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Marvair air conditioners and heat pumps have new product classification and rated to ARI standard 390.

Marvair announces that its ARI listed wall mounted air conditioners and heat pumps will now be covered under the new classification of Single Package Vertical Units (SPVU) and will be tested to the new ARI standard 390.

On Jan. 23, 2006, a new DOE standard for efficiency became effective for **residential** air conditioners and heat pumps. This update to the National Appliance & Energy Conservation Act requires that all **residential air conditioners** have a minimum SEER of 13 and all **residential heat pumps** have a minimum SEER of 13 and a HSPF of 7.7. However, the Department of Energy has ruled that Marvair wall mounted air conditioners and heat pumps and Scholar heat pumps and air conditioners are **not** covered by this standard.

A NEW CLASSIFICATION - SPVU and A NEW STANDARD - ARI 390

Marvair wall mounted air conditioners and heat pumps and Scholar heat pumps and air conditioners will now fall under the Energy Policy and Conservation Act (EPACT). EPACT established performance standards for commercial products and more accurately reflects the overwhelming use of wall mounted and Scholar units. Since wall mounted units were no longer considered a residential product, a new product classification was developed by ASHRAE 90.1-2004 and the Air Conditioning Institute (ARI). The new classifications - SPVAC for air conditioners and SPVHP for heat pumps - are referenced in the ASHRAE standard 90.1-2004, table 6.8.1.D. Marvair wall mounted air conditioners and heat pumps and Scholar heat pumps and air conditioners will be tested in accordance with a new standard, ARI standard 390, “Performance Rating of Single Package Air-conditioners and Heat Pumps”, and listed in the ARI Single Package Vertical Units (SPVU) directory. **ARI standard 390 determines cooling efficiency as EER and heating efficiency as COP.**

There are two primary reasons for the move to ARI standard 390. First, SEER and HSPF are annualized, part load numbers and intended for use in rating air conditioners and heat pumps designed for residential use. However, the vast majority of wall mounts are used in commercial applications. A standard for rating residential units is not the optimum way to rate commercial equipment. Second, the raising of the minimum SEER to 13.0 and the minimum HSPF of 7.7 is a 30% increase over a SEER of 10.0.

One of the primary methods manufacturers use to increase efficiency is to increase the size of the coils. However, due to the nature of many applications for wall mounted units, increasing the size of the unit is not feasible or possible. If wall mounted units had been forced to comply with the higher efficiencies, many applications for wall mounted air conditioners and heat pumps would have been eliminated. Over the past several years, DOE and ARI have been working to resolve this problem. DOE recognized and approved ARI Standard 390 in 2005 so that vertical, wall mounted equipment will now be certified and tested in accordance with ARI Standard 390.

MINIMUM EFFICIENCY

The minimum efficiency requirements for ARI standard 390 are an EER of 8.6 and a COP of 2.7. The SPVU classification will require Marvair's ARI listed products to be certified with an EER cooling efficiency, not SEER, and a COP for heating efficiency, not HSPF.

ARI will not allow units to be certified under two standards. All products that are defined as factory-made commercial and industrial single package vertical air conditioners and heat pump equipment must be classified as SPVU's and certified to ARI standard 390. This includes our ComPac and ModPac and Scholar air conditioners and our Classic and Scholar heat pumps. It is important that engineers and HVAC specifiers be aware of this change in order that they can correctly specify the efficiency of wall mounted air conditioners and heat pumps. Specifications should refer to EER and COP – not SEER and HSPF. Marvair's product literature will show **certified** performance at ARI 390 as well as the performance at ARI 210/240 during a transition period.

If you have any questions, please do not hesitate to call David Shuford at 404-848-9281.