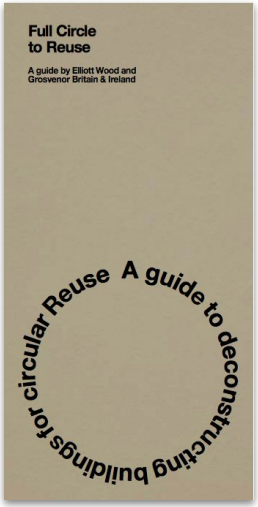
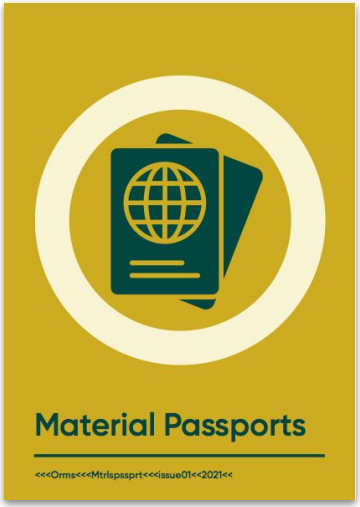
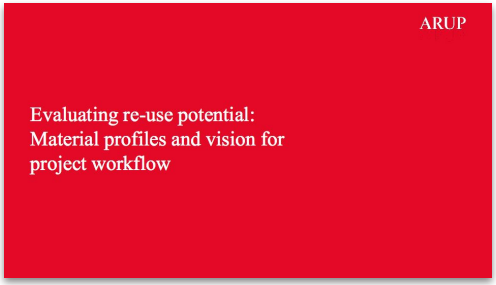





*Covers of the guides published by the various consultants © Elliott Wood, Orms, Heta, ReLondon, Arup*

# GROSVENOR

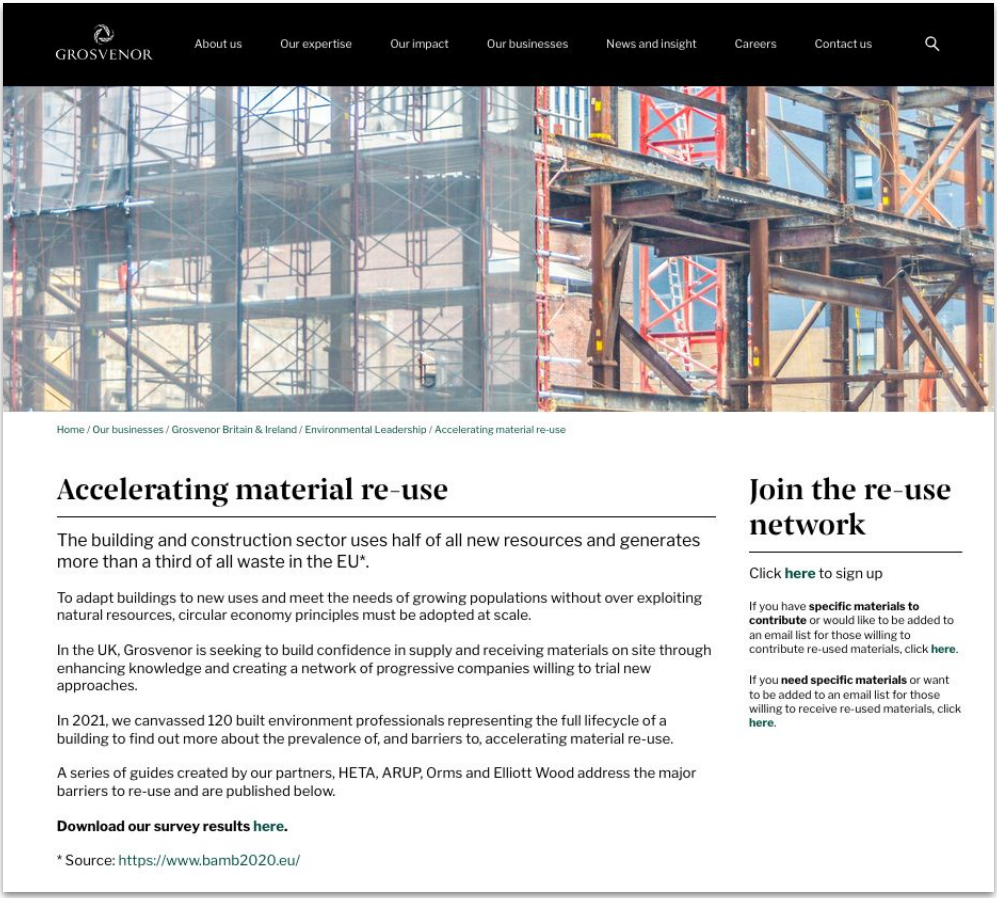
## *Talking reuse with a large real estate company*

**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.

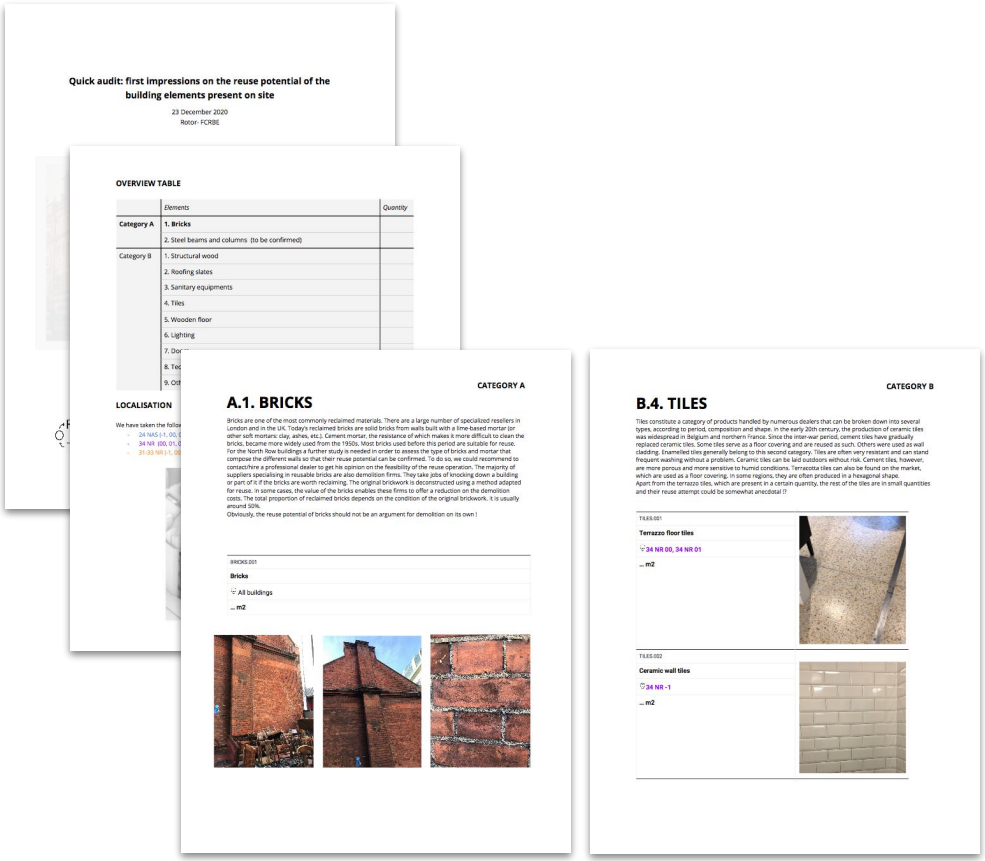
**London - UK - 2021 - Private procurement**
Project Size : 400m2 - FCRBE partner : Rotor asbl
Project Owner : Grosvenor
Consultants, architects and engineering offices:
Arup - Orms - Elliott Wood - HETA - ReLondon




***< 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.



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 | |

LOCALISATION

CATEGORY A

A.1. BRICKS

Bricks are one of the most commonly reclaimed materials. There are a large number of specialized resellers in London and in the UK. Today's reclaimed bricks are solid bricks from walls built with a lime-based mortar (or other soft mortars: clay, ashes, etc.). Cement mortar, the resistance 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 Row buildings 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/hire 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 if the bricks are worth reclaiming. 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 50%.

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

BRICKS.001

Bricks

All buildings

... m2

CATEGORY B

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 widespread in Belgium and northern France. Since the inter-war period, cement tiles have gradually replaced ceramic tiles. Some tiles serve as a floor covering and are reused as such. Others were used as wall cladding. Enamelled tiles generally belong to this 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. Terracotta 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 !?

TILES.001

Terrazzo floor tiles

34 NR 00, 34 NR 01

... m2

TILES.002

Ceramic wall tiles

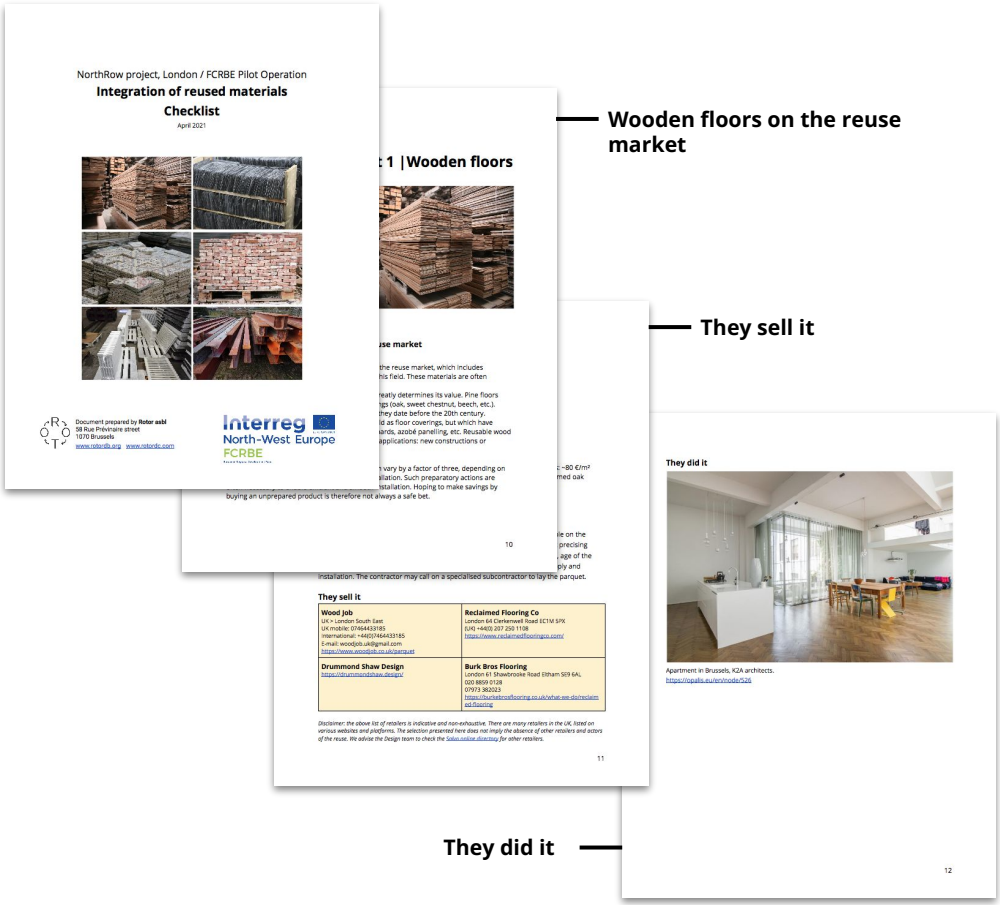
34 NR -1

... m2

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

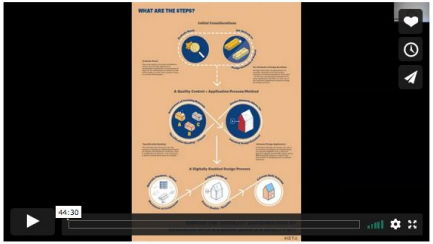
Rotor made a first estimation of the reuse potential of the elements present in the project based on photographs.

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).




***< 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.



## Designing for material re-use

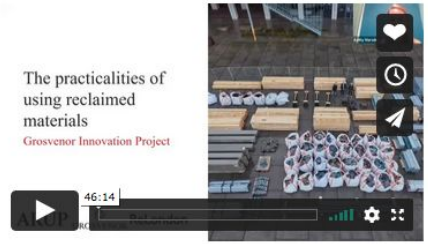
Grosvenor's Steve Gilchrist joined Heta Architects and RotorDC to discuss the initial considerations when incorporating re-used materials into the design process.


## 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.