

Article

Construction statistics, Great Britain: 2020

A wide range of statistics that are currently available on the construction industry including value of output, new orders by sector, number of firms and total employment, insolvencies and construction output price indices.

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1 . Main points

- The value of construction new work in current prices in Great Britain experienced a record 16.3% fall in 2020 to £99,651 million after the record high of £119,087 million in 2019 as the impact of Coronavirus (COVID-19) pandemic took hold; there were similar percentage reductions in both private and public new work. (See [Section 2](#))
- Construction new orders fell by 11.9% in 2020 to £55,631 million, reaching its lowest level recorded since 2013, driven down by the private housing, private commercial (mainly entertainment) and public other new work sectors; the only sectors with positive growth were infrastructure and public new housing, with the former seeing most notable growth in electricity and roads. (See [Section 3](#))
- 342,456 Value Added Tax (VAT)/Pay As You Earn (PAYE) registered firms were operating in the construction industry in Great Britain in the third quarter of 2020, a 2.0% growth compared with 2019; administrative lags in deregistering and closing firms may mean that some closures are not yet visible in these figures. (See [Section 4](#))
- Construction-related employees (excluding self-employment) for VAT/PAYE-registered businesses in Great Britain remained broadly unchanged in the third quarter of 2020 compared with 2019, totalling 1.4 million workers; while self-employed workers fell to 727,000 in 2020 according to Office for National Statistics (ONS) data from the Labour Force Survey. (See [Section 4](#))
- Construction saw a 36.6% annual fall in the number of recorded company insolvencies in 2020; this is a similar magnitude when compared with all industries. (See [Section 4](#))
- The all-work construction output price index saw a mixed profile of annual price growth in 2020; the first half of 2020 saw continued declines in annual growth from 1.8% in January 2020 to flat (0%) growth in July 2020 with successive increases in the second half of 2020 to 1.7% annual price growth in December 2020. (See [Section 5](#))
- The table numbers in the 2020 edition have changed but the data within each table remains consistent with previously published annual tables; see [main dataset](#) contents for an updated table list and their corresponding number in 2019 publication.

This release may be subject to more uncertainty than usual because of the challenges faced due to the pandemic and collection of data under government-imposed restrictions.

2 . Construction output

This annual publication focuses on short-term measures of output value in current prices (see the [accompanying dataset](#)) where deflators are unavailable for the low-level sector data. This is opposed to volume (the value of work deflated by measures of inflation), which is the lead measure in [monthly statistics](#) on construction output in Great Britain.

Figure 1: Total new work construction output experienced a record 16.3% fall in 2020, with percentage reductions of 17.2% and 16.0% in public and private new work respectively

Types of construction work, current prices, non-seasonally adjusted, Great Britain, 2010 to 2020

Download the data

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Overall, total new work fell £19,436 million in 2020 as the impact of the coronavirus (COVID-19) pandemic took hold. This is significantly more than the £14,082 million decrease in 2009 after the financial crash.

Private housing and private commercial new work contributed three-quarters of the overall decrease in 2020. Both sectors had exceptionally large falls in April and May 2020 as building sites closed because of official guidance on restrictions of movement in Great Britain.

Private infrastructure was the only sector to see an annual increase in new work (£1,571 million), recording its highest value in the last decade. In contrast, public infrastructure new work fell £2,306 million in 2020.

Table 1: Construction new work output value broken down by type: change from 2019 to 2020
Types of construction work, current prices, non-seasonally adjusted, Great Britain, annual percentage change, £million change and value for 2020

Type of work	Annual change (%)	Annual change (£ million)	2020 value (£ million)
Total new work	-16.3	-19,436	99,651
Total private	-16	-14,050	73,625
Total public	-17.2	-5,387	26,025
New housing	-20.7	-9,872	37,755
Public	-32.2	-2,264	4,763
Private	-18.7	-7,608	32,992
Total Infrastructure	-3.2	-735	22,517
Public Infrastructure	-16.9	-2,306	11,361
Private Infrastructure	16.4	1,571	11,156
Other new work			
Public	-7.6	-817	9,901
Private Industrial	-18.5	-1,102	4,863
Private commercial	-21.9	-6,911	24,614

Source: Office for National Statistics – Construction statistics, Great Britain: 2020 (Table 1.1, 1.2, 1.3)

Notes

1. See the monthly statistics on construction output in Great Britain listed in the Related links section for more information on repair and maintenance statistics.
2. Types of construction work may not sum exactly to the totals because of rounding.

3 . Construction new orders

We publish quarterly [construction new orders data](#), using data sourced from [Barbour ABI](#), which provide an indication of both current confidence and future health of the construction industry. Annual data is provided in the [accompanying dataset](#).

Figure 2: New orders value fell 11.9% in 2020 compared with 2019 to £55,631 million, the lowest level since 2013

New orders value, current prices, non-seasonally adjusted, Great Britain, 2010 to 2020

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Annual falls in private housing (15.0%), private commercial (13.6%) and public other new work (27.7%) were the main contributors to the 2020 decline in new orders. This was partly offset by infrastructure, which grew 3.0%.

Figure 3: Entertainment, railways and private housing were the main sectors contributing to the annual decrease in new orders in 2020

Contributions to year-on-year growth by sector, current prices, non-seasonally adjusted, Great Britain, 2020

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Private housing new orders saw a fall of £2,904 million in 2020.

In the private commercial sector, the entertainment industry fell 40.5% (£1,954 million) to £2,868 million in 2020 compared with 2019. The decline was driven by fewer new orders placed each quarter, most prominently in Quarter 2 (Apr to June) 2020. Despite the large fall in the value of new orders, the average value per project in the entertainment sector only fell slightly.

Infrastructure new order growth was led by a 66.7% increase in electricity (£1,875 million) and 23.0% (£1,050 million) increase in roads. The large annual increase in electricity is affected by 2019 data recording its lowest level since 2012.

Railway infrastructure fell 68.5% (£2,697 million) in 2020, however like electricity, new orders in rail can be volatile.

Other public non-housing saw a fall of 27.7% (£2,203 million). The largest decrease was in schools and colleges of 32.2% (£1,058 million), which fell across each quarter in 2020 compared with 2019.

Conversely, the largest increase was in health (40.7% or £433 million), where value of new orders increased in the first three quarters of 2020 but decreased in Quarter 4 (Oct to Dec 2020). The coronavirus (COVID-19) pandemic increased the focus on health-related construction.

4 . Structure of the industry

Structure of the construction industry data includes breakdowns on employment, trade, size and number of firms, using the Office for National Statistics (ONS) [Inter-Departmental Business Register \(IDBR\)](#) (see [accompanying dataset](#)).

There can be notable lags in the removal of a business from the IDBR because of economic, legal and statistical processes. These data are as of Quarter 3 (July to Sept) 2020. As such, increased business closures resulting from the coronavirus (COVID-19) pandemic may not yet be visible in these statistics and may be reflected in data in subsequent quarters.

Also, these statistics are based on location of construction firm on the IDBR. Construction firms may operate and employ people across wider geographical areas, not just in the region in which they are registered on the IDBR.

Number of firms and employees

Figure 4: Over 30% of construction firms and employees were concentrated around London and the South East of England

Proportion of total construction firms and employees in Great Britain, by NUTS1 region of registration, classified as of Quarter 3 2020

Notes:

1. These firm and employees data are point in time estimates classified in the third quarter of 2020 on the IDBR. In October 2021 BEIS published estimates of the wider [business population](#) in the UK.
2. Self-employment data are not included because of being unavailable at a NUTS1 level by industry.

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Figure 5: Despite the challenges of the pandemic both the number of firms (2.0%) and employees (excluding self-employment) (0.9%) in the construction sector saw some annual growth in Quarter 3 2020

Year-on-year growth in the total number of construction firms and employees, Great Britain, 2012 to 2020, classified as of Quarter 3 (July to Sept) 2020

Notes:

1. These firm and employees data are point in time estimates classified in Quarter 3 2020 compared with Quarter 3 2019.
2. Self-employment data are not included because of being unavailable at a NUTS1 level by industry.

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Firms

There were 342,456 Value Added Tax (VAT)/Pay As You Earn (PAYE) registered construction firms operating in the construction industry across Great Britain in 2020. The number of registered firms grew 2.0% in the third quarter 2020 compared with 2019, although administrative lags in deregistering and closing firms may have affected these figures to a different extent compared with other years. While seeing annual growth in 2020 the rate of growth has continued to slow for the fifth consecutive year since 2015.

Evidence from [UK Business demography, quarterly experimental statistics](#) show both business births and deaths in the construction industry fell in 2020 compared with 2019 by 6,190 and 3,080, respectively. However, with business births still above business deaths the number of firms increased.

Administrative lags (both legal and statistical) aside, further anecdotal reasons, gathered from survey responses to the IDBR, for the overall increase in the number of firms included:

- continued optimism from firms waiting for the pandemic to subside who see no advantage in closing because of the expected resurgence in the economy
- increased governmental financial support for companies
- increase in demand in the second half of 2020 (see [Construction output June 2021 publication](#))

Wales saw the largest increase, with 2.2% (293) more registered firms. England had 2.1% (6,374) more registered firms, while Scotland remained broadly stable, with 0.3% (58) more registered firms.

Employees and self-employment

Using data from [ONS Workforce Jobs release](#) (these data are different to IDBR data and unavailable at the granularity required to publish the Annual construction tables 3.4, 3.5 and 3.6) total employment (employees and self-employment) in the construction industry decreased to 2.1 million workers in the second half of 2020.

This is consistent with the productivity jobs employment trend shown in the [construction productivity](#) article.

Self-employment

The ONS workforce jobs estimates include employees and self-employed. According to ONS data, [Self-employment jobs by industry](#), sourced from the Labour Force Survey, there was an average of 727,000 self-employed construction workers in Great Britain in 2020, a decrease of 92,000 (11.2%) compared with 2019.

Self-employment remained concentrated in [UK Standard Industrial Classifications \(SIC\) 2007 divisions 41 and 43](#), the construction of buildings and specialised construction activities. Despite this, the construction sector had the highest levels of self-employed jobs across the whole economy (17.4%).

Employees (excluding self-employment)

Sourced from IDBR estimates, construction-related employees (excluding self-employment) in Great Britain (as shown in Figures 4 and 5) remained broadly unchanged in the third quarter of 2020 compared with 2019, totalling 1.4 million workers.

Wales increased 3.1% and England 1.9%, whereas Scotland fell 9.2%. The fall in employment seen in Scotland also observed in [Workforce Jobs statistics](#) is affected by the standard process of company reclassifications of location on the IDBR (a business changing the region where it is registered, and associated employment changing to the new region).

The anecdotal reasons listed for number of firms also apply to why employees (excluding self-employment) might not have decreased in some parts of the country.

Insolvencies

There were 13,204 new company insolvencies in Great Britain in 2020, with construction making up 16.5%. For a full account of business death counts, see the [ONS UK Business demography, quarterly experimental statistics](#) article.

Specifically, during 2020, as part of government COVID-19 measures, the number of insolvencies may have been affected because of:

- reduction in operations in the court system
- temporary restrictions on statutory demands and certain winding-up petitions
- increased governmental financial support for companies

Figure 6: Construction has seen a 36.6% fall in the number of company insolvencies in 2020; a similar magnitude when compared with all industries

Number of insolvencies by industry, 2019 average = 100, non-seasonally adjusted, Great Britain, 2020

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Figure 7: Although the construction sector had the highest percentage of all insolvencies of any industry, at 16.5%, construction had the fourth largest proportion of insolvencies to number of firms

Number of insolvencies by industry as a proportion of number of firms, non-seasonally adjusted, Great Britain, 2020

Notes:

1. The "proportion of total industry" rates are calculated using two different company registers, the number of company insolvencies listed on the Companies House register over companies registered to the IDBR.

Download the data

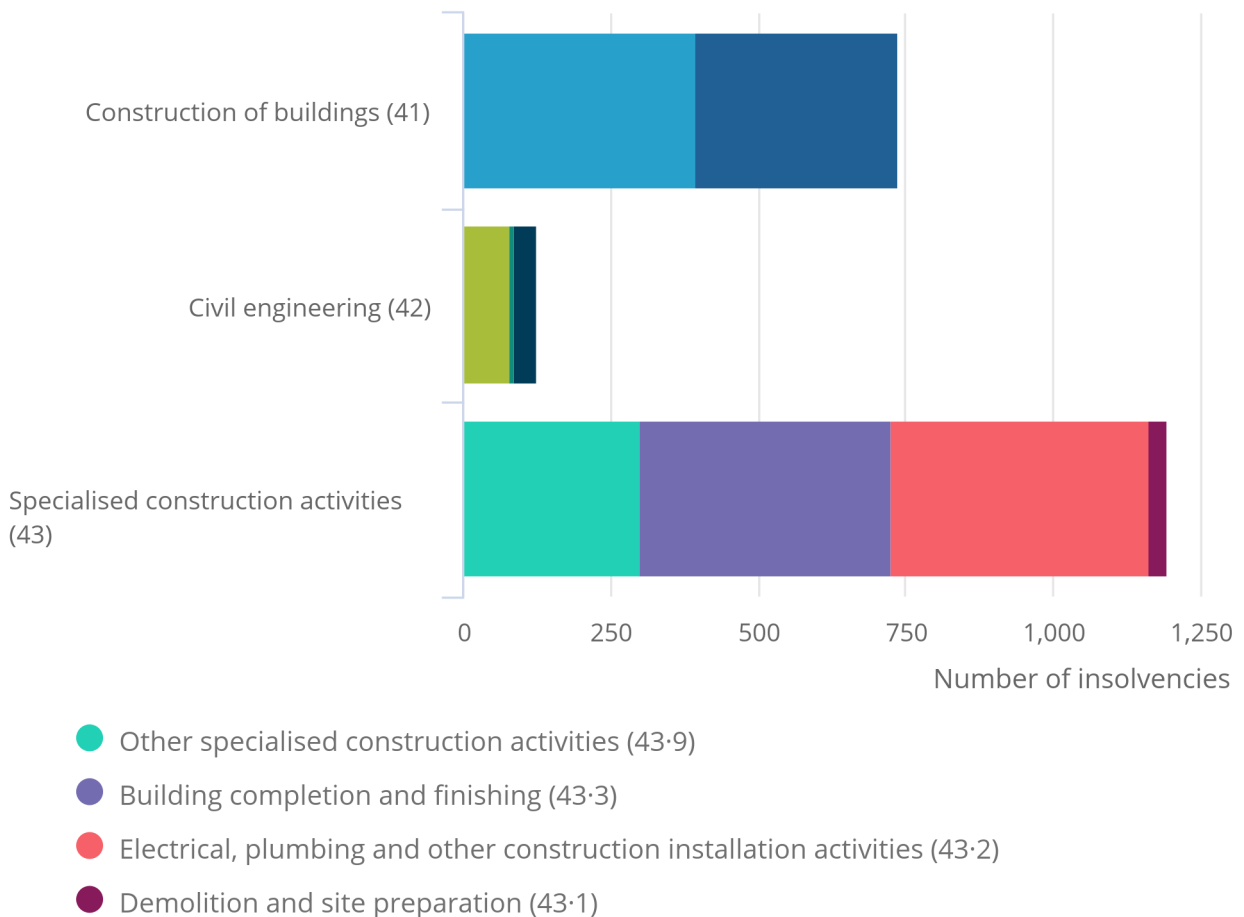
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Figure 8: Electrical, plumbing, and other construction installation activities accounted for most construction company insolvencies in 2020

Number of construction insolvencies by three-digit SIC (2007), non-seasonally adjusted, England and Wales, 2020

Figure 8: Electrical, plumbing, and other construction installation activities accounted for most construction company insolvencies in 2020

Number of construction insolvencies by three-digit SIC (2007), non-seasonally adjusted, England and Wales, 2020



Source: The Insolvency Service – Company Insolvency Statistics: April to June 2021 (Table A1c)

5 . Construction Output Prices Indices

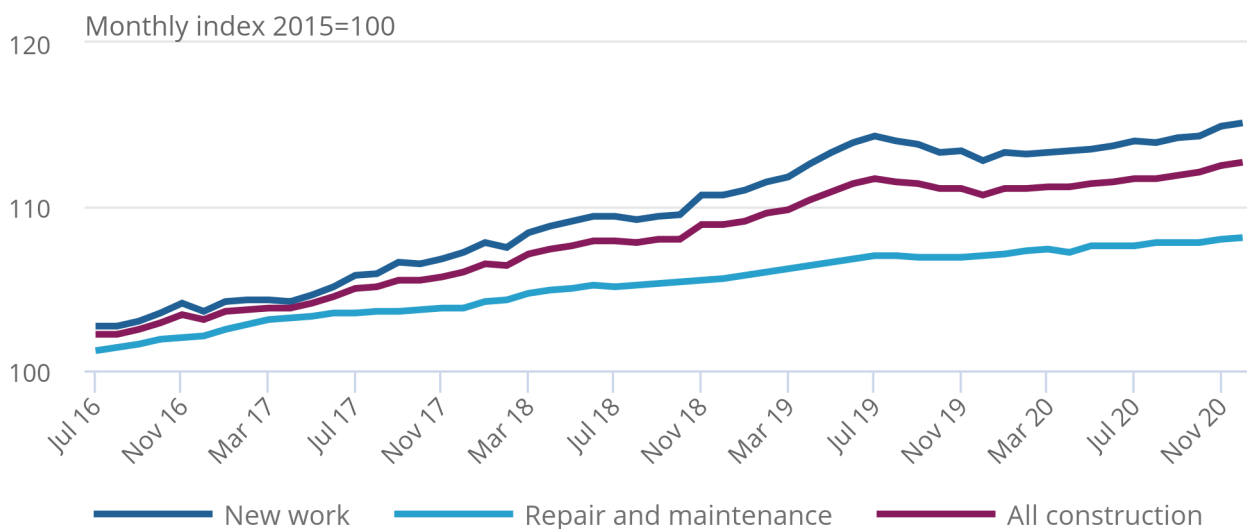
The Construction Output Price Indices (OPIs) provides Office for National Statistics (ONS') best estimate of inflation within the UK construction industry.

Figure 9: After falling in the second half of 2019, all Construction Output Price Indices reached an all-time high in December 2020

Monthly index 2015=100, non-seasonally adjusted, Great Britain, July 2016 to December 2020

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Monthly index 2015=100, non-seasonally adjusted, Great Britain, July 2016 to December 2020



Source: Office for National Statistics – Construction Output Price Indices

In the 12 months to December 2020, there was annual growth in all construction output prices of 1.7%. At the lower level, repair and maintenance output prices increased slightly across the 12 months to December 2020 with growth of 1.1% while new work output prices increased by 2.1%.

Figure 10: The profile of growth in construction output prices is similar across most sectors with growth decreasing in the first half of 2020 and increasing in the second half of 2020

Construction output price growth, annual percentage change, non-seasonally adjusted, Great Britain, July 2016 to December 2020

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The “U-shaped” profile for construction output price growth is evident in 2020, with declining growth across most sub-sectors in the first half of 2020 followed by increases in the second half of 2020. This was led by price increases later in the year, most notably infrastructure sector price increases of 3.8% in the 12 months to December 2020.

Both housing and non-housing repair and maintenance saw lower growth in the 12 months to December 2020, at 0.9% and 1.3% respectively.

For more information see the article on how [construction material and plant hire price inputs](#) are affecting construction output prices over the coronavirus (COVID-19) pandemic period.

6 . Construction data

[Construction statistics annual tables](#) Dataset | Released 19 October 2021 The construction industry in Great Britain, including value of output and type of work, new orders by sector, number of firms and total employment.

[Construction output in Great Britain: August 2021](#) Dataset | Released 13 October 2021 Monthly construction output for Great Britain at current price and chained volume measures, seasonally adjusted by public and private sector.

[Construction output price indices](#) Dataset | Released 12 August 2021 A summary of the Construction Output Indices (OPIs), UK.

[New orders in the construction industry](#) Dataset | Released 12 August 2021 Quarterly new orders at current price and chained volume measures, seasonally adjusted by public and private sector. Quarterly non-seasonally adjusted type of work and regional data.

[Output in the construction industry: sub-national and sub-sector](#) Dataset | Released 12 August 2021 Quarterly non-seasonally adjusted sub-national and sub-sector data at current prices, Great Britain.

7 . Glossary

Construction output estimates

Construction output estimates are monthly estimates of the amount of output chargeable to customers for building and civil engineering work done in the relevant period, excluding Value Added Tax (VAT) and payments to subcontractors.

Construction Output Price Indices (OPIs)

The Construction OPIs are compiled using input costs, which are material, labour and plant, weighted together for a selection of types of construction projects, with a mark-up being applied to account for profit by the construction firm. The result is considered a proxy for output prices.

Inter-Departmental Business Register

The Inter-Departmental Business Register (IDBR) is a comprehensive list of UK businesses registered for Value Added Tax (VAT) and Pay As You Earn (PAYE) used by government for statistical purposes. The IDBR provides the main sampling frame for surveys of businesses carried out by the Office for National Statistics (ONS) and other government departments. It is also an important data source for analyses of business activities.

The two main sources of input are VAT and PAYE records from HM Revenue and Customs (HMRC). Additional information comes from Companies House, Dun and Bradstreet and the ONS business surveys.

New orders

The new orders data measures the value and volume of new orders of main contractors by type of work and region.

Seasonally adjusted estimates

Seasonally adjusted estimates are derived by estimating and removing calendar effects (for example, leap years such as this year) and seasonal effects (for example, decreased activity at Christmas because of site shutdowns) from the non-seasonally adjusted estimates.

Value estimates

The value estimates reflect the total value of work that businesses have completed over a reference month. Value estimates are also referred to as the data in current prices.

Volume estimates

The volume estimates are calculated by taking the value estimates and adjusting to remove the impact of price changes. Where [chain-linking](#) is applied, volume estimates are referred to as chained volume measures.

8 . Data sources and quality

This annual publication brings together a range of statistics currently available on the construction industry from the Office for National Statistics (ONS) and other government departments.

The construction industry is categorised as section F of the [UK Standard Industrial Classification \(SIC\) 2007](#), which is defined as:

- division 41: Construction of buildings
- division 42: Civil engineering
- division 43: Specialised construction activities

The table numbers in the updated [Construction statistics annual tables](#) have changed but the data within each table remains consistent with previously published datasets.

All data published are in current prices and, unless otherwise stated, non-seasonally adjusted and correct at the time of release, however, are subject to revisions as per the respective revisions policy.

The links below provide the annual data sources published previously, externally, or elsewhere by ONS.

- [Annual Business Survey \(Non-financial business economy, UK and regional\)](#)
- [Average weekly earnings](#)
- [Building materials and components: monthly statistics](#)
- [Business demography, quarterly experimental statistics, UK](#)
- [Business insights and impact on the UK economy](#)
- [Business population estimates for the UK and regions 2021 \(BEIS\)](#)
- [Construction Industry Training Board \(CITB\)](#)
- [Construction output statistics \(Northern Ireland\)](#)
- [Department for Communities \(Northern Ireland\): Housing Statistics](#)
- [Employees and self-employed by industry](#)
- [House building, UK](#)
- [Insolvency Statistics](#)
- [International comparisons \(OECD\)](#)
- [Migrant labour force within the UK's construction industry](#)
- [Planning application statistics](#)
- [Reporting of Injuries, Diseases and Dangerous Occurrences Regulations \(RIDDOR\)](#)
- [Regional GDP estimates](#)
- [Stoppages of work](#)
- [Workforce jobs by region and industry](#)
- [UK business: activity, size and location](#)

Quality and methodology information (QMI)

- [Business demography QMI](#)
- [Construction output QMI](#)
- [Construction Output Price Indices QMI](#)
- [Guide to sources of data on income and earnings](#)
- [New orders in construction QMI](#)
- [Monthly insolvencies QMI](#)
- [Productivity QMI](#)
- [UK business: activity, size and location QMI](#)

9 . Related links

[Price movements in construction materials and plant hire, UK: 2019 to 2021](#)

Article | Released 20 October 2021

Price movements of construction materials and plant hire between 2019 and 2021 and their causes: a brief overview of construction in the UK, construction output indices and how these are computed, and construction inputs and their price movements and the factors behind them.

[How has UK construction performed over the pandemic?](#)

Blog | Released 19 October 2021

Recent drivers of output, new orders and productivity and the challenges currently facing the sector.

[Construction output in Great Britain](#)

Bulletin | Released monthly

Short-term measures of output by the construction industry in Great Britain and contracts awarded for new construction work in the UK. Also, quarterly new orders and sub-national and sub-sector data.

[Productivity in the construction industry](#)

Article | Released 19 October 2021

Productivity in the construction industry, construction output, labour market data, capital stocks, gross fixed capital formation

[Construction development: improvements to regional and sub-sector level estimates, UK: July 2021](#)

Article | Released 20 July 2021

Latest improvements to input data used to model sub-national and sub-sector level construction output estimates, including the impact of the changes.

[Housing in construction output, Great Britain: 2010 to 2019](#)

Article | Released 30 January 2020

An overview of the housing sector using construction output estimates, including the differences in public and private sector housing and size and geographical location of firms in the industry.

[Construction statistics development: improving the understanding of new orders in the construction industry and the gap between output and new orders](#)

Article | Released 30 October 2018

Explanation and analysis as to the possible causes to explain the differences in Office for National Statistics construction output and new orders data.

[Construction statistics: sources and outputs](#)

Methodology | Released 2 October 2017

A list of the known sources of information available on the construction industry and their outputs.