

# An Evening Lecture

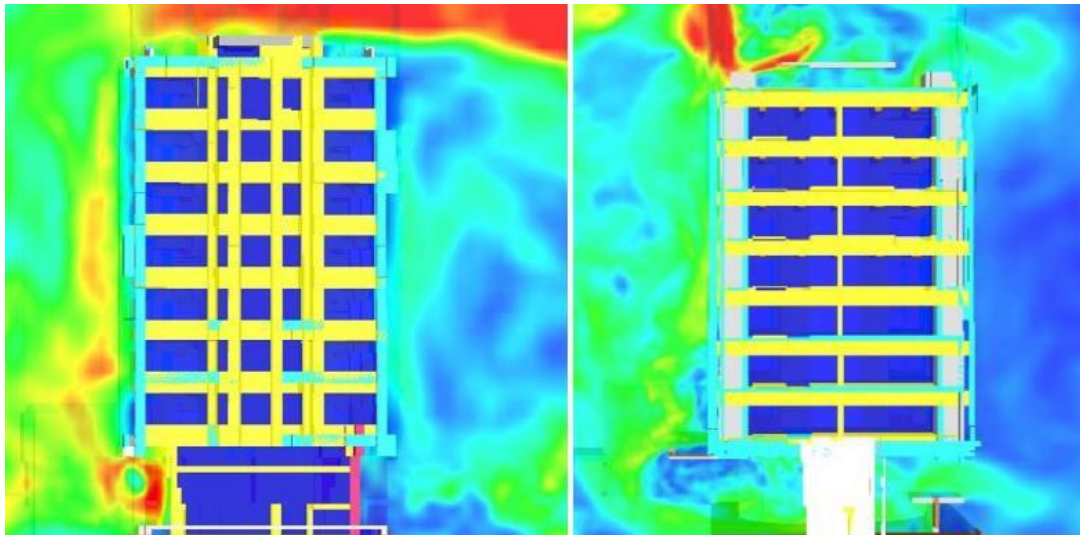
ENGINEERS IRELAND

Structures and Construction Division

Fluid Flows for the Built Environment



ARUP



Wind downdraft to the left of a new tall building in the Dublin Docklands

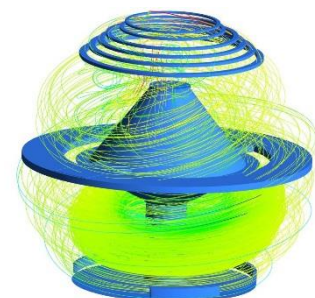
Effect of the installation of a wind canopy in mitigating severe wind effects

In recent years, end users have become more concerned with the human experience and the personal comfort of the individual is becoming more important in the design of the built environment. Computational Fluid Dynamics (CFD) is a tool that permits assessment of personal comfort. CFD is a stream of fluid mechanics that utilises numerical methods to analyse and solve problems involving fluid flows. The fundamental basis for these problems are the Navier-Stokes equations. While research applications of CFD are developing, as it the use of CFD in the aerospace industry, the use of CFD in Civil Engineering applications is currently at the cutting edge. Arup have recently developed a team to work on such projects and some of these will be presented at this talk.



Admission Free

All welcome



**6.30pm Monday 5<sup>th</sup> December 2016**

at Engineers Ireland, 22 Clyde Road, Dublin 4

Further details: [www.engineersireland.ie](http://www.engineersireland.ie) or [emmett.davis@irishrail.ie](mailto:emmett.davis@irishrail.ie)