CHILLED BEAMS



ENERGY EFFICIENT

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

EXRUEGER

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.

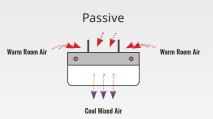
Design Considerations

- 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.

Active Primary Air Induction Air Active / Adaptable Mixed Air Primary Air Coil Induction Air



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	.2848" WC	.2848" WC	N/A
Water Flow Rate	.32 - 1.58 GPM	.1663 GPM	.32 - 1.58 GPM
Sound Pressure Level	< 35dB(A)	< 35dB(A)	N/A
Heat/Cool Capacity Floor Area	25 - 38 BTU/hr/ft²	13 - 19 BTU/hr/ft²	25 - 38 BTU/hr/ft²
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