



Department for
Business, Energy
& Industrial Strategy



Monthly Statistics of Building Materials and Components

Commentary

September 2018

Headline results	1
Important Notice	2
Introduction	2
Seasonal Adjustment Review	2
Summary of results	3
Economic Background	11
Background notes	14
Uses of the data	16
Related Statistics	16
Revisions	17
Pre-release access	17
Further information	17

Coverage: UK and Great Britain
Geographical area: Country, region and
county
Date of publication: 3rd October 2018

Headline results

- Sales of sand and gravel have increased by 12.8% when comparing Q2 2018 to Q1 2018. This could be in part due to industry recovery from the unseasonably cold weather conditions experienced in February and March 2018.

Important Notice

This publication is now published by the Department for Business, Energy and Industrial Strategy (BEIS). All references to the Department for Business, Innovation and Skills (BIS) made in this publication refer to when it was published by BIS. This has made no impact to the content of the publication.

The methodology for the sand and gravel estimates has changed. Please see the background notes for further details.

Introduction

This commentary accompanies the latest Monthly Statistics of Building Materials and Components bulletin, published on the BEIS building materials [web page](#) on 3rd October 2018. It aims to provide a brief 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 [Uses of the data](#).

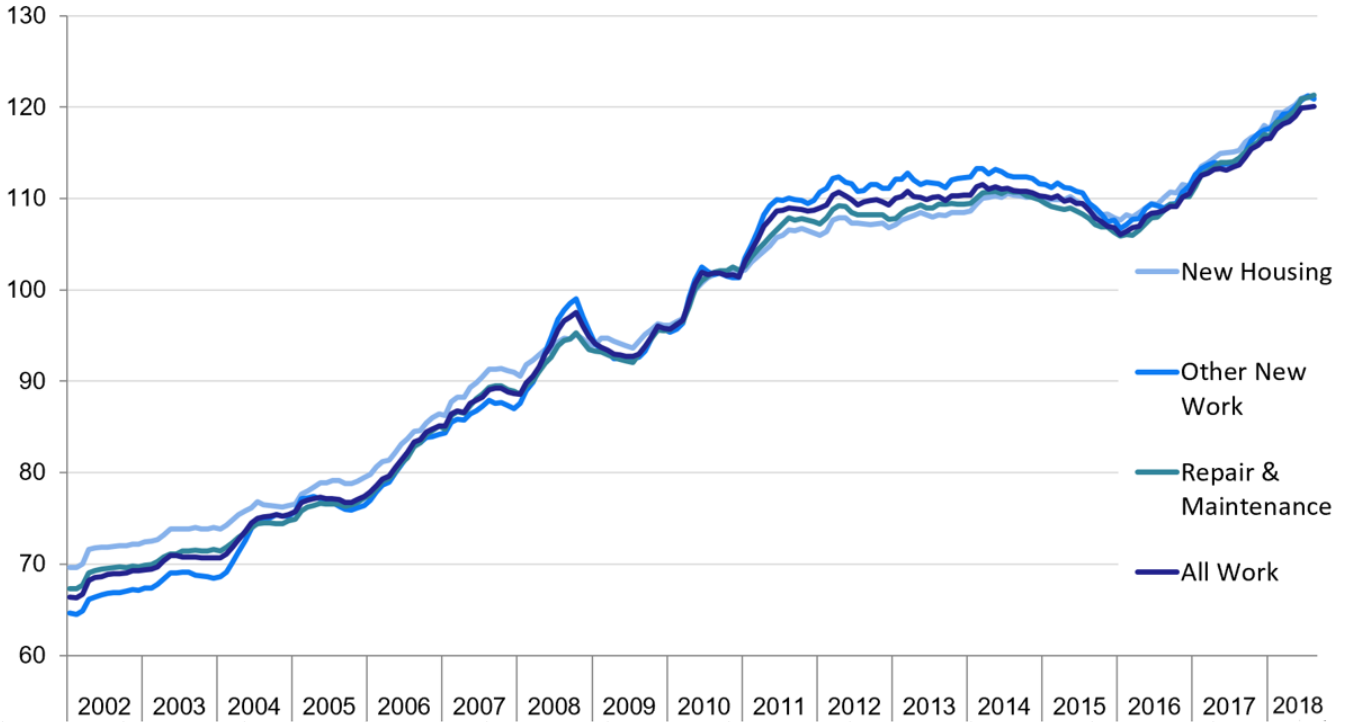
Seasonal Adjustment Review

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 paragraph 2 of the Background Notes ([see page 11](#)).

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 August 2017 to August 2018	
New Housing	5.0%
Other New Work	6.1%
Repair & Maintenance	6.0%
All Work	5.6%

Month-on-month change

Change from July 2018 to August 2018	
New Housing	-0.1%
Other New Work	-0.2%
Repair & Maintenance	0.2%
All Work	0.1%

Looking at the longer term change, the material price index of ‘**All Work**’ increased by **5.6%** in August 2018 compared to the same month in the previous year.

Table 1: Construction materials experiencing the greatest price increases and decreases in the 12 months to August 2018, UK

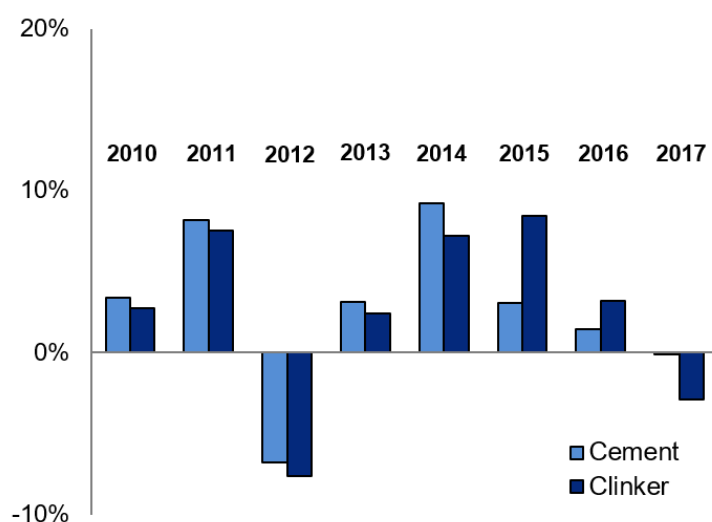
Construction Materials	% change on a year earlier
Greatest price increases	
Imported plywood	24.1
Concrete reinforcing bars	13.6
Kitchen furniture	13.4
Greatest price decreases	
Electric heating apparatus	-3.2
Other building ironmongery	-2.0
Sand & gravel (including levy)	-1.0

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 (%)



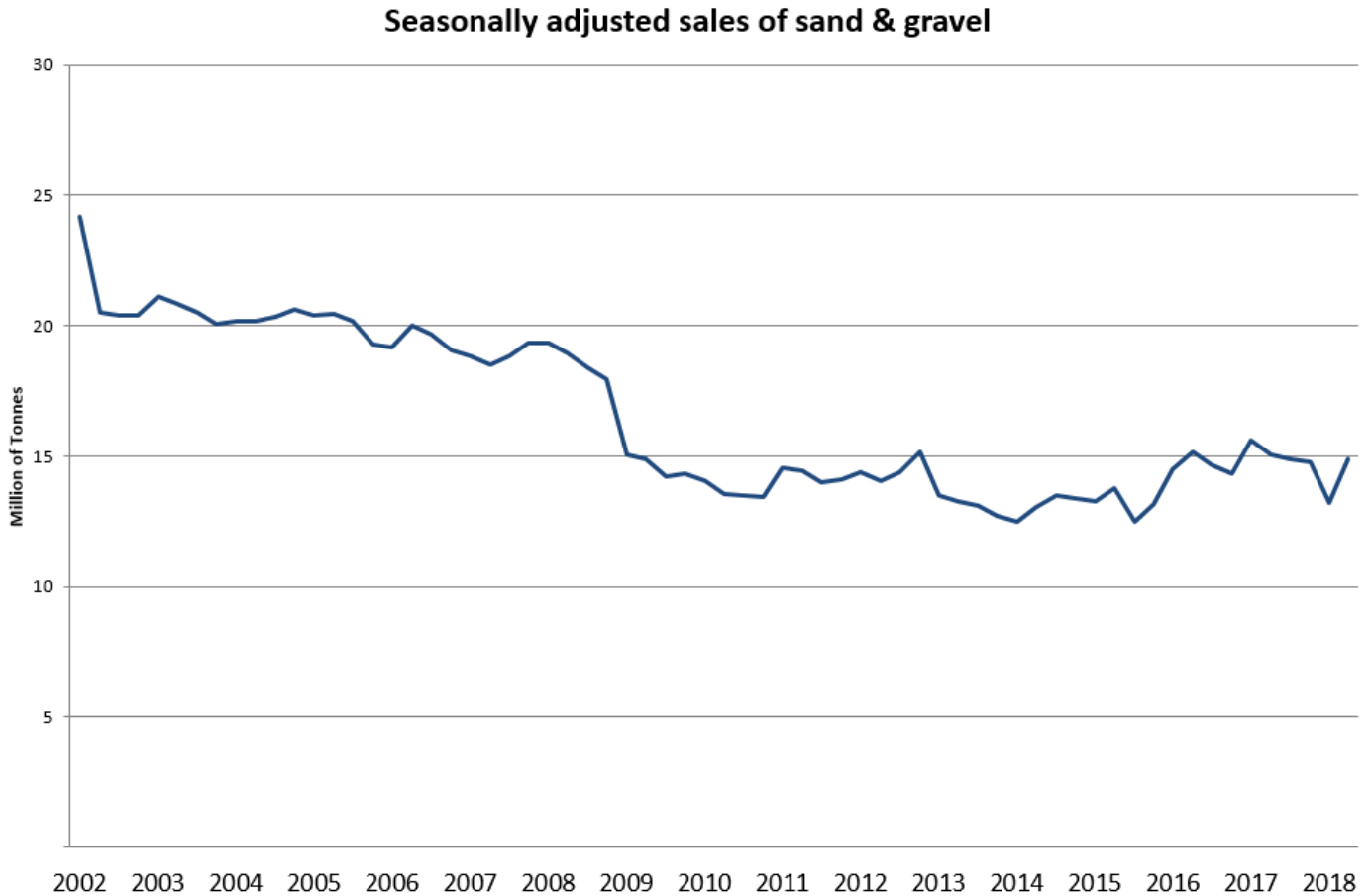
Cement production fell by 0.1% to 9.4 million tonnes in 2017, compared to the previous year. This fall in cement production follows growth of 1.5% to 9.4 million tonnes in 2016. Pre-recession production peaked in 2007 at 11.9 million tonnes.

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. Pre-recession production, in 2007, stood at 10.2 million tonnes.

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

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

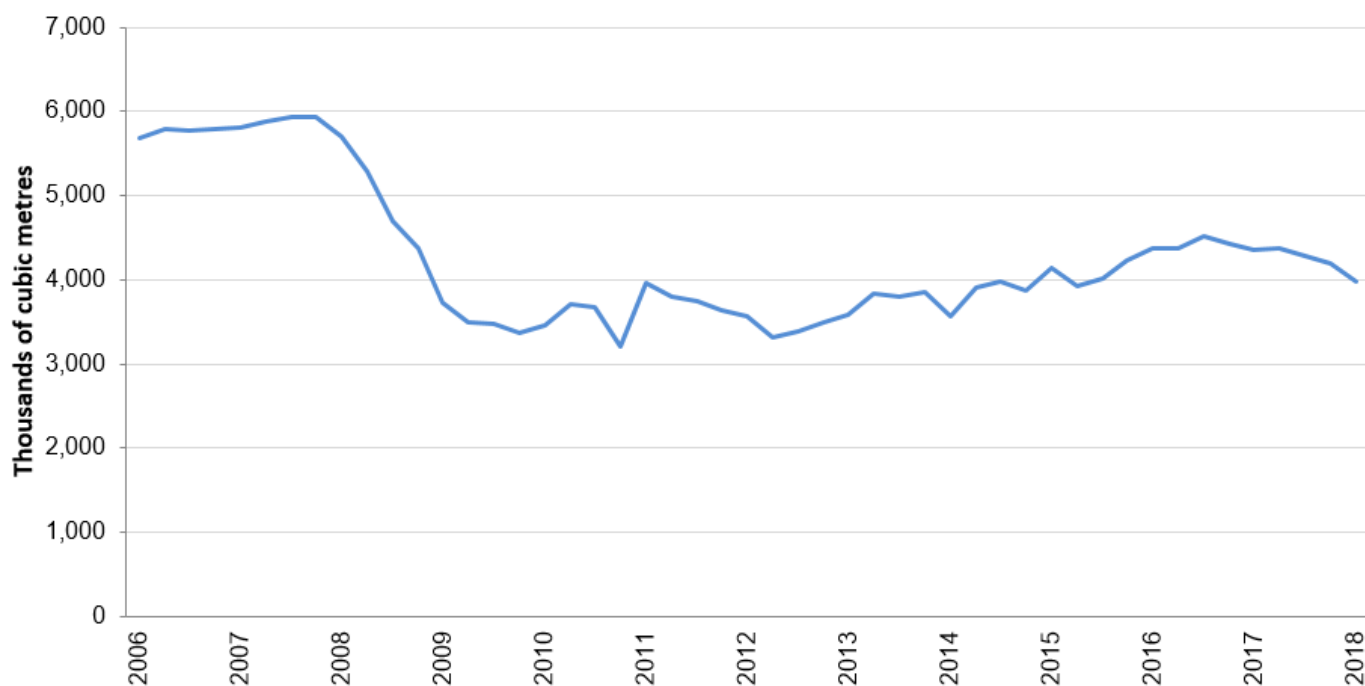
The methodology for the sand and gravel estimates has changed. Please see the background notes for further details.

- Sales of sand & gravel **increased 12.8%** in Quarter 2 2018 compared to Quarter 1 2018, according to the seasonally adjusted data.
- This followed a decrease of 10.6% in Quarter 1 2018.
- Comparing Quarter 2 2018 to the same quarter in the previous year, sales have **decreased** by 1.0%.

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

Concrete

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



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

The data source for raw RMC has changed from 2016 Q1; these figures form the basis of the seasonally adjusted data.

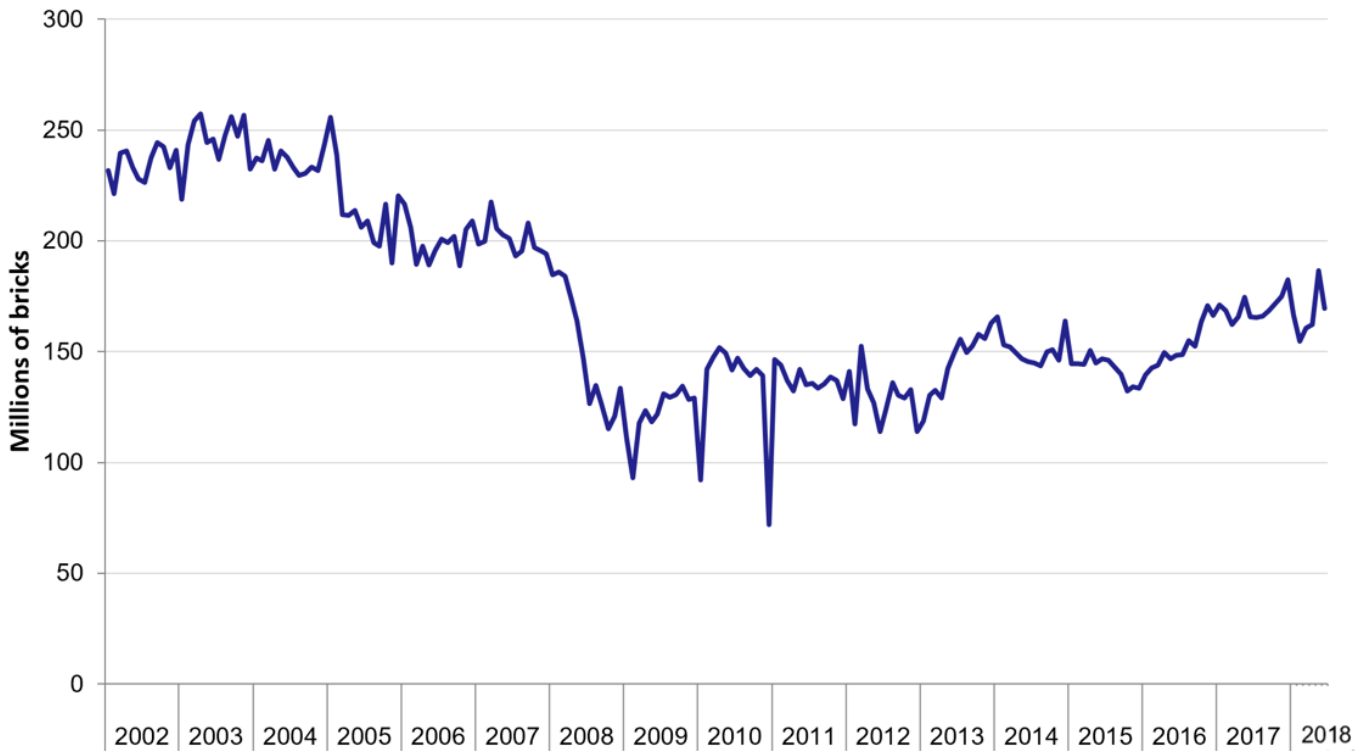
- Ready-mixed concrete sales **decreased 5.2%** in Quarter 1 2018 compared to Quarter 4 2017, according to the seasonally adjusted data.
- This followed a 1.9% **decrease** in Quarter 4 2017.
- Sales in Quarter 1 2018 **decreased** by **8.4%** compared to the same quarter in the previous year, following a **5.1% decrease** in Quarter 4 2017, 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 pre-recession levels.

Bricks

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



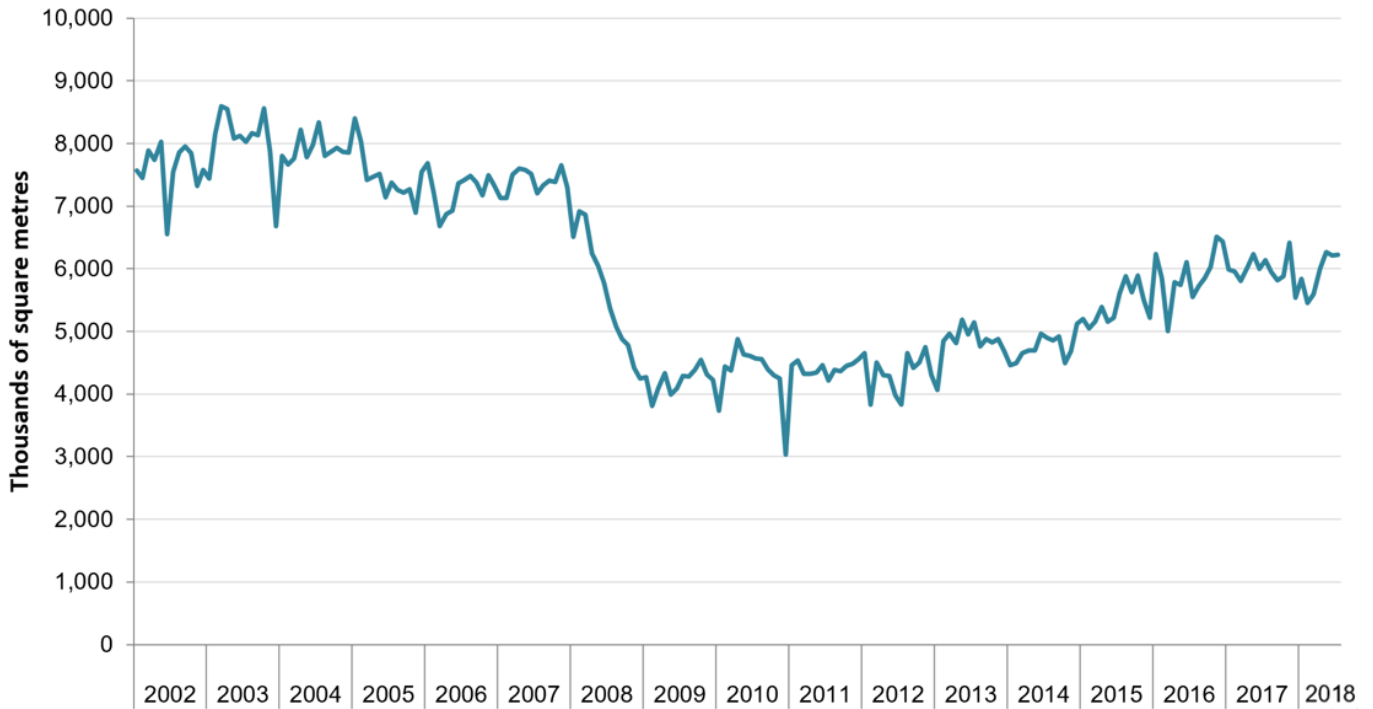
Source: Table 9, Monthly Statistics of Building Materials and Components

- There was a **3.6% increase** in brick deliveries in August 2018 compared to August 2017, according to the seasonally adjusted figures.
- This followed a 2.6% increase in July 2018, on the same basis.
- The month-on-month change shows a **1.3% decrease** in August 2018.
- This followed a 9.1% decrease in July 2018, on the same basis.

Brick deliveries declined during the recession and reached their lowest value during the extreme cold weather in December 2010. Deliveries were at their lowest point in October 2015 since April 2013.

Blocks

Chart 6: Seasonally Adjusted Deliveries of Concrete Blocks, GB
Area of concrete blocks



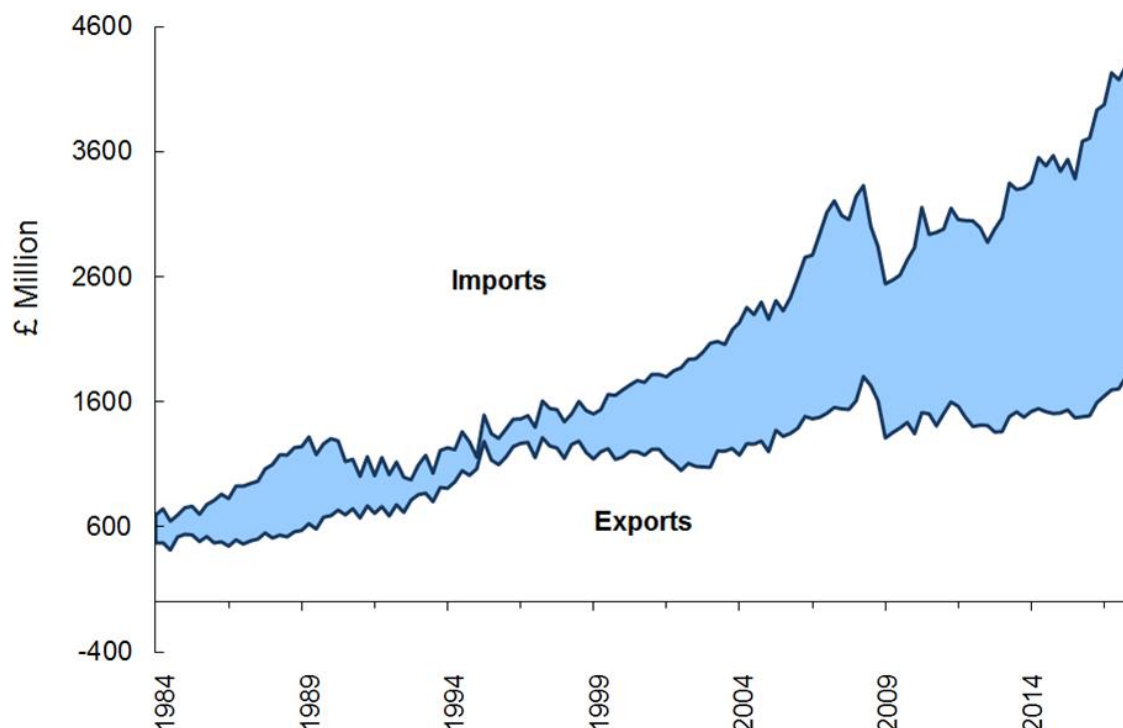
Source: Table 11, Monthly Statistics of Building Materials and Components

- There was an **4.5% increase** in concrete block deliveries in August 2018 compared to August 2017, according to the seasonally adjusted figures.
- This followed a 1.2% increase in July 2018, on the same basis.
- The month-on-month change shows a **0.1% increase** in August 2018.
- This followed a 0.9% decrease in July 2018, on the same basis.

Concrete block deliveries declined during the recession and reached their lowest value during the extreme cold weather in December 2010. Since then the trend has varied from month to month but the general trend year has been one of growth in concrete block deliveries.

Imports and Exports of Construction Materials

Chart 7: Exports and Imports of Construction Materials, UK.
value in pound sterling



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

Imports of construction materials **decreased** by £22 million in the second quarter of 2018 (to £4,456 million) compared to the previous quarter, a decrease of 0.5%.

Exports of construction materials **increased** in the second quarter of 2018 by £104 million (to £1,911 million), a 5.7% increase.

As a result, the **trade deficit narrowed** by £126.3 million to £2,545 million in Quarter 2 2018, a decrease of 4.7%.

Over the period from Quarter 1 1984 to Quarter 2 2018, construction materials imports have increased, on average (per quarter), by 4.0%. Over the same period, exports increased by an average of 2.2% 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. Currently (Quarter 2 2018), the trade deficit is £2,545 million, 57% of the value of imports.

Table 2: Top-5 Exported and Imported Construction Materials in 2017

<i>£ million</i>				
Top-5 Exported Materials		Top-5 Imported Materials		
Electrical Wires	855	Electrical Wires	1,928	The top five exported materials in 2017 accounted for 38% of total construction material exports.
Paints & Varnishes	669	Lamps & Fittings	991	
Plugs & Sockets	430	Sawn Wood > 6mm thick	859	
Lamps & Fittings	381	Air Conditioning Equipment	663	
Air Conditioning Equipment	374	Central Heating Boilers	641	
				The top five imported construction materials in 2017 accounted for 30% of total construction 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, 2017

<i>£million (% of total trade in italics)</i>		
All Building Materials & Components	EU	Non-EU
Imports	10,276	6,710
	<i>60%</i>	<i>40%</i>
Exports	4,357	2,760
	<i>61%</i>	<i>39%</i>

Source: Table 15 Monthly Statistics of Building Materials and Components

Compared to pre-recession levels in 2007, the share of total UK construction material exports going to the EU has declined from 70% to 61%.

Table 4: Top 5 UK Export and Import Markets for Construction Materials in 2017

<i>£ million</i>			
Top-5 Export Markets		Top-5 Import Markets	
Republic of Ireland	1,037	China	2,849
Germany	778	Germany	2,477
USA	594	Italy	1,081
France	590	Netherlands	847
Netherlands	565	Spain	845

The top five export markets comprised 50% of total construction materials exports in 2017. The Republic of Ireland remains the largest market, despite having shrunk from a pre-recession peak of 27% of total exports in 2007, to 15% in 2017.

The top 5 import markets comprised 48% of total construction materials imports in 2017. 17% of all imports are from China.

Source: HMRC Overseas Trade Statistics

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 [construction output](#) figures for July 2018 were published by the **Office for National Statistics** on 10th September 2018.

Key points:

- Construction output continued to recover following a relatively weak start to the year, **increasing by 3.3% in the three months to July 2018**.
- The three-month on three-month growth in July 2018 was driven by growth in both repair and maintenance, and all new work, which increased by 5.3% and 2.3% respectively.
- Construction **output also grew in the month-on-month series, increasing by 0.5% in July 2018**, driven predominantly by a 4.0% increase in new private housing work.
- Total construction **new orders declined 6.5% in Quarter 2** (Apr to June) 2018, decreasing for the third consecutive quarter, reaching its lowest level since Quarter 1 (Jan to Mar) 2013.
- The quarter-on-quarter decrease in construction new orders in Quarter 2 2018 is driven predominantly by a 17.6% fall in new housing orders, which fell to a similar level seen in Quarter 4 (Oct to Dec) 2017, following strong growth in Quarter 1 2018.

Bank of England Summary of Business Conditions

The **Bank of England** published its latest update to the Agents' Summary of Business Conditions on 13th September 2018, covering intelligence gathered between early June 2018 and late August 2018.

Key points:

- Consumer spending increased slightly, helped by the warmer weather which boosted demand for seasonal food and outdoor leisure goods. However, growth remained modest.
- The housing market had softened in some areas, activity was strongest at lower price levels and demand for new builds continued to be supported by the Help-to-Buy scheme.
- Construction activity increased slightly, but growth remained modest. The dry weather helped to catch up on progress lost due to adverse weather conditions which caused disruption earlier in the year.
- Housebuilding slowed in some areas and some large scale commercial infrastructure projects had been delayed or put on hold, but growth in the private rental sector and student accommodation was firm.

Gross Domestic Product Estimate

The **Office for National Statistics** published the [monthly estimate](#) of gross domestic product for July 2018 on 10th September. Further details of the new GDP publishing model can be found in the bulletin.

Key points:

- GDP is estimated to have increased by 1.6% in July 2018 compared to July 2017 and by 1.4% in the three months to July 2018 compared to the three months to July 2017.

- GDP is estimated to have increased by 0.3% in July 2018 compared to June 2018 and by 0.6% in the three months to July 2018 compared to the three months to April 2018.
- Construction output increased by 3.5% in July 2018 compared to July 2017 and increased by 2.4% in the three months to July 2018 compared to the three months to July 2017.
- Construction output increased by 0.5% in July 2018 compared to June 2018 and increased by 3.3% in the three months to July 2018 compared to the three months to April 2017.

Gross Domestic Product Forecast

The latest monthly **Consensus Economics** [forecast survey](#) (which uses an average of private sector forecasts) results were published in September 2018.

Key points:

- The mean GDP growth forecast for 2018 is 1.3% growth and remains unchanged from last month.
- The mean GDP growth forecast for 2019 is 1.5% growth and remains unchanged from last month.

The **Office for Budget Responsibility** published its most recent [Economic and Fiscal Outlook](#) on 13th March 2018.

Key point:

- The GDP growth forecast for 2018 was unchanged from the November 2017 and remains at 1.4%.

Construction Output Forecasts

In July 2018, **Experian** published their [forecasts](#) for the construction sector.

Key points:

- Output is expected to increase by an average of 1.0%; a decrease of 2.1% in 2018, an increase of 1.7% in 2019, and 3.1% in 2020.
- Public housing and private housing will slow down, but continue to rise steadily through the forecast period.
- The infrastructure sector is forecast to continue to recover from a 9.3% downturn in 2016, it grew 10.2% in 2017 and is forecast to grow by 5% in 2018, 11% in 2019 and 4% in 2020. 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 5.5% in 2017, but is forecast to decrease by 9% in 2018, 5% in 2019. 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 Summer [forecasts](#) for the construction sector in July 2018.

Key points:

- Overall, construction output is forecast to fall by 0.6% in 2018. 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.

- Construction activity during 2018 is expected to fall despite significant growth in private house building and infrastructure due to declines in commercial offices and retail activity. Without this growth in housing and infrastructure, output would fall by 3.0% in 2018 and be flat in 2019.
- In 2019, construction output is forecast to rise by 2.3% as infrastructure projects and house building drive industry activity; and in 2020, construction output is forecast to rise by 1.9%. Growth in infrastructure is highly dependent on large projects such as HS2 and Hinkley Point C nuclear power station going ahead as planned.

Manufacturing

The latest **Index of Production** data for July 2018 were [published](#) on 10th September 2018 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 July 2018 with July 2017, **output decreased by 3.6%**.
- When comparing July 2018 with June 2018, **output decreased by 2.2%**

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

- When comparing July 2018 with July 2017, **output decreased by 1.0%**.
- When comparing July 2018 with June 2018, **output decreased by 4.0%**.

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 [report](#), published on 22nd December 2011, can be found on the UK Statistics Authority website.

2. As of 3rd August 2016, this publication is published by the Department for Business, Energy and Industrial Strategy (BEIS). All references to the Department for Business, Innovation and Skills (BIS) made in this publication refer to when it was published by BIS. This has made no impact to the content of the publication.
3. In work done for 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 [results of the BIS consultation on seasonal adjustment](#) 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. BIS 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.

- 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 BIS *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).

- 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 [interim report](#). In July 2012, MAS published their [final report](#).
- 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 BIS *Building Materials and Components* webpage:

Separately, HM Revenue and Customs also have a [Statement of Administrative Sources](#) which covers Overseas Trade Statistics.

- [The pre-announcement of any major changes to samples or methodology](#) also details some methodological changes to the collection of data.
- 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	70%
Quarterly Sand and Gravel – Land Won	4, 5 & 6	68.5%
Quarterly Sand and Gravel – Marine Dredged	4, 5 & 6	82%
Quarterly Slate	7	89%
Quarterly Concrete Roofing Tiles	13	80%
Monthly Bricks Provisional data	9	100%
Monthly Bricks Final data	9 & 10	100%
Monthly Concrete Blocks	11	90%

- 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 up-to-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

10. 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

11. [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.
12. The [Construction Statistics Annual](#) 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.
13. In its monthly **Index of Production (IoP)** [publication](#), 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

14. Our [revisions policy](#) can be found on the BEIS Building Materials webpage.
15. [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

16. No [pre-release access](#) is granted to this publication.

Further information

The coverage of cement and cementitious statistics changed from UK to GB in 2002 due to data confidentiality issues in Northern Ireland as the number of manufacturers decreased. Where the coverage of figures for other building materials is limited to Great Britain (i.e. sales of sand and gravel, and production, deliveries and stocks of slate, clinker, bricks, concrete building blocks and concrete roofing tiles), no equivalent data are collected for Northern Ireland.

The most recently published bulletin and accompanying data tables can be found on BIS' *Building Materials and Components* [website](#).

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: 7th November 2018

Statistical Contact: Frances Pottier
Tel: +44 (0)207 215 1953
Email: MaterialStats@beis.gov.uk

Website: [Building Materials Construction Statistics](#), part of the [Business, Energy and Industrial Strategy](#) website.



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Contact us if you have any enquiries about this publication, including requests for alternative formats, at:

Department for Business, Energy and Industrial Strategy
1 Victoria Street
London SW1H 0ET
Tel: 020 7215 1953

Email: MaterialStats@beis.gov.uk

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