The most important factors that influence the selection of heat exchangers which the project team must consider are as follows:

1. Building peak cooling load demand considering provision of future load.
2. Inlet and outlet temperatures on the primary and secondary sides.
3. Maximum allowable pressure drop on the primary and secondary sides.
4. Operating pressure on the primary and secondary sides.
5. Flow rate on the primary and secondary sides.

In addition to selection of heat exchanger as per the above requirements, all the heat exchangers selected for the project must be AHRI certified under ANSI/AHRI Standard 400 (IP) program for performance rating of Liquid to Liquid Heat Exchangers to comply with this regulation.

The ANSI/AHRI standard 400 program applicable to the Liquid to Liquid Gasketed Plate-type Heat Exchangers (LLHE) & Liquid to Liquid Brazed & Fusion Bonded Plate-type Heat Exchangers (LLBF).

For detailed program scope and product specific rating tolerances refer the latest edition of product specific operational manual (AHRI LLHE/LLBF OM) listed in reference section.

The AHRI certification is required to ensure a manufacturer's stated performance will be met and operate as designed and also to ensure standard tolerances followed by all manufacturers. As a standard practice by manufacturers, the AHRI certified equipment are delivered with AHRI Mark as shown below in fig. 502.22(1).

AHRI Certified Program specific mark is used to identify the certified performance ratings, in accordance with the rating standard noted on the mark, for an AHRI certified product.

Fig. 502.22(1): Plate Heat Exchanger with AHRI Certified Mark