



Respiratory Protective Equipment Fit Test Providers Accreditation Scheme

Essential background reading and references

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Fit2Fit Fit Test Providers Accreditation Scheme

1. Introduction

Fit testing is an essential part of an effective respiratory protective equipment (RPE) programme. Tight-fitting RPE, i.e., those that have a face seal (BS EN136, BS EN140, BS EN149), will not provide optimum protection if they do not fit.^{1,2,3} Therefore, all wearers of tight-fitting RPE should be fit tested to verify that the selected make, model, and size of a tight-fitting RPE adequately fits the wearer.^{4,5}

A fit test should be performed prior to first use of the RPE and be conducted by a competent fit tester. HSE COSHH Approved Code of Practice and guidance requires that fit testing is undertaken by a competent person.⁴

The Fit2Fit Respiratory Protective Equipment Fit Test Providers Accreditation Scheme (referred to as the '*scheme*') provides a route, via an examination and practical assessment, to demonstrate that those offering respiratory fit testing have the required knowledge and practical skills essential for the application of good-quality fit testing.

2. Scheme overview

Fit testers wishing to become Fit2Fit accredited must be able to demonstrate their knowledge and practical skills as detailed in the *scheme's* syllabus.⁶

The syllabus covered by the *scheme* is based on, HSE INDG479, the BSIF Fit2Fit Companion guides to HSE INDG479 and HSE HSG53.^{7,8,9,10,5}

There are two stages to the assessment process.

- i. The first is to ensure all candidates have sufficient underpinning knowledge to be able to successfully undertake respirator fit testing. This will be achieved using a multiple-choice examination.
- ii. The second stage is to undertake a practical assessment of the candidate conducting a respirator fit test.

Candidates who have proven both their underpinning knowledge and demonstrated their practical competence in their chosen fit test method to the level required by the *scheme* will receive Fit2Fit accreditation status.

Accreditation is granted for three separate respirator fit test methods:

- I. Qualitative: using a taste test method (bitter or sweet)
- II. Quantitative: using an ambient particle counting (APC) device[†]
 - a. Part 1 - without the use of the 'N95 Technology' for fit testing FFP2 and FFP1 filtering facepieces
 - b. Part 2 - including the use of an 'N95 Technology' for fit testing FFP2 and FFP1 filtering facepieces
- III. Quantitative, using Controlled Negative Pressure method^{††}

[†] Example includes the TSI Portacount respirator fit tester and the AccuTech AccuFIT9000

^{††} Example includes the OHD QuantiFit2

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3. Essential background reading

The syllabus of the *scheme* details the minimum knowledge requirements and practical skills required for competent RPE fit testing. The syllabus details the depth required in each element of the *scheme* that a fit tester needs to demonstrate (via examination and practical assessment) to be deemed competent.

To prepare for a Fit2Fit competency assessment, fit testers should ensure that they are familiar with both the requirements of the *scheme's* syllabus and the underpinning knowledge and content in the following areas:

3.1. Fit testing

- **HSE INDG479 Guidance on respiratory protective equipment (RPE) fit testing⁷**

Fit testers have duties under health and safety at work legislation because if they do not carry out a fit test properly the wearer could be exposed to substances hazardous to health due to facepiece leakage. It is therefore a requirement, (under the COSHH Approved Code of Practice) that RPE fit testing be carried out by a competent person. A fit tester should have adequate knowledge, and have received adequate instruction and training, and have developed practical skills so that the competency areas set out in INDG479 are met.

It is important to note that HSE INDG479 references the scheme as a means by which a fit tester's competence can be demonstrated.

- **Fit2Fit Companion guides to HSE INDG 479**

It is essential that fit testers should also be familiar with and be able to demonstrate detailed knowledge of the information contained in the following Fit2Fit publications which support HSE INDG 479 (depending on the face fitting method(s) to be assessed)

- **BSIF Companion to HSE INDG 497 Guidance on respiratory protective equipment (RPE) fit testing - Qualitative Method⁸**
- **BSIF Companion to HSE INDG 497 Guidance on respiratory protective equipment (RPE) fit testing - Quantitative Method Ambient Particle Counting⁹**
- **BSIF Companion to HSE INDG 497 Guidance on respiratory protective equipment (RPE) fit testing - Quantitative Method Controlled Negative Pressure¹⁰**

3.2. RPE programme

- **HSG53 Respiratory protective equipment at work A practical guide⁵**
- **BS EN529 Respiratory protective devices - Recommendations for selection, use, care and maintenance Guidance document¹¹**

Where respiratory protective equipment (RPE) is used as a control measure under health and safety legislation, it is vital that the selected RPE is both adequate and suitable. General advice on selection of RPE is covered in HSG53. Fit testers play an important role in the RPE programme and as such a fit tester should be familiar with the fundamental elements of an RPE programme as covered by HSG53.

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- **HSE L5 Control of Substances Hazardous to Health (COSHH) Approved Code of Practice and guidance⁴**

The COSHH ACoP outlines the preferred or recommended methods that can be used to comply with the COSHH Regulations. Regulation 7, and the accompanying practice and guidance, explains the legal requirements when RPE is used to control exposure to hazardous substances, and the provides advice on achieving compliance. It is important to note that the Approved code of practice requires the fit test be conducted by a competent person.

Further substance/industry specific regulations also contain content pertaining to RPE and fit testing and are essential reading where the fit tester is providing a service to these sectors.

- **HSE L143, Managing and working with asbestos, Control of Asbestos (CAR) Regulations 2012 Approved Code of Practice and guidance¹²**
- **HSE L121, Work with ionising radiation Ionising Radiations Regulations 2017 Approved Code of Practice and guidance¹³**
- **HSE L132 The Control of Lead at Work Regulations 2002 – Approved Code of Practice and guidance¹⁴**
- **HSE L101 Safe work in confined spaces. Confined Spaces Regulations 1997 Approved Code of Practice and guidance¹⁵**

3.3. RPE certification

- **HSE L25 Personal Protective Equipment at Work Regulations 1992, Guidance on Regulations¹⁶**

RPE to be used in the workplace must be appropriately certified and marked in accordance with applicable national regulations concerning the design or manufacture of the RPE with regard to health and safety. The Personal Protective Equipment (PPE) Regulations 2016/425 requires manufacturers to CE mark their products to show compliance with the Regulation. Following the withdrawal of the UK from the European Union (EU) the UKCA (UK Conformity Assessed) marking came into effect 1 January 2021 and applies to RPE previously subject to the CE marking. Please consult the latest HSE guidance for further information.

3.4. RPE and Facial hair

- **RR1052 The effect of wearer stubble on the protection given by Filtering Facepieces Class 3 (FFP3) and Half Masks¹⁷**

Fit tests should not be conducted if there is any hair growth between the skin and the mask sealing surface, such as stubble beard growth, beard, moustache, sideburns or low hairline which crosses the respirator sealing surface. Research carried out by the HSE has demonstrated that protection could be significantly reduced where stubble or facial hair was present in the seal area.

4. References and links

1. [BS EN136 Respiratory protective devices - Full-face masks - Requirements, testing and marking. British Standards Institution](#)

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2. [BS EN140 Respiratory protective devices - Half masks and quarter masks - Requirements, testing and marking. British Standards Institution](#)
3. BS EN149 Respiratory protective devices - Filtering half masks to protect against particles - Requirements, testing, marking
4. [HSE L5 Control of Substances Hazardous to Health \(COSHH\) Approved Code of Practice and guidance](#)
5. [BSIF RPE Fit Test Accreditation Scheme 'Fit2Fit' – Syllabus 2019](#)
6. [HSE INDG 497 Guidance on respiratory protective equipment \(RPE\) fit testing](#)
7. [BSIF Companion to HSE INDG 497 Guidance on respiratory protective equipment \(RPE\) fit testing - Qualitative Method](#)
8. [BSIF Companion to HSE INDG 497 Guidance on respiratory protective equipment \(RPE\) fit testing - Quantitative Method Ambient Particle Counting](#)
9. [BSIF Companion to HSE INDG 497 Guidance on respiratory protective equipment \(RPE\) fit testing - Quantitative Method Controlled Negative Pressure](#)
10. [HSE HSG53 Respiratory protective equipment at work A practical guide](#)
11. [BS EN529 Respiratory protective devices - Recommendations for selection, use, care and maintenance Guidance document](#)
12. [HSE L143, Managing and working with asbestos, Control of Asbestos \(CAR\) Regulations 2012 Approved Code of Practice and guidance](#)
13. [HSE L121, Work with ionising radiation Ionising Radiations Regulations 2017 Approved Code of Practice and guidance](#)
14. [HSE 132 The Control of Lead at Work Regulations 2002 – Approved Code of Practice and guidance](#)
15. [HSE L101 Safe work in confined spaces. Confined Spaces Regulations 1997 Approved Code of Practice and guidance](#)
16. [HSE L25 Personal Protective Equipment at Work Regulations 1992, Guidance on Regulations](#)
17. [HSE RR1052 The effect of wearer stubble on the protection given by Filtering Facepieces Class 3 \(FFP3\) and Half Masks](#)