

Chilled Water Flow Efficiency

At District Energy St. Paul, we make every effort to keep our equipment running at peak efficiency to help keep customer costs low. The best way for our customers to assist with this goal is to use energy as efficiently as possible on the customer side of the meter. By reaching the acceptable flow ratio or “flow efficiency,” your building will operate more efficiently, the overall district system will operate more efficiently, and your operations may be eligible for a flow efficiency credit.

Removing heat and humidity from a building cools the air. Excessive chilled water flow from District Energy to a customer building indicates that a building is not efficiently transferring heat energy from the building to District Energy’s return water loop. This lack of efficient heat transfer requires more chilled water flow to be pumped through the system to deliver the required cooling for the building. If you are having challenges with cooling your building or are receiving an excess flow charge, please contact our team to help understand the challenge.

Customer Tools

[Preventative Maintenance Checklist](#)

[Ask the Engineer](#)

[Customer Portal](#)

[Energy Efficiency Program](#)

The District Cooling Service Agreement (Section 8.4) states that from June 1 through September 30 a customer's "allowable chilled water flow" during any billing period shall be equal to or less than 103 gallons per ton-hour.

Quantifying Flow Efficiency

The energy used in a customer building is determined by two data points: water flow and the temperature difference between the District Energy’s return and supply water temperature; also known as Delta T. When a customer building is operating efficiently on the District Energy system the Delta T will be greater than or equal to 14 °F.

Chilled Water

Delta T ≥ 14 °F

Flow Efficiency Credits and Charges

Below 75 gallons/ton-hour to a floor of 32 gallons/ton-hour	flow efficiency credit of \$0.60/1,000 gallons
75 – 103 gallons/ton-hour	within allowable chilled water flow guidelines
Above 110 gallons/ton-hour	flow efficiency charge of \$0.60/1,000 gallons over 103 gallons/ton hour

Please contact our team for questions or support at 651-297-8955 or info@districtenergy.com.