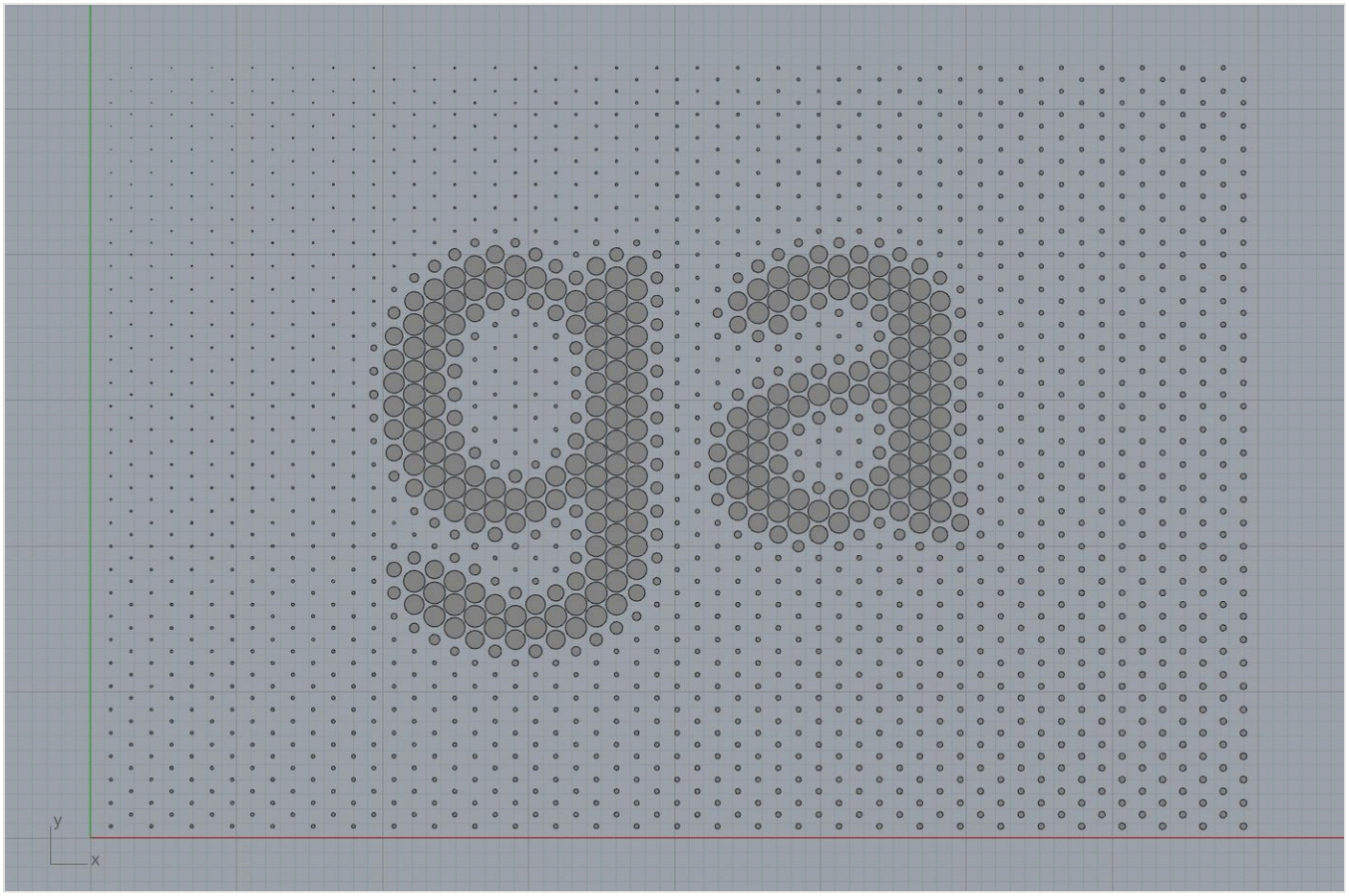
GRAPHICS AND PATTERN

IMAGE TO SHAPES

Halftone of circles, triangles, squares or hexagons from any image



FREE | RHINO 7 · RHINO 8 | NATIVE COMPONENTS ONLY | VERSION 1.0 · NOVEMBER 2026

The image is sampled on a square or hexagonal grid and every point becomes a shape whose size, and if you want rotation, follows the tone. Shapes can be black or take the original colours. Useful for graphics, perforations and patterns.

Free to use in your own projects, commercial ones included. Please do not resell or re-upload the files: share the link instead.

HOW TO USE

1. Open the file: the sample 'ga' image appears as circles (the image is saved inside the file).
2. Double-click the Image Sampler and load your image; set width and aspect to match it.
3. Choose 'Grid' and 'Shape', set the cell size and the size range.
4. Use contrast, rotation by tone, 'Invert' and 'Original colours' to tune the look.
5. Bake 'Shapes'.

OPTIONS

Grid: Square / Hexagonal
Points on a square grid, or on a hexagonal one (tighter, more even).

Shape: Circle, Triangle, Square, Hexagon
The shape drawn at every point.

Invert (toggle)
Big shapes on light areas instead of dark ones.

Original colours (toggle)
Preview the shapes with the colours of the image instead of black.

BAKE

Shapes

GOOD TO KNOW

- The sample image is also in the package, so you can see what the definition expects.

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INPUTS

PARAMETER	RANGE	DEFAULT
Width	10.00 – 200.00	80.00
Aspect (H/W)	0.2000 – 3.0000	0.6667
Cell size	0.30 – 10.00	1.60
Min size	0.00 – 1.00	0.00
Max size	0.10 – 1.50	1.00
Contrast (gamma)	0.20 – 3.00	1.00
Rotation by tone (deg)	0 – 180	0
Base rotation (deg)	0 – 90	0
Grid	Square · Hexagonal	Hexagonal
Shape	Circle · Triangle · Square · Hexagon	Circle
Invert	on / off	off
Original colours	on / off	off

RESULTS AT DEFAULT VALUES

SHAPES COUNT

1881

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INSIDE THE DEFINITION

STAGES, LEFT TO RIGHT AND TOP TO BOTTOM

1 INPUT

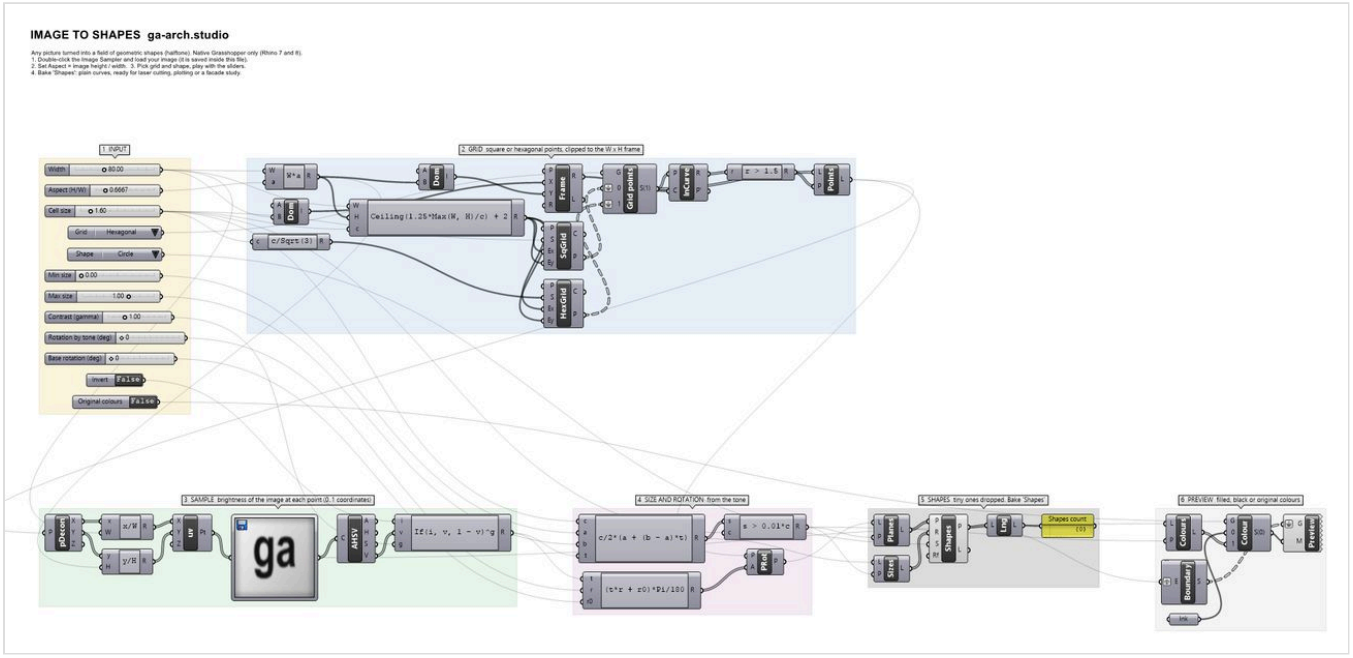
2 GRID square or hexagonal points, clipped to the W x H frame

3 SAMPLE brightness of the image at each point (0..1 coordinates)

4 SIZE AND ROTATION from the tone

5 SHAPES tiny ones dropped. Bake 'Shapes'

6 PREVIEW filled, black or original colours



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