

CHILLED BEAMS



ENERGY EFFICIENT

Use the power of water to efficiently provide heating and cooling to occupant spaces.

 **KRUEGER**

Product

Chilled Beam - An air distribution device with an integrated coil.

Features

- Quiet operation.
- Adaptable/flexible design.
- Reduce floor to floor height.
- Increase system efficiency.
- *Krueger by Halton* Air Quality Control.
- *Krueger by Halton* Velocity Control.

Design Considerations

- Airflow and air distribution requirements.
- Structural and architectural design.
- Type of system(s) available for design.
- Heating, cooling, and climate conditions.
- Operation and methods of control.

K-HIT Selection Program

- Dynamic catalog page output.
- Room air conditioning design.
- CAD design support.

Applications

Use Active Beams When...	Use Passive Beams When...
Both cooling and ventilation are required.	Supplementary cooling (not ventilation) is needed.
Normal heating/cooling capacities are needed.	Fresh air requirements are otherwise met.
Required airflow is between .15 and 1.5 cfm/ft ² .	Airflow rate within the space is high.
Ceiling heights are 13 ft. AFF or lower.	Installation is in a space with higher ceilings.

Recommended Design Values

	Active Cooling	Active Heating	Passive Cooling
Room Air Temp	73° - 77°F	68° - 72°F	73° - 77°F
Supply Air Temp	55° - 66°F	55° - 66°F	N/A
Water Inlet Temp	1-2° Over Space DPT	95° - 130°F	+2° Over Space DPT
Duct Pressure Level	.28 - .48" WC	.28 - .48" WC	N/A
Water Flow Rate	.32 - 1.58 GPM	.16 - .63 GPM	.32 - 1.58 GPM
Sound Pressure Level	< 35dB(A)	< 35dB(A)	N/A
Heat/Cool Capacity Floor Area	25 - 38 BTU/hr/ft ²	13 - 19 BTU/hr/ft ²	25 - 38 BTU/hr/ft ²
Heat/Cool Capacity Effective Unit Length	Up to 1,000 BTU/hr/ft	156 - 260 BTU/hr/ft	Up to 350 BTU/hr/ft
Outdoor Airflow Rate, Effective Unit Length	3.2 - 7.8 CFM/ft	3.2 - 7.8 CFM/ft	N/A

* If chilled beams are installed in areas where space humidity and temperature are not readily controllable, supply water temperatures should be elevated.

Types of Chilled Beams

