

Concealed System

Air Ventilation and Filtration for Public Shelters



Model Hidden-33



All walls remain free



Main Advantages

- Out of Sight - Installed overhead above drop ceiling, not occupying usable wall area
- Always Ready - No need to remove or mount anything
- Switch-over from ventilation to filtration mode simply by pulling a handle
- Safe - All components are above an average person's height
- No exposed ducts
- Manual backup drive stored within system housing and is drawn out only in power failure
- Delivers 400 m³/h fresh air or 200 m³/h filtered air
- Flexible installation options are available – according to the room structure



Compliant with Israeli standard

Development - Design - Production - Installation



Certified Quality Assurance Program According to AQAP-2110





System Description

- All system components - filter, blower, manual backup drive - integrated into one modern housing
- Installable onto the wall right under physical ceiling or above drop ceiling as high as desired, leaving the **wall area below and the floor free** for normal uses
- Readily connected and configured for delivering 400 m³/h fresh air in conventional times by plugging the power cord in and pressing a switch. In this mode the air flow bypasses the filter
- Under CBRN alert, simply pulling a handle engages the filter, automatically switching the system into CBRN-Filtration mode. In this mode it delivers 200 m³/h of purified air for up to 33 people
- A manual backup drive is stored inside the housing behind the service door. In case of power failure it is pulled out and used to operate the blower manually
- For optimal room fit, the system is available in two different directions of mounting and manual operating

CERTIFICATIONS

- Tested and certified by the Standards Institution of Israel and the Israeli Institute for Biological Research
- Approved by the Civil Defence Command
- Quality control according to ISO 9001 and AQAP 2110

Technical Specifications - Model Hidden-33

Product No.: B91405

A. Air Intake Blast Valve with Prefilter ESVF 803/403

| | | | |
|-------------------------------|--|-----|-----|
| Incident Pressure Durability: | | 300 | kPa |
| Pressure Drop: | Ventilation Mode (400 m ³ /h) | 60 | Pa |
| | Filtration Mode (200 m ³ /h) | 20 | Pa |

B. Ventilation and Filtration System

| | | | |
|---|-----------|--------|---------|
| Weight (incl. housing, filter and blower): | | 100 | kg |
| Separation Efficiency with Particle Size of 0.3 Micron: | | 99.995 | % |
| Blower Single Phase Electric Motor: | Voltage | 230 | Volt |
| | Frequency | 50 | Hz |
| | Current | 1.9 | Ampere |
| Manual Operation: | | 2 | Persons |

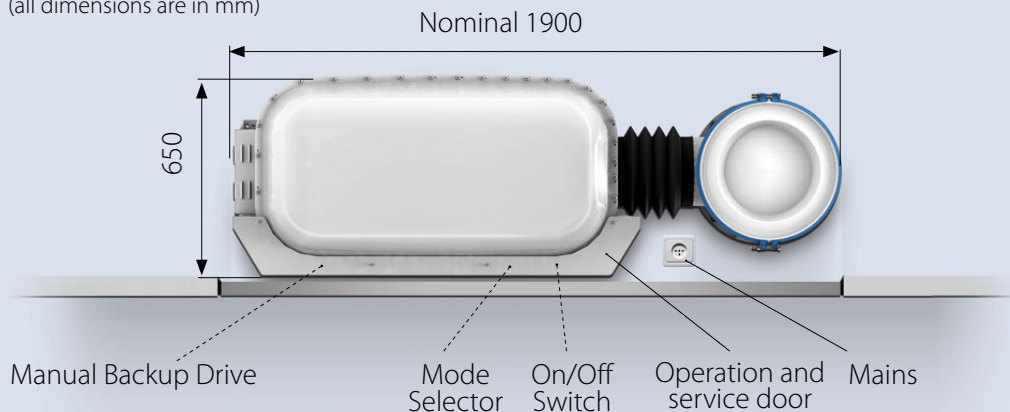
C. Overpressure Blast Valve A 510

| | | | |
|-------------------------------|--|-----|-----|
| Incident Pressure Durability: | | 300 | kPa |
| Pressure Drop: | Ventilation Mode (400 m ³ /h) | 205 | Pa |
| | Filtration Mode (200 m ³ /h) | 140 | Pa |

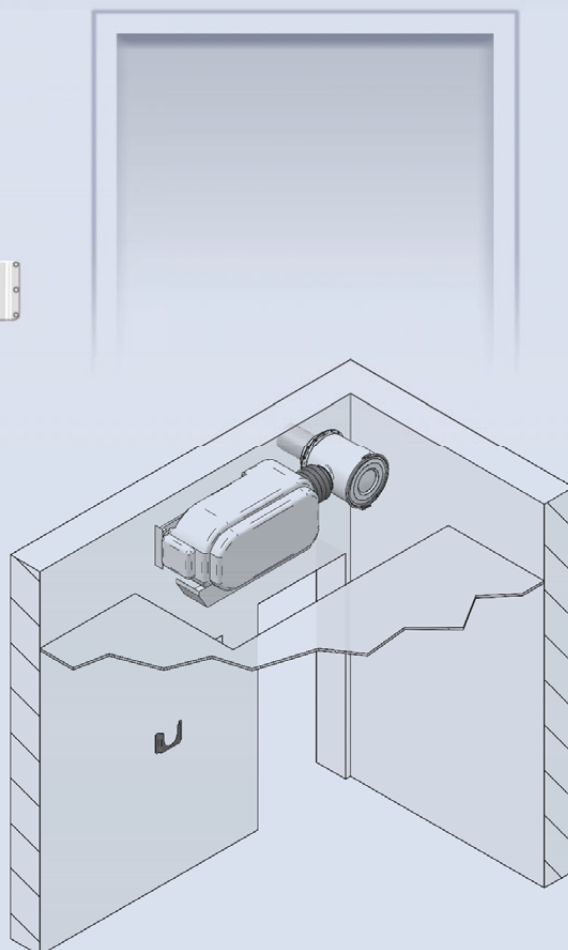
Specifications are subject to change without prior notice.

Overall Dimensions (showing Left-hand version)

(all dimensions are in mm)



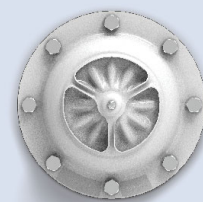
Manual crank socket



Shelter Design Requirements

Air Intake 8" Wall Sleeve: at least 35 cm below concrete ceiling, but no more than 305 cm from the floor.

When installed above drop ceiling: leave access opening 100 x 220 cm below the system. A hatch or a removable cover may be installed over the opening.



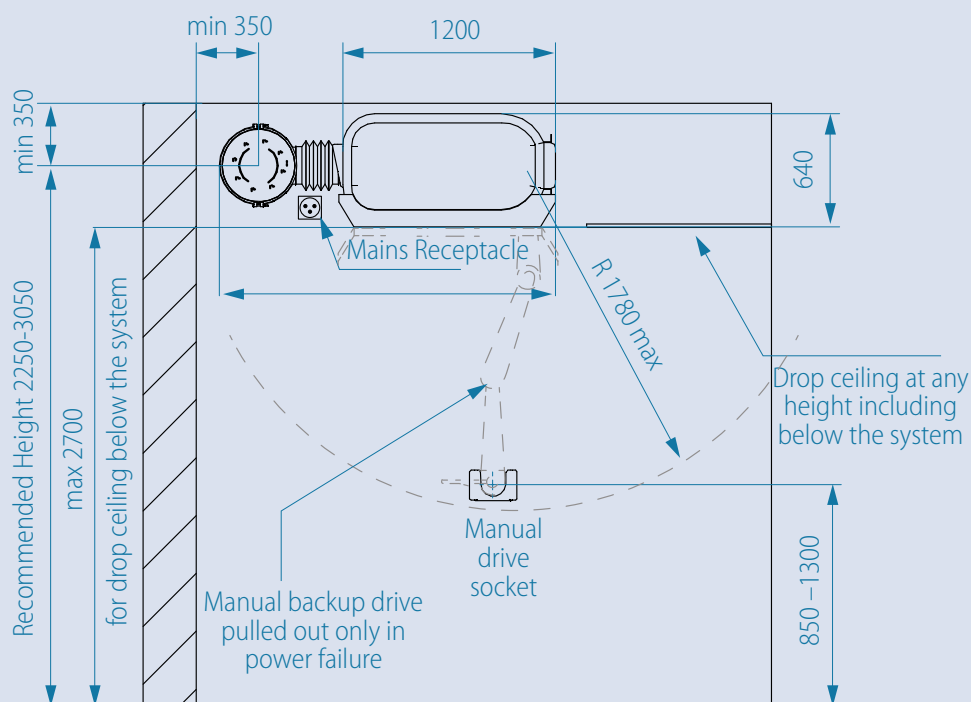
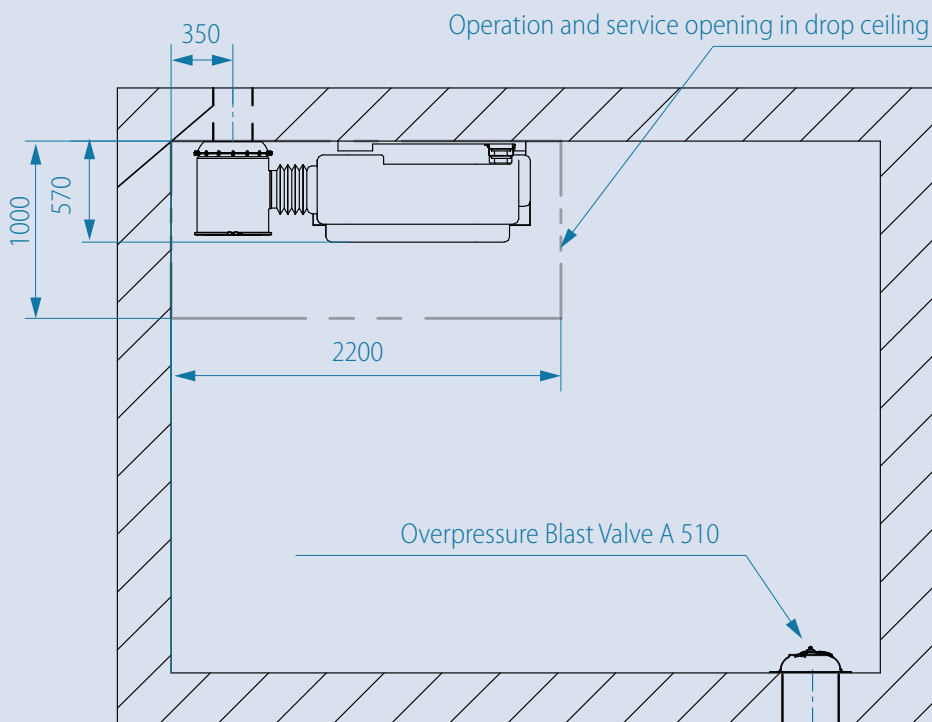
**Overpressure
Blast Valve
A 510**



**SYSTEM
INSTALLATIONS
REQUIREMENTS**

- **Air Outlet:**
8" flange according to BS 4504 – PN 6 or DIN 2501 – PN 6 located preferably at an outside wall, opposite the air inlet

General Dimensions for Installation - Including Above Drop Ceiling
(showing Right-hand version)
(all dimensions are in mm)



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