



# Monthly Statistics of Building Materials and Components

# Commentary January 2015

Coverage: UK and Great Britain

Geographical area: Country, region and

county

Date of publication: 4<sup>th</sup> February 2015

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### **Headline results:**

- Construction material prices decreased slightly in December. The 'All Work' Construction Material Price Index for December 2014 decreased by 0.4% compared to November 2014, but increased by 0.1% compared to December 2013.
- Brick deliveries and production increased. The year-on-year figure for deliveries of bricks in December 2014 increased by 10.9%, whilst brick production rose by 10.4%.
- Concrete block deliveries and production increased. The year-on-year figure for deliveries of concrete blocks in December 2014 increased by 14.1%. Production also increased, by 13.4%.
- Concrete roofing tiles decreased. The year-on-year figure for deliveries of concrete roofing tiles decreased by 13.0%, after 9 consecutive increases.

#### Introduction

Please note - we have updated the design of many of the charts in this release, and welcome any feedback. Please send any comments to: MaterialStats@bis.gsi.gov.uk.

This commentary accompanies the latest Monthly Statistics of Building Materials and Components bulletin, published on the BIS building materials <u>web page</u> on 4<sup>th</sup> February 2015. 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):

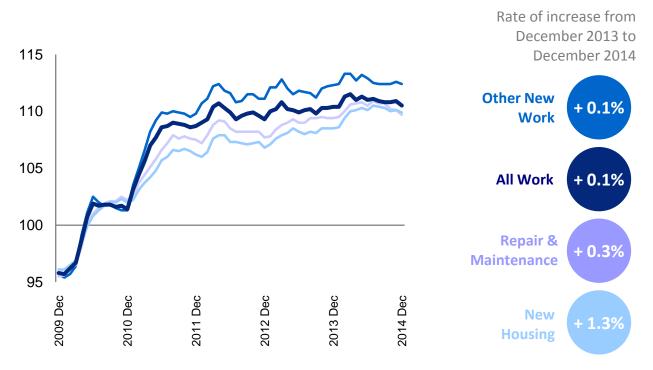
- Construction material price indices (monthly, UK)
- Sand and gravel sales (quarterly, GB\*)
- Slate production, deliveries and stocks (quarterly, GB)
- Cement and clinker production, deliveries and stocks (annual, GB)
- Bricks production, deliveries and stocks (monthly, GB\*)
- Concrete building blocks 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

The 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>.

# **Summary of results**

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



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

The headline 'All Work' Construction Material Price Index decreased by 0.4% in December 2014 compared to the previous month, after a 0.1% increase in November. The index has fallen in 5 out of the past 12 months.

From October 2009 to June 2011, construction material prices increased rapidly, rising by 15% over the period. The price of construction materials has increased more slowly since June 2011: by 1.8% overall for the headline 'All Work' index.

The 'All Work' year on year change for the Construction Material Price Index was 0.1% in December 2014, down from 0.5% in November. The past 19 months have recorded year on year changes in the range of 0% to 1.1%. The sub-sector recording the highest rise in prices was 'New Housing', at 1.3%. The higher rise in prices for 'New Housing' is consistent with recent increases in activity in this sub-sector.

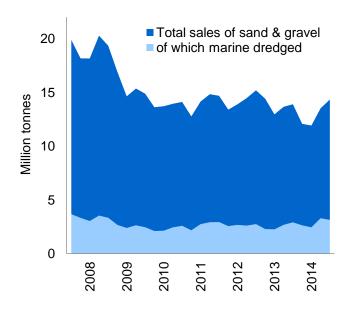
Table 1: Construction materials experiencing the largest price increases and decreases in the 12 months to December 2014, UK

Construction Materials	% change on a year earlier	
Largest price increases All Bricks Particle Board Sawn Wood	9.2 7.0 6.3	
Largest price decreases Fabricated Structural Steel Concrete Reinforcing Bars Electric Heating Apparatus	-4.9 -3.8 -1.1	

The 'All Work' Construction Material Price Index shows that the year on year change in material costs for December 2014 was 0.1% (see chart 1). However, this aggregated figure hides larger price movements for some specific products and materials. The 3 largest increases and decreases are presented here.

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

Chart 2: Volumes of Total and Marine Dredged Sand and Gravel sold, GB

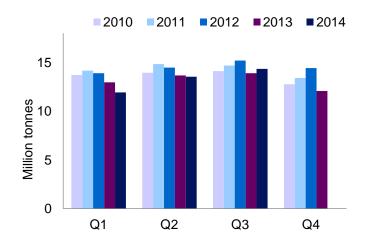


Source: Table 4, Monthly Statistics of Building Materials and Components

Volumes of sand and gravel sold in Great Britain increased by 6.0% on the quarter in 2014Q3, to 14.3 million tonnes. This followed a quarterly increase of 13.5% in 2014Q2. Following the recession (from 2009Q3), quarterly sales have averaged 13.8 million tonnes.

The proportion of sand and gravel sold that was Marine Dredged has averaged 22.3% of total quarterly sales in 2014. This is higher than the average of 18.2% over the period 2009 to 2013.

Chart 3: Volumes of Sand and Gravel sold, GB

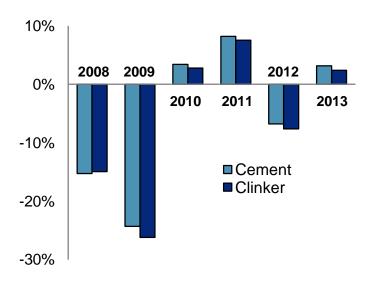


Source: Table 4, Monthly Statistics of Building Materials and Components

Sales of sand and gravel were up 3.1% in 2014Q3 compared with the same quarter in the previous year. Volumes of sand and gravel sold declined from 2013Q1 to 2014Q2 on the same basis, with each of these six quarters recording year on year decreases. The decreases ranged from -1.0% (2014Q2) to -16.2% (2013Q4).

Seasonal effects may help to explain some of the differences between quarters. The number of working days in a quarter varies each year, which may affect comparisons over periods.

Chart 4: Production of Cement and Clinker, GB
Percentage change over previous year (%)

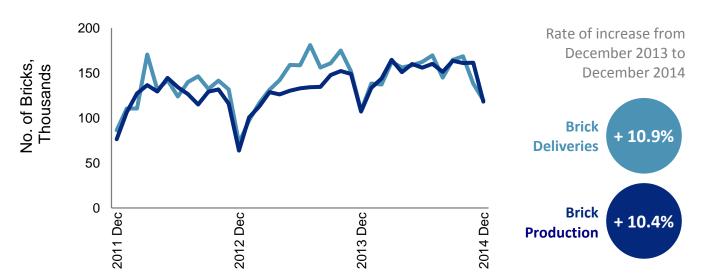


Source: Table 8, Monthly Statistics of Building Materials and Components

Cement production rose by 3.2% to 8.2 million tonnes in 2013, compared to the previous year. This growth in cement production follows a contraction of 6.8% to 8.0 million tonnes in 2012. Pre-recession production peaked in 2007 at 11.9 million tonnes.

Production of Clinker rose by 2.4% to 6.7 million tonnes in 2013, compared to the previous year. This growth in clinker production follows a contraction of 7.6% to 6.6 million tonnes in 2012. Pre-recession production, in 2007, stood at 10.2 million tonnes.

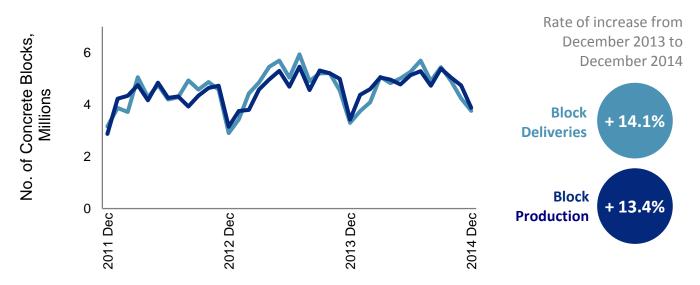
Chart 5: Deliveries & Production of Bricks, GB
Monthly number of bricks



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

In the 12 months to December 2014, deliveries of bricks increased by 10.9%, following a decrease of 9.0% in the 12 months to November. Brick production increased by 10.4% in the 12 months to December 2014, following an increase of 8.4% on the same basis in November. Brick deliveries were 13% lower in December 2014 than pre-recession levels in December 2007.

Chart 6: Deliveries & Production of Concrete Blocks, GB
Monthly number of concrete blocks

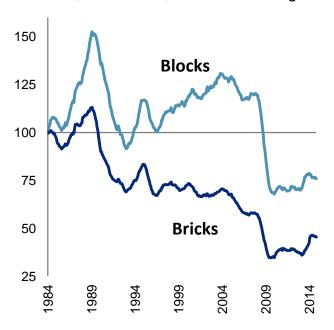


Source: Table 11, Monthly Statistics of Building Materials and Components

Deliveries of concrete blocks increased by 14.1% in December 2014 relative to the same month a year earlier, following a decrease of 6.7% in November. Concrete block production increased by 13.4% in the 12 months to December 2014, after decreasing by 5.0% in November. Concrete block deliveries were 24% lower in December 2014 than pre-recession levels in December 2007.

Chart 7: Deliveries of Bricks and Blocks, GB. 1984 to present.

Index, 1983 = 100, 12 month moving totals



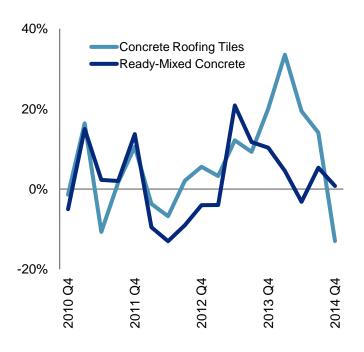
Source: Tables 9 and 11, Monthly Statistics of Building Materials and Components

Before the 2008 recession, brick deliveries were in long term decline. Brick deliveries fell sharply in the recession, with the 12 month moving total reaching a nadir in June 2009, 39.9% lower than the mean value for 2007. The subsequent recovery has seen deliveries increase by 31.8% since June 2009, but by December 2014 they remain 20.8% lower than the 2007 mean.

Prior to the 2008 recession, concrete block deliveries were increasing over the long term. Deliveries fell sharply in the recession, with the 12 month running total reaching a nadir in October 2009, 42.5% lower than the mean value for 2007. The subsequent recovery has seen deliveries increase by 11.5% since October 2009, but by November 2014 they remain 35.9% lower than the 2007 mean.

Chart 8: Deliveries of Concrete Roofing Tiles (GB) and Ready-Mixed Concrete (UK)

Percentage change over a year earlier (%)



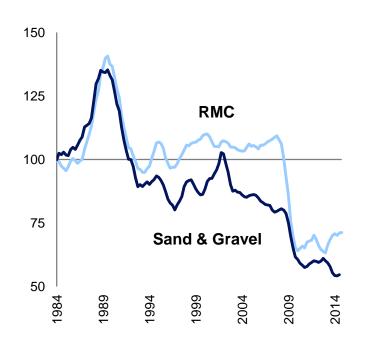
Source: Table 13, Monthly Statistics of Building Materials and Components

Deliveries of Concrete Roofing Tiles in 2014Q4 decreased by 13.0% compared to the same quarter the previous year. This followed 9 consecutive quarterly increases on this basis. Deliveries of concrete roofing tiles were 19.7% lower in 2014Q4 compared to pre-recession levels in 2007Q4.

Deliveries of Ready-Mixed Concrete rose by 0.8% in 2014Q4, compared to 2013Q4. This followed an increase of 5.3% in 2014Q3 on the same basis. Deliveries of ready-mixed concrete remain 34.7% below pre-recession levels in 2007Q4.

Chart 9: Deliveries of Sand & Gravel (GB) and Ready-Mixed Concrete (UK)

Index, 1983 = 100, 4 quarter moving totals

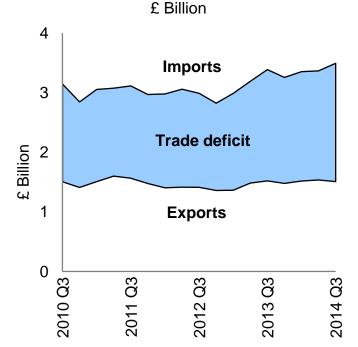


Source: Tables 4 & 13, Monthly Statistics of Building Materials and Components

Deliveries of sand & gravel declined gradually in the period before the 2008 recession. Following an initial sharp decline in 2009 and 2010, deliveries have continued to decline. In 2014Q3, deliveries were 31.9% lower than the 2007 mean.

In the period leading up to the 2008 recession, deliveries of ready-mixed concrete were broadly stable. Deliveries fell sharply in 2008/9: by 2010Q1 they were 40.8% below the 2007 mean. There has been a modest recovery since, with deliveries in 2014Q4 now 34.2% below the 2007 mean.

Chart 10: Exports and Imports of Construction Materials, UK



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

Exports of construction materials decreased by £28 million in the third quarter of 2014 (to £1,507 million), a decrease of 1.8% on the previous quarter. Imports rose, by £127 million (to £3,492 million), a 3.8% increase. As a result, the trade deficit increased by £155 million, to £1,985 million, in 2014Q3.

The increase of the trade deficit in 2014Q3 was largely due to an increase in the trade deficit for products and components of £161 million. For semi-manufactures, the trade deficit decreased by £16 million. The raw materials trade deficit increased, by £10 million.

Chart 11: Exports and Imports of Construction Materials, UK. 1984 to present.
£ Billion

Over the period 1984Q1 to 2014Q3, construction materials imports have increased, on average, by 3.3% 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 (2014Q3) the trade deficit is £2.0 billion, 57% of the value of imports.

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

Table 2: Top-5 UK Exported and Imported Construction
Materials in 2013

£ Million Top-5 Exported Materials		Top-5 Imported Materials		The top five exported materials in 2013 accounted for 34% of
D : 0	0.40	E1	4.400	total construction material
Paints & Varnishes	648	Electrical Wires	1492	exports.
Electrical Wires	547	Lamps and Fittings	703	
Lamps and Fittings	287	Sawn Wood > 6mm thick	698	The top five imported
Plugs & Sockets	260	Central Heating Boilers	618	construction materials in 2013
Air Conditioning Equip.	239	Air Conditioning Equip.	535	accounted for 32% of total
Source: Table 14, Monthly Statistics of Building Materials and Components				construction material imports.

Table 3: UK Trade of Construction Materials with EU and Non-EU Countries, 2013

£ Million (% of total trade in italics)			
All Building Materials & Components	EU	Non-EU	
Imports		8,131	4,685
		63%	37%
Exports		3,511	2,330
		60%	40%

Compared to pre-recession levels in 2007, the share of total UK construction material exports going to the EU has declined from 70% to 60%.

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

Table 4: Top 5 UK Export and Import Markets for Construction Materials in 2013

£ Million Top-5 Export Markets		Top-5 Import Markets	
Ireland Germany France Netherlands USA	599 520 430	Germany China Italy Spain Netherlands	2,046 1,829 848 687 589

Source: HMRC Overseas Trade Statistics

The top 5 export markets comprised 46% of total construction materials exports in 2013. Ireland remains the largest market, despite having shrunk from a pre-recession peak of 27% of total exports in 2007, to 13% in 2013.

The top 5 import markets comprised 47% of total construction materials imports in 2013.

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

# **Economic background**

The first estimate of GDP, published by the Office for National Statistics (ONS) on the 27<sup>th</sup> of January, reported that the economy grew by 0.5% on the quarter in 2014Q4 following a 0.7% rise in 2014Q3. Compared to 2013Q4, GDP increased by 2.7% in 2014Q4. GDP is estimated to be 3.4% above its pre-recession peak in 2008Q1. Growth in 2014Q4 was recorded in two of the four main industrial groupings: services increased by 0.8%, and agriculture increased by 1.3%. However, output fell by 1.8% in construction, and by 0.1% in production. Manufacturing output, which accounts for just over two-thirds of total production, rose by 0.1% over the same period, following growth of 0.3% in 2014Q3. The 1.8% decrease in construction output contributed -0.11 percentage points to overall GDP growth, and followed a rise in construction output of 1.6% in 2014Q3.

More recent construction output figures were published by the ONS on the 9<sup>th</sup> of January. The latest seasonally adjusted figures show that output fell by 2.0% in November 2014, compared to the previous month. This is the 3<sup>rd</sup> monthly decrease in the past 4 months. The decrease was largely driven by decreases in non-housing R&M (-6.0%) and private housing R&M (-4.1%). However, the longer term trend remains for growth in the construction sector: comparing November 2014 with the same month in 2013 shows growth of 3.6%. Overwhelmingly, this rise was due to increases in new private housing (23.8%) and new public housing (14.9%).

The latest monthly Consensus Economics forecasts in January 2015 (which uses an average of private sector forecasts) held GDP growth expectations for 2015 at 2.6%. The forecast for 2016 was set at 2.4%. The 2015 forecast is similar to those produced in December 2014 by the Office for Budget Responsibility (OBR) and in November by Organisation for Economic Co-operation and Development (OECD) who forecast GDP growth in 2015 of 2.4 and 2.7%, respectively.

The latest reports from the Bank of England's regional agents state that growth in construction was robust, but that there was variation across regions. Improvements were noted in repair & maintenance work, infrastructure and commercial development activity. House building activity continued to increase, although there were some indications that plans were being moderated for 2015, and demand for land was easing a little. Skills shortages and increasing materials costs were again noted as constraints. However, future cost increases were expected to be smaller, due to increases in supply capacity.

Experian published their Winter 2014/15 forecasts in January, and estimated that construction output grew by 6.2% in 2014. This was largely due to the performance of public and private housing output. They revised their prediction for 2015 upwards, to 6.0%. Growth in 2015 is expected to be more balanced than in 2014, with expansion predicted for every sector. Expectations for 2016 were also revised upwards slightly, to 3.6%, with a further 4.1% in 2017. On these predicted levels of growth, construction output will surpass its 2007 peak in 2016. Looking at the whole of the forecast period, 2015-17, the infrastructure sector is expected to be the best performer, with 44% growth over 3 years. However, this may prove optimistic if major projects in the infrastructure pipeline do not start as scheduled.

# **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. 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 <u>report</u> 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).

- 3. 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 summary Quality Report that will be published by BIS shortly.
- 4. 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 <u>Building Materials and Components</u> webpage:

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

5. <u>The pre-announcement of any major changes to samples or methodology</u> also details some methodological changes to the collection of data.

6. 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.

Latest data used in December 2014 edition	Bulletin table number	Response rate
Quarterly Sand and Gravel	4, 5 & 6	92%
Quarterly Sand and Gravel – Land Won	4, 5 & 6	84%
Quarterly Sand and Gravel – Marine Dredged	4, 5 & 6	100%
Quarterly Slate	7	89%
Monthly Bricks Provisional data	9	69%
Monthly Bricks Final data	9 & 10	100%
Monthly Concrete Blocks Provisional data	11	87%
Monthly Concrete Blocks Final data	11	100%
Quarterly Concrete Blocks Final data	11 & 12	90%
Quarterly Concrete Roofing Tiles	13	100%

#### Uses of the data

7. 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**

- 8. <u>Construction Statistics: Sources and Outputs</u> 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.
- 9. 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.
- 10. In its monthly **Index of Production (IoP)** publication, the ONS publishes Gross Value Added (seasonally adjusted, UK) data for the following two industries:
  - SIC 23.1-4/7-9 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 ONS.

The latest IoP data show that output in the SIC 23.1-4/7-9 industry rose by 1.6% in the 12 months to November 2014, after a rise for October of 0.6%. This was the 18<sup>th</sup> consecutive month in which output rose on this basis, following 17 successive monthly declines. In 2013, the industry expanded by 4.5%, after a contraction of 13.0% in 2012. Monthly indices (2011=100) from March 2012 to July 2013 inclusively were some of the lowest on record (since January 1997), the lowest being in October 2012.

Year on year for November 2014, output in the SIC 23.5-6 industry rose by 4.2%, after a rise for October 2014 of 4.2%. This was the 12<sup>th</sup> consecutive monthly increase on a year-on-year basis. The past 12 months of year on year increases follow a long period characterised predominantly by declines: 22 months in the past 36-month period have recorded year-on-year declines. Monthly index values (2011=100) show that the period from January to October 2013 had some of the lowest monthly values on record (since January 1997), the lowest being in March 2013. In 2013 as a whole, the sector suffered a 7.7% decline in output, following a contraction of 14.8% in output recorded in 2012.

#### **Revisions**

- 11. Our revisions policy can be found on the BIS Building Materials webpage.
- 12. <u>The pre-announcement of any major changes to samples or methodology</u> and <u>Summary of Revisions</u> 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 <a href="MaterialStats@bis.gsi.gov.uk">MaterialStats@bis.gsi.gov.uk</a>

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

**Next publication:** 4<sup>th</sup> March 2015

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https://www.gov.uk/government/organisations/department-for-business-innovation-

skills/series/building-materials-and-components-monthly-statistics-2012

Department of Business of Business, Innovation & Skills.

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