

# Standard 174-2009 -- Method of Test for Rating Desiccant-Based Dehumidification Equipment (ANSI Approved)



ASHRAE Standard 174 provides a method of test for rating the overall performance of desiccant-based dehumidification equipment. Desiccant-based systems are typically designed with moisture removal as their primary function and deliver air at lower dew points than typical air conditioning systems. Accordingly, this method of test has been developed to assist in the measurement and documentation of variables needed to establish moisture-removal capacity per unit of energy. It is intended for equipment incorporating additional energy transfer devices that are outside the scope of ASHRAE Standard 139, *Method of Test for Rating Desiccant Dehumidifiers Utilizing Heat for the Regeneration Process*.

Annexes to this standard are included for information purposes only and provide methods for comparing the performance of the desiccant dehumidification equipment to unitary air conditioning equipment employing electric reheat as a means for reducing the sensible heat ratio of the cooling output. Typical air conditioning equipment is rated at higher temperature and humidity ratios than are found in desiccant systems, requiring that comparative operational modes for air conditioning systems vary from their normal rating conditions. A rating standard prepared by an appropriate trade association, which specifies standard rating conditions for desiccant-based dehumidifier products, would be an ideal companion document to this ASHRAE method-of-test standard.

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