RPD Framework Design Features



The design parameters listed below have been researched and tested during a series of clinical trials and design studies, along with mechanical analyses using computer simulations, and information found throughout literature. All milling and manufacturing strategies discussed in this guide were developed to optimize production time while maximizing the attributes of Ultaire[™] AKP to produce an accurate and functional framework. The following is a comparison of various RPD framework design features between Ultaire[™] AKP and Co-Cr.

	Dentivera [®]	Co-Cr
Akers Clasp		
Base Width (mm)	2.0-4.5	1.5-3.5
Base Thickness (mm)	1.25–2.5	0.8-2.0
Tip Width (mm)	1.5-3.0	1.05-2.45
Tip Thickness (mm)	0.75-1.5	0.56-1.4
Lingual Rest		
Thickness (mm)	1.0-2.0	0.75-1.0
Occlusal Rest*		
Width (mm)	2.0-3.5	2.0-3.5
Thickness (mm)	1.0+	0.5-1.0
Retention Grid		
Thickness (mm)	1.0-1.5	0.7-1.0
Major Connector**		
Thickness (mm)	1.75-3.0	.7–1.5
Lingual Bar***		
Width (mm)	4.0-9.0	3.0-5.0
Thickness (mm)	1.75-5.0	1.5–2.0
Minor Connector		
Thickness (mm)	1.0-3.0	0.75-1.0

* Occlusal Rest = Dependent on doctor's preparation and antagonist

** Major Connectors = Palatal Plate, Palatal Strap, AP Palatal Bar, or Closed Horseshoe designs

*** Lingual Bars = Standard Horseshoe, Lingual Bar, or Lingual Plate

