Buff & Polish Chart

INTRODUCTION

1. Many stones polish equally well with several buff and polishing compound combinations. A very hard gem can be polished by a much softer polish powder. Only one polishing agent should be used on a buff.
2. Polishing does not remove any material from the surface. If scratches develop, the stone must be re-sanded.
3. It is impossible to obtain a high glossy finish on very soft materials, especially if they tend to be slightly porous, fibrous, or granular. As a last resort with this type of material, a finish gloss can be given by the use of spray varnish.

	Buff					Polishing Compound				
Material	**Canvas**	**Phenolic**	**Felt**	**Leather**	**Muslin**	**Cerium Oxide**	**Chrome Oxide**	**Diamond**	**Linde 'A'**	**Tin Oxide**
Agate		C	A	B		A-B		C		
Amethyst		C	A	B		A-B		C		
Beryl		D	A	B-C		A	C	D	B	
Calcite				B	A					A-B
Chloastrolite			A			A				
Feldspar			A			A				
Garnet		C	A-B			B	A	C		
Glass			A			A				
Goldstone			A			A				
Hematite	B				A	A			B	
Howlite			A	B					B	A
Jadeite				A-B	C		B		A	C
Jasper			A	B		A			B	
Lapis Lazuli				A-B			B		A	
Malachite				A-B			B		A	
Nephrite-Jade				A-B	C		B		A	C
Obsidian			A			A				
Opal-Australian			A		B	A				B
Opal-Mexican		A						A		
Psilomelane				A-B					A	B
Petosky Stone	A									A
Quartz		C	A	B		A-B		C		
Rhodochrosite				A-B					A	B
Rhodonite				A-B		B			A	
Serpentine				A-B					A	B
Sodalite			A			A				
Thomsonite			A			A				
Tigers Eye				A					A	
Tourmaline	C			A-B			B	C	A	
Turquoise				A-B					A	B
Unakite			A			A				
Variscite			B-C	A		B			A	C
Wonderstone			B-C	A					A	C
Match letters across rows for best combinations										

BUFFS

Canvas: Canvas is useful when polishing heat-sensitive stones because it develops very little friction.
Muslin: Muslin buffs are recommended for soft stones and gems that are heat-sensitive.
Leather: Leather is a versatile buffing material that is both efficient and economical. Leather generates heat, but not as much as felt.
Felt: Felt is useful for polishing glass and stones of even texture. It is not recommended for gemstones that under cut. Friction on felt generates heat rapidly.
Phenolic: Phenolic tools or phenolic lap disc (cab laps) are useful when impregnated with diamond grit.14,000 Micron (pre-polish) or 50,000 Micron (polish) diamond compound can be applied to the surface of the gemstone and worked with a phenolic carving tool. It can also be applied to the surface of a phenolic lap disc and worked with the gemstone mounted at the end of a dop stick. The diamond will charge the phenolic plate making smoothing and polishing easier.

POLISHING COMPOUNDS

Cerium Oxide: Covington cerium oxide will polish at a faster rate than conventional polishing compounds and produce a superior optical lens surface with no staining or caking. Because it will polish faster, a lower concentration can be used. It is recommended for use on leather, felt, polyurethane foams, and thermoplastic polishing pads. It is a favored polish for quartz type minerals and other gemstone types. It is not recommended for gemstones that will under cut.
Linde "A": A .3 micron aluminum powder that is carefully graded for uniformity of grain size. It is excellent for polishing stones that will under cut. Excellent for hard to polish stones.
Chromium Oxide: Chromium oxide is a hard polishing agent. It is green in color and stains badly. It is useful for polishing jade and stones that will under cut.
Tin Oxide: Tin oxide is an excellent general-purpose polish. It is used to provide a final high gloss finish.
Diamond: Diamond grit is the most efficient polishing medium. It is especially useful for polishing difficult-to-polish stones.