Samuelson
LEGENDARY FURNITURE

WHITE PAPER SERIES 6

First Impressions Built to Last

(Attributes of Fine Quality Furniture)

DESIGN FUNDAMENTALS: FF&E SPECIFICATIONS

First Impressions Built to Last

(Attributes of Fine Quality Furniture)

You had them from hello.

A traver walks into a hotel lobby are / or guestroom and gets bombarded by first impressions. It's the "wow factor" and overall positive feeling that initially connects that guests to the space and connects that guest to the space and confirms their choice in selecting a hotel. The goal is to generate that feeling throughout the guest experience.

As a design professional, creating that wow factor begins with the concept and aesthetics but goes far deeper. The underlying quality, particularly in hospitality furniture, speaks to longevity, durability, comfort, convenience and tastefully executed design. Delivering the highest quality requires a foundation of standards that can be better understood by looking beneath the surface. Included here are some basic quality features to create that lasting impression.

TWA HOTEL DESIGNED BY STONEHILL & TAYLOR, PURCHASED BY PARKER INTERNATIONAL
PHOTO CREDIT: DAVID MITCHELL

QUALITY CONTROL VS QUALITY ASSURANCE

There are two essential processes that are part of successful production of furniture. They are key in fulfilling the quality requirements of a product. Quality Assurance (QA) and Quality Control (QC) possess differentiating characteristics as follows: (QA) is proactive in its efforts to improve development and prevent defects during the manufacturing process.

(QC) is a reactive process that seeks to identify and correct defects in finished product through testing. QA is a preventive process while QC is a corrective one.

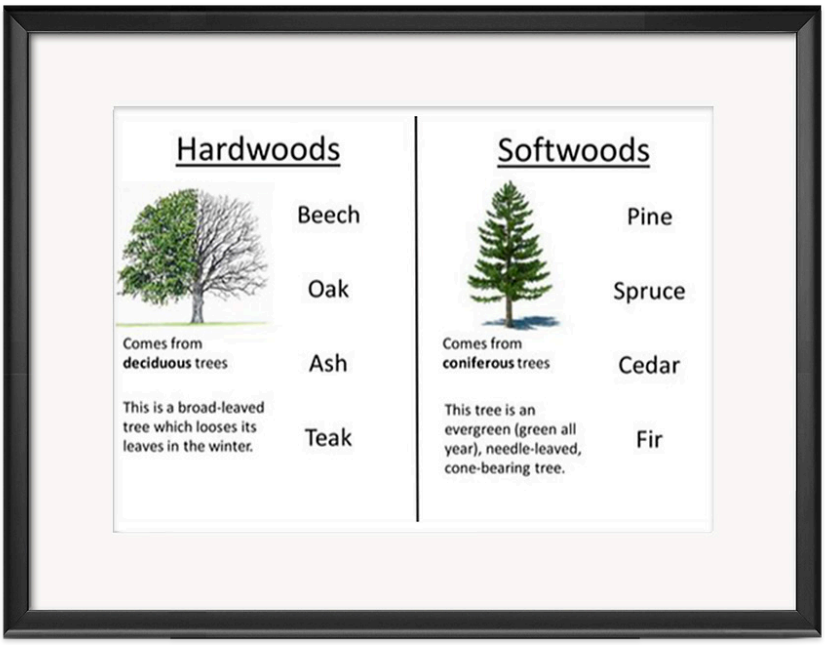
The two must work in thoughtful tandem to eliminate problems and provide a consistent positive result. Working with a custom furniture manufacturer who can anticipate and / or deliver solutions during product development can save critical time and dollars. Examining the end product through QC validates the quality result.

WOOD FRAME QUALITY CONSIDERATIONS

Material Selection:

In consideration of using wood for furniture, hardwoods (coming from deciduous trees such as maple, walnut, oak, mahogany) versus softwoods (coming from coniferous trees such a pine, cedar, spruce) are more desirable in producing durable, high quality product. It is important that a distinction is clearly specified between a desired wood species versus an artistic representation of that species. As an example, with use of finish and various techniques, a very capable manufacturer can create the appearance and character of a more costly, more exotic wood species starting with a clean, white wood such as maple.

Marine grade plywood is a component often overlooked, but critical to successful vanity and bathroom furniture construction. Unlike standard plywood, marine grade is comprised of higher quality, water resistant hardwood glued together using waterproof adhesives. This alternative will avoid mould and rotting that are destructive in wet environments.



WOOD FRAME QUALITY CONSIDERATIONS

Veneers:

A wood veneer is a thin slice of wood cut from a log with an incredibly sharp knife. Normally thinner than 1/8 of an inch, the veneer is then bonded or glued to another surface called a substrate which is typically MDF or particle board.

Understanding the properties of wood veneers and ways in which they enhance product design can lead to enduring value. In addition to the distinctive and exotic look that can be achieved by using wood veneers, stability and durability are a key advantage. Solid lumber is subject to warping and splitting due to expansion and contraction caused by environmental elements of moisture and temperature. The quality of wood veneer glued to a strong substrate of plywood or MDF (medium density fibreboard), stands up to the elements while offering unique character and countless variations.

Finishes:

Using hardwood may call for a finish applied in the form of stain or paint. Importantly, not all finish types are equal in quality. A lasting result achieved with use of a high-grade commercial quality finish, hand applied, burnished and glazed as required per design intent.

In addition, polyurethane (PU), the hardest and strongest finish material available, is best used for optimum results as a topcoat in sealing and protecting the finish. Although not truly waterproof, the water resistant properties of PU make it an ideal choice for commercial settings and moist environments. In serving the long term needs and values of hotel property owners, a manufacturer's use of PU for endurance and lasting beauty of their furniture is paramount.

In general, finish should feel smooth, uniform, without cracks or bubbles, and no visible excess glue or finish material.

Joinery:

There are several types of wood joints used in furniture construction to assure strength and stability. The following are types of joinery commonly used in quality furniture manufacturing:

Dowels: One steadfast application for effective joinery is that of frames being screwed, glued and double doweled for proper strength. Dowels, wooden pegs that are structural reinforcements, are inserted into holes drilled or bored to the proper size. Dowels are used at connections such as legs to rails, backs, arms and more.

Corner block: This is a solid wood reinforcement "bracket" that gets screwed into both pieces of wood at a corner. This provides a critical means of stability to the construction. Corner blocks come in various shapes and sizes, the strongest of which will be made from solid wood and applied as a fitted corner block leaving no air gap between the 2 side rails.

Mortise and Tenon: A part of one piece of wood (the tenon) is inserted into a precise hold on a second piece of wood (known as the mortise) and reinforced with glue. Also common and very strong, this joinery method is used to attach narrower pieces of wood, like connecting a chair leg to a chair seat.

Dovetail: This method, the best for constructing drawers, consist of interlocking notches in the shape of a trapezoid (or dove's tail) connecting the drawer panels. The sidepieces are securely connected with this method and cannot slide out of the front or back piece.

Biscuit Joint: Similar to a dowel joint, except instead of a cylinder being inserted in a hole, a thin disk is inserted into a slot. Biscuits are useful for aligning pieces of wood (say if you were joining narrow boards to make a table top), but not recommended for structural joints.

Drawer Features: Already mentioned is the dovetail drawer joinery feature. Not only is it aesthetically pleasing, but the interlocking trapezoidal joinery functions to keep the drawer from coming apart.

Under mount drawer slides demonstrate quality when a drawer is opened and closed using no visable hardware.

Under mounts connect to locking devices attached to the underside of the drawer. Unlink side mounted exposed slides, under mounts are silent, smooth-running, full extension, and invincible, keeping drawers square to the cabinet. A self-closing option allows drawers to come to a smooth, quiet and controlled stop.

SEATING

Frame:

Upholstery frames should be constructed with thick, kiln-dried hardwood. Once again, joinery of the frame is critical to durability and appearance; quality construction includes double doweled, glued, corner blocked and screwed frames for soil longevity. Fitted corner blocking is an essential component in enhancing stability and prevention of loose joints.

Suspension:

Eight-way hand tied coil spring suspension is the most labor intensive and represents the mark of highest quality. Numerous coil springs are supported from underneath with jute webbing and secured to one another with string, each tied by hand, touching each print at eight different spots. The sting eliminates shifting of the springs to work as one unit, giving the best support and longevity to the seat.

Pressing on the deck of the seat, under the cushion, should product an even resistance to pressure.

Sinuous spring suspension is an alternate system of two dimensional, zigzagging pieces of metal secured in rows to the wooden frame from front to back for strength and resilience. This method provides consistent quality throughout the seat surface and is common when there is not ample room for coil spring construction. It is also sometimes used as an alternative to coil springs for cost reasons. It is much less labor intensive to install and is therefor a less expensive method. While it does provide good support it is not as durable as a 8 way hand tied coil sprung seat. You are more likely to see this used in the back areas of upholstery construction as opposed to seats on well made upholstery pieces.

Cushions:

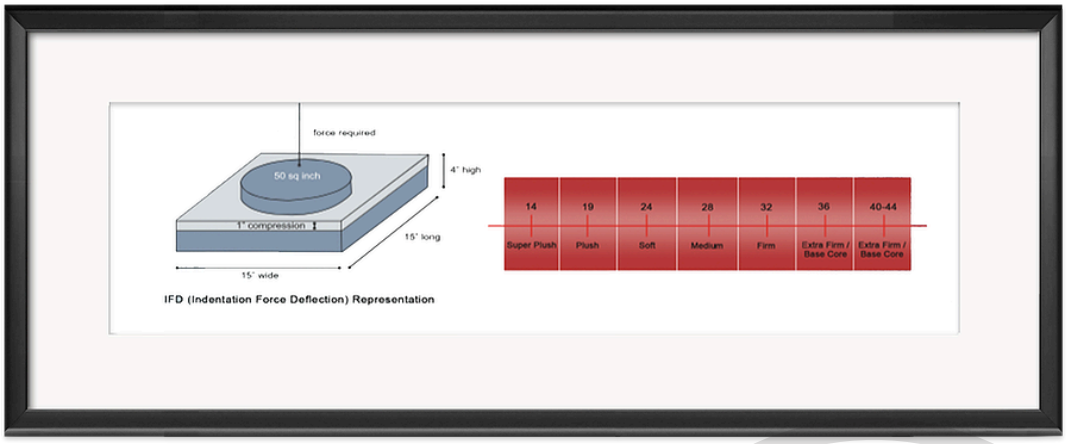
Seat and back cushions can be constructed in a variety of ways. Industry standard in the hospitality market calls for more demanding criteria due to durability required in areas of perpetual, heavy use. Foam, padding and springs interact for a comfortable, resilient “ride”.

Foam:

Density of foam refers to weight. The more foam weights, the higher the density. Greater density yields more rebound (recovery of shape) and durability, thus higher quality. Heavier foam yields less breakdown and greater longevity.

Firmness of foam allows for different comfort levels. Indentation Load Deflection (ILD), a numerical system for 10 - 90, gauges the amount of pressure required to compress the foam. Lower numbers equal softer; higher numbers equal more firmness.

Support is based upon thickness of the foam, which should support the weigh applied to it. The balance between support and comfort is imperative in a quality cushion.



Tailoring:

Welting is a fabric-covered cord that follows the seam of a chair cushion, sofa cushion, or pillows for a tailored look. It is used to provide a finished, elegant look, as well as cover exposed and raw edges between fabric and wood frame.

Welt cut on the bias at 45-degree angle allows easier manipulation of the cord and curves. It is also a noted attribute to the finished appearance of upholstery that adds a dignified design element. Because it is more labor intensive, many hospitality manufactures do not apply this high-end feature to their product. This process also avoids the issue of directional pattern that would otherwise require matching welt with seat, back arms, etc. in order to correctly line up. Welting not cut on the bias will cause the welt to pucker and distort as it is applied to the piece of furniture.

Fabric patterns should align and / or match from skirt to base to cushion to back of arm Welts and seams should be even.

TECHNOLOGY

Integrating technology into the guest experience has become a priority. This includes LED lighting, USBs and charging ports, as well as Bluetooth technology.

“Plug and play”, the ability to plug components such as LED strip / tape lighting and transformer together without the need to cut, splice and / or solder components or wiring together has facilitated technology infused furniture production. It’s this type of simplifying and streamlining that will produce both short term and long-term benefits for the property and staff as a whole.

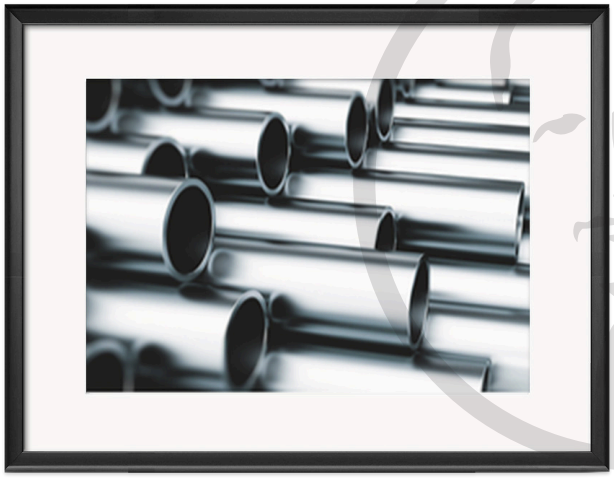
However, and extremely critical aspect of integrating this technology in the realm of furniture manufacturing is a safety. Enough emphasis cannot be placed, both for the sake of the property as well as public safety, on sourcing specific UL standards for LED in furniture application. Specifying LED from lighting manufacturers who adhere to these codes and standards is critical.

METAL FURNITURE

Metal furniture adds a clean design element to a space whether traditional, transitional or contemporary, offering a departure from heavier wood and fabrics. Some important characteristics of this genre include the following:

Type: Choices of metals used include iron, aluminum, and stainless steel. Stainless steel is most desirable, providing high tensile strength (greatest longitudinal stress without tearing apart) for durability and low maintenance. Using stainless with high nickel content further increases quality. The higher nickel level is suitable for wet environments to prevent rust and corrosion. This is a critical attribute in environments where humidity plays a role. In addition, polished stainless, as a viable alternative, can duplicate the look of chrome, which is very costly and subject to pitting and flaking.

Weight: Heavier furniture indicates construction of thick metal. The thickness of metal is measured by gauge. The larger the gauge number, the thinner the metal. Gauge determines durability, resilience and strength.



Joinery: Welding offers the cleanest, most permanent form of joinery. In particular, brazing (which torch and brass forms a smooth, durable joint which should not be evident.

In conclusion, having awareness of basic quality checkpoints in the many aspects of furniture construction will enable one to see and feel these attributes, as well as proactively specify them for the best possible result.