

# Dental Cabinetry

## Comparison Chart

★★★★ Excellent  
★★★ Fair  
★ Poor

	Integra™ Dental Casework	Artizan™ Dental Furniture	Other Dental Manufacturers	Local Cabinet-Makers
<b>Base Material</b> A good base should be strong enough to provide sufficient support to the cabinet and be made from painted or stainless steel. Seamed and riveted steel can provide strong bases, but may be difficult to clean and an esthetic compromise. Basic plywood or particle board with laminate covering can delaminate and swell over time. Finally, the base should incorporate adjustable levelers to level cabinets on uneven floors.	★★★★ Powder-coated, painted steel with integrated, adjustable leg levelers	★★★★ Seamless 201 grade stainless steel with integrated, adjustable leg levelers (Picture A)	★★★★ Powder-coated, painted steel with integrated adjustable leg levelers  -or- ★★ Seamed or riveted steel with integrated, adjustable leg levelers	★ Basic plywood or particle board with laminate covering and wood shims for leveling
<b>Cabinet Frame</b> The frame needs to be strong and durable to withstand the demands of the healthcare environment. Since it will encase many components, it must be built with stability. Modular design allows future integration of new storage options.	★★★★ 18 gauge powder-coated, painted steel (Picture B)	★★★★ 3/4" thick, 47-51 lb. density industrial grade particle board	★★ 5/8" and 1/2", 45 lb. or greater density industrial grade particle board	★ Low density particle board and various types of plywood
<b>Panel Substrates</b> The substrate is the core material used in a cabinet's paneling. Higher density material such as industrial grade particle board or medium density fiber board is recommended because it is more stable and more resistant to warping, especially compared to other materials such as low density particle board or plywood. The latter materials are not recommended because humidity can cause shrinkage/swelling which, in turn, will lead to warpage, cracking and separation.	★★★★ 3/4" thick, 45lb. medium density fiberboard	★★★★ 3/4" thick, 47-51 lb. density industrial grade particle board	★★ 5/8" and 1/2", 45 lb. or greater density industrial grade particle board	★ Low density particle board and various types of plywood
<b>Finishes</b> All exposed surfaces must be covered and sealed to prevent damage from moisture common in the dental environment. Three superior choices are thermally-fused melamine, high pressure laminate and PVC thermofoil (vinyl-clad) covering because they offer the best resistance to wear, staining and moisture. Paints and varnishes are not recommended because they will not stand up to the stringent agents and disinfectants used in a dental office.	★★★★ PVC thermofoil	★★★★ High pressure laminate or thermally-fused melamine	★★★★ High pressure laminate or thermally-fused melamine	★★★★ High pressure laminate  -or- ★ Varnished, painted or left unfinished
<b>Edge Treatments</b> When using high pressure laminates or thermally-fused melamines, an edge treatment will be required to completely seal the panel corners from moisture. Acceptable treatments are 2 or 3 mm thickness PVC, thermofoil vinyl and post formed high pressure laminate. However, keep in mind, all these materials must have adequate equipment for proper application. Watch out for square-edge laminate stripping because it can produce sharp, dangerous corners and when applied with traditional contact adhesive, it can delaminate over time.	★★★★ PVC thermofoil wrapped-around (Picture C)	★★ Combination of postform and 3mm PVC	★★ 3 mm and 2 mm PVC, laminate post-formed edges and thermofoil coverings	★★ 2 mm PVC (depends on adequate equipment?)  -or- ★ Square edge strips
<b>Countertop Options</b> The most popular countertop options are laminates and solid surfaces. Laminates are the most cost-effective while solid surfaces are easy to repair, non-porous and seamless (good for asepsis). Quartz, which is resistant to scratches, chips and cracking and does not require sealing, is making its way into the market.	★★★★ Variety of laminates, solid surfaces and quartz options	★★★★ Variety of laminates, solid surfaces and quartz options	★★★★ Variety of laminates, solid surfaces and quartz options	★★★★ Variety of laminates, solid surfaces and quartz options
<b>Type of Assembly</b> The four most popular methods are the glue and dowel, knock down, screw fasteners and staple fasteners. The glue/dowel, the knock down method and mechanical fasteners are the best because they create strong joints. Staple fasteners are unacceptable because joints are weak and the staples are exposed.	★★★★ Mechanical fasteners (screws & pop rivets)	★★★★ 100% Glue/Dowel assembly (Picture D)	★★★★ Glue/Dowel assembly and knock down fasteners	★ Frequently use staple fasteners
<b>Components</b>				
<b>Hinges -</b> Quality hinges should provide optimum support and adjustment. Internal hinge mounting allows easy cleaning of doors.	★★★★ European-style, concealed hinges (Picture E)	★★★★ European-style, concealed hinges	★★★★ European-style, concealed hinges	★ Frequently use exposed hinges common to kitchen cabinetry
<b>Drawers -</b> For the dental environment, the best option is strong, seamless drawers that contain spills and leaking. The next best option is to be covered by high pressure laminate or thermally-fused melamine.	★★★★ Seamless, polystyrene drawers (Picture F)	★★ Wood-covered, thermally-fused melamine drawers	★★ Wood-covered, thermally-fused melamine or metal drawers	★ Inside of drawers are varnished, painted or left unfinished
<b>Drawer Slides -</b> The best choice is a ball bearing type slide with full extension, followed by a 3/4 extension system.	★★ 3/4 extension ball bearing drawer system	★★★★ Full extension ball bearing slides	★★ 3/4 extension with side mounted roller slide system	★ Typically use a single under-mounted runner (monorail glide)
<b>Handles -</b> Best options are either seamless, integrated handles or high grade, non-corroding metals like solid nickel or stainless steel for easy cleaning and disinfecting. Other materials may stain or oxidize over time.	★★★★ Seamless, integrated handles	★★★★ Solid nickel asepsis handles (Picture G)	★★ Pull knobs or "C" shaped handles	★ Most use wire pull or "C" shaped handles made of plastic or aluminum

