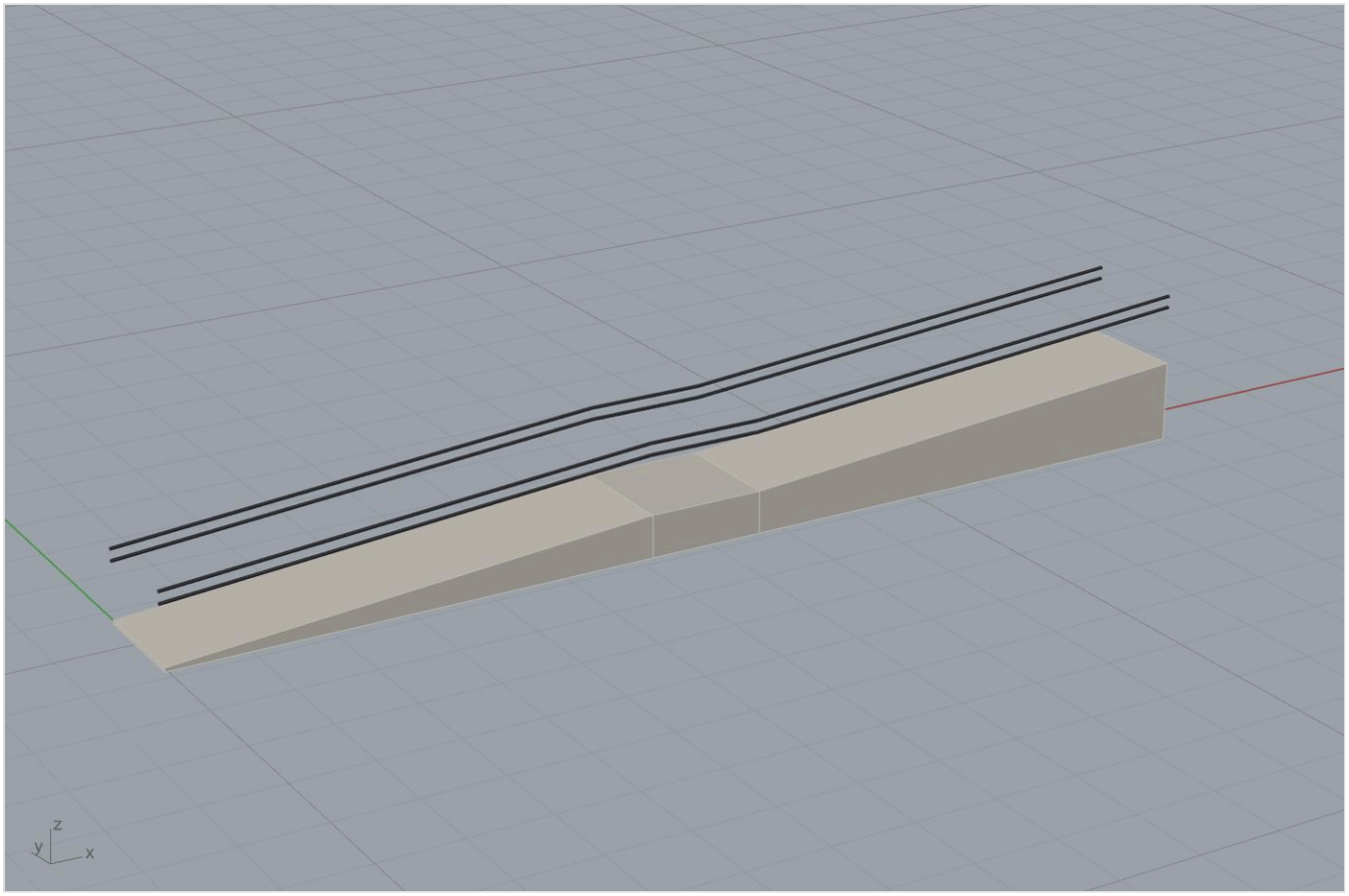
CIRCULATION

ACCESSIBLE RAMP

Ramp on any plan path with landings, continuous handrails and accessibility checks



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

Give the rise and draw the route: the ramp is split into flights no longer than the maximum, with landings in between and handrails at 0.90 and 0.75 m running continuously on both sides. The default is a normal straight ramp; a U-shaped path gives a switchback, any curve gives a free-form ramp. On curves the slope is also checked on the inner edge, where it is steeper.

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 default straight ramp (1 m rise at 8%) appears at the origin.
2. Draw the route in plan from the bottom (line, polyline or curve), right-click 'Path (plan)' > Set one Curve and pick it.
3. Set the rise, width and landing length; choose in 'Slope from' whether the slope is given or fitted to the path.
4. Read the Checks panel: slope, flight length, landings, width, path length, slope at the edges, overlaps.
5. Bake 'Ramp' and 'Handrails'.

OPTIONS

Slope from: Slope slider
The slope is the one you set; the run follows (rise / slope) and the panel tells you if the path is long enough.

Slope from: Fit to path length
The ramp fills the whole path: the number of flights and the slope are worked out from its length.

BAKE

Ramp | Handrails

GOOD TO KNOW

- Switchback: draw a U, choose 'Fit to path length' and make the landing long enough to contain the whole turn; then the flights stay straight.
- Default limits are those of the Italian DM 236/89 (8%, 10 m flights, 1.50 m landings, 0.90 m width): check your local code.

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INPUTS

PARAMETER	RANGE	DEFAULT
Rise (m)	0.10 – 4.00	1.00
Slope (%)	2.0 – 12.0	8.0
Max flight length (m)	2.0 – 15.0	10.0
Width (m)	0.90 – 3.00	1.50
Landing length (m)	1.00 – 3.00	1.50
Inner radius at corners (m)	0.05 – 5.00	0.20
Slope from	Slope slider · Fit to path length	Slope slider

GEOMETRY YOU CAN REPLACE

Path (plan) · Curve

RESULTS AT DEFAULT VALUES

CHECKS

```
Rise 1.00 m at 8.00%: run 12.50 m in 2 flight(s) of 6.25 m
Slope <= 8%: OK   flight <= 10 m: OK
Landing >= 1.50 m: OK   width >= 0.90 m: OK (two wheelchairs can pass)
Length with landings 14.00 m on a path of 14.00 m: OK
Steepest slope at the edges (curves): 8.00%: OK
Overlaps: none
```

CONCRETE

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Ramp volume: 11.55 m3
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INSIDE THE DEFINITION

STAGES, LEFT TO RIGHT AND TOP TO BOTTOM

1 INPUT 'Path (plan)': your route

2 PATH LINE corners filleted so the ramp can turn

3 SIZING slope given, or fitted to the path; flights no longer than the maximum

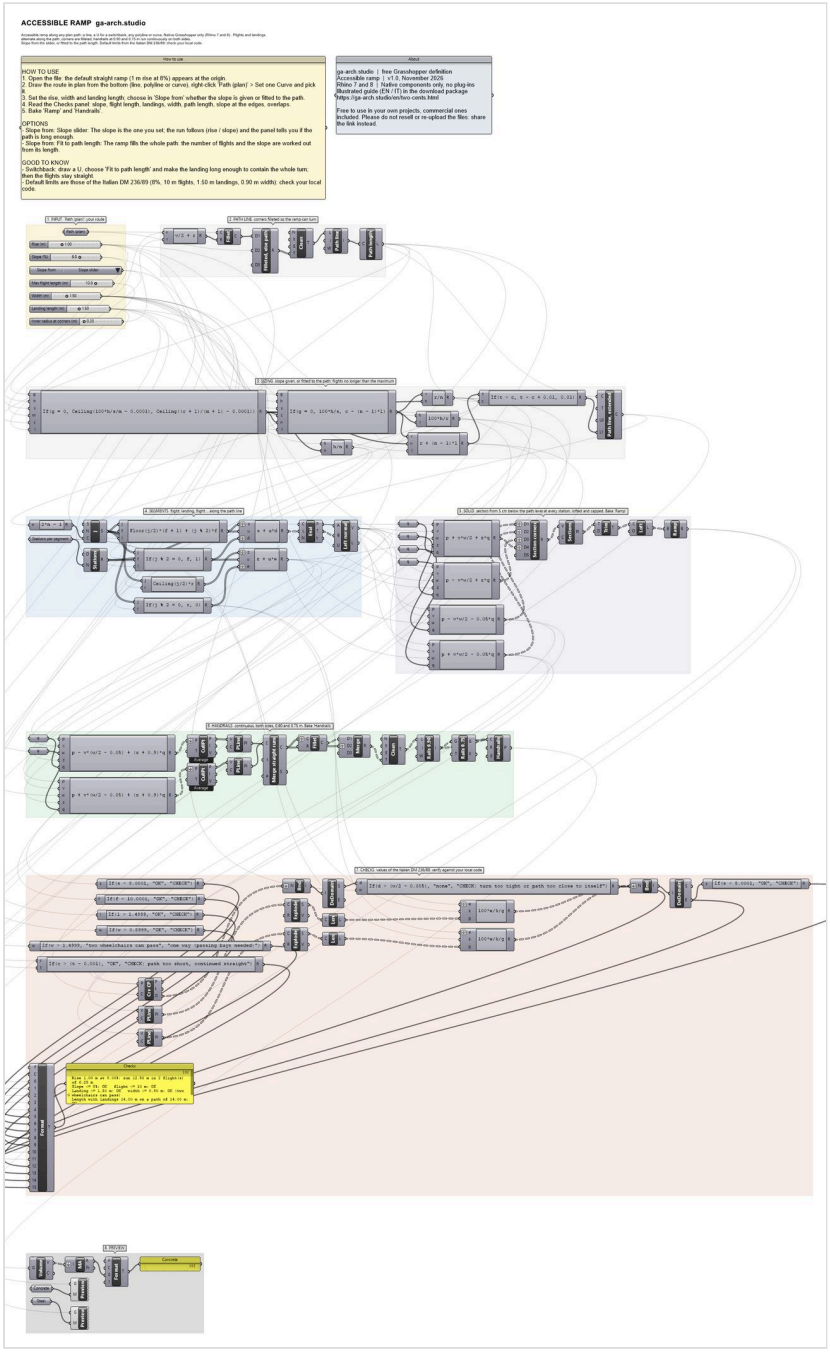
4 SEGMENTS flight, landing, flight ... along the path line

5 SOLID section from 5 cm below the path level at every station, lofted and capped. Bake 'Ramp'

6 HANDRAILS continuous, both sides, 0.90 and 0.75 m. Bake 'Handrails'

7 CHECKS values of the Italian DM 236/89: verify against your local code

8 PREVIEW



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