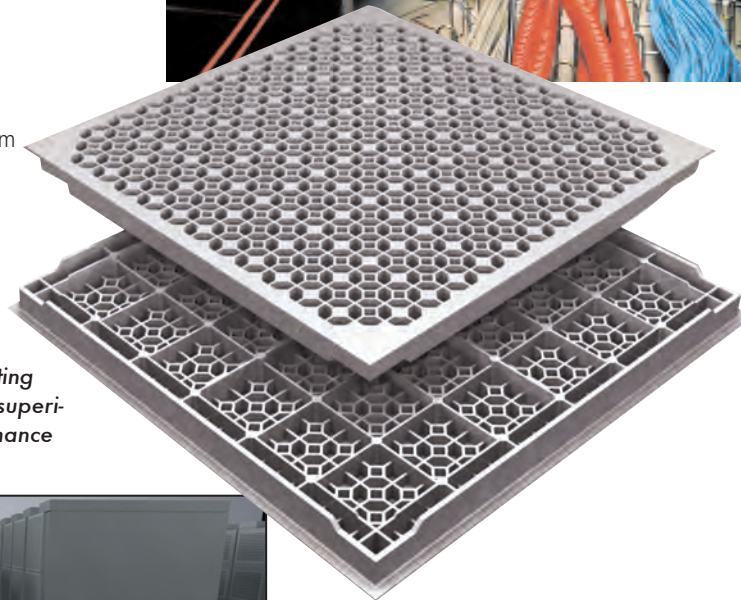


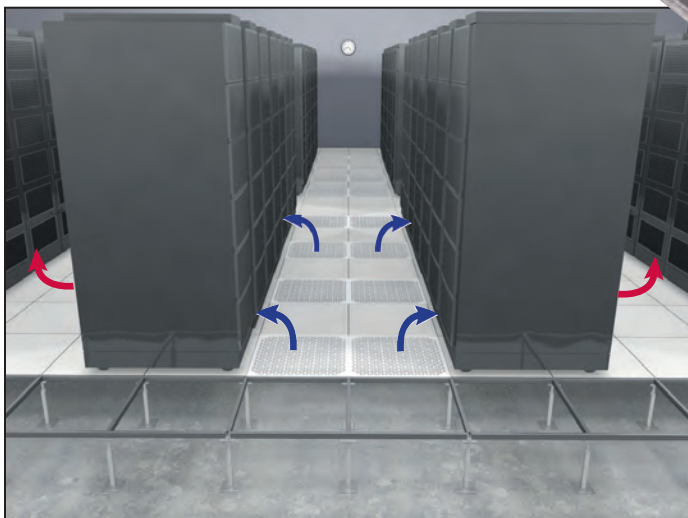
### Heat Management Solution for Data Centers

#### System Highlights

- Unmatched ability to handle heat density needs of the most demanding mission critical facilities
- Achieve densification never before possible with perforated panels
- Unique design provides seamless compatibility with All Steel and ConCore® Panels
- Effortless reconfiguration and retrofit of any existing stringered access floor, without modification
- One GrateAire® can cool over 12kw of heat and up to 25kw in a contained system at .2 inches H<sub>2</sub>O



*The GrateAire® aluminum grate is designed for new and existing access floor installations, providing superior airflow and rolling load performance*



*GrateAire® allows unprecedented densification of server equipment. Blue arrows indicate cool air from grate entering server, which is the cold aisle. Red arrows indicate hot air exhausted from server, forming the hot aisle.*

#### Benefits

##### COMPATIBILITY

- GrateAire® is compatible with All Steel and ConCore® panels utilizing bolted stringer systems

##### AIRFLOW

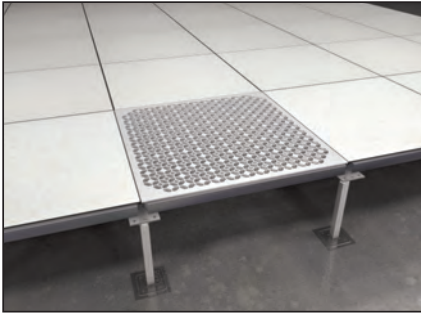
- One GrateAire® can perform the cooling of three perforated panels, without the comparable cost

##### ROLLING LOAD

- Nearly seven times more rolling load capacity than perforated panels. Can be used in aisles and high traffic areas

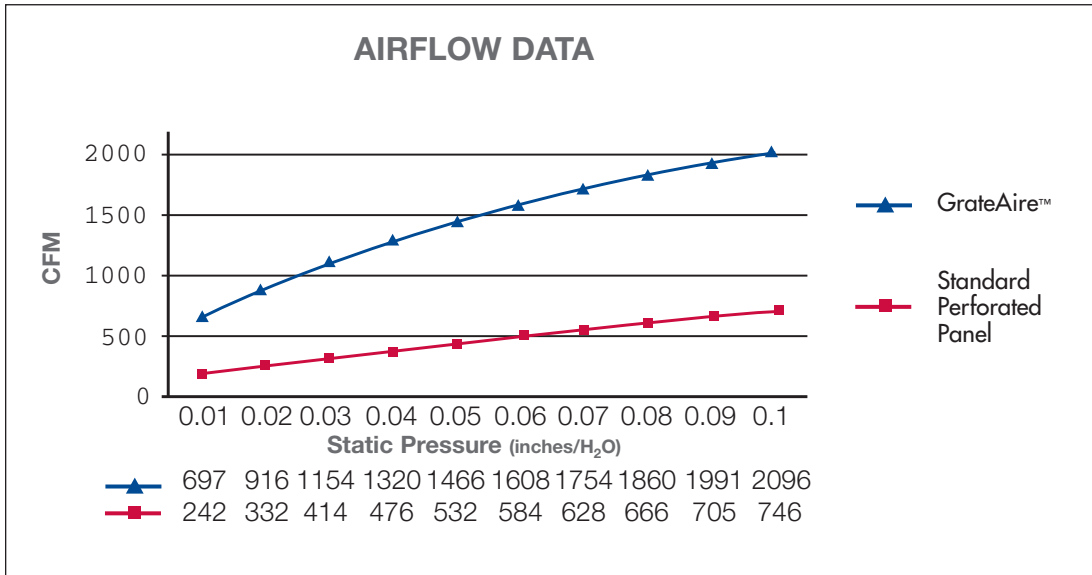
##### STRENGTH

- High strength, low weight, all aluminum die-cast construction



### GENERAL INFORMATION

- Compatible with All Steel and ConCore® panels
- 24 inches square
- Panel weight: 4.7 lbs/ft<sup>2</sup> bare
- Panel height: 1 1/4" "
- Flange width: approximately 1/2" inch to accommodate standard 3/4" wide x 1 1/4" deep stringers
- Die cast aluminum construction
- Class A flame spread rating
- Non-combustible material
- 56% open area
- Available with coatings
- Top surface adjustable damper available
- Removable with portable lifting device
- Load performance – see table below
- Airflow data – see chart below



### GrateAire® PERFORMANCE CHART

SYSTEM TYPE		STATIC LOADS			ROLLING LOADS	IMPACT LOAD
Panel	Understructure	Design Load	Safety Factor	Ultimate Load	10 Passes	10,000 Passes
GrateAire®	Bolted Stringer	1,000 lbs.	Min. >2	2500 lbs.	1000 lbs.	800 lbs. 100 lbs.

**Notes:**

\*All tests are performed using CISCA's Recommended Test Procedures for Access Floors with the exception of Design Load

1. Design Load is tested using CISCA's Concentrated Load test method on actual understructure instead of steel blocks. Design Load is determined by taking the lesser value of ultimate load divided by two or the point at which permanent damage begins to occur (yield point).
2. Safety factor is the multiple of Design load to the Ultimate Load. International standards and Tate recommend a minimum of 2.
3. For further information and product specifications, call the Tate Hotline at 800-231-7788.
4. Based on typical computer room conditions running at 0.2" static pressure, whereby each 140cfm of cold air will dissipate approximately 1kW of heat.