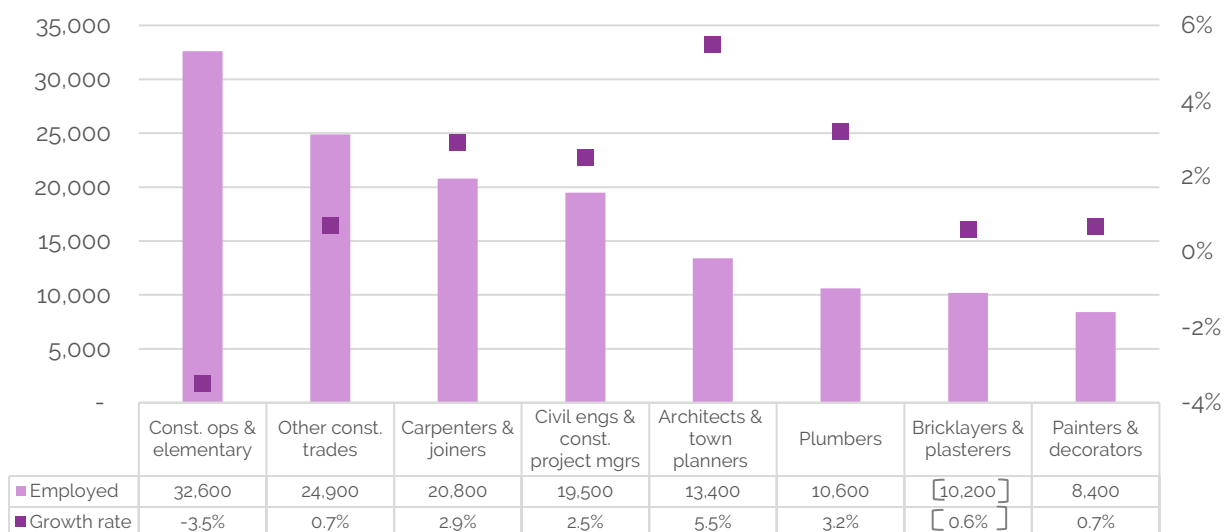


10.8 Construction Occupations

Figure 10.8 Annual Average Employment (2022) & Annual Average Growth Rates (2017-2022)



Overall employment	145,000
Share of total workforce	5.7%
Main sectors of employment	72% - Construction 12% - Professional activities 8% - Industry
Employment growth	+6,000 between 2017 and 2022 +0.8% on average annually (compared to +3.0% for total workforce)

2022	% Female Q4	% Full-time Q4	% Aged 55 years & over Q4	% Irish citizens Q4	% Third level graduates Q4	Number of new employment permits	Recruitment Agency Survey
Civil engineers & construction project mgrs	...	96%	...	76%	66%	596	✓
Architects & town planners etc.	...	96%	...	90%	100%	168	✓
Construction related technicians	...	[97%]	[91%]	10	✓
Bricklayers & plasterers	...	[95%]	...	[78%]	...	191	
Plumbers	...	94%	...	92%	...	46	
Carpenters & joiners	...	96%	...	88%	...	161	✓
Painters & decorators	...	[90%]	...	[70%]	...	31	
Other construction trades	...	96%	[23%]	75%	...	87	✓
Construction operatives & elementary	...	86%	[20%]	80%	...	56	✓
Overall total	[6%]	94%	18%	80%	33%	1,346	

Source: SLMRU (SOLAS) analysis of CSO (LFS) data, DETE, and SLMRU Recruitment Agency Survey (RAS)
Numbers in square brackets should be treated with caution; an ellipsis (...) denotes numbers too small to report
Construction related technicians are included in overall total but numbers are too small to report.

Overall Outlook for these Occupations

Employment levels in construction occupations fell during the COVID-19 pandemic, with employment numbers only returning to pre-COVID-19 levels in 2022. Over half (52%) of those employed held higher secondary or FET qualifications, with the share far higher for the skilled trades occupations. The removal of a number of construction occupations from the ineligible list for employment permits has resulted in an increase in the number of new permits issued between 2021 and 2022, with permits issued across all occupations in this group in 2022.

Demand for construction-related skills is expected to be particularly driven by Government targets for housing¹ and climate action². A 2022 DFHERIS report estimates that 50,000 new entrants will be required across all skill levels over the period 2023-2030 to deliver Government targets for housing and retrofitting alone.³ The transition to a zero carbon economy and the increased adoption of modern methods of construction will have significant implications for construction-related skills, with the changing skills mix of a range of existing occupations (e.g. civil engineers, plumbers, roofers, glaziers, etc) likely to require considerable levels of upskilling/reskilling. New practices for waste management and sustainable water (re)use facilities in order to achieve a circular economy will impact on the need for construction and civil engineering skills, particularly in the design phase of these operations⁴.

Occupation	Economic summary												
<p>Civil engineers & construction project managers</p> <p>Skills shortage: Civil engineers & construction project managers</p>	<p>Although the annual average employment growth over the five-year period for this occupation was only marginally above the national average, employment grew strongly between 2021 and 2022. Census data indicates that civil engineers account for over half of employment in this group; the strongest growth since 2016 was for production managers/directors.</p> <table border="1"> <thead> <tr> <th>CSO Census</th> <th>2016</th> <th>2022</th> </tr> </thead> <tbody> <tr> <td>Civil engineers</td> <td>7,128</td> <td>8,907</td> </tr> <tr> <td>Production managers and directors in construction</td> <td>4,585</td> <td>7,103</td> </tr> <tr> <td>Construction project managers and related professionals</td> <td>1,290</td> <td>1,185</td> </tr> </tbody> </table> <p>Both the new employment permits issued and the mentions of difficult-to-fill vacancies in the Recruitment Agency Survey point to issues in sourcing civil, site and structural engineers along with construction project managers. In addition, the Skills for Growth data signals issues with sourcing civil engineers (including for water infrastructure and sustainability) and structural engineer roles (especially those with project management skills). Demand for this occupation was also evident in the 12% increase in the number of job postings (OVATE) for civil engineers in 2022, with growing demand for skills in project management, teamwork, communication and adaptability. Demand for these roles is expected to continue as Ireland aims to meet housing and climate action targets. With employment increasing and issues with recruitment evident, shortages are likely to continue.</p>	CSO Census	2016	2022	Civil engineers	7,128	8,907	Production managers and directors in construction	4,585	7,103	Construction project managers and related professionals	1,290	1,185
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<p>Architects & town planners, architectural technologists, & surveyors</p> <p>Skills shortage: Quantity surveyors</p>	<p>The annual average employment growth was above average for this occupation, although employment levels declined marginally between 2021 and 2022. New employment permits issued in 2022 related to quantity surveyors and issues with recruitment of quantity surveyors were also evident in both the Skills for Growth and Recruitment Agency Survey data. The supply of quantity surveyors has increased since 2016, with 336 awards in 2021 in higher education. The demand for these skills is expected to be sustained in the coming years, although the tasks may be incorporated into other occupations e.g. structural engineer. With supply increasing, issues with recruitment may lessen in future years. Demand for architects and town planners is likely to continue, although the data does not currently point to issues in relation to sourcing suitably qualified personnel for these roles.</p>												
<p>Bricklayers & plasterers</p>	<p>Employment growth was below average for this occupation with little growth in recent years and a decline in levels between 2021 and 2022. Census 2022 data shows that employment was relatively evenly split between bricklayers/masons and plasterers. There were almost 200 employment permits issued in 2022 for bricklayers, stonemasons, and plasterers (including specialist clay</p>												

¹ <https://www.gov.ie/en/publication/ef5ec-housing-for-all-a-new-housing-plan-for-ireland/#for-low-income-households>

² <https://www.gov.ie/en/publication/6223e-climate-action-plan-2021/>

³ gov.ie - Report on the Analysis of Skills for Residential Construction & Retrofitting, 2023 to 2030 (www.gov.ie)

⁴The Green Employment and Skills Transformation: Insights from a European Green Deal skills forecast scenario https://www.cedefop.europa.eu/files/4206_en.pdf

	<p>plasterers). There was also a relatively high volume of vacancies notified through the DSP across similar roles to that of the employment permits (there may be some overlap as a labour market test is required for employment permit applications for these roles which includes advertising the positions on DSP Jobs Ireland). The 2022 DFHERIS report suggests that demand for plasterers will be strong in the short-term when retrofitting activity increases. However, the report also indicates that demand for both bricklayers and plasterers for housing will decline in the coming years; apartments account for an increasing share of housing stock and have fewer requirements for bricklayers due to the use of pre-cast concrete, and modern methods of construction where much of this work is carried out off-site. Although demand is evident at present, the data does not point to shortages.</p>																		
<p>Plumbers</p> <p>Skills shortage: Plumbers</p>	<p>Although employment has increased annually since 2020, employment levels in 2022 remained below pre-COVID-19 levels. New employment permits issued related to both plumbers and plumbing, heating and ventilation engineers. The DFHERIS report suggests that demand for plumbers for housing projects will peak in 2024 but, with retrofitting projects accelerating from 2026, a significant demand for plumbers is likely to persist. New apprenticeship registration numbers in 2022, at 792, were above pre-COVID-19 levels and the number of persons achieving the craft apprenticeship award (plumber) more than doubled between 2016 and 2021, going from 113 to 238. Shortages for plumbers are likely to continue, at least in the short-term, as supply from the education/training system is yet to meet annual recruitment requirements. In addition, those already trained as plumbers will also require re-/upskilling opportunities in order to carry out work linked to alternative renewable energy sources (e.g. the installation of heat pumps).</p>																		
<p>Carpenters & joiners</p> <p>Skills shortage: Carpenters</p>	<p>Employment growth was slightly above average for this occupation, although employment levels remained below pre-COVID-19 levels. Employment permits issued in 2022 were primarily for shuttering carpenters and mentions of difficult-to-fill vacancies in the Recruitment Agency Survey referred to both carpenters and shuttering carpenters. There was a large volume of vacancies notified through DSP for shuttering carpenters. Skills for Growth identified a limited demand for snag experts with woodwork skills for the construction sector. Although new apprenticeship registration numbers in 2022 were down on 2021, they exceeded pre-COVID-19 levels (713 in 2022 compared to 597 in 2019), with 228 persons achieving the craft apprenticeship award (carpentry & joinery) in 2021 (compared to 98 in 2016). The DFHERIS report suggests that developments in off-site construction manufacturing may dampen demand for carpenters somewhat; however, the report also signals that a shortage of carpenters is likely to be particularly evident in the short-term, driven particularly by demand for these skills for housing projects.</p>																		
<p>Painters & decorators</p>	<p>Employment growth was below average for painters and decorators; although employment levels increased between 2021 and 2022, they remained below pre-COVID-19 levels. Despite this, 31 new employment permits were issued in 2022. This occupation also had the highest share of non-Irish citizens in employment across the construction occupations, at 30%. The supply of skills from the education and training system is comparatively small: the number of QQI craft awards (painting & decorating) reached just 13 in 2021, although this is an increase on the 7 made in 2016. Significant increases are unlikely in the medium term as new apprenticeship registrations in 2022, at 23, were below the 31 observed in 2019. The demand for painters/decorators to meet the skills requirements for housing and retrofitting projects is likely to far outstrip the supply from the apprenticeship system, however, many employed as painters/decorators do not hold apprenticeship qualifications. Although the DFHERIS report signals issues with painters, the data here does not point to any current shortages for this occupation.</p>																		
<p>Other construction trades</p>	<p>Employment levels in 2022 returned to pre-COVID-19 levels after declining for the previous two years. The Census data shows that employment is spread across a number of roles, all of which increased between 2016 and 2022.</p> <table border="1"> <thead> <tr> <th>CSO Census</th> <th>2016</th> <th>2022</th> </tr> </thead> <tbody> <tr> <td>Construction and building trades supervisors</td> <td>2,901</td> <td>3,613</td> </tr> <tr> <td>Floorers and wall tilers</td> <td>2,967</td> <td>3,506</td> </tr> <tr> <td>Glaziers, window fabricators and fitters</td> <td>2,587</td> <td>2,916</td> </tr> <tr> <td>Roofers, roof tilers and slaters</td> <td>1,423</td> <td>1,786</td> </tr> <tr> <td>Construction and building trades n.e.c.</td> <td>9,989</td> <td>12,167</td> </tr> </tbody> </table> <p>The share aged 55 years and older fell between quarter 4 2021 and quarter 4 2022 from 38% to 23%; although still above the national average of 19%, job opportunities through replacement demand have likely lessened. The Recruitment Agency Survey identified issues with sourcing steel fixers/erectors, curtain wallers, and fitters/glaziers with Skills for Growth data suggesting issues with recruiting roofers for the construction sector. New employment permits issued in 2022 related to foremen, fitters/glaziers and tilers. Vacancies advertised through DSP Jobs Ireland were mainly for glaziers, tilers, roofers/solar panel installers. Roofing awards from QQI totalled 54 in 2022, up</p>	CSO Census	2016	2022	Construction and building trades supervisors	2,901	3,613	Floorers and wall tilers	2,967	3,506	Glaziers, window fabricators and fitters	2,587	2,916	Roofers, roof tilers and slaters	1,423	1,786	Construction and building trades n.e.c.	9,989	12,167
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	<p>slightly compared to 2020 and 2021 but still below their pre-pandemic level of 84. The DFHERIS report notes that it is becoming increasingly common for roofs to be constructed offsite which is likely to have knock-on effects for demand for these skills but a significant increase in retrofitting activities would likely see increased demand for roofers and glaziers. Although future shortages may emerge, albeit in small numbers, none are evident at present.</p>
<p>Construction operatives & elementary</p>	<p>Overall employment levels for this occupation have been relatively stable in recent years; the negative employment growth over the five-year period for this occupation relates to changes that occurred on the introduction of the new Labour Force Survey in 2017. Although employment only increased marginally between 2021 and 2022, there was a high volume of recent job hires indicating that job churn is a significant issue. Scaffolders appeared in the employment permit data, the Recruitment Agency Survey and in the DSP Jobs Ireland vacancy data. The number of QQI scaffolding awards (specific purpose) reached 329 in 2022, and except for 2019 (when there were 333 awards), was higher than at any point over the last 10 years. A new two-year apprenticeship for scaffolding was also announced in August 2021 which aims to alleviate any issues for this occupation. It is not possible, however, to determine from the Labour Force Survey or Census data the employment levels for scaffolders and as such it is difficult to determine the extent to which supply from the education/training system is meeting demand.</p>