Blast Doors & Valves Page 1 of 7

# UTAH SHELTER SYSTEMS Inc.

Salt Lake City, Utah

**AND** 

# ANDAIR AG

Andelfingen, Switzerland

## DOORS & ACCESSORIES

"The Strongest and Best Designed Shelter Hatches to be Found in the Marketplace"

USS Inc. Blast Door
Features
Front & Side Views
Accessories

ANDAIR (LUWA) Armored Door

Self Rescue Device

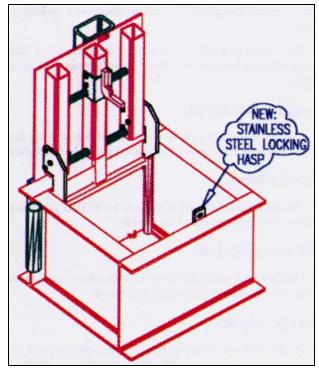
ANDAIR Blast Valves
Inlet Blast Valve 1 bar
Exhaust Blast Valve 1
bar

Inlet Blast Valve 3 bar Exhaust Blast Valve 3 bar

USS Inc. -Blast Door

This blast door has been designed to fit a 30"to 48" diameter steel entrance tunnel. The door has a 31 in. square entrance.

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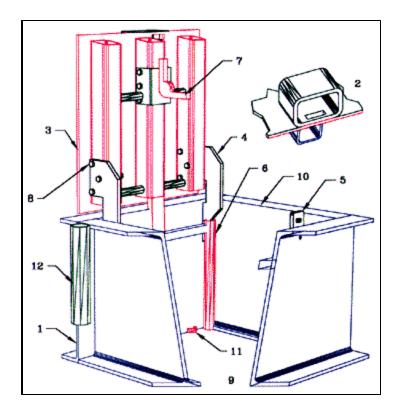


We recommend horizontal (flat) installation of this door. A different lifting mechanism would need to be retrofitted for steeper angled installations. Angled installations significantly diminish the blast capability of doors and shelters.

The door opens with little effort.

**Blast Door Features** 

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### Overall hatch strength

- 1. The hatch body is constructed of fully welded I-beams, resulting in the strongest, most secure hatch door that can be manufactured for home use.
- 2. The door lock location has a full 7/8" thick steel wall. Almost triple that of any other hatch.
- 3. The stee membrane door is contructed of 3/8 inch steel plate.

#### **Fully concealed construction**

- 4. The hinges are fully concealed and constructed inside the hatch frame making it impossible for any intruder to enter by cutting the hinges.
- 5. The locking hasp is fully enclosed and to the under side of the door skirt. is removable from the inside.

#### Adjustable strut

6. The door comes complete with shock dampened spring loaded strut, allowing for easy and safe entry.

#### **Inside latch**

## Removable locking hasp

8. The steel membrane door is reinforced with 3 inch square steel tubing for added strength with a minimum 150 psi rating.

### **Large Capacity**

9. The generous sized hatch 31 inch square opening can accommodate a 55 gallon drum.

#### **Ladder Connection**

- 11. The ladder is designed to be welded to the under side of the door skirt.
- 12. A winch base is included to allow for the adaptation of an optional winch accessory, to lower light weight items (up to 250 lbs) into and out of the shelter.

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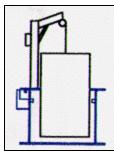
7. The internal locking latch is designed for 5000 lb. pressure to insure against unwanted entry from the outside. It also resists the negative pressure phase of a nuclear explosion passing over the hatch.

## Accessories

#### **WINCH**

Lowers objects into and out of the shelter

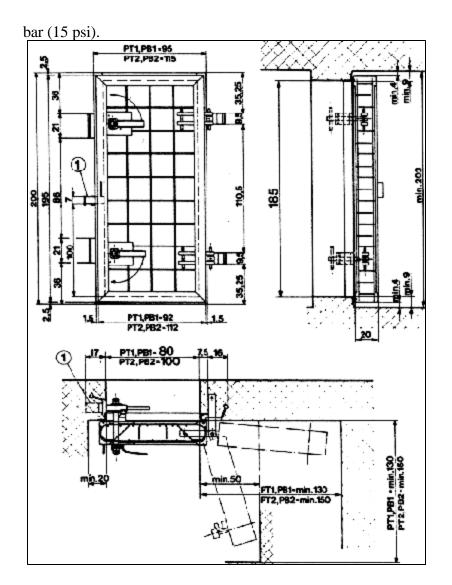
(250 lb. capacity)



## ANDAIR AG (LUWA)-Armored Door

The PT series exterior armored doors are vertical hanging doors designed for concrete shelters. **They have been designed and tested** by Andair AG in Andelfingen, Switzerland according to the directives of the Swiss Federal Office of Civil Defense. They are rated at apx. 1

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The PT1 is 80 cm. by 185 cm. and the weight without the concrete filler is 200 kg. It has outside mounting with a fixed door sill. Hinges can be on either the LH or RH side. It consists of a steel frame to cast made of angle-profile with anchor plates.

Larger sized exterior and interior doors are available upon request.

PT2....100 X 185 cm.

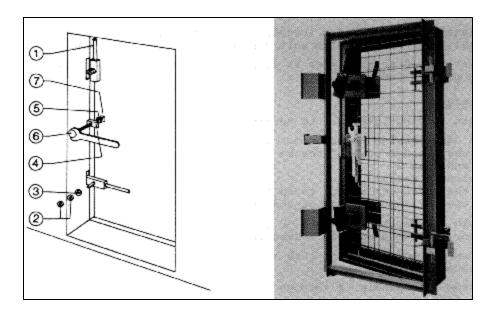
PT3....140 X 220 cm.

PT4.... 60 X 120 cm.

PTO double door......240 X 210 X 20 cm. thick.

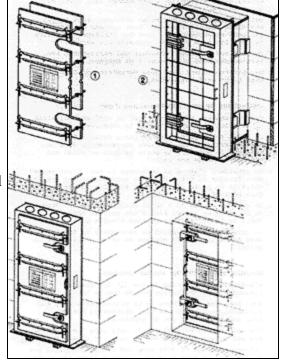
## Self Rescue Device

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## **Mounting Instructions:**

- -Use shuttering boards or a standardized shuttering device (1).
- -Door body and frame must be placed vertically and accurately wedged to the wall shuttering boards (2).
- -The wall and frame must be cast first. The door is cast in a closed position after the concrete in the wall has set (apx. 30 days). Quality of concrete to be (300 kg / cm<sup>2</sup>)
- -A minimum clearance of 4 cm. is required between top edge of door body and finished ceiling, and bottom edge of door body and finished floor.
- -The rubber seal must not be removed while casting and painting.



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