

July 1, 2010

Re: **MICROPAS@8 v8.1**

Welcome to MICROPAS8 version 8.1. This version, approved by the California Energy Commission (CEC) on June 23, 2010, replaces version 8.0. This new version may be used upon publication, and must be used on compliance submittals made after July 31, 2010.

### **What's Different**

This letter covers the major changes in v8.1 compared to v8.0. For differences from older versions, please see the v8.0 welcome letter attached below.

- The energy use numbers will be different. For new construction, the differences are minor. For additions and alterations, the differences can be larger and are generally more favorable to getting a home to comply.
- There is a significant change to how Joint Appendix 4 references are done. The software now looks the values up and inserts them automatically. If a lookup is not successful, it adds a message that says that non-standard U-factors are being used.

### **Reporting**

Since the release of v8.0:

- The MF-1R has been added back in. There are no longer any check boxes to fill out.
- A new optional report called the Above Code Report has been added. This report is useful for above code programs such as the statewide utility California Advanced Homes program and other programs like LEED. In addition to the TDV budgets, it includes the energy usage in therms, kWh and the kW demand.
- The report printer from previous versions has been restored. By request, some users prefer to print using the report printer from previous versions.

### **Support**

Any time you have questions or problems with either the program or the standards, please don't hesitate to call us at 800-755-5908. You can reach me at Extension 1 or Dee Anne Ross at Extension 2. And be sure to look for software updates at [www.micropas.com](http://www.micropas.com).

Sincerely,



**Ken Nittler, P.E.**  
Enercomp, Inc.

December 21, 2009

Re: **MICROPAS®8 v8.0**

Thank you for your MICROPAS8 order. This version, approved on an interim basis by the California Energy Commission (CEC) on December 16, 2009, incorporates changes in the Residential *Building Energy Efficiency Standards* that take effect on January 1, 2010.

### **What's the Same**

The operation of the program has not changed. Screens will look the same. Editing and running are virtually unchanged. However, printing is done within the software to any print device installed on your system in the standards Windows manner.

### **What's Different**

This section covers the major changes in the standards and in MICROPAS. For more details, see the Chapters 1 and 2 of the Compliance section in the *Micropas User Manual*.

### **Cosmetic Changes**

- *MF-1R*. The MF-1R no longer has check boxes/fields for compliance and enforcement. Please use the 3-page MF-1R in the *Residential Compliance Manual*, Appendix A.
- *A Thermostatic Expansion Valve (TXV) is no longer a compliance option*. The Refrigerant Charge credit requires either testing of the refrigerant charge or a Charge Indicator Display.
- *Slab Edge Modeling*. Slab edges are now connected to the mass surface name rather than the zone name.

### **Changes That Will Affect Compliance Results**

- *Lower U-factor and Solar Heat Gain Coefficient values in Package D*. The result of this change is less credit for better windows.
- *Roofs/Attics*. More attention is being given to the roof and attic construction and configuration. The software now has a section on Roofs/Attics with several new inputs including roof slope, roofing material type, weight, solar reflectance and thermal emittance. The prescriptive package requirements often include a cool roof in cooling climates.
- *Mandatory Mechanical Ventilation*. MICROPAS allows several types of ventilation systems for meeting this requirement (see more in Chapter 2 of the Compliance Manual).
- *Tankless water heaters derated*. The software internally derates the efficiency of a tankless water heater by 8%.

### **Other Changes**

- *WS-5R*. This form is no longer a compliance submittal form, but is handled with an Installation Certificate for Lighting (see *Residential Compliance Manual*, Appendix A).

- *Registered (with a HERS Provider) CF-1R.* All projects using measures that require HERS verification will need to be registered with a HERS provider. The registered CF-1R is what is submitted to the building department with a permit application. Initially this affects only subdivisions, and beginning October 1, 2010, any project with HERS verified measures must be registered. MICROPAS will create the document that will be uploaded. Additional instructions will need to come from the HERS providers (i.e., CHEERS, CalCERTS, and CBPCA).
- *New Duct System Credits.* There are two new credits associated with Low Leakage Air Handlers and Low Leakage Ducts in Conditioned space. Read more about these in Chapter 3, Duct Systems.
- *Multiple HVAC systems serving one zone.* The California Energy Commission has changed the language in the *Residential Compliance Manual* for dealing with multiple systems serving the same zone. Any time you have this condition, review section 7.7.3 in the CEC Manual.

## Installation

This version of MICROPAS8 installs in its own directory (\MP8) and leaves existing copies alone. If you download the 24mb version of the software, you will have copies of the MICROPAS User Manual as well as residential publications from the CEC for use when preparing compliance submittals. These documents are in the same MP8 directory.

## Converting Files

A file converter that imports version 7 input files is provided. The settings inside the program will look for your files in the MP73 folder (the last version of MICROPAS). If your files are stored in a different directory, you will need to change the disk settings (OTHER OPERATIONS, Edit Settings, DISK Installation, HardDisk) to match the directory where your files are stored.

After you have converted your files, you will need to check the data to make sure it is consistent with the new standards. This includes the attic/roof assembly, slab edges, and mechanical ventilation.

## Updates

We will send you an email as updates are posted at [www.micropas.com](http://www.micropas.com).

## Support

Thanks for your business. Any time you have questions or problems with either the program or the standards, please don't hesitate to call us at 800-755-5908. You can reach me at Extension 1 or Dee Anne Ross at Extension 2. And be sure to look for software updates at [www.micropas.com](http://www.micropas.com).

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