

20 Men Blast Proof H₂S Shelter



This 20 Men Blast Proof H₂S Shelter from Uniteam is a customized solution for easy transport and relocation. It is built by 1x50' container with A-60 fire rating and blast proof protection with 690mbar for 20msec.

With compressed fresh air breathing system, it will protect employees for more than 2 hours during an emergency. F&G system and MIMIC panel will make sure your warnings are informative and correct with a SIL-2 control system.

The Shelter consists of Airlock Area and Battery Room with 25~50Pa overpressure, Muster Room and Equipment Room with 50~75Pa overpressure.

Muster Room is approx. 16.5 Sqm and equipped with 2 toilets and long stools where stores SCBA, portable gas detectors and first aid kits for 20 men using in an emergency evacuation.

Equipment Room is used for installing Breathing Air Bottle Bank, PRP Cabinet, Power Distribution Panel and PLC system, Batteries are located in a separate room which is A60 fire rating.

People are requested to enter Airlock area first before going to the Muster room in case of bring in toxic gas.

A 360-degree rotating camera on the roof can monitor the external environment timely.

Specification

Structural

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| 1x50ft High Cube Container | Size: L x W x H 15000 x 3000 x 3000 mm |
| Insulation | 25mm B15 panel + 50mm thickness Rockwool |
| Fire rating | A-60 fire rating |
| Blast protected | 690 mbar / 20msec |
| Doors | A-60 Heavy duty gas tight & blast |
| Painting | Offshore painting |
| Evacuation time | 2 hours + 20% |

Electrical

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|--------------------|---------------------------------|
| UPS | 2 hours for emergency equipment |
| Cables | Acc. to Offshore and petroleum |
| ATEX zone approval | 1, 2 and safe area |

Instrumentation

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|---------------|---|
| Detectors | Internal H2S/CH4/CO2/CO/O2/SO2/H2, External H2S/CH4/Smoke detector |
| Airlock | With interlock system activated in emergency situation |
| Over pressure | 50~75Pa in Muster room/Equipment room, 25Pa~50Pa in Air Lock and Battery room |

HVAC

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|----------------------|--|
| Breathing Air system | 2hours +20% with SIL-2 operation and manual override |
| HVAC system | Split AC unit & fresh air fans (redundant) |
| AC External | EX ATEX zone 1 |