



NFCC
National Fire
Chiefs Council

The professional voice of the
UK Fire & Rescue Service

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Firefighters Personal Protective Equipment

Standard, Specification and Requirements

Hazardous Materials PPE

Liquid Tight Suit

[Combined type 3 (liquid) and type 4 (splash) tight]

Specialist PPE Project – Oct 2021

SCOPE

This performance specification describes the requirements for a protective hazardous material liquid tight suit for both male and female fire fighters.

The liquid tight suit should offer the wearer protection from injuries, which could arise through accidents in the working sector for which the gas tight suit is designed.

The liquid tight suit is to be CE marked to BS EN 14605:2005 *Protective clothing against liquid chemicals - Performance requirements for clothing with liquid-tight (Type 3) or spray-tight (Type 4) connections, including items providing protection to parts of the body only (Types PB [3] and PB [4]) (includes Amendment A1:2009)*

PERFORMANCE REQUIREMENTS

Description and Use

Provision of liquid tight suit that meets the general and specific needs of Fire & Rescue Service (FRS) operational personnel.

The product must be suited to the range of activities carried out during emergency response and training operations. The product must be of such design, robustness, material and specification to meet the needs of these operations. It should also be simple to clean, repair and maintain (if appropriate).

All test performance data must be submitted with tender document, please indicate compliant and submitted where requested. All documentation to be in English.

Emergency response PPE is designed, following a suitable risk assessment, to protect firefighters from risks that cannot be removed by other means.

| Requirement Reference Number | Requirement | Response Criteria |
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| A1 | Combined Type 3 and Type 4, full body chemical protective clothing reusable suit Compliant to EN 14605:2005 | Evidence from Tenderer shall constitute: (1) Independent Certification from test laboratories that are accredited to their respective National Accreditation Service, The National Accreditation Service must be members of either EA or ILAC and comply with ISO/IEC 17011:2017. Validity of Certification must be 6 months or more prior to date of expiry, or; A signed letter on official letterhead from the relevant test house stating that work to complete the required certification has been commissioned and certification will be achieved before the required deadline. (2) Detailed Product specification. |
| A2 | The suit must be supplied with interchangeable gloves compliant to BS EN ISO 374-1:2016 – Protective gloves against dangerous chemicals and microorganisms. Permeation performance - Type A | |
| A3 | Compatibility EN 14605, section 4.3 performance testing for whole suits The suit must be for use with self-contained breathing apparatus (compliant to EN136 and EN137) to be worn outside of the suit or respirator (full mask and filter). For use with rubber fire boots compliant to EN 15090:2012 To be compatible with Fire Helmets compliant to EN443. | |

| Gas Tight Suits - General Requirements | | |
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| B1 | Tenderers must make items available in all sizes between XS to XXL. To include a facility to provide 'made to measure' for wearers that fall outside standard size ranges. Please refer to 5. Sizing and Special Requirements in Stage 1: Pass / Fail Evaluation Questions at within the ITT. | Evidence from Tenderer shall constitute: <ul style="list-style-type: none"> Detailed Product specification The actual sizing chart to be offered via the Framework that evidences that all sizes required will be supplied. |
| B2 | Each garment will need to be uniquely barcoded in order that the Authority is able to track each garment, particularly if a garment is sent for cleaning, repair and maintenance. The Tenderer must provide an inventory of barcodes with each order delivered and hold a central database of all barcodes assigned to each order for each Participating Authority. | The Tenderer must provide relevant evidence to demonstrate how the requirement shall be met, and shall include product information of the barcoding system that shall be used to meet the requirement. |

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| | If providing cleaning, repair and maintenance services, the Tenderer must use the unique barcodes to enable both the Tenderer and the Authority to track the garments throughout each stage of the respective service provision. This information must therefore be accessible to both the Tenderer and Participating Authority throughout the life of each call-off arrangement. | |
| B3 | The garments shall be supplied with reinforced knee and elbow areas which are built into the garment to provide robust additional protection to these specific areas of the body. The size of the reinforced knee and elbow areas must be proportionate to each size garment. | Evidence from Tenderer shall constitute: Detailed Product specification, which includes a design of the garment to be provided under the Framework, indicating the size and location of the knee and elbow reinforced areas. |
| B4 | The garments must be supplied in colour that differentiates the performance of the suit to other suits to be supplied in Lot 2. Tenderers should also provide details of all colours available. | Evidence from Tenderer shall constitute: Detailed Product specification |

Gas tight suits - Additional Documentation

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| C1 | <p>The tenderer shall provide all relevant user documentation and manuals that details how the item is:</p> <ol style="list-style-type: none"> 1. Safely used and adjusted (if necessary) 2. Maintained, including repair if relevant 3. Cleaned <p>All of these to be published in English.</p> | <p>Evidence from Tenderer shall constitute:</p> <p>User documents that come with the product detailing all the requirements (1, 2, and 3 as listed) in English on company headed or branded paperwork</p> |
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Gas tight suit - Optional Fire Service Requirement

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| D1 | A fully encapsulating suit complete with visor, for use with self-contained breathing apparatus being worn within the suit | |
| D2 | A disposable suit, compliant to the requirements above | <p>Evidence from Tenderer shall constitute:</p> <p>Detailed Product specification</p> |