

BSkyB Harrods Demolition

Application of the Waste Hierarchy



Scope of Works

The former Harrods warehouse was demolished over a period of approximately seven months (i.e. between March and September 2013) to create space for Building 2 to be constructed as part of the new Campus Masterplan. The warehouse was a 24,682m² (GIA) steel frame structure with a reinforced concrete slab. The principles of the waste hierarchy namely: *Prevention, Preparation for reuse, Recycling, Recovery, Disposal* were duly applied on Harrods deconstruction site.

Client
BskyB

Year
2013/14

Outcomes

Waste arisings

As of September 2013, a total of 40,021 tonnes of waste has been produced. Concrete represents the largest waste stream at 58%, this is followed by metal accounting for 30% of the waste arisings. Finally mixed construction and timber represent 7% and 4% respectively of the arisings. [Ref Fig.1].

High Recycling

Overall 100% of the waste arisings were diverted from landfill [Ref Fig.2]. Approximately 99% was either recycled (metals) or downcycled (crushed concrete, inert and timber); the remaining 1% was sent to an Energy Recovery Facility (ERF)¹. The good levels of on-site segregation was determinant in achieving an exemplary recycling rate

On-site recycling and reuse

Harrods concrete slab was crushed on site. In total 8217m³ (approximately 14,791 tonnes) of concrete was processed and graded to a 6F2 specification which will be subsequently reused as piling mat for the construction of Building 2. Aside from representing a massive material savings, this initiative eliminated approximately 1,479 truck movements by not having to dispose of the redundant slab and subsequently importing new aggregates for the piling operation. As a result, Sky prevented unnecessary dust and noise nuisance to the local community. In addition an estimated 198 tonnes of CO₂ in transport emissions was saved, equivalent to the annual energy use of almost 2200 Sky set top boxes.

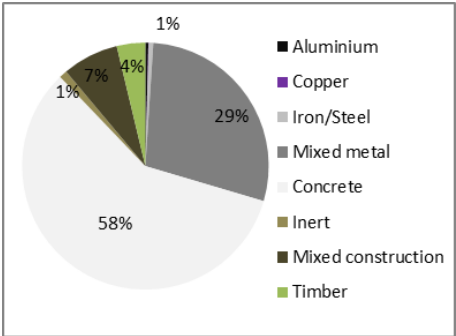


Fig 1 – Waste arisings breakdown - Harrods

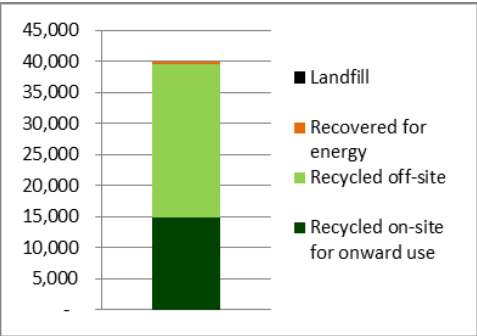


Fig 2 – Waste end-of-life routes - Harrods

¹ERF is a facility producing energy by incinerating waste