

KOHL'S MINIMUM CONSTRUCTION STANDARDS

PRIVATE & EXCLUSIVE BRANDS HOME

FURNITURE

All Private and Exclusive brands must follow Minimum requirements unless otherwise specified in the TP.



MINIMUM CONSTRUCTION STANDARDS FURNITURE

Kohl's Furniture Minimum Construction Standards Overview

The acceptance of an order placed by Kohl's for Private and Exclusive Brand products indicates that as a vendor, you are aware of the technical and quality standards required by Kohl's, in addition to any applicable laws or regulations existing for this product category. It is your responsibility to supply product to Kohl's that meets those standards. Any variation from Kohl's established standards must be agreed upon in writing by Kohl's and the manufacturer.

Section I. Defect Zones

Maps locations on the products for imperfection accept/reject assignments.

Section II. Basic Requirements

Outlines best practices and normal expectations for beginning all developments.

Section III. Classification of Defects (color, dirt/soils, material, contamination, construction/assembly and packaging)

Outlines defects that could pose safety liabilities, performance limitations, or be visually unacceptable to the consumer.

The list identifies general defects and is a starting point. Vendor should work with the Technical Designer to develop specific standards, where necessary, per product.

Section IV. Measurements and Measurement Tolerances

Lists measurement points and assigned tolerances per product type.

Section V. Labels and Packaging

Outlines unacceptable elements for labels, assembly material and cartons.

Section VI. Glossary

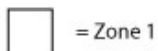
Defines common terms to help align understanding of basic wood and metal working terms.

NOTE: For Textile and Filling/Batting requirements reference the Home Textiles Minimum Construction Standards–Filled Products document located on Kohl's Connection

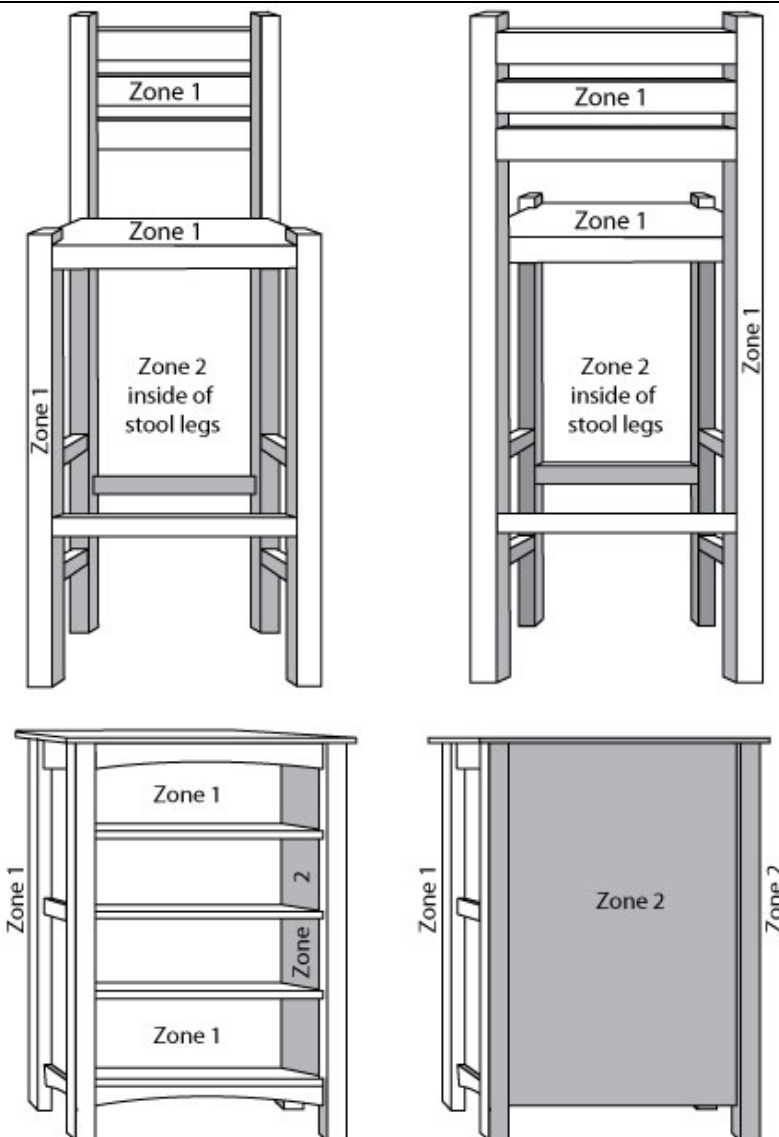
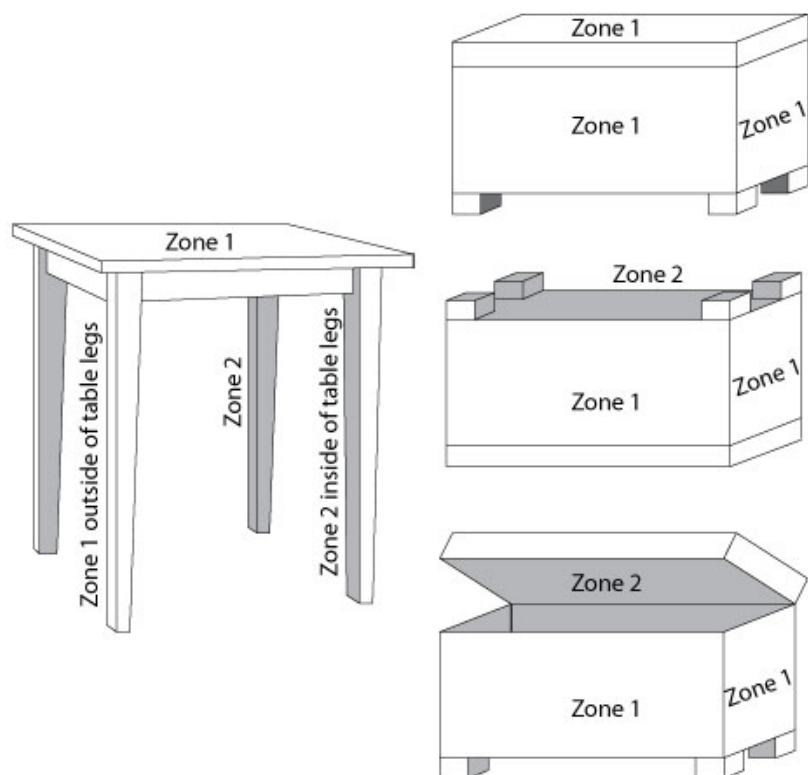
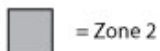
Section I. Defect Zones: Product mapping identifying areas of product where questionable dirt/soils and material imperfections may or may not exist

Defect Zones:

Zone 1: Focal points which are highly visible.



Zone 2: Areas of product not readily visible when in use.





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Section II. Basic Requirements: All individual components must meet the following requirements and perform together in assembled product form.

WOOD AND MANUFACTURED WOOD PRODUCTS	Moisture content - kiln dry raw material correctly to prevent cellular collapse	6-10%
	Wood Species – use specified wood throughout entire production/life of program. No unauthorized substitutions.	
	Wood Quality – standard graded with sufficient strength for appropriate end use; use heart wood vs. sap wood	
	Lumber Selection – only first quality material may be used. Refer to Section III for additional information.	
	Wood Products (MDF, Plywood, Particle Board, Veneer) - use Industry standard thicknesses, grades and practices	
	Edge Banding – applied on MDF, Plywood and Particle Board, as specified, unless fully wrapped with veneer	
	Grain - cut in correct grain direction and keep grain alignment consistent within one unit and within a set	
	Joinery – use appropriate joining methods - mortise and tenon, dowels with glue, glued and screwed, tongue and groove, butt joint, finger joint, etc. – to achieve the strongest possible connection.	
	Framing – framed construction for sufficient strength, especially floor/bottoms of benches, rect. ottomans, etc.	
	Sanding – all surfaces smoothly sanded, even on surfaces that don't show; shelves must be double sided.	
HARDWARE	Stain/Finish – water resistant/repellent to prevent spots/stains/damage from liquids. (ie. oil, PU, wax, etc)	
	Leg Bottom Glides – as specified by product type and as approved by Technical Design.	
	- Preference: No glides for products with wood legs. Smoothly sanded bottom of wood leg, clean of soils, break the edge slightly to prevent grain tear-out. - For other leg types the glides must be high quality material, specific to the end use by product type. No plastic glides with bulging nail/screw heads. Levelers will be assigned where appropriate.	
	Standardized Hardware Components – Certain components are specified by Kohl's with no substitutions allowed. Some examples include hinges, lid lifts, drawer stops, spiral ground stakes etc. Refer to the Tech Spec.	
	Hardware – hinges, lid lifts, brackets, etc. – consider position and attachment to meet required loading force	
METAL	Folding Furniture – must have locking mechanism to prevent unintentional collapse/closure	
	Metal Selection – use high quality material – content, gauge, etc. – appropriate for the end use by product type	
	Welds – complete, smooth and even. Spot welds located at back/inside.	
	Hardware – use high quality material with sufficient hardness to prevent stripping of heads or threads.	
	Hardware Selection – Use corrosion proof hardware (stainless steel, galvanized brass, zinc etc.) for furniture used in wet/humid areas (outdoors, bathroom, kitchen, etc.). Cap all nuts and bolts to keep moisture out and prevent rusting.	
GLASS/STONE	Glass – tempered for strength and safety	
	Glass – all exposed edges polished unless otherwise specified	
	Stone (marble, granite, slate, etc.) - table tops must be set in a frame and secured with hardware at all sides	
SYNTHETIC	Resin fibers – primarily virgin material. Amount of allowable re-melted manufacturing waste TBD by product type.	
	Textiline fiber – high quality Taiwanese textiline with excellent UV resistance.	
CONSTRUCTION	Air holes – cut/drill/router 1" diameter air holes in the floor of all storage items with lids unless otherwise specified.	
	Drawers – construct drawer face using cam bolts w/ locks on drawer sides then add bottom and finally attach drawer back.	
	Bladder – encase loose fill (poly, cubed memory foam, pellets, etc) in non-woven bladder before fashion covering	

Revised Date: 11/24/2020



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Section III. Classification of Defects: Visual and/or performance imperfections that may cause safety concerns, product failure, affect the usability of the product for its intended purpose or be unacceptable to the customer. (Cosmetic variations viewed at arms length in normal room lighting.)			Zone 1	Zone 2
COLOR	WOOD Color/Stain (Some natural shading will occur in stains on most woods and is acceptable however, only limited shading is allowed. Discuss all shading with the Technical Designer)	Off-standard color/stain outside of predetermined acceptable range	not acceptable	
		Shading between product components in one unit (not due to grain direction and light reflection)	not acceptable	
		Shading between units in a set or collection outside of predetermined acceptable range	not acceptable	
		Differential sanding causing shading or color variation within a product	not acceptable	
		Streaking, drips, ripples or missed areas	not acceptable	
		Overspray / air-in-spray causing rough surface or spotting	not acceptable	acceptable
		Smudges, smears and/or fingerprints in the finish	not acceptable	
	METAL Finish/Polish	Missing finish	not acceptable	acceptable
		Finish variations between product components within one unit outside of predetermined acceptable range	not acceptable	
		Excessive polish remains (cleaning compound)	not acceptable	acceptable
		Tarnish, corrosion or rust	not acceptable	
	METAL Plating	Incorrect/inconsistent thickness	not acceptable	
		Peeling or flaking	not acceptable	
		Missing plating areas	not acceptable	
DIRT/SOILS		Any conspicuous dirt, soil or glue spot	not acceptable	acceptable
		Sticky or tacky surface	not acceptable	
		Permeating smell or odor	not acceptable	
		Foreign material, contamination	not acceptable	
		Mold or fungus	not acceptable	
		Insects, dead or alive	not acceptable	
MATERIALS WOOD	General	Incorrect material – not as specified or contracted	not acceptable	
		Incorrect moisture content or drying method	not acceptable	
		Dimension – not as specified or contracted	not acceptable	
	Mineral	Large brown streaks greater than 1 ½" L and/or 1/16" W	not acceptable	
		Black marks greater than 3" L and/or 1" W	not acceptable	

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Listed items are minimum construction standards unless otherwise specified. Production must match 'Master Limit' sample.

Section III. Classification of Defects: (cont.)			Zone 1	Zone 2
MATERIALS WOOD (cont.)	Knots (only solid small knots acceptable unless specifically discussed with Technical Designer)	Large knots – maximum size limit established by wood species (ideally ½" diameter)	not acceptable	
		Excessive number of knots – maximum number limit on face surfaces established by wood species	not acceptable	
		Knots on edges which are not a design feature, outside of predetermined acceptable tolerance	not acceptable	acceptable
		Loose knots	not acceptable	
		Holes or cracks left by loose knots	not acceptable	
		Knots glued back into board	not acceptable	
		Raised or deeply recessed knots	not acceptable	
		Split or cracking knots	not acceptable	
		Knots leaking sap or pitch	not acceptable	
		Lengthwise separations	not acceptable	
	Splits, Checks, Shake			
	Grain	Chipped, torn, raised or loosened grain	not acceptable	acceptable
	Decay, Rot	Soft, pulpy, crumbling wood	not acceptable	
	Insect Holes	Holes, voids or small channels in wood created from insects	not acceptable	acceptable
MATERIALS NATURAL	Wane	Presence of bark or lack of wood along an edge or corner	not acceptable	
	Warp, Bow, Crook, Twist, Cup	Excessive deviation from a flat plane	not acceptable	
	Pitch Pocket	Internal cavities that contain resinous material and sometimes bark	not acceptable	
	White Speck	White speck (small white pits or spots)	not acceptable	acceptable
	Honeycombing	Honeycombing (larger, deeper pits)	not acceptable	
		Endangered species of plant materials	not acceptable	
		Plant materials restricted by the USDA	not acceptable	
		Plant materials restricted by individual U.S. states	not acceptable	
		Incorrect plant material – immature plant material	not acceptable	
		Excessive fading or color range outside of predetermined acceptable range	not acceptable	
MATERIALS METAL	Pitting (hole, dimple or air bubble)	Excessively dry plant material (causing breakage)	not acceptable	
		Small pits, less than or equal to 1 mm, not clustered	acceptable	
		Small pits, less than or equal to 1 mm, clustered	not acceptable	acceptable
		Large pits, greater than 1 mm, not clustered	not acceptable	acceptable
	Heat Stress	Large pits, greater than 1 mm, clustered	not acceptable	
		Splits in metal rod	not acceptable	
		Excessive heat stress, randomly	not acceptable	acceptable
MATERIALS SYNTHETIC	Excess Shrinkage	Excessive heat stress, pervasive	not acceptable	
		Chips, cracks, splits or stress marks (light colored lines)	not acceptable	
		Highly visible injection point or mold line; distorts surface	not acceptable	
		Rough edges at injection point or mold line; sharp	not acceptable	

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Section III. Classification of Defects: (cont.)			Zone 1	Zone 2
CONSTRUCTION &/OR ASSEMBLY	General	Finished product does not meet Minimum Performance Testing Standards; parts not fully functioning	not acceptable	
		Finished product dimensions are not as specified or contracted	not acceptable	
		Missing or incorrect assembly or mounting hardware	not acceptable	
		Missing, extra or misaligned mounting/assembly holes, hardware or components	not acceptable	
	Shape Irregularities	Does not match specified shape	not acceptable	
		Shape irregularities on punched/die stamped metal (not part of design)	not acceptable	
		Kinks or straight spots greater than 3/8" on scrolled metal	not acceptable	
		Loose joints, gaps	not acceptable	
		Bent/crooked legs	not acceptable	
		Product does not sit level on the floor	not acceptable	
		Crossbars not parallel	not acceptable	
		Lid, handle, drawer, door, etc., does not align, fit or function as expected	not acceptable	
	Weaving (Natural products - rush, wicker, rattan, seagrass, etc. Synthetic products – poly-vinyl chloride wicker, resin, textiline, olefin, etc.)	Gaps or irregularities in weave	not acceptable	
		Loose ends, raveling	not acceptable	
		Broken/split ends	not acceptable	
		Large tied knots or splices	not acceptable	
		Frame not completely covered by material	not acceptable	
		Sharp points on metal frame	not acceptable	
		Puckering, wavy or over stretched areas	not acceptable	

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Section III. Classification of Defects: (cont.)			Zone 1	Zone 2
CONSTRUCTION &/OR ASSEMBLY	Welding/Soldering	Misalignment of joint, major deviation	not acceptable	
		Misalignment of joint, minor irregularity	not acceptable	acceptable
		Inconsistent welding resulting in too heavy (messy and massive) or too light (not strong enough or open) welds	not acceptable	
		Slag or splatter – not sharp (bumps from welding which drop on other areas)	not acceptable	acceptable
		Dimples - spot weld marks, small less than or equal to 1mm	acceptable	
		Dimples - spot weld marks, large greater than 1mm	not acceptable	acceptable
		Over-buffing large weld area to reduce it causing distortion of surface	not acceptable	
		Spot weld buffed out to correct slight burns/yellowing from weld	acceptable	
		Small burn-out of angle iron from welding, not sharp	acceptable	
		Excessive burnt metal and large burn-out of angle iron from welding (slight amounts are expected)	not acceptable	
	Surface Marks	Scratches – light, does not score the surface, not clustered	acceptable	
		Scratches- deep, scores the surface	not acceptable	
		Scratches cross direction of brushing (for brushed metal only)	not acceptable	
		Burrs/hanging chads from punched or die stamped metal	not acceptable	
		Chisel marks (wrinkles) at rolled edges, minor with no deformation	acceptable	
		Chisel marks (wrinkles) at rolled edges, excessive causing deformation	not acceptable	
		Clipped/cut ends of metal with burr/sharp edges	not acceptable	
		Splits or cracks	not acceptable	
		Machine-caused burns, splintering, chips, bite or knife marks	not acceptable	
		Skips in surfacing (planer marks)	not acceptable	
		Surface finish not smooth	not acceptable	
		Veneer separating from bonded surface	not acceptable	
		Rough, sharp, peeled or torn edges	not acceptable	

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Section IV. Measurements and Measurement Tolerances:

Any deviations must be approved and documented by Technical Design

MEASUREMENTS:

Identified on the Design Sheet / Technical Product Specification and are specific to each style/program.

Controlling product dimensions and set component variations is imperative.

Tolerances only allow for reasonable manufacturing error.

Measurements are a concern and product can be rejected when:

- One critical measurement is outside of tolerance
- Collectively several detail or additional measurement points are out of tolerance and affect aesthetics or use
- Any measurement is grossly out of tolerance
- Component variation within a set or between items normally purchased as a set is outside of tolerance

MEASUREMENT TOLERANCES:

Item	Measurement Point	Tolerance No minus (-0) tolerance allowed.
Ottomans, Benches, Trunks	Length, width, height	1/2" or 5% of advertised/claimed dimension whichever is smallest
	Lid to base measurement	1/4"
Chairs, Stools	Seat height	1/4" or 5% of advertised/claimed dimension whichever is smallest. No minus (-0) tolerance allowed.
	Back height	1/2" or 5% of advertised/claimed dimension whichever is smallest. No minus (-0) tolerance allowed.
	Arm height	1/4" or 5% of advertised/claimed dimension whichever is smallest. No minus (-0) tolerance allowed.
Tables	Length, Width	1/2" or 5% of advertised/claimed dimension whichever is smallest
	Height	1/4" or 5% of advertised/claimed dimension whichever is smallest
Glass or Tile inset into Frame	Space between glass/tile and frame	1/8"
	Flush with top - higher or lower than top	1/16"
Bookshelves, Storage	Length, width, height	1/2" or 5% of advertised/claimed dimension whichever is smallest
	Shelf spacing	1/4"

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Section V. Labels and Packaging

LABELING / PACKAGING	Labels and Stickers	Labels other than as specified or required by Customs, Federal Trade Commission, USDA, EPA and country specific legal requirements (COC).	not acceptable
		Does not comply with all advertised and labeled claims.	not acceptable
		Label demarking product's surface finish. (To prevent this defect – place component part identification stickers at an inconspicuous location on the unit – back, bottom, inside, etc.)	not acceptable
		- Missing law labels (for upholstered furniture or cushions or other filled products) - Missing UL/EL labels (for lighting) - Missing CPSIA label for children's products - Missing warning labels as required/specified by product.	not acceptable
	Assembly Materials	Missing, incorrect or misspelled mounting, assembly or use instructions.	not acceptable
		Missing hardware packets. (To prevent this defect – weigh each box/carton prior to shipping to ensure hardware is included.)	not acceptable
	Cartons	Product Packaging: Retail packaging of insufficient size, strength or type to support or protect product.	not acceptable
		Master Shipping Cartons: Shipping carton and shipping material insufficient size or strength to protect packaged product in transit.	not acceptable
		Reshippers: SUGGEST Meeting Transit Testing protocols specific for product type/size: ASTM D4169, ISTA 1A, 1B, 1C	

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Section VI. Glossary of Furniture Materials:

Adhesive – Substance that is capable of bonding material together by surface attachment.

Apron – Frame around the base of a table to which the top and legs are fastened.

Bead – During welding, the filler metal/material deposited on and in the work surface when the wire or electrode is melted and fused into the steel to join two or more pieces.

Bevel – Edge of a component which is not perpendicular to the faces of the piece.

Box Joint – Square shaped finger joints used to join wood pieces at right angles.

Bow – Deviation from a flat plane of the wide face of a piece of lumber from end to end.

Burnishing – Smoothing of a metal surface through friction between the metal and a material such as hardened metal media.

Burr – Roughness left by a metal cutting operation such as slitting, shearing, stamping, etc...

Burnt – Metal which has been permanently damaged by overheating.

Butt Joint – A wood joint where straight edges of 2 boards are against each other.

Checks – Longitudinal separation of fibers in wood that do not go through the whole cross section, resulting from tension during drying.

Corrosion – Degradation of metal material due to reaction with its environment.

Crack (metal) – Point where the weld breaks apart from the base structure.

Crater – Depression in the base metal at the end of the bead, caused when steel is burned without depositing filler material.

Crook – Deviation from a flat plane of the narrow face of a piece of lumber from end to end.

Cross Cut – A cut which runs across the board perpendicular to the grain.

Cross sand – Sanding across the grain.

Delamination – Separation of layers in laminated wood or plywood because of adhesive failure.

Edging – Dressing of metal strip and wood edges by rolling, filing, drawing or edge banding (wood).

Finger Joint – Woodworking joint created by cutting a set of complimentary rectangles in two pieces of wood, which are then glued (also known as a comb joint).



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Section VI. Glossary of Furniture Materials: (cont.)

Finish – Coatings of paint, varnish, lacquer, wax etc... applied to wood surfaces to protect and enhance their durability or appearance.

Gauge – Manufacturer's standard numbering system indicating decimal thickness or diameters.

Galvanized – Coated with zinc by passing a component through a bath of molten zinc.

Grade – Designation of the quality of manufactured logs, lumber or wood.

Grain – Alternating regions of lighter and darker wood resulting from the differing growth parameters occurring in different seasons.
The alignment of the grain must be taken into consideration for strength, warpage, drying, cutting and aesthetics.

Grinding – Same as burnishing

Honeycomb – Similar to White Speck but deeper with larger pits. Not subject to further decay unless used in wet conditions.

Insect Marks – Holes, voids or channels in wood created from insects.

Jig – A device used to hold work or as a guide in manufacturing or assembly.

Joint – Point where two or more pieces of wood, veneer or metal are joined together.

Knot – Portion of a branch or limb that has been surrounded by subsequent growth of the stem.

Laminate – A product made by bonding together 2 or more layers of material.

MDF – Medium Density Fiberboard a type of hardboard, which is made from wood fibers and glued under heat and pressure.

Mineral Streak – Olive to greenish-black or brown colored stripes or streaks that run parallel to the grain in hardwoods.

Mortise – Slot cut into board, plank, or timber to receive the tenon of another board to form a joint.

Open Weld – A weld that shows an area that is not fused.

Particle Board – Wood material manufactured from wood particles or other lingo-cellulosic material and a suitable binder.

Plating – Surface covering in which a metal is deposited on a conductive surface.

Plywood – A glued wood panel made of relatively thin layers of veneer with the grain of adjacent layers at right angles, or of veneer in combination with a core lumber.



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Section VI. Glossary of Furniture Materials: (cont.)

Raised Grain – A roughened condition on the surface of dressed lumber in which the hard latewood is raised above the softer early wood but not torn loose from it.

Slag/Spatter – Remnants of wire electrode that do not fuse with weld puddle and splatter on surfaces surrounding the welds.

Splits – Separation of wood fibers extending completely through a piece of wood, usually at the ends. Similar to checks.

Spot Weld – Welding process in which fusion is limited to a small area, usually multiple welds at intervals.

Stainless Steel – Corrosion resistant steel of a wide variety.

Tack Welds – Small scattered welds made to hold parts of a weld in proper alignment while the final welds are being made.

Tarnish – Dulling, staining, or discoloration of metals due to superficial corrosion.

Tear out – The tendency to splinter the trailing edge of wood material when cutting across the grain.

Tenon – A projecting member left by cutting away the wood around it for insertion into a mortise to make a joint.

Twist – Deviation from the flat planes on all four faces by a spiraling or torsional action, usually the result of seasoning in wood.

Veneer – A thin layer or sheet of wood or material (i.e. paper, pvc, wood veneer etc...) that is adhered to the exterior of a substrate.

Wane – Presence of bark or lack of wood on the edge or corner of a piece of lumber.

Weld – Union of metal materials made by the process of welding. Welding process uses the application of high heat to join metals.

White Speck – Small white pits/spots in wood. Caused by a fungus in the living tree. No further decay unless used in wet conditions.