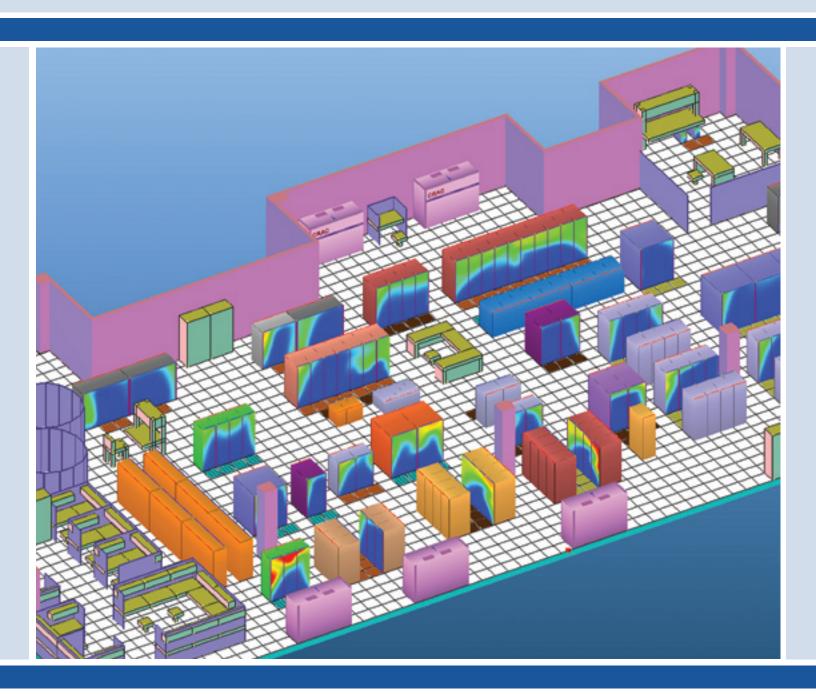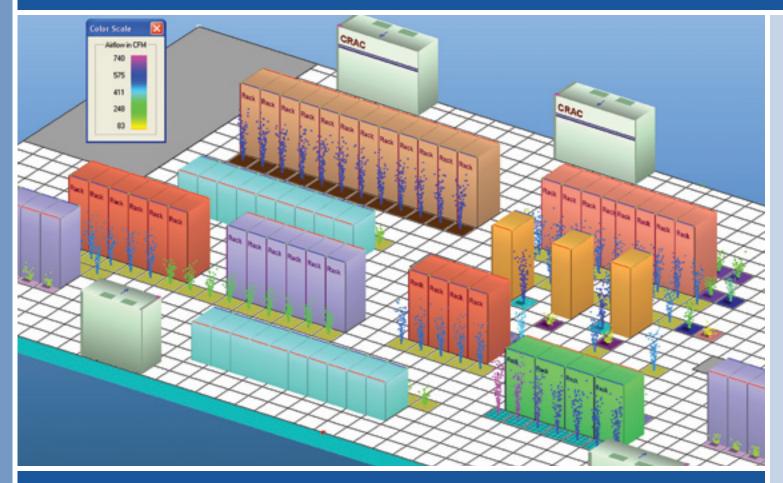# TileFlow™

A Software Tool for Simulating Cooling Performance of Data Centers

Animation of Airflow through Perforated Tiles

The Cooling Challenge

The key to reliable cooling in a data center is to meet the cooling air requirement of each server rack and to ensure an acceptable inlet temperature.

With **TileFlow**, you can make a computer model of your data center and thus calculate the distribution of cooling air through perforated tiles, the airflow pattern in the computer room, and the corresponding temperature distribution. This enables you to devise the best cooling strategy for your data center. **TileFlow** is equally applicable to both raised-floor and non-raised-floor data centers.

Business Case

- Design highly efficient data centers

- Prevent heat-related outages of computer equipment in existing data centers

- Evaluate different options for positioning new equipment

- Examine numerous "what if" scenarios

- Save on the initial and operating costs of cooling units

- Streamline installation and commissioning

- Make cost-effective investments in purchasing cooling-related hardware

TileFlow Features

- Intuitive and easy-to-use

- Powerful , fast, and intelligent solver

- Comprehensive library of CRAC units, perforated tiles, cable cutouts, server racks, XDOs, XDVs, and in-row coolers

- Capable of simulating both raised-floor and non-raised-floor data centers

- Inclusion of overhead supply and return ducts

- Inclusion of supply and return vents on perimeter walls and ceiling

- Capable of modeling return ceiling plenum

- Capable of modeling rooms, hallways, and galleries

- Metric and English units

- Applicable to any tile size

- Import from Aperture Vista

- Numerous graphical displays
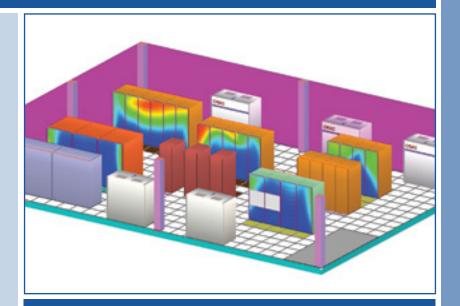
- Export to Excel

- Text reports

- Screen capture

Fully Validated Tool

TileFlow results have been compared with measurements in real-life data centers and shown to be very accurate.
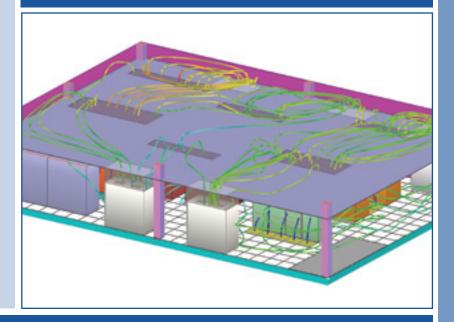
TileFlow Users

TileFlow is being used by:

- Data center managers

- Equipment manufacturers

- A&E companies

- Consulting companies

Temperature Map at the Inlets of the Server Racks

Temperature and Airflow Patterns in a Data Center

Airflow Paths in a Data Center with a Return Plenum

Would You Like to See More?

If you want to see a live online demonstration of **TileFlow** or obtain a free evaluation copy:

Call 763-519-0105

Email info@inres.com

Visit www.inres.com

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