

# Buyer's Guide

## Infrared Saunas

You already know the benefits of infrared saunas over other saunas such as steam rooms. That is why today's sauna buyers are looking for **Infrared** saunas more than ever before. However, infrared saunas come with various levels of quality, features, and prices.

The following questions will help you to select the most suitable infrared sauna for you and your family or your business.

### **1. What “wavelength” does the sauna generate and why it is important?**

The main reason that people like infrared saunas is because of its gentle heat. One of the attributes on its gentleness comes from its heaters that are efficient in emitting radiant heat. Most of the infrared sauna heaters radiate near-infrared (0.76-1.5 micron), mid-infrared (1.5–4 micron), and far-infrared (4-16 micron) energy bands. The far-infrared has the largest energy distribution. The less near and mid-infrared a heater emits, the more comfortable it is for the user. When a person is exposed to shorter wavelength infrared rays such as near and mid-infrared, they will feel the heat and associated discomfort. Even small amounts of near-infrared and mid-infrared will cause noticeable heat and discomfort! A human body is naturally a 100% **far-infrared** emitter; therefore, it readily accepts **100% far-infrared**.

Pure far-infrared (4-16 microns) is produced from an object that has surface temperature of less than 100°C (212°F). As an object gets hotter than 100°C (212°F), it begins to radiate mid and near-infrared. Therefore, in order to produce far-infrared exclusively, we need a heater that works at a temperature lower than 100°C (212°F).

Most infrared sauna heaters work hotter than 150°C and therefore, generate some amount of mid or near-infrared from their surfaces. As the temperature

drops, the amount of shorter wavelength infrared is reduced. However, not all sauna heaters can run at lower than 100°C (212°F). Most of them cannot make the sauna room hot enough. Infrared sauna manufacturers are competing to achieve as low a heater temperature as possible while keeping the room temperature hot enough to be a sauna. Some of them are successfully doing this by using larger surface heaters in their saunas.

***When shopping for an infrared sauna, ask about the temperature of the heater surface. The lower the temperature, the better the quality infrared.***

## **2. How much infrared does the heater produce?**

The quantity of infrared depends on the surface area of the heater. Ideally, heaters would be large enough to cover the entire sauna surface area. This is hard to achieve due to the difficulties in design and the construction cost.

Enlarging the surface area of a heater not only makes the quantity of infrared greater but also achieves a lower operating temperature, which generates longer wavelength that is friendlier to the human body as explained earlier.

***Ask about the surface area of heaters when you consider purchasing an infrared sauna.***

## **3. Uniformity of heat**

The reason why uniformity of heat is important is because the entire skin of a human body is a single organ that prefers to be treated uniformly. The great thing about infrared sauna is its uniformity of heat. Conventional saunas have a centralized heater that sits in a corner of the sauna which results in an uneven temperature distribution depending on the distance from the heater. On the other hand, heaters in infrared saunas are placed in multiple locations, which makes the heat within the sauna more evenly distributed.

However, the uniformity of heat distribution among infrared saunas is different

from one to the other based on what kinds of heaters they use. A narrow ceramic heater leaves more cold spots compared to a wider surface heater. Therefore, in general, a wider surface heater will provide better uniformity of heat. Wide surface infrared heaters can be divided into two types. One of them is a type where a heating element is covered by a highly heat conductive material so that the heat from the element can be spread out across the surface. The conductive cover itself then becomes a heater that radiates infrared. Although this type of heater produces more uniform radiation, there are temperature differences among the spots on the cover surface based on the distance from the heating element. The other type of surface heater uses evenly distributed fine carbon particles as the source of the heat across the heating surface. This latter type provides the maximum uniformity of temperature.

***Carbon fiber panels provide the most uniform distribution of heat.***

## **Where are heaters located?**

As stated earlier, infrared heaters in a sauna are placed in multiple locations. Each heater directs a specific body part of a user. Infrared is a kind of ray that shares common characteristics with other rays such as visible light; it travels straight. Therefore, it has to target a specific body part of the user to provide heat therapy. In other words, if the surface of the heater is not facing towards on a specific body part, there is no direct therapeutic value to be derived. The user may still expect secondary therapeutic effects by increased overall blood circulation. The same principle applies to weight loss or detoxification. For example, if one is concerned about reducing the size of the stomach, you need an infrared sauna where at least one of its heaters targets the stomach to get results. You need to identify your problem areas and ensure that the infrared sauna you select has heaters that target these areas.

***Large surface heaters are much more effective than tubular ceramic heaters***

## **Where are the saunas made?**

Infrared saunas are made in a number of countries including the USA. Most all of them are made with good craftsmanship in dedicated sauna factories regardless of their origins these days. Chinese manufacturers bring good quality saunas with relatively low prices in the industry. However, make sure you ask about the maintenance policy of the company, since the products are manufactured abroad. Domestic sauna manufacturers, on the other hand, provide excellent customer care although the prices of their saunas are higher than most of the imported saunas. However, as competition becomes more intense, the price gap between imported saunas and domestic saunas will decrease. Inquire about the history of the company as a lot of start-up companies fail to manage their financial issues even though they have high quality products. If the company disappears so does your sauna maintenance!

Domestic companies often provide custom sauna service. They can customize a sauna that fits to specific dimensions for your needs. If you are knowledgeable enough about infrared and saunas, you may design your own. For example, you can better address your problem areas by locating heaters to better target those areas.

***Select a reputable sauna manufacturer***

## **Which wood is used to make the sauna?**

The most common wood that is used to build an infrared sauna is cedar. Many people prefer it since cedar provides a unique refreshing aroma especially when heated. However, there are people who do not like the smell and some who are allergic to it. Therefore, the best way of choosing a wood is to experience a demonstration. There are several other woods that are widely used for saunas including poplar, basswood, and pine. One thing that is common in these woods is the fact that they are soft woods. Softwoods respond better towards moisture and are more resilient with the expansion and shrinkage

caused by heat than hardwoods and, therefore, make the sauna room more durable.

### ***Select the right wood for you***

## **Prices**

Infrared saunas for two people are priced from \$1,800 to \$6,000. Imported saunas tend to be priced lower than domestic ones in most cases. Due to the price competition among sauna manufacturers, most of the saunas that are equipped with tubular ceramic heaters are priced at under \$3,000. A few of them are even under \$2,000. Saunas with high-tech heaters and large surfaces are sold at higher prices. One of them with the largest surface heater is priced at \$6,000 MSRP but for the reasons above may be the best choice for you.

### ***You get what you pay for!***

## **Other components and miscellaneous features**

There are many components in a sauna besides the heater. The bench is an important component. A potential buyer has to take a careful look at its construction to make sure it is strong enough to stand the weight and large enough to provide a comfortable session especially when he/she is overweight.

Today's infrared saunas are designed to be easily assembled and disassembled for relocations. Many of them also come with a built in stereo or speakers. Power supply is either 110V or 220V. Saunas that consume less than 2 Kilowatts of electricity are usually for 2 to 3 people and need a 110V power supply. Larger saunas that consume more electricity often need a 220V power supply. Most of the saunas need a dedicated line of 20 Amps or more.

Ensure that the sauna and its electric components meet the safety standards required by safety certification organizations such as UL and CSA. Ask if the sauna comes with a safety feature such as a timed automatic shut off.

Finally, and most importantly, you should ensure that the company has knowledgeable and experienced staff in healthcare applications with infrared saunas. Knowing how to use an infrared sauna properly is as important as choosing the best one. Knowledgeable sales personnel can share their various experiences. They can advise you on how to use the sauna to address your specific needs most effectively, regardless of whether they are joint or muscle pains, cardiovascular problems, weight loss, or detoxification. Also, there are companies that work closely with healthcare or fitness professionals to help their clients get better consulted. If possible, talk to these professionals regarding your own specific needs. A reputable sauna manufacturer will provide you with access to these professionals.