

GROSVENOR

Talking reuse with a large real estate company

About - As part of a refurbishment project in London, real estate company Grosvenor brought together different consultants to study reuse possibilities. Their findings have been communicated to the designers. The consultants pursued their research and enlarged their scope to include more general questions about reuse in the construction industry. They shared their results through guidebooks and webinars.

Challenges - Introduce a major real estate developer to the reuse of building materials. Guide design offices and consultants in their research. Start from a small-scale project to think about how to implement large-scale strategies.

Materials involved - Bricks, steel structure, roof slates, cast iron radiators, floor tiles, wooden floors.

London - UK - 2021 - Private procurement
Project Size : 400m2 - FCRBE partner : [Rotor asbl](#)
Project Owner : [Grosvenor](#)
Consultants, architects and engineering offices:
[Arup](#) - [Orms](#) - [Elliott Wood](#) - [HETA](#) - [ReLondon](#)

Covers of the guides published by the various consultants © Elliott Wood, Orms, Heta, ReLondon, Arup

Home / Our businesses / Grosvenor Britain & Ireland / Environmental Leadership / Accelerating material re-use

Accelerating material re-use

The building and construction sector uses half of all new resources and generates more than a third of all waste in the EU*.

To adapt buildings to new uses and meet the needs of growing populations without over exploiting natural resources, circular economy principles must be adopted at scale.

In the UK, Grosvenor is seeking to build confidence in supply and receiving materials on site through enhancing knowledge and creating a network of progressive companies willing to trial new approaches.

In 2021, we canvassed 120 built environment professionals representing the full lifecycle of a building to find out more about the prevalence of, and barriers to, accelerating material re-use.

A series of guides created by our partners, HETA, ARUP, Orms and Elliott Wood address the major barriers to re-use and are published below.

Download our survey results here.

* Source: <https://www.bamb2020.eu/>

Join the re-use network

Click [here](#) to sign up

If you have **specific materials to contribute** or would like to be added to an email list for those willing to contribute re-used materials, click [here](#).

If you **need specific materials** or want to be added to an email list for those willing to receive re-used materials, click [here](#).

< *Grosvenor's website page on reuse of building materials* © Grosvenor

Grosvenor, one of the world's largest property developers, wants to engage in the reuse of building materials. As a first step in the subject and starting from a real situation, Grosvenor has brought together a group of consultants to consider reuse in a refurbishment project in central London.

Within this project, different subjects have been studied by these consultants : how to assess the reuse potential, the question of material passports, how to source reused materials, etc.

< Extracts from first impressions on the reuse potential of the building elements present on site © Rotor

Quick audit: first impressions on the reuse potential of the building elements present on site

23 December 2020
Rotor - FCRBE

OVERVIEW TABLE

Elements	Quantity
Category A	
1. Bricks	
2. Steel beams and columns (to be confirmed)	
Category B	
1. Structural wood	
2. Roofing slates	
3. Sanitary equipments	
4. Tiles	
5. Wooden floor	
6. Lighting	
7. Doors	
8. Tec	
9. Oth	

LOCALISATION

We have taken the following photos:

- 34 NR 01, 02
- 34 NR 03, 04
- 34 NR 05, 06

A.1. BRICKS

Bricks are one of the most commonly reclaimed materials. There are a large number of specialised resellers in London and in the UK. Today's reclaimed bricks are solid bricks from walls built with a lime-based mortar (or other wall materials: clay, adobe, etc.). Cement mortar, the replacement of which makes it more difficult to clean the bricks, became more widely used from the 1930s. Most bricks used before this period are suitable for reuse, for the North-West building a further study is needed in order to assess the type of bricks and mortar that compose the different walls so that their reuse potential can be confirmed. To do so, we could recommend to contact a professional dealer to get his opinion on the feasibility of the reuse operation. The majority of suppliers specialising in reusable bricks are also demolition firms. They take jobs of knocking down a building or part of it; the bricks are worn (sometimes). The original brickwork is deconstructed using a method adapted for reuse. In some cases, the value of the bricks enables these firms to offer a reduction on the demolition costs. The total proportion of reclaimed bricks depends on the condition of the original brickwork, it is usually around 30%.

Obviously, the reuse potential of bricks should not be an argument for demolition on its own!

BRICKS.001

Bricks

All buildings

... m2



CATEGORY A

B.4. TILES

Tiles constitute a category of products handled by numerous dealers that can be broken down into several types, according to period, composition and shape. In the early 20th century, the production of ceramic tiles was industrialised in Belgium and northern France. Since the inter-war period, cement tiles have gradually replaced ceramic tiles. Some tiles served as a floor covering and are reused as such. Others were used as wall cladding. Unwaxed tiles generally belong to the second category. Tiles are often very resistant and can stand frequent washing without a problem. Ceramic tiles can be laid outdoors without risk. Cement tiles, however, are more porous and more sensitive to humid conditions. Terrazzo tiles can also be found on the market, which are used as a floor covering. In some regions, they are often produced in a hexagonal shape. Apart from the terrazzo tiles, which are present in a certain quantity, the rest of the tiles are in small quantities and their reuse attempt could be somewhat anecdotal!

TERRAZO

Terrazzo floor tiles

34 NR 03, 34 NR 04

... m2



TERRAZO

Ceramic wall tiles

34 NR -1

... m2



CATEGORY B

Rotor made a first estimation of the reuse potential of the elements present in the project based on photographs.

The elements with a reuse potential were divided into two categories: those that may be of interest to professional resellers and those that may be of interest to other actors (small contractor, local organization, individuals, etc).

NorthRow project, London / FCRBE Pilot Operation
Integration of reused materials
Checklist
 April 2021

Document prepared by Rotor at 107B Brussels www.rotorlab.org www.fcrrbe.com

1 | **Wooden floors**

Reuse market

The reuse market, which includes this field. These materials are often readily determines its value. Pine floors (oak, sweet chestnut, beech, etc.) they aged before the 20th century. It is as floor coverings, but which have various uses: paneling, etc. Reusable wood applications: new constructions or renovation.

It varies by a factor of three, depending on the type of wood. Such preparatory actions are necessary for installation. Hoping to make savings by buying an unprepared product is therefore not always a safe bet.

Wooden floors on the reuse market

They sell it

Installation: The contractor may call on a specialised subcontractor to lay the parquet.

They sell it	
Wood Job UK - London South East Tel: +44 (0)20 7462 1198 Informational: +44(0)20 7462 1195 E-mail: woodjob@woodjob.com http://www.woodjob.co.uk/about	Reclaimed Flooring Co London SE1 Courtenay Road CTM 5PL Tel: +44(0) 207 200 1198 http://www.reclaimedflooring.com
Drummond Shaw Design http://www.drummondshawdesign.com	Burk Bros Flooring 61001111 Broomfield Road Sturum SE18 6AL 020 8638 5124 02019 363233 http://www.burkbrosflooring.co.uk/web/see-also/index.html#about

Disclaimer: The above list of retailers is indicative and non-exhaustive. There are many retailers in the UK. Based on various websites and profiles, the selection presented here does not imply the absence of other retailers and actors of the reuse. We advise the design team to check the www.rotorlab.org for other retailers.

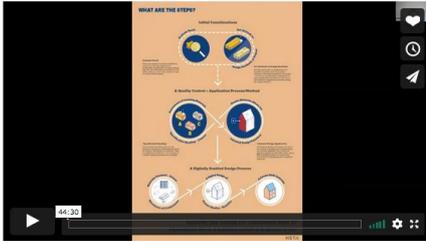
They did it

Apartment in Brussels, K&A architects.
<https://kapelle.eu/en/mode020>

< Extract from the selection of materials to be integrated © Rotor

Based on the needs of the renovation project, Rotor made a selection of reuse materials that have a good chance of being integrated into the project and provided information about these materials and the reuse market, a series of good contacts for these specific materials and examples of projects that integrated these reuse materials with success.

They did it



Designing for material re-use

Grosvenor’s Steve Gilchrist joined Heta Architects and RotorDC to discuss the initial considerations when incorporating re-used materials into the design process.



Accelerating material re-use – Watch the webinar

Grosvenor’s Steve Gilchrist joined Gary Elliott, CEO and Founder of Elliott Wood to share the results of our survey and discuss the launch of their guide to decarbonisation



How can Material Passports support material re-use of existing buildings?

Grosvenor’s Steve Gilchrist joined Orms and Turner & Townsend to discuss the launch of a new guide to material passport



The practicalities of reclaimed materials

Grosvenor’s Kathy Marsden joined Arup and ReLondon to discuss their guides to sourcing and using reclaimed materials

< **Webinars available on Grosvenor’s website © Grosvenor**

All of the consultants' research resulted in the publication of the different guides as well as webinars presenting the different guides. Rotor participated in one of these webinars.

- Asking consultants to carry out a study about material reuse at a very early stage of a project offers opportunities but also has some drawbacks. It allows to be aware of the major challenges and issues of working with reused materials and to anticipate certain issues well in advance. On the other hand, because the project is so undefined at this stage, it is not possible to deal with the very concrete questions that specific materials pose. The recommendations therefore remain at a very theoretical stage.