

FormIt Pro Product Briefing:

current value and future investment

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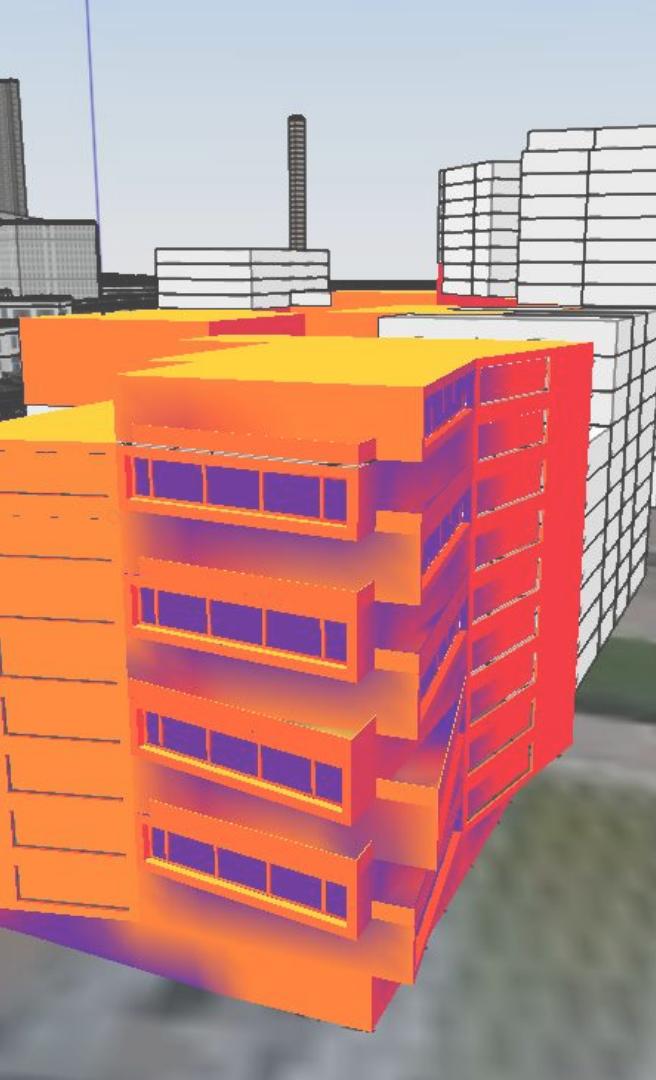
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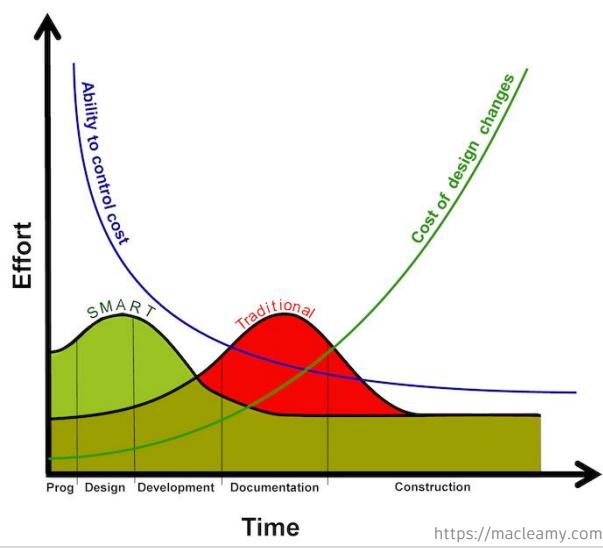
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Why is early stage design
important?

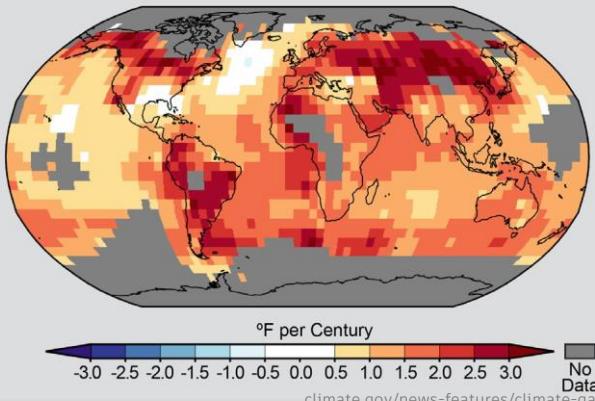


Decisions
made in early stage design
greatly influence
cost and environmental impact
of buildings
throughout their lifecycle.



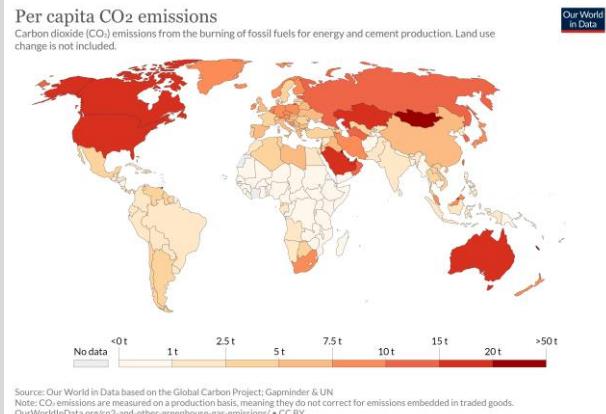
The MacCleamy curve

Decisions
made in early stage design
greatly influence
cost and environmental impact
of buildings
throughout their lifecycle.



Stakes are high:

- Global warming
- Population growth



CO₂ emissions per capita 2019



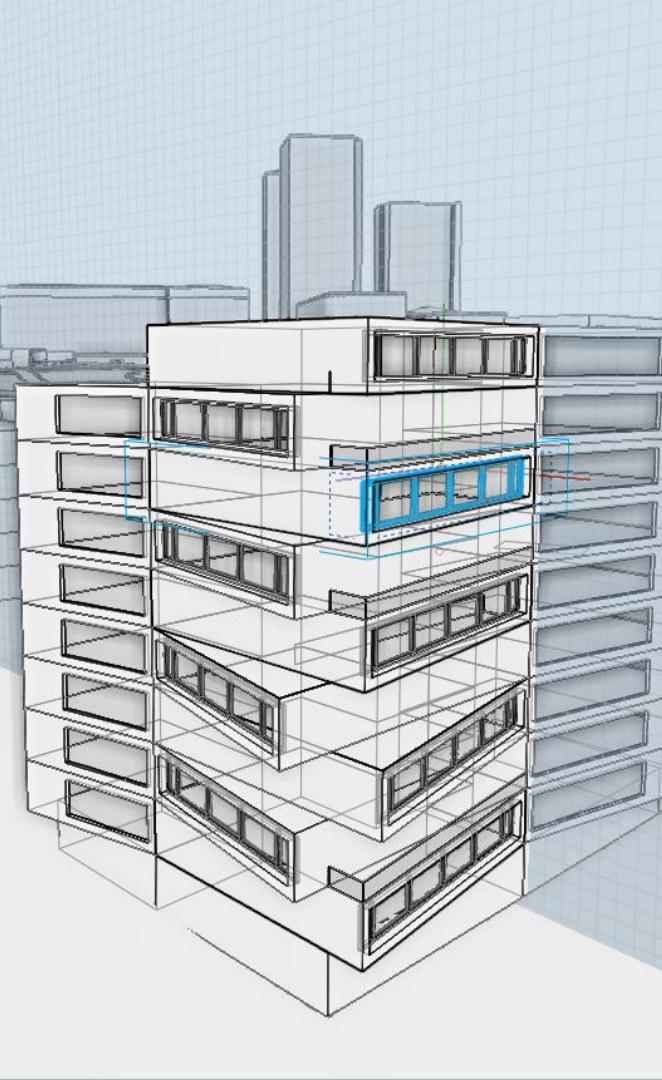
10B population by 2060
1/2 → 2/3 in cities



13K buildings/day

Stakes are high:

- Global warming
- Population growth



Stakes are high:

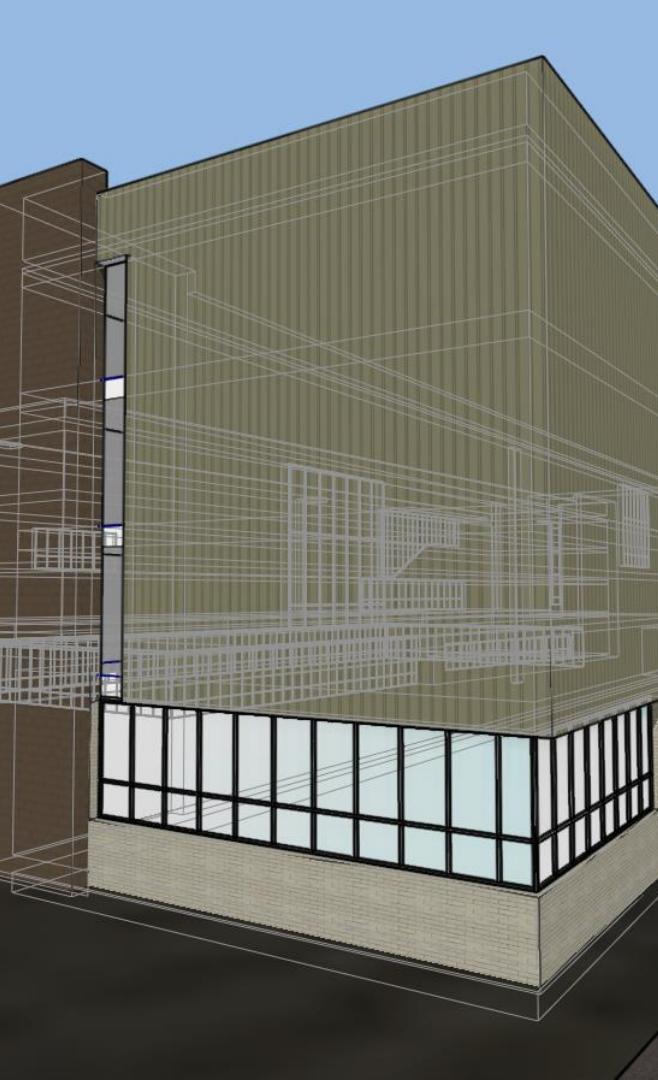
- Global warming
- Population growth

All while navigating...

- Smaller budgets
- Accelerated timelines



Software
can help you
design better buildings.



AUTODESK® FORMIT® PRO

We **support architects**
by combining
intelligent automation and
informed analysis
with **fluid 3D sketching**
so you can
design better buildings.

The background of the slide features a dark, abstract design. It includes a large, dark grey parallelogram in the upper left and a dark grey triangle in the upper right. The bottom right corner is a rounded rectangle with a metallic texture and a bright, glowing white line along its right edge. The overall aesthetic is modern and minimalist.

How does FormIt Pro support architects?

A fluid 3D sketching environment with...

Seamless connection from Concept to BIM

Informed design exploration

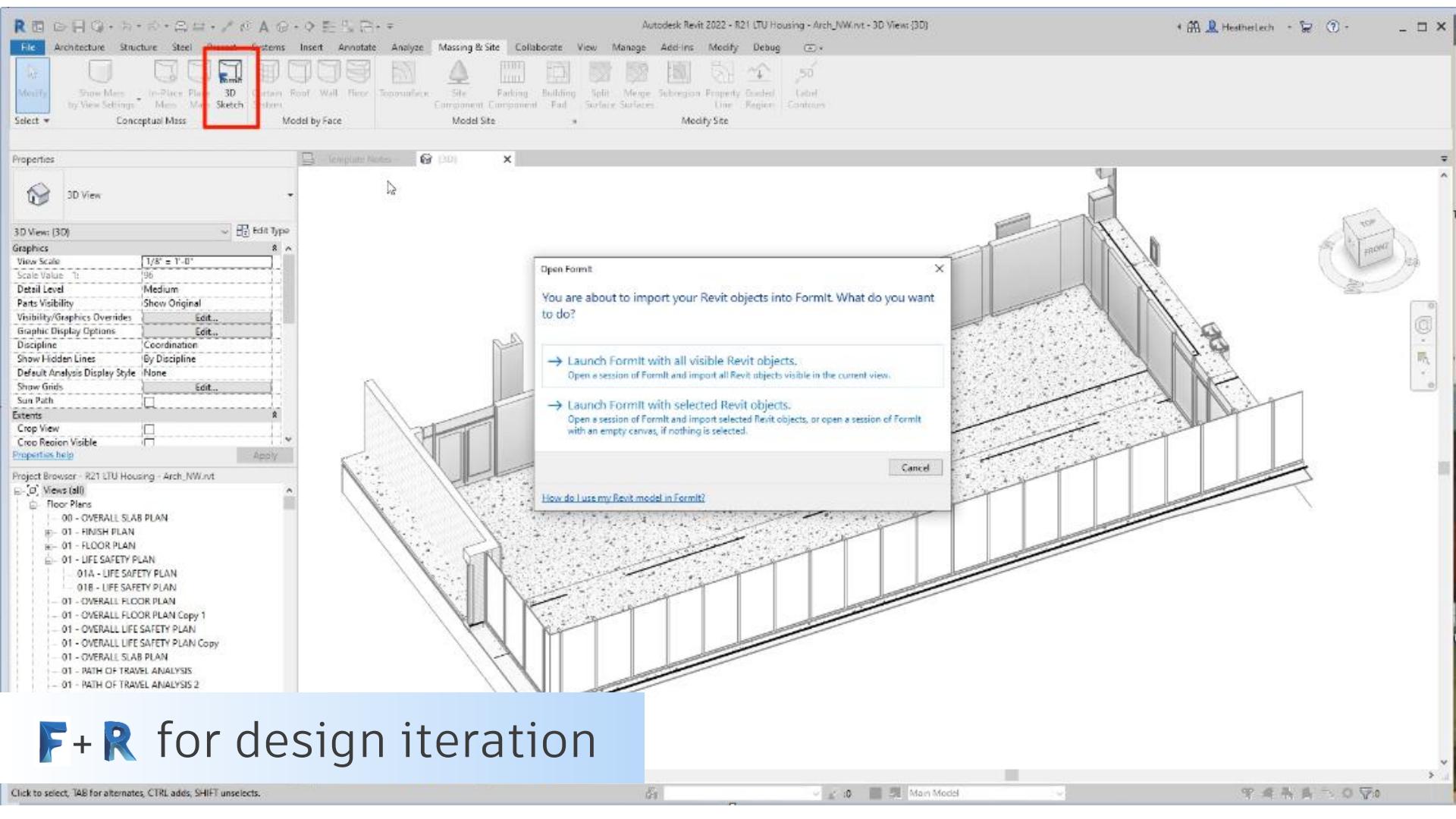
Collaborative data sharing





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Seamless Connection
from Concept → BIM



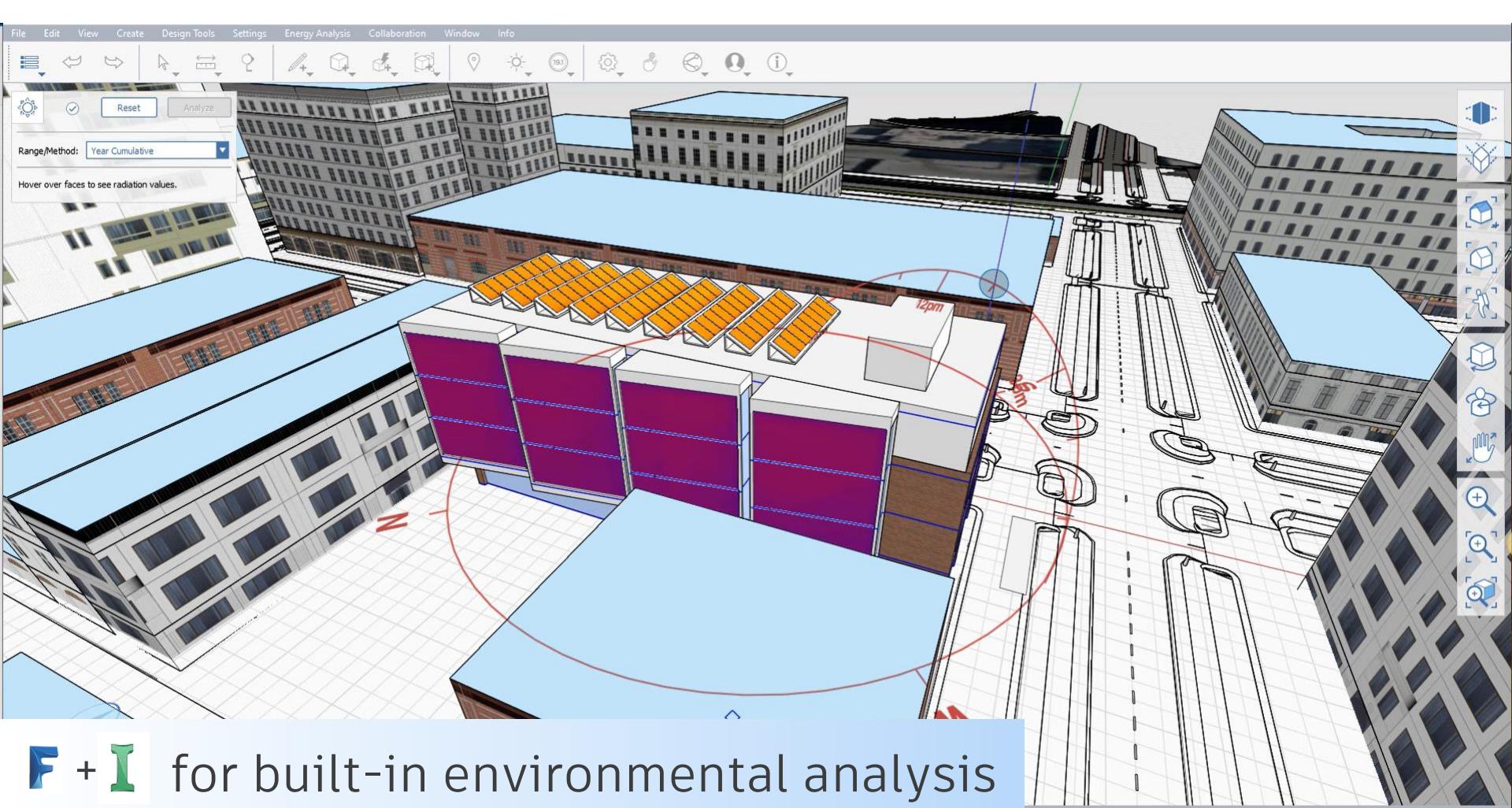
F + R for design iteration



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Informed Design

Environmental Analysis
Computational Analysis





Properties

Use levels

Dynamo [About FormIt + Dynamo](#)

Run (modified)

[Edit Embedded Graph](#)

INPUTS:

Add Top Landing? True False

Add Middle Landing(s)? True False

Add Bottom Landing? True False

Floor-to-Floor Height: 12

Stair Width: 1.5

Riser Height: 0.5

Tread Length: 1

Tread Overlap: 0

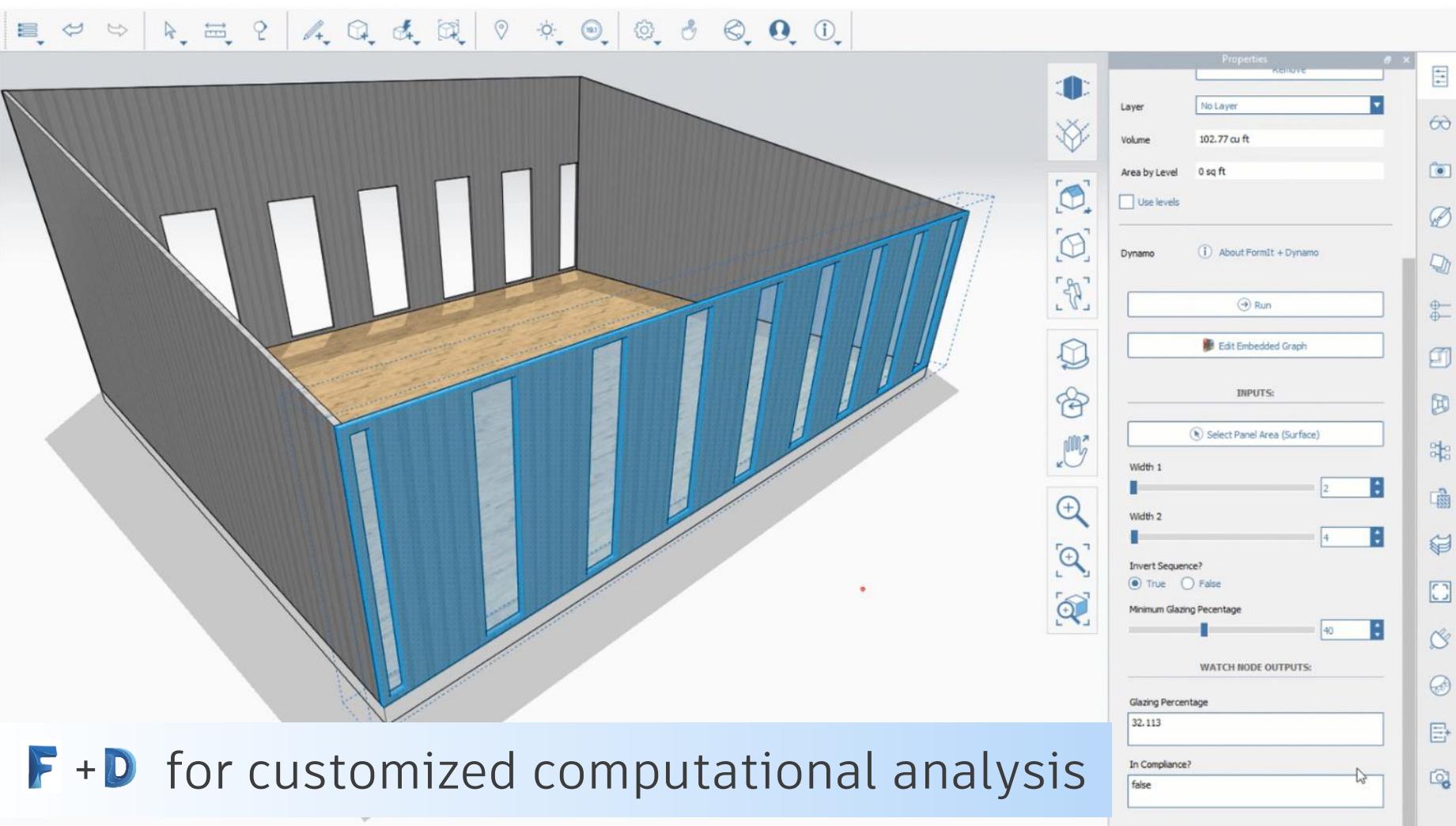
Tread Thickness: 0.1667

Height Between Middle Landings: 7

Middle Landing Length: 6

The screenshot shows the FormIt interface with a 3D model of a townhome. A staircase is being generated on the left side of the building. The 'Properties' panel on the right is open, showing parameters for the staircase's configuration. The 'Dynamo' tab is selected, and a 'Run (modified)' button is visible. Below it, an 'Edit Embedded Graph' button is shown. The 'INPUTS' section contains several sliders and dropdowns for defining the staircase's characteristics: 'Floor-to-Floor Height' (12), 'Stair Width' (1.5), 'Riser Height' (0.5), 'Tread Length' (1), 'Tread Overlap' (0), 'Tread Thickness' (0.1667), 'Height Between Middle Landings' (7), and 'Middle Landing Length' (6). The 'Add Top Landing?', 'Add Middle Landing(s)?', and 'Add Bottom Landing?' checkboxes are all checked. The 'Use levels' checkbox is unchecked.

F + D for intuitive computational design



The screenshot displays the FormIt + Dynamo interface, a plugin for the FormIt 3D modeling software. The main workspace shows a 3D model of a building's facade, featuring a dark grey vertical panel system and a blue horizontal glazing system. The glazing is arranged in a staggered pattern along the facade. The Properties panel on the right provides various parameters for the selected glazing elements, including 'Layer' (No Layer), 'Volume' (102.77 cu ft), and 'Area by Level' (0 sq ft). The 'Dynamo' section includes a 'Run' button and an 'Edit Embedded Graph' button. The 'INPUTS:' section contains a 'Select Panel Area (Surface)' button and two sliders for 'Width 1' (set to 2) and 'Width 2' (set to 4). A radio button for 'Invert Sequence?' is set to 'True'. The 'Minimum Glazing Percentage' is set to 40. The 'WATCH NODE OUTPUTS:' section shows the 'Glazing Percentage' as 32.113 and the 'In Compliance?' status as 'false'.

F + D for customized computational analysis



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Collaborative Data sharing



Markups

Filter ▾ Sort ▾



PRIVATE
Heather Lech
04:58 pm · V1 (current)
Scene

Add attachments



PUBLISHED
Heather Lech
04:57 pm · V1 (current)
Scene

Add attachments



Layers

Enter filter term

00 context - buildings

00 road plane

00 satellite - original

01 existing floor plates

01 opt 1 building

01 opt 1 structure

01 site

02 opt 1 furniture

03 people

04 vegetation

Layer0

people



F+  for collaboration on the Autodesk Cloud





What's next for
early stage design?

Connect

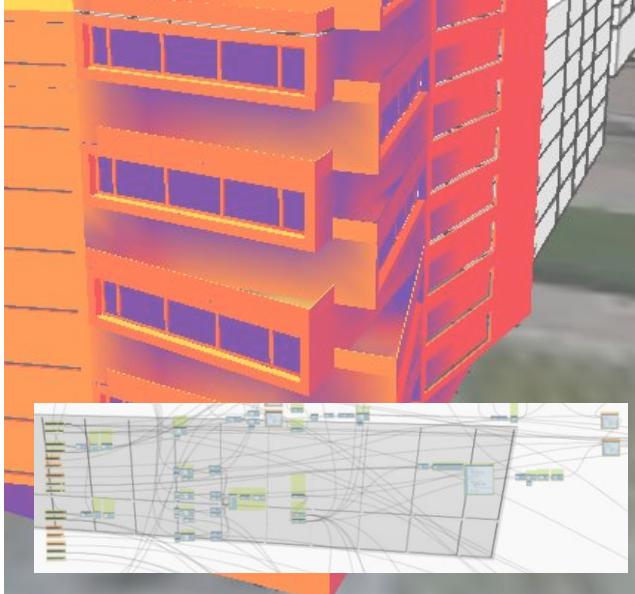
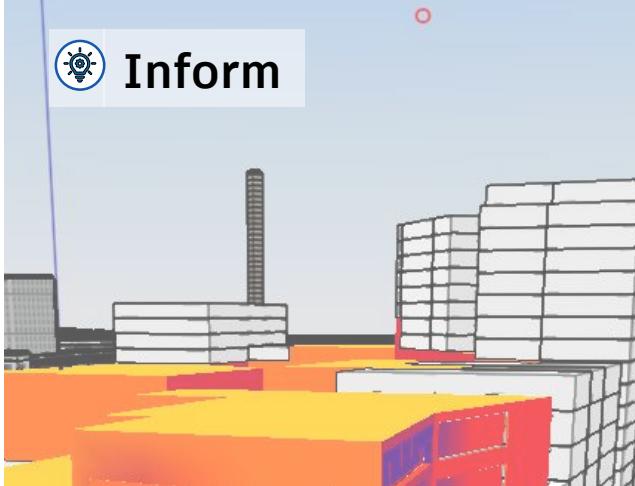


3D View

2D View

E	F	G	H	I
PANEL				
H	T	TYPE	MATERIAL	
7'-0 1/8"	1 3/4"	FL_01	RUSH	
7'-0"	1 3/4"	FP_01	WOOD	>By Category>
7'-0"	1 3/4"	FP_01	WOOD	WHITE BIRCH
7'-0"	1 3/4"	FP_01	WOOD	WHITE BIRCH
7'-0"	1 3/4"	FL_01	WOOD	WHITE BIRCH
7'-0"	1 3/4"	FL_01	ALUM	CLEAR ANODIZED
7'-0"	1 3/4"	FP_01	WOOD	WHITE BIRCH
8'-0"	1 3/4"	AE_01	ALUM	CLEAR ANODIZED
8'-0"	1 3/4"	AE_01	ALUM	CLEAR ANODIZED
7'-0"	1 3/4"	VL_01	HOLLOW METAL	PANT_P-02
7'-0"	1 3/4"	VL_01	HOLLOW METAL	>By Category>
7'-0"	1 3/4"	FP_01	WOOD	WHITE BIRCH
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7'-0"	1 3/4"	FP_01	WOOD	WHITE BIRCH

Inform



3D View

2D View

Collaborate



3D View

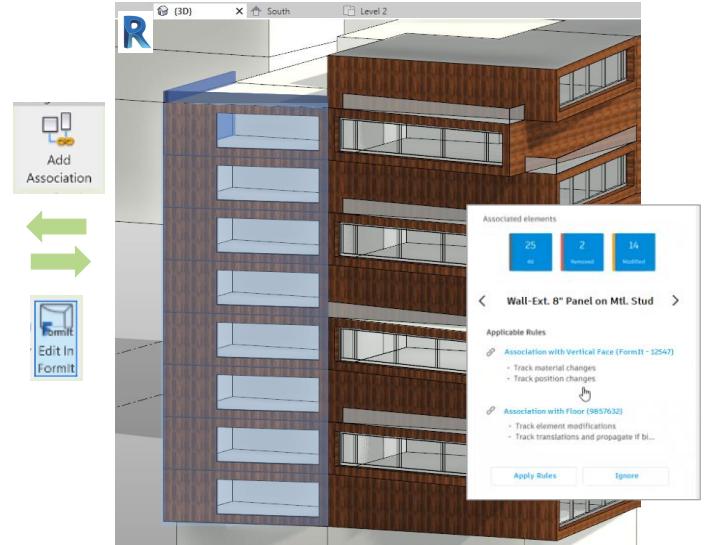
2D View





Connect workflows across the ADSK portfolio

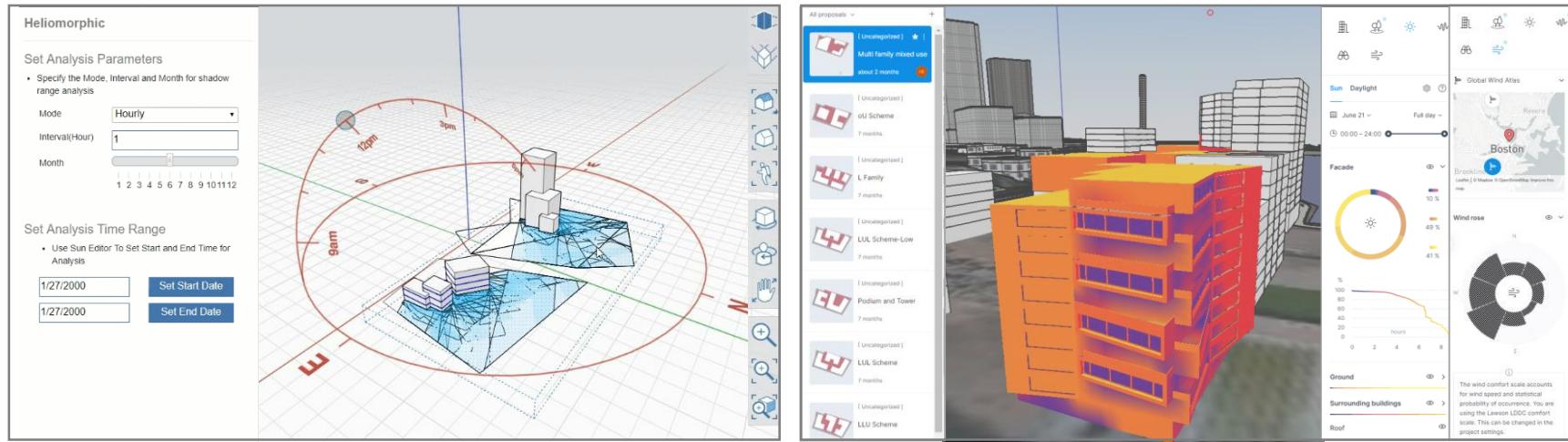
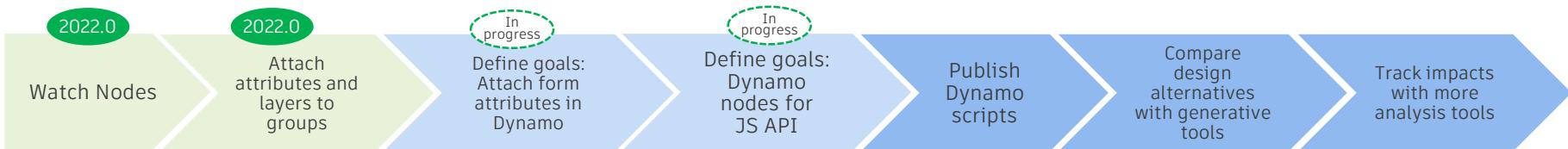
Create a seamless experience between conceptual and detailed design to prevent rework because design is iterative not linear.





Inform design with analysis and compute

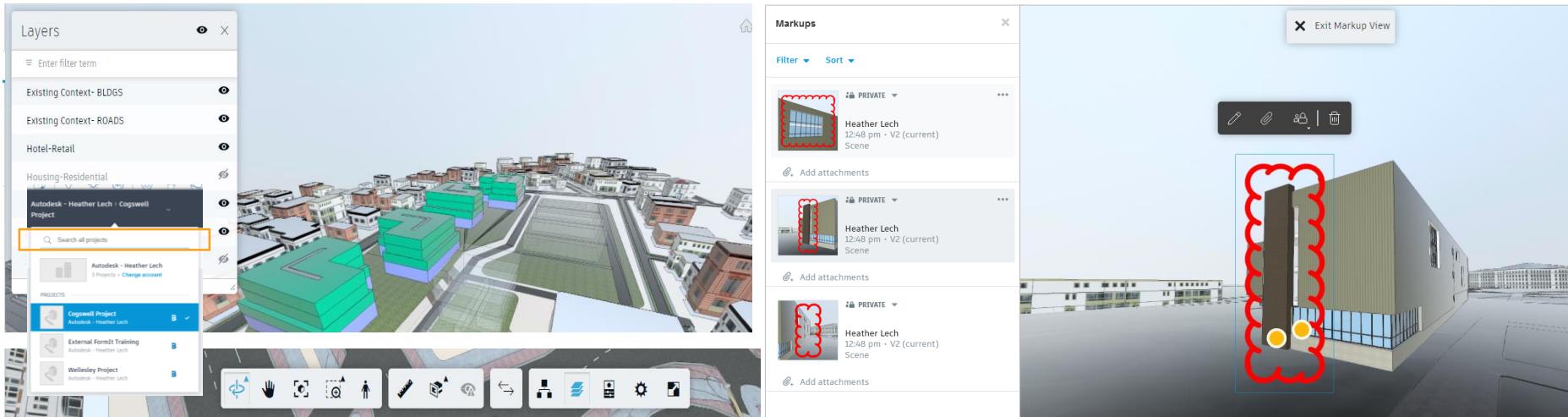
Combine computation and 3D sketching so architects can automate processes and make informed decisions in early stage design.





Collaborate with shared data on the Cloud

Ensure a single data source starting with early-stage design so teams can collaborate efficiently.





Improve Performance and Scalability

Enhance performance and scalability so that complex, data-rich projects remain fast and accessible.



Navigation: **4x – 20x faster**
Orbit, pan, zoom, swivel, jetpack mode...



Group Operations: **10x – 15x faster**
Edit/exit Group Edit mode, create Group, Make Unique...



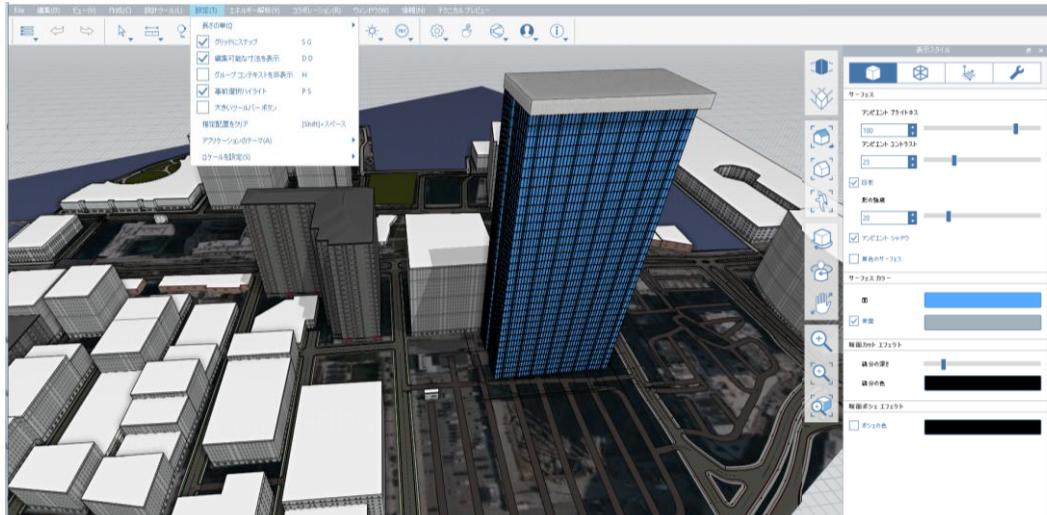
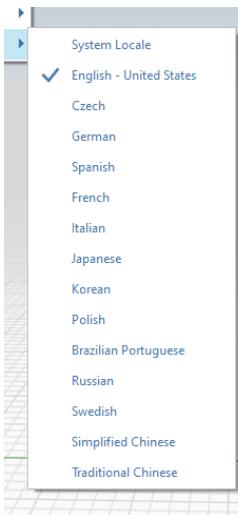
Selection and Preselection: **10x – 30x faster**
Especially with Groups containing lots of geometry



Creation and Editing: **4x – 20x faster**
Create/delete geometry, Drag Face/extrude, move, paint...



	FormIt File Size	Import Time		
		FormIt Converter (Revit 2021)	Import CAD (Revit 2022)	
Model 1	0.25 MB	60 seconds	5.54 seconds	10.8x
Model 2	2 MB	80 seconds	5.19 seconds	15.4x
Model 3	32 MB	2760 seconds	89 seconds	31.0x
Model 4	115 MB	(did not import)	138 seconds	∞
Model 5	230 MB	(did not import)	152 seconds	∞



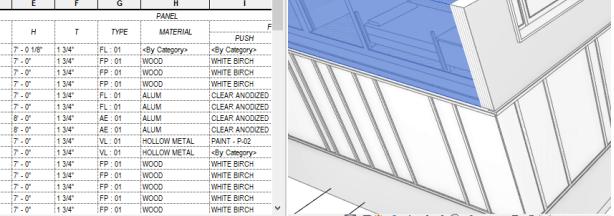
 **Connect** workflows across the Autodesk portfolio



F



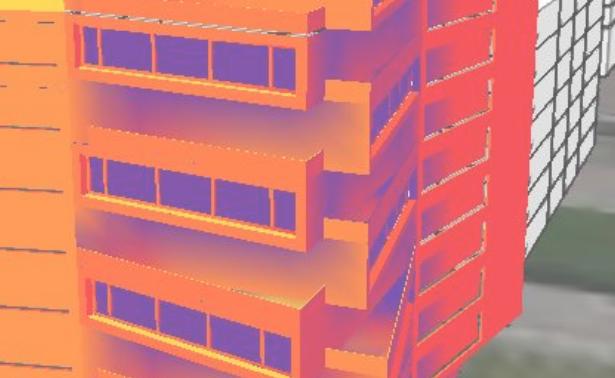
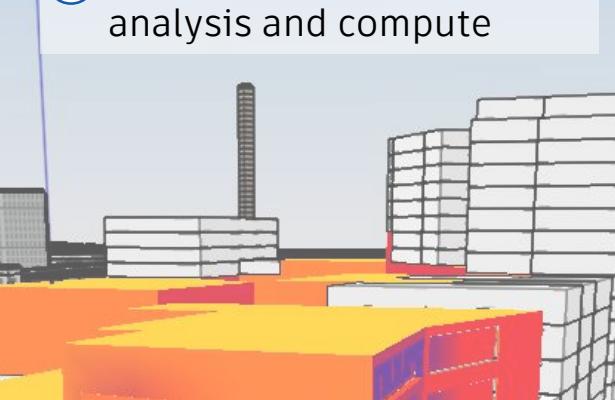
R



H **F** **G** **H** **I**

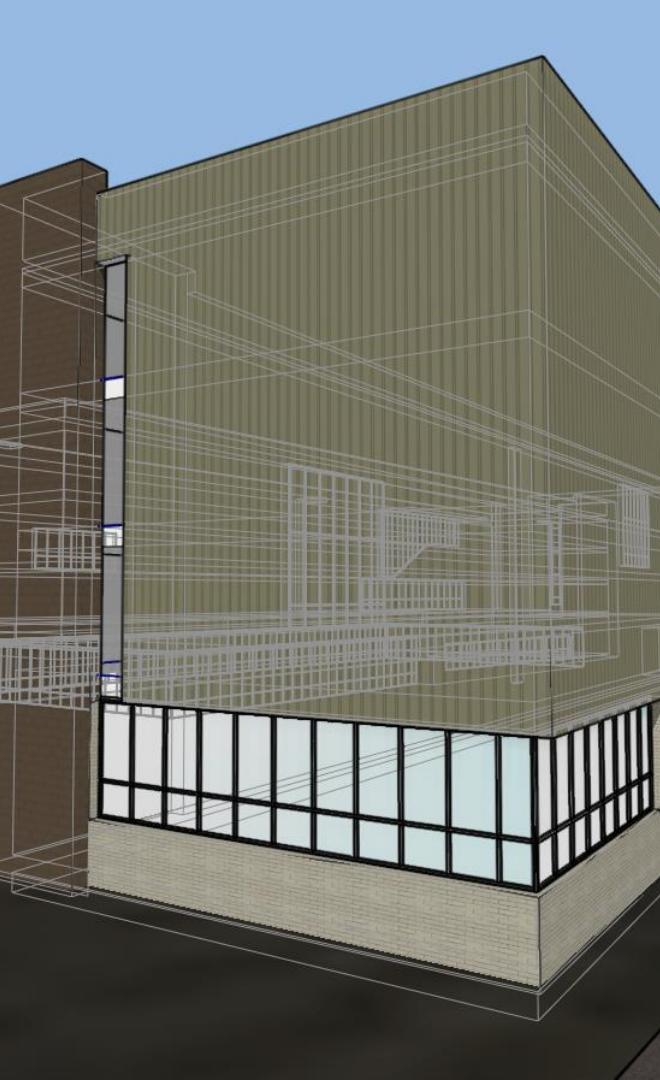
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7'-0"	1 3/4"	FP_01	WOOD	WHITE BIRCH

 **Inform** design with analysis and compute



 **Collaborate** on the Autodesk Cloud





AUTODESK® FORMIT® PRO

We **support architects** by combining **intelligent automation** and **informed analysis** with **fluid 3D sketching** so you can **design better buildings**.

formit.autodesk.com
autodesk.com/sustainability



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