

REFUGE·ONE

AIR CENTRE



KEY FEATURES

- Removes Carbon Dioxide and replenishes Oxygen to maintain breathable air
- Does not require any compressed air or connection to surface
- Works independently of mine power for up to 36 hours
- Small size, easy to relocate
- Simple to operate under stressful emergency conditions
- Skid mounted for portability
- Modular design in 2 sizes can be combined for any sized refuge station needs
- Ten year underground life expectancy

DESCRIPTION

Experience dictates that accidents, mine fires or the sudden release of toxic or other gases can occur at any time and without warning. In a closed or sealed refuge station, CO₂ levels can rise and O₂ levels can deplete quickly to dangerous levels, putting lives at risk. Conventional sources of respirable air such as compressed high pressure cylinders or piped air from the surface can be dangerous or compromised in an emergency. Prepare for the unexpected with the **REFUGE ONE AIR CENTRE**. The **REFUGE ONE** has been designed as a source of respirable air during an emergency, providing safe, breathable air in a compact, moveable unit. Even if electrical power is cut off, the unit will operate for at least 36 hours on it's own battery supply. It constantly removes potentially harmful levels of Carbon Dioxide and replenishes Oxygen, maintaining safe breathing air within a sealed refuge station for up to 36 hours*.

*Actual capacity will depend on number of people in the refuge station. See minimum performance characteristics on opposite page.



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SPECIFICATIONS

Physical Dimensions:

Single Bed Unit:

Length: 57.25"

Width: 29.5"

Depth: 25.5" (15" with cover removed)

Weight: 720 lbs (500 lbs w/o O₂ cylinders)

Double Bed Unit:

Length: 55.5"

Width: 31"

Depth: 65.5"

Weight: 1,545 lbs (1,155 w/o O₂ cylinders)

Electrical:

115V, 60Hz standard (Other voltages/frequencies available)

Oxygen connectors:

CGA540 standard, other connections available

Mechanical:

Skid mounted for easy forklift transport.

OPERATING INSTRUCTIONS

The REFUGE ONE AIR CENTRE has been designed to operate under stressful conditions. The startup instructions are simple and easy to follow:

- 1) Break the security seals and remove the cover
- 2) Install the carbon dioxide absorbent chemical
- 3) Start the blower
- 4) Turn on the oxygen cylinders
- 5) Set the oxygen flow rate according to the number of people occupying the Refuge Station.

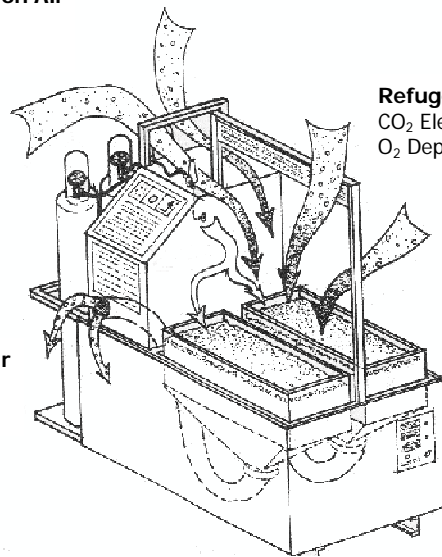
AIR/OXYGEN FLOW DIAGRAM

Refuge Station Air

CO₂ Elevated
O₂ Depleted

Processed Air

CO₂ Removed
O₂ Added



Refuge Station Air

CO₂ Elevated
O₂ Depleted

MINIMUM PERFORMANCE CHARACTERISTICS

Single Bed Unit: (with 15 people)

Oxygen: 30 hours

Carbon Dioxide Absorption: 31 hours

Battery Capacity: 36 hours

Double Bed Unit: (with 30 people)

Oxygen: 20 hours

Carbon Dioxide Absorption: 31 hours

Battery Capacity: 36 hours

TEST REPORT & MORE INFORMATION

The REFUGE ONE AIR CENTRE has been tested under realistic conditions. To obtain more information or the results of the CANMET Mining Research Laboratory test report, please contact us at the address below.

More information, including a comprehensive guide to providing respirable air in a refuge station entitled "Respirable Air Handbook" is available on our website or at the address below.

Note: This data sheet contains only a general description of the REFUGE ONE AIR CENTRE. While uses and performance capabilities are described, under no circumstances should the product be used except by qualified, trained personnel, and not until the instructions, labels and other literature accompanying them have been carefully read and understood. All safety precautions must be followed. In accordance with RANA-Medical's policy of continued development, specifications subject to change without notice.

For More Information, Please Contact:

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