Department for Business, Energy & Industrial Strategy

Monthly Statistics of Building Materials and Components

Commentary

December 2016

Coverage: UK and Great Britain
Geographical area: Country, region and county
Date of publication: 11th January 2017

Headline results

- **Construction material prices rose on a yearly basis**. The 'All Work' construction material price index increased by 2.6% in November 2016 compared to a year ago. On the same basis, in October, there was the same percentage increase.

- **Blocks deliveries increased.** Deliveries increased by 22.6% in November 2016 compared to the same month in the previous year, according to the seasonally adjusted figures.

- **Brick deliveries increased.** Sales increased by 28.0% in November 2016 compared to the same month last year, according to the seasonally adjusted figures.

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.

Introduction

This commentary accompanies the latest Monthly Statistics of Building Materials and Components bulletin, published on the BEIS building materials web page on 11th January 2017. 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.

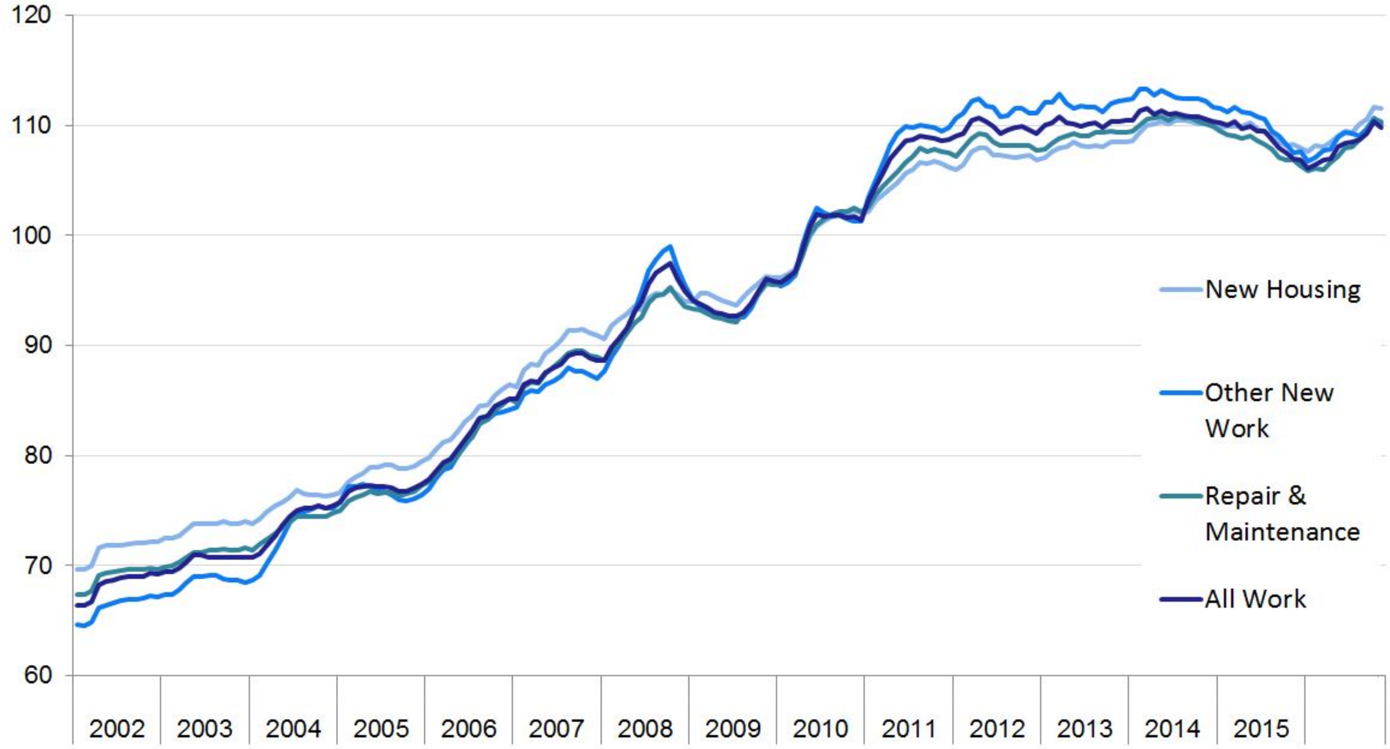
Seasonal Adjustment Review

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 November 2015 to November 2016	
New Housing	3.0%
Other New Work	2.4%
Repair & Maintenance	3.2%
All Work	2.6%

Month-on-month change

Change from October 2016 to November 2016	
New Housing	-0.1%
Other New Work	-0.5%
Repair & Maintenance	-0.3%
All Work	-0.5%

Looking at the longer term change, the material price index of **'All Work' rose by 2.6%** in November 2016 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 November 2016, UK

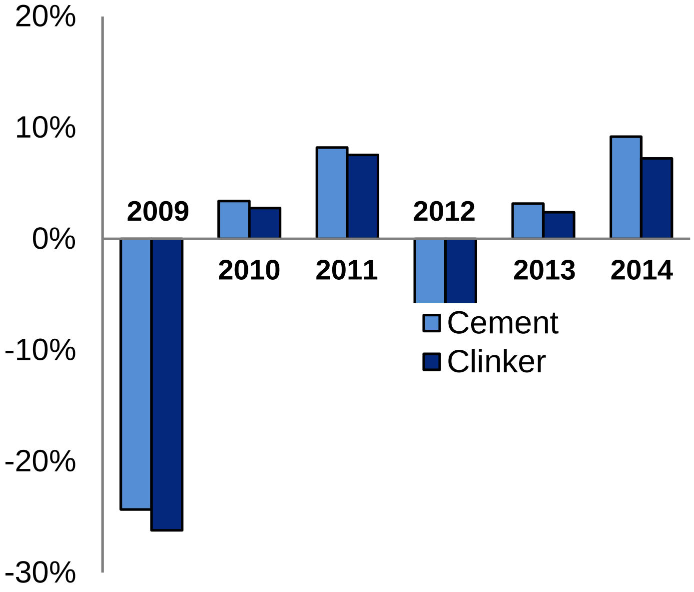
Construction Materials	% change on a year earlier
Greatest price increases	
Concrete reinforcing bars	15.9
Imported sawn or planed wood	10.0
Imported plywood	7.9
Greatest price decreases	
Lighting equipment for roads	-4.9
Other builders ironmongery	-2.6
Particle Board	-2.6

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

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.

Cement & Clinker

Chart 2: Production of Cement and Clinker, GB
Percentage change over previous year (%)



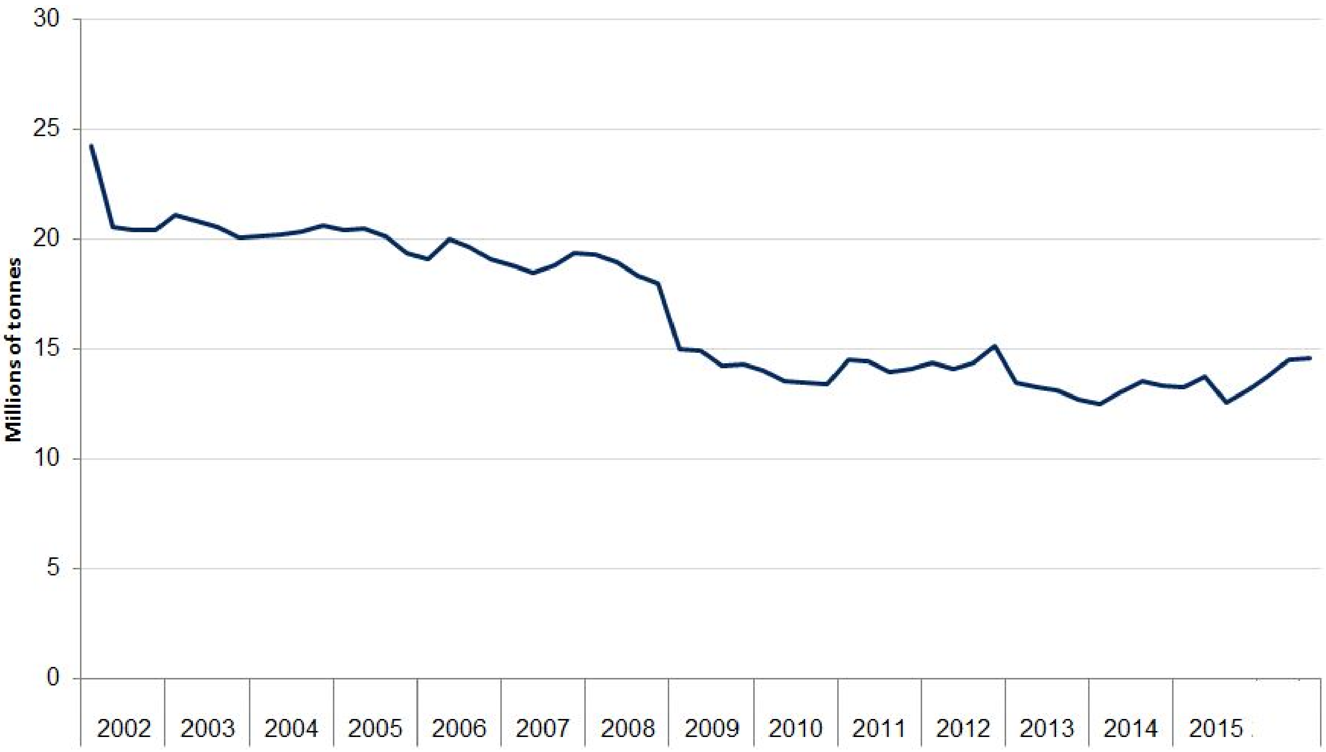
Source: Table 8, Monthly Statistics of Building Materials and Components

Cement production rose by 9.2% to 9.0 million tonnes in 2014, compared to the previous year. This growth in cement production follows growth of 3.2% to 8.2 million tonnes in 2013. Pre-recession production peaked in 2007 at 11.9 million tonnes.

Production of Clinker rose by 7.2% to 7.2 million tonnes in 2014, compared to the previous year. This growth in clinker production follows growth of 2.4% to 6.7 million tonnes in 2013. Pre-recession production, in 2007, stood at 10.2 million tonnes.

Sand & Gravel

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



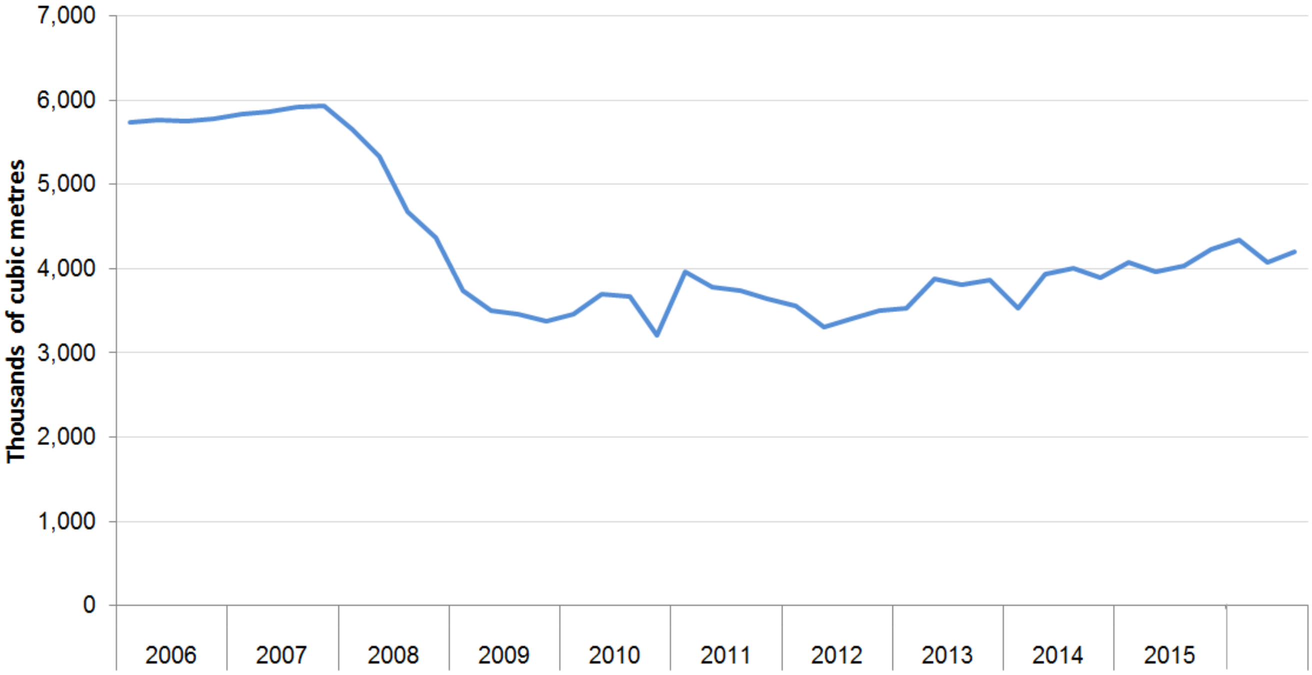
Source: Table 4, Monthly Statistics of Building Materials and Components

- Sales of sand & gravel **increased 0.4%** in Quarter 3 2016 compared to Quarter 2 2016, according to the seasonally adjusted data.
- This followed an increase of 5.7% in Quarter 2 2016.
- Comparing Quarter 3 2016 to the same quarter in the previous year, sales have **increased** by **16.1%**.

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

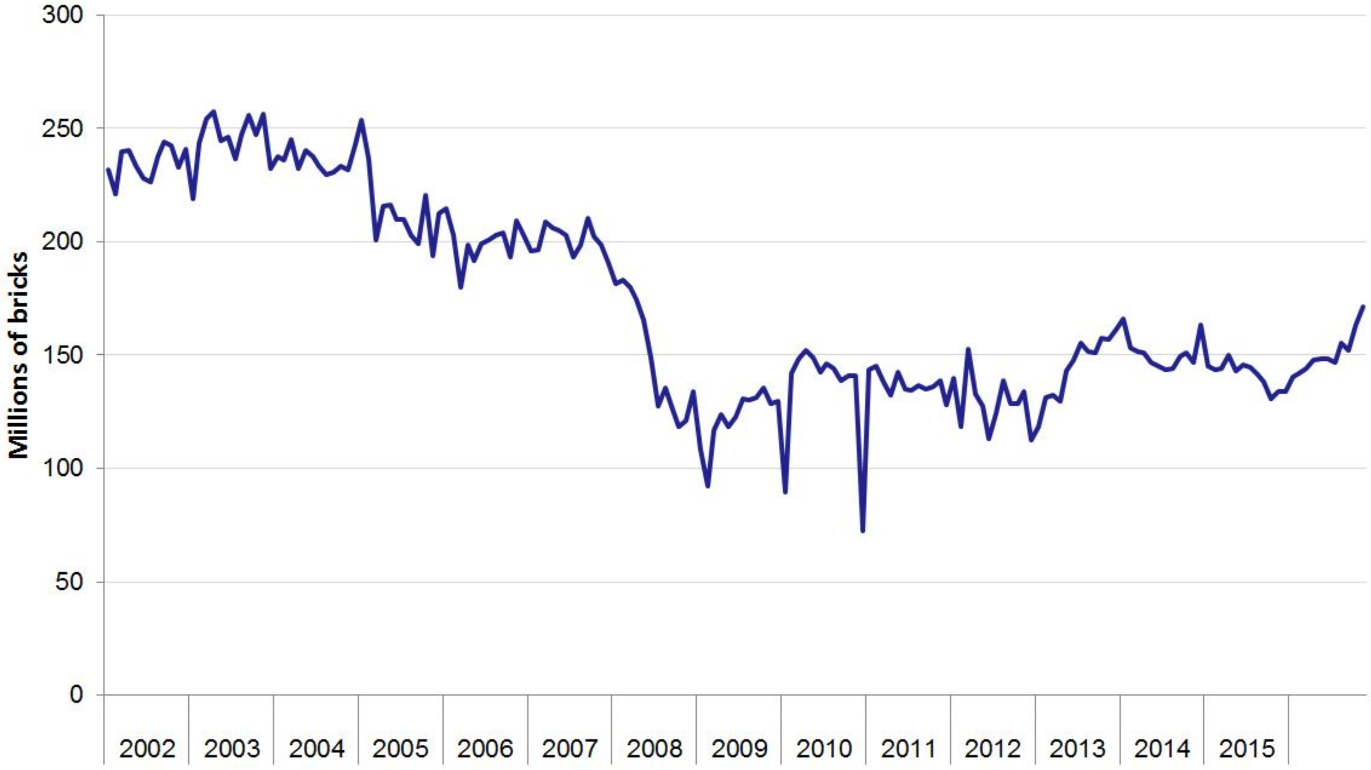
- Ready-mixed concrete sales **increased 3.1%** in Quarter 3 2016 compared to Quarter 2 2016, according to the seasonally adjusted data.
- This followed a 6.3% **decrease** in Quarter 2 2016.
- Sales in Quarter 3 2016 **increased** by **3.9%** compared to the same quarter in the previous year, following a **3.4% increase** in Quarter 2 2016, 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



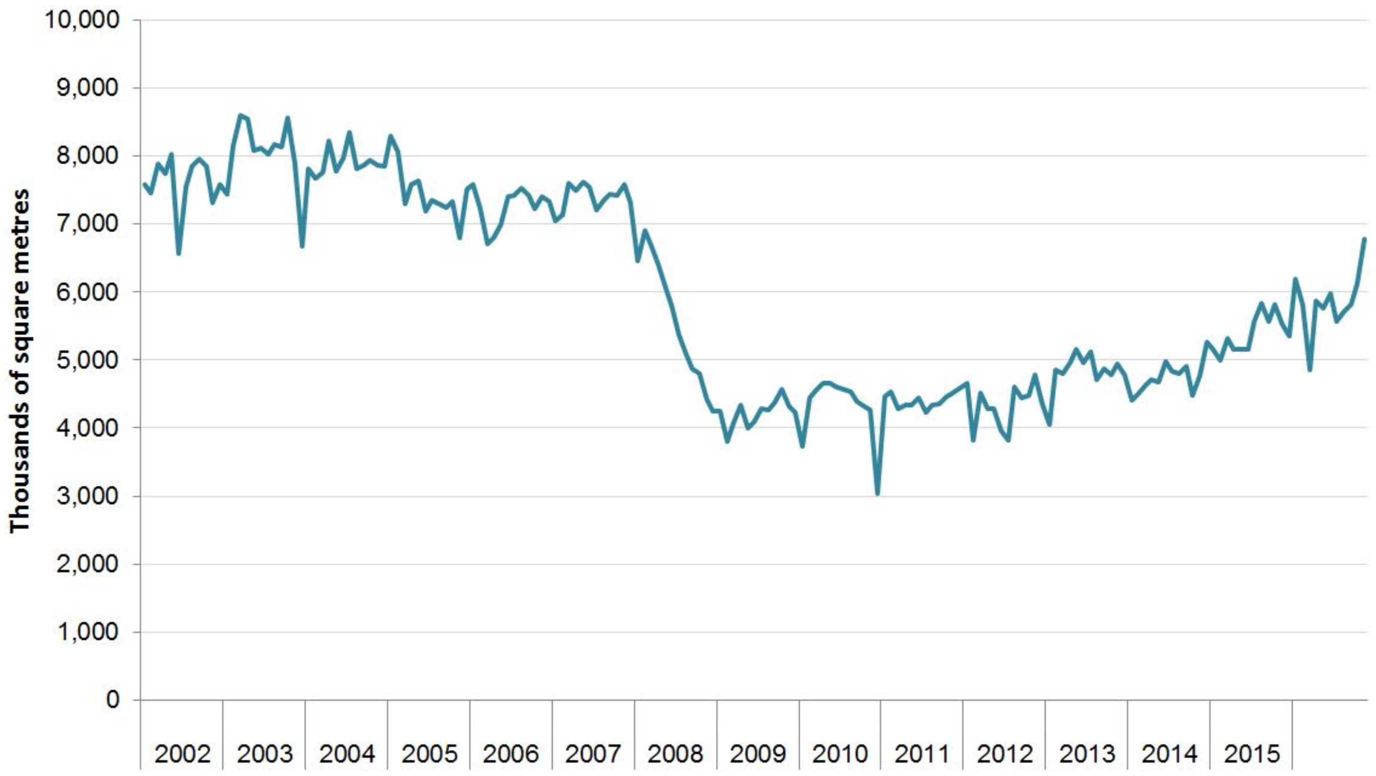
Source: Table 9, Monthly Statistics of Building Materials and Components

- There was a **28.0% increase** in brick deliveries in November 2016 compared to November 2015, according to the seasonally adjusted figures.
- This followed a 25.2% increase in October 2016, on the same basis.
- The month-on-month change shows a **4.9% increase** in November 2016.
- This followed a 7.3% increase in October 2016, on the same basis.

Brick deliveries declined during the recession and reached their lowest value during the extreme cold weather in December 2010. Deliveries remain low compared to pre-recession levels and have declined since their post-recession peak in January 2014. 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



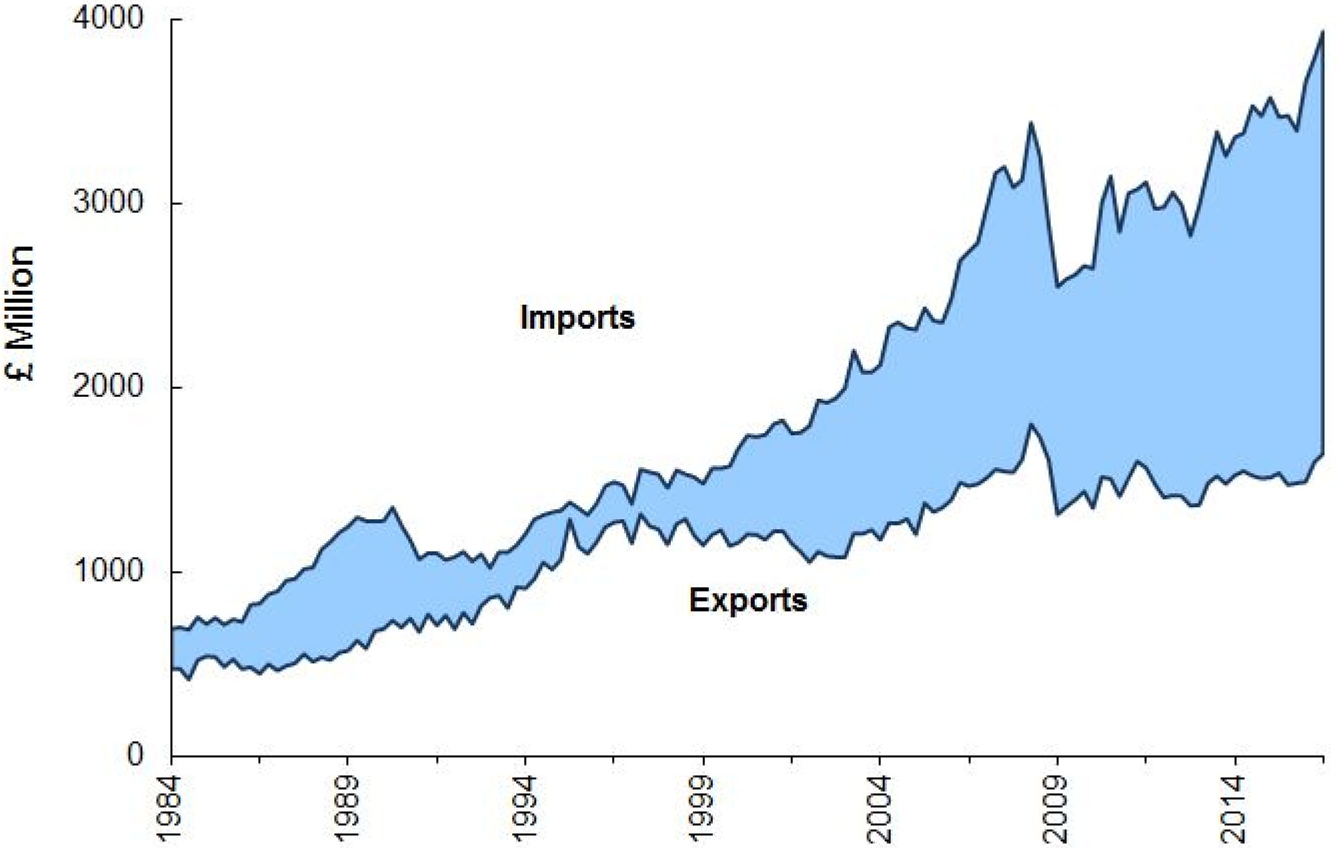
Source: Table 11, Monthly Statistics of Building Materials and Components

- There was a **22.6% increase** in concrete block deliveries in November 2016 compared to November 2015, according to the seasonally adjusted figures.
- This followed a 5.1% increase in October 2016, on the same basis.
- The month-on-month change shows a **10.8% increase** in November 2016.
- This followed a 5.0% increase in October 2016, 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 **increased** by £144 million in the third quarter of 2016 (to £3,929 million) compared to the previous quarter, an increase of 3.8%.

Exports of construction materials **increased** in the third quarter of 2016 by £46 million (to £1,642 million), a 2.9% increase.

As a result, the **trade deficit widened** by £98 million to £2,288 million in Quarter 3 2016, an increase of 4.5%

Over the period from Quarter 1 1984 to Quarter 3 2016, construction materials imports have increased, on average, by 3.6% per quarter. Over the same period, exports increased by an average of 1.9% 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 3 2016), the trade deficit is £2,288 million, 58% of the value of imports.

Table 2: Top-5 UK Exported and Imported Construction Materials in 2015

£ Million

Top-5 Exported Materials		Top-5 Imported Materials	
Electrical Wires	*685*	Electrical Wires	*1,556*
Paints & Varnishes	*607*	Lamps & Fittings	*876*
Lamps & Fittings	*329*	Sawn Wood > 6mm thick	*784*
Plugs & Sockets	*307*	Central Heating Boilers	*584*
Air Conditioning Equip.	*285*	Air Conditioning Equip.	*518*

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

The top five exported materials in 2015 accounted for 37% of total construction material exports.

The top five imported construction materials in 2015 accounted for 31% of total construction material imports.

Table 3: UK Trade of Construction Materials with EU and Non-EU Countries, 2015

£ Million (% of total trade in italics)

All Building Materials & Components	EU	Non-EU
Imports	8,415	5,490
	61%	*39%*
Exports	3,493	2,506
	58%	*42%*

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 58%.

Table 4: Top 5 UK Export and Import Markets for Construction Materials in 2015

£ Million

Top-5 Export Markets		Top-5 Import Markets	
Republic of Ireland	781	China	2,472
Germany	563	Germany	2,039
France	527	Italy	886
USA	479	Spain	703
Netherlands	442	Netherlands	672

Source: HMRC Overseas Trade Statistics

The top five export markets comprised 47% of total construction materials exports in 2015. The Republic of Ireland remains the largest market, despite having shrunk from a pre-recession peak of 27% of total exports in 2007, to 13% in 2015.

The top 5 import markets comprised 49% of total construction materials imports in 2015. 18% 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 construction output figures for October 2016 were published by the **Office for National Statistics** on 9th December 2016.

Key points:

- In October 2016, output in the construction industry was estimated to have fallen by 0.6% compared with September 2016 but increased by 0.7% compared with October 2015.
- The monthly change was caused by a fall of 0.9% in All New Work with no change in Repair & Maintenance.
- Infrastructure new work fell by 4.1% compared to September 2016. Public new non-housing fell by 3.1% and private commercial new work by 1.3% compared with September 2016. Private Housing rose by 2.4% compared with September 2015.
- New Orders in Quarter 3 2016 fell by 2.4% compared with Q2, but are still higher than any other quarter since Q3 2009. Infrastructure orders increased by 22.4% but public new work orders fell by 24.8%.
- Output is estimated to have decreased by 0.8% in quarter 3 2016 compared to the previous quarter. This is an upwards revision of 0.3 percentage points from the estimate of -1.1% published in the Second Estimate of GDP on 25th November. This has no impact on the estimate of total GDP to 1 decimal place. Output estimates have been revised back to January 2015; this has had no effect on annual growth in 2015 but has reduced growth in each of the first three quarters of 2016.

Bank of England Summary of Business Conditions

The **Bank of England** published its latest Agents' Summary of Business Conditions for late August to late November 2016 on the 21st December 2016.

Key points:

- There is a modest increase in construction output growth in recent months.
- Looking to the future, there is a hopeful sentiment of increased activity due to the autumn statement spending stance on house building and infrastructure.
- Suppliers to house builders and infrastructure projects reported that the market is robust, and the demand continues in a similar fashion.
- The increased activity in the housing market is mainly concentrated at properties below the value of £1,000,000. There is sluggish movement above this threshold.
- There was, reportedly, more interest from overseas buyers in UK property, although this has not resulted into transactions yet.
- Modest price inflation is being supported by the relatively few houses available in the buying market.

Gross Domestic Product Estimate

The **Office for National Statistics** published a third estimate to gross domestic product for Quarter 3 2016 on 23rd December 2016.

Key points:

- GDP is estimated to have increased by 2.2% in Quarter 3 2016 compared to Quarter 3 2015.
- GDP is estimated to have increased by 0.4% in Quarter 3 2016 compared to Quarter 2 2016.
- Construction output increased by 1.7% between Quarter 3 2016 and Quarter 3 2015.
- Construction output decreased by 0.8% in Quarter 3 2016 compared to Quarter 2 2016.

Gross Domestic Product Forecast

The latest monthly **Consensus Economics** forecast survey (which uses an average of private sector forecasts) results were published on 9th December 2016.

Key points:

- The mean GDP growth forecast for 2016 is 2% growth, the same level from last month.
- The mean GDP growth forecast for 2017 is 1.3% growth, up 0.2 percentage points from last month

The **Office for Budget Responsibility** published its most recent Economic and Fiscal Outlook on 23rd November 2016.

Key points:

- The GDP growth forecast for 2016 was revised upwards by 0.1 percentage points to 2.1% growth.
- The forecast for 2017 is 1.4% growth.

Construction Output Forecasts

This autumn, **Experian** published their forecasts for the construction sector.

Key points:

- The growth forecasts for GDP and construction output were lowered.
- Output is expected to decrease by 1.0% in 2016, decrease by 0.3% in 2017 and increase by 0.8% in 2018.
- Public housing output is predicted to continue to decline until 2018.
- A sharper downturn in the infrastructure sector is expected in 2016, believed to be due primarily to a hiatus in roads work.
- The repair & maintenance sector will likely see decline until 2018 with infrastructure repair expected to see the largest decline in 2016.

This summer, the **Construction Products Association** published their forecasts for the construction sector. Due to the uncertainty they see following the UK referendum on European Union membership the CPA have produced a series of central scenarios with higher and lower bound rather than produce typical point estimate forecasts.

- The central scenario is that construction sector is expected to grow by 0.6% in 2016, followed by a fall of 0.3% in 2017 and then increase by 0.2% in 2018.
- In the central scenario, private new housing and private commercial output continue to grow in 2016 but stagnates in 2017 with a fall of 2% in 2018. Infrastructure output grows over the whole forecast period, with strong growth in 2017 (6.2%) and 2018 (10.2%), due in part to a predicted fiscal stimulus in the Autumn Statement and the start of activity on Hinckley Point C.
- The lower scenario is that construction will fall by 2.3% in 2016, 3.4% in 2017 and 3.6% in 2018, with falls in private new housing, private commercial. The forecast for infrastructure is growth in 2017 and 2018.
- The upper scenario is that construction rises by 3.7% in 2016, 2.7% in 2017 and 4.0% in 2018, with rises in private housing and infrastructure output.

Manufacturing

The latest **Index of Production** data for August 2016 were published on 7th December 2016 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 October 2016 with October 2015, **output increased by 10.1%**.
- When comparing October 2016 with September 2016, **output increased by 1.0%**.

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

- When comparing October 2016 with October 2015, **output increased by 15.9%**.
- When comparing October 2016 with September 2016, **output increased by 0.2%**.

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 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.

4. 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).

5. 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.

6. 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.

7. The pre-announcement of any major changes to samples or methodology also details some methodological changes to the collection of data.

8. 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	80%
Quarterly Sand and Gravel – Land Won	4, 5 & 6	76%
Quarterly Sand and Gravel – Marine Dredged	4, 5 & 6	100%
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	90%

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 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.

12. 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

13. Our revisions policy 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 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: 1st February 2017

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This publication available from www.gov.uk/beis

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