

AMERICAN LEATHER®



Why leather?

Leather is one of man's earliest and most useful discoveries. Our ancestors used leather to protect themselves from the elements. Primitive man hunted wild animals for food, then made clothing, footwear and crude tents from the hides. Like then, hides used today are a by-product of the meat industry. Animals are raised for the meat, dairy and wool industries, not for their hides. Isn't it amazing that we can take what is essentially a waste product and make it a useful and beautiful material?

Leather today

Due to its durability and comfort, leather has been used for seating throughout the history of transportation and furniture. It has always been the ideal material for making saddles and tack, as well as footwear. During the Middle Ages, leather became the cover of choice for dining chairs, because it was easy to maintain and did not absorb the odor of food – a fact that is still true today.

Modern technology has allowed for innovation in the leather industry, as the development of chemicals and sophisticated processing methods have greatly expanded the aesthetics and feel of leather as well as the possible applications. Leather continues to be the luxury material of choice, not just for commercial and residential furniture but for automotive, aviation and marine applications as well.

We believe nothing adds richness to a room like leather. Natural leather is not only strong, durable and sustainable, it offers something that no other material can match – uniqueness. No two hides are identical. This means that your chairs, your sofa – your project will be unique as well. In the hands of a skilled craftsman, unique markings of each hide become celebrated features that separate sameness. Leather also appeals to the senses. It begs to be touched and over time and wear becomes more beautiful with age.

AMERICAN LEATHER®

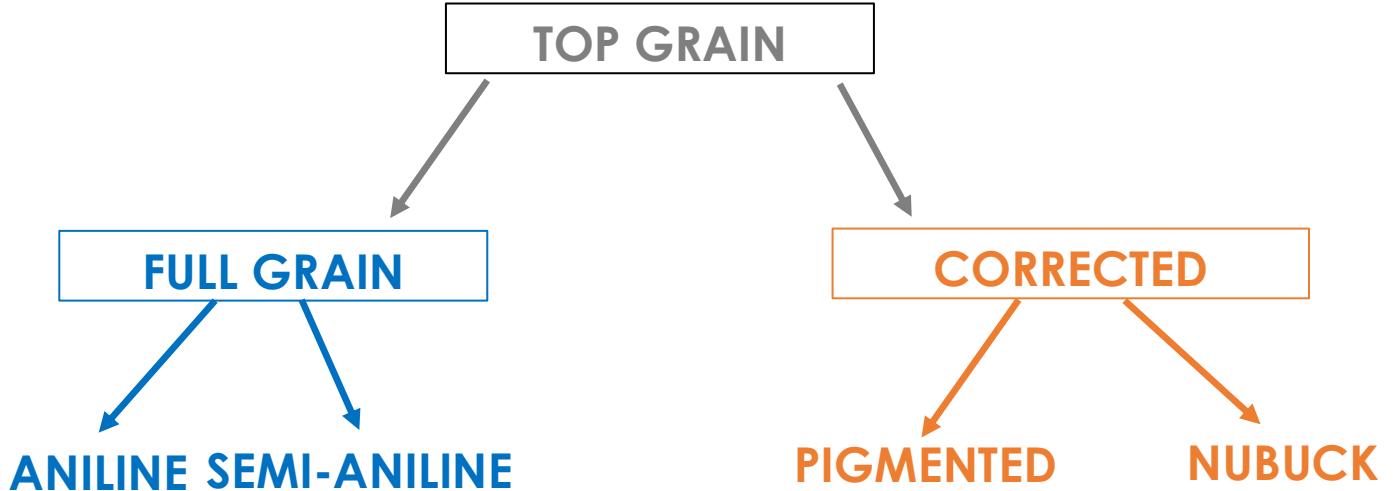
The Creation of Leather

- a) **Tanning Process** – the process of treating skins/hides of animals to produce leather
 - i) **Vegetable Tanned Leather** – tanned using tannin and other ingredients found in vegetable matter, tree bark, and other sources. It is supple and brown in color with the exact shade depending on the mix in chemicals and color of the skin. Vegetable tanned leather will discolor if wet and can shrink. If soaked in water, it will become less supple and harder. Historically, it was used as armor after hardening and book-bindings.
 - (i) **Chromium Tanned Leather** – most common method. Invented in 1858, this process uses chromium sulfate and other salts of chromium. (The chromium stabilizes the leather by cross-linking the collagen fibers within the leather. Chromium tanned leather can contain between 4-5% of chromium, which is tightly bound to the proteins.) It is more supple and pliable than vegetable-tanned leather and does not discolor or lose shape as drastically in water. It is also known as wet blue for its color derived from the chromium. A broader range of colors are more possible to achieve using chrome tanning.
- a) **Liming** – removal of hair
- b) **Splitting process** - separation of the top grain from the split
- c) **Initial (basic) dyeing process** – introduction of color via aniline dyes
- d) **(optional) Embossing** - placement of pattern(s) or the alteration of leather hides to create visual appeal or to reduce the appearance of unwanted characteristics
- e) **(optional) Protecting the hide** – use of topical applications to protect the surface of the hide. These products can be added during the dyeing process or as an after-market addition.



AMERICAN LEATHER®

Types of Top Grain Leathers



Top Grain - Refers to the upper section of a hide that contains the epidermis or skin layer.

Full Grain

- Top grain leather hides that have not been altered or corrected in order to remove imperfections. Only the hair has been removed from the epidermis.
- The grain remains in its natural state, which will allow for the best fiber strength and greater durability.
- Natural full-grain surface will wear better than any other leather. It will develop a natural patina and change its appearance over time.
- Full grain leathers can be bought as two finish types: aniline and semi-aniline.

Corrected Grain

- Top grain leather that has had its surface sanded, buffed, or snuffed in order to remove any imperfections on the surface due to insect bites, healed scars or brands.
- The hides used to create corrected leather are hides of inferior quality that do not meet high standards for use in creating aniline or semi-aniline leather.
- The imperfections are corrected, and an artificial grain can be applied. A pattern is stamped into the surface of the leather to create visual appeal or to hide unwanted characteristics. (embossed leather or printed leather)
- Corrected grain leathers can be bought as two finish types: semi-aniline and pigmented.

Aniline – bi-product of the petroleum industry. Pigments are added to the aniline to achieve the desired color. Aniline dyes are then mixed with the hides to color them.

- **Full Aniline** – leather hides fully dyed using aniline dyes. Typically, most full anilines have no form of protection add to the surface. AKA – naked leathers, natural leathers.
- **Semi-Aniline** – leather hides that are (typically) fully aniline dyed first, and then a colored surface coat is applied. AKA – aniline plus, protected leather, pigmented leathers, painted leather.

AMERICAN LEATHER®

Other Common Leather Types Used for Furniture

Split (*American Leather DOES NOT use*)

- Created from the bottom part, and the more fibrous part of the hide, left once the top-grain of the rawhide has been separated from the hide
- Split leather has an artificial later applied to the surface of the split and is embossed with a leather grain.
- Typically used in lower price point furniture
- Splits are used to create suede.

Bonded leather (*American Leather DOES NOT use*)

- Also known as reconstituted leather, LeatherSoft, Faux Leather, Vinyl, Composite Leather
- It is a mixture of both real (about only 20% genuine leather) and fake leather.
- Made from leftover scraps and fibers from processing genuine leather mixed with a polyurethane binder. The fibers are then tolled together using adhesives to bond them onto a paper backing.
- Bonded leather is less expensive than genuine leather and more consistent than genuine leather.
- Bonded leather has a short lifespan and is not as durable as other leathers.
- It is not recommended for heavy use as it will wear over time and can easily scratch, peel and flake, unlike genuine leather.

Bi-cast Leather (*American Leather DOES NOT use*)

- Also known as reconstituted leather, Laminated Leather or Leatherette
- A man-made product that consists of a thick layer of polyurethane applied to a split
- Most of the strength of bi-cast leather comes from polyurethane coating.
- Originally made for shoe industry and recently adopted by furniture industry.
- Most of bi-cast used today is inferior generic chemicals resulting in an inferior material.
- Bi-Cast leather has a short lifespan and is not as durable as other leathers.
- The result is a much stiffer product that tends to de-laminate, resulting in bubbles and cracking.



AMERICAN LEATHER®

Choosing the Right Leather for Your Application

1. Is this piece of furniture for a residential home or a commercial space?
Typically speaking, you will want a heavier protection leather in a commercial space as it is used very frequently, you do not have as much control over who will be using and should be easy to clean/care for.
2. Where in the home/building is this piece of furniture going to live?
3. How is this space going to be used?
4. How often will it be used? (daily or one a month, a couple times a year when entertaining)
5. How much sunlight does this room get? (direct or indirect)
6. Who will be using this piece of furniture? Do they live in the home with you?
7. How do you typically care for your furniture? Do you allow others to eat/drink on your furniture? If something is spilled, how quickly would you clean it up?
8. Do you have pets? Are they allowed to get on the furniture?
9. Have you ever owned leather before? If so, do you know what kind of leather it was? (getting to know their expectations of how leather will perform over time)
10. What do you currently know about genuine leather vs. other imitations out in the market?
11. Do you prefer a smooth leather or a more pebbled leather?
12. How do you feel about natural characteristics in leather?
13. Do you tend to prefer a more uniform appearance in leather, or would you appreciate variation in tones, grains and markings?
14. How do you feel about superficial scratches showing up in leather?

The 4S's of Leather

SOFTNESS

Softness is the essential and defining characteristic of leather. The overall comfort level and cost of your leather are directly linked to the softness factor. There are many special processing techniques used to enhance softness

1. **Natural**
The rarest and most expensive leathers.
2. **Technical**
Suppleness created through technology.
3. **Mechanical**
Enhanced through mechanical action
4. **Firm**
Unadulterated and inexpensive

SURFACE

Surface grain mirrors the softness category. The more intact the original surface grain, the more natural and softer the leather. Alteration of a leather's surface grain can relate to the cost of the leather. The cost is reduced in proportion to the level of grain removal.

1. **Full Grain**
100% natural grain. Typically, the most expensive leathers.
2. **Top Grain**
A full grain leather that has been lightly sanded. Alteration is subtle and barely noticeable.
3. **Corrected & Embossed**
A top grain leather that has been thoroughly sanded and then embossed with a natural looking, uniform grain pattern.
4. **Split**
The second layer split from a full grain hide.

SPECIAL EFFECTS

Special effects provide the opportunity to create countless varieties of leather looks. The complexity of the looks relates to the cost of the leather.

1. **Multiple Effects**
More than 2 special effects such as hand rubbing, heavyweight texture or metallic finishes to create an upscale look and price.
2. **Active Effects**
Injection of oil or wax to create a color burst when stretched. Often referred to as "pull up" leather.
3. **Mechanical Effects**
Color or surface effects created using mechanical techniques like 2 toned sauvage, wiped, retile embossed, nubuck and distressed.
4. **Uniform Color**
Pigmentation coating is sprayed on the surface to create a uniform color throughout.

SERVICABILITY

It is important to match your lifestyle to the serviceability of a leather. Options range from easy to live with leathers with high resistance to those focused on fashion and style

1. **Minimal resistance**
Expensive and luxurious; typically, a nubuck or suede. Designed for fashion and style.
2. **Natural Resistance**
The most expensive and elegant of all leathers; typically, pure or naked. Will gain a patina over time.
3. **Standard resistance**
Impervious to spills and stains and easy to clean; best for the average home.
4. **Maximum Resistance**
Impervious to spills and stains and very easily cleaned; best for frequent use and high traffic environments.

AMERICAN LEATHER®

Cleaning and Protection

Finally, it is important to match your lifestyle to the serviceability that is built into the leather that you select. Leather is a versatile material that offers many distinct choices. In serviceability, it can range from easy care leathers with high resistance to those focused on fashion and style.

Heavy Protection: suitable for a young/active family with kids, pets, grandchildren, etc., Possibly going into a man cave where they'll be drinking beer and eating pizza, or in a contract application. Care-free.

Medium Protection: falls somewhere in-between... maybe a young family but they know how to take care of furniture. The best trade off of serviceability, softness and fashion.

Light Protection: attractive to empty nesters or people who tread lightly. Perfect for a consumer that is willing to trade off the exceptional look and feel against the possibility that the piece may need to be replaced after heavy use.

Under normal usage and conditions, regular dry-cloth dusting and vacuum cleaning in crevices and along the bottom are all that is necessary to clean your leather furniture. Dust is the enemy! Dust absorbs moisture and will cause your leather to dry out and crack. Protect your furniture from sun and direct light. Like any upholstery material, leather can fade if exposed to the sun.

Beyond regular maintenance, we recommend applying a good leather conditioner every six to 12 months. This will help your leather piece maintain its own natural oils, keeping it soft and supple for many years. Some of the brands we suggest are Leather Masters, Mohawk and Leather Magic.

DO NOT USE: saddle soap, cleaning solvents, furniture polish, oils, varnish, abrasive cleaners, detergent soaps or ammonia water!

Always try any cleaning method in a hidden area first to verify the results. For minor or slight scratches on the surface, use a soft cloth or clean fingers to gently buff the scratch. If needed, moisten lightly with distilled water to work scratches out.

FOR MINOR SPOTS AND SPILLS: Wipe any excess liquid up immediately with a clean absorbent cloth or sponge. If necessary, use a lightly moistened soft cloth with distilled water and let air-dry naturally. Do not dry with hair dryers, etc. Do not use soap or soak the stain heavily with water. This may cause more damage than the stain itself. If the stain persists, we recommend that a professional leather specialist clean the leather.

FOR STUBBORN STAINS: Moisten a soft cloth or sponge with a mild non-detergent soap and lukewarm water. Apply gently to all soiled portions of the leather surface. Remove soap lather by wiping with a clean damp cloth. Blot dry with another soft cloth, and then let air dry naturally. Do not use hair dryers, etc. If the stain persists, it is recommended that the leather be cleaned by a professional leather specialist to avoid any potential damage.

FOR BUTTER, OIL, OR GREASE: Blot excess butter, oil or grease off the leather with a clean dry cloth, then leave it alone. The spot should dissipate into the leather after a short period of time. Do not apply water or try to wash a butter, oil or grease spot. We also recommend the use of Leather Degreaser by Uniters.com to remove butter, oil or grease stains.

AMERICAN LEATHER®

Comfort Wrinkles

As you settle into your new piece of furniture, "comfort wrinkles" will begin to appear. This is a natural part of the upholstery maturing process.

Comfort Wrinkles are caused by many things. They are normal in upholstered furniture that is designed to have soft seating and back support. The type of covering and filling has a significant role reducing comfort wrinkles.

The standard foam seat cushion is constructed with an inner core of high density, high-resiliency premium urethane foam between thick layers of resilient polyester fiber. Loose back pillows are filled with 100% polyester fiber. This is the same material used to fill high quality bed pillows. Like bed pillows, furniture cushions must be hand fluffed and turned frequently to maintain a soft, well filled appearance.

The soft, comfortable cushions and pillows used with better quality furniture will provide years of lasting service if properly maintained. Fabrics and leathers that provide flexibility combined with filling materials that compress softly, provide the best comfort benefits. These same features also create Comfort Wrinkles in cushions and pillows that are characteristic of the construction and should not be considered defect.

All leather will stretch and form comfort creases as a result of being sat on. The effect is called puddling. Puddling occurs from the initial use period and generally does not continue beyond this, as the amount of stretch is directly related to the amount of compression. Factors that contribute to the amount of puddling are the size of the leather panel (large panels versus smaller segmented panels), the density of the foam, types of suspension (webbing or no-sag springs), and the amount of weight placed on the seat. Puddling is not a fault with the leather; rather it is a good indication of good quality manufacturing as large pieces of leather are used.



AMERICAN LEATHER®

Comfort Wrinkles (cont)

Longer cushions tend to wrinkle more readily than narrow cushions. One piece sofa or loves seat cushions will develop comfort wrinkles more quickly than a two- or three-piece cushions regardless of the fabric or leather. The larger the expanse a cover, the less support there is to stabilize it, allowing for more deflection of the fabric. In thicker cushion cores, softer foam is used to achieve the desired comfort. However, when filling cushions, these softer cores do not allow as much push from front to back and side to side, thus permitting more wrinkles to occur.

Even when using the highest quality foam and fiber wrap available, there will, over time, be a loss in loft in the fiber wrap and a slight loss of compression strength in the foam. These factors added to the fact that fabrics stretch and lose some of their recovery properties, result in comfort wrinkles. Fluffing and stroking cushions regularly, along with reversing them, will reduce the number of wrinkles and aid the fabric in wearing better.

There are approximately 500 fabrics and leathers in our line. Even though the materials are of the same general quality, they can be different because of their fiber content, construction, wearability and stretch ability. All materials are tested to meet our high-quality standards.

Climate affects fabric just as it does wood. Heat, cold, humidity and sunlight. Contribute to fabric and leather instability.

Soil repellent coatings or treatments applied after the manufacturing or finishing process, may break down the backing of the fabric. It can also react to the cushion cores themselves.



AMERICAN LEATHER®

Hide Sizes and Shapes

Since leather is a natural material and each hide is unique, these dimensions represent average hide sizes and shapes.

The industry-wide formula for converting fabric yardage to leather square footage is one linear yard of 54" wide fabric equals 18 square feet of leather, based on hides averaging 50 to 55 sf. Due to the irregular shape of the hides, there will always be a certain amount of waste; this formula takes waste into account. When using hides smaller than 50 sf., the manufacturer or upholsterer should be consulted to determine whether more leather is required due to decreased yield from smaller hides and/or whether seams will be necessary to upholster the piece.

Generally speaking, a typical cow hide is about six feet long from neck to butt and four feet wide at the middle of the hide. Of course, it's in the shape of a cow and more importantly every hide is different. This is leather, a natural product that unlike fabric, doesn't come in a roll.



AMERICAN LEATHER®

Glossary of Common Leather Terms

Altered Leather - Leather that has had the original surface of the skin removed (usually due to imperfections in the original surface) and a new grain embossed into the leather. This is also called corrected grain. Most top grain leathers have altered or corrected grain surfaces.

Aniline Dye - Any dye produced synthetically from coal tar products.

Aniline Dyed or Aniline Leather - A finish type where leathers are dyed with aniline dyes and an additional surface coating of waxes and oils or minimum additional amounts of dye for added protection and aesthetic.

Aniline Plus - Leather that has been dyed in a dye bath with some level of dye penetration.

Bark Tanned - Leather that has been vegetable-tanned mainly by means of tannins from the bark of trees.

Blues - in the state of hides that have been tanned once using chromium salts. These hides are light blue in color.

Breathability - An important characteristic of a full grain leather. Due to its intact grain and pore structure, full grain leather breathes. This means that the leather adjusts to temperature and wicks away moisture and body heat, making it very comfortable to sit on.

Buffed Leather - Leather from which the grain is removed by an abrasive or bladed cylinder. This process is used in altered or corrected grain leather.

Chrome Tannage - Leather tanned with chromium salts resulting in soft, mellow hides receptive to excellent color variety.

Corrected Grain - Commonly referred to as top grain. Lacking an intact full grain surface. Usually pigmented.

Drum Dyeing - The application of dyestuffs to leather by the immersion of the leather in a drum that is tumbled. This process allows full dye penetration into the fiber.

Embossed Leather - Usually corrected grain, in which a pattern is applied by extreme pressure in a press to give a unique design or imitation of full grain characteristics. Sometimes leathers are embossed to make them appear to be another leather, such as embossing an alligator pattern into cowhide.

Enhanced Full Grain - Full grain leather, which has received minor surface alteration to improve grain appearance.

Fat Wrinkle - Wrinkles in the grain of leather caused by fat deposits in the animal that create beauty in the leather. Fat wrinkles are not visible in imitation grain leather.

Finish - Generally defines a surface application on the leather to color, provide additional aesthetic, or protect or mask natural characteristics. More specifically, it refers to all processes administered to leather after it has been tanned.

Full Grain - Leather in which the grain layer or dermis has not been altered. The grain layer gives each type of leather its distinctive appearance.

Full Hand - This defines leather that is full bodied and robust. Also called round hand or full round hand.

Grain (leather) - The outside of the hide or skin consisting of the pores, cells, wrinkles and other characteristics which constitute the natural texture of the leather.

Hand - A leather industry term used to describe the feel, i.e. suppleness or fullness of upholstery leather.

Leather - An animal hide that has been preserved and dressed for use.

Leatherette - A manufactured product that imitates leather.

Liming - This process includes removal of the hair, preparing the hides for the tanning process.

Matte Finish - A flat or dull finish

Milling - A process that produces suppleness in hides

Naked Leather - A pure aniline dyed leather that has received no topical application that may mask or alter the natural state of the leather.

Natural Grain - A leather that retains the full, original grain.

Nubuck - A top-grain leather where the top hair cell layer has been removed by buffing the surface, resulting in a luxurious nap and velvet-like surface.

Patina - A natural characteristic that develops on full grain leather through normal use over a period of time.

Pigmented - Leather that has been sprayed with a pigmented, opaque finish.

Pure Aniline - A finish type where leather is colored by immersing hides in a dye bath with transparent, aniline dyes that fully penetrate the hide. Also referred to as Unfinished leather.

Reconstructed Leather - Material composed of collagen fibers, obtained from macerated hide pieces, which have been reconstructed into a fibrous material.

Saturation - A most important aspect in producing high quality leathers. Full saturation of tanning, fat liquors and dyes are essential in the production of fine leathers.

Semi-Aniline - A finish type where leathers are aniline dyed with an added layer of pigment or surface coating to enhance durability and achieve an even color consistency throughout the hide.

Split Leather - Leather made from the bottom split, or reticular layer of the hide, which has an imitation grain embossed into a heavily finished pigmented surface to simulate papillary leather.

Splitting - Cutting leather into two or more layers preparatory to tanning.

Suede - A split leather that has been buffed to create a soft, fuzzy surface.

Sueding - The process of raising fibers on the grain side of a hide to give a velvet nap effect. This is generally called 'Nubuck' or 'grain sueded.'

Tannin - Any various solvent, astringent substances of plant origin used in tanning leather.

Top Grain - An over-used term commonly used to refer to corrected grain leather. See Corrected Grain.

Unfinished Leather - Normally defines pure aniline, naked leathers with no additional application intended to finish, color or treat in any way that would alter the natural characteristics of the leather.

Upholstery Leather - A general term for leather processed for many uses including applications, etc.

Vegetable Tanning - The conversion of rawhide into leather by use of vegetable tannins. This process produces leather with greater body and firmness than the more general method of chromium tanning.

Weight - The weight of leather is measured in ounces per square foot.

Wet Blue Leather - Leather that after chrome tanning has not been further processed and is sold in the wet condition. A colorless oily liquid made from coal tar used in making dyes and resins in organic synthesis.