

CHAPTER 2 - CONSERVATION AND EFFICIENCY: BUILDING SYSTEMS

500

502.22 HEAT EXCHANGERS



INTENT

To optimally design and select heat exchangers for better performance and minimal energy loss.

REQUIREMENT

For Golden and Platinum Sa'fa and all new buildings other than villas:

1. Heat exchangers shall be designed and certified in accordance with the following:
 - AHRI Liquid to Liquid heat exchanger certification program.
 - The tolerances shall be as per ANSI / AHRI 400.
2. Selection shall consider thermal block load, pressure drop, thermal performance, temperature and provision for future additional loads.

SIGNIFICANCE

AHRI performance certification programs are well recognised as a performance verifier for heating, air conditioning, and commercial registration equipment. Product connected to a program is tested annually to verify that they conform to specified performance ratings in data sheets. This is useful as the buyers can evaluate and make a fair comparison while selecting heat exchangers. For the project team this reduces time incurred in the heat exchanger selection process and ensures that the optimised equipment is selected.

APPLICABILITY

This regulation is applicable to all building types except villas. Refer to Table 101.07(2) in Section One - Administration for detailed applicability levels.

IMPLEMENTATION

The concept of district cooling, which has both economic and environmental benefits has been widely adopted in the region. The district cooling system also offers several benefits such as operating flexibility, saving of space, reduction in maintenance costs, etc.

As indirect cooling systems are common in district cooling and have several benefits over direct cooling systems, it is important to select high-performance heat exchangers.