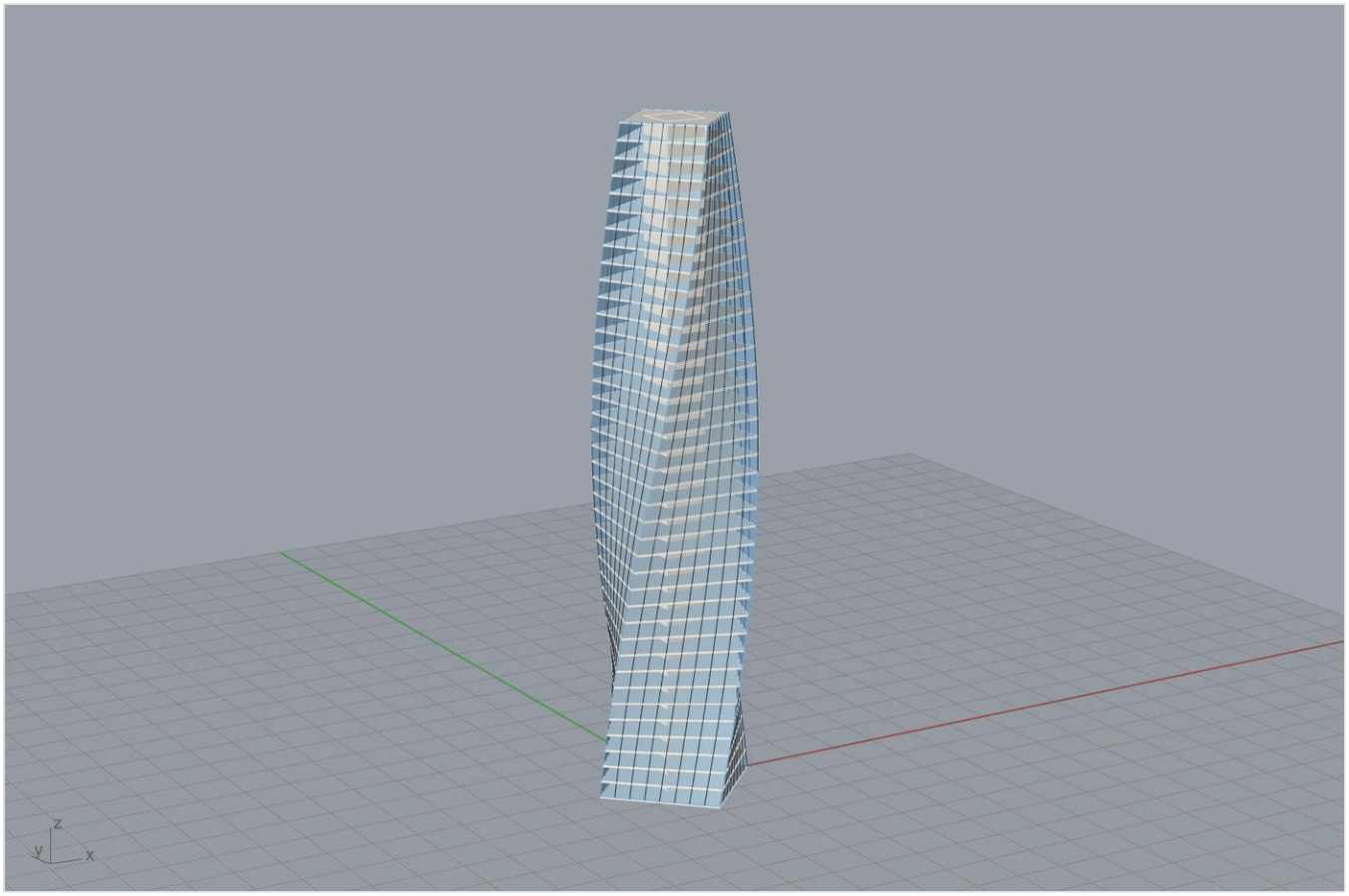
MASSING

TWISTED TOWER

Tower massing with twist, taper and bulge, slabs, mullions and floor areas



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

Every floor plate is the base polygon turned by its share of the total twist and scaled by taper and bulge. The definition builds slabs, a central core, continuous mullions and the glass envelope, and reads the floor plate range and the gross floor area.

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HOW TO USE

1. Open the file: a 40-floor tower appears.
2. Set the number of sides and the base radius.
3. Set floors, floor-to-floor height, total twist, top scale and bulge.
4. Read 'Tower data': height, twist per floor, floor plate range, GFA and net of core.
5. Bake 'Slabs', 'Core', 'Mullions' and 'Glass envelope'.

BAKE

Slabs | Core | Mullions | Glass envelope

GOOD TO KNOW

- A massing study: structure and core are indicative.

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INPUTS

PARAMETER	RANGE	DEFAULT
Sides	3 – 12	4
Base radius (m)	5.0 – 60.0	18.0
Floors	2 – 120	40
Floor to floor (m)	2.80 – 6.00	3.60
Total twist (deg)	-360 – 360	90
Top scale	0.20 – 1.50	0.70
Bulge	-0.50 – 0.50	0.12
Mullions per side	1 – 30	8
Core side (m)	4.0 – 30.0	9.0

RESULTS AT DEFAULT VALUES

TOWER DATA

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Height 144.0 m, 40 floors, twist 2.31 deg per floor
Floor plates 318 to 662 m2
GFA 22394 m2, net of core 19154 m2
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INSIDE THE DEFINITION

STAGES, LEFT TO RIGHT AND TOP TO BOTTOM

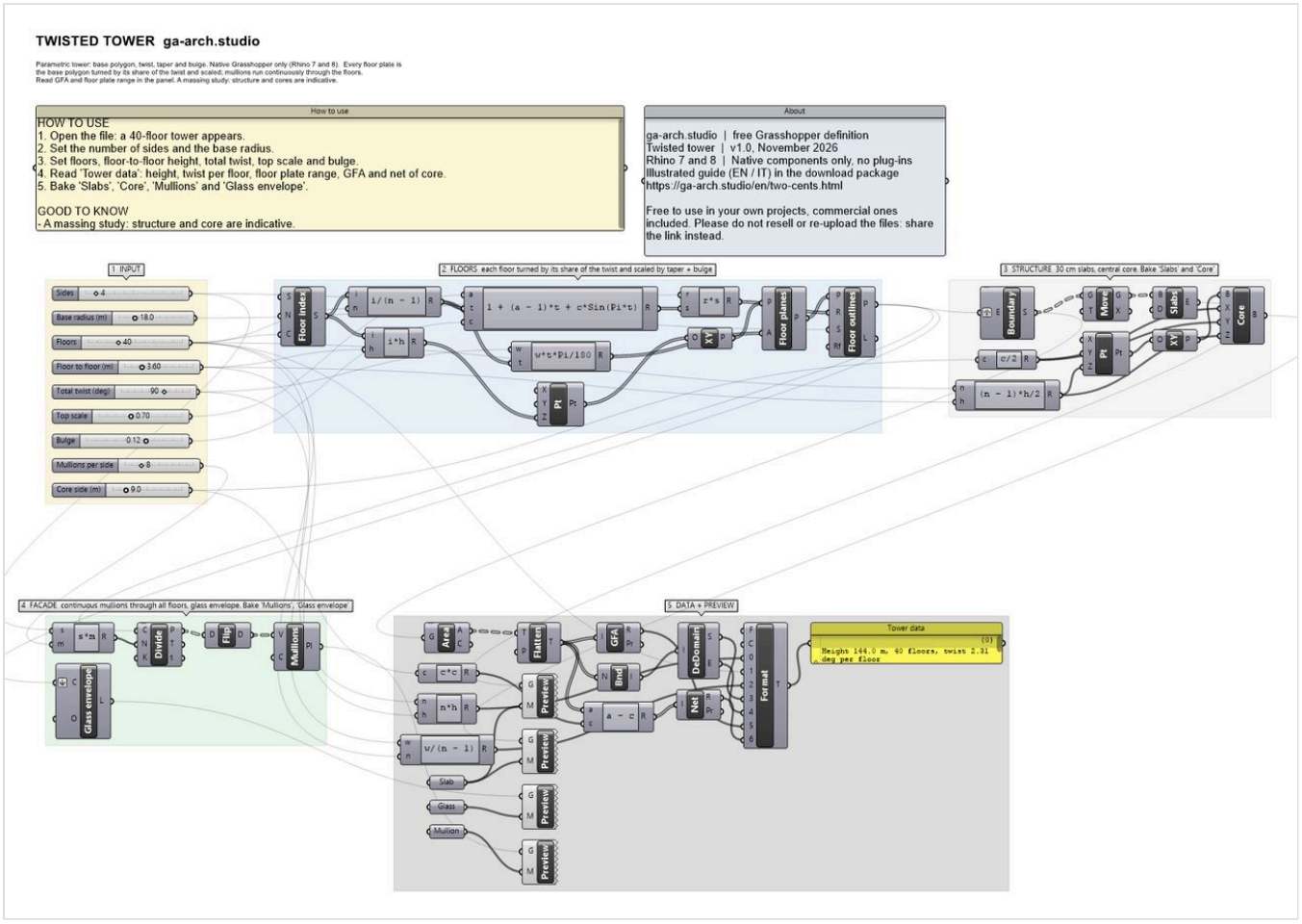
1 INPUT

2 FLOORS each floor turned by its share of the twist and scaled by taper + bulge

3 STRUCTURE 30 cm slabs, central core. Bake 'Slabs' and 'Core'

4 FACADE continuous mullions through all floors, glass envelope. Bake 'Mullions', 'Glass envelope'

5 DATA + PREVIEW



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