

Eyewear Materials Technology Selection

	Laser Protective Eyewear Technology			
Eyewear Performance Needs	Filter Glass	Polymer	Coated Glass	Laminated
Multiple Wavelength Coverage	Very good for standard wavelength combinations	A few good choices available	Best overall; product selection currently limited	Often the only solution for unusual combinations
Prescription (R_x)	Good choice; R _x may be in laser lens	Usually requires an adaptor	Good choice; R _x may be in laser lens in newer products	Not typically used; thickness and layers impact the optics
Selective far IR wavelength coverage (e.g. 1540nm)	Best current choice	May not be possible depending on wavelength	Technologically feasible, requires custom design	Good choice if combining far IR with other wavelengths
Femtosecond (mode locked) coverage	Best current choice	Some new products emerging	Not available at present	Some new products emerging
Wide field of view	Larger lenses often too heavy	Molded single lens products are best choice	Larger lenses often too heavy	Larger lenses often too heavy
8-hour shift wear	Excellent VLT; request impact resistance from supplier	Lowest weight; impact-resistant products available	Excellent VLT; request impact resistance from supplier	Not typically used
High power protection	Best choice for direct laser impact	Excellent OD levels available; but not for direct hit	Excellent OD levels available; review each product for direct hit	Excellent OD levels available; review each product for direct hit