



# Labour Market Intelligence: Refresh – 2023



## Snapshot report for West Midlands

May 2023

**Pye Tait Consulting**  
[info@pyetait.com](mailto:info@pyetait.com)  
[www.pyetait.com](http://www.pyetait.com)



Member of SN Registrars (Holdings) Ltd  
Cert No: QEC19593371/0/Q



A report prepared by:

**Pye Tait Consulting**

Registered in England, Company No: 04001365, VAT No: 755 8312 14

Postal address: Royal House, 110 Station Parade, Harrogate, North Yorkshire, HG1 1EP

Tel: 01423 509 433

Registered office address: 5 Merus Court, Meridian Business Park, Leicester, LE19 1RJ

email (enquiries related to this report): [n.charleton@pyetait.com](mailto:n.charleton@pyetait.com)

email (general enquiries): [info@pyetait.com](mailto:info@pyetait.com)

website: [www.pyetait.com](http://www.pyetait.com)

Copyright: © Pye Tait, 2023; All Rights Reserved.



Pye Tait Consulting is part of the EMB-Group.

## Contents

|   |           |
|---|-----------|
| <b>1. Introduction</b> .....                                | <b>3</b>  |
| 1.1 Background .....  | 3         |
| 1.2 Methodology.....  | 3         |
| 1.3 About this report.....                                  | 3         |
| 1.4 Respondent profile .....                                | 4         |
| 1.5 Sector size .....                                       | 5         |
| <b>2. Recruitment</b> .....                                 | <b>6</b>  |
| <b>3. Skills needs of the electrotechnical sector</b> ..... | <b>7</b>  |
| 3.1 Electrotechnical qualifications .....                   | 7         |
| 3.2 Current and future skills needs .....                   | 7         |
| <b>4. Future of the electrotechnical sector</b> .....       | <b>11</b> |
| 4.1 Take-up of technology.....                              | 11        |
| 4.2 Workforce projection .....                              | 12        |

## 1. Introduction

### 1.1 Background

The Electrotechnical Skills Partnership (TESP) commissioned Pye Tait Consulting, an independent research agency, to refresh labour market intelligence (LMI) that was undertaken in 2018/19 (with some additions in 2020 via a mini-LMI study) to understand the current skills requirements to work within the electrotechnical sector. The main report from 2018/19 provided a detailed overview of the electrotechnical sector, its workforce, skills needs, and the training and development typically undertaken.<sup>1</sup>

The electrotechnical sector continues to be at the forefront of a rapidly-evolving revolution in how we use technology – with increased demand for digital communication, energy conservation, electric vehicle charging, and renewable energy solutions with a particular focus on the electrification of heat (such as heat pumps) in buildings. The underlying driver for most of this development is the Net Zero agenda.

The overarching aim of this research is to update the previous LMI work to ensure accurate and up-to-date intelligence, building upon 2018/19 and 2020 research findings. The findings will provide TESP with renewed/up-to-date data that can be used to inform the development or update of a future labour force strategy.

### 1.2 Methodology

The study involved three core strands of research:

- desk research,
- a telephone survey of 467 employers, and
- follow-up interviews with 12 employers.

The survey questionnaire was designed to be similar to that used in 2018/19 and 2020 to enable longitudinal comparison.

### 1.3 About this report

The major output from this study is a UK-level report that outlines trends in the sector over the past few years. It provides a detailed insight into the state of the electrotechnical sector in terms of its workforce size, demography, and skills needs/challenges.

In addition, a series of twelve regional reports (one per English region and per devolved nation) will succinctly present the key findings from the research for TESP's regional managers to take forward in their work. This is the report for the West Midlands.

---

<sup>1</sup> TESP, 2019, Labour market intelligence research

The findings contained in this report are derived from the telephone survey of employers. Of the 467 total respondents, 30 are based in the West Midlands.

Findings are based on a small sample of businesses in the region, resulting in a larger margin of error than the main report, meaning findings should not be interpreted quantitatively as being necessarily representative of the region. From a qualitative standpoint the results will, however, be valuable indications of the local situation.

Note that charts and tables presented in this report may not sum to 100% due to rounding.

## 1.4 Respondent profile

Nine in ten (27, 90%) are micro firms employing fewer than 10 staff, and the remainder are small firms (three, 10%) with 10 to 49 staff. The average (mean) size of company in terms of staff is six, while the most common (modal) size is two staff. These figures include both PAYE direct staff and 'others' such as self-employed. Discounting the latter group, the average (mean) size is five, and the most common (modal) size is two.

The age spread of workers in the West Midlands is shifted slightly towards the oldest age group compared to the UK as a whole – see Table 1.

**Table 1 Age profile of respondents: UK and West Midlands**

| Age      | UK-wide | West Midlands |
|----------|---------|---------------|
| 16 to 18 | 6%      | 7%            |
| 19 to 24 | 14%     | 12%           |
| 25 to 49 | 50%     | 48%           |
| 50 to 64 | 26%     | 24%           |
| 65+      | 4%      | 8%            |

Base: 467 (UK) and 30 (West Midlands) respondents. Source: Pye Tait Consulting 2023.

The workforce of surveyed respondents in the region is reported by respondents as being 100% UK citizens – a similar profile to the UK as a whole, though lacking a small percentage of EU (Irish and non-Irish) citizens.

Two thirds (67%) undertake new fit commercial work, and five in six (83%) undertake commercial repair and maintenance work. Around half work in the domestic sector on new fit (47%) and almost six in ten in domestic repair (57%).

From a list of pre-defined activities, surveyed respondents most commonly undertake low voltage maintenance and repair work (90%) or low voltage electrical installation (83%). The next most common activities are electrical design consultancy (60%) and emergency lighting systems (57%).

## 1.5 Sector size

ONS SOC code data indicate there are 15,300 individuals (conf %: 5,100) working in the region in the SOC2020 code 5241: Electricians and electrical fitters.<sup>2</sup> However, it should be noted that ONS has identified an issue in the collection of occupation data affecting the accuracy of some detailed occupations and the data derived from the them, and urge caution in interpreting data. Nevertheless, based on an estimated proportion of those with electrotechnical skills who may operate at different skill levels, the overall total of electrotechnical-skilled workers in the region is 19,700 ± 5,100.

Further detail and considerations for how these figures are derived are outlined in the accompanying UK-wide report.

---

<sup>2</sup> Annual Population Survey, ONS, Jan to Dec 2022. Conf is presented as the standard error as a percentage of the figure.

## 2. Recruitment

Surveyed employers most commonly report advertising to recruit skilled workers over the past 12 months (14 roles advertised), followed by apprentices/trainees (12) and unskilled workers (three). Of these, employers say two in three (67%) unskilled roles were hard to fill, as were just under half (43%) of skilled roles and apprentice/trainee roles (42%).

In terms of the employment basis, as compared to pre-COVID-19, under half of employers (47%) are 'more likely' to recruit using a PAYE directly employed approach and two in five to hire apprentices (40%). Around three in five are less likely to use an employment agency or to loan labour between companies (both 62%).

The main perceived actions required to tackle recruitment problems and skills shortages in the region include (see Figure 1):

- greater promotion of electrotechnical (mentioned by 59% vs 49% in UK as a whole), and
- improving employability of school leavers (56% vs 37%).

**Figure 1 Perceived actions required to tackle recruitment problems – UK vs West Midlands**



Base: 441 (UK) and 27 (West Midlands) respondents (multiple responses permitted).  
Source: Pye Tait Consulting 2023.

### 3. Skills needs of the electrotechnical sector

#### 3.1 Electrotechnical qualifications

Respondents in the West Midlands have a slightly less optimistic view of training and qualifications and preparedness of job applicants compared to the UK as a whole – see Table 2.

**Table 2 Views on qualifications – agreement levels UK wide and West Midlands**

|  | UK-wide | West Midlands |
|--|---------|---------------|
| Job applicants typically have the skills we require of them to do the job well | 58%     | 47%           |
| Currently available qualifications fully reflect the demands of the job today  | 59%     | 50%           |
| We are able to find suitable training in our area when we need it              | 69%     | 67%           |

Base variable: 460 to 462 (UK) and 30 (West Midlands) respondents. Source: Pye Tait Consulting 2023.

#### 3.2 Current and future skills needs

Employers were asked to comment on their business’s current and future demand for a variety of technical skills. The results for the UK as a whole, and for the West Midlands are presented in Table 3. It should be noted that, for the two sets of ‘current demand’ columns, three options were available to respondents (‘not needed right now’, ‘needed and we have this skill’, and ‘needed but we don’t have in the business’), but that the ‘not needed right now’ responses are omitted for clarity.

A discussion of the findings is presented in the main UK-wide report.

**Table 3 Current and future demand for technical skills – UK vs West Midlands**

| Skill   | Current demand – UK-wide |                             | Current demand – West Midlands |                             | Needed in 3 years – UK-wide | Needed in 3 years – West Midlands |
|---|--------------------------|-----------------------------|--------------------------------|-----------------------------|-----------------------------|-----------------------------------|
|   | Needed and have skill    | Needed but don't have skill | Needed and have skill          | Needed but don't have skill |                             |                                   |
| Building Automatic Control Systems (BACS) design, installation & maintenance                              | 16%                      | 0.6%                        | 15%                            | -                           | 20%                         | 12%                               |
| Direct electrical heating systems (e.g. storage heaters, UFH) design and installation                     | 23%                      | 0.6%                        | 20%                            | -                           | 38%                         | 23%                               |
| Electric vehicle charging equipment (EVCE) installation   | 34%                      | 2%                          | 48%                            | -                           | 39%                         | 48%                               |
| Electrical - High Voltage   | 35%                      | 2%                          | 19%                            | -                           | 37%                         | 8%                                |
| Electrical - Low Voltage  | 89%                      | 1%                          | 90%                            | -                           | 88%                         | 82%                               |
| Electrical Design   | 67%                      | 2%                          | 68%                            | -                           | 69%                         | 79%                               |
| Electrical Energy Storage Systems (EESS) design & installation  | 31%                      | 2%                          | 36%                            | -                           | 39%                         | 36%                               |
| Emergency lighting, installation & servicing  | 63%                      | 0.5%                        | 56%                            | -                           | 64%                         | 61%                               |
| Energy efficiency services including lighting and lamp replacement services, power factor correction etc. | 45%                      | 0.6%                        | 56%                            | -                           | 47%                         | 44%                               |
| Fire detection and alarm system installation and servicing  | 51%                      | 0.5%                        | 50%                            | -                           | 52%                         | 50%                               |
| Heat pump installation and design   | 25%                      | 2%                          | 31%                            | -                           | 31%                         | 42%                               |
| Installation & maintenance of temporary and stand-by generator sets                                       | 28%                      | 1%                          | 40%                            | -                           | 30%                         | 32%                               |
| Installation of technologies associated with Smart-Buildings  | 20%                      | 3%                          | 32%                            | -                           | 36%                         | 36%                               |
| Installation, servicing & maintenance of security systems including intruder/controlled access and CCTV   | 46%                      | 0.8%                        | 50%                            | -                           | 44%                         | 44%                               |

|   |     |      |     |   |     |     |
|---|-----|------|-----|---|-----|-----|
| Lighting systems installation & maintenance including Highway and Street lighting | 47% | 0.6% | 62% | - | 49% | 54% |
| Lightning protection systems design & installation                                | 46% | 0.9% | 52% | - | 50% | 58% |
| Renewable energy systems design & installation                                    | 32% | 6%   | 50% | - | 44% | 46% |

Employers were asked a similar question in relation to their current and future demand for a variety of generic skills. The results for the UK as a whole, and for the West Midlands are presented in Table 4. It should be noted that, for the two sets of ‘current demand’ columns, three options were available to respondents (‘not needed right now’, ‘needed and we have this skill’, and ‘needed but we don’t have in the business’), but that the ‘not needed right now’ responses are omitted for clarity.

**Table 4 Current and future demand for generic skills – UK vs West Midlands**

| Skill   | Current demand – UK-wide |                             | Current demand – West Midlands |                             | Needed in 3 years – UK-wide | Needed in 3 years – West Midlands |
|---|--------------------------|-----------------------------|--------------------------------|-----------------------------|-----------------------------|-----------------------------------|
|   | Needed and have skill    | Needed but don’t have skill | Needed and have skill          | Needed but don’t have skill |                             |                                   |
| Management and leadership                                 | 97%                      | 0.4%                        | 97%                            | -                           | 93%                         | 93%                               |
| Maths   | 96%                      | -                           | 100%                           | -                           | 93%                         | 97%                               |
| Problem solving   | 97%                      | 0.4%                        | 100%                           | -                           | 94%                         | 97%                               |
| Project and time management                               | 95%                      | 0.7%                        | 100%                           | -                           | 93%                         | 97%                               |
| Spoken English  | 97%                      | -                           | 100%                           | -                           | 94%                         | 97%                               |
| Team working and communication                            | 98%                      | 0.2%                        | 100%                           | -                           | 94%                         | 97%                               |
| Written English   | 98%                      | -                           | 100%                           | -                           | 94%                         | 97%                               |
| Client engagement   | 94%                      | 2%                          | 100%                           | -                           | 93%                         | 97%                               |
| Digital literacy (e.g. using the cloud / other platforms) | 78%                      | 7%                          | 84%                            | 12%                         | 94%                         | 91%                               |

The main perceived reasons for skills deficiencies in the region include (see Figure 2):

- ageing workforce experiencing difficulties keeping up-to-date (mentioned by 32% vs 28% in UK as a whole), and
- inappropriate training courses (21% vs 26%).

**Figure 2 Perceived reasons for skills deficiencies**



Base: 422 (UK) and 28 (West Midlands) respondents (multiple responses permitted).  
Source: Pye Tait Consulting 2023.

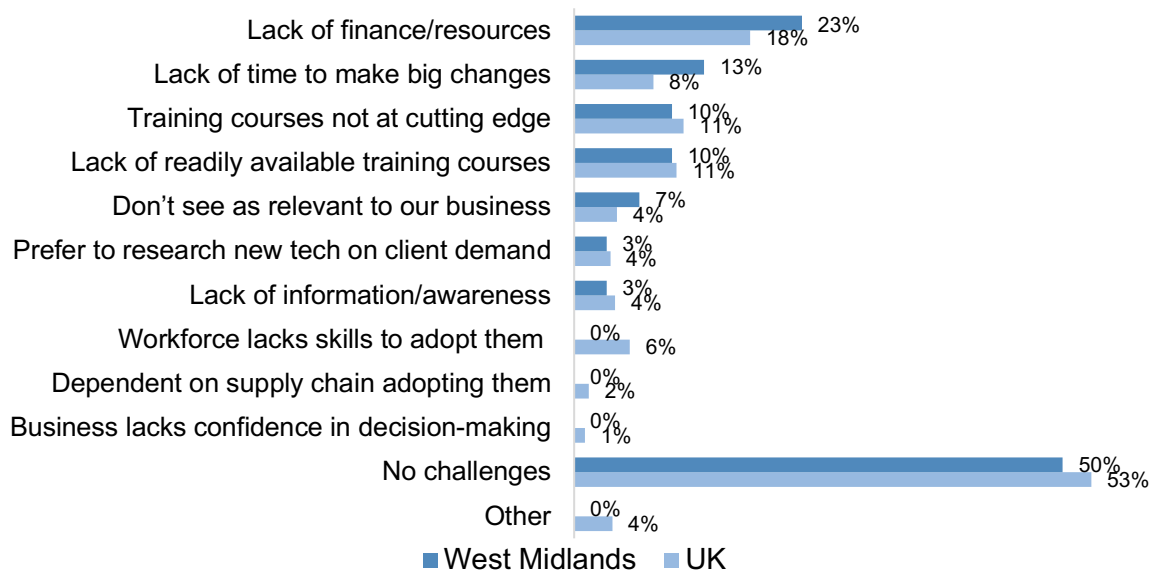
## 4. Future of the electrotechnical sector

### 4.1 Take-up of technology

The main perceived issues that organisations in the region face in adopting new technologies and processes include (see Figure 3):

- a lack of finance/resources (mentioned by 23% vs 18% in UK as a whole), and
- a lack of time to make big changes (13% vs 8%).

**Figure 3 Perceived challenges in adopting new technologies - UK vs West Midlands**



Base: 456 (UK) and 30 (West Midlands) respondents (multiple responses permitted).  
Source: Pye Tait Consulting 2023.

There appears to be a slightly higher level of concern in the West Midlands compared to the wider UK that sector-wide take-up of new technology and processes is relatively modest (46% agree or strongly agree, vs 40% in UK) – Table 5.

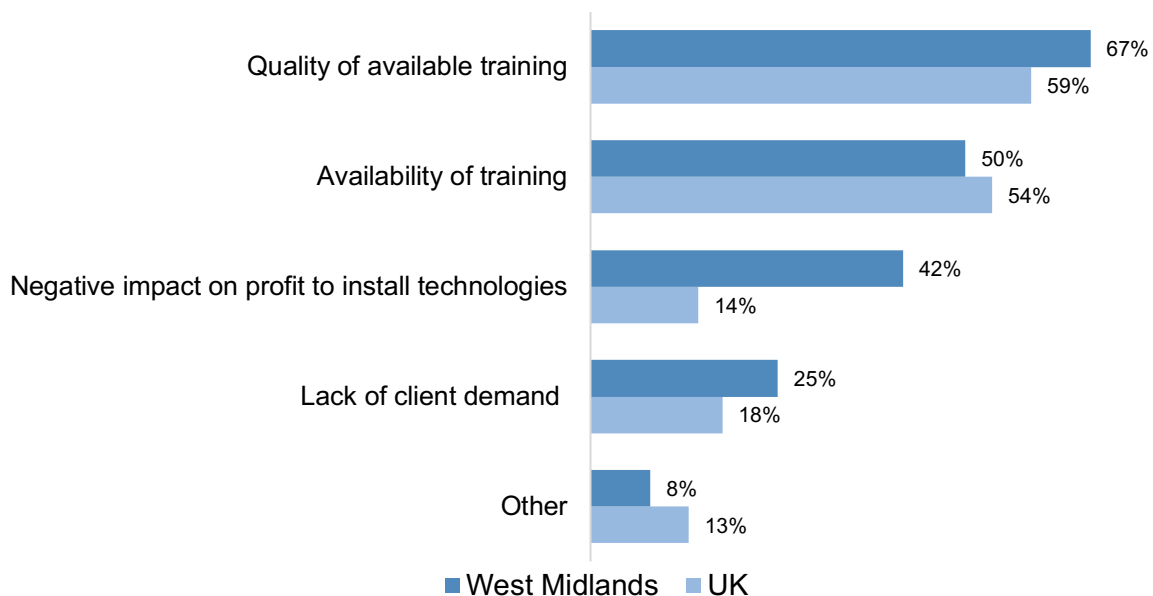
**Table 5 Sector-wide take-up of new technology is relatively modest – UK vs West Midlands**

|                   | UK-wide | West Midlands |
|-------------------|---------|---------------|
| Strongly agree    | 9%      | 7%            |
| Agree             | 31%     | 39%           |
| Disagree          | 60%     | 54%           |
| Strongly disagree | 0.5%    | -             |

Base: 399 (UK) and 28 (West Midlands) respondents. Source: Pye Tait Consulting 2023.

Those agreeing or strongly agreeing were asked why they believe take-up has been relatively modest. Reasons generally reflect those of the wider UK, although there is a more common perception of a negative impact on profit to install technologies (42% vs 14% of UK) – Figure 4.

**Figure 4 Perceived reasons for modest take-up of technology – UK vs West Midlands**



Base: 153 (UK) and 12 (West Midlands) respondents (multiple responses permitted).  
Source: Pye Tait Consulting 2023.

## 4.2 Workforce projection

Companies anticipate that, in five years' time, they will employ a slightly higher average of staff – eight staff (compared to six now). This includes both PAYE direct staff and 'others' such as self-employed. Discounting the latter group, the future average (mean) size is anticipated to be six (compared to five now), indicating a slight expansion in company size anticipated in the future for the region.

Compared to the UK as a whole, anticipated demand for personnel in the region in the next two to three years is higher for qualified electricians, apprentices, electrical labourers, and fire and security system installers, and lower for design engineers and estimators, and project supporting roles – see Table 6. While most surveyed employers believe demand will remain steady, the remainder of respondents from this region believe demand will increase with no respondents indicating they believe a decrease is likely.

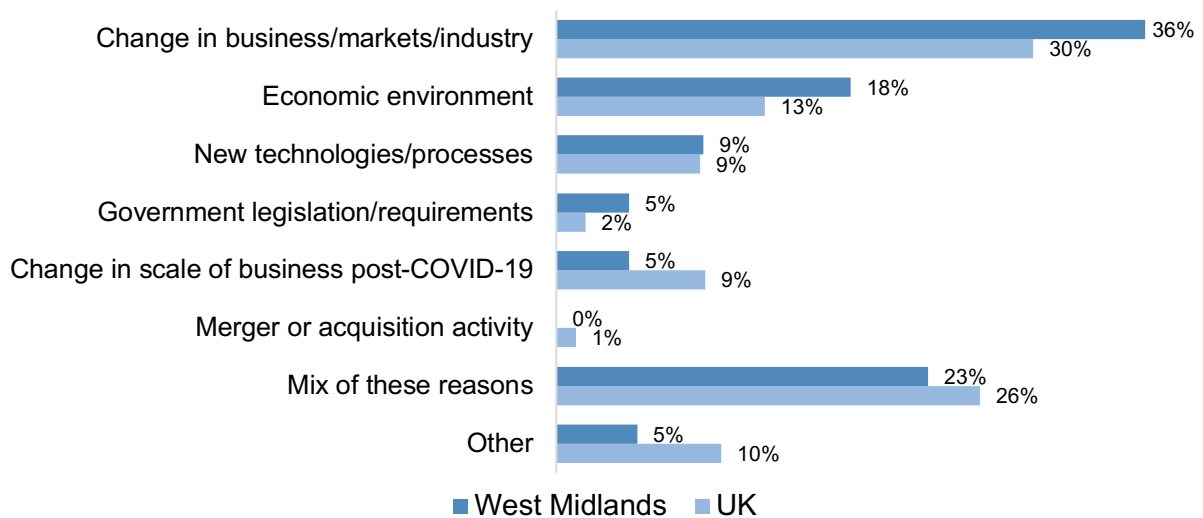
**Table 6 Anticipated demand for personnel change – UK vs West Midlands**

|                                     |               | Decrease | Remain the same | Increase |
|-------------------------------------|---------------|----------|-----------------|----------|
| Managers and supervisors            | UK-wide       | 4%       | 88%             | 8%       |
|                                     | West Midlands | -        | 93%             | 7%       |
| Design engineers and estimators     | UK-wide       | 5%       | 81%             | 14%      |
|                                     | West Midlands | -        | 96%             | 4%       |
| Qualified electricians              | UK-wide       | 5%       | 41%             | 54%      |
|                                     | West Midlands | -        | 33%             | 67%      |
| Apprentices                         | UK-wide       | 6%       | 45%             | 49%      |
|                                     | West Midlands | -        | 47%             | 53%      |
| Project supporting roles            | UK-wide       | 5%       | 82%             | 13%      |
|                                     | West Midlands | -        | 96%             | 4%       |
| Fire and security system installers | UK-wide       | 7%       | 82%             | 11%      |
|                                     | West Midlands | -        | 86%             | 14%      |
| Electrical labourers                | UK-wide       | 5%       | 64%             | 31%      |
|                                     | West Midlands | -        | 62%             | 39%      |

Base variable: 390 to 452 (UK) and 26 to 30 (West Midlands) respondents. Source: Pye Tait Consulting 2023.

Respondents foreseeing an increase or decrease in demand for any role were asked for the main reason for this change. Responses generally reflect those provided at a UK-wide level, with a slightly higher indication that change in business/market/industry is the main reason (36% vs 30% for the UK) – see Figure 5.

**Figure 5 Main reason for change in demand – UK vs West Midlands**



Base: 325 (UK) and 22 (West Midlands) respondents. Source: Pye Tait Consulting 2023.

Compared to the UK as a whole, anticipated demand for personnel in the region in the next three years as a direct result of new technologies and processes is higher for project personnel and skilled workers, and lower for all other roles. – see Table 7.

**Table 7 Anticipated demand for job roles as a direct result of new technologies – UK vs West Midlands**

|                                     |               | Decrease | Remain the same | Increase |
|-------------------------------------|---------------|----------|-----------------|----------|
| Directors and managers              | UK-wide       | 5%       | 89%             | 7%       |
|                                     | West Midlands | 4%       | 96%             | -        |
| Supervisors                         | UK-wide       | 5%       | 83%             | 12%      |
|                                     | West Midlands | 4%       | 96%             | -        |
| Project personnel                   | UK-wide       | 5%       | 76%             | 19%      |
|                                     | West Midlands | 4%       | 75%             | 21%      |
| Skilled e.g. qualified electricians | UK-wide       | 6%       | 41%             | 53%      |
|                                     | West Midlands | -        | 46%             | 54%      |
| Unskilled e.g. labourer             | UK-wide       | 6%       | 60%             | 33%      |
|                                     | West Midlands | 7%       | 64%             | 29%      |
| Apprentices/trainees                | UK-wide       | 8%       | 44%             | 47%      |
|                                     | West Midlands | 7%       | 52%             | 41%      |

Base variable: 396 to 442 (UK) and 27 to 28 (West Midlands) respondents. Source: Pye Tait Consulting 2023.