

Can You Survive 13 SEER?

Got Questions?

Here are the answers!

We have compiled some questions that have been asked by contractors about the new 13 SEER requirement. There is very little that will change with reference to installation and service procedures. The following questions and answers will relieve some of your concerns.

Q. When is the new date for 13 SEER?

A. The federally mandated 13 SEER minimum efficiency standard is effective 1/23/06.

Q. Do I have to remove all AC units that are less than 13 SEER?

A. No. Installed units are not affected. The law only applies to the manufacturing of new units.

Q. Can I still install the 10 SEER units that I have already purchased?

A. Yes. You can also purchase any unit less than 13 SEER that is in the distributor's inventory.

Q. What product line does the 13 SEER law apply to?

A. It applies only to single phase AC package and split systems.

Q. How much higher priced will 13 SEER be?

A. The cost can be significant but it will have lower energy consumption for the customer

Q. How much larger will the 13 SEER be?

A. The physical size of the component parts will be increased. You can refer to specifications when quoting an installation in case an extra person is required.

Q. Will the existing air handler or furnace accommodate the larger evaporator coils?

A. The size of the new coils must be looked at closely to be sure it can be adapted to the existing air handler or furnace. If the space is not adequate, the installation quote may have to include a significant upgrade of the ductwork and/or a new air handler or furnace.

Q & A continued.

Q. Will the 13 SEER have the R 410A refrigerant?

A. Both R 22 and R 410A will be used.

Q. Do I have to be certified to work with R 410A?

A. No. All R 410A certifications are voluntary. The only certification required is CFC certification.

Q. What should my concerns be for the R 410A refrigerant?

A. All installation and service procedures are the same. The only difference is that R 410A has a pressure that is 60% higher than R22. The pressure temperature relationship is the same.

Q. Why is the R 410A oil a problem.

A. The POE oils used can absorb moisture quicker than the mineral oils used with R 22. However that is not an issue because there is no reason to leave a system open and expose it to the atmosphere. If the same proper refrigeration installation and service procedures are followed, there is no problem.

Q. Do I need special tools for 13 SEER?

A. Only R 410A refrigerants will require that you have tools designed for the higher pressures. Examples are recovery tanks, recovery pumps, service manifolds etc.

Q. Can I use the existing coil and/or line set with a 13 SEER condensing unit?

A. For replacements, it is recommended to change the evaporator coil and line set. If the line set is the correct size, it can be reused after cleaning out the old mineral oil deposits inside. That however can be difficult and replacing the line set could be more cost effective.

Q. Will it work with an old existing evaporator coil?

A. Mismatched components can cause operational problems. Only matched components are acceptable.

Q. Can I use solder for installation?

A. No. Just as when installing or servicing any refrigeration product, brazing is only acceptable.

Q. How do I properly charge a 13 SEER unit?

A. Use the same method. There is nothing different in accurately charging a system. The easiest way is to exact charge with a digital scale.

Are you ready for the 13 SEER AC change?

Change of procedures in our HVAC business can be difficult or easy and this happens to be an easy one.

Common myths about 13 SEER being difficult to sell, install and service are just not true.

Here are the responses to contractors' questions and concerns.

- As of 1/23/06 manufactured package and split system single phase AC must be at least 13 SEER
- Yes it will be a higher cost but lower energy consumption for your customer
- You can purchase 10 SEER units until the stock is gone. Then only 13 SEER and higher will be available
- 13 SEER will be available in both R22 and R410A
- The physical size of the coil or condenser may be larger. Sometimes it may take 2 to install.
- Product sizing, installation and service procedures all remain the same.
 - A. Choose the correct size AC for the heat load
 - B. Choose the correct size blower for proper air flow – Nominal 400 CFM's per ton
 - C. All installation procedures are the same. Both orifices and TXV's will be used.
 - D. For replacements, it is recommended to change the coil and line set with the condenser
 - * Mismatched components, as always, can cause operational problems. You can refer to the specification sheets on the Nordyne web site or our sales department will select a properly matched system for you.
- R410A – Note: R410A certification is NOT required. All of the procedures for installation and servicing are the same as R22. Here are a few things to remember for R410A.
 - A. Brazing is required just as with R22. Soft solder or Stay-Brite is not acceptable
 - B. The pressures will be 60% higher than R22 but the PT refrigerant temperatures are the same.
 - C. Line sets should be replaced when changing to a R410A unit because the size may be different and the mineral oil in an old line set does not mix with the new POE oil.

If the existing line set is buried and cannot be changed, the old oil must be flushed out. Nitrogen alone is not enough. A flushing agent such as RX 11 Flush must be used.
 - Note: If the existing suction line size is smaller than required, it may only decrease the efficiency a small percentage. You can refer to the specification sheets on the Nordyne web site or our sales department can advise you.
 - D. Evaporator coils must be changed because the old oil cannot be flushed out easily and all R410A coils use a TXV valve