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With Best Compliments

MUTUAL
PRIORITY SERVICE
GOLD



PUBLIC MUTUAL
WHOLLY-OWNED SUBSIDIARY OF PUBLIC BANK





Code Word Green

In an age of skyrocketing commodity prices, is it possible to build a “wasteless” interior within a building? The optimistic answer is yes. But it takes a busload of smart thinking to push the boundaries of innovation and arrive at the end product. And the lessons learnt have wider implication for future development models.

‘LIVING LAB’ EXPERIMENT

In 2009 the HAKA building was appointed a campus for clean-tech activity. It is essentially A ‘Living Lab’ for companies, institutions and authorities in the field of water and energy to pool their knowledge and research.

For this task Doepel Strijkers Architects explored the concept of using recycled materials as the fulcrum of the project. Doepel Strijkers Architects is one of the partners of REAP PLUS (Rotterdam Energy Approach & Planning). In addition to recycling the basics that involve water and waste, recycling building material is also part of their methodology; hence they chose the letter as the mainstay of their project.

Various material flows from demolition objects were researched for their feasibility to be used as part of the interior portion of the Haka building.

Once the investigation was completed, a toolbox was constructed with the available materials that passed the test. To be part of this generic toolbox, the objects were evaluated based on the technique that would be required to fit them in, their carbon footprint and the cumulative cost and production process involved. Clean Tech Delta took charge of this stage of project.

PRIORITISING FLEXIBLE USE

The building was originally conceived to look like a machine. The designer



wanted to build something that looked aesthetically similar to the functions that were carried out within its premises.

The entrance was enlarged with large glass windows. Orange cued vertical TL-lamps are visible from the road, clearly designating the point of entry. The portion of the original public area offers space to work, as well as doubling up to act as a meeting and hospitality area. A raised platform functions as a temporary office space for current tenants and will be used as a restaurant in the next phase of the

development.

Tables around the platforms double as flexible workstations, complete with WiFi Internet connections. The centrally located catering point functions as a pantry for the companies on the platforms and also doubles up as a kitchen/bar during events. This pantry will be extended into a professional kitchen for a restaurant operator in the next phase of the development.

To the east, the original office area has been converted into an auditorium and

temporary exhibition space. A flexible acoustic partition wall, constructed from 8.000 kilograms of clothing, ensures that the space can be adapted to changing needs. Thus even the auditorium and exhibition spaces can function as separate areas but mixed used is also possible.

RECYCLED MATERIALS

Doepel Strijkers Architects has re-used demolition material from pre-and post-war buildings to create this structure.

When processing the unused demolition materials into new products, the intrinsic value of the materials was the deciding factor to determine their mode of use. Additionally, other major factors that were guiding principles in the design process were the need to minimise waste, minimise technical operations and minimise various mobility factors.

SOCIAL COMPONENT

When designing and building components for the office, social factors were taken into consideration. For a start, a large





portion of the objects that were built used the labour force from a disadvantaged group in society that came from the Work and Probation group. As they did not have specific skills and could thus only be used to replicate simple repetitive work, when designing the products to be used in the building, these skill limitations were taken into account. Thus the designs were kept simple and did not require complex technical operations but were rich in labour-intensive detailing, which is unusual in conventional design processes.



SUSTAINABILITY COSTS

In collaboration with AVR / Van Ganssewinkel and Public Works, the impact of using demolition materials, plus the additional transportation and processing costs in term of their carbon footprint were calculated as part of the cost per item.

In addition to carbon footprint cost calculations, there were also technical aspects to this building process that revolved around the reuse of materials. These included certification, fire safety and building costs.

The cumulative knowledge gained in the process of implementing this strategy provides insight that has the potential to be applied for an alternative development model for a wider area in terms of the economic, environmental and social costs. 