

DASH

*Digitally Accelerated
Standardized Housing*

acceleratedhousing.ca

What is DASH?

The following pages provide an introduction to the main elements of DASH.

The digital tools are designed to enhance collaboration and close the gaps between the planning, design and construction phases of a mid-rise housing project.

There is a suggested workflow, but the tools can be used separately or in any combination.

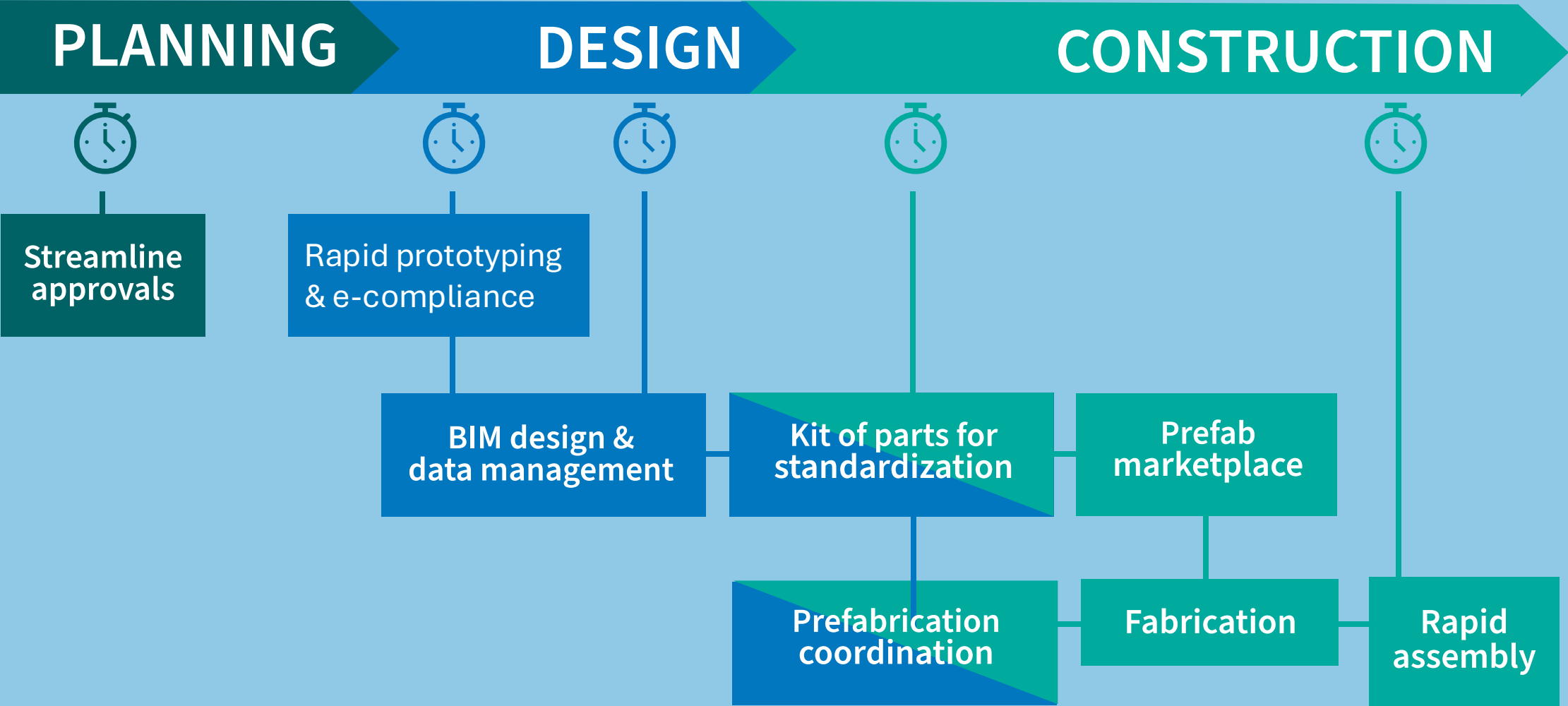
An innovative digital platform of tools that can help address the housing crisis.

How does DASH work?

Optimizes a 3 – 6 storey project for prefabrication using a “kit of parts” that links to a marketplace of locally manufactured products.



DASH saves you time



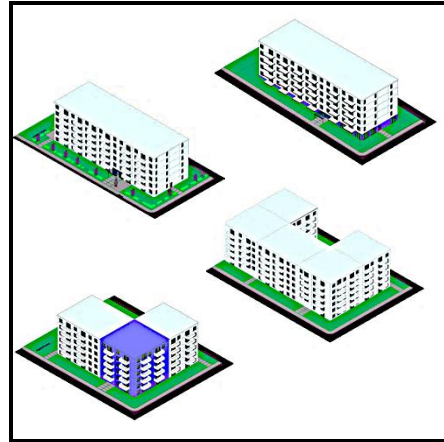
DASH workflow

1



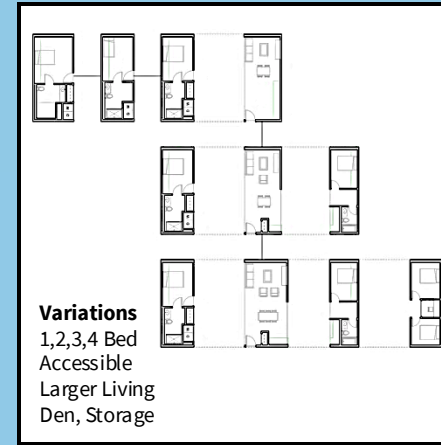
Use the rules-based generative design platform to create multiple massing options that are then exported to BIM.

2



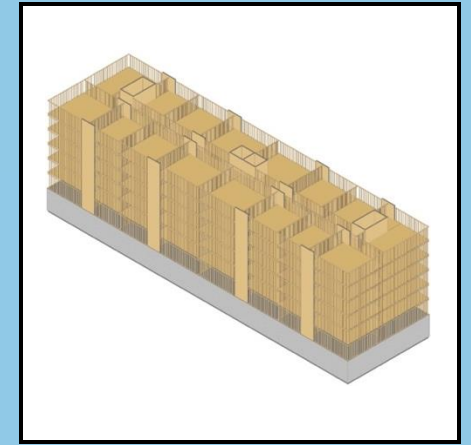
Customize the DASH blueprint to meet the needs of the project (suite mix, site constraints, etc.).

3



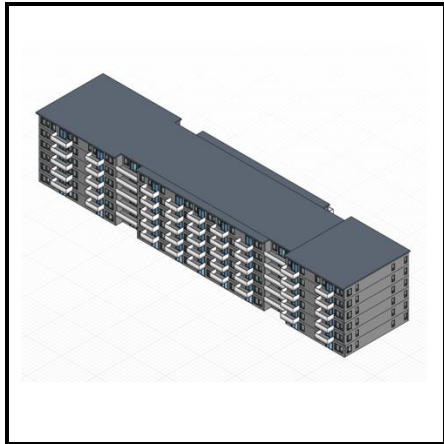
Blueprint suite configurations are on a standard grid dimension that can work over a parkade if needed and stackable for efficiency.

4



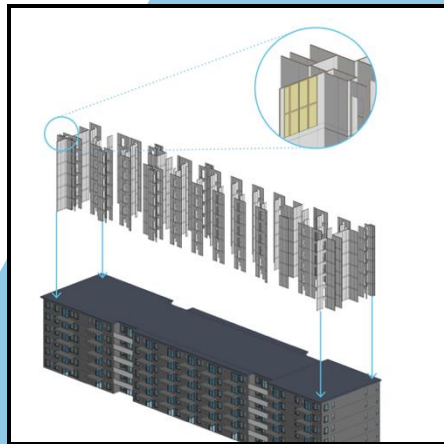
Structural and envelope information has been pre-installed in the blueprint BIM model for the engineer.

5



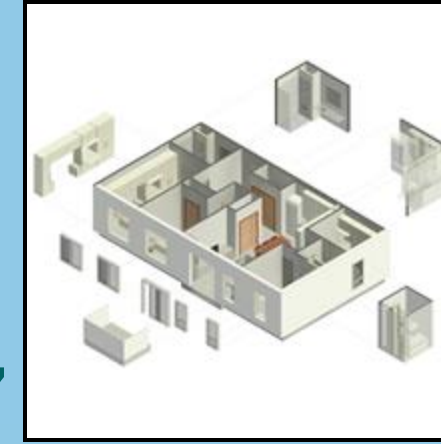
DASH BIM requirements provide ISO19650 compliant data management framework that is “right sized” for residential construction.

6



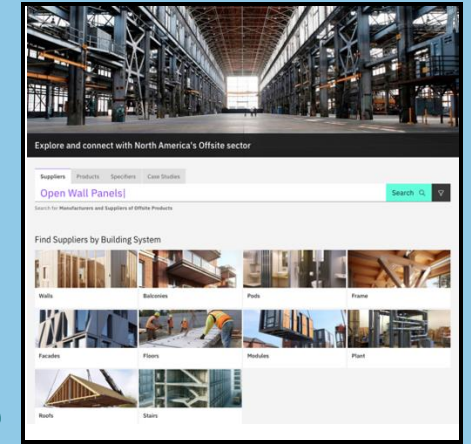
Import the BIM model into the prefabrication coordination platform for optimization with standardized products.

7



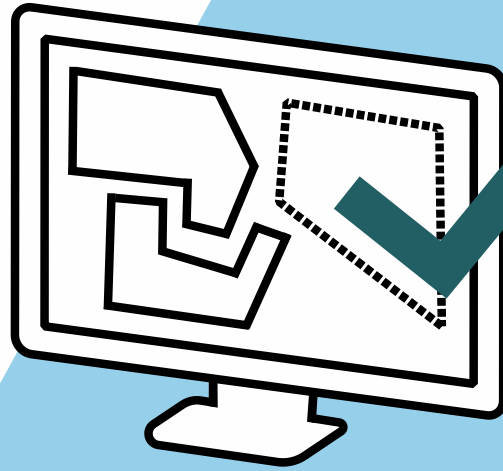
Constructed from standard elements in the Blueprint that meet BC Housing design standards.

8

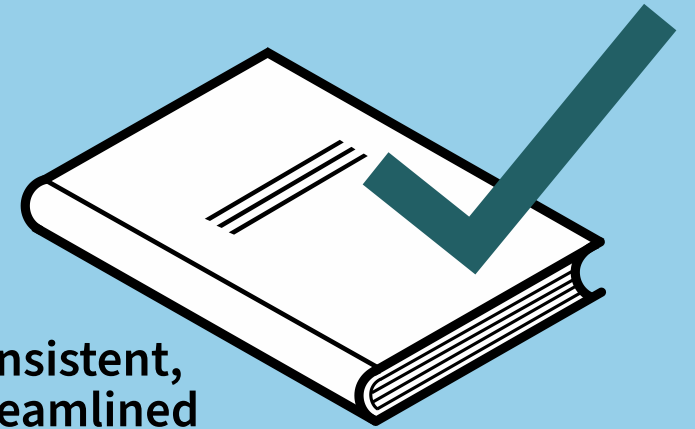


Search and compare available prefabricated products in the virtual marketplace by type and location.

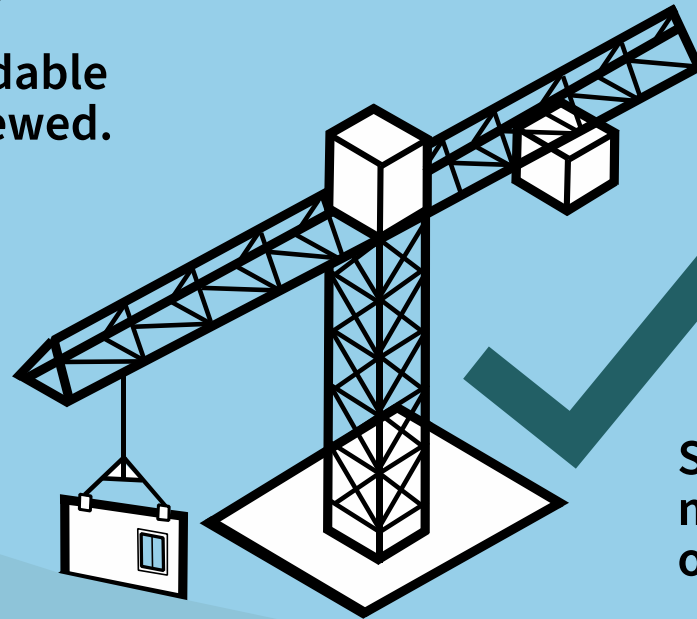
DASH facilitates municipal reviews



Machine-readable
and pre-reviewed.



Consistent,
streamlined
approvals.



Supportive of
modern methods
of construction.

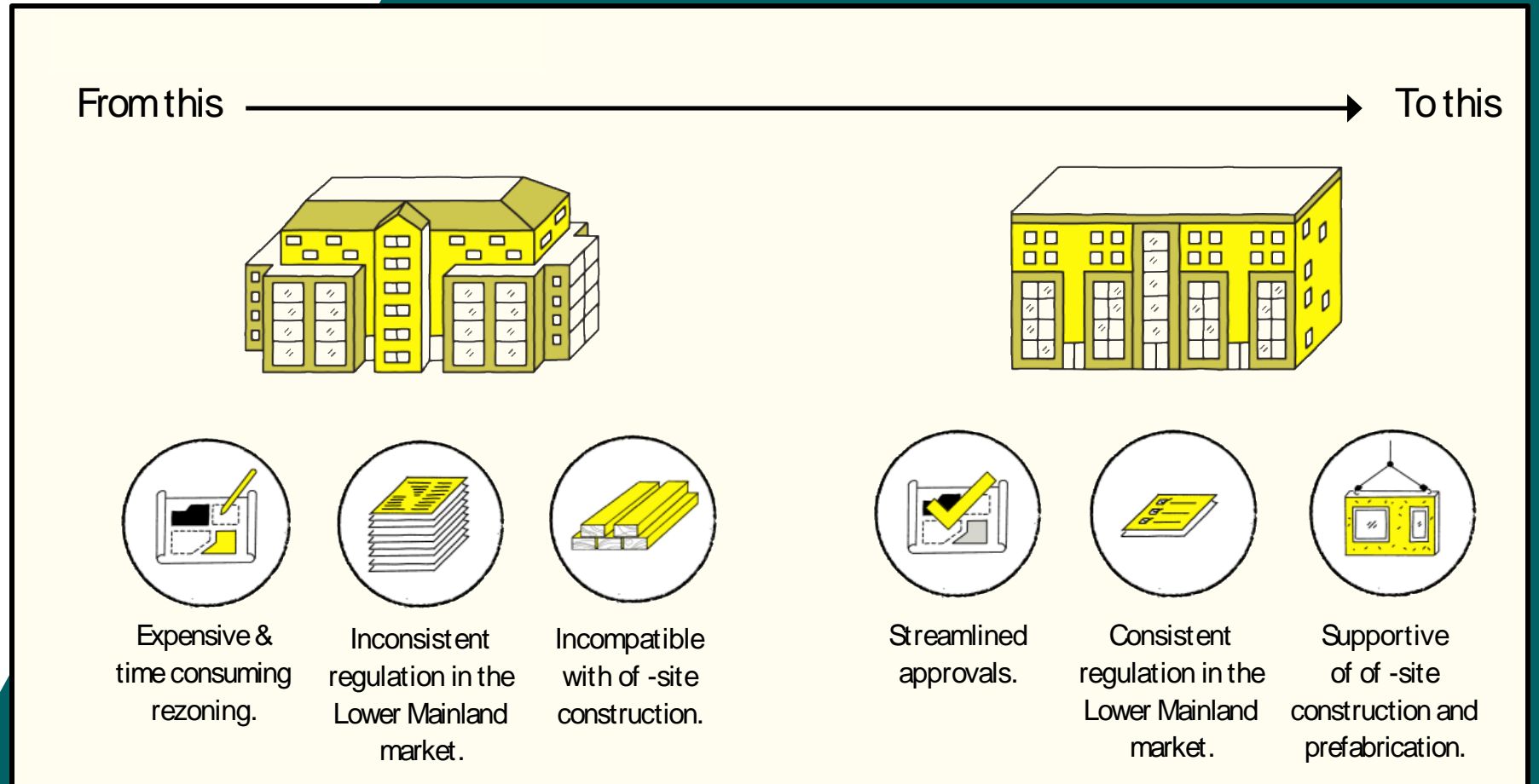
DASH zoning guidelines for prefab-friendly development

Aimed at helping municipalities develop a standardized regulatory approach for 3 – 6 storey rental buildings

Supportive of the DASH blueprint building designs and optimized for off-site manufacturing.

Available on the DASH website

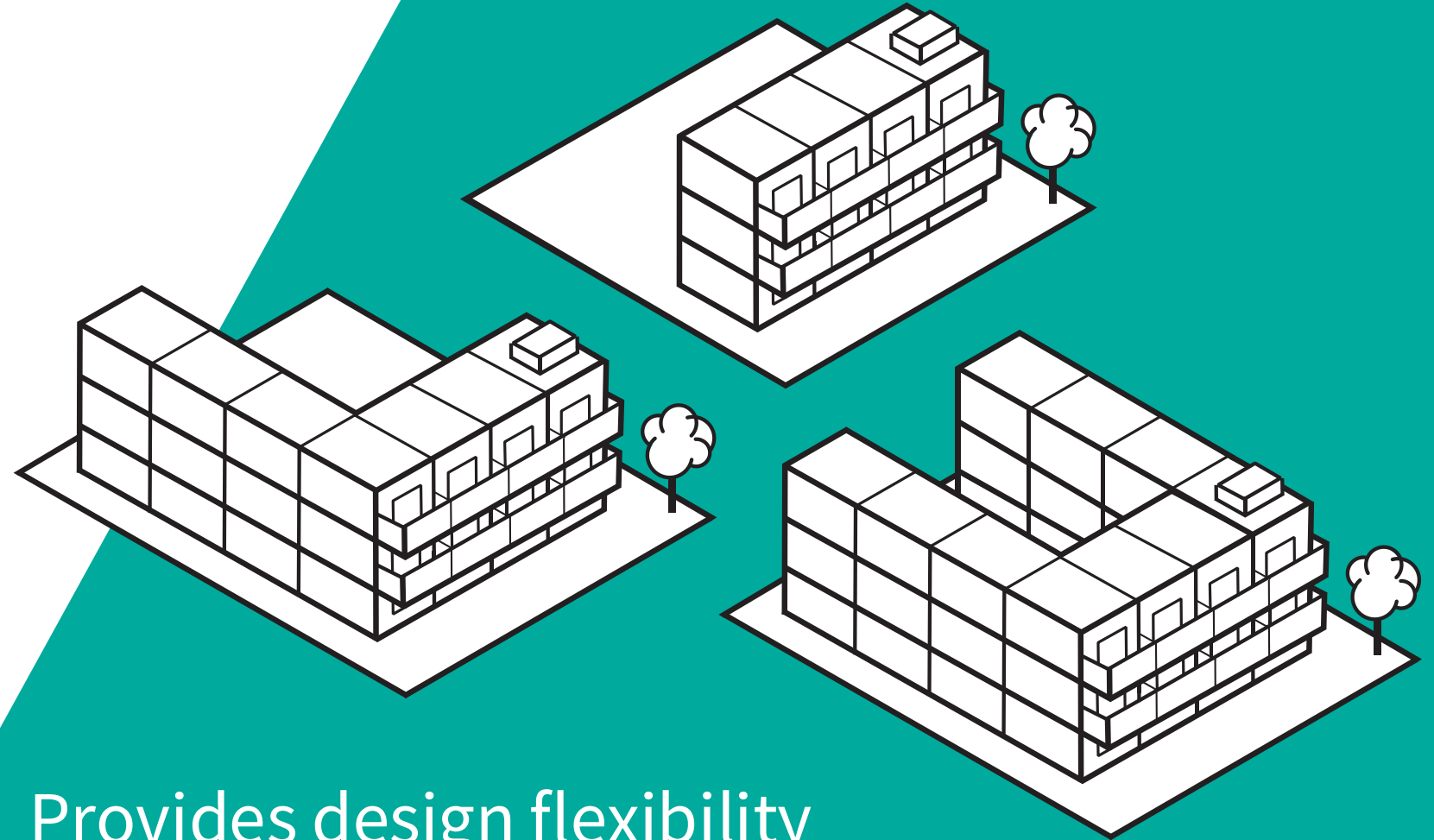
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Rapid prototyping

The DASH generative design tool helps you to

- Find applicable sites
- Quickly determine the optimal development configuration



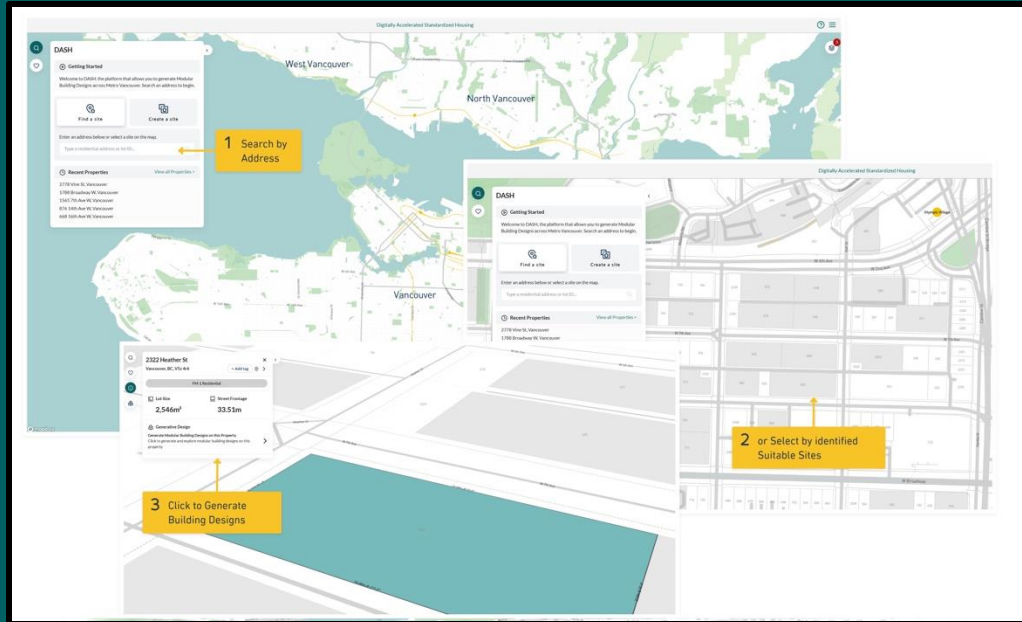
Provides design flexibility
with the assembly of blocks

Generative design

The Archistar generative design platform has been preloaded with all the DASH information.

It has land use data for Metro Vancouver and with the DASH zoning guidelines for 3 to 6 storey projects.

It also pre-selects and highlights sites that are suitable for DASH. DASH blueprint design information is in Archistar (unit sizes, etc.) so that prototype designs can be accurately generated.

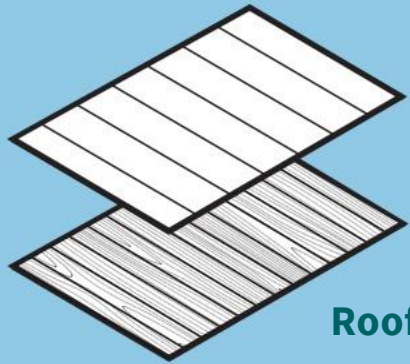


Follow the link from the DASH website to set up a free Archistar account

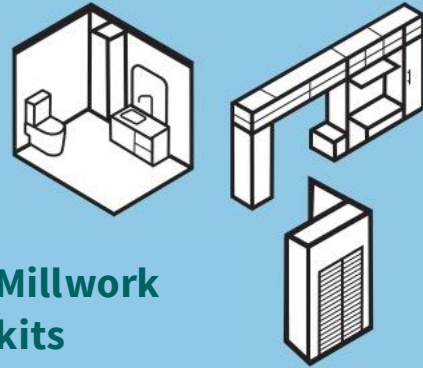
Archistar helps you get started with tutorials and videos.

Building block units assembled from a kit of parts

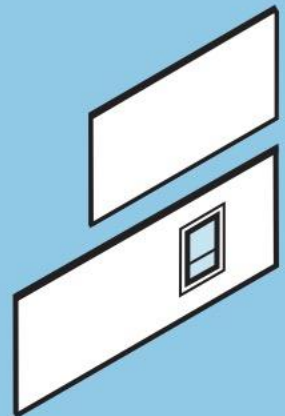
KIT OF PARTS



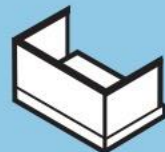
Roof & floor panels



Millwork kits



Interior & exterior wall panels



Balconies, sunshades, canopies, etc.

BUILDING BLOCK UNITS



Studio, 1, 2, 3 or 4 bedroom homes

What is a kit of parts?

Prefabricated wall assemblies

Floor cassettes

Mass timber systems

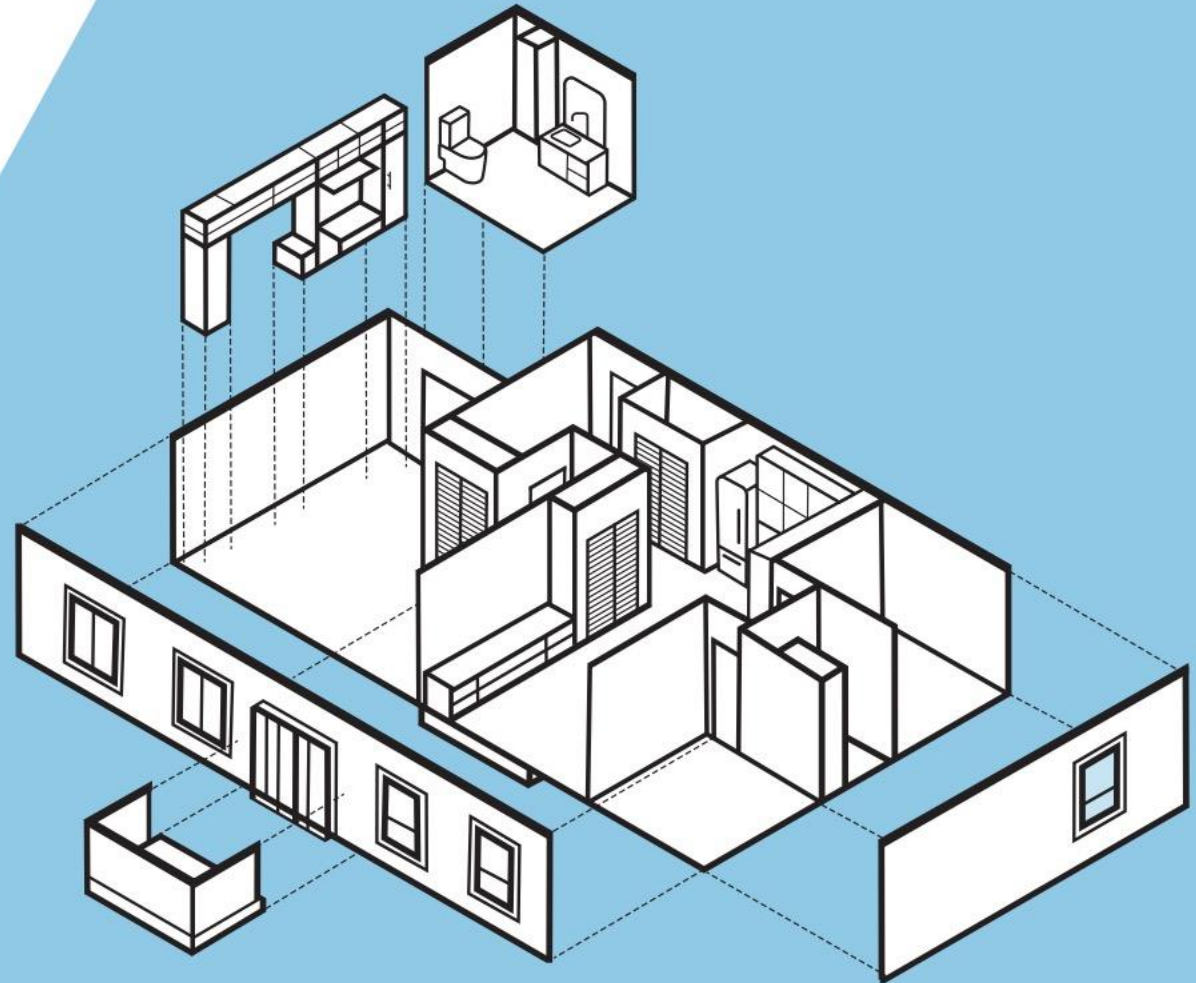
Roof panels

Drop-in mechanical systems

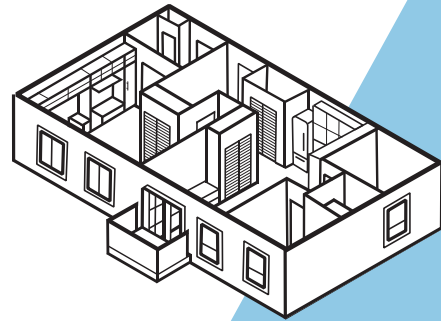
Balcony, sunshade and walkway options

Millwork kits

And more to come!

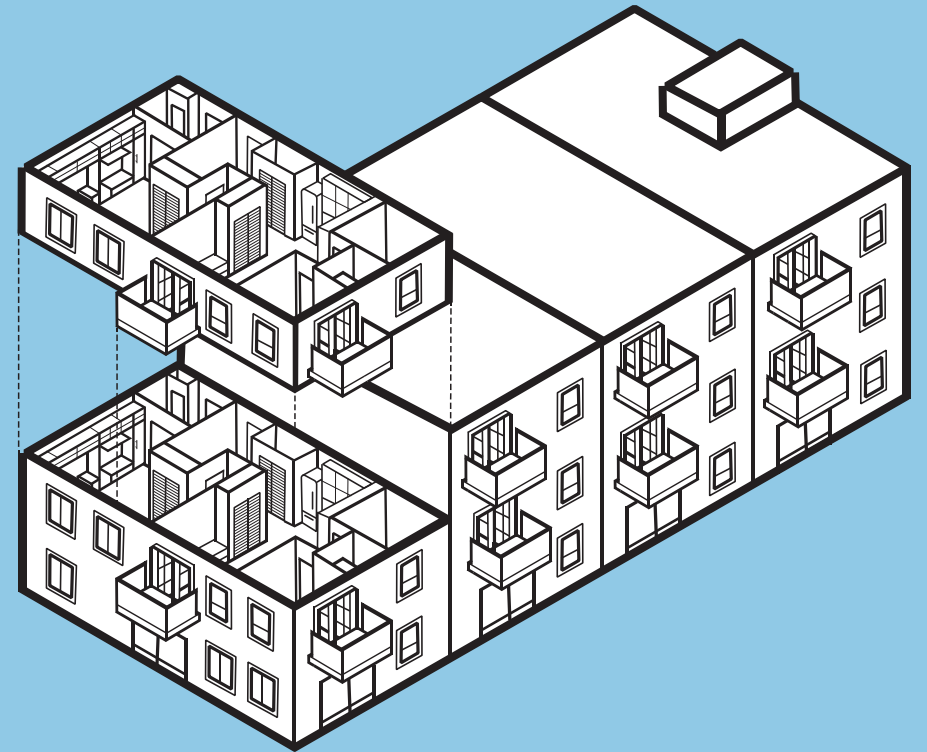


Compiling the DASH building block units into the project design

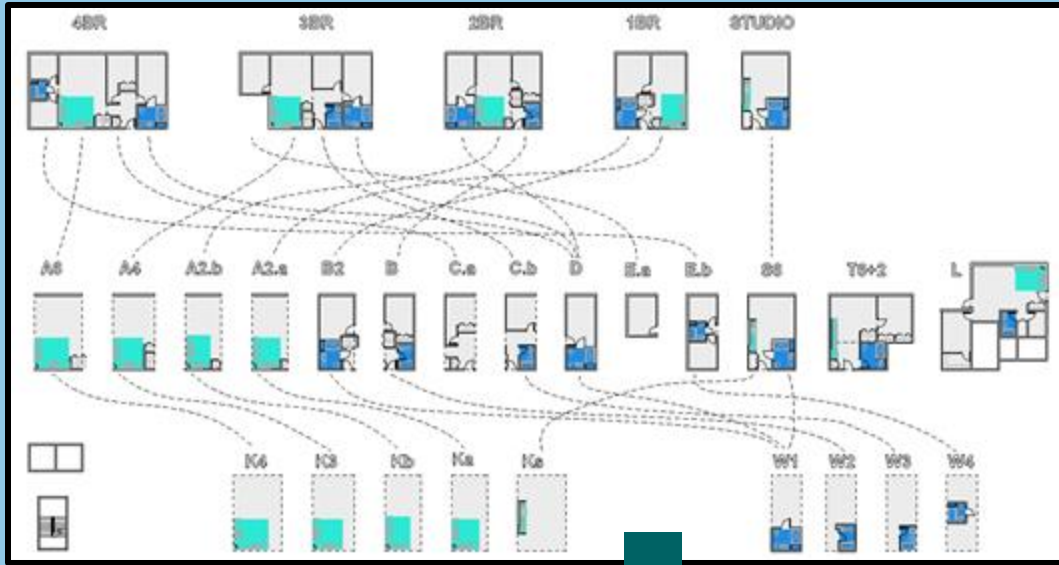


BUILDING BLOCK UNITS

DASH Aims to Deliver the Speed and Quality Benefits of Prefab



The DASH kit



The DASH Blueprint works for 3 to 6 storey projects with various configurations suitable for BC's Lower Mainland.

The DASH kit of parts can be compiled into buildings to fit lot dimensions.

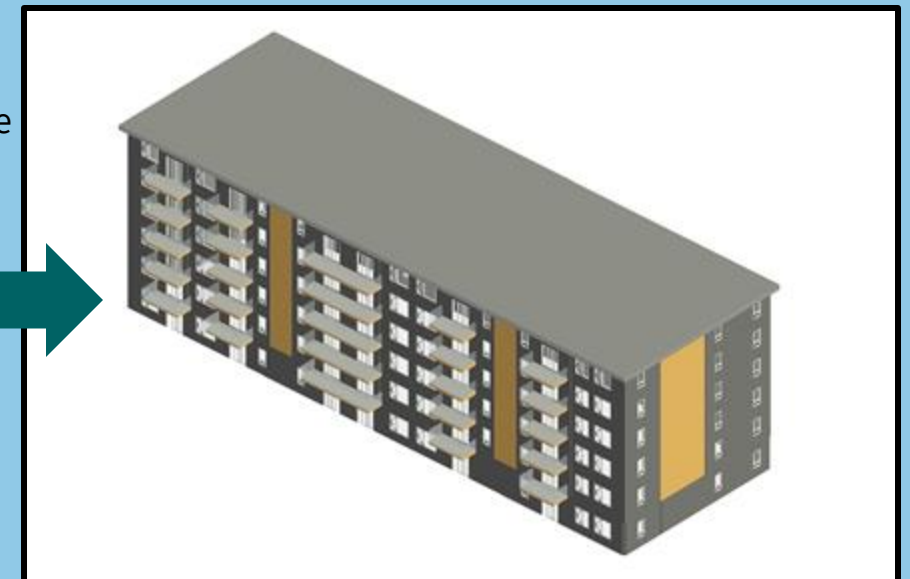
The mix of studios, 1-4 bedrooms can be adjusted to the development requirements. The suite units are coordinated to BCBC, BC Housing Design Guidelines, DASH zoning guidelines, BC Energy Step Code 4.

Visit the DASH website to access the Revit files and for instructions on how to use them.

Multiple suite design options can be configured into units

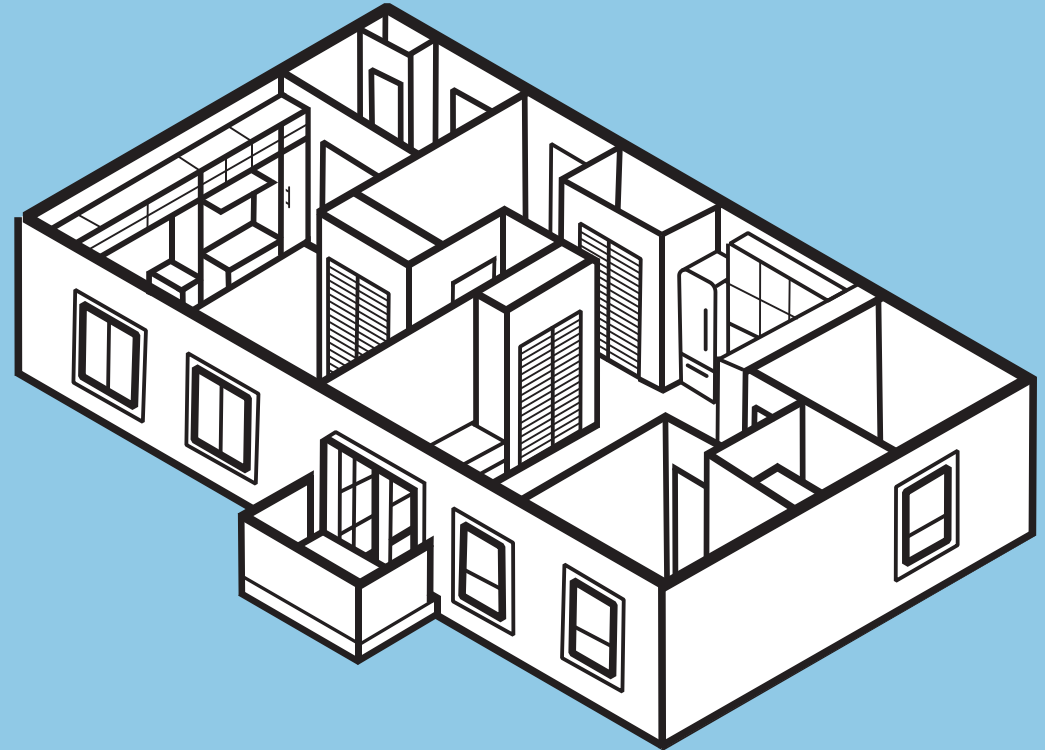


Units can be compiled into the overall building form



DASH = Digital

DASH connects architects and developers to state-of-the-art technologies



DASH establishes a digital framework within which designers can address and coordinate planning constraints, site-specific constraints and manufacturing constraints

BIM is essential for DASH

Building Information Modelling (BIM) is necessary to:

- Facilitate information exchange and access between stakeholders
- Enable the required precision and information quality needed for prefab
- Avoid duplication and decentralization of project information
- Standardize project management

DASH BIM requirements have been developed with residential construction in mind.

The BIM Requirements can be downloaded from the DASH website

The DASH configurators accept BIM models for rapid design optimization



Prefabrication Coordination

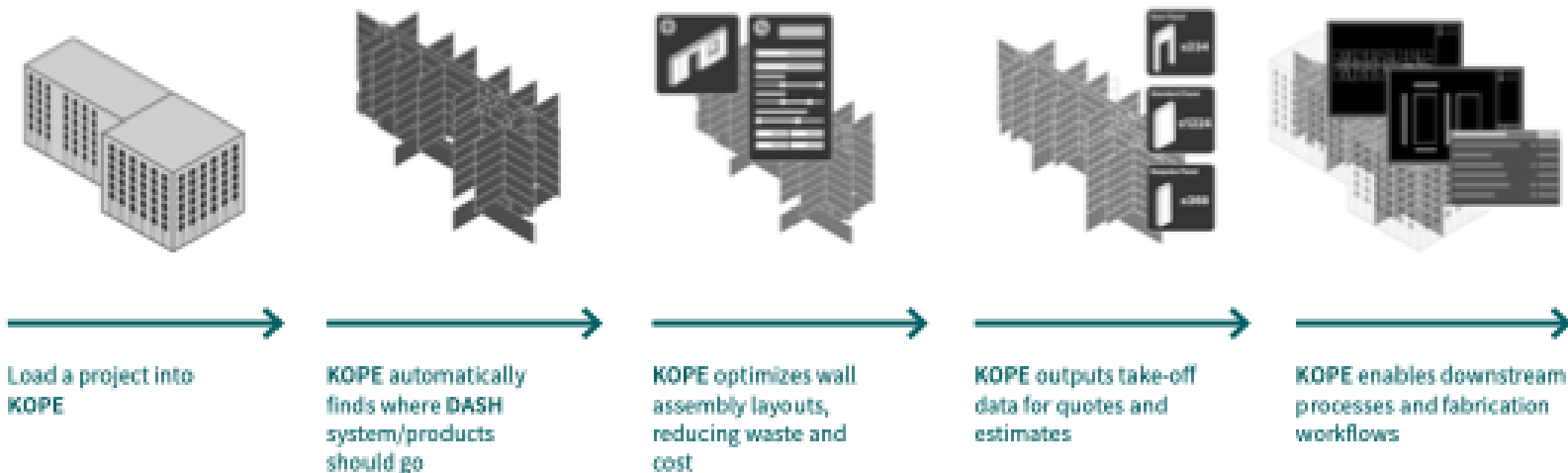
The DASH blueprint has been designed for prefabrication.

Architects and engineers can explore product types and layout options, set performance criteria and coordinate sequencing.

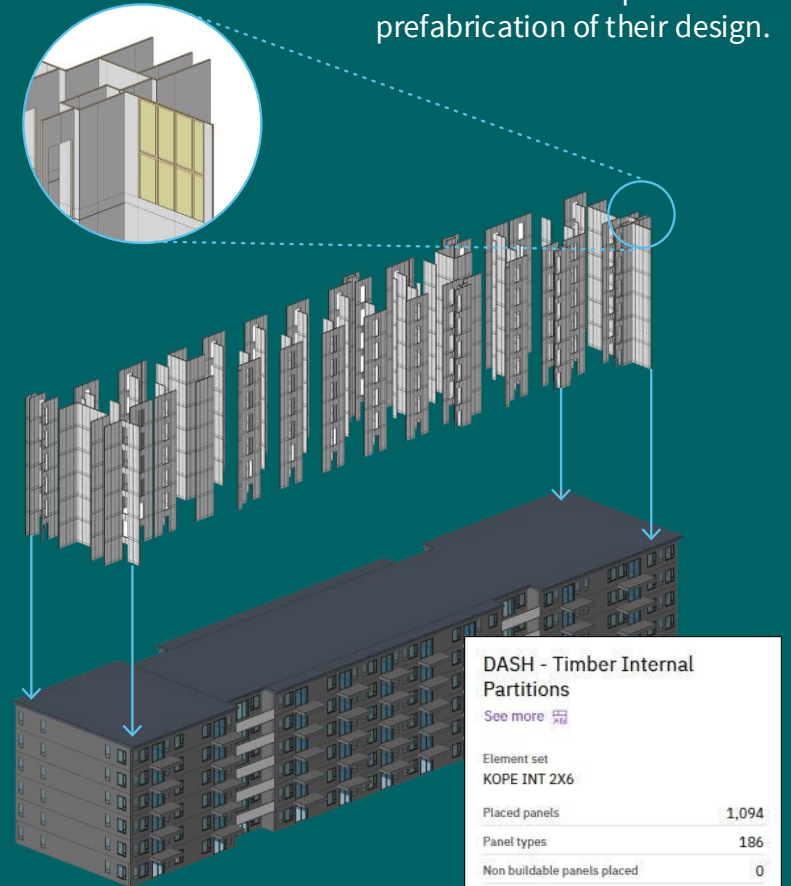
Key Features

- Design iteratively
- Design with system logic in mind – apply, validate and optimise DASH products
- Collaborators focus on design rather than complex model generation.
- Structured DASH process with standardised outputs and embedded data, enabling efficient decision making and connection to downstream processes.
- Connect direct to the DASH supply chain, query spec, validate product suitability and cost.

The KOPE platform enables the DASH workflow



Architects can upload their BIM model to KOPE to optimize the prefabrication of their design.



The resulting KOPE model provides take-offs, quantities, costs and embodied carbon information

DASH - Timber Internal Partitions

See more [🔗](#)
Element set
KOPE INT 2X6

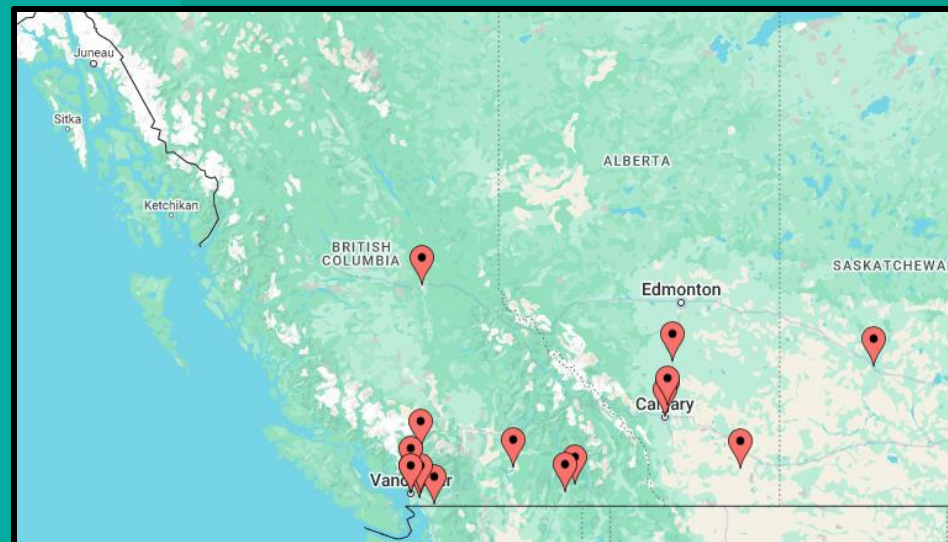
Placed panels	1,094
Panel types	186
Non buildable panels placed	0
Placed framing parts	2,263
Placed boarding parts	1,094
Boarding area	2,010.3 m ²
Boarding waste area	304.1 m ²
Boarding waste area ratio	0.15
Boarding cost	\$1,038
Boarding waste cost	\$155.7
Total cost	\$1,038
Frame embodied carbon	-6,152.82 kg
Boarding embodied carbon	5,107.07 kg
Total embodied carbon	-1,045.75 kg

DASH Founding Manufacturers

11 companies manufacturing a range of panels, CLT and pods have joined DASH.

They are located across Western Canada.

Follow the link on the DASH website to the DASH marketplace to find out more.



DASH does not constrain creativity

The DASH blueprint imposes standardization where it matters but without compromising design expression.

Here are some of the projects that are sources of inspiration for DASH.



Benchmark 1: 330 Goldstream is a 6-storey prefab social housing project in Victoria. It achieved Step Code 4 and was an early adopter of prefabrication and Lean project delivery. Despite being faced with 10 days of inclement weather, the total erection time for the 6-storey structure was only 69 days.

Credit: [Cascadia Architects](#)



Benchmark 2: Vienna House in Vancouver is a National Housing Strategy that uses BIM throughout design, construction and handover. The 6-/7-storey mass timber and prefab wood frame building will provide 123 units ranging from studio to four bedrooms. It is aiming for completion in Spring 2026.

Credit: [Public Architecture](#)



Benchmark 3: The Dik Tiy Passive House performance social housing project in Smithers, BC for the Witset Nation shows how a 3-storey project can be designed efficiently and lend itself to industrialization. BC Housing used the plans for this project to test industrialized manufacturing concepts.

Credit: [Cornerstone Architecture](#)

Got questions?

Contact us at:

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acceleratedhousing.ca

