



RESPIREX™



Instructions for use of Two-Piece Sellprotex Suit



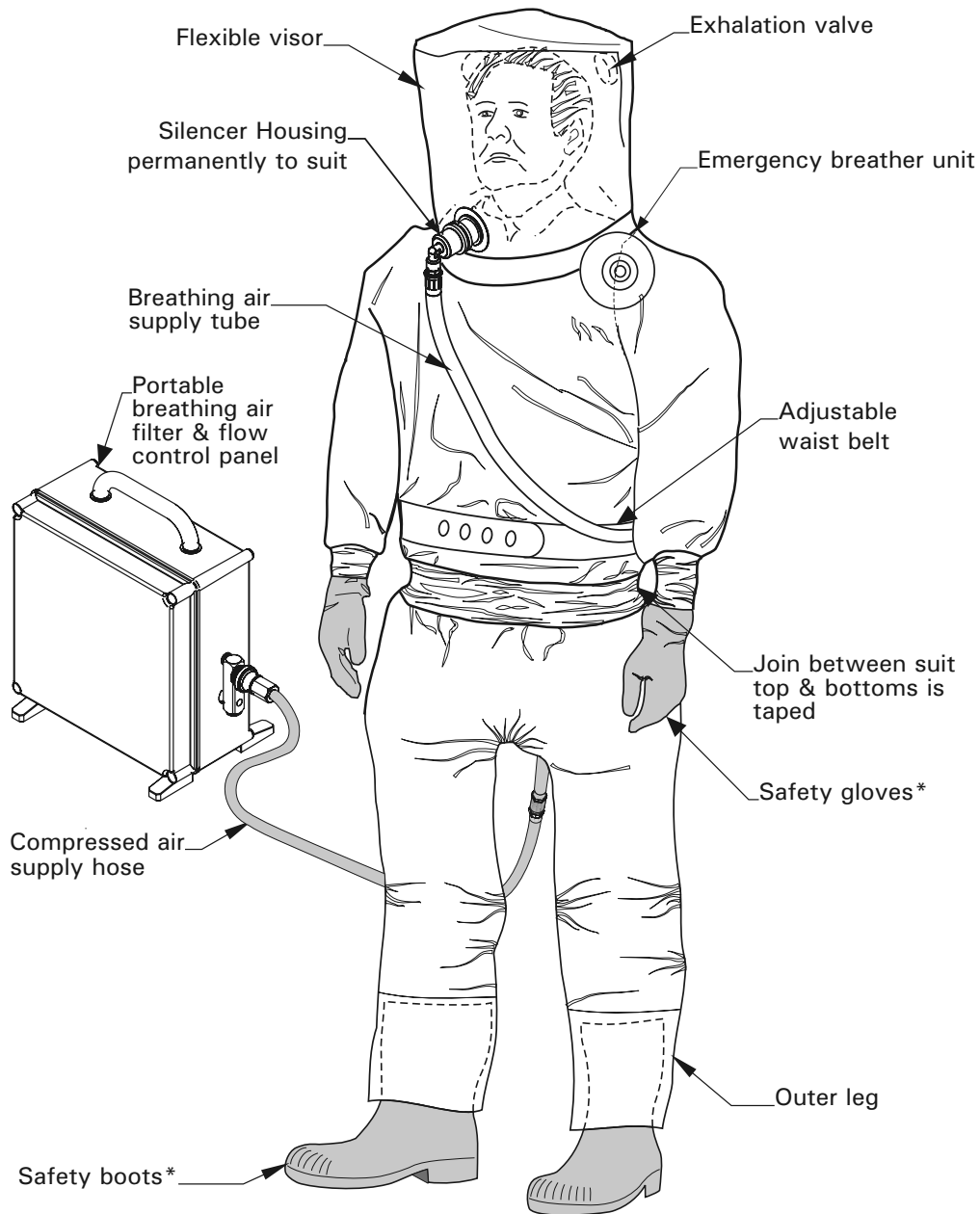
EN 1073-1: 1998



TABLE OF CONTENTS

General Information.....	PG 1
Limitations & Warnings	PG 2
Pre-Checks	PG 3
Use of Hand Held Inflation Tester	PG 4
Donning Procedure	PG 8
Use of Emergency Breather	PG 22
Doffing Procedure	PG 23
Instructions For Use Of Fall Arrest Harness	PG 24
Instructions for use of welding face screen fitted to Respirex Sellprotex suits	PG 25
Fitting Face screen	PG 25
Care & Maintenance of Visors/Face Screens.....	PG 26
Inspection And Replacement Of Component Parts	PG 26
Recommended Storage Conditions.....	PG 26
Suit Labelling	PG 27
Physical properties of Velbex™ S5520 calendered PVC foil.....	PG 28
Sizing.....	PG 29

General Information



*Not supplied with suit

These garments are for use within certain contaminated environments only. You must carefully read and follow these operating instructions closely.

The Sellprotex suit is designed for use with breathable air supplied from an external compressed air source. The quality of breathing air flowing into the suit unit must comply with EN12021:2014.

Sellprotex suits **MUST** be used in conjunction with either a Respirex breathing air filter/flow control panel (Part No.G00604) or an in-line flow control panel that is calibrated and is adjustable to give the correct flow rate into the suit.

- Minimum flow rate 120 litres/min
- Maximum flow rate 300 litres/min

All Respiratory Protective Clothing is UKCA and CE marked to indicate compliance with European Regulation 2016/425 on personal protective equipment (PPE) and Regulation 2016/425 on personal protective equipment as brought into UK law and amended. The Sellprotex suit complies with EN1073-1:1998 (ventilated protective clothing against particulate radioactive contamination); this specifies the performance requirements for the suit and its materials of construction.

Sellprotex suits are manufactured from translucent Velbex™ S5520 calendered PVC foil (see page 28 for physical properties).

UKCA and CE Declarations of Conformity can be found at www.respirex.com/doc

Limitations & Warnings

- **Sellprotex suits are designed for single use only.**
- **Never use a suit directly from cold storage conditions.** If the suit is removed from cold storage it must be allowed to stabilise at a temperature of at least 10°C before use.
- The recommended temperature range for the suit during use is -3°C to + 37°C.
- Extra care must be taken at the extremities of the usable temperature range. Some component parts may become harder and the suit stiffer at low temperatures. At high temperatures some component parts can soften and the suit may become more flexible.
- Do not use any suit exposed to extreme temperatures.
- Adequate protection may not be provided by the suit in atmospheres that are immediately dangerous to life or health (IDLH).
- The suit must **NOT** be used with oxygen only or oxygen enriched air.
- At high work rates the pressure in the suit may become negative at peak inhalation flow or during bending or squatting.
- Care must be taken to ensure that the suit is being used from the correct length and bore of air supply hose as a low airflow may cause a less efficient protection.
- The Respirex two-piece Sellprotex suit is manufactured from non-breathable materials. Persons who show any signs of excessive stress such as fever, nausea, dizziness, eye irritation, difficulty in breathing, becoming fatigued or any unusual order or taste should leave the work area **immediately** and remove themselves from the suit.
- The garment must only be used in the hazardous area for which it is intended. Always follow the instructions carefully otherwise the protection offered by the garment may be drastically affected.

- Extremely hot or cold water temperatures must be avoided during showering.
- Do not use excessive force when removing the suit.
- Always use compatible PPE, e.g. gloves, safety boots, welders over suits, leathers, grinding shields, welding shields, etc advised by Respirix.

For any enquiries please contact the Respirix customer services department on Tel : +44 (0)1737 778600, Fax : +44 (0)1737 779441 or Email : info@respirex.co.uk

Pre-Checks

Respirex recommend carrying out the following pre-checks prior to donning the Sellprotex suit:

1. Visually inspect the suit for any damage that may impair the correct working of the garment.
2. Ensure that the breathing tube is securely attached and is not damaged.
3. The suit is free from contamination both internally and externally.
4. The suit is free from tears and holes; pay particular attention to the seam areas.
5. Vision from the visor is not obstructed by large scratches or heavy scuff marks.
6. Respirix recommend that the exhalation valves are part of the visual pre-check. If the valve diaphragm is distorted or damaged in any way it must be replaced.
7. Perform an inflation pre-check of the suit top and bottoms as detailed on pages 4 to 7 using a Respirix hand held tester, part no. G00610. If any leaks are discovered consult your supervisor. **NEVER USE A LEAKING SUIT.**

Inspection of the compressed air supply tube (medium pressure connecting hose) which supplies breathing quality air to the operator must be carried out at least once per month and before each shift cycle and the results recorded.

During the inspection the following should be checked:

1. Lines are clean externally.
2. Lines are free from damage (holes, splits, etc).
3. Air line coupling connections are in good working order.

Submerge in water to locate any leaks if any sign of external damage is evident.

Report any defects to the supervisor and record them. The compressed air supply tube must **NOT** be used until the defect has been rectified.

Use of Hand Held Inflation Tester

Inflation pre-checking of the Sellprotex suit should be carried out using a Respirex hand held tester like that shown in Fig. 1, part no. G00610.



Fig.1

1. To check the suit top block off the exhalation valves fitted to the hood using the rubber bungs provided, Fig.2.

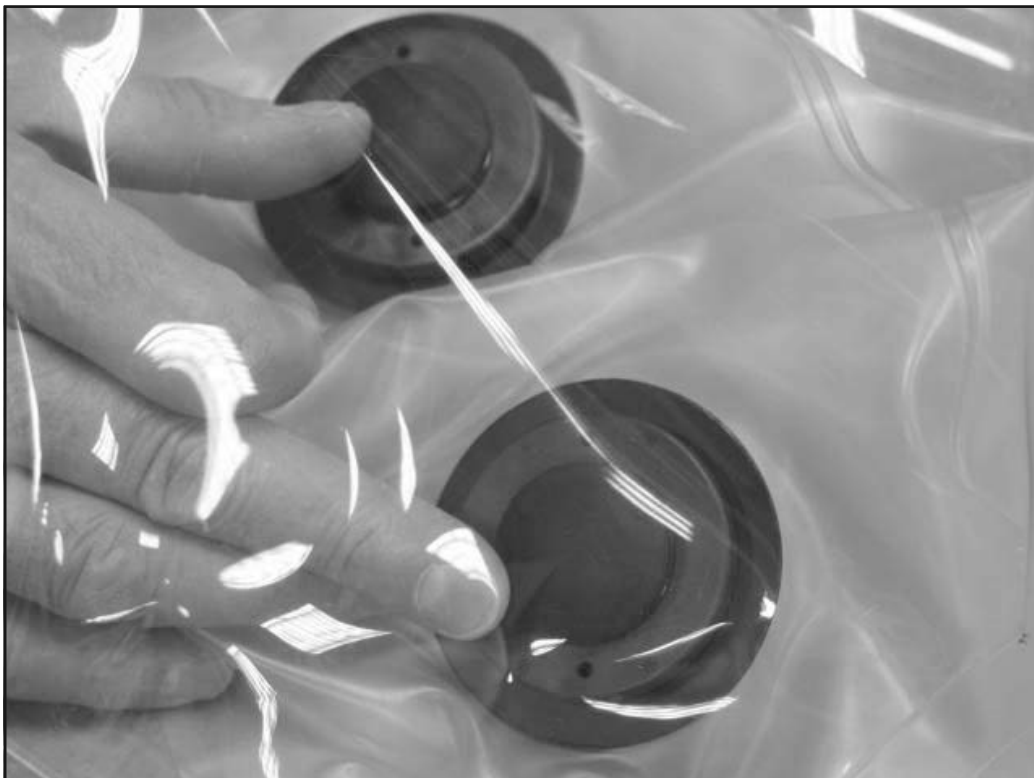


Fig.2

2. Fold over the ends of the sleeves and clamp together as shown in Figs.4 & 3.



Fig.4



Fig.3

3. Connect the hand held tester to a length of airline that is attached to the dressing line outlet of the portable breathing air filter/flow control panel. Position into the waist of the suit top and gather excess material around the tester, Fig.6. Slide the on/off valve on the tester to inflate the suit top, Fig.5.



Fig.6



Fig.5

4. When fully inflated check the suit top for leaks, Fig.8. On completion shut off the valve and remove the tester.



Fig.8

IMPORTANT!: AFTER THE INFLATION TEST THE RUBBER BUNGS MUST BE REMOVED FROM THE EXHALATION VALVES.

5. Perform an inflation pre-check of the suit bottoms using the same method as described in stages 3 and 4, Fig.7.



Fig.7

Donning Procedure

ALWAYS ENSURE THE WEARER HAS SELECTED THE CORRECT SIZE SUIT BEFORE BEGINNING THE DONNING PROCEDURE

It is strongly recommended that before anybody attempts to wear or use a Sellprotex suit, full training is given on wearing and decontamination by a competent person and the details of the training recorded. For safety purposes it is best to have an assistant to help you don and doff the suit. This makes the process easier and quicker and you will avoid stumbling or tripping which may result in personal injury or damage to the suit.

Follow these steps in putting on the suit:

1. Remove shoes (the suit bottoms are not designed to have footwear worn internally).
2. With the help of the dressing assistant step into the suit bottoms and slide your feet into the integral socks. Fold up the outer legs, Fig. 9.
3. Step into your protective safety boots, Fig. 10.



Fig.9



Fig.10

4. Roll down the outer leg over the exterior of the boots, Figs. 11 & 12.



Fig.11



Fig.12

5. Connect the suit belt airline to a compressed air supply tube (medium pressure connecting hose) supplying breathing quality air compliant with EN12021:2014. Ensure the correct flow rate is being delivered to the Sellprotex air system.
6. With the aid of the dressing assistant don the suit top.

7. With the waist band on the suit bottoms folded downwards and the waist band on the suit top folded upwards the dressing assistant should fasten the two halves of the suit together using the buttons provided, Figs. 13 & 14.

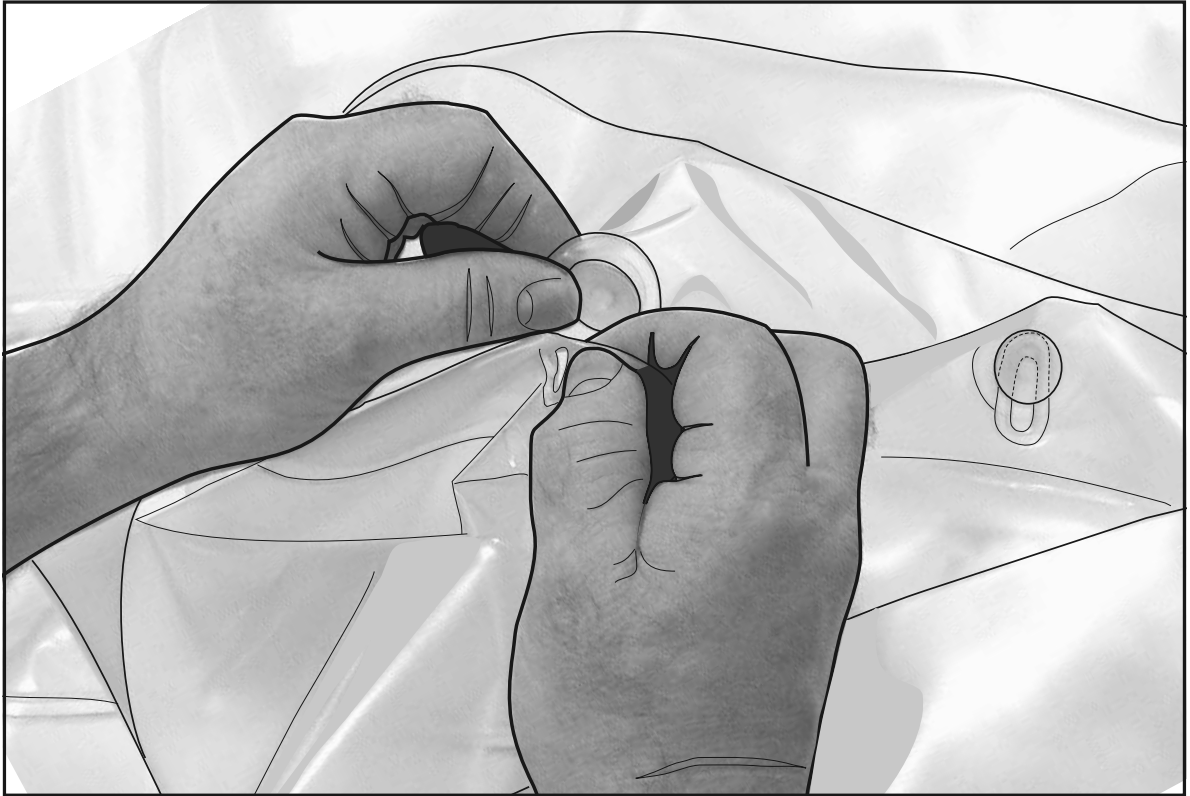


Fig.13



Fig.14

8. Fold the waist band on the suit bottoms upwards over the buttons, Fig. 15. Next fold the waist band on the suit top downwards over the exterior of the waist band on the suit bottoms, Fig. 16.



Fig.15



Fig. 16

9. The suit should now appear as Fig. 17.



Fig.17

10. The suit should be worn with two pairs of protective gloves. The dressing assistant should fit the first pair of gloves to the wearer, pulling the sleeves of the suit top approximately 6cm over the exterior of the gauntlet ends of the gloves. The excess material of the sleeve should have a double fold around the glove, Figs.18 & 19.



Fig.18



Fig.19

11. The wearer should hold the folded sleeve in position as shown in Fig. 20 in readiness for the dressing assistant to start applying 50mm wide sealing tape.



Fig.20

12. Before taping the dressing assistant should pull out an adequate length of tape from the roll to help minimize the effects of contraction after application, Fig. 21.



Fig.21

13. The dressing assistant should tape around the circumference of the wrists ensuring that the tape overlaps the ends of the sleeves onto the gloves as shown in Fig. 22. The wearer should continue to hold the folded sleeve in position.



Fig.22

14. Tape around the circumference of the wrists a minimum of three times. On completion double fold the end of the tape by approximately 20mm to allow for easy removal, Fig.23.



Fig.23

NOTE: When taping try to leave as few gaps and ridges as possible. Press the tape down firmly to ensure there is a complete seal.

15. Fit the second pair of protective gloves over the first pair and over the exterior of the suit sleeves, Fig.24.



Fig.24

16. With the sleeves still folded flat, seal around the second pair of gloves ensuring that the tape overlaps the gloves and the sleeve, Fig.25.



Fig.25

17. Tape around the circumference of the sleeve and glove a minimum of three times. On completion double fold the end of the tape by approximately 20mm to allow for easy removal, Fig.26. When taping try to leave as few gaps and ridges as possible. Press the tape down firmly to ensure there is a complete seal.

After completing the taping of the second pair of protective gloves the suit should begin to inflate.



Fig.26

18. Allow a minute for the suit to inflate. The suit should now appear as Fig.27.



Fig.27

19. The waist bands of the suit should lay smoothly together as shown in Fig.28.



Fig.28

20. The dressing assistant should pull an adequate length of tape off the roll and carefully lay over the waist bands where the suit top joins the suit bottoms, Fig.29.



Fig.29

21. Do not press the tape down at this stage, make sure that the tape is lying flat on the waist bands to produce a good seal, Fig.30.

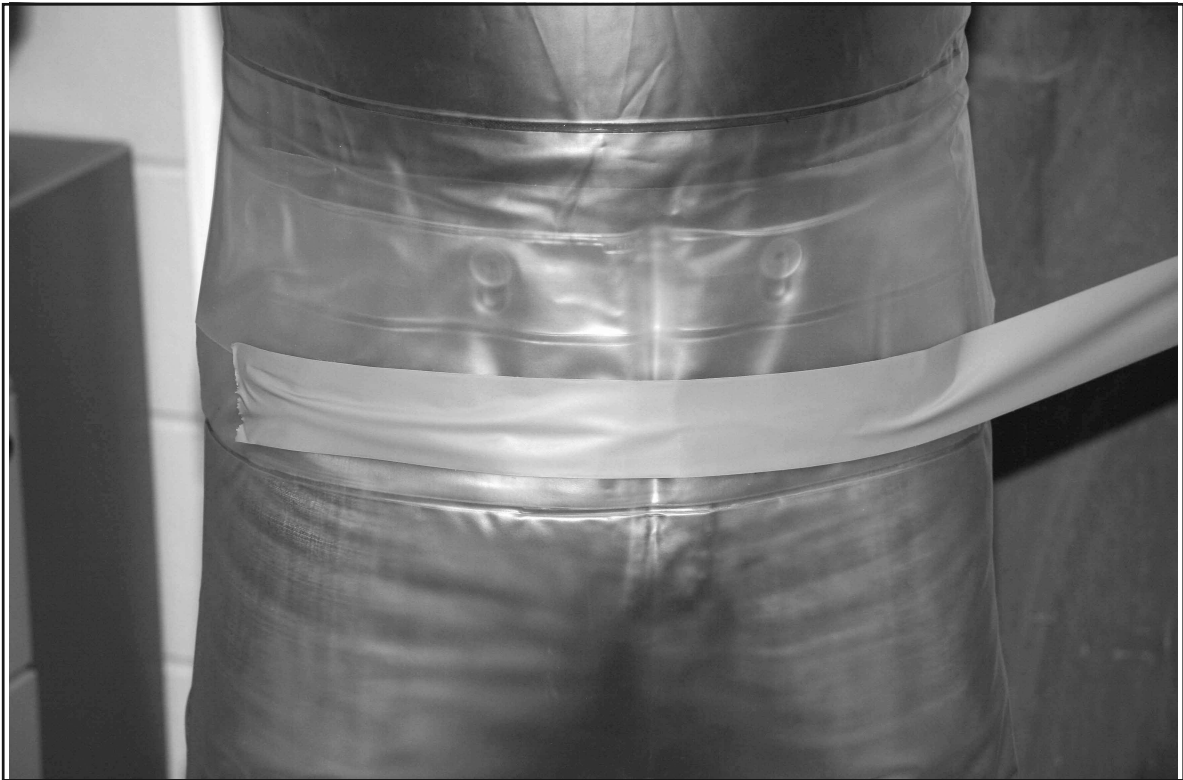


Fig.30

22. Tape around the circumference of the waist at least three times. Carefully press the tape down onto the waist bands ensuring that there are as few gaps and ridges as possible to achieve a good seal, Fig.31.



Fig.31

23. On completion double fold the end of the tape by approximately 20mm to allow for easy removal. The finished waist taping should appear as in Figs.32 & 33.



Fig.32

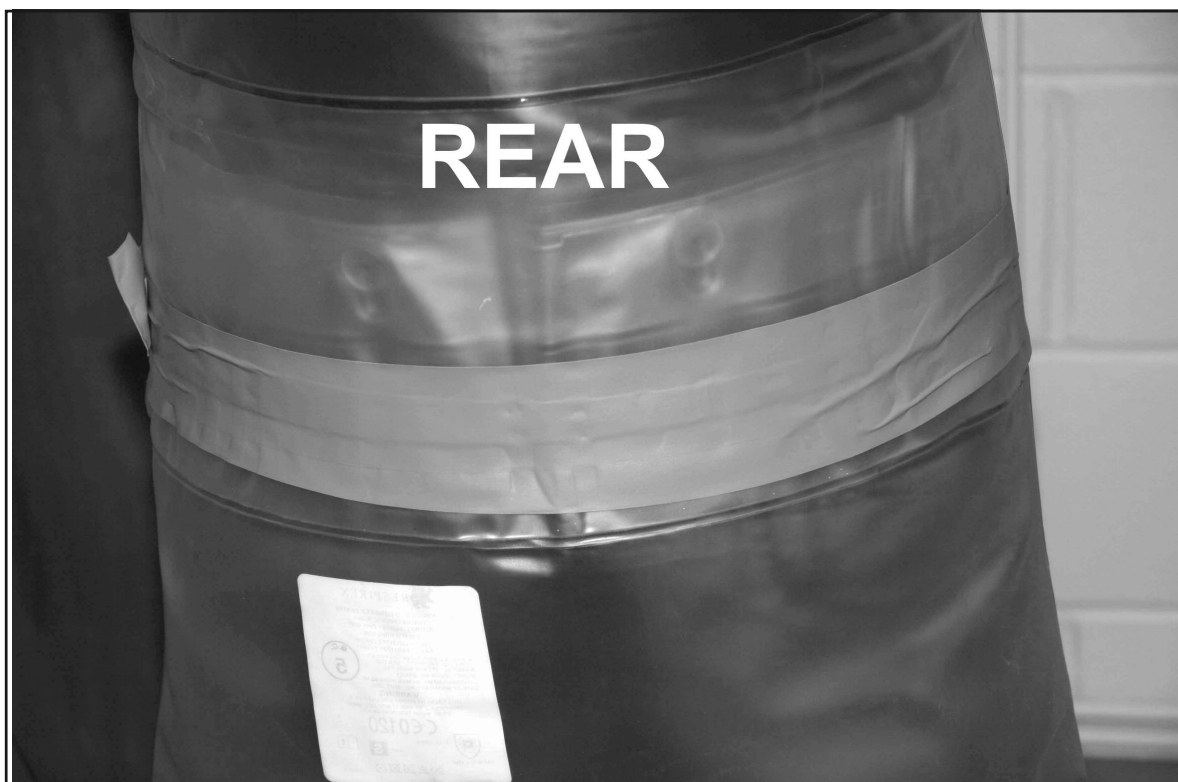


Fig.33

Note: The taping procedure is necessary to seal the suit, if not carried out correctly it will affect the protection offered. If you are not satisfied remove all tape and repeat the procedure from the beginning.

24. To ensure the crotch of the suit bottoms are pulled into the correct position the wearer's arms should be raised above head height before fitting the waist belt, Fig.34. Fit the waist belt so that it is tight enough to hold the crotch in position during operation.



Fig.34



Fig.35

On completion of the donning procedure the Sellprotex suit should inflate and appear as shown in Fig.35.

Use of Emergency Breather

The suit is fitted with an emergency breather unit designed for the purpose of evacuating the work area in the event of a complete loss of air supply to the suit.

The emergency breather is used via a mouthpiece attached to the inside of the suit.

Doffing Procedure

The person assisting in the doffing procedure should be wearing appropriate PPE selected by qualified safety personnel.

1. Remove the adhesive tape from wrists and waist.
2. Remove safety gloves.
3. Unfasten the buttons which join the two halves of the suit together.
4. With the help of the dressing assistant remove the suit top.
5. Disconnect the suit belt airline from the compressed air supply.
6. Roll the outer leg on the suit bottoms up approximately 20 - 23cms (8"-9") and step out of your safety boots.
7. Step out of the suit bottoms.

After use decontaminate and dispose according to your company procedures.

Instructions For Use Of Fall Arrest Harness

WARNING : This facility must only be used in conjunction with a fall arrest harness approved to EN 361:2002 with a back 'D' ring fixing and a portable Respirex retractable airline hose reel. Always follow the manufacturer's recommendations for use, inspection and cleaning of safety belts and harnesses.

1. Don the fall arrest harness according to manufacturer's instructions ensuring that the back 'D' ring fixing point is between the wearer's shoulder blades. See Fig 36.
2. Don the Sellprotex suit as outlined on page 9 as far as stage 6.
3. Pull the harness trunk on the Sellprotex suit inside out and down towards the 'D' ring fixing point of the fall arrest harness. Connect the 'D' ring on the fall arrest harness to the internal harness link using a connector approved to EN 362:2004. See Fig 37.
4. Complete the donning procedure for the Sellprotex suit as described on pages 11 to 23.
5. Attach the exterior harness link on the Sellprotex suit to an inertia block fall arrest device approved to EN 360:2002

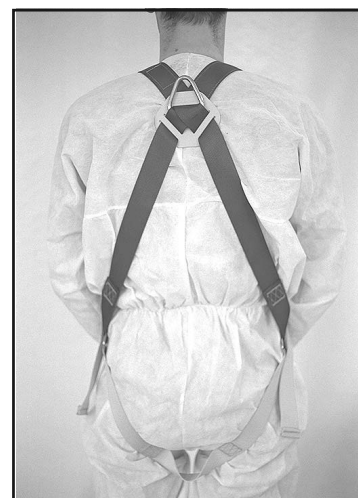


Fig.36



Fig.37

NOTE : When a Sellprotex suit is being worn in conjunction with a fall arrest harness the trunk at the rear of the hood must concertina flat towards the wearer's neck. This is to ensure that in the event of a fall the movement of the harness is taken up by the trunk. This prevents damage occurring to the suit. See Fig 38.

At no time must the operator work at greater than 1m horizontal distance from the attachment point on the inertia block fall arrest device.

At all times the operator must maintain a quantity of slack airline at their working location, thus avoiding any potential for the airline hose to become stress loaded in the event of a fall. At least 5m of coiled hose must remain wound onto the portable Respirex retractable hose reel, which will then be carried by the operator and attached to a point immediately adjacent to the working location.



Fig.38

Instructions for use of welding face screen fitted to

Respirex Sellprotex suits

These instructions refer to Sellprotex suits designed for use with face screens to protect against non-ionising radiation arising from welding and similar operations. To be used in accordance with current Eye Protection Regulations and must be worn when the process or job for which it is provided is being carried out. Ensure you understand when it should be worn and if there are any queries consult your supervisor.

The face screen must **ONLY** be fitted with the following combination of lenses:

4.25” (10.8cm) x 2” (5.1cm) Clear Cover Glass **AND** a

4.25” (10.8cm) x 2” (5.1cm) Green lens conforming to EN169:2002.

Note: The Clear cover glass is worn outermost from the eye.

Fitting Face screen

Don your Sellprotex suit as detailed in the user instructions supplied with the garment with the following additional stage for use of the welding face screen.

Proceed to the work area. Before commencing work secure the outer glare shield fitted with flip-up welding lens holder to the visor using the velcro attachment points provided, see Fig 39 (to achieve the best grip try to ensure that the attachment points on the glare shield line up with those on the visor).

Ensure that the filter lenses are at eye level.

Note: A heat resistant over-suit and hood is available which helps to prevent damage from welding splash, please contact Respirex for further information.

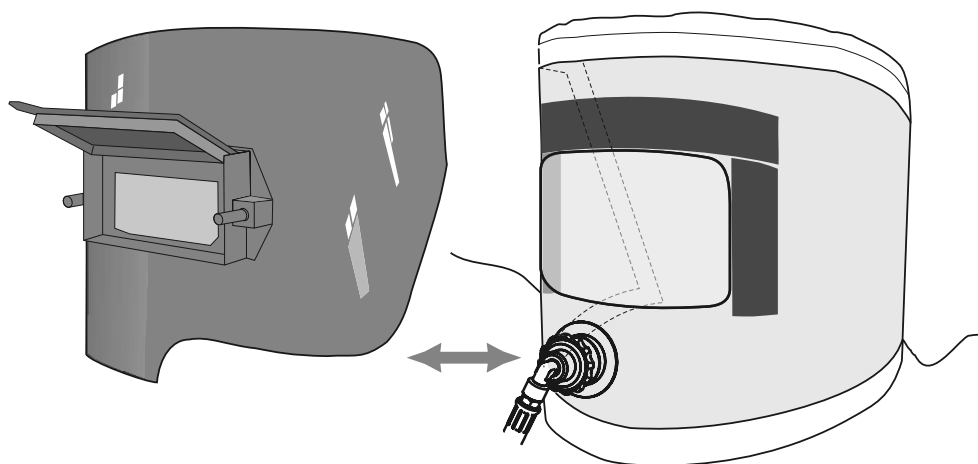


Fig.39

Care & Maintenance of Visors/Face Screens

Can be cleaned using a mild solution of soap and warm water. Wipe with a soft cloth or tissue and allow to dry. Under no circumstances use an external heat source for drying. Periodic disinfecting with a dilute solution of a proprietary disinfectant will enhance wearer comfort. Pitted or scratched lenses reduce vision and seriously reduce protection - replace immediately.

Regardless of the above recommendations visors and face screens should be examined for damage such as scratches, abrasions, cracks etc. before use, and should also be examined for deterioration. Damaged face screens and visors should be replaced. Lenses subjected to chemical splashes or significant impact should also be replaced.

Warning

The materials from which the welders face screen are manufactured are not known to be harmful although it may be possible for an allergic reaction to occur in susceptible individuals.

Inspection And Replacement Of Component Parts

A regular inspection and replacement program should be conducted by employees.

The Respirax Sellprotex suit and all component parts and assemblies should be inspected for damage or excessive wear before and after each use to ensure proper functioning. Immediately remove the suit from service and replace parts or assemblies that show any sign of failure or excessive wear that might reduce the degree of protection originally provided.

Use only Respirax components and replacement parts.

Recommended Storage Conditions

The recommended temperature range for storage is -5°C to +40°C.

Store suits in the original packaging, correct way up as marked on the box.

Store above ground level in dry conditions away from direct sunlight.

In order to maintain the level of protection offered, care should be taken to minimize the risk of damage occurring to the Sellprotex suits during transportation between work areas. It is recommended that all Sellprotex suits are transported in a suitably sized rigid container resistant to penetration by sharp objects, abrasive surfaces, chemicals, oils, solvents etc.

Never store outdoors or in damp conditions. Only remove the suit from original packaging when intending to use. Care needs to be taken when storing suits at extreme temperatures.

At sub-zero temperatures the flexibility of PVC will be reduced and the suit may suffer damage if not handled with care. At high temperatures some component parts in the suit may suffer distortion if incorrectly stored. Always rotate stock.

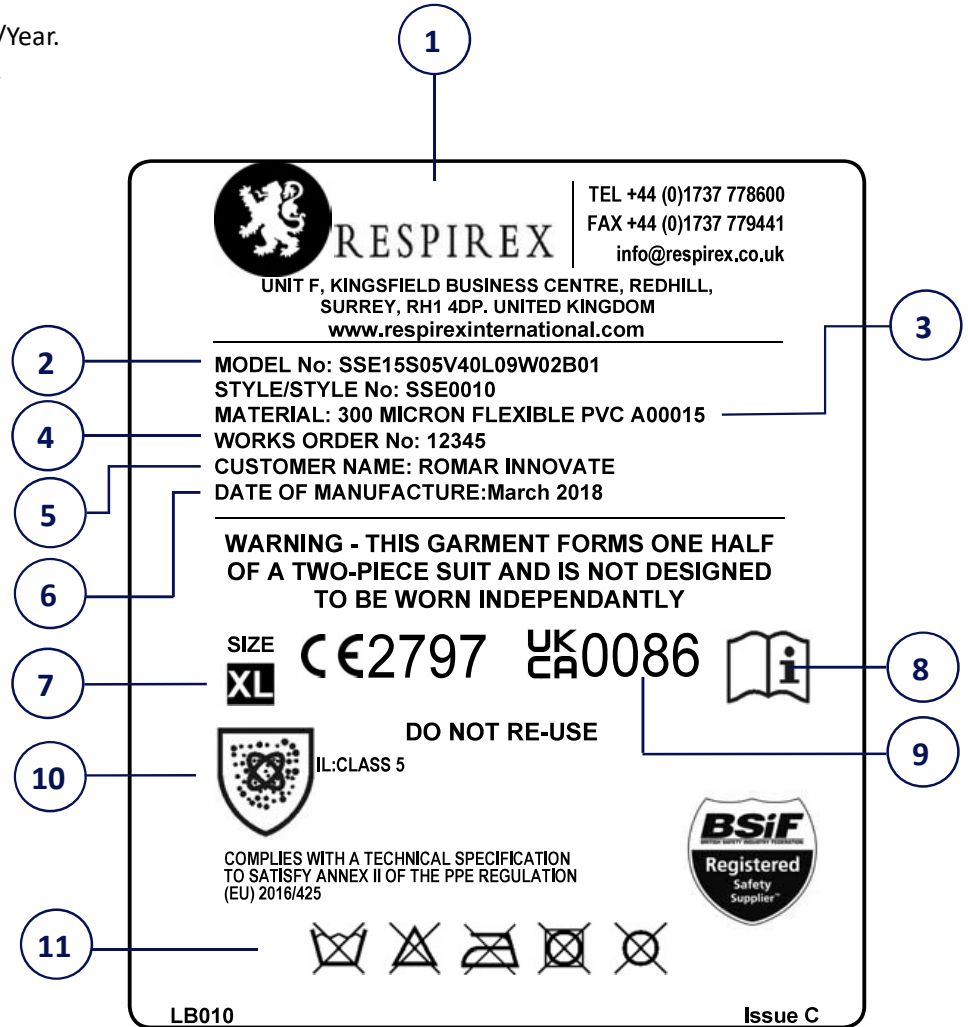
Maximum shelf life of the Sellprotex Suit is 5 years.






For further information please contact Respirax International Ltd.

Product labelling

1. Manufacturer of garment and address:
Respirex International Ltd.
2. Manufacturer's Model number
3. Material of Manufacture.
4. Manufacturer's Order No.
5. Customer Name.
6. Date of manufacture: Day/Month/Year.
7. Standard Garment Size for wearer

Size	Chest (cm)
S	88 - 96
M	96 - 104
L	104 - 112
XL	112 - 124
XXL	124 - 136



8. "Open Book Pictogram"; wearer must refer to the "Instructions for use" for further information.
9. CE and UKCA mark including Notified Body and Approval Body code.
10. Pictogram defining protection types: Particulate Radiation Pictogram
11. Five care pictograms indicating that clothing is not suitable for cleaning and reuse.
 - Pictogram 1 Hand wash 
 - Pictogram 2 Do not bleach 
 - Pictogram 3 Do not iron 
 - Pictogram 4 Do not machine dry 
 - Pictogram 5 Do not dry clean 

Physical properties of Velbex™ S5520 calendered PVC foil

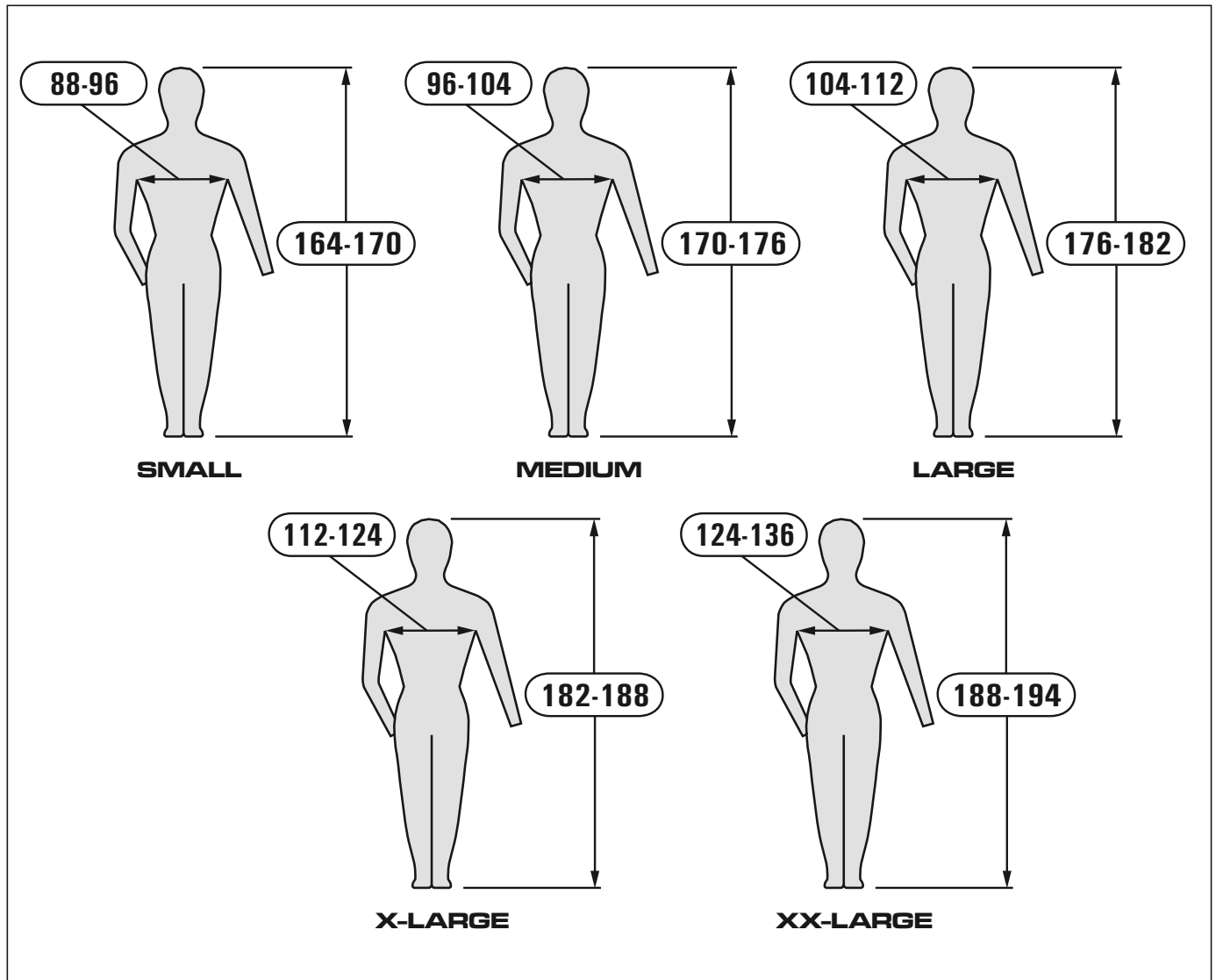
5520 grade is a cadmium and lead free mixed Di-isodecyl phthalate - phosphate plasticised grade meeting the flammability requirements of BS 1763 1B:

Property	Test Method	Performance level	EN1073-1:1998 Performance class
Abrasion resistance	EN 530 Meth 2 (inc. pressure drop)	> 2000 cycles	6
Flex cracking resistance	ISO 7854 Method B (inc. pressure drop)	> 100,000 cycles	6
Trapezoidal tear resistance	ISO 9073-4	> 20 N	2
Puncture resistance	EN 863	> 10 N	2
Resistance to flame	EN 13274-4 Meth 3 (inc. pressure drop)	No part ignited or continued to burn on removal from flame	Pass
Seam strength	BS EN ISO 13935-2	> 125 N	4
Resistance to Blocking	EN25978:1993	Blocking	1
Resistance to permeation by liquids	BS EN ISO 6529**	150 mins	N/A

** Tested against 48% Hydrofluoric acid ™ Wardle Storeys Ltd

Sizing

The following pictograms designate the range of height & chest sizes suitable for specific sizes of Sellprotex suit, check your body measurements and select the correct size of suit. Body measurements in cm (inch).



Size	Body Height	Chest Girth
S	164-170 (5'4½"-5'7")	88-96(35"-38")
M	170-176 (5'7"-5'9")	96-104(38"-41")
L	176-182 (5'9"-5'11½")	104-112(41"-44")
XL	182-188 (5'11½"-6'2")	112-124(44"-49")
XXL	188-194 (6'2"-6'4½")	124-136(49"-53½")

RESPIREX INTERNATIONAL LTD,

Unit F Kingsfield Business Centre,
Philanthropic Road,
Redhill,
Surrey RH1 4DP
United Kingdom

RESPIREX GmbH

Wilthener Straße 32
Gebäude 4a,
D-02625,
Bautzen
Germany

Tel. +44 (0) 1737 778600

Fax.+44(0) 1737 779441

www.respirexinternational.com

Tel: +49 (0)3591-5311290

Fax: +49 (0)3591-5311292

Email: [info@ respirex.de](mailto:info@respirex.de)

Module B and D **BSI,**
Type Examination By: Davy Avenue, Knowhill,
Milton Keynes, MK5 8PP,
ENGLAND

UK Approved Body No. 0086

BSI Group The Netherlands B.V.
Say Building, John M. Keynesplein 9,
1066 EP,
Amsterdam, NETHERLANDS

Notified Body No. 2797