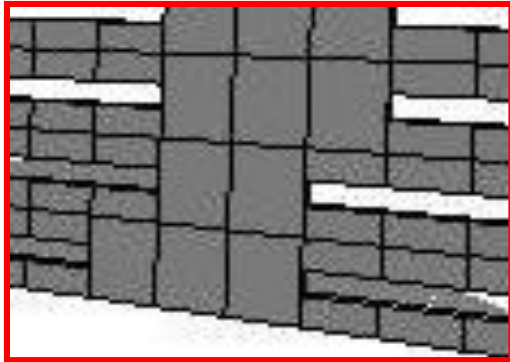


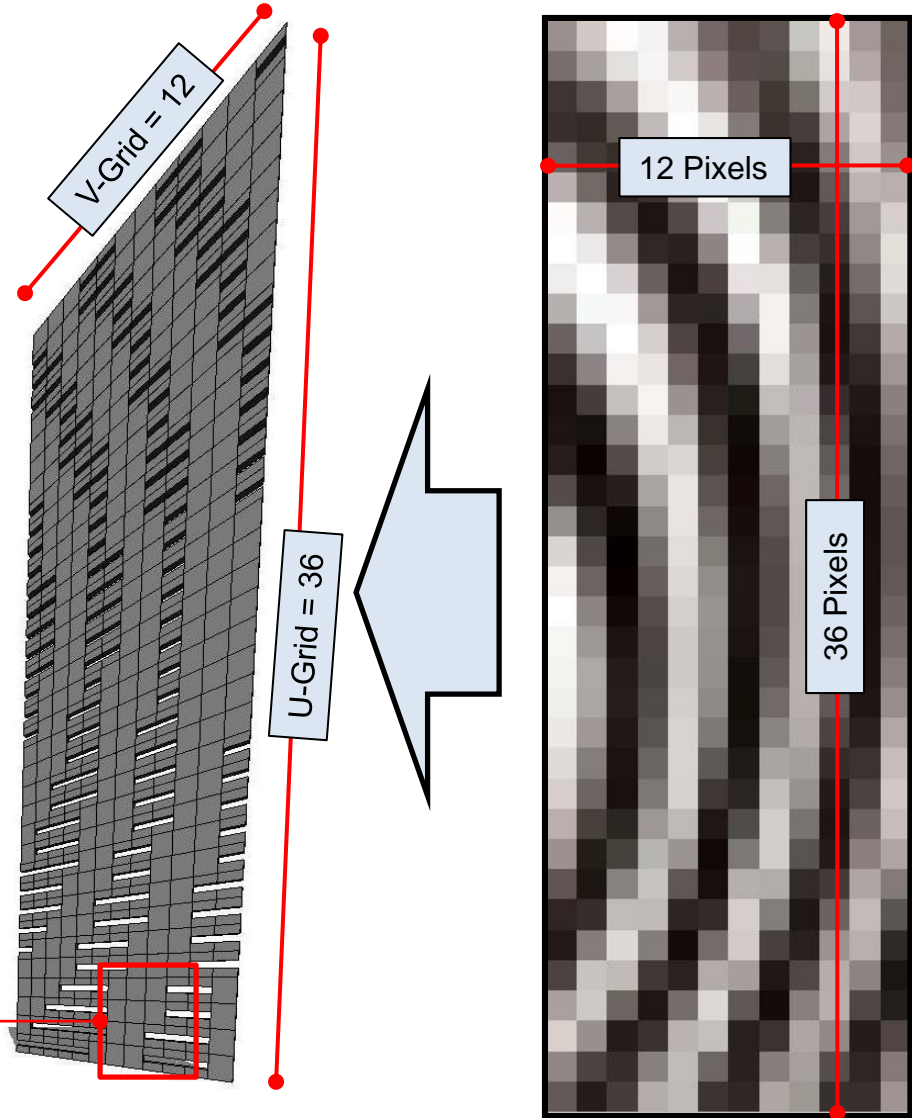
# 1- Scenario (A) Usability Steps

**Description:** this scenario allows the user to select an image with certain Pixel layout and allows the user to manually assign which curtain panel pattern base (CPPB) to be placed on the divided surface based on the image pixel color gradient (0-100%).



❑ Notice in the example (Tower.rf) shown

**[C:\ProgramData\Autodesk\Application Plugins\PatternGen.bundle\Contents\2020\ProtoModel1]** how we used Panel Type A (with-opening) and Panel Type B (No Opening) to map the same image effect on the divided surface or facade

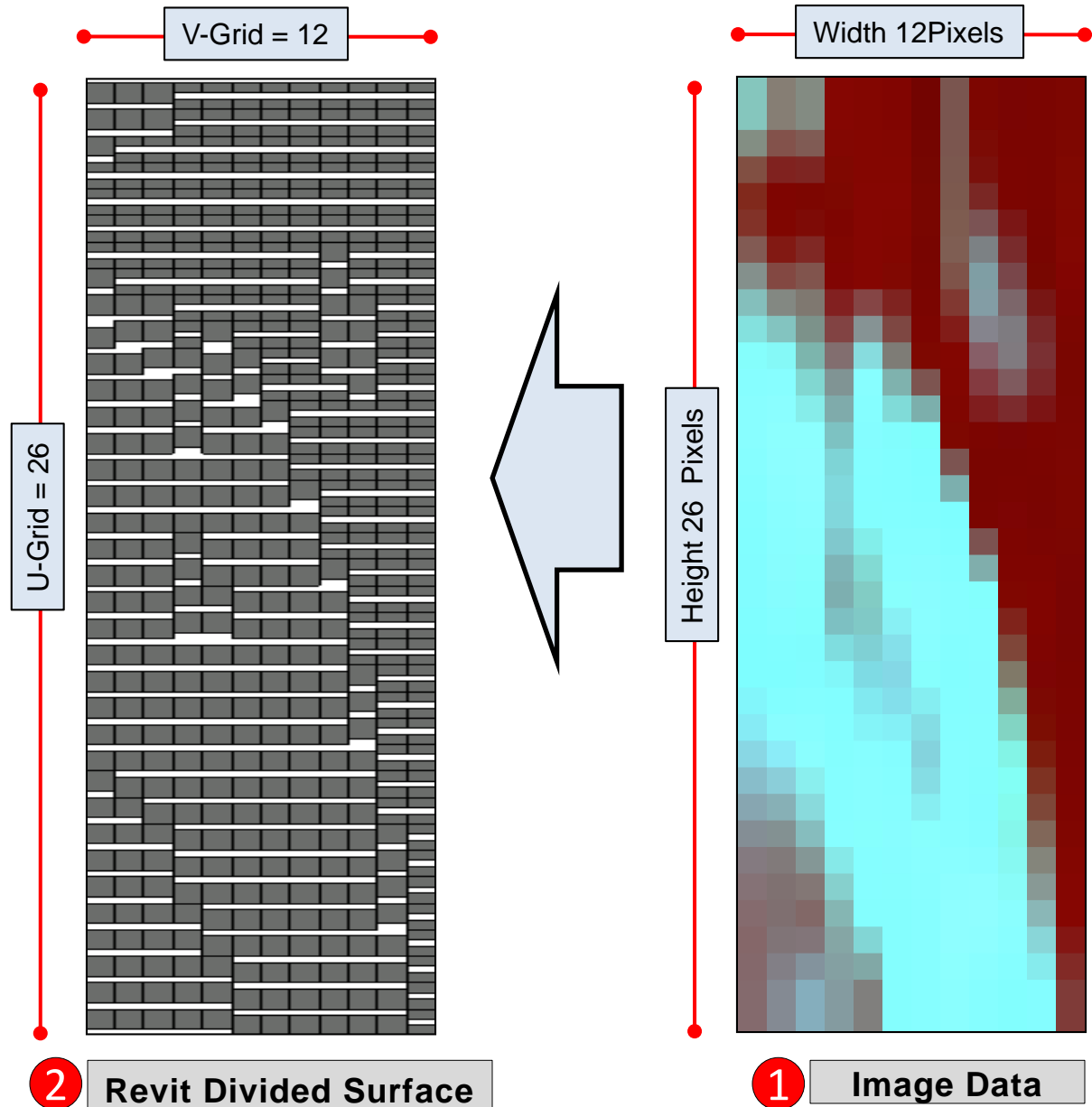


2 Revit Divided Surface

1 Image Data

# 1- Scenario (A) Usability Steps

❑ ... here is another example using the *[C:\ProgramData\Autodesk\ApplicationPlugins\PatternGeneration.bundle\Contents\2020\ProtoModel1* sample file



# 1- Scenario (A) Usability Steps

The screenshot shows the 'PatternGen - iConViz Tools V3.0 (c) 2019' window. It includes a trial notice, a file selection area, three parameter input sections, and a panel assignment table. Three red callout boxes with arrows point to specific elements: 'Load the data image' points to the 'Browse To Image' button (labeled 1), 'Assign panel type to gradient scale' points to the dropdown menu in the 'Assign Panel to Gradient' table (labeled 2), and 'Run the application' points to the 'RUN' button (labeled 3).

**PatternGen - iConViz Tools V3.0 (c) 2019**

AID Pattern Gen

**Activate 30-Days Trial**

**iConViz**

**Select AID Image Path**

C:\Revit-Tools\Images\13x50PanelType.jpg

Browse To Image

Image Pixles Width (U) 50 Image Pixles Height (V) 13

**Parameter X1**

Specify Max. Length Range Per Gradient Image

10 Inch RUN

**Parameter X2**

Specify Max. Width Range Per Gradient Image

10 Inch RUN

**Parameter X3**

Specify Max. Angle Range Per Gradient Image

10 Deg. RUN

**Assign Panel to Gradient**

		Min. Val.
100%	Zaki-TowerModuleContainer:Bottom	100%
90%	Zaki-TowerModuleContainer:Middle	90%
80%	Zaki-TowerModuleContainer:Full	80%
70%	Zaki-TowerModuleContainer:Middle	70%
60%	Zaki-TowerModuleContainer:Top	60%
50%	Zaki-TowerModuleContainer:Middle	50%
40%	Zaki-TowerModuleContainer:Full	40%
30%	Zaki-TowerModuleContainer:Bottom	30%
20%	Zaki-TowerModuleContainer:Full	20%
10%	Zaki-TowerModuleContainer:Full	10%
0%	Zaki-TowerModuleContainer:Top	0%

RUN

Max. Val.

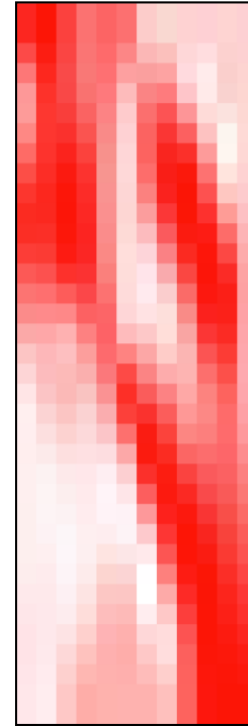
**User Interface and Steps:** begin by selecting the data image, then assign manually the panel type to the gradient, and finally click the compute button.

## 2- Scenario (B) Usability Steps

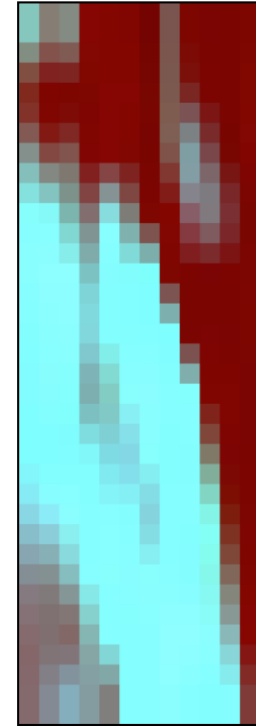
**Description:** this scenario allows the user to select an image data with certain Pixel layout and gradient color. Then the tool based on the gradient range (0-100%) will change the values of parameters X1, and X2.

- ❑ When the user assigns “X1 =12” inches and the greyscale of a pixel is 100%, then “X1” value remains as it is.
- ❑ If the greyscale value is (0%) then “X1” value becomes “0” inch.
- ❑ When the greyscale value is (50%) then “X1” value becomes “6” inches.
- ❑ And so forth it can be applied similarly for the parametric values of “X2” and “X3”.

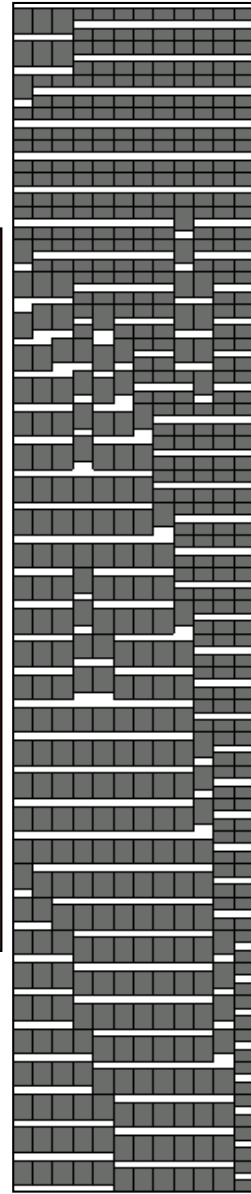
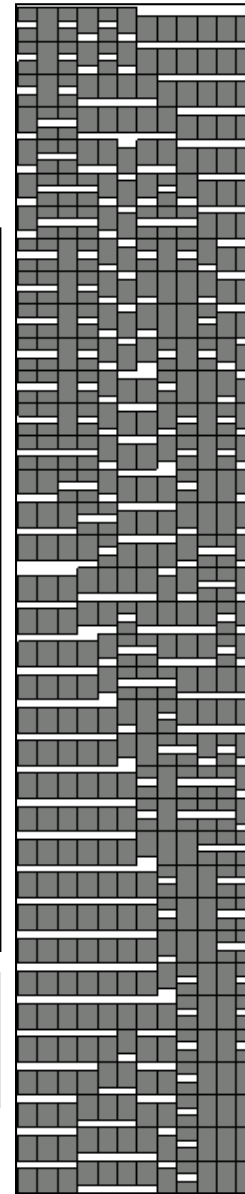
**NOTE:** X1 and X2 are length parameters. X3 is an angular rotation parameter type.



SCHEME  
A



SCHEME  
C



## 2- Scenario (B) Usability Steps

PatternGen - iConViz Tools V3.0 (c) 2019

AID Pattern Gen

**Activate 30-Days Trial**

**Select AID Image Path**

C:\Revit-Tools\Images\13x50PanelType.jpg

Browse To Image

Image Pixles Width (U) 50 Image Pixles Height (V) 13

**Parameter X1**

Specify Max. Length Range Per Gradient Image

10 Inch RUN

**Parameter X2**

Specify Max. Width Range Per Gradient Image

10 Inch RUN

**Parameter X3**

Specify Max. Angle Range Per Gradient Image

10 Deg. RUN

**Assign Panel to Gradient**

		Min. Val.
100%	Zaki-TowerModuleContainer:Bottom	100%
90%	Zaki-TowerModuleContainer:Middle	90%
80%	Zaki-TowerModuleContainer:Full	80%
70%	Zaki-TowerModuleContainer:Middle	70%
60%	Zaki-TowerModuleContainer:Top	60%
50%	Zaki-TowerModuleContainer:Middle	50%
40%	Zaki-TowerModuleContainer:Full	40%
30%	Zaki-TowerModuleContainer:Bottom	30%
20%	Zaki-TowerModuleContainer:Full	20%
10%	Zaki-TowerModuleContainer:Full	10%
0%	Zaki-TowerModuleContainer:Top	0%

RUN

Max. Val.

Load the data image

Select the maximum length to constraint parameter X1 or X2. For example: if the image pixel gradient is 70% then the opening height 'X1' parameter length type will be reduced by 70%... And so on!

Hit RUN button

# SAMPLE OF PANEL WITH ALL PARAMETERS (SCENARIOS A AND B)

❑ Design the pattern-base curtain panel family using the exact parameters type and naming as shown here.

1

Angular parameter X3  
for rotation movement

2

Length parameter X1  
and X2

