

PBE / SCU

Essex offers both the **PBE (PROTECTIVE BREATHING EQUIPMENT)** for crewmembers and the **SCU (SELF-CONTAINED UNIT)** for passengers and crew to provide compressed aviator grade oxygen in an aircraft emergency. The PBE is currently used by nearly every US commercial carrier and has FAA TSO-C116, TSO-C99, CAA, EASA, CAAC and ANAC approvals.

- Protects Against Toxic Fumes & Smoke
- Dons in Just 15 Seconds
- Wide Range of Visibility
- No Mouth Piece Allows for Communication
- One Size Fits Most Adults
- 10 ½ Year Shelf Life

	PBE	SCU
W"x L"x H" IN FABRIC POUCH	16 x 2 x 11	9 ½ x 2 x 7 ½
WEIGHT	3.3 LBS.	2 LBS.
PROVIDES PROTECTION AGAINST	TOXIC FUMES, SMOKE & HEAT	
TIME DURATION <i>(DEPENDS ON WORKLOAD & PHYSICAL CONDITION)</i>	UP TO 60 MINUTES	20 MINUTES
SOURCE OF BREATHABLE AIR	AVIATOR GRADE COMPRESSED OXYGEN, O ₂ CYLINDER, WITH OVERPRESSURE PROTECTION TO PREVENT RUPTURE.	
SYSTEM TYPE	CLOSED CIRCUIT REBREATHING SYSTEM	
HERMETICALLY SEALED	✓	
CARBON DIOXIDE CONTROL	PATENTED PASSIVE SCRUBBERS	
DONNING TIME	15 SECONDS	
CARBON DIOXIDE (MAX AVERAGE)	4%	
OXYGEN (MINIMUM VALUE)	18%	
OXYGEN ACTIVATION	SEMI-AUTOMATIC	MANUAL
SHELF LIFE	10-YEARS 6-MONTHS FROM THE DATE OF MANUFACTURE	
HUMIDITY INDICATOR	✓	
SERVICE INDICATOR	✓	—
TAMPER EVIDENT SEALS	✓	—
SIZING/FITTING	FITS 5TH TO 95TH PERCENTILE ADULTS WITHOUT ADJUSTMENT	
VISIBILITY	270°	360°
ANTI-FOG	✓	
ORAL COMMUNICATION	EFFECTIVE AT 12 FEET	
INSIDE HOOD TEMPERATURE	104°F MAX @ 68°F AMBIENT	
OPERATING TEMPERATURE RANGE	5° F TO 120° F	
STOWAGE TEMPERATURE RANGE	-20° F TO 185° F	
CABIN PRESSURE ALTITUDE	8,000 FEET	
THERMAL RESISTANCE	RADIANT HEAT - 1.0 BTU/SQ. FT. FOR UP TO 60 SECONDS, DRIPPING THERMOPLASTIC - 390°F, TRANSIENT FLAME - 1800°F FOR 5 SECONDS	
PROTECTION FACTOR RATIO (TYPICAL)	260 @ 80 WATTS	
VARIOUS STOWAGE OPTIONS	15 DIFFERENT STOWAGE OPTIONS AVAILABLE	—
PACKAGING	SOFT POUCH AND HARD CASES AVAILABLE	SOFT POUCH ONLY

TYPICAL DONNING PROCEDURE

EXAMPLE SHOWN IS FOR THE SCU ONLY

STEP
1

Pull Tab, Open Pouch



STEP
2

Unfold Hood



STEP
3

Insert Hands to Open Neckseal and Pull Over Head



STEP
4

Grasp Oxygen Cylinder and Pull the String (Red Ball)



WARNING: Remove the hood immediately if the hood fails to slowly inflate after donning or if it collapses up against the face.

