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Enabling the Provision of Inclusive PPE



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Inclusive PPE – An opportunity for positive impact

The world of work is changing. With increased focus on equity and diversity in the post-covid world it has become incumbent on employers to consider and provide for the needs of all their employees. There are arguably few aspects of working life where this is more crucial than personal protective equipment (PPE).

This reality presents an exciting opportunity. Organizations that take the initiative and ensure inclusive PPE provision will be ahead of the game in fostering a diverse, inclusive workplace. These early adopters will reap huge benefits from this, including enhanced reputation as an employer, decreased turnover and, most importantly, increased safety for all their employees.

BSI is working to support organizations in taking steps to ensure inclusive PPE provision. Recent BSI and CIOB events provided crucial insights into what the key issues are in inclusive PPE provision and how to solve them.

BSI also partnered with CIOB on a workshop and worked with other stakeholders to explore what type of standard might help reduce PPE inequalities.

The new British Standard, BS 30417 *Provision of Inclusive PPE – Guide* (due to be published in September 2025) will represent the culmination of this work.

The standard, produced by a committee of experts representing a range of industries and stakeholders, will provide comprehensive guidance on the selection, purchasing process, training and maintenance related to inclusive PPE, promoting accessibility and inclusivity in PPE provision, focusing on the safety, health and wellbeing of all individuals.

This report will set out the issues that need addressing, why they are important, the work already being done in this area (both at BSI and elsewhere) and how you can get involved.

Read on to find out how you can position yourself and your organization as trailblazers in providing a safe, inclusive workplace for all.

Overview - Why one size does not fit all

Employers across a range of industries and sectors use personal protective equipment (PPE) to protect their workforce from occupational hazards. Workers covering a vast array of roles in sectors including, but not limited to, construction, healthcare, manufacturing and policing are among those who regularly use PPE to reduce the risk of injury, illness and/or death.

A Trades Union Congress (TUC) report, *Personal protective equipment and women*¹, has helped to turn the spotlight on the problems women and other minority groups can face when attempting to find suitable and comfortable PPE.

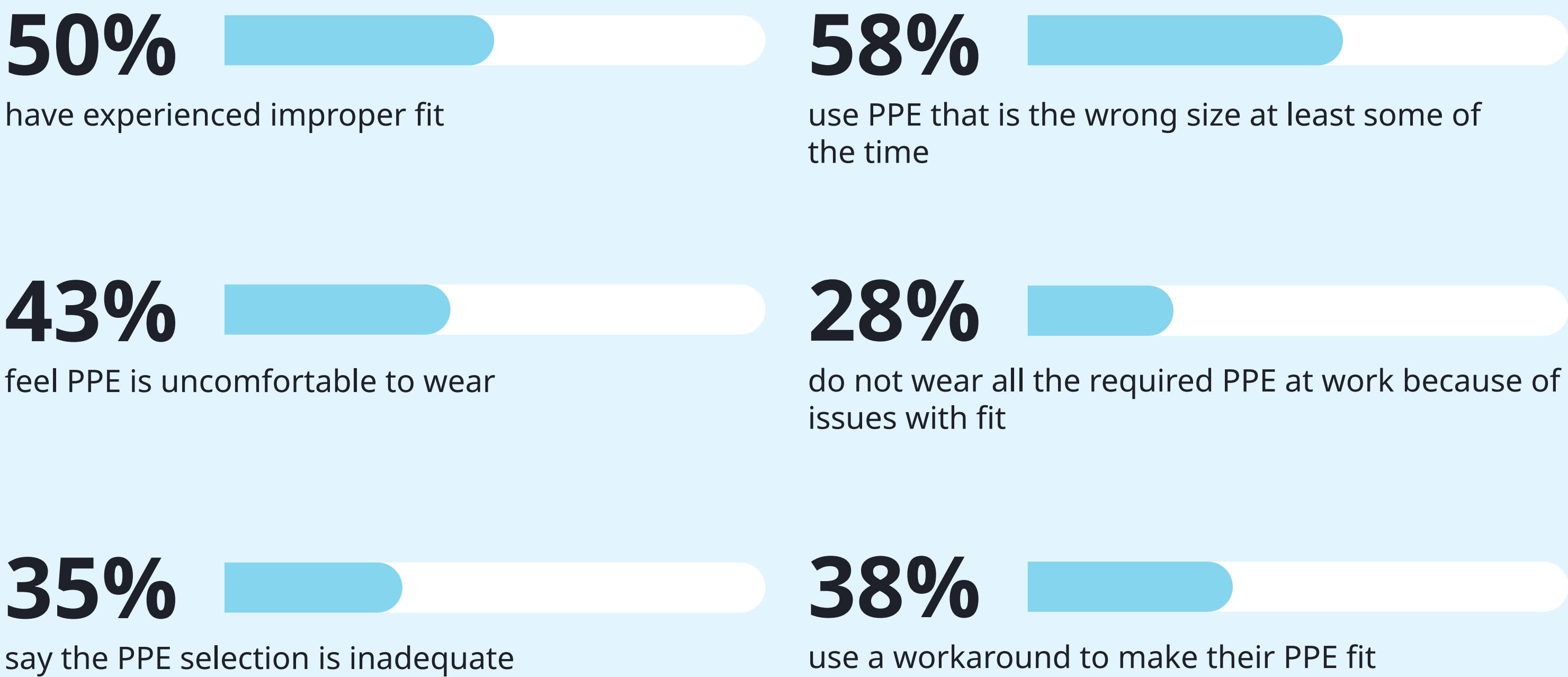
The report references a 2016 survey – conducted by organizations including the TUC and the trade union Prospect – which showed that 57% of women respondents found that their PPE “sometimes or significantly hampered their work”. Reports and articles referenced for this paper make clear that the problem persists.

More recently, a 2022 report from Canadian standards organization CSA Group found that ill-fitting and uncomfortable PPE has a negative impact on women’s health and safety².





The report, *Canadian Women’s Experiences with Personal Protective Equipment in the Workplace*, includes insight from almost 3,000 women who use PPE at work. According to the findings, **more than 80%** experience one or more problems with their PPE, and:



The research also found that **40%** of the women surveyed had experienced injuries and incidents related to PPE.

Although PPE is considered to be the last line of defence, it could and should be seen by employers as a key method for protecting the workforce. As such, **it is critical that all workers have PPE that fits.**

A barrier for equality, diversity and inclusion

At a BSI workshop, a diverse group of stakeholders agreed that widespread structural and systemic change is needed, with most participants saying change was needed across all the following areas:

- ✓ Legislation
- ✓ Standards
- ✓ Culture / employee empowerment
- ✓ Testing / certification

In the healthcare sector, women – who represent the majority of frontline workers – are leaving their roles in significant numbers.

This worrying phenomenon is highlighted in a 2023 policy report from Women in Global Health (WGH), *The Great Resignation: Why Women Health Workers Are Leaving*³. The report calls for “gender transformative policies that address the root causes of gender inequity”.

The research shows that gender-based inequalities are largely contributing to women healthcare workers deciding to leave their profession. The impact of the Covid-19 pandemic exacerbated this issue, according to the report, with data from many countries showing that “insufficient or poorly fitting personal protective equipment (PPE) increased infection risks for women health workers.”

Prior WGH research, carried out in 2020, found that only **25%** of women had access to adequate PPE all the time. Many health workers had to improvise, using items such as garbage bags as aprons. The research found that “even when available, PPE access has sometimes been influenced by gender power imbalances in the health workforce” and also noted that “PPE distribution during the pandemic was based on priority which mirrored existing power hierarchies within many hospital systems”.⁴

Ill-fitting PPE is not just a concern for the healthcare sector; the construction industry is facing a similar picture.

In the US, the Institute for Women’s Policy Research (IWPR) surveyed 2,635 tradeswomen and non-binary tradespeople⁵. The 2021 research found that:

- 12%** felt they were never or rarely treated equally when it comes to workplace safety
- 28%** said they were never or rarely provided with gloves or safety equipment in their sizes

Parallels can be drawn between the IWPR’s findings and similar research undertaken in the UK highlighting the prevalence of inadequate PPE for women construction workers.

In 2023, the National Association of Women in Construction (NAWIC) Yorkshire Region undertook a survey of 157 respondents for the *Women's PPE in the Construction Industry* report⁶.

Women's PPE in the Construction Industry report

- Most employers do not provide specific women's PPE
- One barrier to employers for providing women's PPE is the cost
- There is a lack of awareness of ill-fitting PPE and the 'one size fits all' stigma
- There is a lack of awareness of the suppliers of women's PPE
- More than 40% of respondents noted that ill-fitting PPE had impacted their career negatively
- Most respondents noted that ill-fitting PPE has caused them health and safety concerns, with the main PPE items mentioned being high visibility coats, jackets and vests, safety boots, trousers and gloves

The report makes for sobering reading, with the general sentiment summed up by one respondent who revealed that the lack of well-fitting PPE "makes me not want to be working in the construction industry".

A 2020 study, *Does it matter if PPE fits women who work in the UK construction industry?*⁷, explored the unconscious biases facing women across the workforce. The findings concluded that ill-fitting PPE is based on four main issues:

- Legal bias
- Diversity bias
- Economic bias
- Size bias

The report concluded that "women have been unable to do their job to the standard of their male counterparts based on incorrect clothing".

Analysis of the findings also illustrates a clear gender bias which, if not addressed, could result in a "greater impact on the well-being of employees".



Disrupting the status quo

BSI has been conducting its own research on the problems surrounding lack of inclusive PPE provision. A recent BSI / CIOB Inclusive PPE workshop yielded some key insights around the causes this issue, including:

- ✓ lack of awareness of the problem
- ✓ lack of understanding of the differing needs of wearers
- ✓ perceptions (misperceptions) about cost
- ✓ workplace culture (employees not being empowered to speak up)

The primary purpose of PPE is, of course, to provide appropriate and adequate protection for workers. As well as being integral to an employer's health and safety strategy, the provision of PPE is also inextricably linked to workforce productivity.



According to the Health and Safety Executive (HSE)⁸:

- an estimated **35.2 million** UK working days were lost in 2022/23 due to self-reported work-related ill health or injury; and
- the estimated annual cost of workplace injury and new cases of work-related ill health in 2021/22 was **£20.7 billion**.

Providing employees with well-fitting protective gear, which supports accuracy and efficiency, can also help to shape overall job satisfaction, leading to reduced absenteeism and staff turnover.

Ensuring every employee feels safe and equipped to do their job is fundamental to the recruitment and retention of a diverse workforce. Employers who provide adequate PPE for all workers are taking the steps needed to facilitate an equal, diverse and inclusive workplace. For example, simply providing PPE that is designed for men, but in a smaller size, is not an adequate solution for women workers.

People need to be more aware that ill-fitting PPE is a health and safety risk to both the wearer and those around them.

Traditionally, PPE has been manufactured based on the size and proportion of males in certain countries, typically in Europe and the US. The constraints of this approach to PPE sizing highlights the challenge for women workers.

In addition, designing PPE on the basis of generic anthropometric data also fails to address the requirements of smaller men, as well as people from different ethnic backgrounds. As outlined in a previous BSI whitepaper, *Diversity in Personal Protective Equipment (PPE)*⁹, if a worker is outside of the 5th or 95th percentile, finding well-fitting PPE is unlikely, regardless of gender.

The paper also calls attention to the lack of diverse voices among the experts and standards development committees typically tasked with driving progress in this area; however, change is afoot. For example, the UK Committee PH/3/11, Protective Equipment for Sports Players, which mirrors the European committee CEN/TC 162/WG 11, Body protection for sports, now includes input from both males and females.

In addition, BSI successfully proposed, and is leading, a new European committee focusing on horizontal issues in PPE, with inclusive PPE a key area of focus for that group. BSI is also established the UK mirror committee to make sure the UK voice can be represented on the European committee.

BSI, with the support of stakeholders, is working hard to raise awareness about the action needed with PPE when it comes to equality and inclusion and to get more stakeholders involved in developing PPE standards.

The overarching objective is to ensure standards for PPE reflect a greater representation of human diversity, ultimately advancing safety for all workers.



Current regulations and standards

Currently, UK employers must provide PPE if a risk assessment shows it is required to protect workers. Personal Protective Equipment at Work Regulations 1992 (PPER 1992) place duties on employers to ensure that PPE is:

- Properly assessed before use to make sure it is fit for purpose;
- Maintained and stored properly;
- Provided with instructions on how to use it safely; and
- Used correctly by workers.

In April 2022, the Personal Protective Equipment at Work (Amendment) Regulations 2022 (PPER 2022) came into effect in the UK as an amendment to the 1992 regulations.

While the duties and responsibilities on employers and employees under PPER 1992 remain unchanged, PPER 2022 includes limb (b) workers¹⁰ – defined as workers who generally have a more casual employment relationship and work under a contract for service. Under PPER 2022, employers must ensure workers – including limb (b) workers – have sufficient information, instruction and training on the use of PPE¹¹.

The participants in the BSI / CIOB Inclusive PPE workshop overwhelmingly agreed that a standard on the provision of inclusive PPE would be beneficial.

They also highlighted that considerations around inclusivity should be considered in all PPE standards.

To support organizations' compliance and promote a best practice approach to health and safety in the workplace, BSI produces robust technical standards that define the test methods and other requirements used to verify that PPE provides adequate protection.

What are the current standards?

BSI's PPE standards cover a range of equipment including:

- ✓ protective helmets
- ✓ sports helmets
- ✓ impact protection for the body
- ✓ respiratory products
- ✓ hearing protection
- ✓ eye protection
- ✓ glove protection
- ✓ protective footwear
- ✓ high visibility clothing
- ✓ protective clothing
- ✓ fall arrest equipment



The full list of PPE committees and links to more information is available via BSI¹².



While current standards and regulations call for employers to provide adequate PPE to protect workers who might be exposed to risk, there is no specific requirement regarding women or other less represented workers. However, key stakeholders across various sectors are increasingly taking action and seeking to drive change from the ground up.

In construction, for example, the CIOB last year launched the #PPEthatfits campaign. The initiative aims to address the provision of poorly fitting PPE for everyone in the industry regardless of their gender, size, race or religion.

Subsequently, the Considerate Constructors Scheme – which uses its Code of Considerate Practice¹³ to promote high standards across construction activities – announced that it is making women's PPE provision a mandatory requirement on all its sites. The new mandate provides an opportunity to enforce and monitor employers' commitment to inclusive PPE.

Individual changemakers are also making an impact across the industry. For example, work is underway to improve the provision of PPE that is designed to be considerate of modesty and faith.

Civil engineering apprentice Leena Begum has created protective gear specifically for Muslim women who wear a hijab or a burka¹⁴, while water quality scientist

Aminah Shafiq¹⁵ has designed a PPE hijab which is now being supplied globally. Both women were inspired to create practical solutions for an issue that could act as a barrier to Muslim women and girls considering a career in engineering and construction.

Similarly taking up the gauntlet, gender equity and culture consultant Katherine Evans has founded the Bold as Brass network to help push for systemic change for women in construction, mining and quarrying¹⁶. Evans is also working closely with the CIOB to create a directory of suppliers who provide #PPEthatfits¹⁷.

However, despite positive progress on various fronts, anecdotal evidence from key stakeholders at our workshops has raised concerns that procurement challenges are hindering widespread change.

The perceived economic cost of providing PPE for minority groups is a significant barrier, as is the lack of clarity around who should be responsible – particularly in a complex supply chain system – for providing inclusive PPE and ensuring it is available for all workers.

Championing best practice

What is happening on the ground to ensure the provision of inclusive, fit-for-purpose PPE?

The BSI / CIOB Inclusive PPE Workshop participants were keen to highlight the positive work already underway, with a number of PPE manufacturers and suppliers offering a broad range of inclusive safety clothing and equipment.

There are also networks, campaigns and other actions being taken by organizations such as BSI, the CIOB, the BSIF and Bold as Brass, to name but a few.

Many also commended the culture shift towards greater inclusion across many organizations, with employers seeking to address inequity and viewing this culture shift as an opportunity to address the problem with PPE.

Some other examples of positive action cited by participants are:

- Employee resource groups (ERGs) are capitalizing on their weight inside companies to give feedback on issues with PPE.
- There are PPE brands that offer trial days to get feedback directly from end users.
- Some brands offer a range of sizes – including gloves, hard hats and safety boots – as well as maternity PPE and clothing that accommodates religious sensitivities.
- There are networks for women in construction which provide feedback to PPE designers and developers about what is and is not working, and what is missing.

What are the next steps?

There is undoubtedly an appetite for change, largely driven by women frontline workers and allies across all sectors. A holistic approach could sustain this momentum and deliver transformative action.

Further consideration is needed to determine how existing initiatives, committees and pioneering individuals can be brought together to ensure there is a consistent approach across all industries and sectors where PPE is needed.

As explored earlier in this report, BSI has already commenced work to understand how requirements for inclusive PPE can be systematically embedded in standards. Work has also started on a new standard, BS 30417 *Provision of Inclusive PPE – Guide*, which will help organizations to ensure they are being inclusive in their provision of PPE. **You can register for updates on the standard [here](#).**

A broad spectrum of insight and evidence from different industries and stakeholders is critical to drive positive change for the current and future workforce. Attempting to make change with input from a diverse range of voices will help to effectively address the varied and complex factors at play.



Key issues to consider include:

- Why greater clarity is needed regarding employers' and workers' responsibilities for PPE
- How concerns related to the perceived economic cost of inclusive PPE can be addressed
- What role PPE suppliers can play to help support better procurement processes
- How better collaboration between various stakeholders across all relevant sectors can help to deliver significant change; and
- How standards can help to facilitate short and long-term change to tackle persistent PPE issues.



Do you want to help ensure the provision of fit-for-purpose PPE for everyone?

To get involved with PPE standards, email **standardsmakers@bsigroup.com**.

To register your interest in BS 30417 and be notified when it launches, sign up **[here](#)**.

For more information about the CIOB's #PPEthatfits campaign, visit **<https://ppethatfits.com>**.

References

1. <https://www.tuc.org.uk/sites/default/files/PPEandwomenguidance.pdf>
2. <https://www.csagroup.org/wp-content/uploads/CSA-Group-Research-Canadian-Womens-Experiences-with-Personal-Protective-Equipment-in-the-Workplace.pdf>
3. <https://womeningh.org/great-resignation/>
4. Ibid.
5. <https://iwpr.org/a-future-worth-building-report/>
6. https://drive.google.com/file/d/1kG35F5JiIv_2FYaN388PRRnHHqR0z4Q1/view
7. Does it matter if PPE fits women who work in the UK construction industry? by Caroline Chell, 2022.
8. <https://www.hse.gov.uk/statistics/overview.htm>
9. <https://www.bsigroup.com/globalassets/documents/ppe/diversity-in-ppe-whitepaper.pdf>
10. <https://www.hse.gov.uk/ppe/ppe-regulations-2022.htm>
11. In April 2022, the Personal Protective Equipment at Work (Amendment) Regulations 2022 (PPER 2022) came into effect as an amendment to the 1992 regulations. While the duties and responsibilities on employers and employees under PPER 1992 remain unchanged, PPER 2022 includes a broader definition of workers. Workers under a contract of employment – known as limb (a) workers – were already under the scope of PPER 1992. However, under PPER 2022, employers must also ensure limb (b) workers – those who generally have a more casual employment relationship and work under a contract for service – have sufficient information, instruction and training on the use of PPE.
12. <https://pages.bsigroup.com/l/35972/2025-07-21/3t926my>
13. <https://www.ccscheme.org.uk/resources/the-code-of-considerate-practice/>
14. Why PPE designed for women is as much about safety as comfort | New Civil Engineer
15. Birmingham engineer's PPE headscarf to inspire Muslim women - BBC News
16. <https://www.linkedin.com/groups/12683758/>
17. <https://ppethatfits.com>