


Piano **BUYER'S GUIDE**



STEINWAY & SONS

A close-up, high-angle photograph of a piano hammer flange. The flange is a polished, cylindrical metal component with a hexagonal base and a decorative, rounded top. It is positioned centrally, with several white piano strings fanning out from behind it, creating a starburst pattern. The background is dark and out of focus, highlighting the intricate details and metallic sheen of the flange.

The Steinway & Sons PIANO BUYER'S GUIDE

The piano has captured the hearts of artists and music lovers for more than three centuries, and now it has captured yours. Your decision to bring a piano into your home and into your heart is a decision to embrace the joys of music, heritage, artistry, and tradition.

There are many pianos that you and your family will grow out of. But there is only one that you'll grow into — a STEINWAY & SONS piano.

It is easy to find a piano that costs less than a STEINWAY, but it is impossible to find a piano that will offer more heritage, more renown or a greater return on investment. Since 1853, authentic STEINWAYS have had an unrivaled record within the piano world for maintaining their value.

Each STEINWAY & SONS piano is handcrafted, one at a time, taking almost a full year to complete. We are proud to say that many of our artisans who handcraft today's pianos are second- and third-generation STEINWAY craftspeople, carrying forth a STEINWAY family tradition.

Steinway & Sons IS HERE TO HELP

A well-constructed piano will add beauty and elegance to your home and will provide a lifetime of musical enjoyment. It is the perfect instrument for beginning music students as well as seasoned musicians. But we understand that the process of selecting the right instrument may be challenging. This special Piano Buyer's Guide will help you assess your desires, fine tune your preferences, and select the perfect piano for your specific needs.

In the world of musical instruments, there are pianos — and there is STEINWAY & SONS. You get more out of a STEINWAY piano, because a great deal more goes into it. For over 170 years, STEINWAY & SONS pianos have been the instrument of choice for more than 95% of the world's concert pianists, and we've built our name and our reputation on a commitment to one simple word: quality. Our pianos are far more than instruments — they're investment-worthy, exquisitely-crafted family heirlooms to be treasured and enjoyed for generations to come. We'd like to share with you a bit of the knowledge we've amassed about what makes a piano work well, and what makes a piano play well. Armed with this information, we think you'll find the piano that speaks directly to you.



“A STEINWAY is a STEINWAY,
and there is *nothing like it in the world.*”

ARTHUR RUBINSTEIN



The Magic OF MUSIC

Sit Down, Close Your Eyes, **TOUCH THE KEYS, AND LISTEN.**

It's simply magic, isn't it? Actually, it isn't. The piano works through a complex but highly mechanical process developed in the early 1700s and perfected over the last three hundred years. Simply put, when a player's finger strikes a key, it sets the key action (a series of levers connected to a felt hammer) in motion.

The hammer strikes a metal string, or a combination of strings, which causes them to vibrate. These vibrations are transmitted from the strings to the soundboard through bass and treble bridges, and the soundboard converts the vibrations into what is known as piano tone. It also amplifies the notes so that they can be heard.

There are over 12,000 specific parts in the typical piano, all of which must function with ease and accuracy to produce the music we love.

“Build the best piano possible.”

HENRY ENGELHARD STEINWAY, 1797–1871



STEINWAY & SONS

“STEINWAY allows me to unfold *the world of imagination.*”

YUJA WANG



How a Piano WORKS

The CASE

A piano's outside cabinetry is known as the case, and it is often the piano's most visual feature. A high-quality case adds beauty, strength, and support to the piano. The single most important piece of the case is the rim, which in the STEINWAY is made of multiple laminations of hard rock maple. Strong beams or braces in the bottom of a grand piano or in the backs of an upright piano provide additional support.

STEINWAY pianos are well known for the strength and beauty of their cases. The patented process used to make a STEINWAY rim was a major technical innovation invented by STEINWAY & SONS in 1878; as it did then, this process today yields a rim of superior strength and tonal quality. For braces and posts, STEINWAY pianos use spruce, a wood known for its superior tensile strength.

The PLATE

Inside the piano, a cast-iron plate provides the strength to support the string tension. The plate is often called the "backbone" of the piano, and indeed, it must be exceptionally strong in order to withstand over 20 tons of string tension. The cast-iron plate is installed in the case above the soundboard and is often painted gold, polished, and decorated with the logo of the manufacturer. In grand pianos, the plate, soundboard, and strings are horizontal, while in upright pianos, these three components are vertical.

STEINWAY fabricates plates in its own foundry to exacting standards using a sand-casting method.



The **SOUNDBOARD**

The soundboard converts the vibration of the piano strings into audible tones. Manufacturers of fine pianos craft the soundboard from high-quality solid spruce, which allows the soundboard to transmit and amplify sound better than lesser woods.

The soundboard has a curved crown to provide the proper pressure against the strings for maximum sound projection. Ribs are placed on the underside of the soundboard in order to maintain the crown, distribute tone along the soundboard, and provide strength.

STEINWAY soundboards are made of the highest-grade close-grained, quarter-sawn Sitka spruce sourced entirely from a single island in Alaska. This wood is chosen for its superb acoustic qualities and is hand-selected to be free from defects. Individual pieces of spruce are matched to produce soundboards of uniform color and tonal quality.

The soundboards found in STEINWAY pianos are double-crowned and feature STEINWAY & SONS' exclusive Diaphragmatic design. The Diaphragmatic Soundboard, patented in 1936, features a soundboard that tapers in thickness from the center to the edges. This design permits freedom of movement and creates a richer, longer lasting tonal response.

BRIDGES

Soundboard bridges are glued to the top side of the soundboard to transmit the vibrations from the strings to the soundboard. The better the quality of the materials, the better the tone.

STEINWAY & SONS bridges are constructed of vertically-laminated hard rock maple with a solid maple cap. They are bent to a specifically-defined contour to assure optimum sound transmission. The bridge is measured for specific height requirements for each individual piano and is hand-notched for precise individual string bearing. The bridges are then glued and doweled into the ribs to assure the structural integrity of the entire soundboard.



STRINGS

A modern grand piano has between 230 and 264 strings — between one and three strings for each of the 88 notes. Most piano makers use three strings for tenor and treble sections and use single or double strings for the bass keys. The bass strings are routinely “overstrung” above the treble strings to provide more length and better tonal quality. On December 20, 1859, Patent #26532 was granted to Henry Steinway, Jr. for the Overstrung Plate, whereby the longer bass strings were drawn over sections of other strings.

Treble strings are made of high-quality steel, and bass strings are made of copper-wound steel strings. The strings are all uniformly spaced with one end coiled around the tuning pins, which in turn are inserted in a laminated wooden block called the pinblock or wrestplank.

The tuning pins keep the strings taut and are held in place by friction. When aligned properly, the hammers will strike only the strings for the note intended, not the strings of neighboring keys.

A number of factors can affect the physical properties of the strings, including humidity, sunlight, and temperature, and even type and frequency of playing. The strings found on a STEINWAY piano are made of the best high-tensile steel. The bass strings are wound with pure copper, and the tuning pins are premium steel with rust-resistant nickel-plating.

STEINWAY also employs front and rear duplex scales. STEINWAY’S unique relationship with Hermann von Helmholtz (the first physicist to study string vibrations) led to the development and STEINWAY patent in 1872 of front and back aliquots, allowing the traditionally dead sections of strings to vibrate with other strings for a richer tone and longer sustain.

The WRESTPLANK/PINBLOCK

The wrestplank (or pinblock) is a multi-laminated block of wood into which the tuning pins are inserted. Wrestplanks in the finest pianos are made of hard rock maple, and the tuning pins are force-fitted into the pinblock to maintain the piano strings under extreme tension. The quality of the wrestplank is also very important in keeping the piano in tune.

The STEINWAY Hexagrip wrestplank/pinblock, patented in 1963, is made from seven thick, quarter-sawn maple planks, with each layer aligned from 45 to 90 degrees from each other so the grains grip each tuning pin from all angles. This ensures that at least one layer has its grain directly in line with the stress acting on each pin. The result: a piano that is easier to precisely tune and that will stay in tune longer.



Keys and **ACTION**

There are 88 keys on a modern piano — 52 white keys and 36 black keys (the chromatic notes) — spanning seven and one-third octaves. Piano keys are typically made of spruce with a polymer surface. Today's polymer key surfaces are more durable, do not yellow over time, and are easier to replace than their ivory predecessors.

Each of the keys on a piano transmits its movement to a small, felt-covered wooden hammer which strikes one, two, or three strings when the note is played. The hammers are evenly aligned and have the ability to reset quickly and repeat any note rapidly.

Dampers are felt-covered action parts that, when placed against the strings, dampen the vibration. There are fewer than 88 dampers on a piano because the notes in the high treble area of the piano do not need dampers, due to their short length of sustain. The damper (or sustaining) pedal raises all of the dampers, which allows sound to continue even after the key is released.

In a grand piano, gravity assists the action. In an upright, springs return the hammer to its resting position. This difference typically allows a grand piano to repeat notes faster and more reliably than an upright. The keys of a STEINWAY & SONS piano are constructed of Bavarian spruce. The quarter-sawn hornbeam action parts are

mounted on a STEINWAY Metallic Action Frame, which consists of seamless brass tubes with rosette-shaped contours, force fitted with maple dowels and brass hangers to assure the stability of the regulation.

The **PEDALS**

STEINWAY grand pianos have three pedals. The rightmost pedal is called the damper (or sustain) pedal and acts to sustain tone. The left pedal is called the una corda or “soft” pedal. When it is depressed, the keyboard action shifts slightly to the side, causing the hammers to strike the strings differently, thus softening the note. The middle, or sostenuto pedal, sustains a single note or group of notes without sustaining subsequent notes played. While a few uprights (like the New York STEINWAY) have a true sostenuto pedal, the middle pedal on most upright pianos sustains the bass section by lifting the dampers off the bass strings only.

STEINWAY grand and upright pianos feature fully-functional una corda, sostenuto* and damper pedals made of solid brass.



“STEINWAY is *the only piano* on which the pianist can
do *everything he wants* and *everything he dreams.*”

VLADIMIR ASHKENAZY

Selecting A PIANO



Selecting a Piano THAT'S RIGHT FOR YOU

Your piano will make music and memories in your home for years and generations to come. And now that you understand the basic elements of a piano's construction and operation, you're ready to make some final decisions about the instrument that's right for your space, for your abilities, for your dreams.

Grand OR UPRIGHT

The size of the room where your piano will be placed is an important consideration. Sound quality and volume are directly related to the size of the piano's soundboard and the length of its strings. Therefore, the larger the piano, the better it will sound. But make no mistake: a high-quality upright is a better choice than a low-quality grand.

The major difference between an upright and a grand piano, other than looks and size, is the position of the soundboard. In a grand piano, the soundboard and strings are positioned horizontally; in an upright piano, they are positioned vertically. Thus, in a grand piano the action works with gravity and is more responsive than an upright.

A STEINWAY upright is a great choice where space is limited, but a piano that is too small for its space will look like an afterthought and will not fill the room with sound.

The Family of STEINWAY-designed Pianos includes STEINWAY & SONS, BOSTON, and ESSEX pianos. Each brand offers complete lines of grand and upright pianos able to meet any space and performance criteria. Whether you're looking for an upright piano for a smaller space or a grand piano to fill a larger space, there is a STEINWAY piano that is perfect for you.



Style **AND FINISH**

Pianos are produced in a variety of styles to accommodate different tastes and décor. From a traditional ebony or mahogany finish — in either polished or satin — to an exotic wood or limited edition custom piano, the piano you choose will make a striking statement and will introduce elegance and artistry to a room like no other piece can.

While they may look very different on the outside, each STEINWAY piano represents the highest quality musical instrument in its category. You can choose a style that suits your décor and still be confident that it will perform to the exacting standards upheld by STEINWAY & SONS since 1853.

Sensitivity **AND TOUCH**

The touch of the piano is another measure of personal taste. Some players like a light action, while others prefer to feel more resistance when they press the keys. Be sure to play a variety of pianos and notice how the action of the piano keys feels when you play. Are the keys lively and responsive or stiff and sluggish? A more responsive piano will allow for greater ease of playing and tonal expression. Remember, a qualified technician can often adjust the action to accommodate varying tastes.

Sound **AND TONE**

Several factors play into the sound of a given piano, including size, quality of components, and overall construction. Sound quality and volume are directly related to the size of the soundboard and the length of the strings. A larger soundboard will create a larger volume of sound, and longer strings will result in greatly enhanced tone — particularly in the bass section.

In addition, every piano has its own distinct “voice,” which is determined by the age of the piano, the condition of the hammers, and how the piano has been prepared or maintained. Temperature and humidity will affect the sound of a piano, and the acoustics and furnishings of a room will also factor into the sound that the piano produces. For example, plush carpets, draperies, and upholstered furniture will tend to absorb sound, making the piano sound softer. Wood and tile floors tend to produce a brighter, more vibrant resonance.



Quality OF CONSTRUCTION

Two pianos may look very similar but vary widely in price. Top quality manufacturers pride themselves on the quality of their craftsmanship and focus on the sourcing of their materials, knowing that the best materials will produce the best pianos. For instance, you'll want to look for a soundboard made from long-grain spruce as opposed to a laminated material.

A piano should be attractive inside and out, even to the layperson's eye. The finish should be free from nicks and marks and should be even in appearance.

The grains in the soundboard and veneer should be aligned both for aesthetic value and tonal quality. The plate should be polished and attractive, and every moving part should repeat its movement with ease and accuracy. The lid, music desk, and fallboard should move without undue exertion. In short, the piano should look like a magnificent piece of furniture and should respond like a precision instrument.

The mission of STEINWAY & SONS' founder Henry E. Steinway was to build the best piano possible. The craftspeople of STEINWAY & SONS continue to uphold that mission to this day.

STEINWAY & SONS is committed to maintaining the talent, diligence, and tradition of expert workmanship unique to the STEINWAY family of piano builders.

Only STEINWAY & SONS is relentless in its pursuit of perfection, and only STEINWAY can say that every one of its pianos is indeed a work of art.



A Legacy **OF INNOVATION**

STEINWAY & SONS pioneered the design and development of piano building to create the finest piano in the world. STEINWAY remains the peerless instrument of uncompromising expression, the choice of 95% of the world's concert pianists, and at the heart of homes the world over.

STEINWAY & SONS has been granted more than 135 patents since our founding in 1853, including ten new patents in only the last ten years... but we refuse to rest on our past successes. The drive and passion for innovation and continuous improvement of the STEINWAY continues to this day. We continue to enhance the appearance, touch, tone, structural stability, and every aspect of what makes a STEINWAY a STEINWAY.

Our integration of old-world craftsmanship with ongoing development and significant investment in state-of-the-art technology have resulted in a STEINWAY that possesses the widest range of tonal colors and the most responsive touch of any instrument we have ever built in our company's history — by far.



Today's **STEINWAY**

We Still Make Them Like We Used To... ONLY BETTER

Our legacy of innovation guarantees that today's STEINWAY shatters the heretofore imaginable limits of our founder Henry E. Steinway's credo to build the best piano possible.

RECENT INNOVATIONS IN STEINWAY MATERIALS, PROCESSES, AND TECHNOLOGIES INCLUDE:

- Soundboard spruce sourced entirely from a single island in Alaska, the only location that meets our stringent specifications on grain angularity and grain direction to ensure a superiorly uniform soundboard.
- A new rim machining center that achieves an unparalleled fit between soundboard and rim, ensuring pristine resonance, tonal color, and purity of sound.
- Fifteen Programmable Logic Controlled Conditioning Rooms that enable us to manufacture parts that are more exacting in dimension and can better withstand changes in temperature and humidity of the environment where a piano resides.
- A computer-monitored measuring machine that checks action parts daily so they are measured to an exactness of 1/32,000th of an inch, a level never before attained. With improved key up-weight, our actions are more responsive than ever before.
- An improved cast-iron plate produced in STEINWAY's own foundry. Our foundry forges the bell-quality plate with a new No-Bake Process that permits a single-use high-strength mold that creates more precise and consistent casting.
- Hammer felts made of premium Merino wool from Australia and Africa. In the past ten years, we have greatly improved the wool's quality and the carding and pressing processes of the raw wool, achieving a much more stable and consistent hammer felt. Our refined felts produce an enhanced "singing" tone in the piano.
- Improvements to our rim presses and the conditioning process for STEINWAY's famous hand-bent rims. Today's STEINWAY rim has enhanced stability, durability, and strength to improve on the distinctive "STEINWAY sound."
- Development of a unique finish and utilization of the best Italian furniture polishing equipment to create the new STEINWAY DIAMONDGLOSS™ finish.



Certified Pre-Owned Steinway: **100% GUARANTEED GENUINE**

If properly maintained, a STEINWAY will last for many decades and provide musical enjoyment to multiple owners. Some older pianos have wonderful musical and aesthetic character and can be an excellent value for a discerning buyer.

Unfortunately, there are unscrupulous dealers who will display the STEINWAY logo on a pre-owned piano's case but will have used low-quality, non-STEINWAY replacement parts on the inside. When considering a pre-owned STEINWAY, the only way to guarantee that all 12,000 parts in the piano are genuine STEINWAY is to buy a Certified Pre-Owned STEINWAY from a factory-authorized STEINWAY dealer. Otherwise, while the piano may look like a STEINWAY from the outside, it may not actually be a genuine STEINWAY, and its sounds and touch will reflect this.

Any parts replaced on a Certified Pre-Owned STEINWAY are 100% genuine STEINWAY parts. Plus, the Certified Pre-Owned STEINWAY program provides a full three-year STEINWAY & SONS factory warranty; a comprehensive 74-point inspection by factory-trained STEINWAY technicians (to verify authenticity, condition, and quality); and the confidence that a Certified Pre-Owned STEINWAY ensures an instrument of highest quality, backed by the original builders.

Certified Pre-Owned STEINWAYS are available only from our factory-authorized dealers: [Steinway.com/find-location](https://www.steinway.com/find-location)

Choosing **A DEALER**

It is said that if you don't know your jewels, know your jeweler. The same is true for pianos — it's always best to rely on a reputable dealer.

At STEINWAY & SONS, we select our piano dealers with the same care and attention to longevity that we put into our pianos. Authorized STEINWAY dealers are the leading piano retailers in their markets and are active supporters of music arts and education in their regions. They are held to high standards both by STEINWAY & SONS and their communities. Many STEINWAY dealers have been representing STEINWAY for generations.

STEINWAY & SONS provides a comprehensive dealer training program through its William Steinway University, educating dealer salespeople and management staff in every aspect of STEINWAY representation, including sales, customer service, concert and artist activities, institutional sales, and technical service.

And then there's the STEINWAY Promise: assurance that the full purchase price of the BOSTON or ESSEX piano you select today can be applied as a credit toward a future purchase of a new STEINWAY grand piano. Only authorized STEINWAY dealers can provide the STEINWAY Promise with the sale of a new BOSTON or ESSEX piano.



“I have long admired STEINWAY pianos for their qualities of tone clarity, pitch consistency, touch responsiveness, and superior craftsmanship.”

BILLY JOEL



For Today **AND TOMORROW**

Servicing **YOUR PIANO**

Routine service is an important part of piano ownership. There are three basic steps in maintaining the sound of your piano: tuning, which brings the piano back to pitch; voicing, which affects the piano's tone; and regulation, the adjustment of the action mechanism which affects the touch of the piano.

Tuning and voicing are different aspects of adjusting the piano to its optimum standard of performance. Tuning is the adjustment of the piano's strings to the correct pitch. Voicing is the adjustment of the piano's tone or sound and is done by softening or hardening the hammers and adjusting various parts of the piano's keyboard mechanism. Regardless of its original voicing, every piano will acquire a somewhat brighter tone with time as the hammer felts become compacted the more they are struck against the strings.

If your new STEINWAY is a SPIRIO, special maintenance is required. SPIRIO is the world's finest high resolution player piano, and such an extraordinary instrument requires extraordinary care. For the absolute best care of your SPIRIO, we recommend that a SPIRIO-trained piano technician tune and calibrate your SPIRIO three times per year. SPIRIO calibration is highly specialized and involves the regulation of electronic components to ensure performance accuracy.

Tuning **YOUR PIANO**

A piano on a showroom floor will have been tuned to international standards several times before it left the factory. Unfortunately, no matter how well a piano is tuned, atmospheric variations can bring it off pitch. Ideally, a piano should be located out of direct sunlight and away from heating and cooling ducts and should be kept in an environment where the relative humidity is between 40 and 60 percent.

With normal use and conditions, a piano should need only periodic tuning, perhaps twice a year. For reference, a concert piano is tuned before every performance and a piano in a professional recording studio is tuned several times per week. Tuning is a craft practiced by professionals and, for best results, no one other than a trained technician should tune your piano. If you need a referral for a qualified piano technician in your area, contact your authorized STEINWAY dealer (visit www.steinway.com/dealer to find your dealer).



Voicing

Some pianists prefer “bright” voicing, while others prefer a more mellow sound. Regardless of its original voicing, every piano will acquire a somewhat brighter tone over time. Under normal conditions, your piano should be voiced every two to three years. In the voicing process, the resiliency of the hammer felts is adjusted with special tools and then all notes are balanced so that the tone is uniform throughout the keyboard. This is a job requiring special skills and should be done only by a professional piano technician.

Regulation

Over a period of two to three years, the action of your piano will vary somewhat from the evenness established at the factory and will need regulation by a trained technician. The need for regulation is a reflection of the way that the piano is used. For reference, the action of a concert grand is regulated before every performance. STEINWAY & SONS is deeply committed to the continuing education of piano technicians and provides experienced piano technicians with comprehensive training at the C. F. Theodore Steinway Technical Academy.

Finish/Care

Your piano will likely be a showpiece in your home. Use a piece of clean cheesecloth — lightly dampened with plain water — to wipe away dust and fingerprints. Waxing the instrument is not recommended, as it eventually results in an unattractive build-up that must be professionally removed. The piano keys, both black and white, should be cleaned with a lightly dampened cloth. Avoid getting moisture on the sides of the keys.

Interior cleaning by a professional should be arranged through the STEINWAY & SONS service department or an official STEINWAY dealer.

Moving

If you move your piano, either to a different location within the home or to an entirely different venue, use only professional piano movers who will have the equipment necessary to keep the instrument safe in travel. Grand pianos weigh roughly 100 pounds per foot of length. Don't forget to have an experienced technician check and tune your piano after every move.



*“There is a constancy, not only with the house of STEINWAY,
but with their beautiful pianos.”*

VAN CLIBURN



The Family OF STEINWAY-DESIGNED PIANOS

STEINWAY

The STEINWAY piano is the gold standard of musical instruments, representing a dedication to craftsmanship and uncompromised expression that has endured since 1853. This is why over 19 out of 20 concert pianists choose the STEINWAY grand piano — and why the STEINWAY remains at the heart of cultured homes the world over.

STEINWAY SPIRIO

STEINWAY SPIRIO is the world's finest high resolution player piano. A fully playable STEINWAY grand piano and a masterpiece of artistry and engineering in your home, SPIRIO enables you to enjoy performances played by great pianists — captured with such nuance, power, and passion that they are utterly indistinguishable from a live performance.

BOSTON

Designed by STEINWAY & SONS, employing the unique patents and expertise that have made the name STEINWAY synonymous with musical excellence, the BOSTON line of grand and upright pianos represents a singular achievement in instrument building: a superior playing experience at a price level never before thought possible.

ESSEX

The entry into The Family of STEINWAY-designed Pianos, the ESSEX incorporates STEINWAY & SONS latest design specifications and engineering standards, as well as the storied STEINWAY commitment to excellence. Every ESSEX instrument is inspected by a team of highly experienced STEINWAY & SONS technicians before it leaves the factory.



See **THE DIFFERENCE** *Hear* **THE DIFFERENCE** *Feel* **THE DIFFERENCE**

Selecting a piano is a once-in-a-lifetime experience and deserves much consideration. You owe it to yourself to research your options and choose the very best piano you can afford. And you should always keep in mind that quality manufacturers build the highest quality products.

Since 1853, STEINWAY pianos have set the standard for sound, touch, and beauty. That is why STEINWAY and STEINWAY-designed pianos continue to be the overwhelming choice of pianists, composers, and performers around the world. If you're unsure about which sound you prefer, you can take comfort in the fact that most artists who play for a living choose pianos from the STEINWAY family.



STEINWAY & SONS

We build our pianos to match the expectations
of the world's most demanding critics
— people who love music.



NEW YORK

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HAMBURG

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