

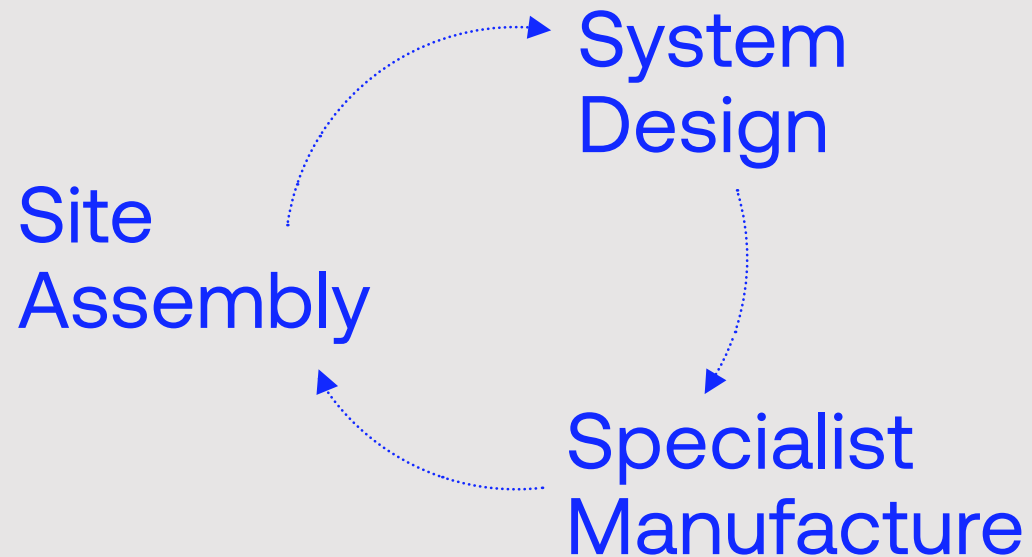
# Precision Manufactured Architecture

**BlokBuild**



BlokBuild is a pioneering collective with a mission to make our built environment more innovative and sustainable through digital manufacturing technologies.

We have mastered and interlocked design, manufacture and construction to offer a fully end-to-end service, seamlessly and collaboratively managed by our hands-on team.



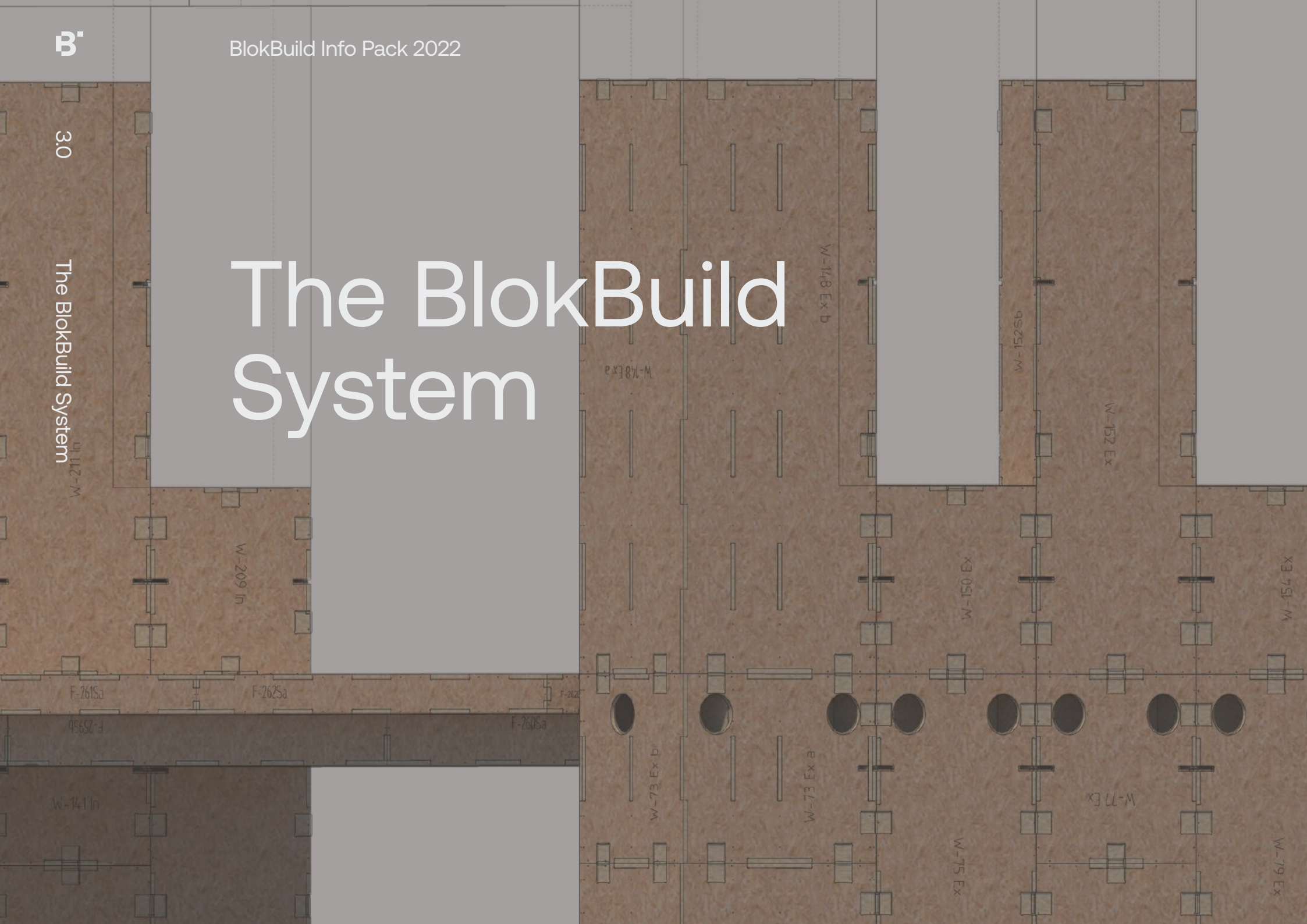


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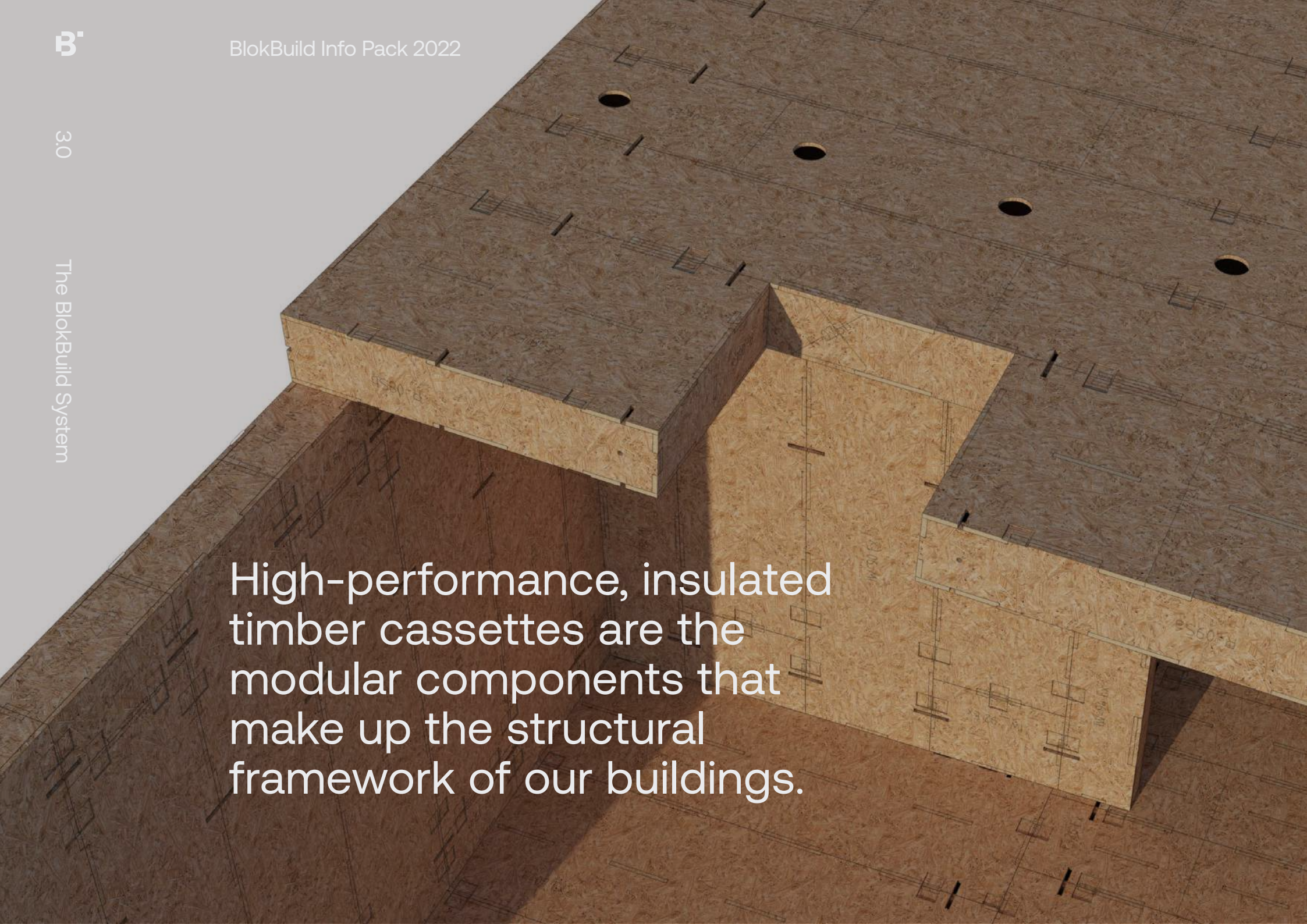
The BlokBuild System

# The BlokBuild System



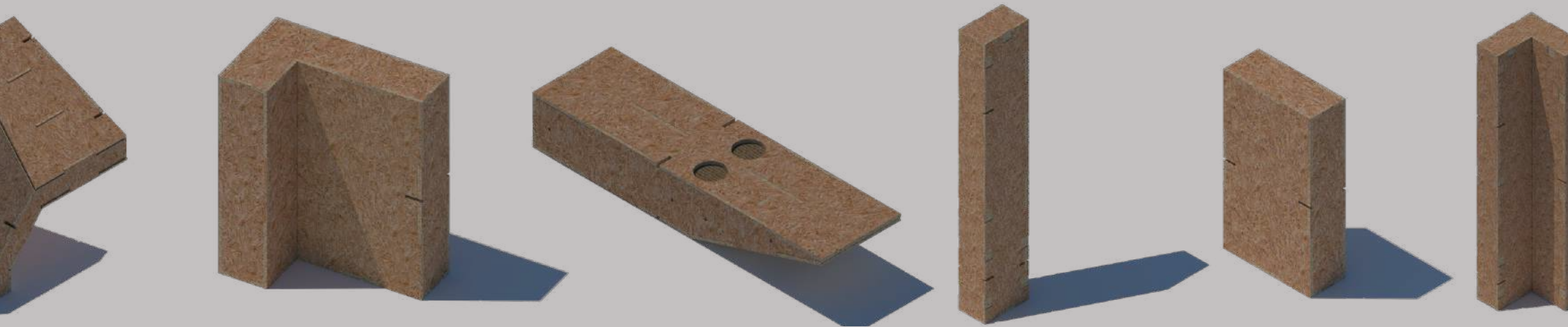


Our digitally driven and infinitely adaptable modular system empowers an efficient, sustainable, and high-quality building process.

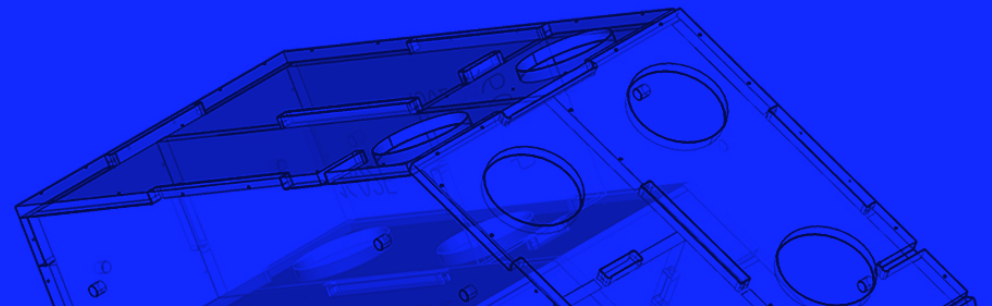
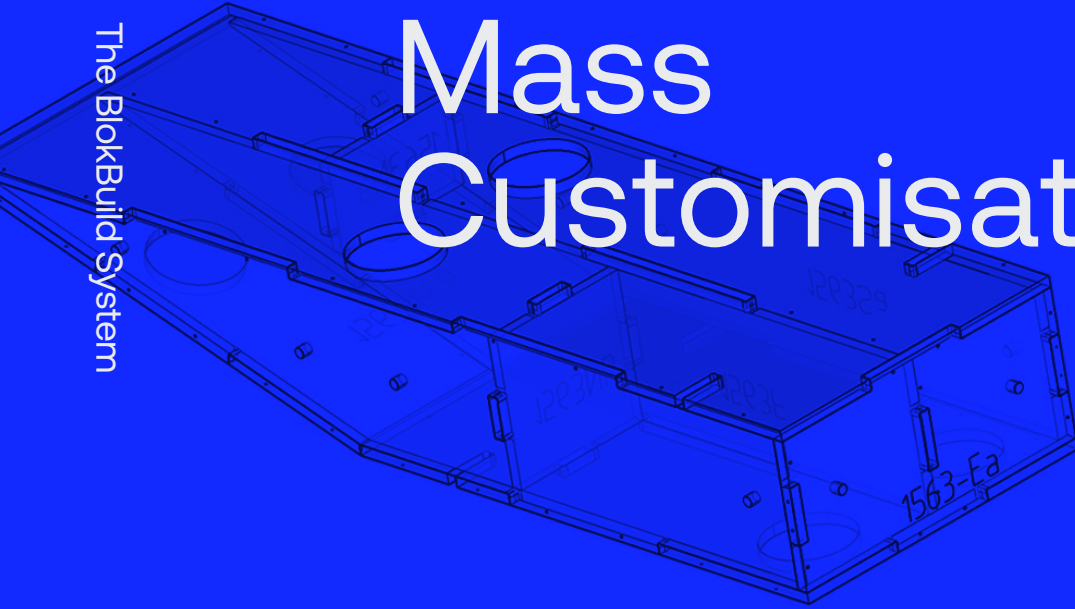
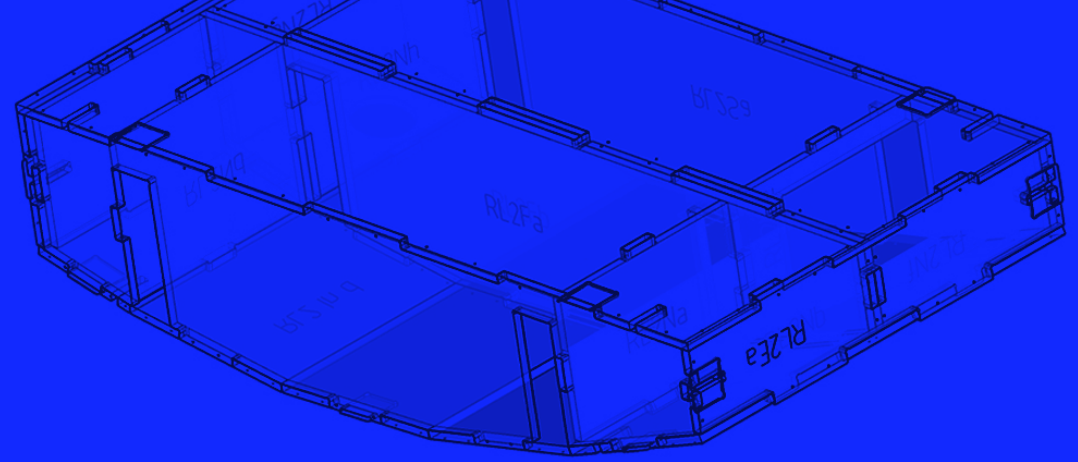


High-performance, insulated timber cassettes are the modular components that make up the structural framework of our buildings.

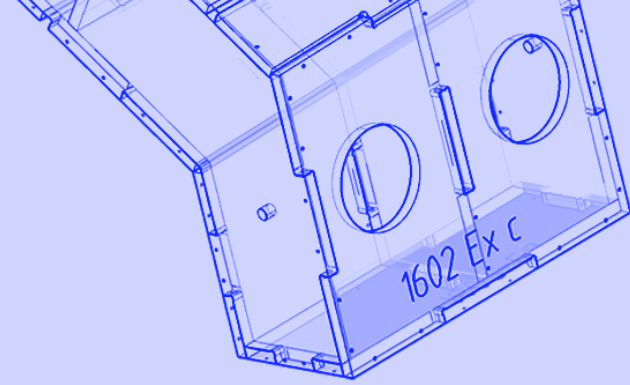
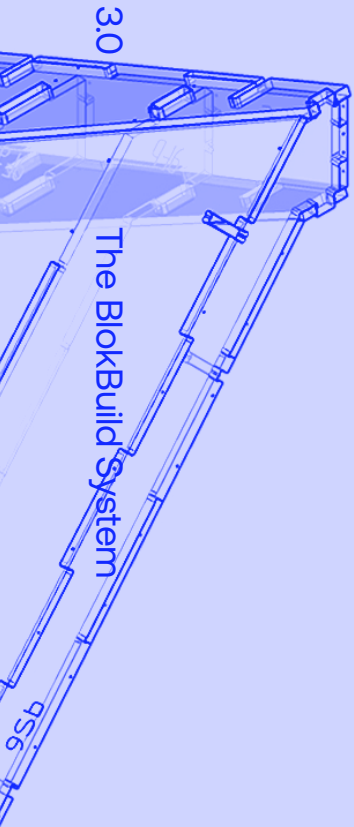
Every cassette in our growing library of floor, wall and roof typologies is designed with leading engineers and manufactured to micro tolerances using CNC technology in our controlled factory environment.



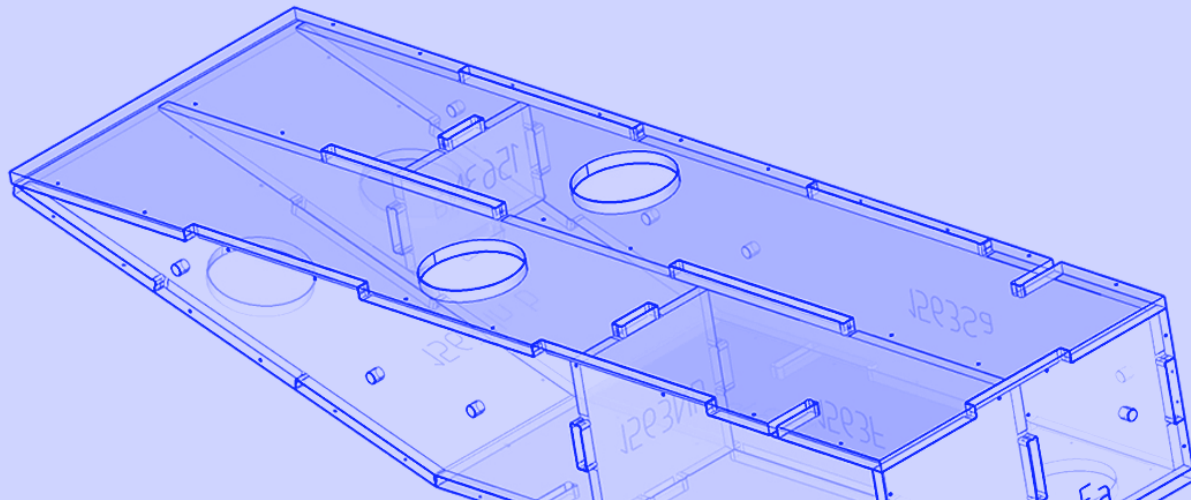
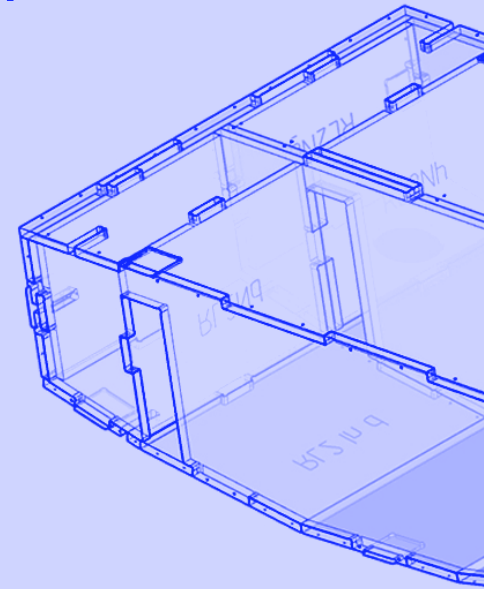
# Mass Customisation







In-built engineering calculations mean structural principles and performance constraints are established for all components and configurations, streamlining the design process and making world-class engineering affordable for projects of any scale.



This library is constantly evolving, with new cassette types developed to match design innovation. Our capacity for customisation and rapid prototyping means we can easily accommodate unique design requirements or different performance standards.



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3.0

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# Sustainable Innovation

Our structural cassettes are manufactured entirely from high grade OSB from FSC certified forests in the UK and N.I.

OSB has twice the shear strength of standard grade plywood and uses the forest thinning of new-growth pine and spruce, including the tops which are not used to make any other wood-based product.

By removing the need for internal softwoods or supporting steel work, our lightweight system also reduces embodied carbon by requiring smaller foundations.

Our cassettes enable customisable thermal performance using a range of insulation types and cavity depths.

Our advanced approach is optimised for customisation and sustainability.

Combining digital design and a controlled factory environment allows us to focus on efficiency and precision. Our lean manufacturing process produces only 10-12% waste, all of which is recyclable.

Variable cassette size means we can take heavy site machinery out of the construction process to minimise the impact on project locations, open up restricted and hard-to-access sites and reduce embodied carbon.

The precision of our building system also facilitates follow-on trades in the most efficient way, eliminating reworks and reducing on-site waste.



An independent study carried out by Aura Innovation Centre and University of Hull found that the BlokBuild system has 45% less embodied carbon than traditional construction methods across lifecycle stages A1-B1.

Through our commitment to research and development, we are constantly working to achieve an even smaller carbon footprint and improved environmental performance.

## BOPAS Accredited System & Process

The Build Off-site Property Assurance Scheme (BOPAS) is a risk-based evaluation which demonstrates to funders, lenders, valuers and purchasers that homes built from non-traditional methods and materials will stand the test of time for at least 60 years.

We design, manufacture, assemble and install under strict quality management procedures. This means all aspects of your build are traceable and signed off after routine and thorough checks at every stage.



**BOPAS**

Buildoffsite Property  
Assurance Scheme



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# Cassette Typologies





# Wall Cassette



Peg connection cut-outs. CNC timber pegs locate and align the faces of cassettes on site prior to nail plates fixing.



CNC drilled pilot holes for fast and standardised off-site assembly.



Castelated connections and internal ribs create a structural cassette, removing the need for any internal softwood supports.



Unique component references guide the off-site assembly and on-site installation process.



Rebated areas for nail plate fixing, ensuring that engineer's fixing spec is adhered to on site at all times.



Internal rib



Customisable off-site insulation. 200mm Semi-rigid RWA45 used as standard.

# Wall Cassette



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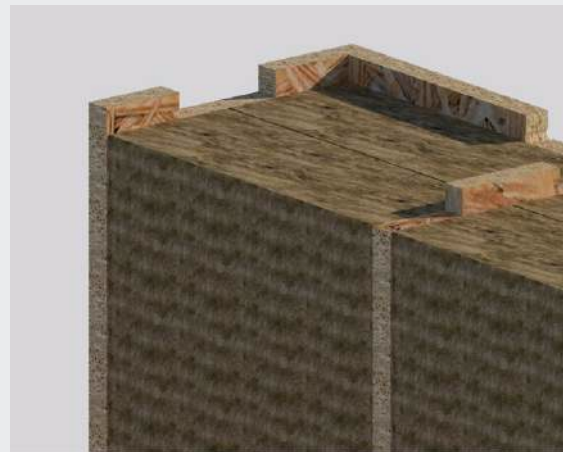
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# Wall Cassette



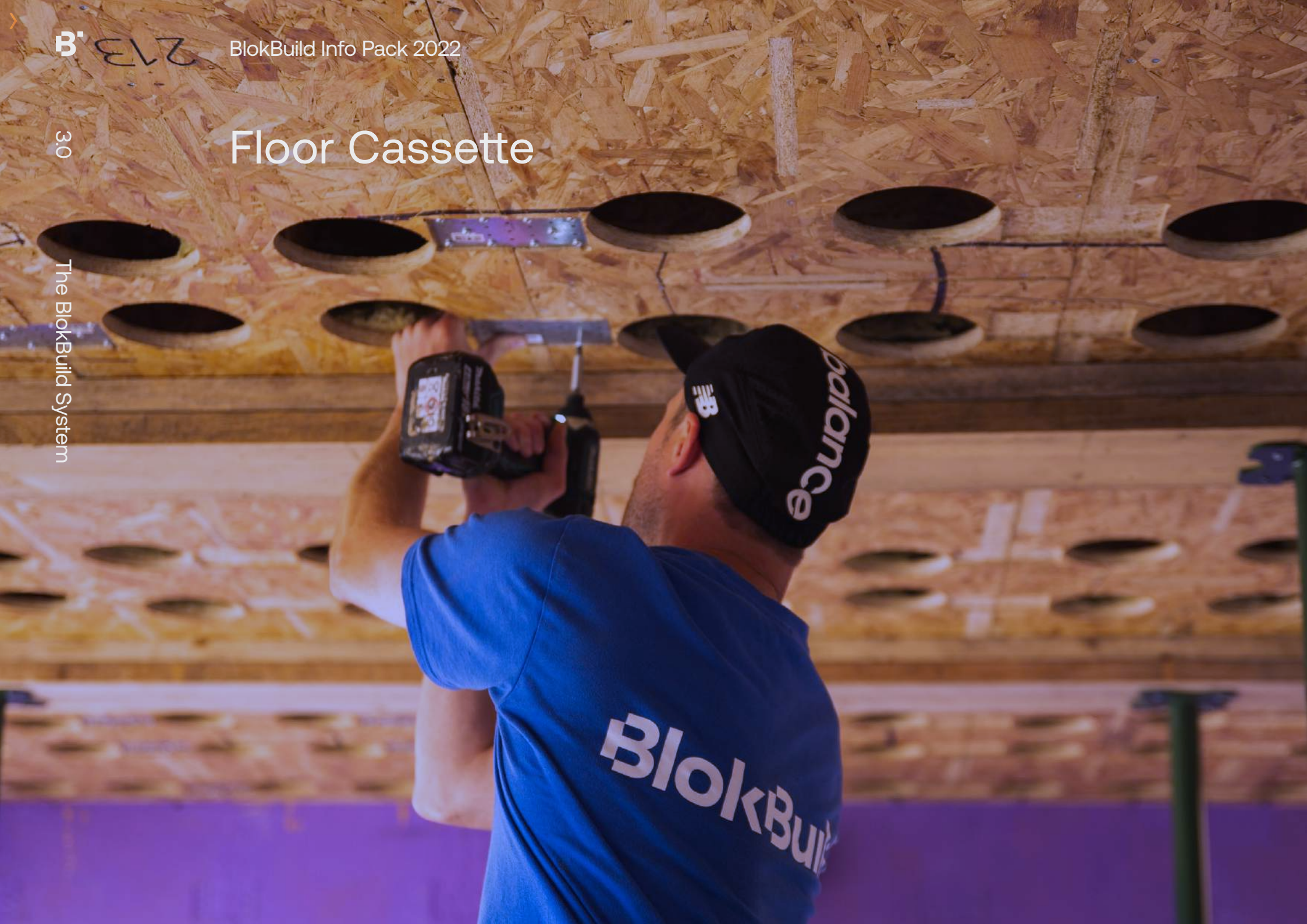
# Floor Cassette



# Floor Cassette

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# Roof Cassette



# Roof Cassette

