

KOHL'S MINIMUM CONSTRUCTION STANDARDS

PRIVATE & EXCLUSIVE BRANDS HOME

GLASSWARE

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



MINIMUM CONSTRUCTION STANDARDS GLASSWARE

Kohl's Glassware Intended for Food Use 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. 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 III. Measurement Tolerances

Lists measurement points and assigned tolerances per product type.

Section IV. Glossary

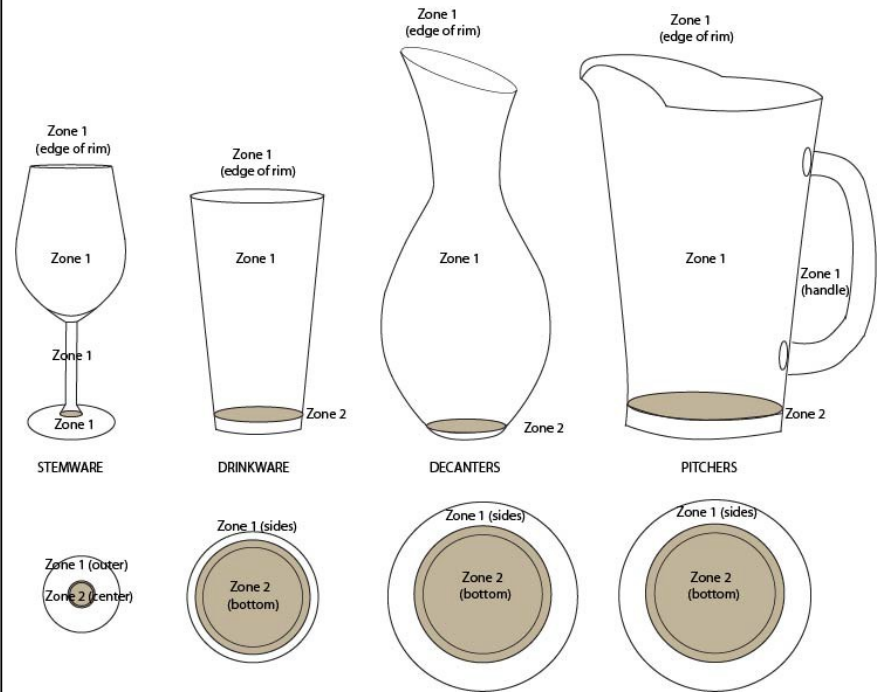
Defines common terms that help align basic understanding of common glass working terms.

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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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 arm's length in normal room lighting.)			Zone 1	Zone 2
COLOR	Pattern/ Design	Inaccurate size, placement, and/or quantity of design elements outside of predetermined acceptable range	not acceptable	
		Varying degrees of surface finish or polish which are not a design feature	not acceptable	
		Off-standard color outside of predetermined acceptable range	not acceptable	
	Color	Color change or loss of clarity of the color	not acceptable	
		Shading between product components in one unit	not acceptable	
		Shading within a set – multiple units in one set – outside of predetermined acceptable range	not acceptable	
DIRT/SOILS	Any conspicuous dirt, soil or glue spot	not acceptable		
MATERIALS	Does not meet Minimum Performance Standards	not acceptable		
	Incorrect material – not as specified	not acceptable		
	Not tempered (where specified)	not acceptable		
CONTAMINATION	Stone size = largest dimension (either length or width)			
	White or light stones, less than or equal to 1mm, no more than 3 occurrences, not clustered	acceptable		
	White or light stones, greater than 1.5mm	not acceptable		
	White or light stones, any size, in stem or base of stemware	not acceptable	acceptable	
	White or light stones, any size, in top 75% of stemware bowl	not acceptable		
	Black stones or contamination, any size	not acceptable		
	Stones which create bumps on the surface	not acceptable		
	Stones on edge of rim or spouts	not acceptable		
	Foreign particles, streaking, cording	not acceptable		
	Water stains	not acceptable		

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Classification of Defects: (cont.)		Zone 1	Zone 2
CONSTRUCTION &/OR ASSEMBLY	Size/Shape Irregularities		
	Does not match specified or approved shape		not acceptable
	Length, width, height not as specified; not within tolerance		not acceptable
	Rim/wall thickness not as specified; inconsistent rim thickness; not within tolerance		not acceptable
	Warped, not round (on circular items), top edge not level; not within tolerance		not acceptable
	Items which rock/wobble (do not rest flat on the table top)		not acceptable
	Jump on rim (from polishing) which is smooth, not sharp		acceptable
	Excessive angle on inside base of jar or glass (wedge bottom); not within tolerance		not acceptable
	Misaligned components (i.e. handles, knobs, etc.)		not acceptable
	Openings not fully functional (decanter or pitcher spout, etc.)		not acceptable
	Lid does not close tightly – Lid does not open easily.		not acceptable
	Pontil Mark on bottom of blown glass items – rough, raised, sharp		not acceptable
	Mould lines on pressed or molded items, not severe enough to break or disrupt the surface/pattern		acceptable
	Heavy raised mould lines on pressed or molded items that distorts surface/design and/or are sharp.		not acceptable
	Large shear marks (straw mark) or cutting scar on foot of blown stemware, wider than the base of the stem; on rim of any blown glass item		not acceptable
Wrinkles, crizzle, swirls, laps less than or equal to 2"		acceptable	
Wrinkles, crizzle, swirls, laps greater than 2"		not acceptable	

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Classification of Defects: (cont.)		Zone 1	Zone 2
Cracks, Chips, Rough Spots	Nicks, chips, flakes, sharp or rough edges	not acceptable	
	Cracks, crazing (unless design detail)	not acceptable	
	Rim edges not smooth and even	not acceptable	
	Rough spots from rough or rusted molds	not acceptable	
	Orange peel effect less than or equal to 2"	acceptable	
	Orange peel effect greater than 2"	not acceptable	
Scratches	Scratches – light, does not score the surface, less than or equal to 1", not clustered	acceptable	
	Scratches – light, does not score the surface, less than or equal to 1", clustered	not acceptable	acceptable
	Scratches – light, does not score the surface, greater than 1"	not acceptable	
	Scratches – deep, scores the surface, any size	not acceptable	
	Any scratches on rims	not acceptable	
Bubbles/Blisters/Seeds	Bubble/blister/seed - Size = (length + width) / 2 Must match Approval Sample. Work with the Technical Designer to establish specific standards by product type, if necessary		
	Bubble/blister/seed, greater than 2.5mm, For very large items, greater than 3.0mm	not acceptable	
	Bubble/blister/seed, less than or equal to 2.5mm, no more than 3 occurrences, not clustered	acceptable	
	Bubble/blister/seed less than or equal to 2.5mm, clustered	not acceptable	
	Bubble/blister/seed, more than 1 bubble on stem of stemware	not acceptable	
	Bubble/blister/seed, more than 2 bubbles on base of stemware	not acceptable	
	Bubble/blister/seed, any size, in top 25% of stemware bowl	not acceptable	
	Bubble/blister/seed which create a bump on the surface	not acceptable	acceptable
	Bubble/blister/seed which cause a bump on the surface of stemware	not acceptable	
	Bubble/blister/seed on edge of rim or spouts	not acceptable	
	Bubble/blister/seed which are bust-out (broken) or open	not acceptable	

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Classification of Defects: (cont.)		Zone 1	Zone 2
LABELING / PACKAGING	Does not comply with all advertised and labeled claims (i.e. microwave safe, dishwasher safe, oven safe, freezer, use with beverages containing alcohol, etc.)	not acceptable	
	Missing non-food use or special food use warnings	not acceptable	
	Missing, incorrect or misspelled use instruction information	not acceptable	
	Missing, incorrect or misspelled care instruction information	not acceptable	
	Retail packaging insufficient size or strength to support or protect product (especially where packaged as sets)	not acceptable	
	Shipping carton and shipping material insufficient size or strength to protect product in transit	not acceptable	
<p>MEASUREMENTS: Identified on the Design Sheets / Technical Product Specification and are specific to each style/program.</p> <p>Controlling product dimensions and set component variations is imperative. Tolerances only allow for reasonable manufacturing error.</p> <p>Measurements are a concern and product can be rejected when:</p> <ul style="list-style-type: none"> - 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 		<p><i>Note: Refer to Measurement Tolerance Standards section for specific information by product type.</i></p>	



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Measurement Tolerance: Controlling product dimensions and set component variation is imperative.

Item	Measurement Point	Round	Square	
Plates/Platters/Trays	Diameter < 150 mm	1.5 mm	2.0 mm	
	150 mm – 200 mm	2.0 mm	2.5 mm	
	200 mm – 250 mm	2.5 mm	3.0 mm	
	250 mm – 300 mm	3.0 mm	3.5 mm	
	300 mm – 350 mm	3.5 mm	4.0 mm	
	> 350 mm	5.0 mm	5.5 mm	
	Length – greater than 350 mm (oval & oblong platters/trays)	9.5 mm		
Shoulder/Rim/In border	1.5 mm			
Height	1.5 mm			
Thickness at rim – measured 1 cm from top edge	10% of rim thickness			
Levelness at top rim	1 mm			
Wedge bottom	2 mm			
Bowls/Serving Dishes	Diameter, Top < 150 mm	2.0 mm	2.5 mm	
	150 mm – 200 mm	2.5 mm	3.0 mm	
	200 mm – 250 mm	3.0 mm	3.5 mm	
	250 mm – 300 mm	3.5 mm	4.0 mm	
	300 mm – 350 mm	4.0 mm	4.5 mm	
	> 350 mm	5.0 mm	5.5 mm	
	Height < 50 mm	2.0 mm		
50 mm – 100 mm	2.5 mm			
100 mm – 150 mm	3.0 mm			
150 mm – 200 mm	3.5 mm			
Thickness of walls – measured 1 cm from top edge	10% of wall thickness			
Levelness at top rim	1mm			
Wedge bottom	5 mm			
Glasses/Cups/Stemware	Capacity Per testing requirements: -0% / +3% maximum deviation from labeled capacity.	Diameter, Top < 50 mm	1.5 mm	2.0 mm
		50 mm – 100 mm	2.0 mm	2.5 mm
		100 mm – 150 mm	2.5 mm	3.0 mm
		150 mm – 200 mm	3.0 mm	3.5 mm
	Height < 100 mm	2.0 mm		
		100 mm – 150 mm	2.5 mm	
		150 mm – 200 mm	3.0 mm	
200 mm – 250 mm	3.5 mm			
Thickness of walls – measured 1 cm from top edge	10% of wall thickness			
Levelness at top rim	1 mm			
Wedge bottom	5 mm			

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Glossary of Glassware Terminology:

Annealed Glass – The process of slow cooling a completed glass object to reduce stresses and increase strength.

Art Glass – Any ornamental glassware made since the mid-19th century.

Batch – The mixture of raw materials (often silica, soda, potash and lime) that is melted in a pot or tank to make glass.

Blowing – The technique of forming an object by inflating a gather or gob of molten glass on the end of a blow pipe. The gaffer blows through the pipe slightly inflating the gob, which is then manipulated into the required form by swinging it, rolling it on a marver, or shaping it with tools or in a mold. It is then inflated to the desired size.

Bottle Glass – A common naturally colored, greenish or brownish glass that derives its color from traces of iron found in the silica that is its major ingredient. Such glass is inexpensive to produce and used in items when good quality is not essential.

Bubble/Blister/Seed - A pocket of gas trapped in the glass during manufacture. The term is used both for bubbles introduced intentionally and for unwanted bubbles created during the melting process. Very small included bubbles, usually occurring in groups or clusters, are known as seeds.

Carving – The cutting removal of glass from the surface of an object by means of hand-held tools or sandblasting. Includes engraving, etching and grinding.

Casting – The generic name for a wide variety of techniques used to form glass in a mold.

Colored Glass – Glass that is colored by (1) impurities in the basic ingredients in the batch or (2) techniques of coloring glass by one of three processes: (a) using a dissolved metallic oxide to impart a color throughout, (b) forming a dispersion of some substance in a colloidal state, and (c) suspending particles of pigments to form opaque colors.

Crizzling – A glass defect caused by an imbalance of ingredients of the batch. The instability of the glass results in an attack by atmospheric moisture, which produces a network of cracks in the surface that may feel damp or oily which is sometimes described as 'weeping'.

Float Glass – A sheet of glass made by floating molten glass on a bed of molten metal. This method gives the glass sheet uniform thickness and very flat surfaces.

Glass – A general term referring to all ware made of inorganic, non-metallic earth minerals (clay and sand), and processed by

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firing or baking usually by the application of high temperature.

Hard Glass – A generic name for glass (e.g., borosilicate glass) with a relatively low coefficient of expansion.

Heat Resistant Glass – Glass that withstands thermal shock (severe changes of temperature). Such glass can be tempered to make it more heat-resistant, and borosilicate glasses such as Pyrex are particularly resistant to thermal shock.

Inclusions – A collective term for bubbles, metal, and glass particles and other foreign materials that have been added to the glass for decorative effects.

Lead Glass – A glass that contains a high percentage of lead oxide. It's a relatively soft glass with a high refractive index giving it brilliance. Also known as lead crystal.

Melt – The fluid glass produced by melting batch.

Orange Peel – A glass defect where the surface take on the appearance of an orange peel with numerous small bumps and indentations rather than being flat and smooth. Often caused by unstable surface tension and unlevel flow of molten glass.

Plate Glass – Flat glass of high quality, formed by rolling molten glass on a metal plate and later grinding and polishing it until the surfaces are parallel and completely smooth. Rollers may be patterned to emboss a design into the glass.

Pressed Glass – Glassware formed by placing a gob of molten glass in a metal mold and pressing it with a metal plunger. The resultant piece termed 'mold-pressed' has an interior form independent of the exterior, in contrast to 'mold-blown' whose interior corresponds to the outer form.

Soft Glass – A generic name for glass (e.g., soda-lime glass) with a relatively high coefficient of expansion.

Slumping – A broad technique of warm glass working, for the forming of glass by applying heat to a flat sheet of glass to the point where the glass will soften. The warm, soft glass 'slumps' into or onto the molded shape under the force of gravity. Also known as sagging.

Stone – Any crystalline inclusion present in glass. Stones consist of unmelted particles of batch, fragments of refractory, material from the pot, or devitrification crystals. Stones are generally irregular but rounded or can be angular and well formed.

Tempered Glass – A type of safety glass processed by controlled thermal or chemical treatment to increase its strength compared to normal glass. When broken, tempered glass will shatter into small granular chunks instead of splintering into jagged shards.

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