



# Monthly Statistics of Building Materials and Components

Commentary

April 2016

Coverage: UK and Great Britain  
Geographical area: Country, region  
and county  
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## Headline results:

- **Construction material prices continue to decline.** The 'All Work' construction material price index fell by 3.0% in March 2016 compared to a year earlier.
- **Sand & gravel sales increased.** Seasonally adjusted sales increased by 2.9% in quarter 1 2016 compared to quarter 4 2015.
- **Ready-mixed concrete sales increased.** Sales increased by 1.7% in quarter 1 2016 compared to quarter 4 2015.

## Seasonal Adjustment Review

A full review has taken place of the seasonal adjustment methodology for brick deliveries and concrete block deliveries, with a revision period back to 2004. This review occurs annually following the receipt of the first monthly or quarterly data of the year. For further information, see [section 2](#) of the background notes.

## Introduction

This commentary accompanies the latest Monthly Statistics of Building Materials and Components bulletin, published on the BIS building materials [web page](#) on 4<sup>th</sup> May 2016. 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](#).

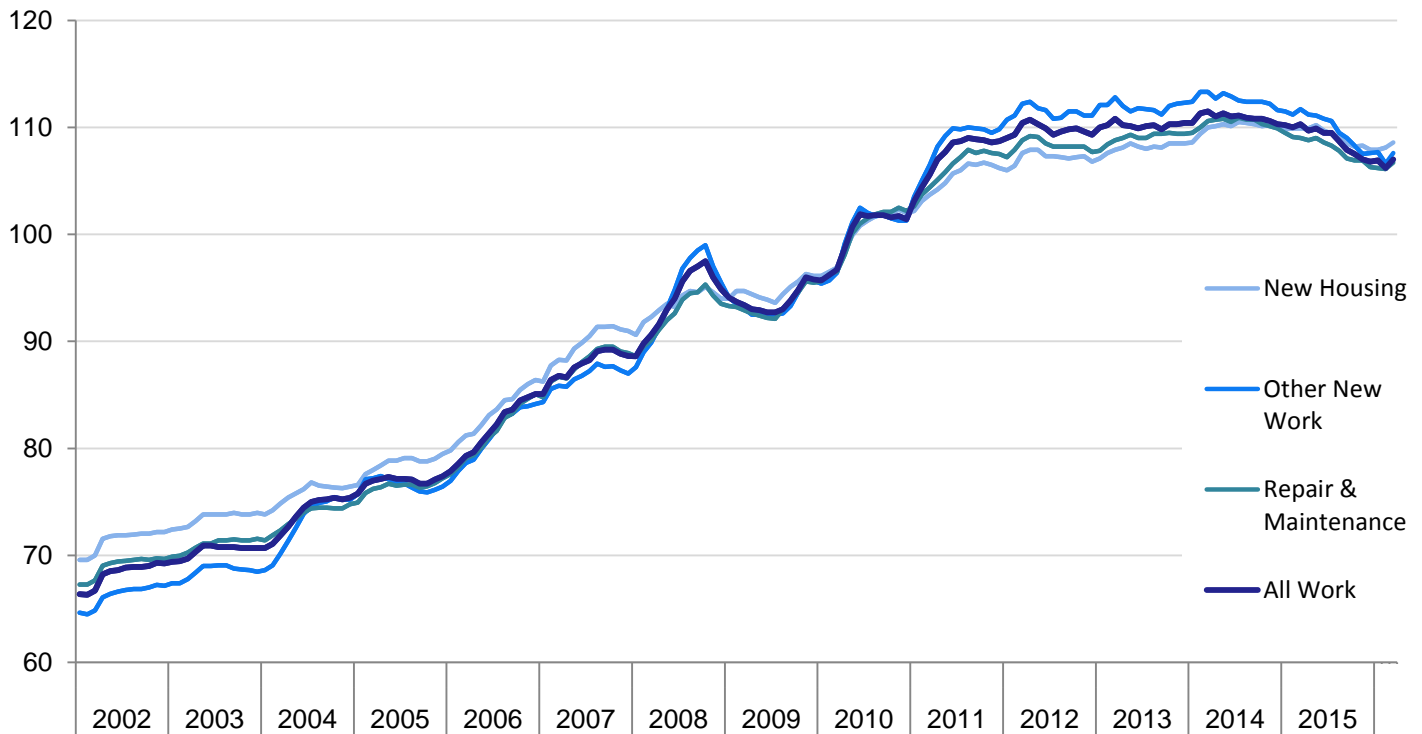
## Seasonal Adjustment

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



Change from March 2015 to March 2016	
<b>New Housing</b>	-1.2%
<b>Other New Work</b>	-3.7%
<b>Repair &amp; Maintenance</b>	-2.1%
<b>All Work</b>	-3.0%

- The headline Construction Material Price Index of **'All Work' increased** by 0.8% in March 2016 compared to the previous month.
- This follows a 0.7% decrease in February.
- In March, **'New Housing' increased** by 0.5%.
- **'Other New Work' increased** by 0.9%.
- **'Repair and Maintenance' increased** by 0.6%.
- Looking at the longer term change, the material price index of **'All Work' fell by 3.0%** in March 2016 compared to the same month in the previous year. This is the 16<sup>th</sup> consecutive decrease on this basis.

From December 2010 to June 2011, construction material prices increased rapidly, rising by 7.0% over the period. The price of construction materials has been declining steadily since June 2014.

**Table 1: Construction materials experiencing the greatest price increases and decreases in the 12 months to March 2016, UK**

Construction Materials	% change on a year earlier
<b>Greatest price increases</b>	
Other builders' ironmongery	11.5
Insulating materials (thermal or acoustic)	4.9
Blocks, bricks, tiles & flagstones	4.2
<b>Greatest price decreases</b>	
Concrete reinforcing bars (steel)	-16.5
Imported plywood	-13.2
Fabricated structural steel	-10.1

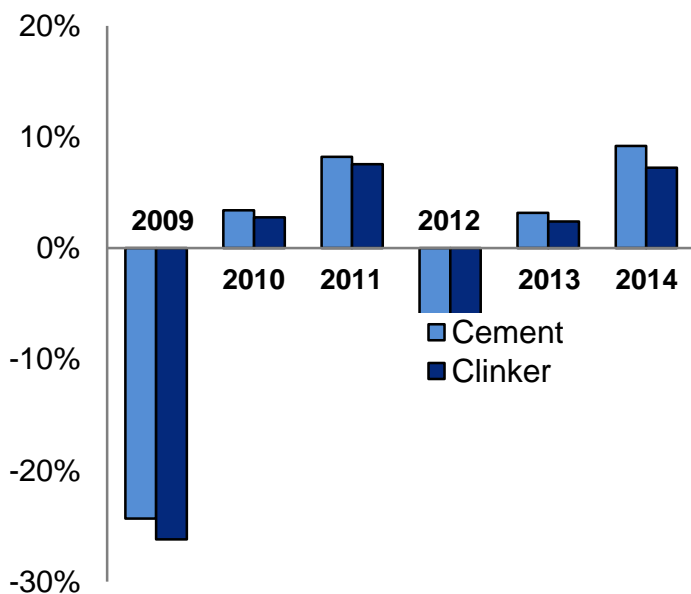
The aggregated construction material price index hides larger price movements for some specific products and materials. The three largest increases and decreases are presented here.

Steel prices have fallen significantly in recent months, largely due to the low cost of imported steel from China.

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 (%)



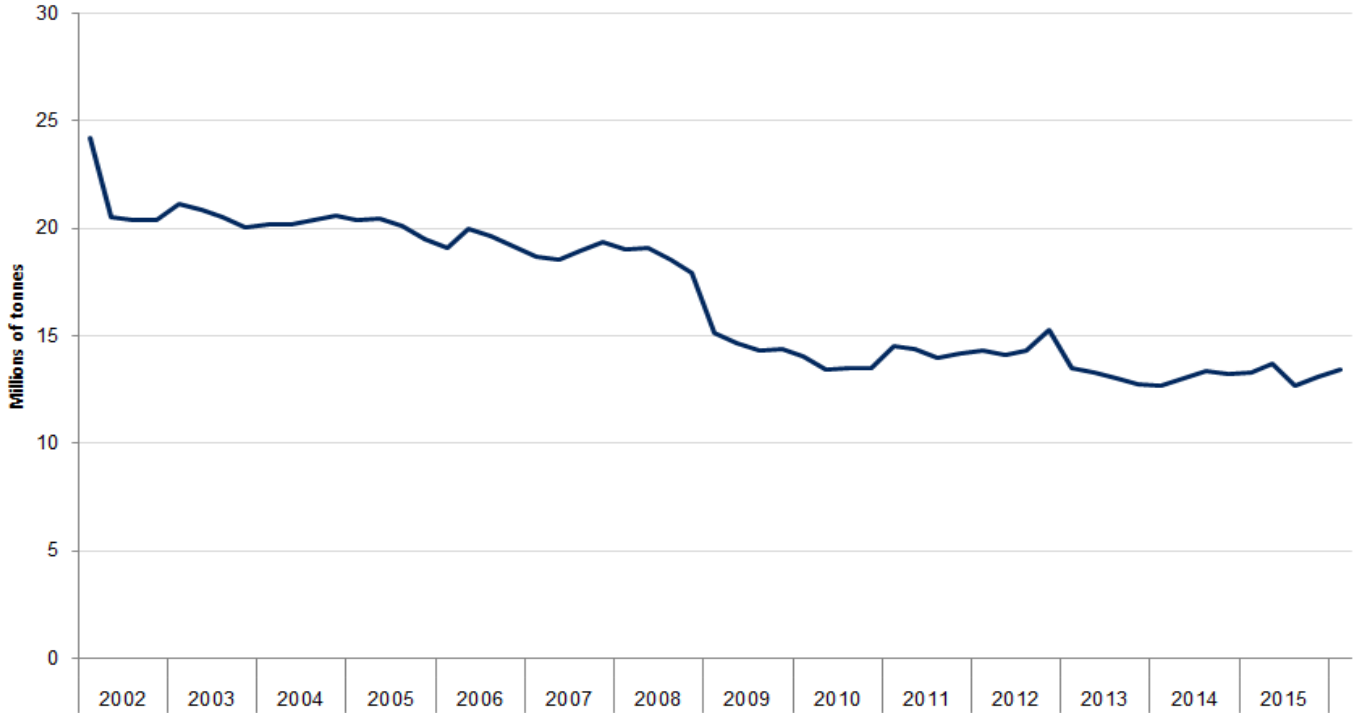
Cement production rose by 9.2% to 9.0 million tonnes in 2014, compared to the previous year. This growth in cement production follows growth of 3.2% to 8.2 million tonnes in 2013. Pre-recession production peaked in 2007 at 11.9 million tonnes.

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.

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



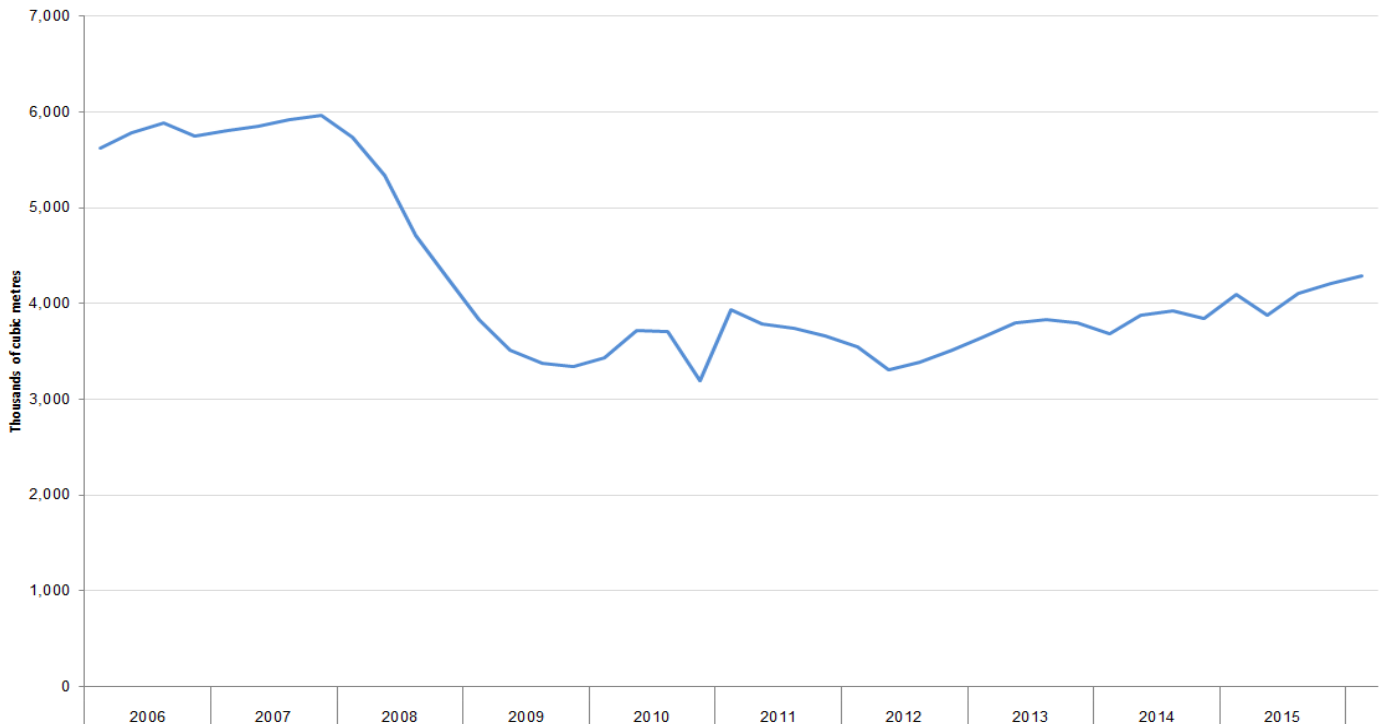
Source: Table 4, Monthly Statistics of Building Materials and Components

- Sales of sand & gravel **increased 2.9%** in Quarter 1 2016 compared to Quarter 4 2015, according to the seasonally adjusted data.
- This followed an increase of 3.4% in Quarter 4 2015.
- Comparing Quarter 4 2015 to the same quarter in the previous year, sales have **increased by 1.0%**.

Seasonally adjusted sales of sand & gravel have declined since the recession. Sales reached their lowest point since the 1950s in Quarter 3 2015.

## Concrete

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



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

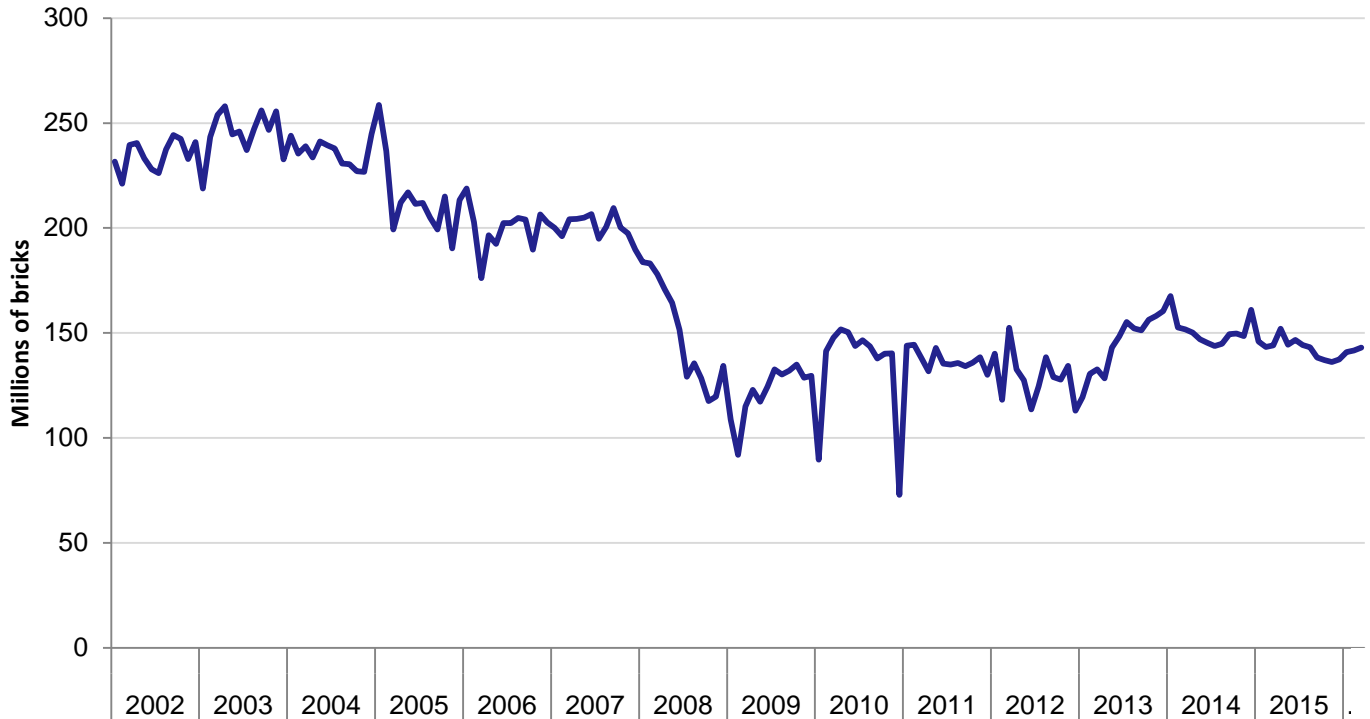
- Ready-mixed concrete sales **increased 1.7%** in Quarter 1 2016 compared to Quarter 4 2015, according to the seasonally adjusted data.
- This followed a 2.4% increase in Quarter 4 2015.
- Sales in Quarter 1 2016 **increased by 4.5%** compared to the same quarter in the previous year, following a **9.5% increase** in Quarter 4 2015, 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



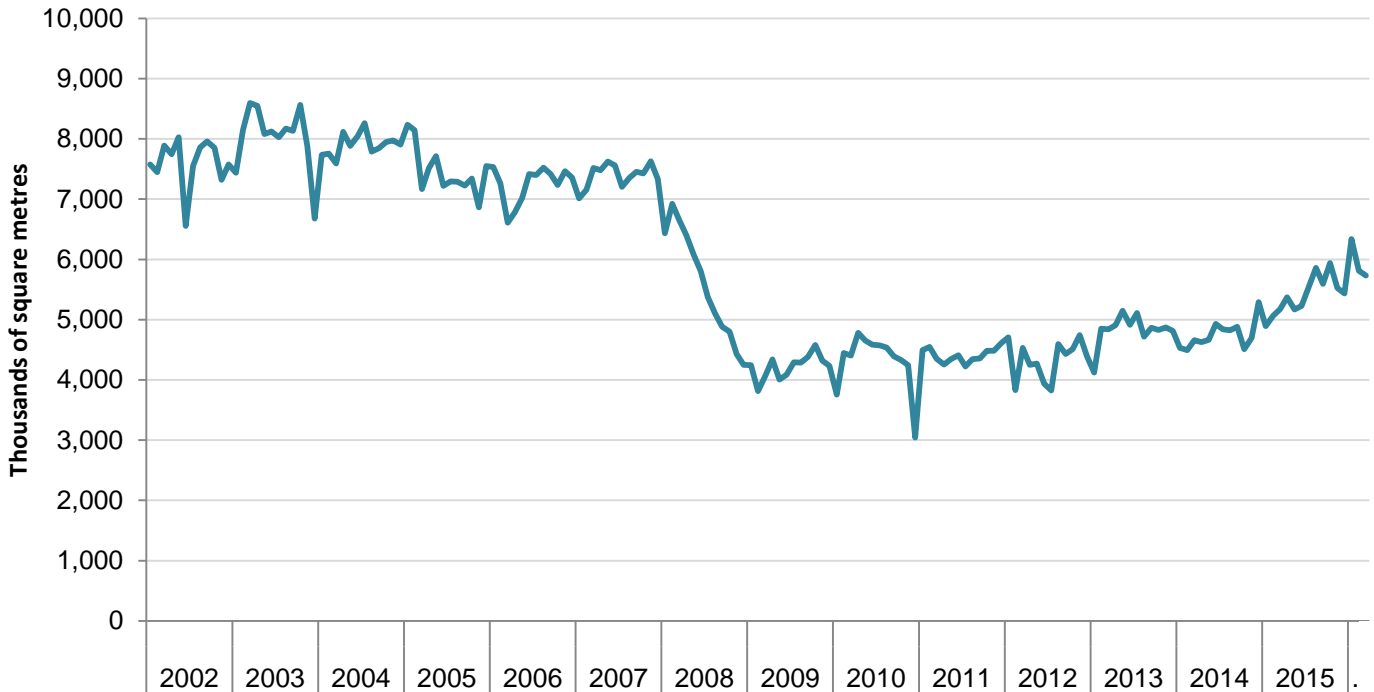
Source: Table 9, Monthly Statistics of Building Materials and Components

- There was a **0.8% decrease** in brick deliveries in March 2016 compared to March 2015, according to the seasonally adjusted figures.
- This followed a 1.2% decrease in February 2016, on the same basis.
- The month-on-month change shows a **0.9% increase** in March 2016.
- This followed a 0.5% increase in February 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 November 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

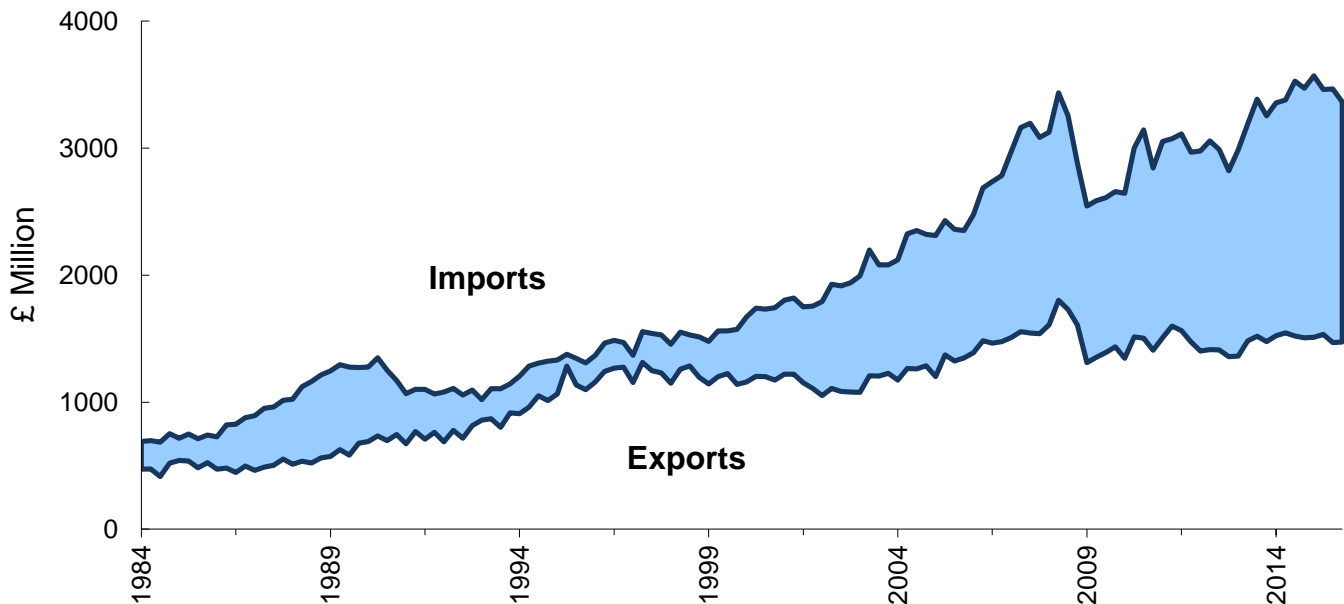
- There was a **10.7% increase** in concrete block deliveries in March 2016 compared to March 2015, according to the seasonally adjusted figures.
- This followed a 14.8% increase in February 2016, on the same basis.
- The month-on-month change shows a **1.4% decrease** in March 2016.
- This followed an 8.3% decrease in February 2016, on the same basis.
- March 2016 showed the 16<sup>th</sup> consecutive year-on-year increase in block deliveries.

Concrete block deliveries declined during the recession and reached their lowest value during the extreme cold weather in December 2010. The past year has seen rapid year-on-year increases.



## 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 £102 million in the fourth quarter of 2015 (to £3,363 million) compared to the previous quarter, a decrease of 3.0%.

**Exports** of construction materials **increased** in the fourth quarter of 2015 by £4.6 million (to £1,474 million), a 0.3% increase.

As a result, the **trade deficit narrowed** by £107 million to £1,890 million in Quarter 4 2015, a decrease of 5.3%

The decrease of the trade deficit in Quarter 4 2015 was largely due to a decrease in the trade deficit for products & components of £69.8 million and a decrease for semi-manufactures of £27.8 million.

Over the period from Quarter 1 1984 to Quarter 3 2015, construction materials imports have increased, on average, by 3.0% per quarter. Over the same period, exports increased by an average of 1.7% 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 4 2015), the trade deficit is £1,890 million, 56% of the value of imports.

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

<i>£ Million</i>			
Top-5 Exported Materials		Top-5 Imported Materials	
Electrical Wires	683	Electrical Wires	1,554
Paints & Varnishes	606	Lamps & Fittings	873
Lamps & Fittings	330	Sawn Wood > 6mm thick	783
Plugs & Sockets	303	Central Heating Boilers	584
Air Conditioning Equip.	284	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**

<i>£ Million (% of total trade in italics)</i>		
All Building Materials & Components	EU	Non-EU
Imports	8,372 <i>60%</i>	5,489 <i>40%</i>
Exports	3,481 <i>58%</i>	2,506 <i>42%</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 58%.

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

<i>£ Million</i>			
Top-5 Export Markets		Top-5 Import Markets	
Republic of Ireland	778	China	2,472
Germany	562	Germany	2,036
France	526	Italy	884
USA	479	Spain	699
Netherlands	438	Netherlands	662

Source: HMRC Overseas Trade Statistics

The top five export markets comprised 46% 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 February 2016 were published by the **Office for National Statistics** on 15<sup>th</sup> April 2016.

#### *Key points:*

- In February 2016, output in the construction industry was estimated to have **decreased by 0.3%** compared with January 2016.
- This was driven by a **decrease of 0.2%** in All New Work and a **decrease of 0.5%** in Repair & Maintenance.
- The year-on-year change shows that output **increased by 0.3%** in February 2016.
- The only period open for revision is January 2016. Output in January was estimated to have decreased by 0.4% compared to December, a revision downwards of 0.2%.

### Bank of England Summary of Business Conditions

The **Bank of England** published its latest [Agents' Summary of Business Conditions](#) for Quarter 1 2016 on the 23<sup>rd</sup> March 2016.

#### *Key points:*

- Construction output growth had softened over the quarter, reflecting some easing in housebuilding growth and some deferrals of energy and commercial construction projects
- Social housebuilding had remained weak
- Infrastructure activity was growing, albeit with significant variation across regions
- Demand for new-build housing remained robust
- Materials costs had remained lower than a year earlier, with sharp declines for metals.

### Gross Domestic Product Estimate

The **Office for National Statistics** published a preliminary estimate to gross domestic product for Quarter 1 2016 on 27<sup>th</sup> April 2016 as part of the Quarterly National Accounts release.

#### *Key points:*

- GDP is estimated to have increased by 2.1% in Quarter 1 2016 compared to Quarter 1 2015.
- GDP is estimated to have increased by 0.4% in Quarter 1 2016 compared to Quarter 4 2015.
- Construction output is estimated to have decreased by 0.9% in Quarter 1 2016 compared to Quarter 4 2015.

## Gross Domestic Product Forecast

The latest monthly **Consensus Economics** [forecast survey](#) (which uses an average of private sector forecasts) was carried out on 11<sup>th</sup> April 2016.

### *Key points:*

- The mean GDP growth forecast for 2016 is unrevised at 2.0% growth.
- The mean GDP growth forecast for 2017 is unrevised at 2.2% growth.

The **Office for Budget Responsibility** published its most recent [Economic and Fiscal Outlook](#) on 16<sup>th</sup> March 2016.

### *Key points:*

- The GDP growth forecast for 2016 was revised downwards by 0.4 percentage points to 2.0% growth.
- The forecast for 2017 is 2.2% growth.

## Construction Output Forecasts

This spring, **Experian** published their [forecasts](#) for the construction sector.

### *Key points:*

- The growth forecasts for GDP and construction output were lowered.
- Expectations for 2016 were revised downwards, to 2.0% growth, a downwards revision of 0.6 percentage points.
- A further 2.9% growth is predicted for 2017 and 2.6% growth for 2018.
- The impact of global growth slowdown and referendum uncertainty has been largely felt in the private non-residential building sectors.
- The rescheduling of main works on Hinkley Point reduces the infrastructure forecast for 2017.

This winter, the **Construction Products Association** published their [forecasts](#) for the construction sector.

### *Key points:*

- The construction sector is expected to grow by 3.0% in 2016, revised downwards from 3.6% in their autumn forecast.
- Output is expected to rise a further 3.6% in 2017.
- Infrastructure work is expected to increase by 56.2% by 2019.
- The positive growth rates are expected to continue over the next three years due to positive fundamentals across the industry.
- Increases in activity in the key sectors of infrastructure, commercial and private housing are expected to lead to growth of 15.4% in output by 2019.

## Manufacturing

The latest **Index of Production** data for February 2016 were [published](#) on 8<sup>th</sup> April 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 February 2016 with February 2015, **output increased by 4.2%**.
- When comparing February 2016 with January 2016, **output increased by 2.7%**.

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

- When comparing February 2016 with February 2015, **output increased by 2.8%**.
- When comparing February 2016 with January 2016, **output decreased by 2.5%**.

## 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. 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 [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 of this publication onwards, BIS will only publish seasonally adjusted data in the commentary.**

- 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](#). This will inform a full Quality & Methodology Information report that will be published by BIS shortly.
- 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.

<b>For latest data used</b>	<b>Bulletin table number</b>	<b>Response rate</b>
Quarterly Sand and Gravel	4, 5 & 6	71%
Quarterly Sand and Gravel – Land Won	4, 5 & 6	69%
Quarterly Sand and Gravel – Marine Dredged	4, 5 & 6	75%
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	94%

## Uses of the data

8. 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

9. [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.
10. 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.
11. 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

12. Our [revisions policy](#) can be found on the BIS Building Materials webpage.
13. [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 BIS Building Materials webpage.



## 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@bis.gsi.gov.uk](mailto:MaterialStats@bis.gsi.gov.uk).

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

**Next publication:** 1<sup>st</sup> June 2016

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