

Wind data

Geographical data

Wind speed

Wind direction

Buildings

Vegetation

Building
Röckle
zones

1.

Creation of URock geometries

Grid

Rotated vegetation
& stacked blocks

Upwind
facades

Downwind
facades

2.

**Effect of all
obstacles on the
wind**

Study area
morphology
parameters

3.

**Effect of individual
obstacle on the wind**

Uniform wind profiles

Wind factor near obstacles

4.

Wind speed calculation

Final wind field

