

2. Flow Models

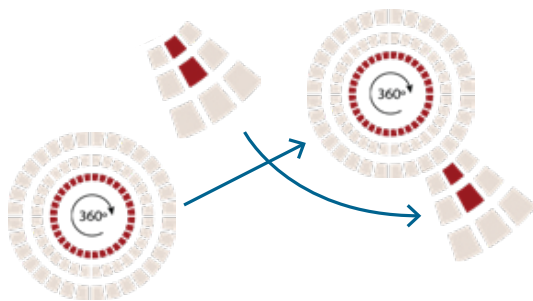
FabricAir offers a wide variety of flow models that can be combined to create the ideal air distribution, addressing any specific project challenges.

The ideal flow model often consists of primary and secondary airflows in combination, depending on throw requirements. The primary airflow addresses the main issue, such as no draft for increased comfort, whereas the secondary airflow is used to ensure that no condensation builds up on the duct in humid environments.

It is of utmost importance to understand the type of space that is being designed in order to select the appropriate flow models, especially in applications that are intended to maximize occupant comfort.

COMBINING FLOW MODELS

By combining surface flow models with directional flow models you can achieve the ideal airflow regardless of the project complexity.



Surface Flow Models		
FABFLOW™	MICROFLOW™	PERFOFLOW™
Permeable	Micro-perforations 0,2–0,6 mm [0.008”–0.024”] diameter	Perforations 3,0-14,0 mm [0.12”-0.55”] diameter
Near-zone: 0 (surface velocity below 0,5 m/s or [98 fpm])	Near-zone: Maximum 300 mm [11.81”]	Near-zone: up to 6.400 mm [21’]
In FabFlow™, the air exits the duct through the permeable fabric surface. The air is driven by thermodynamic forces preventing drafts in the occupied zone, resulting in a high level of comfort.	With MicroFlow™, the air exits the duct via laser cut micro-perforations, along the circumference of the duct. The micro-perforations can cover between 90° and 360° of the duct’s circumference. MicroFlow™ has the smallest near-zone of all of the perforated fabrics available. In most cases the near-zone will not extend beyond 300 mm [11.81”].	With PerfoFlow™ the air exits the duct via laser cut perforations, along the circumference of the duct. The perforations can cover between 90° and 360° of the duct’s circumference. The size of the near zone depends on the static pressure inside the duct, the percentage of the circumference that is perforated, the size and spacing of the perforations.

