Circular building materials and solutions - Perspective of architects

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Architects have to face the complexity of an expanding market of ‘sustainable building products’.
Sustainable solutions: focus on initial construction stage concerning environmental impact and financial benefits

Material selection and assembly methods have a large impact on the future life cycle impacts of a building.

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Total financial life cycle costs mount up to 3-5 times the initial investment cost.

Buildings are responsible for:
- 40% material use
- 40% waste streams
- 40% CO2 emissions
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Introduce reusable and compatible building systems with reversible connections for future adaptation and recuperation.
Anticipate future maintenance and end-of-life of different functional building layers, e.g. technical services.
Design building structures that support polyvalence and that foster a wide range of future possibilities of change adapted to users with high exploitation value.

Solids 1, IJburg, Amsterdam

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Gathered data sets with information about the technical properties, the service life, environmental and financial life cycle of building elements, etc.
Policy pushing the transition towards a circular use of building systems
Certification of circular / reused building materials, …
Collaboration between all building stakeholders for the development of new and retrofitted circular buildings; inspire more architects!

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Development of tools that enable to guide architects and users towards a circular building and enable to evaluate the circularity of buildings

CIRCULAR BUILDING ASSESSMENT

- Environmental LCA
- Economic LCC
- Reversible Building Design
- Social Value

Circular Building Assessment

WEB Platform

User Information

BIM

Material Passport

Supporting Databases

Key Performance Indicators

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Keep in contact!

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