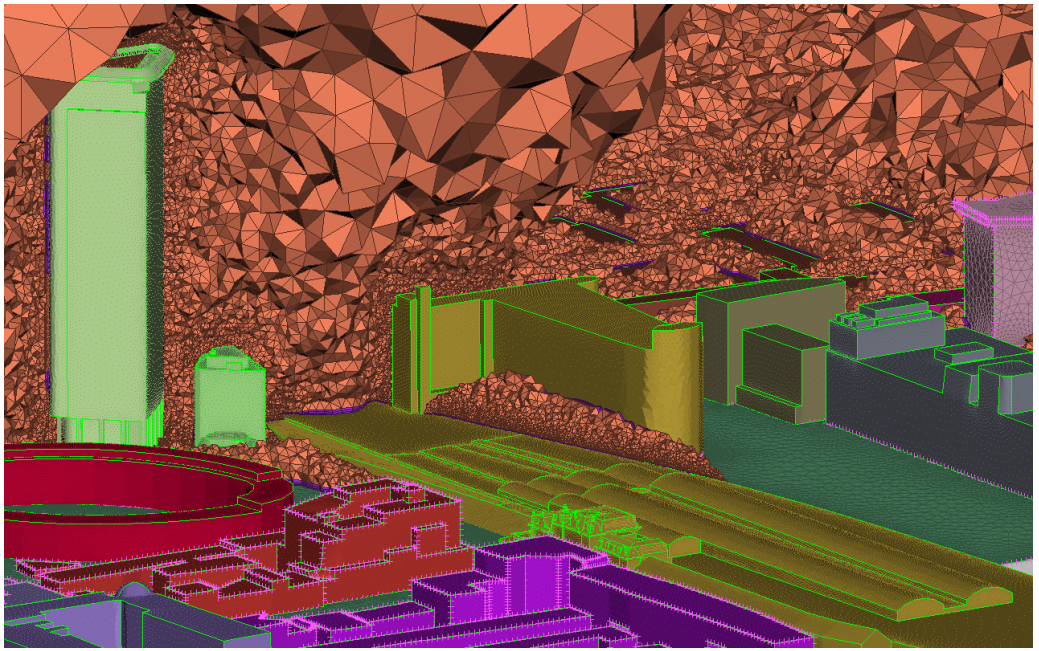
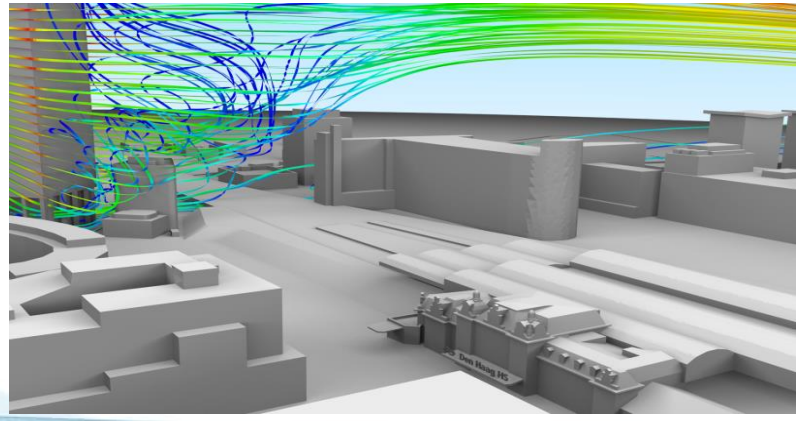
Actiflow BV – Building Wind Comfort Study

Challenge:
To investigate the pedestrian wind comfort in a complex city terrain fast and reliable

Approach:
Read in a Rhino generated IGES file in ANSA, perform geometry clean up and watertight model preparation.
Generate high quality surface and volume mesh with boundary layers all around the buildings and terrain.
Output in OpenFOAM for CFD simulation.

Results:
Using CFD analysis the permit for a new building in the vicinity of the Hague train station was ensured.





"The use of ANSA throughout the whole process of CFD model preparation allows the fast generation of high quality meshes that are necessary for reliable, accurate CFD simulations and fast results."
Tom Fahner
Actiflow BV, Aerodynamics Engineer