4.3: Depictions of storage room connection



Waste and recyclables storage area (externalconnection)



Waste and recyclables storage area (internal connection)