ASHRAE Technical FAQ

ID 41

Question

Where can I get design weather data for my area?

Design weather data refers generally to specific percentiles of occurrence (mostly joint) of temperature and humidity or wind speed as provided in 2017 ASHRAE Handbook - Fundamentals, Chapter F14. Values for locations listed are based on long term hourly official meteorological observations. In the U.S. most available official meteorological data was used in compiling the information in Chapter F14. Other data may be available from local ASHRAE chapters or universities. In other countries, National Meteorological Services generally will have observational data for more locations than listed in Chapter F14. The National Climatic Data Center (NCDC) in Asheville NC makes available a web site providing links to sites providing weather information of potential interest to ASHRAE members (www.ncdc.noaa.gov/oa/ashrae/gwds-title.html)

The following are relevant available products:

2017 ASHRAE Handbook - Fundamentals, Chapter F14

1993 ASHRAE Fundamentals Handbook, Chapter F24 (contains more U.S. locations since some were estimated; percentiles are seasonal rather than annual such as in the 2005 Handbook)

1981 ASHRAE Fundamentals Handbook, Chapter F24 (average monthly and yearly degree-days for U.S. & Canadian cities)

ASHRAE Weather Data Viewer (WDViewer6.0) DVD (same locations as 2017 Handbook with complete joint frequency information, i.e. all percentiles, not just the design percentiles: 0.4%, 1%, 2%, 99% and 99.6% annual percentiles of occurrence)

Engineering Weather Data CD (available from <u>NCDC</u> provides climatic design summaries for hundreds of locations in the U.S. and internationally).

The handbooks and the other publications may be purchased and/or individual chapters of the handbook may be purchased and downloaded on-line at our website, www.ashrae.org or by calling 1-800-527-4723 in the USA and Canada or 1-404-636-8400 worldwide.

The Air Conditioning Contractors of America (ACCA), Manual J also contains design temperature and humidity data for US and Canadian cities. (www.acca.org)

Answer

ASHRAE Pubs

2017 ASHRAE Handbook - Fundamentals, Chapter F14; 1981 ASHRAE Fundamentals Handbook, Chapter F24 (Average monthly and yearly degree-days for U.S. & Canada cities); ASHRAE WYEC2 Data and Toolkit CD-ROM; ASHRAE Climatic Data for Region X Arizona, California, Hawaii, Nevada, Fifth Ed., 1982.; ASHRAE Weather Data Viewer (WDViewer6.0) DVD.

Topic References weather data

	Cognizant ASHRAE Committees	Refer to Organization
1	<u>TC 4.2</u>	<u>NCDC</u>
2		<u>ACCA</u>
3		
4		
5		