



# Monthly Statistics of Building Materials and Components

# Commentary August 2016

Coverage: UK and Great Britain Geographical area: Country, region

and county

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2016

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# **Headline results:**

- Construction material prices increased slightly. The 'All Work' construction material price index increased by 0.3% in July 2016 compared to the previous month, despite a year-on-year decline of 0.2%.
- Sand & gravel deliveries increased. Sales increased by 5.6% in quarter 2 2016 compared to the previous quarter, according to the seasonally adjusted figures.
- **Brick deliveries decreased.** Sales increased by 1.7% in July 2016 compared to the previous month, 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 <u>web page</u> on 7<sup>th</sup> September 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 <u>Uses of the data</u>.

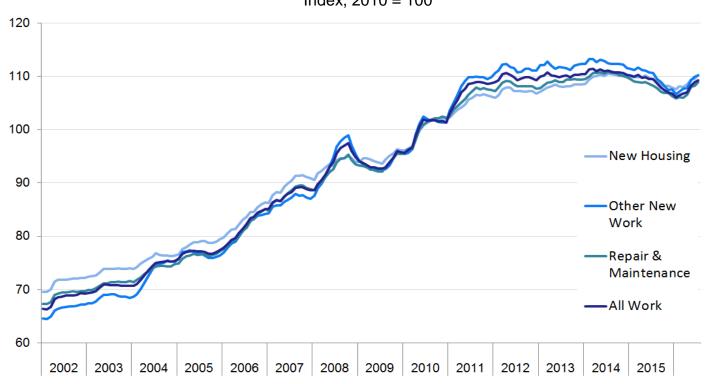
#### **Seasonal Adjustment Review**

As per our revisions policy, the seasonal adjustment methodologies for the sales of sand and deliveries of ready-mixed concrete data should be reviewed annually. Due to other pressures the review was not performed when Q4 data became available. The methodology reviews have been completed retrospectively and seasonally adjusted data from 2004Q1 has been revised. revisions are small with no revision exceeding 5%. Further information about seasonal adjustment can be found in paragraph 2 of the Background Notes (see page 14).

# **Summary of results**

## **Material Price Indices**

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



Year-on-year change

Change from July 2015 to July 2016		
New Housing 0.8%		
Other New Work	-0.4%	
Repair & Maintenance	0.6%	
All Work	-0.2%	

Month-on-month change

Change from June 2016 to July 2016		
New Housing	0.6%	
Other New Work	0.2%	
Repair & Maintenance	0.6%	
All Work	0.3%	

Looking at the longer term change, the material price index of 'All Work' fell by 0.2% in July 2016 compared to the same month in the previous year. This was the 20<sup>th</sup> consecutive decrease on this basis.

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

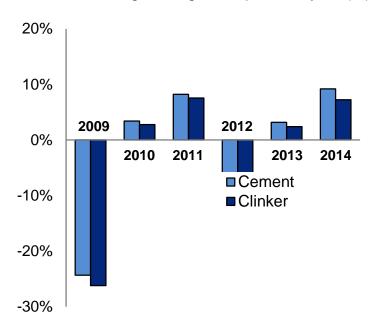
Construction Materials	% change on a year earlier
Greatest price increases	
Electric water heaters	4.9
Blocks, bricks, tiles & flagstones	4.5
Pre-cast concrete products	3.7
Greatest price decreases	
Imported plywood	-4.3
Sawn wood	-3.8
Lighting equipment for roads	-2.7

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 (%)



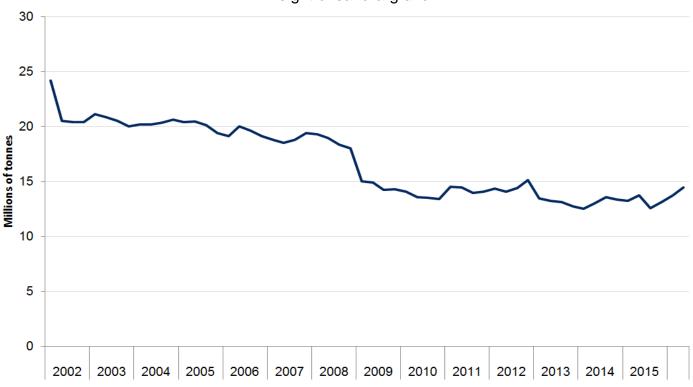
Source: Table 8, Monthly Statistics of Building Materials and Components

Cement production 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



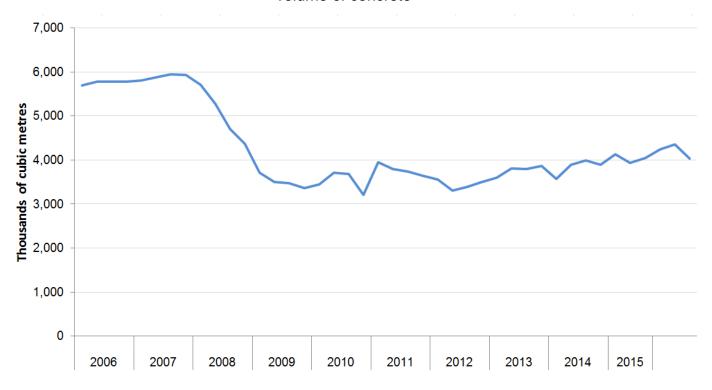
Source: Table 4, Monthly Statistics of Building Materials and Components

- Sales of sand & gravel **increased 5.6%** in Quarter 2 2016 compared to Quarter 1 2016, according to the seasonally adjusted data.
- This followed an increase of 4.5% in Quarter 1 2016.
- Comparing Quarter 2 2016 to the same quarter in the previous year, sales have **increased** by **5.3%**.

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

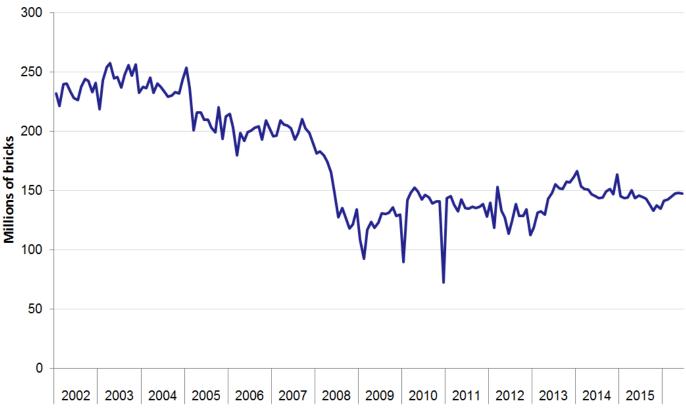
- Ready-mixed concrete sales decreased 7.4% in Quarter 2 2016 compared to Quarter 1 2016, according to the seasonally adjusted data.
- This followed a 2.7% increase in Quarter 1 2016.
- Sales in Quarter 2 2016 **increased** by **2.5%** compared to the same quarter in the previous year, following a **5.3% increase** in Quarter 1 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 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 0.1% increase in brick deliveries in July 2016 compared to July 2015, according to the seasonally adjusted figures.
- This followed a 1.1% increase in June 2016, on the same basis.
- The month-on-month change shows a **1.7% decrease** in July 2016.
- This followed a 0.4% decrease in June 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

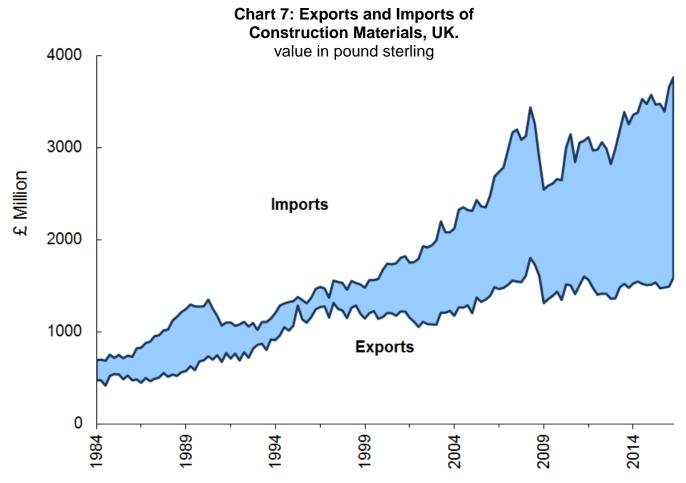


Source: Table 11, Monthly Statistics of Building Materials and Components

- There was a 0.2% increase in concrete block deliveries in July 2016 compared to July 2015, according to the seasonally adjusted figures.
- This followed an 16.5% increase in Junr 2016, on the same basis.
- The month-on-month change shows a 7.4% decrease in July 2016.
- This followed a 3.9% increase in June 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. The past year has seen rapid year-on-year increases in most months.

# **Imports and Exports of Construction Materials**



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

**Imports** of construction materials **increased** by £107 million in the second quarter of 2016 (to £3,763 million) compared to the previous quarter, an increase of 2.9%.

**Exports** of construction materials **increased** in the second quarter of 2016 by £99 million (to £1,588 million), a 6.7% increase.

As a result, the **trade deficit widened** by £8 million to £2,175 million in Quarter 2 2016, an increase of 0.4%

Over the period from Quarter 1 1984 to Quarter 2 2016, construction materials imports have increased, on average, by 3.5% per quarter. Over the same period, exports increased by an average of 1.8% 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 2016), the trade deficit is £2,175 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 1,556 876 607 Lamps & Fittings Paints & Varnishes 784 Lamps & Fittings 329 Sawn Wood > 6mm thick 584 Plugs & Sockets 307 Central Heating Boilers 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

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

Compared to prerecession levels in 2007, the share of total UK construction material exports going to the EU has declined from 70% to 58%.

Source: Table 15, Monthly Statistics of Building Materials and Components

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 <u>construction output</u> figures for June 2016 were published by the **Office for National Statistics** on 12<sup>th</sup> August 2016.

#### Key points:

- In June 2016, output in the construction industry was estimated to have **decreased by 0.9%** compared with May 2016.
- The monthly change was driven by a **decrease of 0.6%** in All New Work and **1.4%** in Repair & Maintenance.
- The year-on-year change shows that output **decreased by 2.2%** in June 2016 and by **1.4%** in Quarter 2 2016.
- Private Commercial New Work was unchanged in June 2016 compared with May 2016.
   Infrastructure new work fell by 1.8%, Private new housing by 0.6%, and public other new work by 1.7%.
- Output is estimated to have decreased by 0.7% in quarter 2 2016 compared to the previous quarter.
   This is a downwards revision of 0.3 percentage points to the GDP estimate published on 27<sup>th</sup> July, which showed a decrease of 0.4%. This revision was due to late survey returns and has no impact to 1 decimal place on GDP growth.

#### **Bank of England Summary of Business Conditions**

The **Bank of England** published its latest <u>Agents' Summary of Business Conditions</u> for Quarter 2 2016 on the 22<sup>rd</sup> June 2016.

#### Key points:

- Construction output growth had been stable, with reports of moderate rates of expansion across commercial, infrastructure and private housing construction.
- The annual rate of decline of material costs had eased.
- Housing market activity had fallen back, although demand for new-build properties had remained robust.
- Infrastructure work had risen steadily.
- Output of new homes had risen, but some housing projects had been put on hold, reflecting regulatory changes to housing associations' rents.

#### **Gross Domestic Product Estimate**

The **Office for National Statistics** published a second estimate to gross domestic product for Quarter 2 2016 on 26<sup>th</sup> August 2016.

#### Key points:

- GDP is estimated to have increased by 2.2% in Quarter 2 2016 compared to Quarter 2 2015.
- GDP is estimated to have increased by 0.6% in Quarter 2 2016 compared to Quarter 1 2016.
- Construction output decreased by 0.7% in Quarter 2 2016.
- Construction output decreased by 1.4% between Quarter 2 2015 and Quarter 2 2016.

#### **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> July 2016.

#### Key points:

- The mean GDP growth forecast for 2016 is unrevised at 1.6% growth.
- The mean GDP growth forecast for 2017 is 0.6% growth, a downwards revision of 0.1 percentage points.

The **Office for Budget Responsibility** published its most recent <u>Economic and Fiscal Outlook</u> 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 Autumn, **Experian** published their <u>forecasts</u> 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 <u>forecasts</u> for the construction sector. These forecasts were made before the UK's referendum on European Union membership.

#### Key points:

- The construction sector is expected to grow by 3.0% in 2016, which is unrevised from their last forecast.
- Output is expected to rise a further 3.6% in 2017.
- Infrastructure work is expected to increase by 56.3% by 2019. This is expected to be driven by Network Rail activity, in particular the start of High Speed 2.
- The positive growth rates are expected to continue over the next three years due to positive fundamentals across the industry.

Private housing starts are expected to rise 5.0% in both 2016 and 2017.

#### Manufacturing

The latest **Index of Production** data for May 2016 were <u>published</u> on 7<sup>th</sup> July 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 June 2016 with June 2015, **output increased by 2.8%**.
- When comparing June 2016 with May 2016, output decreased by 0.3%.

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

- When comparing June 2016 with June 2015, **output increased by 10.3%**.
- When comparing June 2016 with May 2016, output decreased by 0.5%.

# **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 <u>report</u>, published on 22nd December 2011, can be found on the UK Statistics Authority website.

- 2. As of 3<sup>rd</sup> 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 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. 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.

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 <u>interim report</u>. In July 2012, MAS published their <u>final report</u>. This will inform a full Quality & Methodology Information report that will be published by BIS shortly.
- 6. HM Revenue and Customs use administrative sources to produce Overseas Trade Statistics. A <u>Statement of Administrative Sources</u> 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 <u>Statement of Administrative Sources</u> 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	Response
	number	rate
Quarterly Sand and Gravel	4, 5 & 6	87%
Quarterly Sand and Gravel – Land Won	4, 5 & 6	84%
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	100%
Monthly Bricks Final data	9 & 10	100%
Monthly Concrete Blocks	11	93%

#### 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.

#### **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 <a href="MaterialStats@beis.gov.uk">MaterialStats@beis.gov.uk</a>.

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

**Next publication:** 5<sup>th</sup> October 2016

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Strategy website.



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