MFC International
by RESPIREX
ENGINEERED INFLATABLE PRODUCT SOLUTIONS

Rapid Response Shelters

Rubber Product Manual

Index

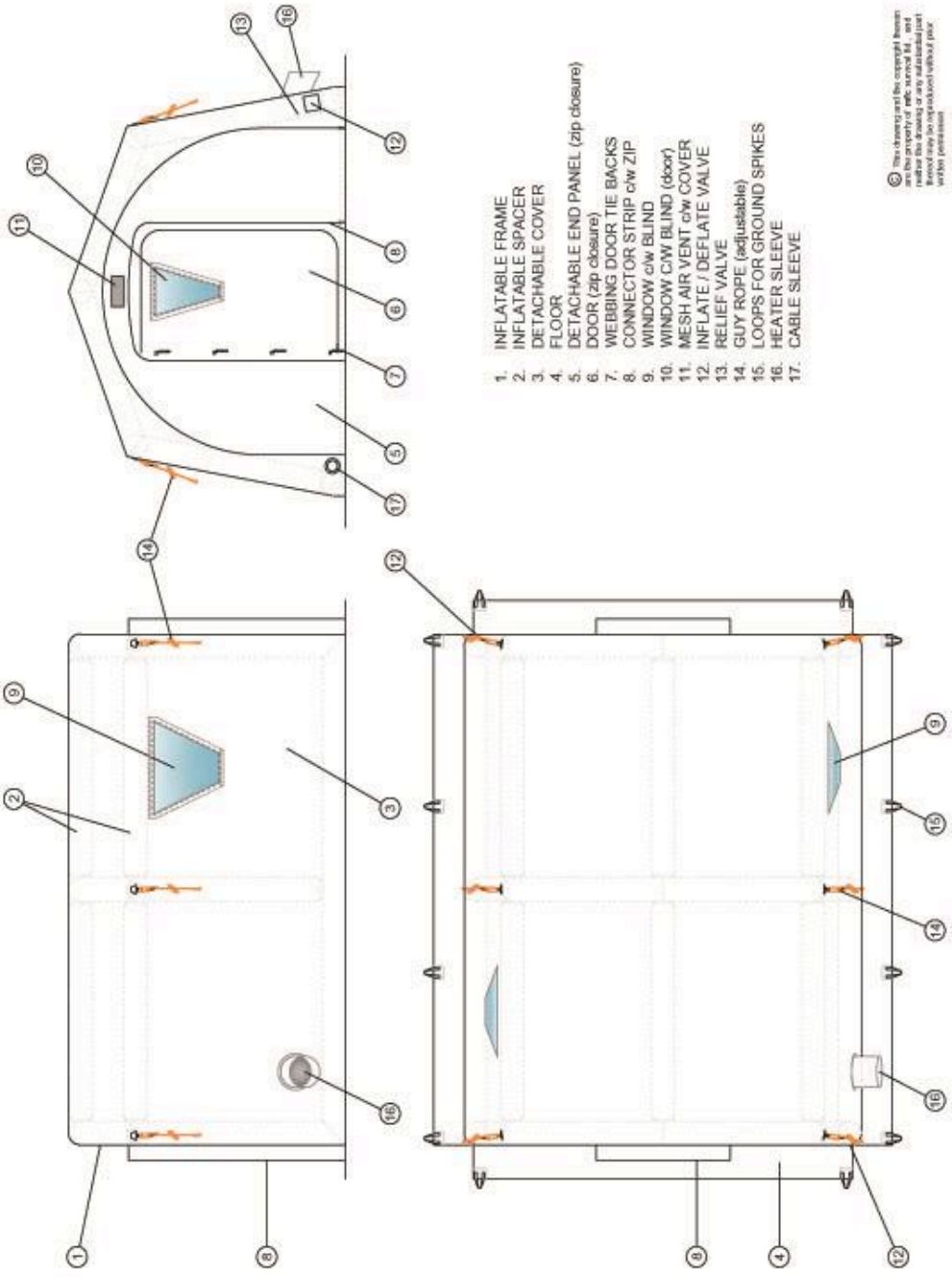
WARNING: Carefully read this manual before operating the Rapid Response Shelter.

NOTICE: The manufacturer takes no responsibility for the consequences of actions not complying with the instructions given in this manual.

Technical Data									
Type	**9**	**12**	**16**	**20**	**25**	**30**	**36**	**51**	**60**
Length (cm)	300	400	400	500	500	600	600	850	1000
Width (cm)	300	300	400	400	500	500	595	595	595
Height (cm)	263	263	280	280	290	290	308	308	308
Weight packed (kgs)	36	45	58	68	78	88	105	125	175
Air Requirements (Ltr)	1300	1850	2600	2900	3050	3700	5900	8100	9600
Pack Size LxWxH (cm)	120x66 x41	120x66 x41	130x66 x50	130x66 x50	140x80 x66	140x80 x60	140x80 x60	160x80 x66	16x100 x70

Note: all dimensions are accurate to ± 3% and all weights are accurate to ± 5%

Parts List



 Note: Image is for illustration purposes only.

Materials List

	Item	Description
1	Inflatable Frame	Neoprene Coated Polyester - Black
2	Inflateble Spacer	Neoprene Coated Polyester - Black
3	Detachable Cover	P.U Coated Polyester
4	Floor	PVC Coated polyester - Black
5	Deatchable end panel	P.U Coated Polyester, Zip closure
6	Door	P.u. Coated polyester, Zip closure
7	Webbing Door tie backs	2.5cm polyester webbing
8	Connector Strip	P.U. Coated polyester C/w zip
9 10	Window C/w Blind	Glass clear PU sheet P.u. Coated polyester blind, Velcro closure
11	Air Vent c/w Cover	Polyester mesh ventilation panel, P.U Coated polyester internal cover, Velcro closure.
12	Inflate/ Deflate Valve	Leafield C7 - Black Acetal
13	Relief Valve	Leafield A6 - Black Acetal, 0.2 bar
14	Guy Rope	Polyester c/w Nylon adjuster
15	Loops for ground spikes	2.5cm Polyester webbing
16	Heater sleeve	P.U coated polyester, Polyester webbing closure
17	Cable Sleeve	P.U coated polyester, Polyester webbing closure
18	Valise	PVC Coated polyester - Orange
19	HP inflation hose	1.0m reinforced hose c/w C7 valve adaptor
20	Repair kit	70ml tube Neo. adhesive, Neoprene patches x4

Operational Instructions

To obtain the best performance from the shelter, particularly if a long-term use is envisaged, the following site conditions are desirable:

a) A reasonably level surface.
b) Freedom from stones, sharp objects or holes in the ground.
c) No spilt oil or chemicals.

Remove the shelter from the valise and unroll it so that the shelter will inflate with one corner facing the prevailing wind (where possible).

Secure the shelter to the ground using metal tent pegs through the webbing loops fitted around the external skirt. (Tension the floor to remove any slackness.) If this is not possible secure using suitable ballast.

2. Inflate the shelter using the inflate / deflate valve. The valves are located on the bottom right corner of the upright tube on both ends of the shelter under the lift up flap. Ensure the central valve diaphragm is closed; i.e. the internal spindle is raised. (push and turn to release)

2.1. Cylinder Inflation (Regulated) - C7 valve.
Connect the delivery hose to the regulator on the air cylinder. Connect the other end to the inflate / deflate valve on the shelter.
Hold delivery hose tight into inflation valve, open the cylinder valve until the relief valve inside the shelter (adjacent to the inflate/deflate and h.p.i. valve, if fitted) begins to vent, close cylinder valve and disconnect the delivery hose.

WARNING: Do not release delivery hose during inflation. Failure to do this may result in personal injury.

2.1.1 Cylinder Inflation (Regulated) - Broom & Wade coupling (if fitted).
The high-pressure inflation point is situated below the inflate/deflate valve, near the bottom front right corner. Connect the inflation hose to the regulator on the air cylinder. Connect the other end to the coupling on the shelter. Open the cylinder valve. When the relief valve in the shelter begins to vent, close the cylinder valve and disconnect the inflation hose.

2.2. Electric Inflator.
Attach inflation hose to Inflate / deflate valve. Switch on the Inflator. When the relief valve on the shelter begins to vent, switch off and remove the inflation hose. As far as is practically possible, the Inflator must not be left to run after the inflation process is complete

2.3. When the Shelter is fully inflated, ensure that the inflate / deflate valve dust caps are replaced and the cover flaps are closed to prevent ingress of dirt and water.

NOTE: During the inflation procedure, it is recommended that the shelter be supported by using the guy lines to guide the shelter upright.

2.4. To ensure the shelter retains its rigidity during or after a fall in ambient temperature it may require the pressure to be topped up until the relief valve blows off, this is normal and not indicative of a problem with the shelter.

2.5. In the event of a significant rise in temperature, the integral relief valve will vent the excess air to ensure that the shelter remains at a pressure of 0.2 bar.

3. Guy Ropes.
Fasten the Guy Ropes to the ground with metal tent pegs, or to other convenient strong points.

NOTE: Do not over-tighten the guy ropes as this can cause the shelter to become distorted.

4. Doors.
The zip doors can be operated from inside or outside the shelter. Tie backs are provided to secure the doors open if required.

WARNING: To prevent possible injury from tripping, care should be taken when stepping into and out of the shelter.

5. Linking shelters.
Shelters of different sizes can be linked together end to end. Shelters can be joined front to back by zipping the connector strips together. The connector strip is the flap of material around each door.

6. Ventilation.
A fine mesh air vent is fitted in both door panels, positioned above the door. An internal flap is fitted that can be used to close the vent if required.

7. Heater sleeve.
Closable heater sleeve/s are fitted into the side of the cover for the provision of heating or air conditioning units.

8. Cable sleeves.
Closable cable sleeves are fitted in the ends of the cover to allow electrical cables or flexible pipes to be run into the shelter.

9. Lighting.
LED light units can be hung from snap hooks fitted to the underside of the ridge spacers if required.

10. Window blinds.
The windows in the shelter are fitted with privacy blinds which can be rolled up and secured open when not required by using the webbing ties provided

11. Cover & end panels.
The cover and/or end panels may be removed from the inflatable frame and replaced if required.

Packing

1. Remove all items from inside the Shelter. The floor must be cleaned thoroughly before packing can commence. If the floor panel has been removed, it must be replaced before the shelter is deflated and packed.

2. Untie the Guy Ropes and reef them - neatly.

3. Deflate by unscrewing the white, threaded, valve body.

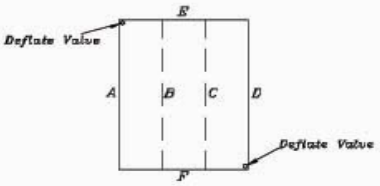
4. Before commencement of the folding operation, ensure that as much air as possible has been evacuated from the frame.

> **Caution:** To prevent possible damage, do not walk on the deflating shelter to expel the air.

5. When the Shelter has been completely folded it can either be (a) Lifted into the Open Valise, or (b) The open valise can be fitted over the Shelter and rolled into the upright position.

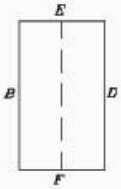
6. Fasten Draw Straps to secure the End Flaps, and then fasten the Lateral Straps.

STAGE 1



Fold Line A to Line C

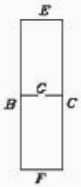
STAGE 2



Fold Line D to Line B

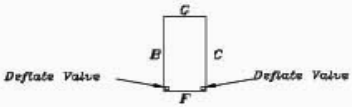
(After Stage 2, use Valise to Measure Finished Fold)

STAGE 3



Fold Line E to Line F

STAGE 4



Roll / fold from End G to end F

Maintenance & Test Procedures

1. The following is a recommended regime for maintenance & test.

1.1. Cleaning.
This should be carried out using soap and water.

> **WARNING:** To prevent possible damage. Do not use strong detergents, bleach or any type of hydrocarbons

If the shelter cover becomes excessively contaminated, and cannot be cleaned, it can be removed from the inflatable frame and a replacement can be sourced from the manufacturer.

2. Quarterly

2.1. Check control equipment as per relevant manual.

2.2. Inflate Shelter unit to working pressure.

2.3. Check audible relief valve operation.

2.4. Whilst inflation system is charged, check connections and valves using brush and soapy water.

2.5. When relief valve has operated, and the unit is at working pressure; it can be left to stand for a length of time that would be comparable to an operational situation (e.g. 6 to 8 hours.)

2.6. After this time, the Shelter unit should still be firm.

2.7. If the Shelter unit has become soft, the air-loss should be located by applying a soapy-water solution. It should be noted that, due to the type of fabrics used in its construction, when the shelter frame is wet, there may sometimes be visual evidence of miniscule white bubbles, which form a line of froth at the seams and joints of the unit. This is recognised within the industry as 'lateral leakage', and is simply air that is trapped in the layer of Polyester between the Neoprene coatings, forcing its way to the nearest available edge of the fabric. This type of leakage will not affect the performance of any inflatable product over the course of an operational procedure, and can be safely ignored.

However, if there is evidence of large, transparent bubbles, this is clearly evidence of a leak that must be repaired at the earliest convenience.

2.8. Any significant leaks (see above) should be marked and repaired using the repair kit provided.

Recommendations

1. Shelters should undergo an annual test carried out by the manufacturer, or persons certified by the manufacturer. If in doubt contact the service department.

Repairs

As a general rule, punctures and other damage will need to be assessed in two categories:

a) That which is repairable at the base, or
b) Serious damage that will need to be repaired by the manufacturer or certified persons.

a) Repairs that are manageable at the base workshops will be minor punctures to any area of the Shelter. These can normally be repaired by the application of a small repair patch.

b) Repairs that should be carried out by the manufacturer or certified persons will be the more serious kind, such as damaged valves, badly torn fabric (either on the frame or the liner and reservoir surfaces) and the replacement of damaged fittings.

If in doubt as to the extent of the damage and the level of repairs necessary, please contact the manufacturer.

Storage

Preparation for storage

1. On return to base the Shelter should be unpacked, inflated and left to dry.

2. When the Shelter is completely dry it should be checked for wear or damage. If none is found it should be repacked in the valise.

3. If any damage is found it should be repaired immediately in accordance with the Repair instructions.

4. Where possible the packed Shelter should be stored on the floor or suitable shelving, ensuring no damage can be caused by it's proximity to other items of equipment.

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