

I would like to take the opportunity to provide my feedback on the draft of Version 2.0 of the ENERGY STAR Ventilating Fan Specifications. For the most part we agree fully with the standard and the revisions you have included. However, there are several items on which it is important that we comment.

- Exclusion of inline fans:
 - We feel that inline fans are a special case to be examined separately from HRVs, powered attic vents, etc. While these other products serve separate applications, inline fans are often used for bathroom exhaust and are thus in direct competition with other bathroom exhaust products. A large portion of our business at Fantech is devoted to producing inline fans for residential bathroom exhaust. By not having ENERGY STAR qualification our products are placed at an ever-increasing disadvantage. As the ENERGY STAR program increases in recognition and acceptance, it is slowly becoming a requirement in some jurisdictions. We have recently encountered situations where our fans were refused by local inspectors or project engineers because they did not “qualify”. The end result in these situations has been that our product is replaced by louder, less efficient fans that bear an ENERGY STAR endorsement. Clearly this is not the intent of this program, and we are being unjustly excluded from the marketplace.
 - Note: We do not wish to claim that inline fans are inherently more efficient than ceiling fans. However, current inline fans benefit from years of research and design for the Radon fan market. Most inline fans currently on the market have been designed for a lifespan in excess of ten years for continuous duty, thereby necessitating the use of only the best quality components. These products have been developed to be highly efficient and extremely reliable and thus represent the state of the art in the fan and motor design field.
 - Originally inline fans were not included in the program pending completion of an HVI sound-rating program. It has since been determined by HVI that the intricacies of creating a sound rating similar to those offered by HVI 915 on ceiling mounted fans would be prohibitive. The sound levels of inline fans are highly dependent upon proper installation, although if installed as recommended these products typically have lower sound levels than some ceiling fans of comparable airflow. And, with the exception of the lack of sound rating, all of our bathroom ventilation products exceed the requirements of the ENERGY STAR program. For this reason, many code jurisdictions that require sound ratings on bath fans are now offering exemptions for inline or remote mounted fans. We respectfully request that ENERGY STAR consider a similar exemption so that we may be able to participate in the program.
- 75% airflow at 0.25 inwg.
 - If ENERGY STAR is so concerned with providing realistic performance numbers why not just take the extra step and make all of the air performance ratings at 0.25”. In a standard HVI test the airflow and power consumption are measured at or near 0.25”. HVI allows members to publish this information although no manufacturers currently choose to do so. For that matter it would be a simple procedure to provide sound performance at 0.25” as well.
 - Our primary concern with this is that low airflow products (less than 75cfm) typically do not exhibit very good high-pressure performance. Although, since pressure losses vary with the square of the airflow, and most bathroom exhaust fans are vented with 4” duct, it is far less likely for one of the smaller bath fans to encounter pressures approaching 0.25”. To the best of my knowledge this rule would exclude ALL 50cfm fans that are currently on the market (including many ENERGY STAR qualified products). Perhaps a two-tiered system would be possible with a more realistic allowance for the smaller sized fans.
- Shorter Warranty Requirement:

- We object to the rationale for shortening the warranty requirement to 1 year. The ENERGY STAR listing is supposed to identify products that excel in quality and efficiency. If the industry standard is a one-year warranty, what is the objection to offering a longer warranty on a top quality product? Many of the inexpensive bathroom fans on the market today are designed for intermittent use only. Should these fans be run continuously, their life expectancy is often 1 year or less in such applications, hence possible objections to offering longer warranties. Most premium fans are intended for five to ten years life span, even in continuous duty application. By requiring a longer warranty period, ENERGY STAR is helping to define that qualified products are of premium quality. This, combined with air and sound performance requirements, should be sufficient to identify a product as meeting the standards of the ENERGY STAR listing.
- Higher sound rating for fans above 75cfm:
 - There are plenty of products on the market that can meet the sound requirements of 1.5 sones for airflow above 75cfm, but are either not participating or fail to meet other requirements such as warranty or efficiency. A quick look through the HVI certified products directory will reveal quite a few companies that would qualify but are not participating. We would suggest against lowering the target but rather doing more to encourage participation by the companies with better products.
- Lack of requirement for HVI certification:
 - The standard refers to HVI testing procedure, but does not clearly require the data to be HVI certified. This leaves the door open for a manufacturer to present data to ENERGY STAR without being subject to the industry policing that is conducted through HVI. "Tested in accordance with HVI 915 (or 916)" has long been a ploy used by manufacturers to publish questionable data. Unless ENERGY STAR plans to implement a stringent check/challenge procedure, we would very much like to see a requirement for HVI certification of the data used for ENERGY STAR listing.

Please feel free to contact me with any comments or questions.

Sincerely,
Lindsay Ambler
Director of Engineering
Fantech, Inc.