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Heated Towel Racks: Design and Function for Interior Spaces



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Heated Towel Racks: Design and Function for Interior Spaces

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REGISTERED CONTINUING EDUCATION PROGRAM

Purpose and Learning Objectives

Purpose:

Heated towel racks not only warm and dry damp towels, but also add a sense of comfort and luxury. This course explores heated towel racks and includes discussions on: the functions, benefits, and applications of heated towel racks; centrally heated, electric, and hydronic heating systems; materials and finishes; installation and care; and, design and accessory options.

Learning Objectives:


At the end of this program, participants will be able to:

- identify the various functions and applications of heated towel racks and differentiate between centrally heated, electric, and hydronic heating systems
- discuss how heated towel racks are an energy-efficient heat source, contribute to water saving measures, and improve indoor air quality by mitigating mold and mildew growth
- list the benefits of designing with stainless steel, and explain how it contributes to sustainable design objectives, and
- outline key measures that must be followed during the installation of a heated towel rack to ensure a safe and secure installation, preventing the risk of electrocution.

How to Use This Online Learning Course

To **view** this course, use the **arrows** at the bottom of each slide or the up and down arrow keys on your keyboard.

To **print or exit** the course at any time, press the **ESC** key on your keyboard. This will minimize the full-screen presentation and display the menu bar.

Within this course is a  **test password** that you will be required to enter in order to proceed with the online test. Please be sure to remember or write down this test password so that you have it available for the test.

To receive a **certificate** indicating course completion, refer to the instructions at the end of the course.

For **additional information** and post-seminar assistance, click on any of the logos and icons within a page or any of the links at the top of each page.

Contents

- Heated Towel Rack Designs
- Functions, Benefits, and Applications
- Methods of Heating Unit
- Safety Measures
- Materials and Finishes
- Accessories
- Summary
- Resources



Click on title to view



Heated Towel Rack Designs

Design Options

Many manufacturers will offer a variety of designs, sizes and finishes, in either electric or hydronic versions. As such, there should be a product available to suit any style and budget.

There will be choices available in the size of the unit, number of bars, and bar spacing. Some manufacturers will even offer custom design and color options. When selecting a unit, the two most important factors are the surface area (number of bars) and the power output (wattage). Custom designs can be aesthetically pleasing (single-bar designs, etc.), but less functional than a traditional heated towel rack. In general, they will project about four to six inches away from the wall and some can be adjusted.



Design Options

Depending on the manufacturer and the unit, a cover plate may be included with an integrated on/off switch with a pilot light. Some units can be controlled by a 24-hr/7-day programmable or countdown timer, or even by a digital heat controller that allows for different heat settings. Some units have a built-in thermostat for optimal energy consumption and safety. Smart timers and app-driven controls can be useful in setting schedules and adding a heated towel rack to a connected smart-home. Source a manufacturer whose units meet all current safety standards.

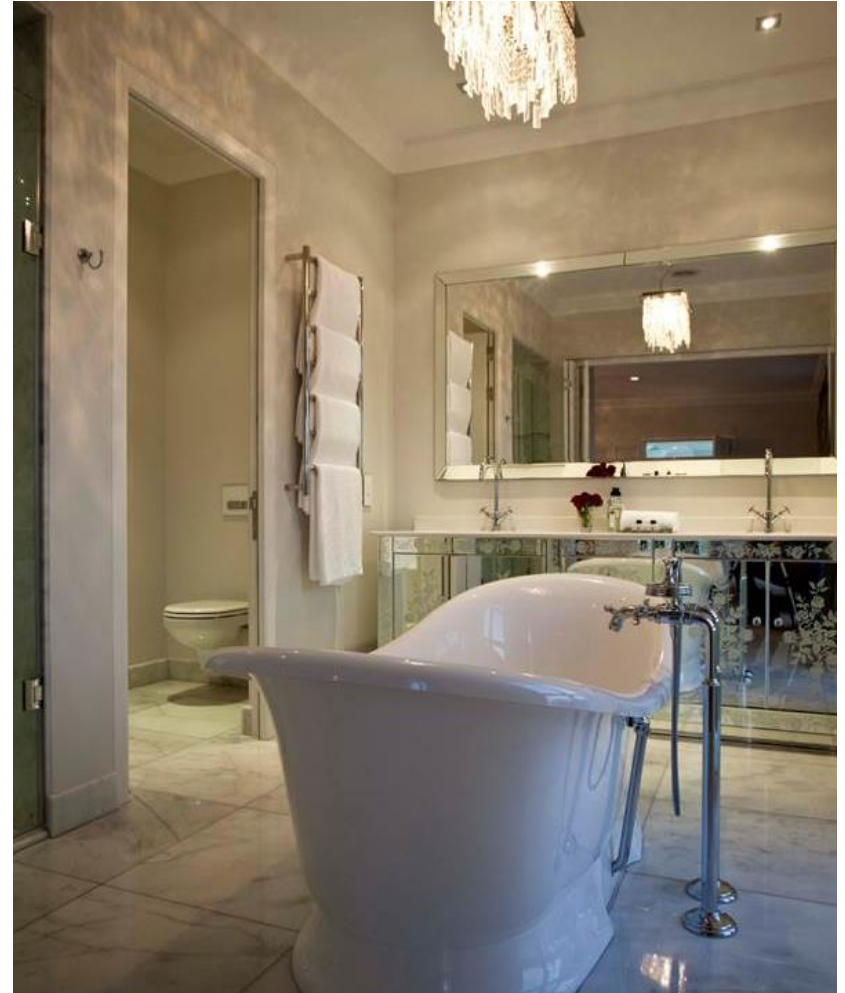
The following slides showcase some heated towel rack designs, show the variations that are often available within the design, and list some common features of similar units.

Classic Design

- Classic towel bar design
- Straight bars or curved bars
- Bar spacing accommodates both small and large towels
- Liquid or cable heating system



Classic Design



Edwardian Design

- Rounded bars with finials at each corner
- Crafted finials and pipes
- Suitable for draping large towels and bathrobes



Edwardian Design



Freestanding Design

- No installation required
- Plugs into any standard outlet
- Portable
- Energy efficient
- No-liquid system
- Saves space



Freestanding Design



Rotating Arm Design

- Swivel hinge rotates 180 degrees
- Each arm moves independently
- Simple to install
- Energy efficient
- No-liquid system
- Saves space

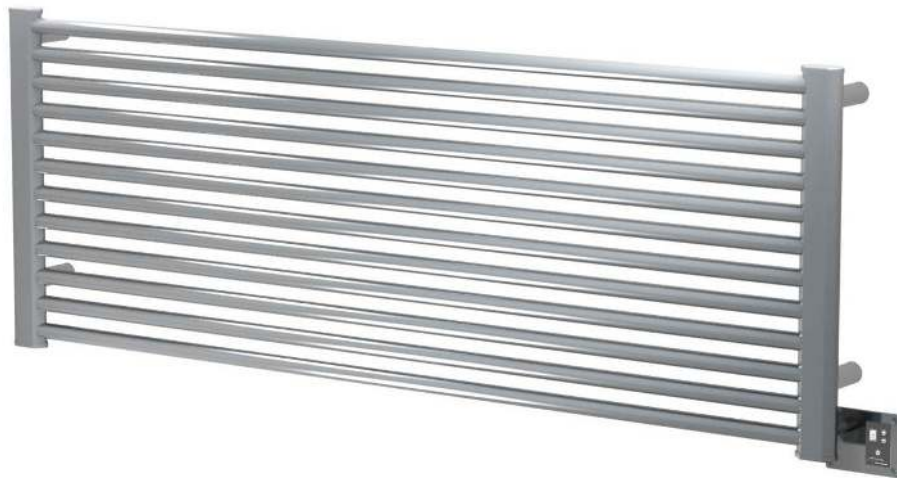


Rotating Arm Design



Narrow Bar Design

- Supports additional towel bars or robe hooks
- Suitable for drying large towels and bathrobes
- Larger models can supply supplemental heat to a room
- Silent and energy efficient—heats quickly and evenly
- Flexible design allows for unit to be installed vertically, horizontally, or upside down
- No-liquid system



Narrow Bar Design



Broad Bar Design

- Broad and flat panels warm towels quickly and evenly
- Large models can supply supplemental heat to a room
- Suitable for drying large towels and bathrobes
- Flexible design allows for unit to be installed vertically, horizontally, or upside down
- No-liquid system



Broad Bar Design

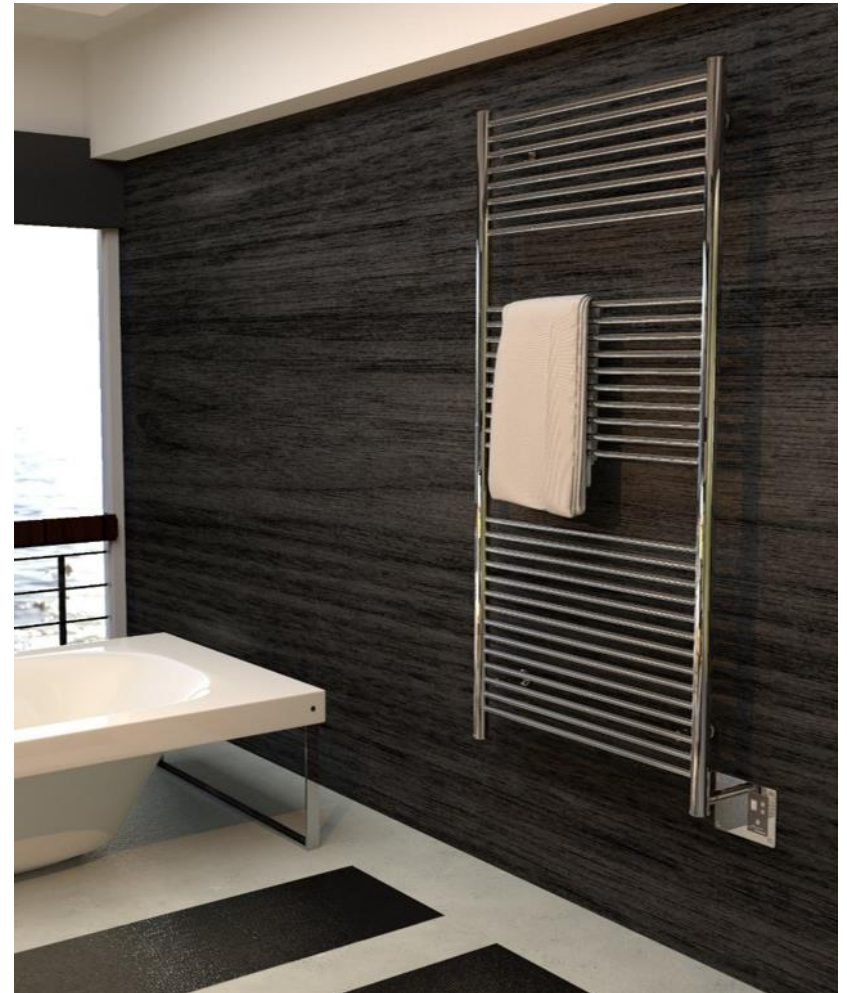


Long Bar Design

- Long bars provide space for large, thick towels
- Suitable for drying large towels and bathrobes
- Large models can supply supplemental heat to a room
- Flexible design allows for unit to be installed vertically, horizontally, or upside down
- No-liquid system



Long Bar Design



Square Bar Design

- Flexible design allows for unit to be installed vertically, horizontally or upside down
- Larger models can supply supplemental heat to a room
- Large, square bars for even heating
- Suitable for drying large towels and bathrobes
- Heats quickly
- No-liquid system

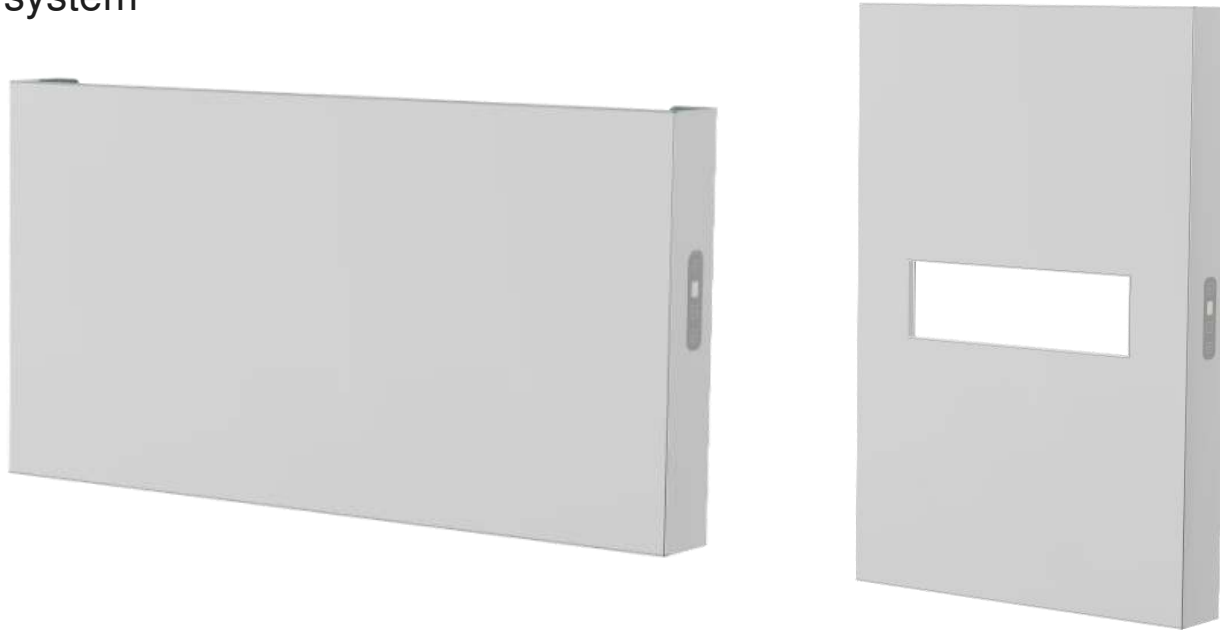


Square Bar Design



Flat Panel Design

- Single-panel
- Silent and energy efficient—heats up quickly and evenly
- Larger models can supply supplemental heat to a room
- Innovative, discreet design complements a variety of contemporary bathroom styles
- Large, flat heating surface area—suitable for drying large, thick towels
- No-liquid system



Flat Panel Design



Custom Designs



Custom Designs



Custom Colors



REVIEW QUESTION

List some of the features of the heated towel rack design pictured here.



ANSWER

Rotating Arm Design

- Swivel hinge rotates 180 degrees
- Each arm moves independently
- Simple to install
- Energy efficient
- No-liquid system
- Saves space





Functions, Benefits, and Applications

History of the Heated Towel Rack

The origin of the heated towel rack is found in the invention of the “radiator,” which is said to have been invented in St. Petersburg, Russia in about 1855.

The radiator forms part of a central heating system whereby a boiler heats water, which is pumped through a series of pipes in a building or home in order to heat the room. A radiator would be placed in a room in order to concentrate more heat in that room.

As bathrooms were heated in this way, towels, and often articles of clothing, were placed on the radiator to dry—hence, the advent of the “heated towel” rack. The 1920s saw the birth of the cast iron, water-heated radiator, commonly referred to as a “bath radiator.”

Heater towel racks are also referred to as towel warmers, heated towel rails, heated towel bars, and in Britain, as drying racks.



100-Year Old Radiator

The Purpose of a Heated Towel Rack



Heated towel racks have a variety of uses and applications. The primary use is to dry towels after use. A heated towel rack will dry towels quickly and efficiently, reducing laundry loads, electricity, and water consumption as towels will not need to be washed as frequently. In addition, they are used to heat towels or clothing, like bathrobes, so the user can enjoy a warm/dry towel or bathrobe when drying off after leaving the pool, beach, or spa. Keeping towels dry and warm prevents the moldy smell that occurs when damp towels are left in a location with limited ventilation.

A heated towel rack is a simple, cost-effective way to upgrade a bathroom by adding both aesthetic appeal and function, replacing conventional towel bars and robe hooks to add value to new or remodeled bathrooms.

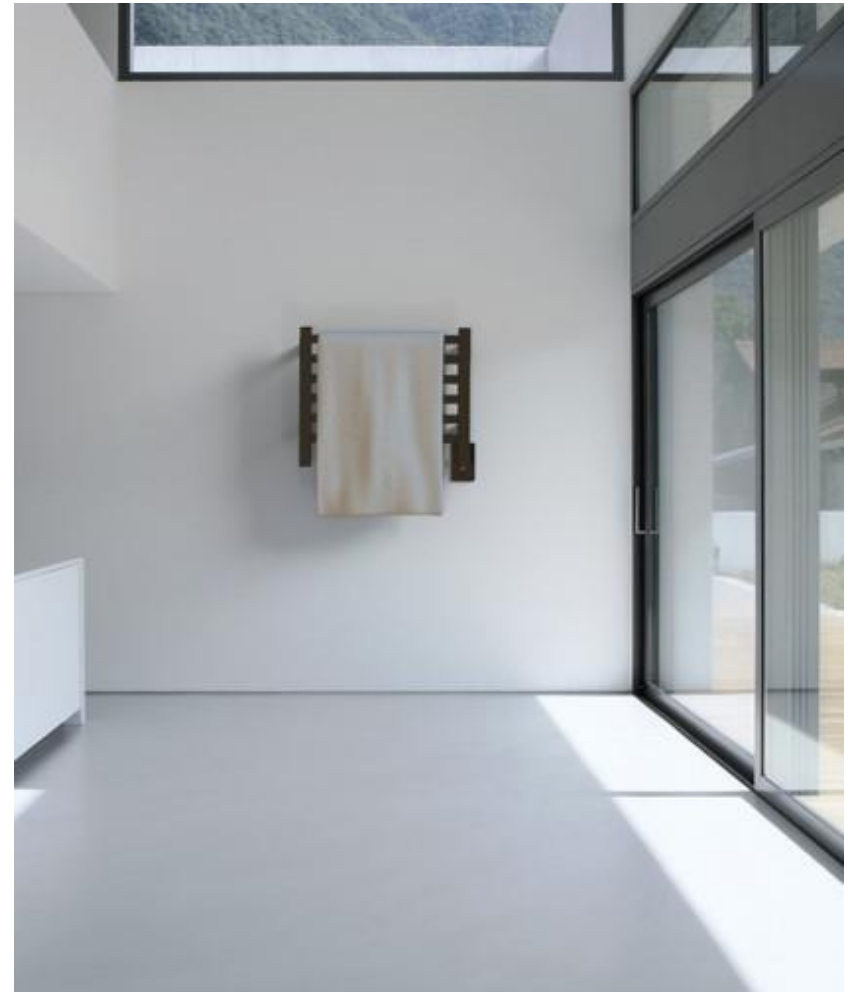
Functions and Benefits

- Keeps towels, bathrobes, and delicates, among other items, warm and dry
- Helps bathrooms stay warm in the winter
- Helps bathrooms stay mold and mildew free
- Some models heat in as little as 15 minutes
- Larger models can supply supplemental heat to a room
- Multiple sizes are available to fit all needs and applications
- Water conservation via reduced laundry
- Units can be custom designed



Functions and Benefits

- Installs easily—wired the same as a light or wall sconce
- Units can be UL, ETL, or CSA approved for safety in Canada or US
- IPX ratings show safety against exposure to moisture
- Units can be controlled by a switch, or 24-hr/7-day programmable timer
- Digital heat controller comes standard with many heated towel racks
- Units consume minimal power—as little as a single lightbulb
- Electric or hydronic versions are available



Green Design Benefits

Net-zero buildings—carbon-neutral dwellings that generate enough clean energy to cancel out the energy they use—are not just a growing trend. From rooftop solar systems and energy-efficient appliances to geothermal heating and thicker insulation, net-zero is all about keeping energy in and using (or losing) as little as possible. From homes to hotel chains, more builders are incorporating these elements into their designs as property owners become increasingly aware of their carbon footprint.

Green design employs various strategies to lessen the damaging effects construction and housing design can have on the environment, human health, and comfort. Many builders and developers are hungry for cost-efficient ways to implement energy-savings, whether it comes in the form of higher-rated building materials, WaterSense[®]-rated showerheads, or ENERGY STAR[®]-rated appliances.

As stated, heated towel racks can reduce the amount of water and energy spent laundering towels and other damp clothing, fitting nicely into the green design equation. They are a sustainable and stylish design option for any bathroom, mudroom, or laundry room and lower both electricity and water use. These savings are important considering about 10% of a home's total electricity costs is attributed to laundry use.

Green Design Benefits

Using a heated towel rack can also be beneficial for air quality by eliminating the conditions necessary for microbial growth. Towels left on a nonheated holder will eventually start growing mold and mildew and develop an unpleasant odor, especially in bathrooms without windows and areas without sufficient ventilation. Mold is a type of fungi that grows both indoors and out in dark, damp areas. There are hundreds of varieties of mold, most of which release tiny spores into the air that when breathed in can cause a variety of illnesses due to the presence of mycotoxins. Installing heated towel racks is one measure to mitigate this.

These benefits are not limited to residential use; installing heated towel racks in guest bathrooms is a proactive step hotels can take to improve the comfort of their patrons while helping to meet the hotel's water and energy saving goals.



Green Design Benefits: Hospitality Industry / Hotels

Comfort: Indulge guests with a spa-quality experience in any hotel bathroom by keeping the towels and bathrobes warm and dry.

Reuse Towels: Reduce water, energy, and detergent use by encouraging hotel guests to place used towels on a heated towel bar.

Maintenance: The heated towel rack radiator will reduce humidity in the bathroom and prevent mold and mildew on the walls and tiles.



Multiple Applications



Heated towel racks are best suited for indoor applications, but that does not mean they must be limited to the bathroom. Heated towel racks can be used in almost any type of application, and larger models can supply supplemental heat to a room. Besides the bathroom, they can be used in mudrooms, saunas, spas, kitchens, basements, garages, workshops, on boats, or in any room that may need additional heat. In some cases, they may also act as the sole source of heat in a room—for example, in a finished basement where dropping the ceiling to add central heating/air is not possible or too costly. This also offers a form of mold prevention which is great for areas lacking ventilation.

They can also be used to dry delicates that cannot be dried in a tumble dryer, to warm blankets, and to dry wet boots, shoes, or winter clothing by hanging them on robe hooks.

Multiple Applications



Mud Rooms



Spas and Hotels



Laundry Room

Multiple Applications

The majority of heated towel racks are installed indoors away from exposure to outdoor elements. The concern with outdoor applications is the exposure to the elements, notably heavy rain, snow, or ice. If a substantial amount of water gets behind the faceplate and into the electrical wiring, it can cause a unit to fail. If a unit is properly installed in a covered location, it could be protected and not face any problems, but there is always a risk.

If the unit is wired in a covered pool area (cable units only, not liquid filled), it is recommended to use outdoor, weather-proof wire connectors and seal the faceplate with silicone and/or use a single-gang box gasket. If the installation is within proximity of the beach, or salty water/air, protecting the heated towel rack from these conditions using stainless steel cleaner is highly recommended.

Always consult with the manufacturer, as the use of a heated towel rack outside might void the warranty and raise potential safety issues.

Choosing a Manufacturer

There are many variables that need to be considered when choosing a manufacturer.

- The average customer is looking for a high quality product at an affordable price. It is important to comparison shop to find a manufacturer that will deliver on both these points.
- Carefully consider the materials and finishes used by the manufacturer as they will affect the durability/longevity of the product.
- Safety and efficiency are also concerns. How safe are the units? How energy efficient are the units? How quickly do they heat up? What area will they heat? Do they meet current safety standards?
- Of course aesthetics is a key issue. Source a manufacturer that offers a wide range of design options including styles, sizes, and finishes. Some manufacturers even offer the option of custom designs.
- Consider customer service. Source a manufacturer with a documented history of customer satisfaction and exceptional service.
- Ensure complete unit is certified by a recognized testing authority.



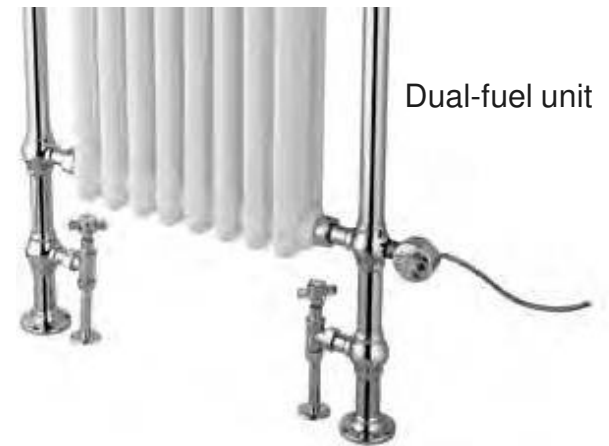
Methods of Heating Unit

Centrally Heated Units / Dual Fuel Units

Heated towel racks can be incorporated directly into a central heating system. The issue with this type of system is that when it is shut off during the warmer months, the heated towel racks do not function.

Dual fuel is an option where, in addition to the standard central heating connections, an electric heating element is also inserted into the heated towel racks. The element is then wired into the electrical supply, meaning that the element can then be switched on even when the central heating is off, and will continue to work independently and heat the towel racks as normal.

A dual fuel heated towel rack gives you the choice of two different energy sources on one towel rack—electric or central heating. It can be heated by the central heating system when it is running (typically in the winter), or by the electric option (typically in the summer).



Electric Units

An electric heated towel rack is heated by an electrical heating system that heats the bars. Electric units can be installed anywhere there is an electrical source, are much simpler to install, and can be used all year round. These units will heat the towels, and some may create the spa-like radiant heat that may be desired. Electric units may be plugged into an outlet or they can be hardwired. Hardwired units have the advantage of concealing the wiring within the wall and do not need to be installed near an outlet.



Hydronic Units



Hydronic heated towel racks operate in conjunction with a closed loop forced-hot-water heating system and typically operate only during the period that the central heating system is operational. The hydronic heated towel rack is heated by circulating warm water from a boiler, which typically operates from home heating oil, natural gas, or LPG propane, depending on the boiler. It can also be connected to a hot water heater (open system). These systems can be more efficient than electric systems but can also be more costly. You need to be able to hook the unit into the existing water system, and a pump is needed to force the water through the bars. They also have a bleeding valve to release captured air.

Heating Time

The time it takes for a unit to heat to the desired temperature depends on the internal heating system.

Some units heat via wire cables throughout the unit (horizontal and sometimes vertical bars too) and take only 10–20 minutes to heat up. However, there are different levels of quality of heating cables.

Another process for heating the units is to use a heating element that heats a glycol-water mixture (similar to antifreeze) the unit is filled with. This in turn heats up the horizontal and vertical bars, beginning with the top bars and working its way down. Units like this take between 15 minutes to 1 hour to heat up to their top temperature, depending on the size of the unit and other parameters.

External factors such as the temperature of the room, the size of the room, and whether the unit is placed near a vent will all have an effect on the time it takes to heat the towel.

Controlling the Temperature

Controlling the temperature largely depends on the unit and the type of heating system it uses.

Liquid filled units usually have a preset temperature range with a safety temperature cut-off. They don't allow for temperature control. Generally, they don't operate on 15/30/60-minute timers as this is insufficient heat-up time. Some liquid filled models don't have any integrated controls, others may but are often aesthetically unpleasing and/or made of plastic.



Systems heated with thick wire cables heat quickly and may come furnished with a digital heat controller which allows for heat regulation through different temperature settings. An average temperature range for heated towel racks is between 131°–167°F, depending on the unit and manufacturer. At maximum temperatures, heated towel racks will feel quite hot to the touch but should not burn the skin.

BTUs

A BTU (British thermal unit) is used mainly to measure heat but is also applied to other forms of energy. One British thermal unit is equal to the amount of heat needed to raise the temperature of one pound of water by one degree Fahrenheit, 251.997 calories. The BTU calculation can be used to work out the amount of heat needed to heat the room a few degrees, ensuring the selection of the appropriate heated towel rack for the space.

1 watt = 3.41 BTUs

The calculation of BTUs is dependent on a variety of factors:

- Room dimensions: height, width, length, and window area x 2
- Type of room: living room, bedroom, kitchen, hallway, bathroom
- What is below the room: heated room, wood floor, concrete floor; What is above the room: heated room, space with no insulation, space with insulation, flat roof with insulation, flat roof with no insulation
- Type of outside wall: brick cavity, insulated brick cavity, solid brick, wood frame; Number of outside walls: none or one, two, three
- Type and size of window: wood/plastic double glazed, metal single glazed, wood single glazed, wood/plastic single glazed

REVIEW QUESTION

List some of the factors that affect BTU calculations.



ANSWER

- Room dimensions
- Type of room
- What is below the room
- What is above the room
- Type of outside wall
- Type and size of window





Safety Measures

Energy Consumption and Use



Some types of units (e.g., units that contain a heating element that heats a glycol-water mixture) have a built-in thermostat and internal thermal cut-out for optimal energy consumption and safety. Once the unit reaches the ideal operating temperature, it then cycles itself to maintain this temperature. This allows it to be left on continuously, only drawing power to maintain the ideal temperature range. If for any reason a unit overheats, the safety cut-out switch will shut the unit off. A switch should be installed so the unit can be switched off when not in use—while on vacation, for example.

Water Conservation Benefits

Removing moisture—preventing mold and mildew growth—is one of the main benefits of a heated towel rack, and by drying towels quickly and efficiently there is less need to wash them.

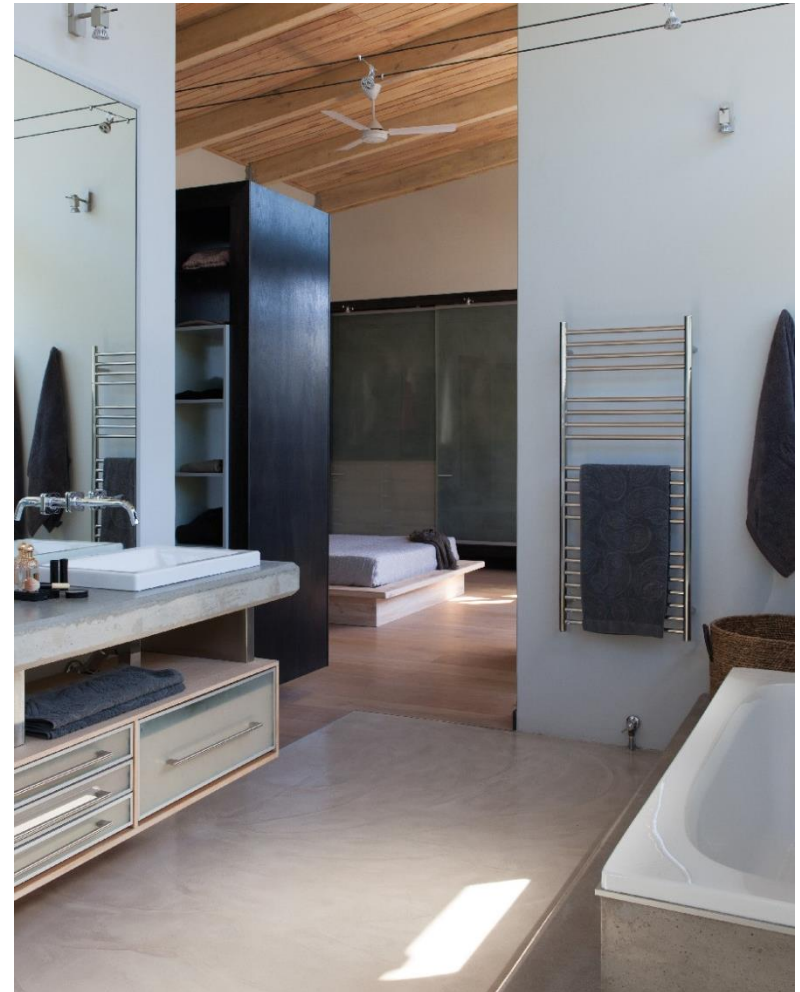
According to the National Parks Services, an average residential washing machine uses ~41 gallons of water per load, with an average annual water use of ~13,500 gallons. Commercial washing machines vary widely, using an average of ~35,000 gallons of water per year.

Using heated towel racks can lead to substantial savings, especially for large-volume laundry operations often found in hotels.



Sample Installation Instructions

- All installations should be in accordance with national and local electrical codes.
- To ensure the heated towel rack is mounted securely, fasteners should be secured in studs, or alternatively, in structural members that are placed behind the racks.
- The units should be installed by a certified electrician according to the local electrical code. Most wiring in bathrooms today is already GFCI (ground fault circuit interrupter) equipped, which is an inexpensive electrical device that prevents the risk of electrocution.



Examples of Installation Warnings

- Follow the manufacturer's installation instructions carefully to ensure unit is properly attached to the wall.
- All installations should be in accordance with national and local electrical codes.
- Unit is intended for indoor use only.
- Do not place units inside a shower, sauna, steam room, or wherever the unit would be directly exposed to running water.
- Liquid-filled units must be installed in an upright position with the wire cover tube/ junction box positioned at the bottom.

Sample Installation Cautions

- Ensure that unit is securely fixed to the wall. Unit is designed for drying towels. Under no circumstances should anybody climb on or hang on unit.
- The fasteners provided with the installation kit are for convenience only and are not suitable for all installation conditions—it is the ultimate responsibility of the installer to ensure proper mounting hardware is employed in attaching the unit to the wall.
- Surface of unit is hot when on.



Sample Care and Instructions

- Towels which contain soap or detergent, or fabric softener residue may appear to have scorch marks; however, this is simply discoloration of the residue in the towels themselves. The unit does not reach a temperature sufficient to scorch towels.
- Some heated towel racks are constructed from 304 stainless steel. They are extremely durable. To maintain their appearance, follow these simple care instructions:
 - For routine cleaning, simply switch off the unit, allow to cool to room temperature, wipe with a damp cloth and buff with a soft, dry cloth.
 - Light scratches and blemishes may be removed by polishing the unit. Unit should be switched off and allowed to cool before polishing with a commercially available metal polish.
 - Under no circumstances should abrasive cleaners be used to clean the unit.

Towel Placement



When hanging a towel on a heated towel rack, it is recommended that the towel be folded lengthwise, and then draped over the top bar with half of the towel on either side of the unit.

Hanging towels with multiple folded layers improves insulation, helping the towel absorb and retain heat. The greater the surface area of the towel touching the bars the better— this decreases time needed to dry a towel.

Mounting Options

All hydronic heated towel racks are either wall or floor mounted as they must be connected into the existing hot water plumbing or radiant heating systems.

Wall mounted heated towel racks are a great option where there is limited floor space; they take the place of more conventional towel bars. They can be hydronic or electric, hardwired or plug-in. Variations in wall surfaces (e.g., tiled areas and flat areas) must be considered when choosing the unit and its placement.



Mounting Options

How the units are mounted depends on the unit itself and the type of heating system. It is important to verify mounting options with the manufacturer as some units may not function correctly if not mounted according to instructions.

Some heated towel racks can be mounted in any direction desired (upside down or sideways) and will still perform just as they are expected to. This is a convenient option when the customer wants the wiring and switch to be in a different location.

The position of the electrical wiring and fittings may be an option at the time of ordering. Check with the manufacturer to see if this is a standard or customizable option.



REVIEW QUESTION

Explain recommended towel placement.

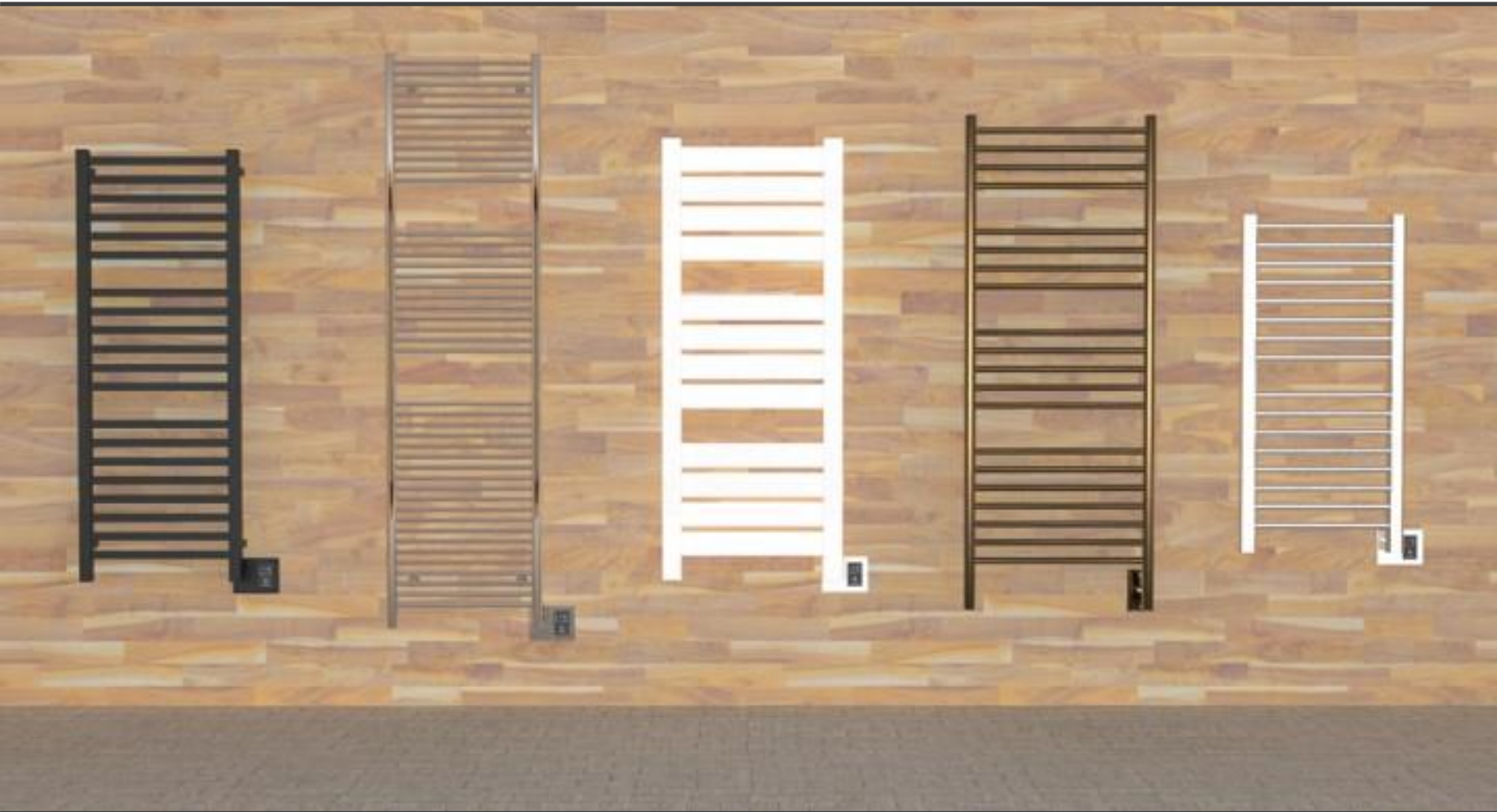


ANSWER

When hanging a towel on a heated towel rack, it is recommended that the towel be folded lengthwise, and then draped over the top bar with half of the towel on either side of the unit.

Hanging towels with multiple folded layers improves insulation, helping the towel absorb and retain heat. The greater the surface area of the towel touching the bars the better— this decreases time needed to dry a towel.





Materials and Finishes

Stainless Steel

Steel is a widely-utilized iron alloy that resists bends, cracks, and chips. It is used to form rigid structures in construction, cars, and appliances, with hundreds of other modern applications. There is one problem with steel, being an iron alloy it is susceptible to rust—the product of iron reacting with oxygen. This corrosion can degrade the strongest steel if it is not adequately protected.

To combat this chemical reaction, stainless steel was created. Also known as inox steel or simply inox, stainless steel must contain at least 10.5% chromium (by mass). The exact composition will vary based on the grade and the intended use of the steel. When added to steel, chromium protects against the oxidizing process and gives a tarnish-resistant finish, making it not only a versatile and strong material, but also giving it a very high-end aesthetic appeal.



Stainless Steel

Most heated towel racks are fabricated out of stainless steel and come in a variety of finishes. Different grades and surface finishes of stainless steel are available to suit the environment the alloy will be exposed to. It is typically used where the properties of steel and resistance to corrosion are necessary.

One commonly used alloy is SS304:

- SS304 is a chromium-nickel austenitic stainless steel and is suitable for the widest variety of applications. It is readily available in a multitude of forms and is easy to form and fabricate. It is used for exterior architectural applications because of its excellent resistance to corrosion from exposure to weather and is extremely durable when used in indoor applications.

Heated towel racks fabricated from SS304 can be installed in areas where there may be excessive moisture (bathrooms, pool houses etc.), which would wreak havoc on regular steel hardware. The tarnish resistance also helps keep the units clean and shiny, minimizing maintenance.

Source: "Stainless Steel Overview: Features & Benefits." *Specialty Steel Industry of North America (SSINA)*, n.d.

Stainless Steel – Benefits

The Specialty Steel Industry of North America identifies the following benefits of stainless steel:

- Corrosion resistance – The chromium content in stainless steel gives steel its corrosion resisting properties. The corrosion resistance strength depends on the grade of steel. Under normal conditions, stainless is unlikely to corrode, pit, tarnish, or deteriorate in any other way. There is no need to compensate for loss of strength due to deterioration, and replacement costs are virtually non-existent.
- Fire and heat resistance – High grades resist scaling and retain strength when exposed to high temperatures.
- Hygiene – It is easy to clean and sanitize, and therefore suitable for applications where hygiene is a requirement, such as hospitals and food processing plants. In residential or industrial applications, washing with detergent and water or with a commercial stainless steel cleaner is generally sufficient.
- Aesthetic appearance – Stainless steel has a clean, bright, modern appearance; it complements, reflects, and highlights surrounding materials.

Source: “Stainless Steel Overview: Features & Benefits.” *Specialty Steel Industry of North America (SSINA)*, n.d.

Stainless Steel – Benefits

- Strength-to-weight advantage – Stainless steel is one of the strongest metals. Different stainless steels will have different mechanical properties. Some grades allow reduced material thickness over conventional grades, therefore providing cost savings.
- Ease of fabrication – It can be cut, welded, formed, machined, and fabricated as readily as traditional steels. Stainless steel is produced in virtually all standard metal forms and sizes, plus many special shapes.
- Impact resistance – High toughness in both very elevated temperatures and those well below the freezing level.
- Long-term value – Stainless steel is a very economical choice when total life cycle costs are taken into consideration. Savings accrued from the minimal cost of maintaining stainless make up any difference in cost that may occur between components made of stainless and other materials.
- Life cycle – Stainless steel products are 100% recyclable at the end of their service life. It is estimated that over 50% of new stainless steel comes from old, re-melted stainless steel scrap, thereby completing the full life cycle.

Source: “Stainless Steel Overview: Features & Benefits.” *Specialty Steel Industry of North America (SSINA)*, n.d.

Common Materials

Materials for fabrication vary by manufacturer with the most common being stainless steel 304, mild steel, carbon steel, brass, aluminum, and nickel.



Stainless Steel



Polished Nickel Finish

Common Finishes

Depending on the manufacturer, a wide range of finish options are available: polished steel, brushed steel, oil rubbed bronze, white, polished nickel, brushed nickel, satin nickel, chrome, anthracite, etc.



Polished Steel



Brushed Steel



Satin Brass



Satin Nickel

Common Finishes



White



Matte Black



Oil Rubbed Bronze



Accessories

Switches

Some units come equipped with a built-in on/off push-button switch, and others have a single-pole pilot light rocker switch. These are two options available for customers who wish to control their unit with an on/off switch.



Timers

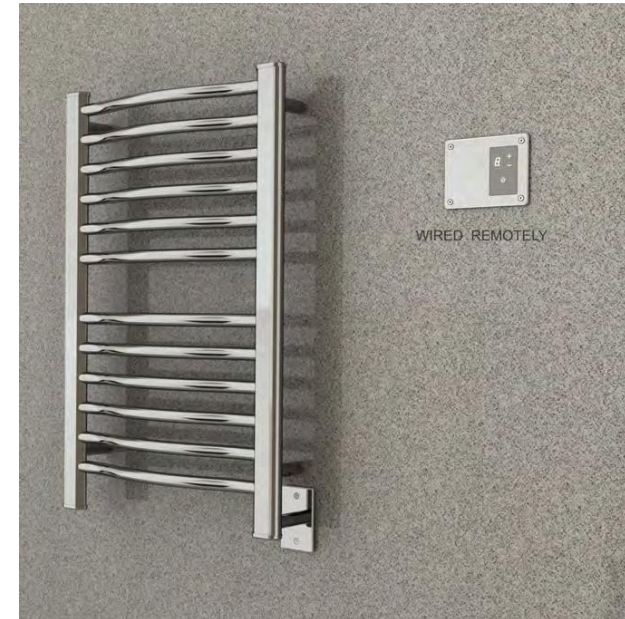
Depending on the manufacturer, and the unit, there are different types of timers available for use with heated towel racks. A 24-hr/7-day programmable timer is intended to be used with hardwired heated towel racks and gives the user the ability to program the heated towel rack to turn itself on/off at designated intervals, set to individual preferences. A plug-in 24-hr/7-day programmable timer works just like the hardwired programmable timer, but works in conjunction with plug-in units. A 24-hr/7-day timer is recommended to ensure consistent temperature performance. Newer “smart” controllers that interface with home automation via WiFi and Bluetooth can also be used to schedule and time usage.



★ Please remember the **test password TOWEL**. You will be required to enter it in order to proceed with the online test.

Digital Heat Controllers

A digital heat controller is designed to allow users to have more control over the temperature at which the unit runs, by giving them several different heat settings to choose from. Check with the manufacturer to see if this type of controller is appropriate for use with the selected heated towel rack.



Bathrobe Hooks

Many manufacturers offer bathrobe hooks that can be used with several of their heated towel rack designs. These versatile hooks can also be used to hang damp jackets or even shoes.





Summary

In Summary...

A heated towel rack is both an economical and efficient decorative source of heat that will add comfort to a room as well as keep towels warm and dry. It also reduces laundry loads and water consumption and helps keep the bathroom mold and mildew free.

In addition to the bathroom, heated towel racks can be used in mudrooms, saunas, spas, kitchens, basements, garages, workshops, boats, or in any room that may need additional heat.

Offered in a variety of designs, finishes, sizes, and shapes, there is a heated towel rack to fit all budgets and complement unique style preferences.



Resources

“Amba Heated Towel Racks FAQs.” *AmbaProducts*, n.d., <https://ambaproducts.com/faqs>. Accessed November 2019.

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“Heating and Radiators.” *The Victorian Emporium*, June 2011, <http://www.thevictorianemporium.com/periodliving/history/article/heating-and-radiators>. Accessed November 2019.

“Laundry Practices and Water Conservation.” *National Parks Service*. U.S. Department of the Interior, May 2018, <https://www.nps.gov/articles/laundry.htm>. Accessed November 2019.

“Stainless Steel Overview: Features & Benefits.” *Specialty Steel Industry of North America (SSINA)*, n.d., <http://www.ssina.com/overview/features.html>. Accessed November 2019.

Conclusion

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