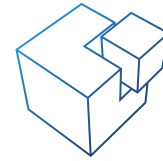


# BuilderHub

Driven by  
Incubation & Innovation  
Automated BIM Technology



# BuilderHub **pro**

Driven by  
Incubation & Innovation  
Automated BIM Technology



## It's Easy

Easy Modeling Process



## It's Fast

Superfast Automated  
Rebar-Detailing/Placing



## It's Precise

Minimizes human errors  
and produces precise outputs

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# What is BuilderHub Pro?

BuilderHub Pro is an automated 3D modeling software optimized for the current construction process.



## It's Easy

Automatic conversion of 2D drawings into 3D models powered with automated rebar detailing & placing features.



## It's Fast

Superfast rebar detailing tools coupled with easy-to-use editing & reporting options accelerate 3D modeling process.



## It's Precise

Minimized human errors increase the accuracy and completeness of 3D models and detailed QTO reports.



## We're connected

Excellent interoperability with 2DShopPro and Revit.

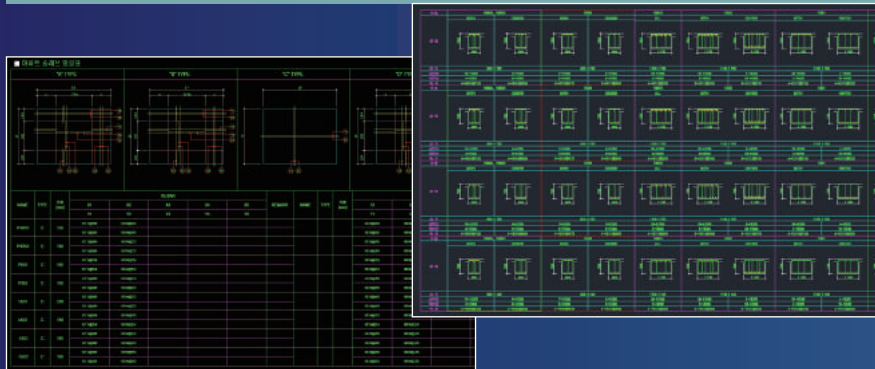
# Why Choose BuilderHub?

## It's Easy!

### Easy Modeling Process

Upon recognizing 2D member schedules and structural drawings, BuilderHub Pro automatically digitizes data, reports errors, and then instantly converts 2D data into 3D models. BuilderHub Pro's easy-to-use BIM tool increases and maximizes project success.

#### Member Schedules



#### Structural Drawings



#### 3D Model



#### STEP 1

Recognizes & digitizes 2D drawings

#### STEP 2

Automatically checks and reports errors

#### STEP 3

Instantly converts 2D data into 3D information models

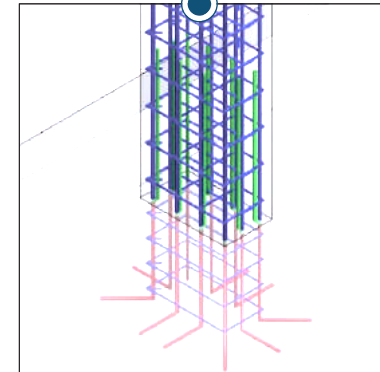
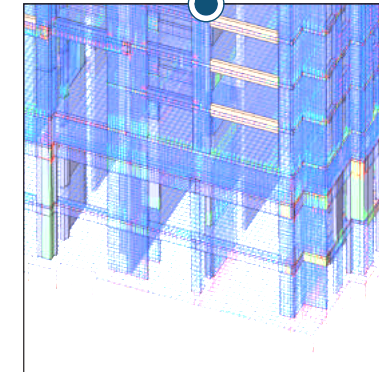
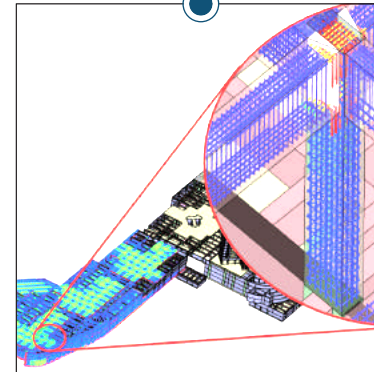
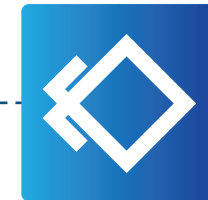
# Why Choose BuilderHub?

- STEP 1  
Set the rebar options for auto-placing
- STEP 2  
Click the generate button
- STEP 3  
Check the result

## It's Fast!

### Superfast Automated Rebar-Detailing/Placing

With few clicks, BuilderHub Pro instantly places rebar in great detail. No more spending endless hours of entering data for each rebar by hand! You can see highly detailed rebar rightly placed within the chosen members in a matter of seconds in real time.



# Why Choose BuilderHub?

BuilderHub Pro's automated process limits human involvement and thus minimizes human errors and produces precise QTOs for rebar, concrete, and formwork.

**3D Model**

Rebar View By Dia    Concrete View By Strength    Formwork View By Type

**QTO**

QTO Summary    QTO By Story    QTO By Member

## It's Precise!



No drawing error means No 3D modeling error, thanks to fully Automated BIM technology.



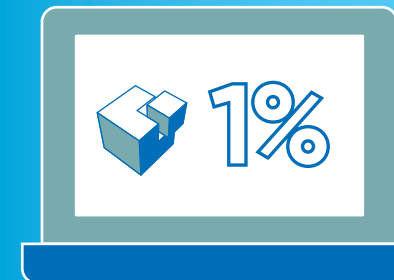
Intelligently builds 3D models and places rebar in compliance with the building codes and the user's options.



In accordance with the programming algorithms, it generates precise QTOs based on 3D information models.



Average error rate in QTO with the conventional estimate system



Sharply reduced error rate in QTO using BuilderHub

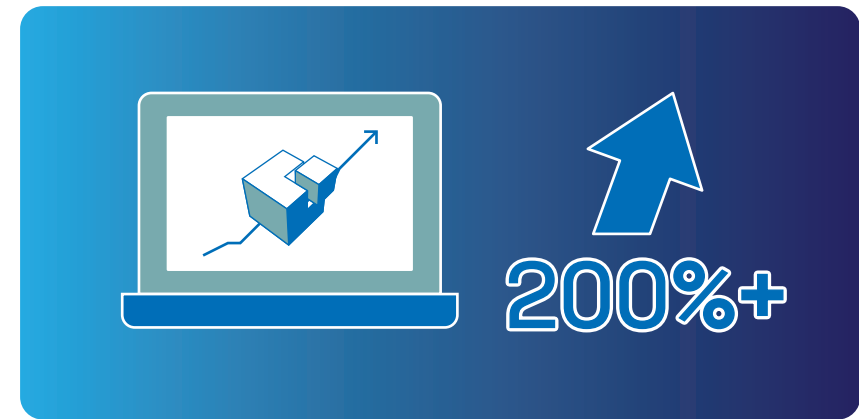
# How does BuilderHub Pro benefit users?

It's about time to leave tedious tasks to the advanced technology.



## Why Waste Time and Money?

Automation remarkably cuts down labor time and cost.



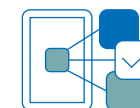
### 200% increase in productivity compared to similar BIM deliverables



BIM process becomes two times faster compared to the traditional modeling practice.



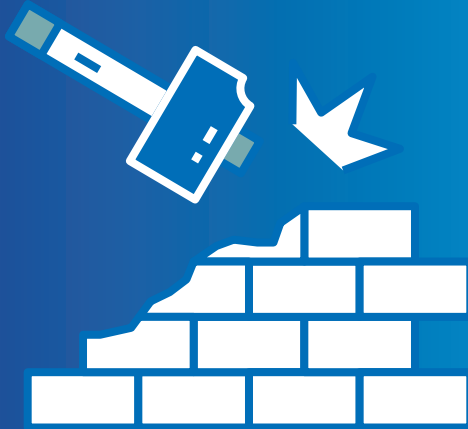
BuilderHub's automated tool to generate 2D CAD-based drawings expedite a shop drawing process.



Seamless data transmission between BuilderHub Pro and a shop drawing software streamlines workflows & increases overall efficiency.



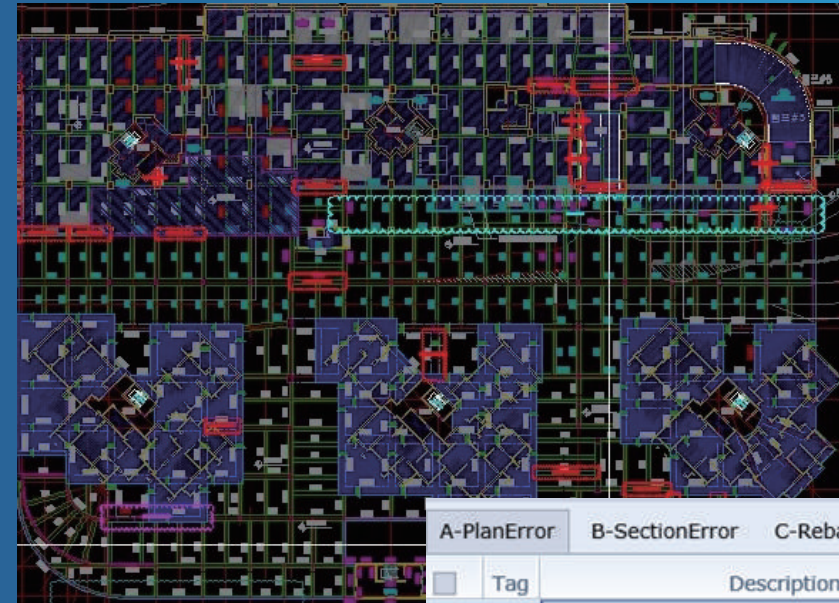
# How does BuilderHub Pro benefit users?



Stop Costly Rework  
& End Budget Overruns

## Report Error, Reduce Money!

A big drop in the occurrence of errors during 3D modeling prevents potential problems that may arise in the field during the actual construction. Budget overruns from costly rework can be stopped beforehand.



A-PlanError		B-SectionError		C-RebarError		D-Etc	
<input type="checkbox"/>	Tag	Description				<input type="checkbox"/>	Visible
<input checked="" type="checkbox"/>	1	The depth for RW3 is different. [section schedule &				<input checked="" type="checkbox"/>	
<input type="checkbox"/>	2	The size of TC3A is different. [section schedule & p				<input checked="" type="checkbox"/>	
<input type="checkbox"/>	3	The marks for the walls surrounding the stairs of A				<input checked="" type="checkbox"/>	
<input type="checkbox"/>	4	The depths for the walls surrounding the core of A				<input checked="" type="checkbox"/>	
<input type="checkbox"/>	5	The depths for G2 & G2A are different. [section sc				<input checked="" type="checkbox"/>	
<input type="checkbox"/>	6	The heights for C6A & C8A are different. [section s				<input checked="" type="checkbox"/>	

# How does BuilderHub Pro benefit users?

## It's Practical!

Timing is everything, especially in construction.



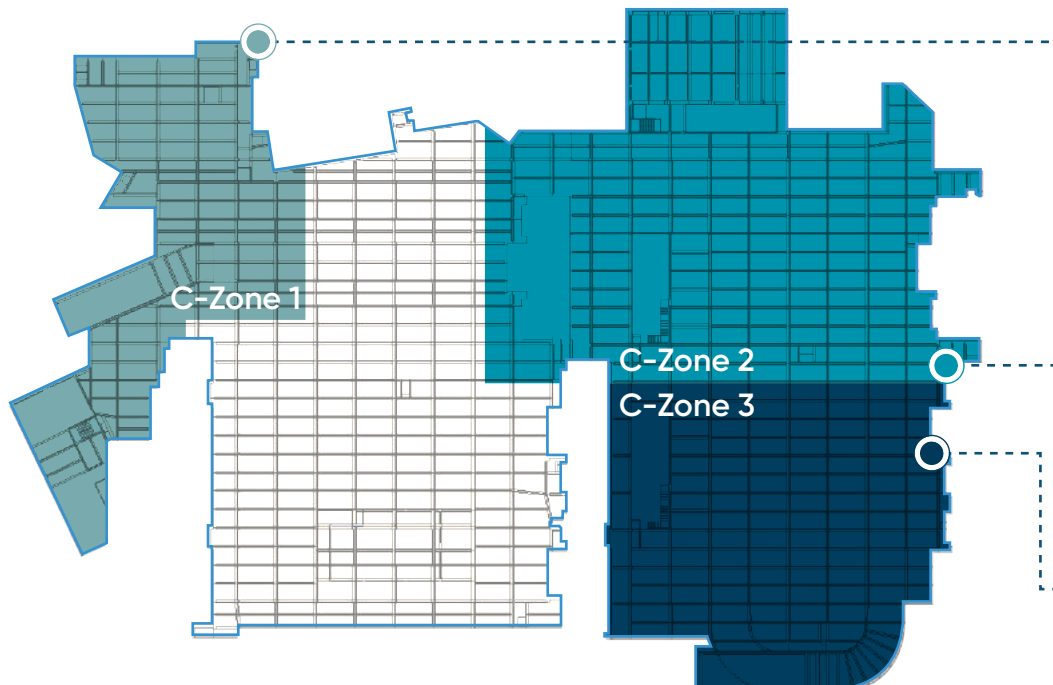
Producing QTO reports for each concrete, formwork, and rebar based on the construction zoning plan ensures a proper procurement process.



Practical engineering and productive construction are achieved through smooth communication and coordination among all project parties with the help of QTO reports in Excel.



Providing real-time results of any changes enables smarter decision making in an early phase of the project and facilitates the overall project management.

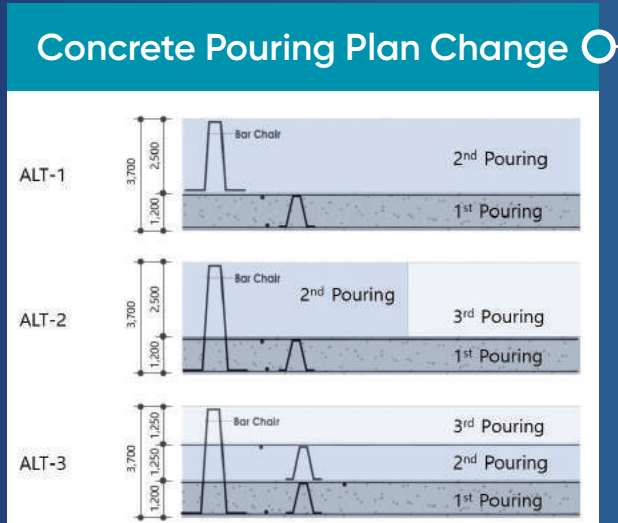
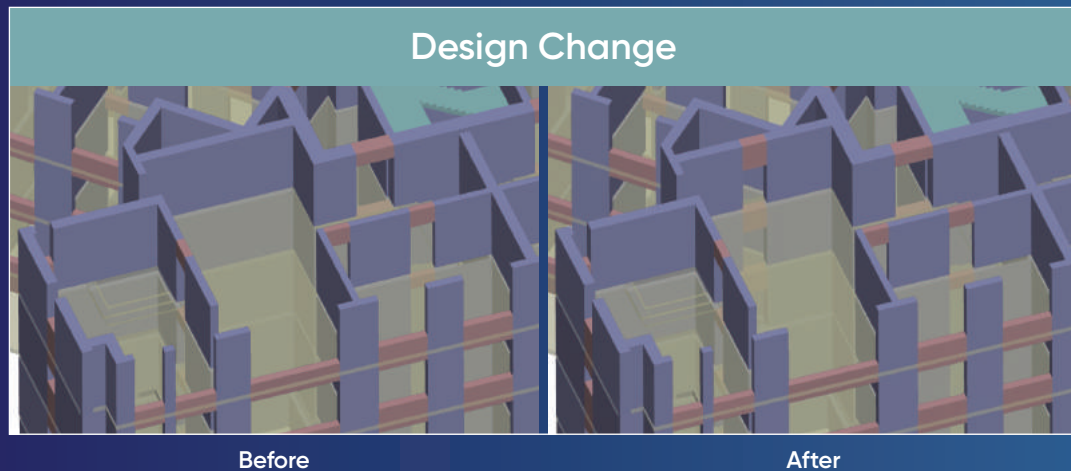


Task : C-Zone 1		Concrete(m³)			Formwork(m²)				Rebar(ton) : SD500					
START	END	Item	25 - C18 - 18	25 - C24 - 18	25 - C27 - 18	GangForm	Aluminum (Vertical)	Aluminum (Horizontal)	EuroForm	Plywood Usage No.3	Plywood Usage No.4	SHD10	SHD13	SHD16
1/1/2000	2/1/2000	Footing	148.470	602.944	0.000	0.000	0.000	0.000	0.000	0.000	225.204	0.000	1.312	0.000
		Column	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.026	0.038	0.000
		Beam	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Slab	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Wall	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.051	3.469	0.000
		Parapet	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Stair	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Etc.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Deck	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Total	148.470	602.944	0.000	0.000	0.000	0.000	0.000	0.000	225.204	1.076	4.819	0.000

Task : C-Zone 2		Concrete(m³)			Formwork(m²)				Rebar(ton) : SD500					
START	END	Item	25 - C18 - 18	25 - C24 - 18	25 - C27 - 18	GangForm	Aluminum (Vertical)	Aluminum (Horizontal)	EuroForm	Plywood Usage No.3	Plywood Usage No.4	SHD10	SHD13	SHD16
1/15/2000	2/15/2000	Footing	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Column	0.000	0.000	6.977	0.000	0.000	0.000	0.000	51.006	0.000	0.301	0.000	0.000
		Beam	0.000	0.000	5.979	0.000	0.000	0.000	0.000	42.224	0.000	0.308	0.000	0.000
		Slab	0.000	0.000	84.947	0.000	0.000	0.000	0.000	429.438	0.000	4.609	0.157	0.000
		Wall	0.000	0.000	243.182	0.000	0.000	0.000	1495.895	0.000	0.000	4.408	12.213	0.000
		Parapet	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Stair	0.000	0.000	2.678	0.000	1.233	19.070	0.000	0.000	0.000	0.260	0.038	0.000
		Etc.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Deck	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		Total	0.000	0.000	345.763	0.000	1.233	19.070	1495.895	522.668	0.000	9.886	12.408	0.000

Task : C-Zone 3		Concrete(m³)			Formwork(m²)				Rebar(ton) : SD500					
START	END	Item	25 - C18 - 18	25 - C24 - 18	25 - C27 - 18	GangForm	Aluminum (Vertical)	Aluminum (Horizontal)	EuroForm	Plywood Usage No.3	Plywood Usage No.4	SHD10	SHD13	SHD16
2/5/2000	3/10/2000	Footing	4.896	7.323	0.000	0.000	0.000	0.000	0.000	0.000	4.616	0.000	0.000	0.000
		Column	0.000	0.000	13.677	0.000	0.000	0.000	0.000	63.597	0.000	0.512	0.006	0.000
		Beam	0.000	0.000	30.620	0.000	0.000	0.000	0.000	127.557	0.000	0.503	1.626	0.000
		Slab	0.000	0.000	100.964	0.000	0.000	0.000	0.000	490.834	0.000	4.943	0.157	0.000
		Wall	0.000	0.000	322.124	0.000	0.000	0.000	2285.753	0.000	0.000	6.792	15.563	0.000
		Parapet	0.000	0.000	6.719	0.000	0.000	0.000	0.000	88.159	0.000	0.659	0.163	0.000
		Stair	0.000	0.000	5.143	0.000	2.317	34.406	0.000	0.000	0.000	0.539	0.081	0.000

# How does BuilderHub Pro benefit users?



## Headache-Free Revising!

Easy revising enables a value engineering practice.



As changes are made, they are automatically reflected in all associated areas on both 3D models and 2D drawings



Since BuilderHub Pro generates QTO for each alternative in real time, you can see the cost implications of modifications



By conducting a comparative analysis on alternatives, you can improve your decision-making and choose the optimal model.

Unit : Ton			
	ALT-1	ALT-2	ALT-3
Rebar	1,069.706	1,201.191	1,214.411
Difference	-	+ 131.485	+144.705

This chart illustrates how promptly you can be provided with the QTO results for each alternative, allowing you to see the cost implications at a glance.

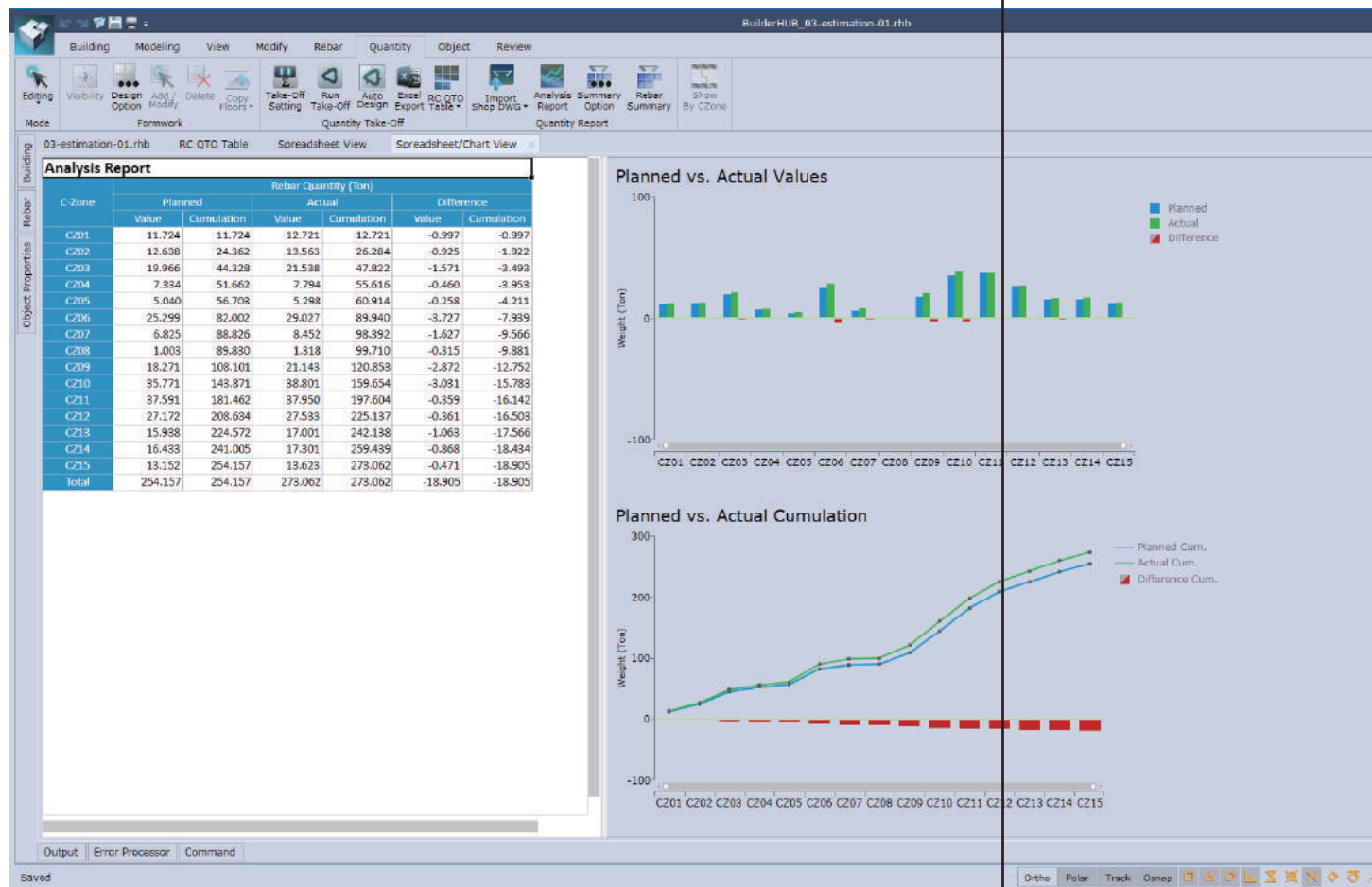
# How does BuilderHub Pro benefit users?

## Remove Risk in Advance!

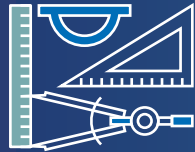
BuilderHub Pro can work as a preventive measure for risk management.

It automatically creates comparative analysis reports between planned and actual quantity in the form of both spreadsheet and graphs.

By reviewing analysis reports, you can see whether your target cost is well managed and identify problems in the early phases of a project, preventing budget overruns.



# How does BuilderHub Pro benefit users?



Conventionally, 3~6 months  
Over 1,000 drawings per site

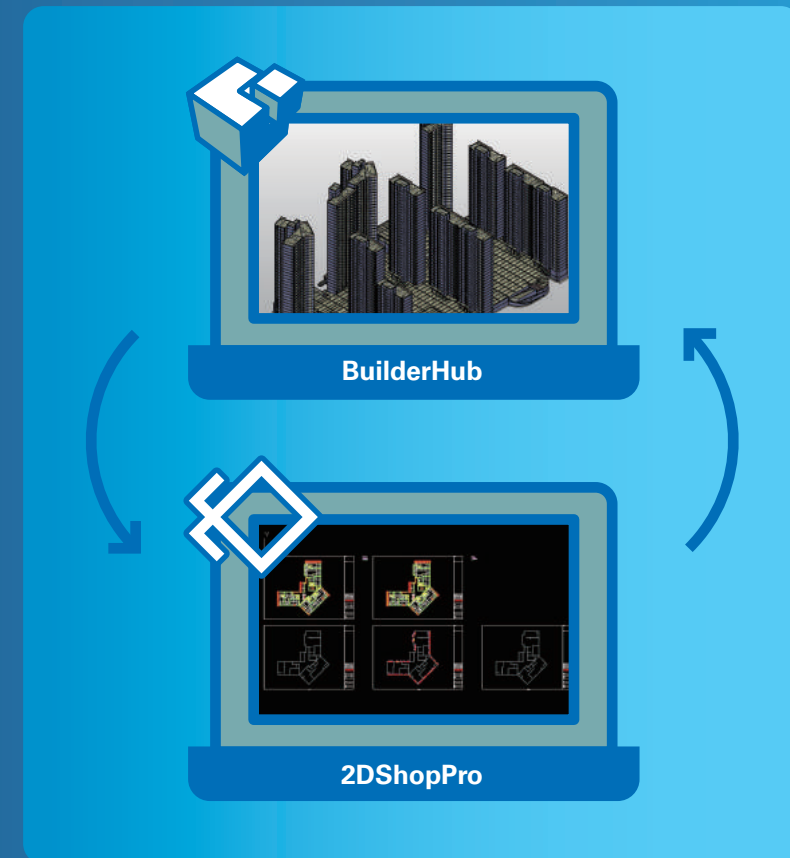


Drawing Time  
Reduced to 1/10

## We're Connected!

### Excellent Interoperability with Shop Drawing Software

Seamless data transmission between BuilderHub Pro and a 2D shop drawing tool remarkably reduces working hours required for shop drawing generation.



Ex) BuilderHub Pro automatically produces 2D CAD-based drawings from 3D models and shares them with 2DShopPro, a designing tool that automatically generates detailed rebar shop drawings and an accurate bar list.

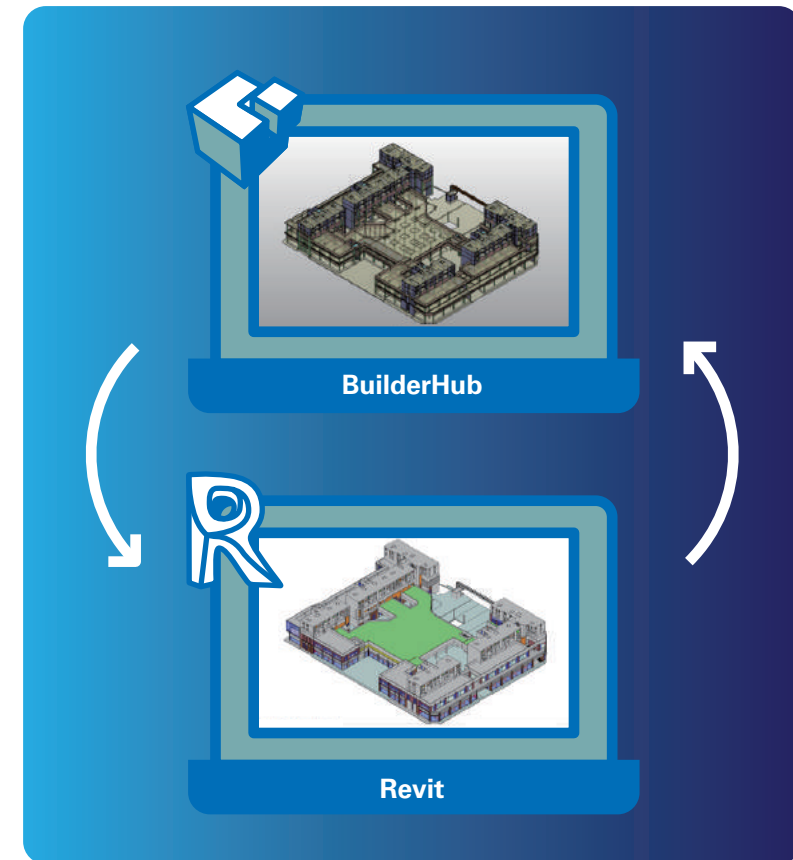
# How does BuilderHub Pro benefit users?



Allows you to perform follow-up tasks such as creating MEP, finish details and so forth.

## We're Connected!

Excellent Interoperability with Revit



The members of 3D model that BuilderHub Pro creates can be easily converted into Autodesk Revit family instances without losing any data.

# Technical Support

 What's your question?  
We have the solution.



Provide you with prompt and on-point technical assistance



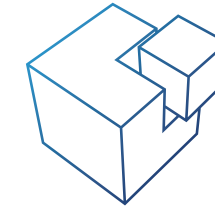
Training: offer you both face-to-face product training service and online resources to walk you through the program



Technical Assistance: hot line, e-mail, live support with remote solution & on-site visits are also available



When possible, we customize BuilderHub Pro in a way that best fits your needs



## We're Different

ChangSoft I & I incubates and innovates 3D model-based digital solutions that actually improve practicality and drastically increase productivity across multiple disciplines in the AEC industry.

Since the inception of ChangSoft I&I, maximizing productivity has been at the heart of our creative minds.

## Let Us Make You Different

Using the ordinary BIM tools, you might be only one step ahead of others with your passion and efforts. However, adopting our extraordinary technology, you will advance by leaps and bounds because our creative minds will pave the way for you.

**Goodbye to the Old and Hello to the New!**





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