

## Custom Sauna Guide Index

Building a sauna isn't like building a shed or finishing a basement.

A proper sauna is a finely tuned balance of heat, airflow, materials, and design — and most people don't realize how many small decisions determine whether it feels okay... or absolutely incredible.

This guide exists to help you understand those decisions, avoid common mistakes, and build (or have someone build) a sauna that performs exactly the way a true sauna should.

Below is your full index.

Each section walks you through a critical part of planning your sauna, step by step.

#### Guide Index

#### 1. Indoor or Outdoor Sauna

Understand the advantages of each location and decide which style best fits your home and long-term goals.

#### 2. Sauna Layout

Learn how space, cubic footage, and overall footprint determine everything from heater size to heat performance.

#### 3. Heating Systems

Compare electric, wood-fired, and gas options — and how to correctly size your heater for perfect heat and steam.

#### 4. Interior Woods

Discover why certain woods thrive in high heat and moisture while others warp, crack, or leak pitch.

#### 5. Wood Species (Deep Dive)

A closer look at cedar, aspen, spruce, basswood, and thermo-modified woods — including pros, cons, durability, and sourcing tips.

#### 6. Bench Layout Understand why bench hei

Understand why bench height determines heat quality and how proper spacing and gapping keep your seating comfortable and safe.

#### 7. Bench Layout (Part 2)

Dive deeper into ergonomics, raw wood finishing, hidden fasteners, under-bench airflow, and long-term cleaning access.

#### 8. Ventilation

Explore the critical role of air movement, intake and exhaust placement, and how great ventilation makes or breaks your sauna.

#### Finishing the Sauna

From flooring and drains to doors, windows, siding, and trim — this section covers all the final details that complete your build.

#### 10. Sauna Amenities

Learn how accessories elevate your sauna into a full wellness experience.

#### Choosing the Right Builder

Understand why craftsmanship, experience, and sauna-specific knowledge matter — and how Cedar Sense ensures your sauna is built right the first time.

# Indoor vs. Outdoor Overview

Traditional Finnish saunas were almost always outdoor—small, simple buildings tucked behind the home where heat and cold collided in all the right ways.

Today, indoor saunas are becoming just as popular, giving people the same authentic experience without stepping into the snow. Both options work beautifully... it just depends on where you want your little slice of escape

#### Indoor Sauna

Ideal for homes,

basements, gyms,

wellness rooms

Requires proper

ventilation strategy

Electrical access

typically easier

Lower exposure to weather →

## Outdoor Sauna

Best for cabins, lake homes, backyards

More design freedom (size, windows, exterior siding) Requires weather-rated materials

Allows wood-fired and gas options more easily





# Space, Footprint & Layout

Before you start dreaming about heaters, benches, or windows, you need to know exactly what kind of real estate you're working with. A sauna may be simple at heart, but it still needs a footprint that fits your life—and your property.

Measure the space carefully and note:

- \* Width, depth, and height (traditional saunas stay under 84")
- \* Clearance around the sauna for airflow, snow load, or maintenance
  - \* Floor strength, especially if placing a heater on a raised deck or indoor platform
  - \* Entry access (doors, hallways, tight corners for indoor builds)
  - \* Drainage or slope considerations for outdoor builds
  - \* Where utilities will run (power, vent routes, or chimney path)

Your sauna's interior **cubic footage** determines the heater size, so **accuracy matters**.

More space = more benches, more comfort, and better heat distribution.

Less space = smarter design and good planning.

Either way, getting the footprint right is the first step toward building something that feels "just right" every time you fire it up.



# **Heating System Selection**

Once you know your space, the next big decision is how you want to heat it—because your heater isn't just a piece of equipment, it's the heart and soul of the entire sauna experience.

The right heater turns your measurements from your layout into real heat, real steam, and real löyly. The wrong one leads to slow warm-ups, uneven temperatures, and a whole lot of disappointment.

#### Electric Heaters

Reliable, simple, and great for daily use Pair with a wall control or Wi-Fi app Requires licensed electrician for final hookup.





#### Wood-Fired Heaters

Delivers the most authentic, traditional feel Internal feed provides flame inside the room External feed keeps wood, dirt, and ash outside Requires a chimney and proper clearances

#### Gas (Natural Gas or Propane)

Efficient for larger saunas or dedicated outdoor/indoor setups
Needs proper venting and a gas-safe installation plan

Expensive up front but saves money overall



## Sizing Matters

Match your heater's output (kW or BTU) to your exact cubic footage.

Underpowered = long heat-up times.

Overpowered = harsh, dry heat.

Correctly sized = perfect heat and perfect steam every time.

## Interior Wood Selection:

More Than Just Picking Boards

By now you've measured your space and started imagining how the heat will feel swirling around the room. But before any of that becomes reality, you need to choose the right interior wood — and this is where most DIY attempts (and even many contractors) run into trouble.

A sauna isn't just another room with lumber slapped on walls. Heat, steam, humidity, expansion, contraction, and years of use put the interior through conditions no other part of your home ever sees. The wood you choose determines the feel, smell, safety, longevity, and even the temperature comfort of your sauna.

### And here's the truth most people don't realize:

You can't just walk into a big-box store and buy the right stuff.

Not the right species, not the right grade, not the right milling, and definitely not the right moisture content.

If you want your sauna to last — and feel like an actual Finnish sauna instead of a hot closet — wood selection matters more than most people think.



## What Wood is Good?

#### Western Red Cedar (The Gold Standard)



- Stays comfortable to the touch even in high heat
   Naturally resistant to moisture, mold, and decay
  - Naturally resistant to moisture, moid, and decay
     Classic sauna aroma that people crave
- Ideal for: traditional saunas, heavy use, and premium builds
   Cedar remains the most popular sauna wood in North America
   for good reason it handles abuse and looks incredible doing it.

#### Aspen (Clean, Light, Modern)



- Very low aroma (great for those sensitive to scents)
   Uniform, light-colored finish for a Scandinavian look
- Stays smooth even after years of heat cycles
- Minimal resin and excellent heat stability

Aspen is a favorite for people who want a calm, neutral-feel sauna.

#### Spruce (Traditional, Affordable, Authentic)



- Stays comfortable to the touch even in high heat
   Naturally resistant to moisture, mold, and decay
- · Classic sauna aroma that people crave
- Ideal for: traditional saunas, heavy use, & premium builds

  Most big-box spruce isn't sauna-grade moisture and resin levels

  are often too high. Sourcing matters.

## Thermo-Modified Woods Thermo-Aspen - Thermo-Spruce - Thermo-Pine

Thermo-modified woods are quickly becoming one of the most sought-after materials in high-end sauna builds — and for good reason.

#### What Is Thermo Modification?

It's a specialized heat-treatment process (no chemicals) that changes the structure of the wood, resulting in:

- Significantly improved stability
   Dramatically reduced resin (pitch)
- Higher resistance to moisture and rot
- Deep, rich color tones
  A luxurious, modern aesthetic
- Longer lifespan in high-heat environments

## The New Favorite in America

## Why Thermo Woods Are

- They stay straighter and flatter over time
- They absorb less moisture, reducing swelling/splitting
  Their darker tones give a spa-like, upscale look
  - They feel premium because they are

## Avoid Standard Pine

Affordable, yes... but problematic in saunas.

High heat causes:

Pitch pockets to melt
Sticky resin to ooze out
Potential burns on skin
Strong odors
Rapid discoloration and cracking

Thermo-Pine is acceptable

but standard Pine should stay far away from your sauna.



## This is the Moment Most People Realize...

# "I Might Need a Pro"

It's one thing to build a deck or a shed.

It's another to design a heat-engineered environment that requires:

ROOF PANEL

- precision heights
   thermal flow
- · thermal flow
- safety clearances
   hidden fasteners
- · mademasteriers
- · sanitary spacing
- · species-specific construction rules

This is why most DIY sauna plans fall short—
not because people aren't handy, but because
sauna building is a different skillset altogether.

Cedar Sense specializes in designing and building high-performance sauna interiors that follow traditional Finnish standards and modern

engineering practices.

When we build benches, they're built for:

- longevity
- safety
- · proper heat performance
  - authentic temperature lavering



All of this is extremely important to a sauna build but NONE OF IT is as crucial as to what we dive into next...

# Ventilation & Airflow:

## The Hidden Engine of a Proper Sauna



If your benches determine how you feel the heat, the ventilation determines how you breathe it. And this is the part of sauna building that even experienced contractors almost always get wrong.

Ventilation isn't optional — it's the single biggest factor that separates a lifeless hot room from a true Finnish sauna with rolling, breathable, energizing heat.

Most people assume ventilation is just "a vent here and a vent there." In reality? It's a delicate balance of airflow, heat movement, and fresh oxygen cycling.

Done wrong, it ruins the entire sauna experience.

Done right, it transforms it

#### The Goal of Ventilation: Fresh Oxygen IN, Stale Air OUT

A proper sauna breathes - literally.

You want a continuous, gentle flow of: Fresh cool oxygen entering low

· Warm, stale air exiting high This keeps the air clean, prevents headaches, and creates that refreshing "alive" heat the Finns call löyly. Without this balance, you get:

 stagnant air oxygen-poor steam burning eyes nausea or dizziness

uneven heat lavers No one wants that -

Expensive

Sauna

and it's entirely avoidable with proper design

#### Bad Ventilation Can Ruin Even the Most You can have-

a \$3,000 HUUM

a \$5 000 Harvia

Want to Get

This Part Right?

Download Our

or a \$10,000 luxury setup

but without correct airflow, none of it performs.

This is exactly why we take ventilation so serious at Cedar Sense It's not a detail - it's the foundation of a great sauna.

Ventilation is too important to guess on.

That's why we created a free, easy-to-read guide that covers: ideal vent sizes

best vent placement

 diagrams Download it anytime on our website.

Free Ventilation Guide It's one of the most valuable resources we offer — and it costs nothing

# Details That Make a Sauna Last Exterior Finish, Flooring, Doors & Windows

Once you've planned the interior and airflow, the next step is shaping the exterior and structural elements that make your sauna both functional and beautiful. These choices affect durability, heat retention, long-term maintenance, and how seamlessly the sauna fits into your property.

#### **Exterior Siding**



Your exterior finish should complement your home, cabin, or property style. Most customers match:

- their house siding
   their deck or porch finish
- their deck or porch finish
   or a natural wood look

#### Flooring



siding, and weather sealing are non-negotiable.

Great sauna flooring isn't about what looks nice — it's about what works:

- Duckboard wooden flooring
   Tru-Tile flooring
- Concrete pads

Good flooring prevents standing water, protects the structure, and keeps the sauna comfortable year-round.

Any exterior material must withstand heat, moisture cycles, and weather exposure. Proper flashing, airflow behind the

#### Doors



Your sauna door plays a role in both heat retention and safety

Must swing outward
 Should have wood handle so you don't burn your hand
 Windows on door help bring in light

A well-built door holds in heat and steam — a poorly-built one constantly leaks it.

#### Drains



Even if your sauna is dry most of the year, drains matter:

- · Sweat, cleaning water, and steam need somewhere to go.
- Floors should slope gently toward the drain
  - Outdoor saunas often connect to a French drain or gravel pit

Without a drain plan, moisture builds up and shortens your sauna's lifespan.

# Sauna Accessories & Wellness Add-Ons That Complete the Experience

A great sauna isn't just walls, benches, and heat — it's the small touches and added amenities that elevate every session. The right accessories create atmosphere, improve usability, and help you get the most from your investment.

Below are the essentials every sauna owner should consider:

#### Essential Sauna Accessories







**Lighting Options** 







Cold Plunges

Hot Tubs

Showers







#### Everything You Need, in One Place

All of these accessories and add-ons — buckets, ladles, timers, lighting, cold plunges, outdoor showers,

hot tubs, and cedar furniture — are available through Cedar Sense. You can explore them anytime on our website

## Why Choosing the Right Builder Matters

By now, it's probably clear that a sauna isn't just a shed with a heater in it. It's a precision-built environment where heat, airflow, wood selection, moisture control, and ergonomics all have to work together perfectly. And this is where the right builder makes all the difference.

A sauna built wrong can still "look" right — but it will never feel right. Poor ventilation makes the air heavy. Bad bench design traps you too low in the cool zone. Wrong materials warp, crack, or leak pitch. Incorrect heater placement can be inefficient. or unsafe. And the biggest mistake of all? Hiring someone who's "handy" but has never actually built a true sauna before.

#### A proper sauna requires:

- Understanding of thermal layering and how to sit in the top ½ of the heat
   Knowledge of airflow patterns and proper vent placement
- Correct vapor barrier techniques
- Experience with moisture-resistant woods
- Safe heater clearances, chimney runs, and electrical considerations
- Bench designs that maximize comfort, airflow, and longevity
  Drainage and floor planning to prevent rot, mold, and odor
- A design that actually matches your lifestyle and usage pattern
- These things don't come from watching YouTube videos.

They come from building saunas—real ones—for real people who use them daily.

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