

# AutoDesk Revit

Software Instructions

Software used			AutoDesk Revit
Version #			1
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Reviewed by	James T.	Date	20/11/20

# Software Instructions: AutoDesk Revit

#### Acknowledgments

We would like to acknowledge the following references used to compile these instructions for students:

1. [link or reference]

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# Software Instructions for Autodesk Revit

# Intro:

### Starting your project

When you open your new project, you will be presented with the following screen.

(c) MODELS	Recent Files   Learn -
Dpen	MODELS
FAMILIES Open New	
	Project3 Sample Architecture Proj Sample Structure Project Sample Systems Project
🐻 Recent Files	FAMILIES
	Sample Architecture Fami Sample Structure Family Sample Systems Family

When the options for opening a new project are presented, select the architectural template and click OK.

Construction Tem	olate	 ~	Browse	
<none></none>	procession in the second se			
Construction Tem	plate			
Structural Tervila	plate te			
Mechanical Templ	ate	ate		

On the left side of the window, there is a list of all current views of the project. The levels featured under the structural plans tab are the floors of the structure. Double click on level 1 or ground depending on which is the lowest. This will open a window to edit and work on this floor plan.

#### Software Name



# **Basic house layout:**

#### Outer walls

To begin building the walls of the structure, select the wall architectue option under the wall tab.



Once the wall tool has been selected, the shape options are available. For most structures, you will likely want to select the rectangle option.



		A	Autodesk Revit	t 2020.2 -	- Education
ew	Manage	Add-Ins	Modify   Pla	ce Wall	• •
-   -					
e	Create		Draw		
0	ffset: 0.0		Radios	: 100	0.0

Draw the shape of the walls you want by clicking an area to be one corner, and then click the opposite corner. The size of these walls may be edited later.



By typing the letters 'un' you have the option to chang the units being used in this project. This project will have length units changed to metres.

jiscipline:	Common			$\sim$
Units		Forma	ıt	^
Length		1235 [m	m]	
Area		1235 m	1 <sup>2</sup>	
Volume		1234.57	m³	
Angle		12.35*	I	
Slope		12.35*	I	
Currency		1234.5	7	
Mass Density		1234.57 kg	ŋ∕m³	
Time		1234.6	s	
Speed		1234.6 kn	n/h	
				~
Decimal symbol/dig	it grouping:			
123,456,789.00	~			

Format	ammon X
Format	^
Use project setting	s
<u>U</u> nits:	Meters ~
Rounding:	Decimal feet Feet and fractional inches
0 decimal places	Decimal inches Fractional inches
Unit symbol:	Meters
None	Centimeters
Suppress trailing 0	Milmeters Meters and centimeters
Suppress 0 feet	
Show + for positive	e values
Use diait arouping	
Suppress spaces	
	OK Cancel



To change the dimensions of your walls, select a wall. This will allow you to change the distance between this wall and the opposite wall.



Clicking on the number displaying the imensions of the wall will allow you to type a new length value for the wall.



In the Annotate tab, you can select the linear tool. This will allow you to label the length dimensions to your project.

	1 - 4		-	~ ~	10 A	0 .	x u_	-
File Archite	cture	Structure	Steel	Systems	Insert	Annotate	Analyze	Massing
			K	S 4	2 4	• 4	$\rightarrow$	<u>_</u> ]]
Modity Aligne	ed Linea	Linear Din	nension	is postor - I	(De 10	10F 180	t \bot	Line
Select 🔻		Places hor between re	izontal o eference	r vertical di points.	mensions	that measure	the distance	
roperties		The dimentities the view.	isions an	e aligned wi	th the hor	izontal or ver	tical axis of	
Floor Plan: Grour	or Plan nd Fl 🗸			2600_1600			10756	
braphics			×			/		
View Scale	1:100		+h		V		*	
Scale Value 1:	100		8 I <b>'</b>	<i></i>	Ľ			
Display Model	Norma		~↓ <b>L</b>					
Detail Level	Coarse		· +	6600	290	08 3100	۷.	
Parts Visibility	Show C		а 1		а 1	1 1		
Visibility/Grap	Ec							
Graphic Displ	Ec	Press F1 fe	or more	help				
Orientation	Project	Noren :	1					
Wall Join Disp	Clean a	ll wall j						
Discipline	Archite	ctural						

### **Editing Footprint**

Once the outside walls are completed, you can select the line tool to draw in the internal walls. mouny price iuge



1

Radius: 1.0

With these new internal walls, the shape of the external walls can also be changed.



The trim/extend tool can be used to help edit the wall shapes.





Select one of the walls to trim around. Be sure to click the wall on the side you wish to keep. Following this, click the second wall that you wish to make a corner out of.



Repeat this process for the other corner.



This process allows you to edit the footprint of your structure like so.



Another tool is the split element tool. This is especially useful in combination with the trim and extend tool.





If you want to cut out a section of wall using trim and extend, using the split tool to separate the center line allows you to trim and extend either side.



### Adding openings

Once the internal walls are added, doors and windows can be added. Select the door tool in the main toolbar.



Find the location you want to place the door and ensure the door is placed on the correct side of the wall.



Once the doors are all placed your structure may look as follows.





#### The process for placing windows is the same.







### Rooms

Once your structure is finished, you can define the rooms of your structure. Select the Room tool.

Autodesk Revit 2020.2 - Educational Version - Project1.rvt - Floor Plan: Ground Floor	
Ins Modify   Place Window 📼 🗸	
IL [6] 🗖 🖾 🗖 💆 🔀 🖉 🗄 🖁	
Model Model Room Room Tag Area Area Tag By Shaft Wall Line Group Separator Room * Boundary Area Face	Ver
Model Room (RM) per	ing
Creates a room bounded by model elements (such as walls, floors, and ceilings) and separation lines.	
Úpen a plan view.	
Room boundaries are automatically defined by many types of model elements. You can add separation lines to add and adjust room boundaries.	
Press P1 for more help	

Using the room tool, add a room label to each room you want to define.



If you want to define two separate rooms but there isn't a wall separating them, you can use the room separator tool to define the boundary.





You can also rename the rooms by double clicking the name.



This is what the assigned rooms will look like.



The rooms can also be colour coded with a legend, using the colour fill tool in the annotations tab.





Once the tool is selected, this will hover over the cursor. Choose somewhere to place your legend in the page.



Once placed, you will be asked to choose the legend type. Select rooms as the space type and select a colour scheme.

			L	
	Choose Space Type	and Color Scheme	×	
	A color scheme has The legend will appo view, choose a spa	not been assigned to the view ear blank. To apply a color sch ce type and scheme and press	r. heme to the ; OK.	
ן	Space Type:	Rooms ~		
	Color Scheme:	Number	0	
		ок	Cancel	tc
				ť

This is what the legend will look like once placed.



With the colour fill legends tool seleced, in the modify tab you can open the edit scheme menu.



With this menu open, you can change the labels on the legend to the room names. You can also change the colours.





Here is what your page will look like once the room legend is complete.



### Internal Walls

You'll notice that all of the walls inside the house are the same thickness as the outside walls. This can be changed. Select all of the internal walls you want to change the thickness of. You'll note that this selects one of the outter walls as well. The split tool can be used to fix this.



In the properties menu, select the dropdown for the wall type.

Modify   Walls       Activate Dimensions         Properties	Select 👻 Proper	rties Clipb	board	Geometry		M	odify
Properties       Image: Constraints         Double brick - 270       Dasic Wall : Double brick - 270 : R1         Walls (/)       Image: Wall : Double brick - 270 : R1         Constraints       Dosic Wall : Double brick - 270 : R1         Dosic Wall : Double brick - 270 : R1       Image: Wall : Double brick - 270 : R1         Constraints       Dosic Wall : Double brick - 270 : R1         Base Constraint       Ground Floo         Base Offset       0.0000         Base Extensio       0.0000         Top Offset       0.0000         Press F1 for more help       Top Extension         Top Extension       0.0000         Related to Mass       Image: Properties	Modify   Walls	Activate	e Dimensions				
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Sedecural	Structural		\$				

Select the generic 100mm wall.



Şearch	م م	
Basic Wall	^	
B ock veneer - 230 sta	el	
Brick - 110		
Brick - 230		
Brick veneer - 250 ste	el	
Brick veneer - 250 tim	be-	
Double brick 270		
Generic 100mm Wall	2	
Generic 200mm Wall	Generic 100mm Wall	
Generic 300mm Wall		
Stud steel - 90		
	~	
East		
North		
South		

This is the result with the thely narrowed internal walls



## Roofing

To create the roof for your structure, select the roof button in the toolbar.





If you open the roof menu from the level your building is constructed on, this menu will open asking if you want to go up a level for your roof. Select yes.

	Lowest Level Notice $\times$
	You have created the Roof on the lowest level. Would you like to move it to:
	Level 1 $\checkmark$ ?
~	Yes No
_	

Select the walls which define the outline or footprint for the roof, a pink line will display where the footprint of the roof is based.



Here is what it may look like once you've completed your outline selection. You'll notice that the wall in the middle continues past the outline.



You can select the walls you've placed and change which side of the wall it appears on. This can be done by either dragging the wall or selecting the arrows in the middle of the wall.





To fix the over lap of the footprint into the internal area of the house, use the trim and extend tool used previously to select the dimensions to be kept.



Once you are satisfied with the footprint for your roof, click the green checkmark.



Once you have chosen to finish the outline, Revit will ask if you want to attach the walls to the roof. Select attach.

Attaching to roof	×
Would you like to attach the high	lighted walls to the roof?
Do not show me this message again	Attach Don't attach

You can open the view for the level your roof was created on to view the new roof.



This is how it will look.





Under the view tab, you can open the 3D view menu to see your structure in 3D.



Here is the result. You'll note that the roof cuts off at the walls and has no overhang.



You can edit your roof footprint by selecting the foor and clicking Edit Footprint in the modify tab.



To create a degree of overhang or the roof, we will use the offset tool in the toolbar.





You can also select the amount by which the offset spaces out, in this case we use 2 metres, however this was a little excessive.



Select each section of the footprint with the offset tool. This produces another outline at the offset distance. Ue the trim and extend tool to clean up this outline.



Once the offset outline is ready, you can delete the previous outline and complete the roof footprint.



### Flooring

To create a flooring for your sturcture, open the floor tool in the main toolbar. This will allow you to create the floor under your building.





#### Furniture

Once your structure is consructed, you can begin to add furnishings. In th main toolbar, select the "Component -> Place a Component" menu.

1.14		⇒ . K	l⊙ A	10.	Y ==	1 I 🗙 4	- · •			
ructure	Steel	System	s Insert	: Ann	iotate	Analyze	Massir	ng & Site	Collab	orate
	IJ			F	P					
Vindow	Compone	ent (	Column •	Roof *	Ceiling	Floor	Curtain System	Curtain Grid	Mullion	Railin *
	Plac	e a Cor	nponent	d						1
	Mar Mar	del In-	Place a Co	mponer	nt (CM)					Roof S
l	•		Places an e element ty	lement pe.	in the bu	ilding mo	odel, base	:d on a se	lected	
Edit Ty	rpe		Use the dri type is not project.	op-down listed, ι	n list to se ise the Lo	elect the ad Famil	element t ly tool to	ype. If thi Ioad it int	e desired o the	
^	<b>^</b>	1	Then click the buildir	in the d ig mode	rawing ar :I.	ea to pla	ce eleme	nts of tha	t type in	
inal 	A month source data manda m					9				
	<b>v</b>	F	Press F1 fo	or more	help					
Apply										

To use a model that you haven't used yet, in the modiy menu select the Load Family option



Search through the folders to find the model you want to use and click open.



Look in	Furniture		v 🔶 🖡	🔍 🗶 🔍 Vie
	Name	Date modified	Type	iew
	Beds	5/02/2020 12:41 PM	File folder	
Documents	Seating	5/02/2020 12:42 PM	File folder	
	Storage	5/02/2020 12:42 PM	File folder	
	Tables	5/02/2020 12:42 PM	File folder 🔍 🔍	
	Mirror-Ellipse.rfa	16/01/2019 3:31 PM	Autodesk	
	Piano (AUS).rfa	16/01/2019 3:31 PM	Autodesk	
	TV - Flat Screen.rfa	16/01/2019 3:30 PM	Autodesk	
My Network	TV Stand.rfa	16/01/2019 3:30 PM	Autodesk	
Favorites Desktop	Type: Aut Size: 380 k Date mod	odesk Revit Family 18 ified: 16/01/2019 3:30 PM		
	<		>	
	File name: TV Stand.rfa		~	

Find the location you want to place your object and click to place it down.



With this tv stand, we will want to put a tv on it, and to do this, we need to know how tall the stand is. In the properties menu, select the "edit type" button and find the height dimension. This, as well as the other dimensions, can be changed.

Family:	IV Stand		~ I	Load	
ype:	TV Stand		∼ Du	plicate	
			Re	ename	
Type Paramet	iers				_
	Parariieter _	1	/alue	=	^
Constraints				*	
Default Elev	ation	0.0000			
Materials a	nd Finishes			\$	
Finish		Melamine - Gra	Ý		
Dimension	5			\$	
Depth		0.4600		1	
Width		1.1000		Ī	
Height		0.5000			
Identity Da	ta			\$	
Type Image					
Keynote					
Model		]			
Manufactur	e'	l			
Type Comn URL	rents				
Descrption					
Assemply C	ode				
Cost		l			
Assemply D	escription				¥

Here is what trying to place a TV on the TV stand looks like without editing the offset.



To fix this, go to the properties menu and find the "elevation from..." field. Set this field to the height of the object you want to place the TV onto.



Modify   Pla	ice Co	mponent	Ro	tate
Properties			×	r.
	TV - 1 0810	Flat Screen mm	•	
New Furnitu	re	V 📴 Edit	t Type	
Constraints			\$	
Level		Ground Floor		
Elevation fr	om	0.5		
Host		Level : Ground	I FI	
Offset from	Host	0.0000		
Moves With	n Ne			
Graphics			\$	
Stand		$\checkmark$		
Identity Data			\$	
Image				
Comments				
Mark				

This is what the TV looks like with the correct height offset.



The align tool can be used to line up furniture with the walls or other furnishings.



Be sure to first select the edge on the object you want to move, then the edge you'd like to move it to.





To select a model that you have already used in the project, you can, instead of going to the "Add Family" menu, select the dropdown in the property menu and find the model you want to use.



Here is the result of these furnishings.





# Analysis:

### Room schedules

Schedules are Revit's way of performing an analysis on the project. To create a new schedule, right click on the schedules listing in the views window, then select "New Schedule/Quantities".



Once the schedule menu is open select the type of schedule you want to create. In this case we will be using the rooms type.



In the following menu, you can select the fields of the schedule that will be displayed. In this case we are using the name, area, and count. Select OK to finish creating.

Bathroom			U	ffice		
1 Schedule Pro	operties			3	×	
Fields Filte	er Sorting/Grouping P	Formatting Appeara	ance Embedded Sche	dule		
Select avail	able fields from:	~			_	
Available fi	elds:		Scheduled fields (i	n order):	_	
Base Finisl Base Offs Ceiling Fin	। st	^ <b>F</b>	Name Area Count			
Comments Departmen Floor Finisi IfoGUID	¥ h					
Image Level Limit Offse	ət	<b>*</b> 5				
Number Occupancy Occupant	/	fr				
Unbounde	d Height	v 📑				
1 D			🧷 🏷 🕇 🗄	ΨE		
□ Include	elements in links				_	
			OK	Cancel	Help	
1		Livir	ng Room		-	
			7			

Once the schedule is created, this table is created displaying the relevent information of each room.



•	≪Room S	ichedul	e 2>		
Д		8		С	
Namo	A	Vrca		Court	
Bathroom	7 m²		1		
Bedrooni	31 ແຕ		1		
Office	32 m²		1		
Cief, Rubin	31 u i		1		- 1
Foyer	78 m²		1		
Kitcher	5C n#		1		
Livina Roon	87 m²		1		

## **Costing Schedule**

Using the 'un' units menu, you can select the currency of the projct and its formatting.

om	Project Units Discipline:	ommon	×	Office	×
Foyer 5	Units Length Area Volume Angle Slope Currency Mass Density Thas Density Speed	Format 1235 [m] 1235 m <sup>2</sup> 1234.57 m <sup>3</sup> 12.35* 1234.57 1234.57 1234.57 1234.57 1234.6 s 1234.6 km/h		Units: Currency Inits: Currency Rounding: Rounding increment: 2 decimal places 0.01 Unit symbol: Suppress trailing 0's Suppress trailing 0's Units on + for positive values Use digit grouping Suppress spaces	Bathroom Bedroom Craft Room Foyer
	Decimal symbol/digit gr 123,456,789.00 OK	Cancel Heb		OK Cancel	Living Room Office

Project Units			$\times$	Office		
Discipline:	Common		$\sim$	Format		×
Un	its	Format	^			
Length		1235 [m]		Use project setting	gs	
Area		1235 m <sup>2</sup>		Linits:	Currency	~
Volume		1234.57 m <sup>3</sup>		Concert.	continey	Bath
Angle		12.35°	1	Rounding:	Rounding increment:	Jau
Slope		12.35°		To the nearest 10	V 10	
Currency		1234.57				Bed
Mass Density		1234.57 kg/m³		Unit symbol:		200
Time		1234.6 s		\$	$\sim$	
Speed		1234.6 km/h		Suppress trailing 0	)'s	Draf
				Suppress 0 feet		
				Show + for positiv	ve values	Fove
				Use digit grouping	I	0,1
			~	Suppress spaces		Cite
Decimal symbo	l/digit grouping:				OK Ca	ncel
123,456,789.	00 V					
				6	-	Livir
	OK	Cancel <u>H</u> elp				Offic

To create a cost estimate schedule, follow the same process as previously. Select walls for the for the schedule type. In this example we are using Family and Type, cost, area, and a claculated field called Total cost. To create this calculated field, select the calculated field option.

ields	Filter	Sorting/Grouping	Formatting	Appearance	e
Select	availabl	e fields from:			
Walls	;		~		
Availa	ble field:	5:			Scheduled fields (in order):
Asse	mbly Nar	ne		<b>—</b>	Family and Type
Base	Constra	int	~	-	Area
Base	Offset			<b>—</b>	Cost
Cour	nents 1				total cost
Desc	ription				
Estim	ated Re	inforcement Volume			
Famil	У				
Fire I	kating Hop			<b>6</b> 2	
Heat	Transfe	r Coefficient (U)			
IfcGL	JID			f	
Imag	e			1	
Keyn	ote		~	≣^√	
rend	ui				L
19	×ъ				/? Řħ ★F IF
0					
<b>—</b> •					
	ciude ele	ments in links			

In the calculated value menu, choose a name for your calculated field and input the formula to be calculated. In this case, the formula multiplies the area of the wall by the cost per metre squared. It's important to divide the area by 1 as it converts the value to a float which can interact with the cost.



	graioaping Tormacang	g Appearance
Select available fields f	from:	
Walls	~	
Available fields:		Scheduled fields (in order):
Assembly Name	^	Family and Type
Base Constraint Base Offset		Area Cost
Comments		total cost
Count		
Estimated Reinforcem	ient Volume 🔳 Calcul	lated Value X
Family	_	
Function	Name:	total cost
Heat Transfer Coeffic	tient (U)	Consulta O Deverations
IncGUID		romula O Percencage
LUUGUE	Discipline:	Common
Keynote Length	Disciplinion	
Keynote Length	Туре:	Number

Before completing the schedule, open the sorting/grouping tab and set the sort by option to family and type. Also select the Header and Blank Line box. Finally, check the Grand Totals box and select grand total.

ields Filter Sor	ting/Grouping Formatting App	bearance		
Sort by:	Family and Type	∨ ⊚ Asc	ending:	ODescending
🗹 Header	Footer:		$\sim$	🗹 Blank line
Then by:	(none)	✓ () Asc	ending:	ODescending
Header	Footer:		$\sim$	Blank line
Then by:	(none)	V 🖲 Asc	ending:	ODescending
Header	Footer:		$\sim$	Blank line
Then by:	(none)	V 🖲 Asc	ending	ODescending
Header	Footer:		$\sim$	Blank line
Grand totals:	Title, count, and totals	$\sim$		
	Custom grand total title:			
	Grand total			
Itemize every in	stance			

In the formatting tab, select the total cost entry and ensure it keeps with the following parameters.

Fields Filter Sorting/Group	ng Gormatting Appearance	
Fields:		
Family and Type	Heading:	
Cost	total cost	
total cost	Heading orientation:	
	Horizontal	~
	Alignment	
	Right	~
	Field formatting:	Field Format
	Hidden field	Conditional Format
	Show conditional format on sh	eets
	Calculate totals	~

Here is what the schedule will look like. The cost an total cost fields are empty because the materials need costs assigned.

	<wall s<="" th=""><th>chedule&gt;</th><th></th></wall>	chedule>	
A	В	С	D
Family and Type	Area	Cost	total cost
Basic Wall: Double	brick - 270		
Basic Wall: Double	84 m²		
Basic Wall: Double	89 m²		
Basic Wall: Double	14 m²		
Basic Wall: Double	101 m²		
Basic Wall: Double	24 m²		
Basic Wall: Double	15 m²		
Basic Wall: Double	13 m²		
Basic Wall: Double	11 m²		
Basic Wall: Double	14 m²		
Basic Wall: Double	16 m²		
Basic Wall: Generic	: 100mm Wall		
Basic Wall: Generi	65 m²		
Basic Wall: Generi	66 m²		
Basic Wall: Generi	116 m²		
Basic Wall: Generi	75 m²		
Basic Wall: Generi	56 m²		
Basic Wall: Generi	27 m²		
Basic Wall: Generi	29 m²		



Select a wall in your structure to assign it's cost. In the properties menu, select "edit type" to open the type menu.



Scroll down to the cost section of the properties menu and input the cost per unit for that wall type.

-amily:	System Family: Basi	ic Wall 🗸 🗸	Load	
Type:	Double brick - 270	~	Duplicate	
			Rename.	
Type Parar	neters			
	Parameter	Value		= ^
Heat Trar	nsfer Coefficient (U)	1.0894 W/(m²·K)		
Thermal	Resistance (R)	0.9179 (m <sup>2</sup> ·K)/W		
Thermal	mass	20.51 kJ/K		
Absorpta	nce	0.700000		
Roughne	SS	3		
Identity	Data			*
Type Ima	ge			
Keynote				
Model				
Manufac	turer			
Type Cor	nments			
URL				
Descripti	on			
Assembly	/ Description			
Assembly	/ Code			
Type Mar	'k			
Fire Ratin	g	141.00.00		
Cost		\$100.00		1
			12	~
CUSC		[#100.00		J!

Once this is completed for all your wall types, your wall schedule will be populated with the new data.

Fonly Basic V Basic V Basic V Basic V Basic V Basic V Basic V	A and Type Val: Double aric Val: Double 84 Val: Double 89 Val: Double 14 Val: Double 14	8 Area * - 270	C Cost	0 total cost 8405.822191
Forniy Basic V Basic V Basic V Basic V Basic V Basic V Basic V	and Type Val: Double pric Val: Double 84 Val: Double 89 Val: Double 14	Area k - 270 m <sup>2</sup>	Cost \$100 \$100	8405.82219
Basic V Basic V Basic V Basic V Basic V Basic V Basic V	Val: Doukle oric Val. Double 64, Val: Double 89 Val. Double 14 Val. Double 14	# - 270 m²	\$100 \$100	8405.822191
Basic V Basic V Basic V Basic V Basic V Basic V Basic V	Val: Double oric Val: Double 84 Val: Double 89 Val: Double 14	* - 270 ก". เชื	\$100 \$100	8405.822191
Basic V Basic V Basic V Basic V Basic V	Val. Double 84, Val. Double 89 Val. Double 14 Val. Double 40	ரு <sup>1</sup>	\$100 \$100	8405.822191
Basib V Basib V Basib V Basib V	Val: Double 89 Val. Double 14 Val: Double 40	เชื้	\$100	0000 004040
Basic V Basic V Basic V	Val. Double 14 Val: Double 10			0000.904040
Basic V Basic V	Val: Double 404	m*	\$100	1425.221997
BasidV	Val. L'OUCIO TU	1 m²	\$100	10092.671578
	Val. Double 24	m²	\$100	2361.781326
Basid A	Val: Doukle 15	m²	\$100	1514.498209
Basic V	Vall: Double 13	m²	\$100	1300.610946
Basic V	Vall: Double 11	m²	\$100	1111.918059
Basic V	Vall: Double 14	m²	\$100	1415.087776
Basic V	Vall: Double 16	rfn²	\$100	1562.842863
Basic V	Val: Generic 10	Omm Wall	870	4587.00
Uasis V	val: Generi US	m* ~ 2	97U 670	4007.337
Basic V	val. Generi 66	nr 2 7	970	4044.53505/
Dasis V	val: Generi 110		97U 670	6121.230003
Davie V	Val. Generi 75	nr- m3	970	3220.51230
Hoors V	val: Generi 35	m- m <sup>2</sup>	470 970	1966 406000
Davie V	val. Genen 17	m <sup>-</sup>	470 970	1000.496920



#### This can also be completed for the roof.

×	L: Level 1	L Ground	i Hoor 📖	Wall Schedule	ш
		<roof s<="" th=""><th>chedule&gt;</th><th></th><th></th></roof>	chedule>		
	A	В	С	D	
	Family and Type	Area	Cost	Total roof cost	
e	Basic Roof: Generi	c - 400mm			
^	Basic Roof: Generi	603 m²	\$90	54256.514787	
	Grand total: 1			54256.514787	

As well as for the doors and windows. To create the doors and windows schedule, choose the multicatgory type.

Filter list: <multiple> ~</multiple>	
Category:	Name:
<multi-category></multi-category>	Multi-Category Schedule
Analytical Beams	
Analytical Braces	Schedule building components
Analytical Columns	Schedule keys
Analytical Floors	Kauaanai
Analytical Foundation Slabs	key name:
Analytical Isolated Foundati	
Analytical Links	Pharas
Analytical Nodes	FIIdse:
Analytical Spaces	New Construction
Analytical Surfaces	
Analytical Wall Foundations	
< >	

×	🖺 Level 1	Ground Floor	Wall Schedule 🔲 Roof
Ŧ	<multi-< th=""><th>Category So</th><th>:hedule&gt;</th></multi-<>	Category So	:hedule>
pe	A	В	С
\$	Family and Type	Count	Cost
	M Fixed: Window		
	M_Fixed: Window	1	\$150
^	M_Fixed: Window	1	\$150
n	M_Fixed: Window	1	\$150
*	M Fixed: Windo ~	1	\$150
	M_Fixed: Window	1	\$150
	M_Fixed: Window	1	\$150
	M_Fixed: Window	1	\$150
L	M_Fixed: Window	1	\$150
	M_Fixed: Window	1	\$150
	M_Fixed: Window	1	\$150
X	M_Fixed: Window	1	\$150
^	M_Fixed: Window	1	\$150
	M_Fixed: Window	1	\$150
n	M_Fixed: Window	1	\$150
	M_Single-Flush: Do	or	
	M_Single-Flush: Do	1	\$200
	M_Single-Flush: Do	1	\$200
	M_Single-Flush: Do	1	\$200
	M_Single-Flush: Do	1	\$200
	M_Single-Flush: Do	1	\$200
	M_Single-Flush: Do	1	\$200
	M_Single-Flush: Do	1	\$200
	M_Single-Flush: Do	1	\$200
	Grand total: 22		\$3700

# **Exporting:**

Your project can be exported to different formats for various programs to make use of. The most likely format you'll want to export to is the CAD formats. For civil3D, you want to export as a DWG. In the file menu, open the export drop menu and select DWG in CAD formats.





Have a look at the preview of your structure before exporting and make sure all of the options are to your liking, then click next.

Select Export Setup				
Color billions And Charles To Donate				
Preview of 3D View: {3D}	Export:	<current td="" view<=""><td>w/sheet only&gt;</td><td>~</td></current>	w/sheet only>	~
	t 🗈 🖉 🖏			
	Include	Туре	Name	
		G	3D View: {3D}	
	Nex	Sav	ve Set & Close	Cancel

Find the file location for your export and save the file.

#### Software Name

Save in:	Revit instructi	005		~	4 🖪	x 🖻	View	5 -
History History Documents My Computer My Network Favorites	Name	∧ ) View - {3D}.dwg	Date modified 29/10/2020 3:43 PM	Type DWG File		Size 1,04	53 KB	
Desktop	File name/prefix: Files of type:	Project1 - 3D View - (3D) AutoCAD 2018 DWG Files (*.dwg	)		~			



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