



Monthly Statistics of Building Materials and Components

Commentary April 2019

Coverage: UK and Great Britain

Geographical area: Country, region and

county

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Headline results

Concrete block deliveries increased by 9.5% in March 2019 compared to March 2018, according to the seasonally adjusted figures. The month-on-month change shows a 3.2% increase in March 2019.

Construction material prices rose on a yearly basis. The 'All Work' construction material price index **increased** by **4.4%** in March 2019 compared to a year previously.

Introduction

This commentary accompanies the latest Monthly Statistics of Building Materials and Components bulletin, published on the BEIS building materials <u>web page</u> on 1st May 2019. It provides an overview of recent trends in the data presented in the bulletin.

The bulletin presents the latest detailed information on selected building materials and components. It covers the following building materials statistics (in parentheses, the data collection frequency and the geographical area covered):

- Construction material price indices (monthly, UK)
- Sand and gravel sales (quarterly, GB*)
- Slate production, deliveries and stocks (quarterly, GB)
- Cement and clinker production, deliveries and stocks (annual, GB)
- Bricks production, deliveries and stocks (monthly, GB*)
- Concrete building blocks production, deliveries and stocks (monthly, GB*)
- Concrete roofing tiles production, deliveries and stocks (quarterly, GB)
- Ready-mixed concrete deliveries (quarterly, UK)
- Values of overseas imports and exports trades for selected materials and components for use in construction (quarterly, UK)
- Value of EU and Non-EU Trade for selected materials and components for use in construction (annual, UK)

Note: * Regional figures available

These statistics support analysis of the construction materials market and business planning. They are regularly reported in the construction press and are used for a variety of purposes, including policy development and evaluation concerning the construction products industry, as well as monitoring market trends. Further detail is available in this document under <u>Uses of the data</u>.

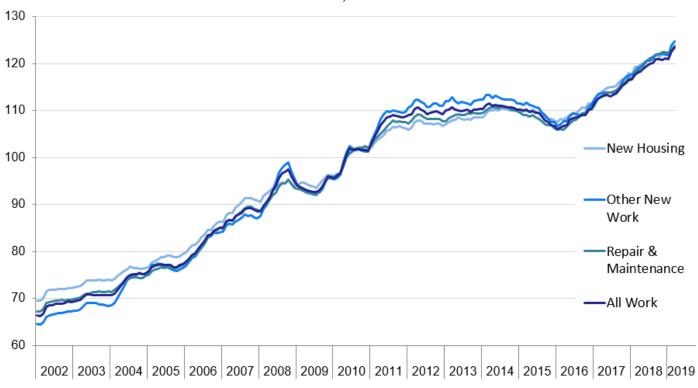
Seasonal Adjustment Review

Seasonally adjusted series for deliveries of bricks, concrete blocks, ready-mixed concrete and sales of sand & gravel are published in this bulletin. The purpose of correcting the reported series is to allow for seasonal factors such as winter weather (including the reduction in hours of daylight, and frost and rain) and other seasonal events such as Christmas and Easter. Thus, seasonally adjusted figures show the underlying trend more clearly. Further information can be found in Section 2 of the Background Notes on page 14 of this document.

Summary of Results

Material Price Indices

Chart 1: Construction Material Price Indices, UK* Index, 2010 = 100



Source: Table 1, Monthly Statistics of Building Materials and Components

Year-on-year change

Change from March 2018 to March 2019		
New Housing 3.8%		
Other New Work	4.7%	
Repair & Maintenance	4.3%	
All Work	4.4%	

Month-on-month change

Change from February 2019 to March 2019		
New Housing 0.8%		
Other New Work	0.7%	
Repair & Maintenance	0.5%	
All Work	0.7%	

Looking at the longer-term change, the material price index of 'All Work' increased by 4.4% in March 2019 compared to the same month the previous year.

Table 1: Construction materials experiencing the greatest price increases and decreases in the 12 months to March 2019, UK

Construction Materials	% change on a
	year earlier
Greatest price increases	
Insulating materials (thermal or ac	oustic) 11.0
Imported sawn or planed wood	7.5
Kitchen furniture	5.3
Greatest price decreases	
Concrete reinforcing bars	-2.0
Ceramic tiles	-0.4
Screws etc	-0.1

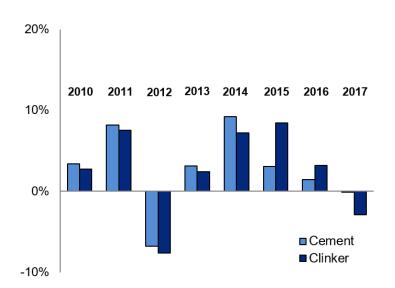
The aggregated construction material price index hides larger price movements for some specific products and materials. The three largest increases and decreases are presented here.

Source: Table 2, Monthly Statistics of Building Materials and Components

Cement & Clinker

Chart 2: Production of Cement and Clinker, GB

Percentage change over previous year (%)



Source: Table 8, Monthly Statistics of Building Materials and Components

Cement production fell by 0.1% to 9.4 million tonnes in 2017, compared to the previous year. This fall in cement production follows growth of 1.5% to 9.4 million tonnes in 2016. Prerecession production peaked in 2007 at 11.9 million tonnes.

Production of Clinker fell by 2.9% to 7.8 million tonnes in 2017, compared to the previous year. This fall in clinker production follows growth of 3.2% to 8.1 million tonnes in 2016. Prerecession production, in 2007, stood at 10.2 million tonnes.

Sand & Gravel

Chart 3: Seasonally Adjusted Sales of Sand & Gravel, GB

Weight of sand & gravel



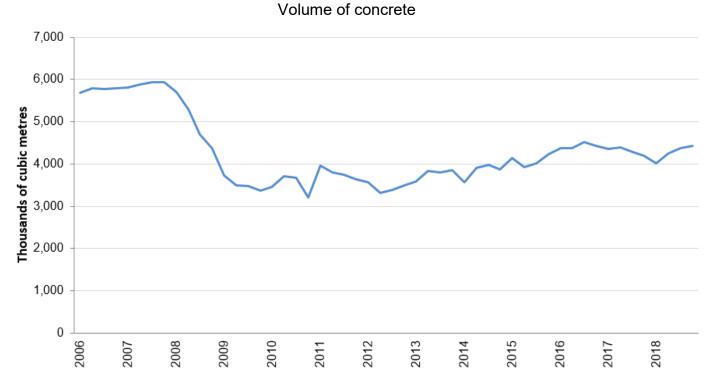
Source: Table 4, Monthly Statistics of Building Materials and Components

- Sales of sand & gravel decreased by 2.1% in Quarter 1 2019 compared to Quarter 4 2018, according to the seasonally adjusted data.
- This followed a decrease of 8.3% in Quarter 4 2018.
- Comparing Quarter 1 2019 to the same quarter in the previous year, sales have increased by 4.4%.

Seasonally adjusted sales of sand & gravel have consistently remained below levels typically seen before the recession of 2008 - 2009.

Concrete

Chart 4: Seasonally Adjusted Sales of Ready-Mixed Concrete, GB



Source: Table 13, Monthly Statistics of Building Materials and Components.

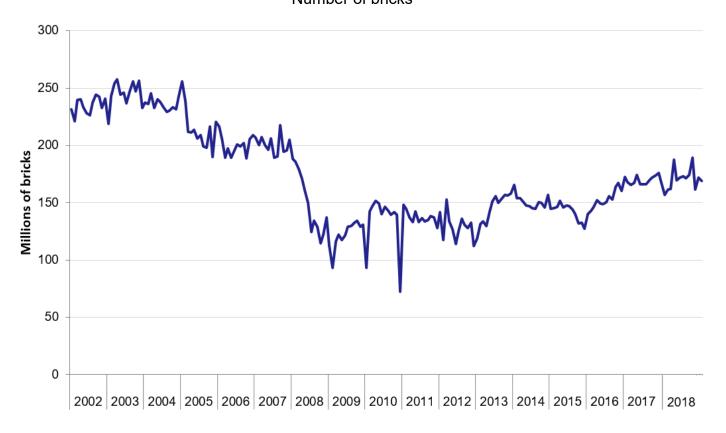
- Data for ready-mixed concrete for Quarter 1 2019 was not available at the time of publication.
- Ready-mixed concrete sales increased by 1.2% in Quarter 4 2018 compared to Quarter 3 2018, according to the seasonally adjusted data.
- This followed a 3.0% increase in Quarter 3 2018.
- Sales in Quarter 4 2018 **increased** by **5.7%** compared to the same quarter in the previous year, following an **2.2% increase** in Quarter 3 2018, on the same basis.

The seasonally adjusted data show that the lowest quarterly sales in the post-recession period occurred in Quarter 4 2010, which included extreme winter conditions.

Sales have steadily recovered since Quarter 2 2012, although they have failed to reach prerecession levels.

Bricks

Chart 5: Seasonally Adjusted
Deliveries of Bricks, GB
Number of bricks



Source: Table 9, Monthly Statistics of Building Materials and Components

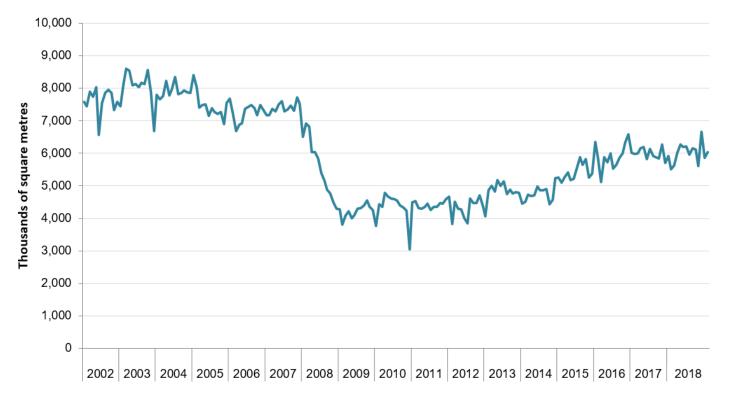
- There was a 7.6% increase in brick deliveries in March 2019 compared to March 2018, according to the seasonally adjusted figures.
- This followed a 2.8% increase in February 2019, on the same basis.
- The month-on-month change shows a **1.7% decrease** in March 2019.
- This followed a 6.3% increase in February 2019, on the same basis.

Deliveries of bricks declined during the recession of 2008 - 2009 and have recovered slowly since 2013.

Blocks

Chart 6: Seasonally Adjusted Deliveries of Concrete Blocks, GB

Area of concrete blocks



Source: Table 11, Monthly Statistics of Building Materials and Components

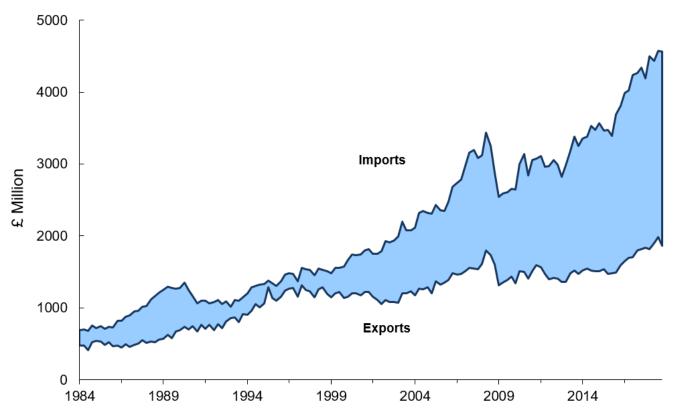
- There was an **9.5% increase** in concrete block deliveries in March 2019 compared to March 2018, according to the seasonally adjusted figures.
- This followed a 1.2% decrease in February 2019, on the same basis.
- The month-on-month change shows a **3.2% increase** in March 2019.
- This followed a 12.1% decrease in February 2019, on the same basis.

Concrete block deliveries declined during the recession of 2008 - 2009, though the general trend has been one of growth since 2013.

Imports and Exports of Construction Materials

Chart 7: Exports and Imports of Construction Materials, UK.

Value in pounds sterling



Source: Table 14, Monthly Statistics of Building Materials and Components

Imports of construction materials **decreased** by £8 million in the fourth quarter of 2018 (to £4,568 million) compared to the previous quarter, a decrease of 0.17%.

Exports of construction materials **decreased** by £121 million in the fourth quarter of 2018 (to £1,868 million), a 6.1% decrease.

As a result, the **trade deficit widened** by £113 million to £2,700 million in Quarter 4 2018, an increase of 4.4%.

Over the period from Quarter 1 1984 to Quarter 4 2018, construction materials imports have increased, on average (per quarter), by 4.0%. Over the same period, exports increased by an average of 2.1% per quarter.

The trade deficit was historically at its smallest throughout the 1990s, with a mean of £0.3 billion over this period. This trade deficit was 24% of the value of imports. As of Quarter 4 2018, the trade deficit is £2,550 million, 59% of the value of imports.

Table 2: Top-5 Exported and Imported Construction
Materials in 2018

£ million Top-5 Exported Materials		Top-5 Imported Materials		
Electrical Wires	864	Electrical Wires	1,889	The top five exported
Paints & Varnishes	717	Lamps & Fittings	910	materials in 2018 accounted for 37% of total construction
Plugs & Sockets	452	Sawn Wood> 6mm thick	883	material exports. The top five imported
Air Conditioning Equipment	402	Structural Units (steel)	785	construction materials in 2018 accounted for 28% of total construction
Lamps & Fittings	387	Central Heating Boilers	665	material imports.

Source: Table 14, Monthly Statistics of Building Materials and Components

Table 3: UK Trade of Construction Materials with EU and Non-EU Countries, 2018

£million (% of total trade in italics)	-	
All Building Materials & Components_	EU	Non-EU
Imports	11,250	6,828
	62%	38%
Exports	4,744	2,830
	63%	37%

Source: Table 15 Monthly Statistics of Building Materials and Components

Table 4: Top 5 UK Export and Import Markets for Construction Materials in 2018

£ million			
		Top-5	
Top-5 Export		Import	
Markets		Markets	
Republic of			
Ireland	1183	China	2831
Germany	800	Germany	2577
USA	642	Italy	1052
France	613	Spain	909
Netherlands	598	Netherlands	907

Source: HMRC Overseas Trade Statistics

Compared to prerecession levels in 2007, the share of total UK construction material exports going to the EU has declined from 70% to 63%.

The top five export markets comprised 51% of total construction materials exports in 2018. The Republic of Ireland remains the largest market, despite having shrunk from a prerecession peak of 27% of total exports in 2007, to 16% in 2018.

The top 5 import markets comprised 46% of total construction materials imports in 2018. 16% of all imports are from China.

The 'Rotterdam Effect' (also known as the 'Antwerp Effect') may affect trade figures. This is explained in detail by HM Revenue & Customs.

Economic Background

Construction Output

The most recent <u>construction output</u> figures for February 2019 were published by the **Office for National Statistics** on 10th April 2019.

Key points:

- Construction output decreased by 0.6% in the three-month on three-month all work series in February 2019; the all repair and maintenance, and all new work series saw decreases of 1.0% and 0.4% respectively.
- The decrease in the all new work series was driven by a fall in private commercial new work, which decreased by 3.7% whereas the decrease in all repair and maintenance, was driven by a fall in non-housing repair and maintenance which decreased by 2.6%.
- Construction output increased by 0.4% in the month-on-month all work series in February 2019.
- In the month-on-month series, there was a 1.1% increase in all new work, while all repair and maintenance fell by 1.0% in February 2019.
- Annual growth in 2018 has been revised down to 0.3% from 0.7%.

Bank of England Summary of Business Conditions

The **Bank of England** published its latest update to the <u>Agents' Summary of Business Conditions</u> on 21st March 2019. It compares activity and prices over the past three months with a year ago.

Key points:

- Construction output growth eased as weakening housing market conditions and business investment weighed on activity.
- Growth in domestic manufacturing output slowed. This reflected a fall in output in the automotive sector and weaker construction output growth, which was only partially offset by growth generated by stockbuilding. The latest Agents' survey on preparations for EU withdrawal showed that around two fifths of all respondents have been building inventories.
- There was slower demand for commercial real estate from both domestic and overseas investors, but demand continued to outweigh supply.
- Housing market activity weakened for new-build homes as well as for second-hand properties, but the rental market remained buoyant.

Gross Domestic Product Estimate

The **Office for National Statistics** published the <u>monthly estimate</u> of gross domestic product for February 2019 on 10th April 2019. Further details of the new GDP publishing model can be found in the bulletin.

Key points:

- UK GDP grew by 0.3% in the three months to February 2019 and by 0.2% in February.
- Head of GDP Rob Kent-Smith said "GDP growth remained modest in the latest three months.
 Services again drove the economy, with a continued strong performance in IT. Manufacturing
 also continued to recover after weakness at the end of last year with the often-erratic
 pharmaceutical industry, chemicals and alcohol performing well in recent months."
- The services industries grew by 0.4% in the three months to February 2019. Production rose by 0.2% over the same period but construction fell by 0.6%. All three sectors grew in February 2019.

• The month-on-month gross domestic product (GDP) growth rate was -0.3% in December 2018, 0.5% in January and 0.2% in February. UK GDP grew by 1.4% in 2018.

Gross Domestic Product Forecast

The latest monthly **Consensus Economics** forecast survey (which uses an average of private sector forecasts) results were published on 11th March 2019.

Key points:

- The mean GDP growth forecast for 2019 is 1.3% growth, down from 1.4% in the previous months survey.
- The mean GDP growth forecast for 2020 is 1.5% growth, unchanged from the previous months survey.

The **Office for Budget Responsibility** published its most recent <u>Economic and Fiscal Outlook</u> on 13th March 2019.

Key point:

• The GDP growth forecast for 2019 was revised from 1.6% in October 2018, to 1.2%.

Construction Output Forecasts

In April 2019, **Experian** published their <u>forecasts</u> for the construction sector.

Key points:

- Output is expected to increase by 0.3% in 2018, 0.9% in 2019, 2.3% in 2020 and 2.7% in 2021.
- Private housing will slow down but continue to rise steadily through the forecast period. Public housing will fall in 2018 but then recover strongly over the next three years.
- The infrastructure sector is forecast to continue to recover from a 3.4% downturn in 2016, it grew 5.5% in 2017 and is forecast to grow by 5.4% in 2018, 8% in 2019 and 9% in 2020 and 4% in 2021. The infrastructure work is expected to move from energy and water & sewage, to transport and sewage, led by Highways England's road upgrades and Thames Tideway.
- Private commercial building grew by 7.6% in 2017 but is forecast to decrease by 6.4% in 2018, 6% in 2019 and 4% in 2020. This decrease is thought to be due to a more cautious attitude from investors and developers in light of the EU Referendum vote in June 2016.

The **Construction Products Association** published their Winter <u>forecasts</u> for the construction sector in January 2019.

Key points:

 Overall, construction output is forecast to fall by 0.2% in 2018, downgraded from the Autumn forecast of +0.1%. The demise of Carillion and bad weather in Q1 2018 caused the loss of £1 billion of work. It is estimated that 60% of this work may be recovered, although work on two major Carillion hospital projects is on hold until at least 2019. There have been declines in

- commercial offices and retail activity which counteracted significant growth in private housebuilding and infrastructure.
- In 2019, construction output is forecast to rise by 0.3%, reduced from 2.3% in the Summer forecast, as infrastructure projects and house building drive industry activity. Infrastructure is expected to reach the highest level on record in 2019 due to HS2, Thames Tideway and Hinkley Point C. Housebuilding activity is also expected to grow, encouraged by the extension of Help to Buy through to 2023.
- In 2020, construction output is forecast to rise by 1.6%. Growth in infrastructure is highly dependent on large projects such as HS2 and Hinkley Point C nuclear power station going ahead as planned, and there are some concerns due to the cancellation of the new nuclear power station at Wylfa and delays to Crossrail.

Manufacturing

The latest **Index of Production** data for February 2019 were <u>published</u> on 10th April 2019 by the Office for National Statistics.

Key points for the SIC 23.1-4/7-9 industry (includes the manufacture of bricks, tiles and other construction products):

- When comparing February 2019 with February 2018, output decreased by 3.3%.
- When comparing February 2019 with January 2019, output increased by 2.0%

Key points for the SIC 23.5-6 industry (includes the manufacture of concrete, cement and other products for construction purposes):

- When comparing February 2019 with February 2018, output increased by 16.3%.
- When comparing February 2019 with January 2019, output increased by 1.2%.

Background Notes

Quality information for the Building Materials bulletin

1. The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- · are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed. The full assessment <u>report</u>, published on 22nd December 2011, can be found on the UK Statistics Authority website.

2. In work done for the Department for Business, Innovation and Skills (BIS) on improving the quality of statistics published in the Monthly Statistics of Building Materials and Components, the Office for National Statistics' Methodology Advisory Service (MAS) recommended that BIS should start seasonally adjusting key data series (see ONS/MAS review of building materials statistics: final report for more detail). Seasonal adjustment is widely used in official statistics and aids data interpretation by removing effects associated with the time of the year or arrangement of the calendar. Seasonal effects frequently obscure features of interest in data, such as long term trends and the effects of unusual occurrences. By removing seasonal effects, users can more readily identify the features of interest.

Following advice from the MAS, and the results of a consultation (see the <u>results of the BIS</u> <u>consultation on seasonal adjustment</u> for more detail), BIS agreed to publish seasonally adjusted data for the following series:

Sand and gravel, total sales Concrete blocks, all types deliveries Bricks, all types deliveries Ready-mixed concrete, deliveries

For the initial publication of seasonally adjusted data, data from 1983 onwards will be seasonally adjusted. Subsequently, for each monthly publication, data up to 12 months or 4 quarters previous to the new data point will be revised. Upon the completion of each year's data series, data for the previous 12 years will be revised. BEIS will publish both non-seasonally adjusted and seasonally adjusted data in the tables of this publication. From the June 2015 edition this publication will only use seasonally adjusted data in the commentary for these series.

3. Quality issues related to the *Building Materials and Components* outputs are discussed in the review of the Building Material statistics that was carried out in 2010 by BIS's construction team.

The review aimed to: ascertain user needs; examine whether existing data collection methodologies are fit for purpose; estimate compliance costs; assess compliance with the Code of Practice; and identify options for change.

The full report can be found on the BEIS Building Materials and Components webpage.

Detailed information on data suppliers, coverage and data collection methodology can be found in sections 2.1-2.10. Quality issues (coverage and accuracy of sample panels, response rates, survey results processing, disclosure etc.) and potential measures that could be employed to improve the quality of the statistics are discussed in section 2.11 of the review. Users' views on the quality of the *Building Materials and Components* statistics are given in section 3.3.4. These are derived from a user survey carried out in early 2010, as part of the review (see section 3 for details).

- 4. Following the review, BIS acted on the recommendations including commissioning the Office for National Statistics Methodology Advisory Service (ONS/MAS) to address some of the recommendations from the 2010 review. In July 2011, MAS published their <u>interim report</u>. In July 2012, MAS published their <u>final report</u>.
- 5. HM Revenue and Customs use administrative sources to produce Overseas Trade Statistics. A Statement of Administrative Sources used to compile construction material trade statistics is available on the BEIS *Building Materials and Components* webpage:

Separately, HM Revenue and Customs also have a <u>Statement of Administrative Sources</u> which covers Overseas Trade Statistics.

- 6. <u>The pre-announcement of any major changes to samples or methodology</u> also details some methodological changes to the collection of data.
- 7. The following table gives a summary of response rates related to some of the latest survey results. Where the response rate is less than 100%, estimates are made for missing values.

For latest data used	Bulletin table number	Response rate
Quarterly Sand and Gravel	4, 5 & 6	69%
Quarterly Sand and Gravel – Land Won	4, 5 & 6	67%
Quarterly Sand and Gravel – Marine Dredged	4, 5 & 6	71%
Quarterly Slate	7	100%
Quarterly Concrete Roofing Tiles	13	100%
Monthly Bricks Provisional data	9	97%
Monthly Bricks Final data	9 & 10	100%
Monthly Concrete Blocks	11	89%

8. Change to the methodology for the land-won sand and gravel surveys. Previously we have used information from the Annual Minerals Raised Inquiry (AMRI) run by the Department for Communities and Local Government (now the Ministry for Housing, Communities and Local Government) in order to select the sample of sites which received the land-won sand and gravel survey and to weight the results to reflect the population. MHCLG no longer run AMRI, and so we have had to make changes to the sand and gravel surveys, which took effect from Q1 2017. The changes are:

- We have changed the survey from a sample to a census, so that we now send forms to all sites identified as producing sand and/or gravel. This has increased our panel from about 200 sites to around 500, and means that we will no longer need to weight the returns. We will still need to impute for any non-response.
- We refreshed our panel of sites using information from the British Geological Survey, ensuring that it was upto-date.
- We made the survey statutory, bringing it into line with the marine-dredged sand and gravel survey which was already statutory. This means that respondents are required to complete the survey under the Statistics of Trade Act 1947.

Uses of the data

9. The *Building Materials and Components* statistics are used for a variety of purposes, including policy development and evaluation concerning the construction products industry, as well as monitoring market trends. In a wider context, the figures are regularly reported in the construction press to facilitate market analysis and business planning for its wide range of readers. The statistics are also increasingly used by financial institutions for assessing market information and industry trends. For more information on the uses of the Building Materials statistics, their usefulness to users and users' views on the quality of these statistics, see Section 3 of the *Building Materials and Components* review.

Related Statistics

- 10. Construction Statistics: Sources and Outputs lists the known sources of information available on the construction industry and their outputs. These include information on employees, employment, enterprises, output and new orders in the construction industry as well as the contribution of the industry to the economy. Related information, for example housing, is also included.
- 11. The <u>Construction Statistics Annual</u> brings together a wide range of statistics currently available on the construction industry from a variety of sources and provides a broad perspective on statistical trends in the construction industry, with some international comparisons.
- 12. In its monthly **Index of Production (IoP)** <u>publication</u>, the Office for National Statistics publishes Gross Value Added (seasonally adjusted, UK) data for the following two industries:
 - SIC 23.1-4/7-9 industry, which includes the manufacture of bricks, tiles and other construction products.
 - SIC 23.5-6 industry, which includes the manufacture of concrete, cement and other products for construction purposes.

These data are not directly comparable with the data in this bulletin, due to differences in coverage and methodology. They are nevertheless useful in illustrating the latest output trends of related construction materials as measured by the Office for National Statistics.

Revisions

- 13. Our <u>revisions policy</u> can be found on the BEIS Building Materials webpage.
- 14. The pre-announcement of any major changes to samples or methodology and Summary of Revisions give further information on revisions and other changes to data and can also be found on the BEIS Building Materials webpage.

Pre-release access

15. No <u>pre-release access</u> is granted to this publication.

Further information

The most recently published bulletin and accompanying data tables can be found on BEIS' *Building Materials and Components* <u>website.</u>

Accompanying tables with data relating to 2011 are accessible from this link.

Accompanying tables for 2005 - 2010 are accessible from this link.

Requests for older data should be sent to MaterialStats@beis.gov.uk.

Please send us any comments or feedback you may have about this commentary.

Next publication: 5th June 2019

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