

O

Concular

How digital tools will enable circular construction

Dominik Campanella
CEO / Co-founder



The construction sector is the largest polluter in the world

A photograph of a massive construction site. In the foreground, several yellow tower cranes are positioned around a building that is heavily covered in green scaffolding. Behind it, other buildings are visible, some also under construction with their own cranes. The sky is filled with large, white, billowing clouds.

The construction sector is the largest polluter in the world

60%

global
waste

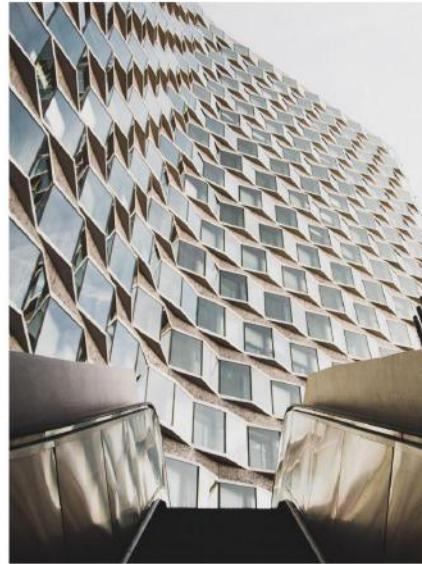
40%

global GHG
emissions

Take



Make



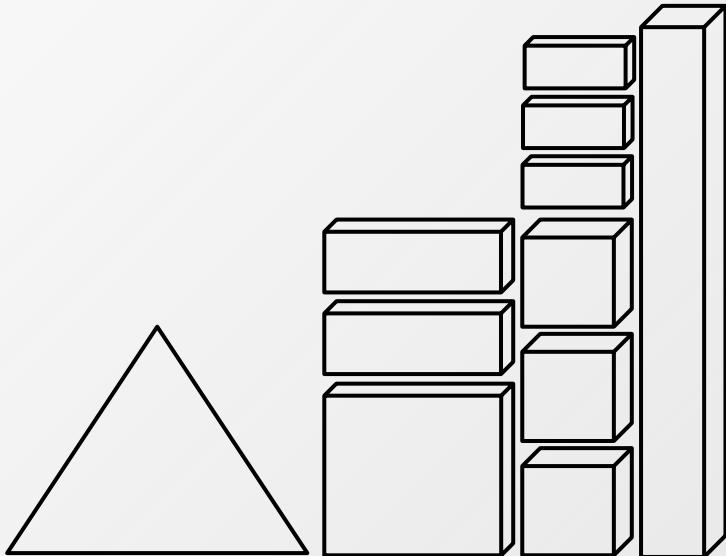
Waste





Buildings as urban mines

Source for new products and buildings





Circular Economy

We have to follow the 5R of Circular Economy

Saved CO₂ and resources

01 Refuse



02 Reduce



03 Reuse



04 Repair



05 Recycle



10 years restado

Europe's largest marketplace
for circular construction



>5T
Sellers



80T
User
per month



1 Mio
materials

2012 - today

3 years Concular

The digital ecosystem for circular construction

2020 → Today



Concular

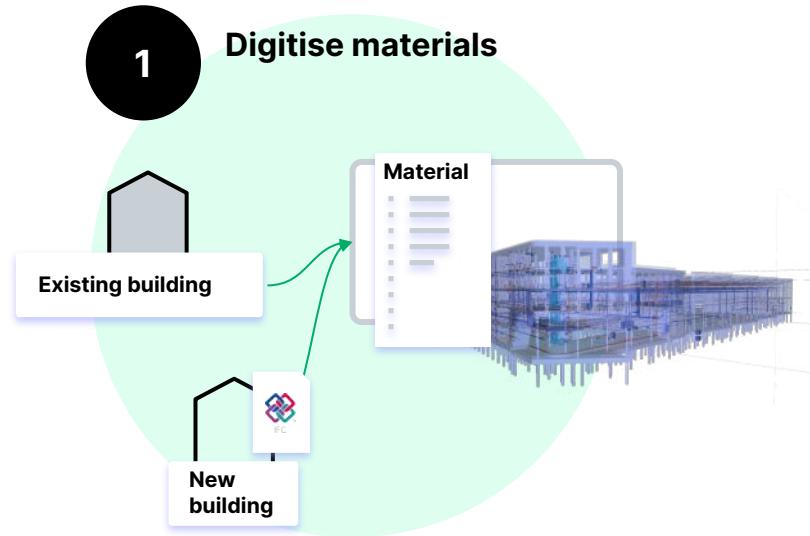
Digital platform for circular construction

The platform features a central navigation bar with icons for MaterialHub, Orders, Inventory, User, and Product data. The main content area is divided into several sections:

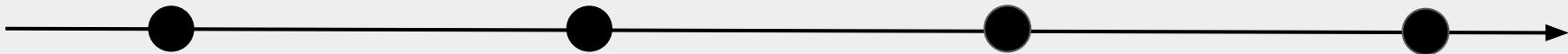
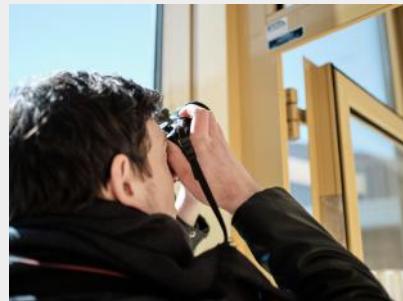
- Orders:** Displays demand (17), on-sale (11), and back-order (12) items. Categories include Lighting (40 pieces), Zamboni (122 pieces), Aluminum (122 pieces), and Plastic (11 pieces). A search bar and filters for category, address, and search are available.
- Inventory:** Shows a list of items with quantity and unit information. A 3D rendering of a building labeled "Corner House" is displayed to the right.
- Savorby Hospital:** A detailed view of a public building (40,000 m², Berlin, Germany). It includes:
 - LCA potential:** -92.9t CO2eq
 - Material value potential:** 2.18M €
 - Circularity score:** 8.9 (out of 10)
 - Embodied Carbon:** Circular progress bars for Site (24.5t CO2eq), Facade (12.7t CO2eq), Structure (25.2t CO2eq), Services (6.01t CO2eq), Space Plan (5.5t CO2eq), and Stuff (2.5t CO2eq).
 - A small 3D model of the hospital building.

Platform

How it works



Circularity assessment of an existing building



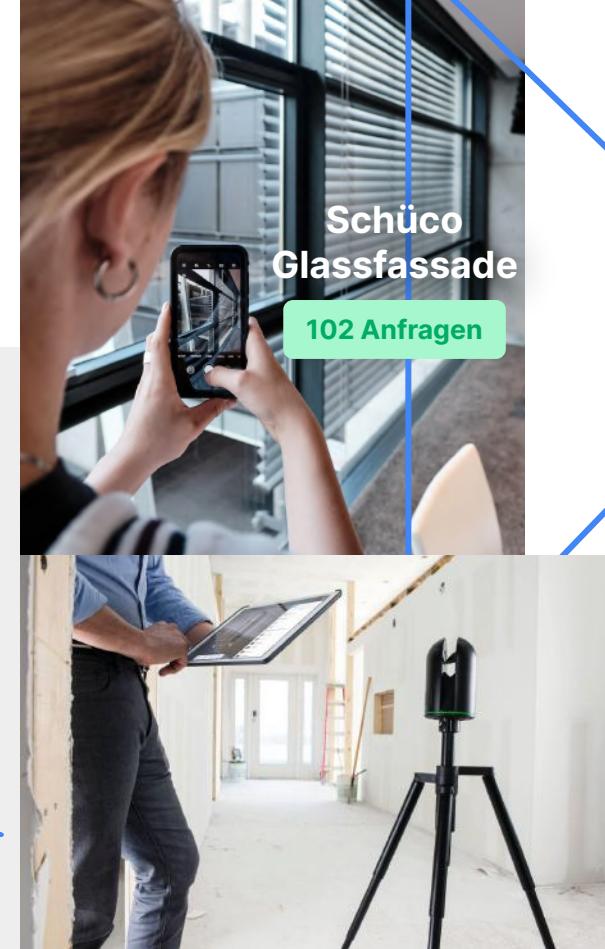
Sifting through the buildings, data collection and surveying

Photographic documentation

Assessment of the condition and deconstructability of the materials

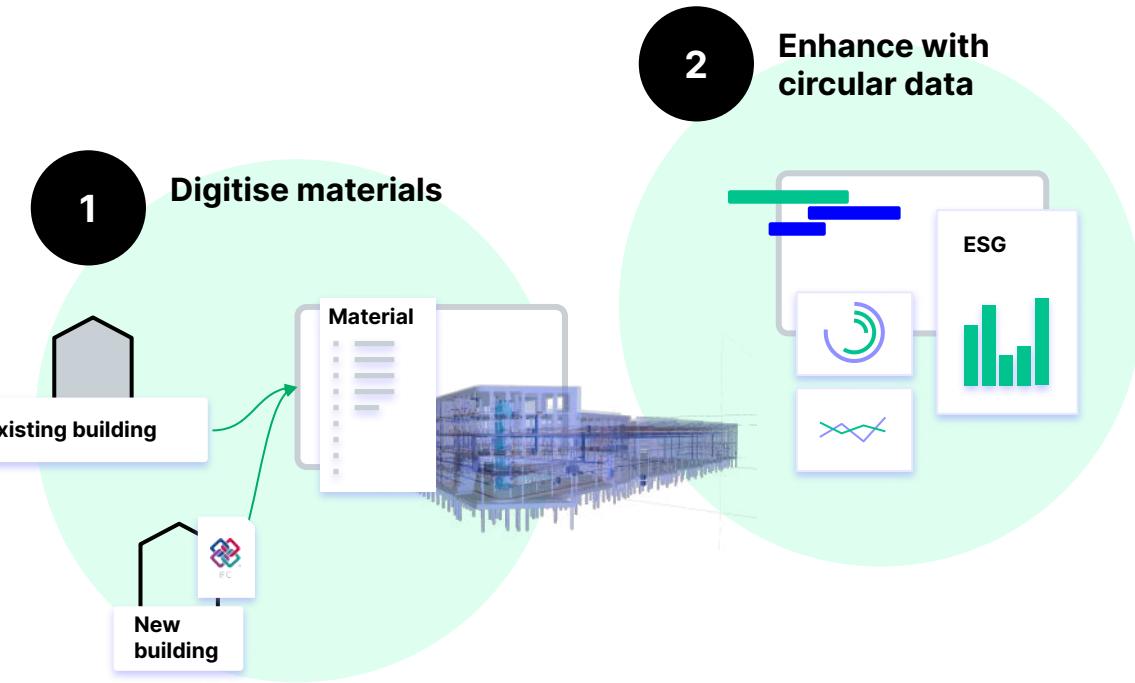
Storage in digital material database

Circularity assessment of an existing building



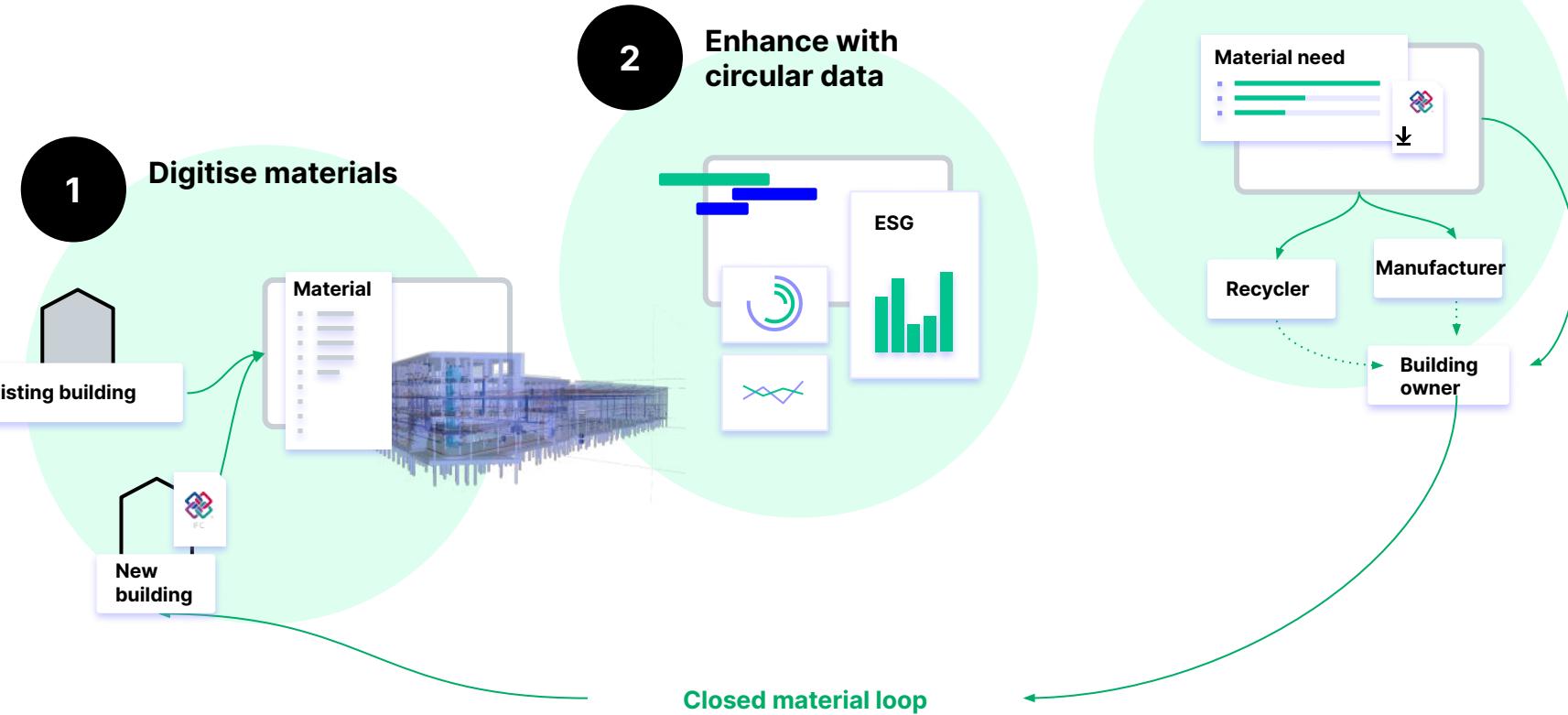
Platform

How it works



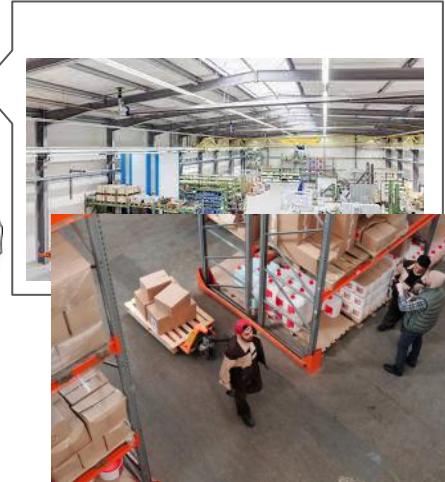
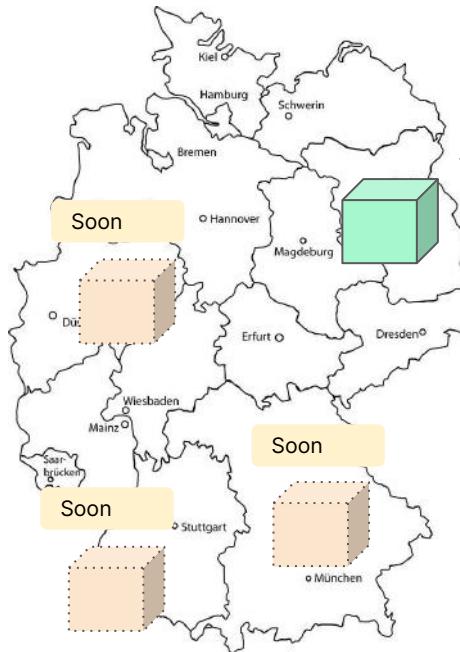
Platform

How it works





Storage- We established Urban Mining Hubs



Sensorenlösung
für Mobilität, Verkehr,
Klimaschutz und Umwelt

BERLIN

Concular



ALBA

Wir sind die Zukunft.

DIN SPEC 91484: Pre-Demolition Audits



Procedure for capturing building materials as a basis for assessing the high-value reuse potential prior to demolition and renovation work (Pre-Demolition Audit).

- Developed with 30 leading stakeholders in the construction industry, including:



Brandenburgische
Technische Universität
Cottbus - Senftenberg



GREYFIELD
GROUP



HM
Hochschule München
University of Applied Sciences



U N I K A S S E L
V E R S I T Ä T





Concular is market leader for circular construction



300+

successful projects in
DACH region

2,000,000+

materials circulated

55+

Circularity Partner from
planning, product and
real estate



Concular is largest company for circular construction

65+ talented people:



Public clients:



5 offices in Germany:



Private clients:



30+ Awards:





Some examples...

Project example: 1. Behrensbau, Düsseldorf





Project example: 1. Behrensbau, Düsseldorf



1

Durchführung der
Bestandserfassung
und Digitalisierung
der Materialien

Project example: 1. Behrensbau, Düsseldorf



- Fitted kitchens, doors, carpet tiles, ceiling panels, washbasins
- Lindner company system partition walls
- +800 luminaires from Zumtobel company



1

Execution of
inventory recording
and digitalization of
materials.

Project example: 1. Behrensbau, Düsseldorf



1

2

Execution of
inventory recording
and digitalization
of materials.

Examination and
take-back systems with
manufacturers and other
partners.



Project example: 1. Behrensbau, Düsseldorf



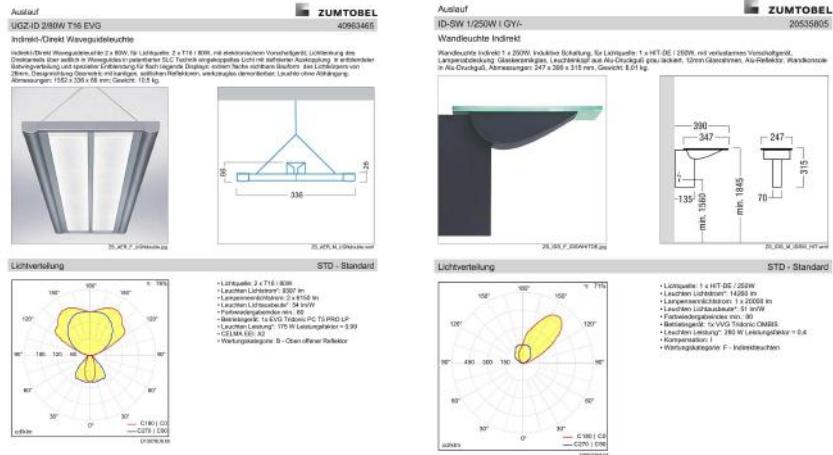
1

2

Execution of
inventory recording
and digitalization of manufacturers and other
materials.

Examination and
take-back systems with
partners.

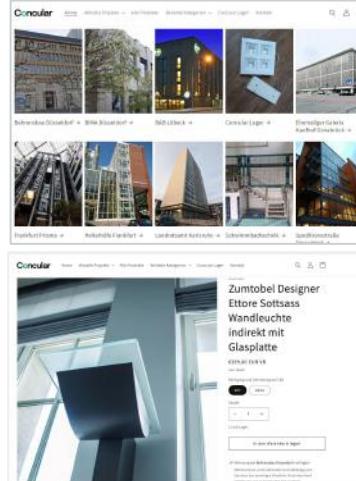
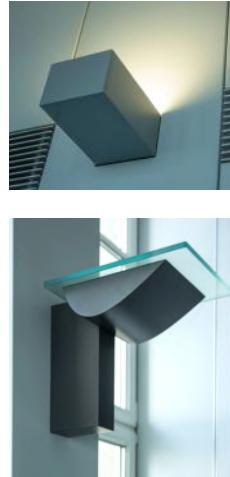
Collaboration (manufacturer's warranty) with Zumtobel and Lindner for the recertification of lamps and system partition walls.



Lindner

ZUMTOBEL Group

Project example: 1. Behrensbau, Düsseldorf



1

2

3

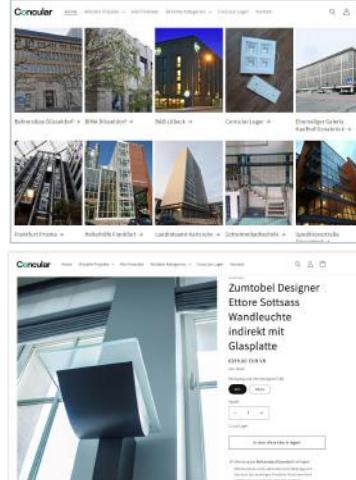
Execution of
inventory recording
and digitalization
of materials.

Examination and
take-back systems with
manufacturers and other
partners.

Material brokerage
through Concular's
online shop.



Project example: 1. Behrensbau, Düsseldorf



Execution of inventory recording and digitalization of materials.

Examination and take-back systems with manufacturers and other partners.

Material brokerage through Concular's online shop.

Execution of selective dismantling.



Project example: 1. Behrensbau, Düsseldorf



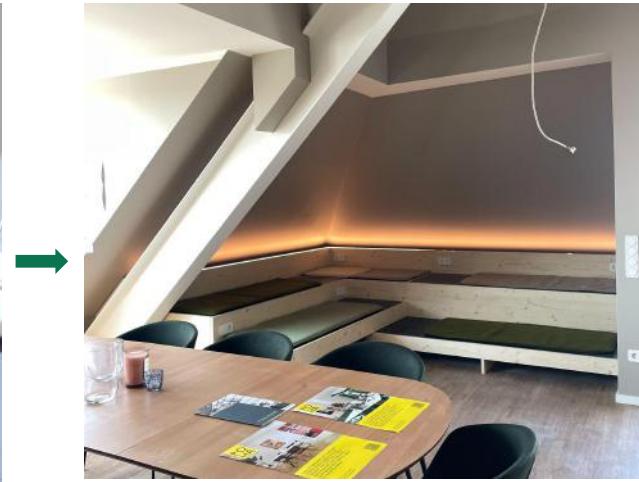


Project example: 1. Behrensbau, Düsseldorf





Project example: 1. Behrensbau, Düsseldorf

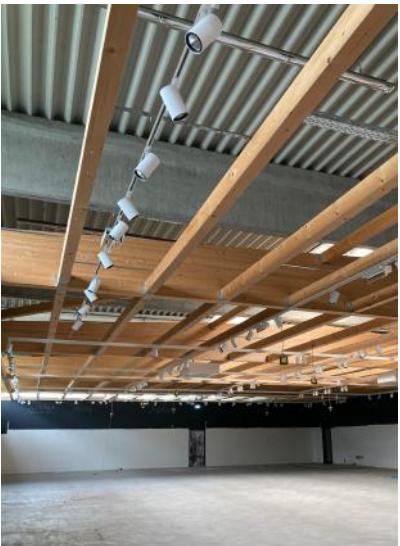


Project example: 2. Discounter, Heilbronn





Project example: 2. Discounter, Heilbronn



Kreislaufwand

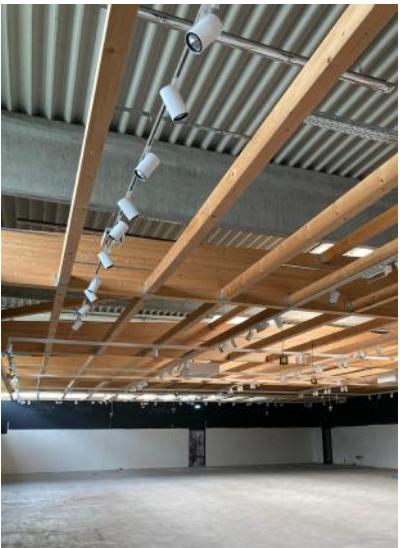
TRIGERI

Up to 4 story high houses can be built with it



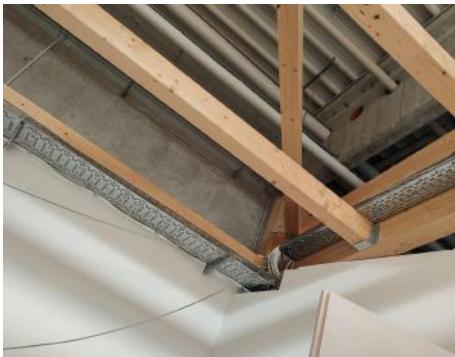


Project example: 2. Discounter, Heilbronn





Project example: 2. Discounter, Heilbronn



Project example: 3. LRS Zentrum, Aachen



Project example: 3. LRS Zentrum, Aachen



Reuse of bricks

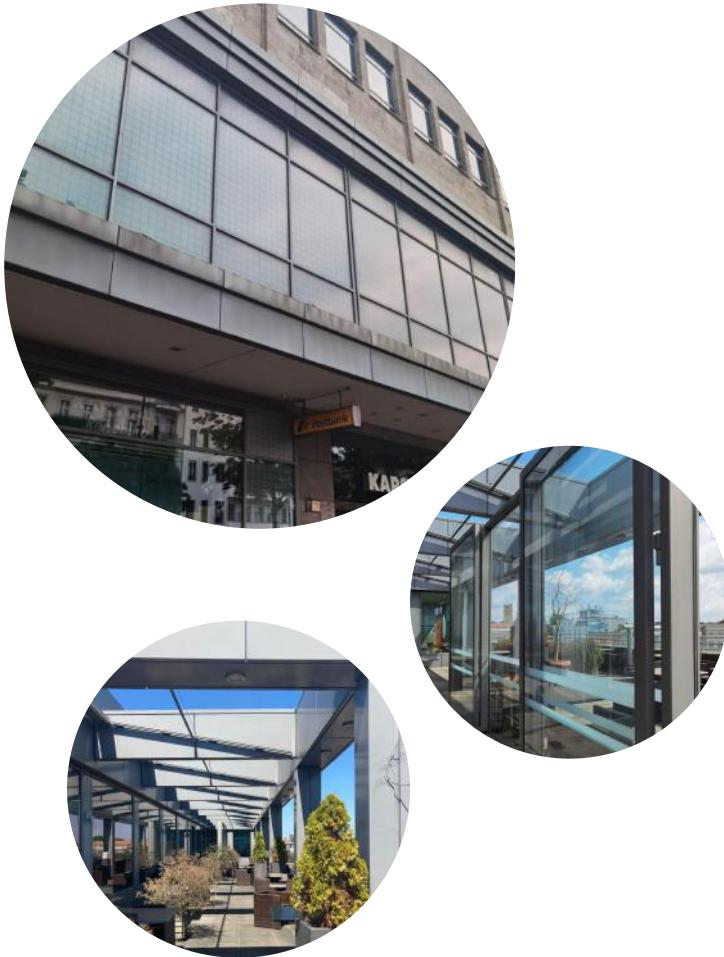


Use as facade



Example: Circular Construction

Karstadt Hermannplatz, Berlin SIGNA



Example: Circular Construction

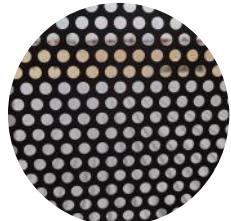
Model project for urban mining



Windbreak elements



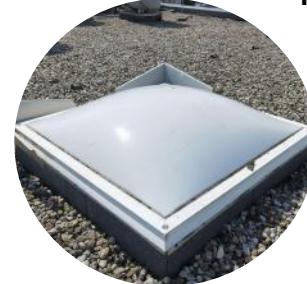
Glass balustrades



Perforated sheets



Terrazzo tiles



Light domes



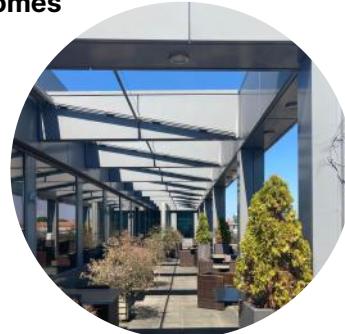
Roller shutters



Attic panels



Post and beam facade



Pergola





Example: Circular Construction

CRCLR House, Berlin LXSY Architekten



Thank you

Together, Circular!



Dominik Campanella

Co-Founder

dominik.campanella@concular.com