

DEPARTMENT OF THE AIR FORCE
 HEADQUARTERS UNITED STATES AIR FORCE
 WASHINGTON, D.C. 20332

REPLY TO
 ATTN OF: LEEE

15 SEP 1983

SUBJECT: Engineering Technical Letter 83-8: Use of Air-to-Air Unitary Heat Pumps

TO: HQ AAC/DEE HQ AFSC/DEE HQ MAC/DEE HQ AFCC/DEE
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1. Purpose: Because manufacturers of heat pumps have been required to implement DOE testing and performance requirements, the ARI Directory of Certified Unitary Heat Pumps has been revised to include these new performance ratings. This Engineering Technical Letter (ETL) revises criteria previously provided for the application of air-to-air heat pumps. It is intended to incorporate the new rating requirements and to insure the use of the most efficient competitively available heat pumps. This policy is mandatory and is to be implemented immediately.

2. General:

a. Pending revision to AFM 88-15, Chapter 6, heat pumps shall be used only in locations with heating design temperatures (97.5% basis) greater than 12 degrees F and with less than 5,000 heating degree days (65 degrees F basis).

b. Until such time as Military Specification MIL-H-22547 is revised to include performance criteria resulting from the most current National Bureau of Standards (NBS) heat pump study, the following performance criteria for heat pumps should be used:

Minimum Seasonal Energy Efficiency Ratios (SEER) and Minimum Heating Seasonal Performance Factors (HSPF) based on the most recent Directory of Certified Unitary Heat Pumps of the Air Conditioning and Refrigeration Institute:

	Certified cooling capacity at the ARI cooling rating conditions	Min SEER	Min HSPF	Min (SEER + HSPF)
HSPF)	Up to 19,000 BTUH	7.6	5.6	13.7*
	19,001 BTUH up	8.0	6.0	14.5

*NOTE: Either 7.6 SEER + 6.1 HSPF = 13.7 or 8.1 SEER + 5.6 HSPF = 13.7 would be acceptable. A 9.0 SEER + 4.7 HSPF = 13.7 would not be acceptable.

FOR THE CHIEF OF STAFF

JAMES E. McCARTHY, Colonel, USAF
Chief, Engineering Division
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