MIL-DTL-15024F Material Comparison Chart:

PRODUCT DESCRIPTION		DECISION FACTORS									
				Abrasion		Salt Spray		Weather		Solvent	
MIL-DTL-15024 Type & Style	**Commercial Brand(s)**	**Thicknesses (inches)** Matches Current Navy Drawings	**Available Configurations**	MIL-DTL-15024F 500 cycles	Commercial Testing	MIL-DTL-15024F Unspecified	Commercial Testing	MIL-DTL-15024F 50 Hours	Commercial Testing	MIL-DTL-15024F Unspecified	Commercial Testing
TYPE H Photosensitive printed **anodized aluminum** plate	**Metalphoto®**	YES	Sheets	PASS	7,000 cycles	Recommended	720 Hours	PASS	10,000 Hours	PASS	96 Hour
TYPE L Style 1 laser-markable **black anodized aluminum** impregnated with silver compounds (candidate)*	**BlackPlus™**	YES	Sheets or custom sized blanks with custom adhesive option	PASS	4,000 CYCLES EST.	Not Recommended for long term exposure	Not Recommended for long term exposure	PASS	10,000 Hours	PASS	96 Hour
TYPE L Style 2 laser-markable **black aluminum** sheet coated with a weatherable, abrasion-resistant coating	**DuraBlack®**	NO	Sheets or custom sized blanks with custom adhesive option	PASS	4,000 CYCLES	Not Recommended for long term exposure	Not Recommended for long term exposure	PASS	5,000 Hours	PASS	FAIL >96 Hours
TYPE L Style 2 laser-markable red **aluminum** sheet coated with a weatherable, abrasion-resistant coating	**DuraRed™**	NO	Sheets or custom sized blanks with custom adhesive option	PASS	4,000 CYCLES	Not Recommended for long term exposure	Not Recommended for long term exposure	PASS	5,000 Hours	PASS	FAIL >96 Hours
TYPE L Style 3 2-Ply **phenolic plastic**	**Commodity**	NO	Sheets	FAILS	FAILS	PASS	NA	PASS	NA	PASS	FAIL >96 hours (est)
TYPE L Style 4 laser markable **stainless steel** coated with ceramic compound (candidate)	**LaserBond™**	YES	Sheets or custom sized blanks with custom adhesive option	PASS	5,000 cycles	Recommended	720 Hours est.	PASS	10,000 Hours est.	PASS	96 Hour

** IMPORTANT: BlackPlus™ is intended for fiber laser marking. If a CO_2 laser is used (most common type) then the laser etched graphic will be higher contrast if the material is subject to a chemical conversion treatment (Alodine®) post marking. This process is explained in MIL-DTL-5541F.*