

# EXTREME ENVIRONMENT GUIDE

## INTRODUCTION

Extreme enclosed and gasketed products fall into three groups based upon their suitability to different applications. Suitability is based upon listings and ratings by various testing labs and trade organizations. Some options may upgrade a fixture's suitability for more demanding environments.

For safety, careful evaluation is required to match the correct product with the intended application. Ambient temperature extremes, NSF (food service, splash zone rating) and exposure to vandalism are some factors to consider.

**Adverse:** Used in protected or semi-protected outdoor locations. At a minimum these fixtures have UL1598 wet location listings. They may have an IP54 rating (protected from sprays in all directions). Upgrades include stainless steel latches, tough polycarbonate lens and vandal proof hardware.

**Severe:** Used when the application calls for greater dust and water protection. Typically, these products have a rating of IP65 (protected against dust and low pressure jets of water), IP66 (protected from strong jets of water) or IP67 (temporary immersion in 3' of water). Products may be covered by UL1958A for marine application. They are rugged products that can endure exposure to most severe weather conditions.

**Hazardous:** Used in hazardous locations calling for a UL844 listing and an IP66 or greater rating. These units have been evaluated for hazardous, caustic environments and ignition protection. Typically, they have a continuous metallic or high strength resin housing supplied with hazardous rated ballasts and other high performance components.

	Feature	Material	UL1598 Wet Location	NSF Option	IP Rating	NEMA 4X	UL1598A Marine	ABS (Shipbuilding)	UL844 Hazardous Location	High Ambient
ADVERSE	FNPV	Fiberglass Reinforced Polyester Resin	x	x	IP54					
	LU	Extruded Aluminum	x							
	47A/47S	Formed Aluminum/ Formed Steel	x(47A)							
SEVERE	XFSW	Fiberglass Reinforced Polyester Resin	x	x	IP67	x				
	FNPS	Fiberglass Reinforced Polyester Resin	x	x	IP65	x	X (Inside drip-proof)	x		40°C*
	FDPS	Die Cast Aluminum	x	x	IP66 (2ft)	x	X (Inside drip-proof)	x		50°C*
	LXEM	Fiberglass Reinforced Polyester Resin	X	X	IP65, IP67					40°C*
	XEM	Fiberglass Reinforced Polyester Resin	X	X	IP65, IP67					40°C*
	XEP	Fiberglass Reinforced Polyester Resin	X	X	IP65, IP67					40°C*
	XTS	Extruded High Impact	x	x	IP65	x				
HAZARDOUS	FNPH	Fiberglass Reinforced Polyester Resin	x	x	IP65	x	x	x	x	40°C*
	FDPH	Die Cast Aluminum	x	x	IP66	x	X (Inside drip-proof)	x	x	50°C*
	FSPH	Die Formed Stainless Steel	x	x	IP65	x			x	
	HZ	Formed Steel	x						x	
	FLSB	Formed Steel	x						x	

\* Maximum ambient temperature approved for product family (can change based on lamp type, markings and options).