

# CONSTRUCTION PRICE INDEX

( Input Cost Index for the construction of a single storey house )  
4<sup>th</sup> Quarter 2009

## 1. Introduction

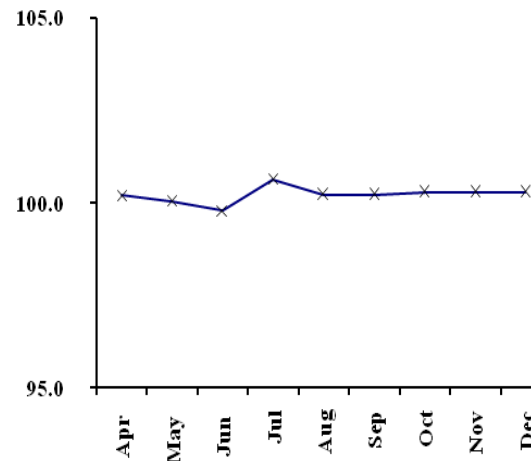
This issue of the Economic and Social Indicators presents a new series of monthly Construction Price Indices for residential buildings for the period second quarter 2009 to fourth quarter 2009 with second quarter 2009 as base period. Previous published series were computed using the fourth quarter of 2001 as base. A review of the specifications and weights was necessary to take into account changes with respect to both inputs and technology that have occurred since 2001.

The methodology used for compiling the index and the changes in the weight structure are given in the annexed technical notes. Figures have been rounded to one or two decimal places although they have been calculated to many decimal places.

## 2. Evolution of the Construction Price Index, April to December 2009

Chart 1 shows the movement of the Construction Price Index from April to December 2009, with the second quarter of 2009 as new base. It is observed that the index declined from 100.2 in April to 99.8 in June. It went up to 100.6 in July but declined again to 100.2 in August and has thereafter remained almost constant at 100.2 in September and 100.3 during the last three months of the year.

Chart 1 : Construction Price Index,  
April to December 2009

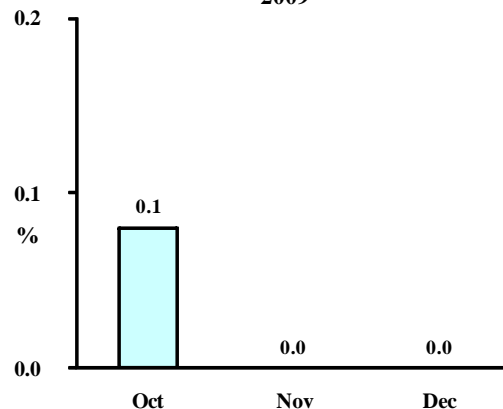


## 3. Changes in the Construction Price Index, fourth quarter 2009

The Construction Price Index, which stood at 100.2 at the end of September 2009, increased to 100.3 in October 2009 and remained unchanged during the months of November and December 2009. (Table 1.1).

The 0.1% increase in October was due to higher prices of paint and adhesive.

Chart 2: Percentage change from  
previous month, October to December  
2009



#### 4. Changes by Input Categories

Changes by input categories are shown in Tables 1.2 to 1.4.

During the fourth quarter of 2009, no change was registered in the sub-indices for “Labour” “Hire of Plant” and “Transport” categories.

The “Materials” sub-index increased by 0.1% from 99.8 in September 2009 to 99.9 in October 2009 due to higher prices of paint (3.1%) and adhesive (0.3%). However, it did not register any further change in the months of November and December 2009.

The net monthly contributions of the input categories to the index during the period April 2009 to December 2009 are shown in Table 1.3.

Quarterly averages of the monthly indices by input category and the percentage change from quarter to quarter are shown in Table 1.4.

#### 5. Changes by Work Category

Changes by work category are shown in Tables 2.2 to 2.4.

In October, price increases were noted in the following work categories: “painting” (2.0%), “metal openings” (0.2%), “softwood joinery” (0.3%) and “tiling” (0.2%). These changes were due to higher prices of emulsion paint, metal primer, gloss paint and adhesive.

Table 2.3 shows the net monthly contributions of the work categories to the index since April 2009.

Quarterly averages of the monthly indices by work category and the percentage change from quarter to quarter are shown in Table 2.4.

#### 6. Past Trends

Table 3.1 summarises the monthly indices, the quarterly and yearly averages as well as the percentage changes in the yearly average since 1998. Indices for the years 1998 to 2001 have been worked out using as base the fourth quarter of 1993, while the base period for the calculation of the index from 2002 up to first quarter 2009 is the fourth quarter of 2001. As from April 2009 the base period used is the second quarter of 2009.

The series are not strictly comparable because of different base periods. However, for some particular purposes, comparison between the series may be necessary. A chain linked series with base period second quarter 2009 has been worked out and is given in table 3.2.

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February 2010*

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## Input Cost Index for the construction of a single storey house

(Base: 2nd Quarter 2009 = 100)

**Table 1.1: Monthly sub-indices by input category, April 2009 to December 2009**

Input Categories	Weight	2009									
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>LABOUR</b>	<b>28.2</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>101.2</b>	<b>101.2</b>	<b>101.2</b>	<b>101.2</b>	<b>101.2</b>	<b>101.2</b>	<b>101.2</b>
<b>HIRE OF PLANT</b>	<b>3.3</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>MATERIALS :</b>	<b>64.2</b>	<b>100.4</b>	<b>100.1</b>	<b>99.6</b>	<b>100.4</b>	<b>99.8</b>	<b>99.8</b>	<b>99.9</b>	<b>99.9</b>	<b>99.9</b>	<b>99.9</b>
Hardcore (remplissage)	1.8	100.0	100.0	100.0	104.0	104.0	104.0	104.0	104.0	104.0	104.0
Cement	12.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Sand	4.2	100.0	100.0	100.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0
Aggregate	3.4	100.0	100.0	100.0	103.9	103.9	103.9	103.9	103.9	103.9	103.9
Block	5.2	100.0	100.0	100.0	101.9	101.9	101.9	101.9	101.9	101.9	101.9
Steel bars (armature)	10.6	101.9	100.4	97.8	94.1	91.5	91.5	91.5	91.5	91.5	91.5
Galvanised corrugated cast iron shee	0.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Timber: (a) Carpentry	3.9	100.1	100.1	99.8	105.6	100.2	100.2	100.2	100.2	100.2	100.2
(b) Joinery	1.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Aluminium openings	4.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Metal openings	2.7	100.0	100.0	100.0	101.8	103.7	103.7	103.7	103.7	103.7	103.7
Ceramic tiles	0.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Adhesive	1.7	100.0	100.0	100.0	100.0	100.0	100.0	100.3	100.3	100.3	100.3
Paint	2.5	100.0	100.0	100.1	98.2	98.2	98.2	101.2	101.2	101.2	101.2
Plumbing	1.5	99.8	100.1	100.1	99.8	100.1	100.1	100.1	100.1	100.1	100.1
Sanitary installation	2.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Electrical installation	4.7	99.9	99.9	100.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>TRANSPORT</b>	<b>4.3</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Total</b>	<b>100.0</b>	<b>100.2</b>	<b>100.0</b>	<b>99.8</b>	<b>100.6</b>	<b>100.2</b>	<b>100.2</b>	<b>100.3</b>	<b>100.3</b>	<b>100.3</b>	<b>100.3</b>

## Input Cost Index for the construction of a single storey house

(Base: 2nd Quarter 2009 = 100)

**Table 1.2: Percentage change from previous month by input category, April 2009 to December 2009**

Input Categories	Weight	% change from previous month								
		April compared to base quarter	May 09	Jun 09	Jul 09	Aug 09	Sep 09	Oct 09	Nov 09	Dec 09
<b>LABOUR</b>	<b>28.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>HIRE OF PLANT</b>	<b>3.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>MATERIALS :</b>	<b>64.2</b>	<b>0.4</b>	<b>-0.3</b>	<b>-0.4</b>	<b>0.8</b>	<b>-0.7</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>
Hardcore (remplissage)	1.8	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0
Cement	12.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sand	4.2	0.0	0.0	0.0	9.0	0.0	0.0	0.0	0.0	0.0
Aggregate	3.4	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0
Block	5.2	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0
Steel bars (armature)	10.6	1.8	-1.5	-2.5	-3.8	-2.8	0.0	0.0	0.0	0.0
Galvanised corrugated cast iron sheet	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Timber: (a) Carpentry	3.9	0.1	0.0	-0.3	5.8	-5.1	0.0	0.0	0.0	0.0
(b) Joinery	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aluminium openings	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Metal openings	2.7	0.0	0.0	0.0	1.8	1.9	0.0	0.0	0.0	0.0
Ceramic tiles	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adhesive	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Paint	2.5	0.0	0.0	0.1	-1.9	0.0	0.0	3.1	0.0	0.0
Plumbing	1.5	-0.2	0.3	0.0	-0.3	0.3	0.0	0.0	0.0	0.0
Sanitary installation	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electrical installation	4.7	-0.1	0.0	0.2	-0.1	0.0	0.0	0.0	0.0	0.0
<b>TRANSPORT</b>	<b>4.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total</b>	<b>100.0</b>	<b>0.2</b>	<b>-0.2</b>	<b>-0.3</b>	<b>0.9</b>	<b>-0.4</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>

## Input Cost Index for the construction of a single storey house

## Input Cost Index for the construction of a single storey house

(Base: 2nd Quarter 2009 = 100)

**Table 1.3: Net monthly contributions of input categories to the index, April to December 2009**

Input Categories	Weight	2009								
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>LABOUR</b>	<b>28.2</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.35</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>HIRE OF PLANT</b>	<b>3.3</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>MATERIALS :</b>	<b>64.2</b>	<b>0.20</b>	<b>-0.15</b>	<b>-0.27</b>	<b>0.51</b>	<b>-0.43</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.00</b>
Hardcore (remplissage)	1.8	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00
Cement	12.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sand	4.2	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00
Aggregate	3.4	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00
Block	5.2	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
Steel bars (armature)	10.6	0.20	-0.16	-0.27	-0.39	-0.28	0.00	0.00	0.00	0.00
Galvanised corrugated cast iron sheet	0.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Timber: (a) Carpentry	3.9	0.00	0.00	-0.01	0.23	-0.21	0.00	0.00	0.00	0.00
(b) Joinery	1.6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aluminium openings	4.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Metal openings	2.7	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00
Ceramic tiles	0.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adhesive	1.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paint	2.5	0.00	0.00	0.00	-0.05	0.00	0.00	0.08	0.00	0.00
Plumbing	1.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanitary installation	2.2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electrical installation	4.7	0.00	0.00	0.01	-0.01	0.00	0.00	0.00	0.00	0.00
<b>TRANSPORT</b>	<b>4.3</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Total</b>	<b>100.0</b>	<b>0.20</b>	<b>-0.15</b>	<b>-0.27</b>	<b>0.86</b>	<b>-0.43</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.00</b>

## Input Cost Index for the construction of a single storey house

(Base: 2nd Quarter 2009= 100)

**Table 1.4: Quarterly average of monthly indices and percentage changes by input category, 2nd Quarter 2009 to 4th quarter 2009**

Input Categories	Weight	2009			% change from previous quarter	
		2nd Qr	3rd Qr	4th Qr	3rd Qr 2009	4th Qr 2009
<b>LABOUR</b>	<b>28.2</b>	<b>100.0</b>	<b>101.2</b>	<b>101.2</b>	<b>1.2</b>	<b>0.0</b>
<b>HIRE OF PLANT</b>	<b>3.3</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>	<b>0.0</b>
<b>MATERIALS :</b>	<b>64.2</b>	<b>100.0</b>	<b>100.0</b>	<b>99.9</b>	<b>0.0</b>	<b>-0.1</b>
Hardcore (remplissage)	1.8	100.0	104.0	104.0	4.0	0.0
Cement	12.7	100.0	100.0	100.0	0.0	0.0
Sand	4.2	100.0	109.0	109.0	9.0	0.0
Aggregate	3.4	100.0	103.9	103.9	3.9	0.0
Block	5.2	100.0	101.9	101.9	1.9	0.0
Steel bars (armature)	10.6	100.0	92.4	91.5	-7.6	-0.9
Galvanised corrugated cast iron sheeting	0.6	100.0	100.0	100.0	0.0	0.0
Timber: (a) Carpentry	3.9	100.0	102.0	100.2	2.0	-1.8
(b) Joinery	1.6	100.0	100.0	100.0	0.0	0.0
Aluminium openings	4.1	100.0	100.0	100.0	0.0	0.0
Metal openings	2.7	100.0	103.1	103.7	3.1	0.6
Ceramic tiles	0.8	100.0	100.0	100.0	0.0	0.0
Adhesive	1.7	100.0	100.0	100.3	0.0	0.3
Paint	2.5	100.0	98.2	101.2	-1.8	3.1
Plumbing	1.5	100.0	100.0	100.1	0.0	0.1
Sanitary installation	2.2	100.0	100.0	100.0	0.0	0.0
Electrical installation	4.7	100.0	100.0	100.0	0.0	0.0
<b>TRANSPORT</b>	<b>4.3</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.3</b>	<b>100.3</b>	<b>0.3</b>	<b>-0.1</b>

**Input Cost Index for the construction of a single storev house**  
(Base: 2nd Quarter 2009 = 100)

**Table 2.1: Monthly sub-indices by work category, April 2009 to December 2009**

Work Categories	Weight	2009									
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1. Setting up	1.5	100.0	100.0	100.0	100.6	100.6	100.6	100.6	100.6	100.6	100.6
2. Setting out	0.5	100.0	100.0	100.0	100.8	100.8	100.8	100.8	100.8	100.8	100.8
3. Earthworks	3.3	100.0	100.0	100.0	102.5	102.5	102.5	102.5	102.5	102.5	102.5
4. Concrete	21.3	100.0	100.0	100.0	101.5	101.5	101.5	101.5	101.5	101.5	101.5
5. Reinforcement	14.6	101.4	100.3	98.4	95.3	93.4	93.4	93.4	93.4	93.4	93.4
6. Formwork (coffrage)	8.5	100.1	100.1	99.9	103.0	100.5	100.5	100.5	100.5	100.5	100.5
7. Blockwork	8.7	100.0	100.0	100.0	101.6	101.6	101.6	101.6	101.6	101.6	101.6
8. Softwood joinery	1.5	100.0	100.0	100.0	99.9	99.9	99.9	100.2	100.2	100.2	100.2
9. Aluminium Doors and Openings	6.0	100.0	100.0	100.0	100.5	100.5	100.5	100.5	100.5	100.5	100.5
10. Metal openings	4.1	100.0	100.0	100.0	101.7	102.9	102.9	103.1	103.1	103.1	103.1
11. Rendering to wall/ceiling (crepis)	10.4	100.0	100.0	100.0	102.6	102.6	102.6	102.6	102.6	102.6	102.6
12. Bed & screed to floor/roof	3.8	100.0	100.0	100.0	103.4	103.4	103.4	103.4	103.4	103.4	103.4
13. Tiling	1.6	100.0	100.0	100.0	100.5	100.5	100.5	100.7	100.7	100.7	100.7
14. Painting	3.2	100.0	100.0	100.0	99.4	99.4	99.4	101.3	101.3	101.3	101.3
15. Plumbing and Drainage	5.0	99.9	100.0	100.0	100.3	100.4	100.4	100.4	100.4	100.4	100.4
16. Electrical installation	6.0	100.0	100.0	100.1	100.3	100.3	100.3	100.4	100.4	100.4	100.4
<b>TOTAL:</b>	<b>100.0</b>	<b>100.2</b>	<b>100.0</b>	<b>99.8</b>	<b>100.6</b>	<b>100.2</b>	<b>100.2</b>	<b>100.3</b>	<b>100.3</b>	<b>100.3</b>	<b>100.3</b>

(Base: 2nd Quarter 2009 = 100)

**Table 2.2: Percentage change from previous month by work category, April 2009 to December 2009**

Work Categories	Weight	% change from previous month								
		April compared to base quarter	May 09	Jun 09	Jul 09	Aug 09	Sep 09	Oct 09	Nov 09	Dec 09
1. Setting up	1.5	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
2. Setting out	0.5	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
3. Earthworks	3.3	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0
4. Concrete	21.3	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0
5. Reinforcement	14.6	1.3	-1.1	-1.8	-3.2	-2.0	0.0	0.0	0.0	0.0
6. Formwork (coffrage)	8.5	0.1	0.0	-0.2	3.1	-2.4	0.0	0.0	0.0	0.0
7. Blockwork	8.7	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0
8. Softwood joinery	1.5	0.0	0.0	0.0	-0.1	0.0	0.0	0.3	0.0	0.0
9. Aluminium Doors and Openings	6.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
10. Metal openings	4.1	0.0	0.0	0.0	1.7	1.2	0.0	0.2	0.0	0.0
11. Rendering to wall/ceiling (crepiss	10.4	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0
12. Bed & screed to floor/roof	3.8	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0
13. Tiling	1.6	0.0	0.0	0.0	0.5	0.0	0.0	0.2	0.0	0.0
14. Painting	3.2	0.0	0.0	0.1	-0.7	0.0	0.0	2.0	0.0	0.0
15. Plumbing and Drainage	5.0	-0.1	0.1	0.0	0.3	0.1	0.0	0.0	0.0	0.0
16. Electrical installation	6.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0
<b>TOTAL:</b>	<b>100.0</b>	<b>0.2</b>	<b>-0.2</b>	<b>-0.3</b>	<b>0.9</b>	<b>-0.4</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>

## Input Cost Index for the construction of a single storey house

(Base: 2nd Quarter 2009 = 100)

**Table 2.3: Net monthly contributions of work categories to the index, April to December 2009**

Work Categories	Weight	2009									
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
1. Setting up	1.5	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
2. Setting out	0.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Earthworks	3.3	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
4. Concrete	21.3	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00
5. Reinforcement	14.6	0.20	-0.16	-0.27	-0.46	-0.28	0.00	0.00	0.00	0.00	0.00
6. Formwork (coffrage)	8.5	0.00	0.00	-0.01	0.26	-0.21	0.00	0.00	0.00	0.00	0.00
7. Blockwork	8.7	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00
8. Softwood joinery	1.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9. Aluminium Doors and Openings	6.0	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
10. Metal openings	4.1	0.00	0.00	0.00	0.07	0.05	0.00	0.01	0.00	0.00	0.00
11. Rendering to wall/ceiling (crepiss)	10.4	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00
12. Bed & screed to floor/roof	3.8	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00
13. Tiling	1.6	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
14. Painting	3.2	0.00	0.00	0.00	-0.02	0.00	0.00	0.06	0.00	0.00	0.00
15. Plumbing and Drainage	5.0	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
16. Electrical installation	6.0	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL:</b>	<b>100.0</b>	<b>0.20</b>	<b>-0.15</b>	<b>-0.27</b>	<b>0.86</b>	<b>-0.43</b>	<b>0.00</b>	<b>0.08</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## Input Cost Index for the construction of a single storey house

(Base: 2nd Quarter 2009= 100)

**Table 2.4: Quarterly average of monthly indices and percentage changes by work category, 2nd Quarter 2009 to 4th quarter 2009**

Work Categories	Weight	2009			% change from previous quarter	
		2nd Qr	3rd Qr	4th Qr	3rd Qr 2009	4th Qr 2009
1. Setting up	1.5	100.0	100.6	100.6	0.6	0.0
2. Setting out	0.5	100.0	100.8	100.8	0.8	0.0
3. Earthworks	3.3	100.0	102.5	102.5	2.5	0.0
4. Concrete	21.3	100.0	101.5	101.5	1.5	0.0
5. Reinforcement	14.6	100.0	94.0	93.4	-6.0	-0.7
6. Formwork (coffrage)	8.5	100.0	101.4	100.5	1.4	-0.8
7. Blockwork	8.7	100.0	101.6	101.6	1.6	0.0
8. Softwood joinery	1.5	100.0	99.9	100.2	-0.1	0.3
9. Aluminium Doors and Openings	6.0	100.0	100.5	100.5	0.5	0.0
10. Metal openings	4.1	100.0	102.5	103.1	2.5	0.6
11. Rendering to wall/ceiling (crepissage)	10.4	100.0	102.6	102.6	2.6	0.0
12. Bed & screed to floor/roof	3.8	100.0	103.4	103.4	3.4	0.0
13. Tiling	1.6	100.0	100.5	100.7	0.5	0.2
14. Painting	3.2	100.0	99.4	101.3	-0.6	2.0
15. Plumbing and Drainage	5.0	100.0	100.4	100.4	0.4	0.0
16. Electrical installation	6.0	100.0	100.3	100.4	0.3	0.0
<b>TOTAL:</b>	<b>100.0</b>	<b>100.0</b>	<b>100.3</b>	<b>100.3</b>	<b>0.3</b>	<b>-0.1</b>

**Table 3.1: Construction Price Index - January 1998 to December 2009**

	<i>(Base: 4th Quarter 1993 = 100)</i>				<i>(Base: 4th Quarter 2001 = 100)</i>									<i>(Base: 2nd Quarter 2009 = 100)</i>
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2009	
January	115.2	118.6	120.4	124.9	100.3	105.8	109.5	118.7	126.7	140.7	159.0	166.0		
February	115.3	119.1	120.4	124.9	100.5	106.8	112.2	122.5	127.3	140.7	159.0	166.0		
March	115.3	119.1	120.5	125.0	100.6	107.0	112.3	122.5	127.3	141.2	157.9	163.5		
<i>1st Quarter</i>	<i>115.3</i>	<i>118.9</i>	<i>120.5</i>	<i>124.9</i>	<i>100.5</i>	<i>106.5</i>	<i>111.3</i>	<i>121.3</i>	<i>127.1</i>	<i>140.9</i>	<i>158.7</i>	<i>165.2</i>		
April	115.3	119.2	120.4	124.9	100.7	107.1	112.3	122.5	127.9	144.1	157.9	162.8	100.2	
May	115.5	119.2	120.4	124.9	101.5	107.1	112.3	122.7	127.9	144.3	157.9	162.6	100.0	
June	115.6	119.3	120.5	124.9	101.5	107.1	115.5	122.7	129.9	147.4	161.2	162.6	99.8	
<i>2nd Quarter</i>	<i>115.5</i>	<i>119.3</i>	<i>120.5</i>	<i>124.9</i>	<i>101.3</i>	<i>107.1</i>	<i>113.4</i>	<i>122.6</i>	<i>128.6</i>	<i>145.2</i>	<i>159.0</i>	<i>162.6</i>	<i>100.0</i>	
July	116.9	120.9	121.5	126.9	105.4	108.1	116.4	124.6	134.4	150.5	165.2	164.1	100.6	
August	117.5	121.0	121.6	127.4	105.4	108.6	116.4	124.6	135.1	151.3	167.5	164.1	100.2	
September	118.1	121.0	121.4	127.4	105.4	109.4	117.0	124.6	135.1	151.6	169.2	164.1	100.2	
<i>3rd Quarter</i>	<i>117.5</i>	<i>120.9</i>	<i>121.5</i>	<i>127.2</i>	<i>105.4</i>	<i>108.7</i>	<i>116.6</i>	<i>124.6</i>	<i>134.9</i>	<i>151.1</i>	<i>167.3</i>	<i>164.1</i>	<i>100.3</i>	
October	118.4	121.2	124.3	127.6	105.2	109.4	117.3	125.3	135.1	152.9	170.0		100.3	
November	j	120.5	124.4	128.4	105.3	109.5	117.8	126.1	136.9	151.1	168.7		100.3	
December	118.6	120.6	124.4	128.5	105.3	109.5	118.4	126.1	137.1	151.4	167.2		100.3	
<i>4th Quarter</i>	<i>118.4</i>	<i>120.8</i>	<i>124.3</i>	<i>128.2</i>	<i>105.3</i>	<i>109.5</i>	<i>117.8</i>	<i>125.8</i>	<i>136.4</i>	<i>151.8</i>	<i>168.6</i>		<i>100.3</i>	
<b>Yearly average</b>	<b>116.7</b>	<b>120.0</b>	<b>121.7</b>	<b>126.3</b>	<b>103.1</b>	<b>107.9</b>	<b>114.8</b>	<b>123.6</b>	<b>131.8</b>	<b>147.2</b>	<b>163.4</b>			
<b>% change in the yearly average</b>	<b>2.9</b>	<b>2.8</b>	<b>1.4</b>	<b>3.8</b>	<b>4.7</b>	<b>4.7</b>	<b>6.3</b>	<b>7.7</b>	<b>6.6</b>	<b>11.8</b>	<b>11.0</b>			

**Table 3.2: Construction Price Index - January 1999 to December 2009 (base period 2nd Qtr2009=100)**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
January	56.9	57.8	59.9	61.7	65.0	67.3	73.0	77.9	86.5	97.8	102.1
February	57.1	57.8	59.9	61.8	65.7	69.0	75.3	78.3	86.5	97.8	102.1
March	57.1	57.8	59.9	61.9	65.8	69.1	75.3	78.3	86.8	97.1	100.6
<i>1st Quarter</i>	<i>57.1</i>	<i>57.8</i>	<i>59.9</i>	<i>61.8</i>	<i>65.5</i>	<i>68.5</i>	<i>74.6</i>	<i>78.2</i>	<i>86.6</i>	<i>97.6</i>	<i>101.6</i>
April	57.2	57.8	59.9	61.9	65.9	69.1	75.3	78.7	88.6	97.1	100.2
May	57.2	57.8	59.9	62.4	65.9	69.1	75.5	78.7	88.7	97.1	100.0
June	57.2	57.8	59.9	62.4	65.9	71.0	75.5	79.9	90.6	99.2	99.8
<i>2nd Quarter</i>	<i>57.2</i>	<i>57.8</i>	<i>59.9</i>	<i>62.3</i>	<i>65.9</i>	<i>69.7</i>	<i>75.4</i>	<i>79.1</i>	<i>89.3</i>	<i>97.8</i>	<i>100.0</i>
July	58.0	58.3	60.9	64.8	66.5	71.6	76.6	82.7	92.5	101.6	100.6
August	58.0	58.3	61.1	64.8	66.8	71.6	76.6	83.1	93.0	103.0	100.2
September	58.0	58.2	61.1	64.8	67.3	72.0	76.6	83.1	93.2	104.1	100.2
<i>3rd Quarter</i>	<i>58.0</i>	<i>58.3</i>	<i>61.0</i>	<i>64.8</i>	<i>66.9</i>	<i>71.7</i>	<i>76.6</i>	<i>82.9</i>	<i>92.9</i>	<i>102.9</i>	<i>100.3</i>
October	58.2	59.6	61.2	64.7	67.3	72.2	77.1	83.1	94.0	104.6	100.3
November	57.8	59.7	61.6	64.8	67.3	72.4	77.6	84.2	92.9	103.7	100.3
December	57.9	59.7	61.6	64.8	67.3	72.8	77.6	84.3	93.1	102.8	100.3
<i>4th Quarter</i>	<i>57.9</i>	<i>59.7</i>	<i>61.5</i>	<i>64.7</i>	<i>67.3</i>	<i>72.5</i>	<i>77.4</i>	<i>83.9</i>	<i>93.3</i>	<i>103.7</i>	<i>100.3</i>
<b>Yearly average</b>	<b>57.6</b>	<b>58.4</b>	<b>60.6</b>	<b>63.4</b>	<b>66.4</b>	<b>70.6</b>	<b>76.0</b>	<b>81.0</b>	<b>90.6</b>	<b>100.5</b>	<b>100.6</b>
<b>% change in the yearly average</b>	<b>2.8</b>	<b>1.4</b>	<b>3.8</b>	<b>4.7</b>	<b>4.7</b>	<b>6.3</b>	<b>7.7</b>	<b>6.6</b>	<b>11.8</b>	<b>11.0</b>	<b>0.1</b>

## Technical Note

### Methodology for the compilation of the Construction Price Index

#### (i) Introduction

A Construction Price Index measures the change in the level of construction prices. The construction industry is very broad and highly diversified with considerable variations from one type of construction to another. This makes it difficult to derive generalized indices that would be applicable to the industry as a whole. Hence, separate indices for the different types of construction need to be compiled. At present, the Central Statistics Office publishes an index that covers residential buildings only.

#### (ii) Types of Construction Price Indices

Different approaches to index number compilation are used depending on the purpose for which the index is required. There are two main types of construction price indices:

##### The Output Price Index

In this approach, specific projects representative of the various categories of construction works are selected as models and construction firms are surveyed and asked to provide estimates of the prevailing market prices for each of the projects. As such, the output price indices respond to the changes in prices of materials used and cost of labour, as well as changes in overhead costs and profits.

##### The Input Price Index

The index is based on prices of a representative selection of basic inputs (labour, plant, materials and transport) that go into the construction work. Hence, the input price index measures the change in the cost of resources to the contractor, and not the change in the price that the client pays.

The office opted for the input price index which, though more limiting than the output price index, is simpler and less expensive to construct and maintain.

#### (iii) Selection of representative dwelling

Since it would have been too time-consuming and costly to include all major types of residential dwellings, it was decided to restrict the index to a model dwelling, representing the most common type of dwelling in 2007. This model dwelling was determined on the basis of the 2000 Housing Census data and developments assumed to have taken place during the period 2000 to 2007. The drawings of the prototype model dwelling were provided by the Mauritius Housing Company Ltd. A description of the model is given at paragraph (viii) below.

**(iv) Weighting scheme**

The quantity survey work to determine the weighting pattern for the index was entrusted to a private Quantity Surveyor following established procedures.

Any given construction consists of an assembly of a certain number of stages or work categories. Sixteen stages or broad work categories were identified and detailed costs of inputs in terms of labour, plant, materials and transport that go into the construction of the selected model were calculated under each of the 16 work categories. The weights have been worked out in such a way that they can be presented in terms of inputs as well as work categories. For publication purposes, weights and sub-indices are shown not only for the 16 work categories, but also for the 4 broad input categories of labour, plant, materials and transport, the “materials” category being further sub-divided into 17 sub-categories.

Changes in the weight structure from 2001 to 2009 are given at the end of this technical note. It is noted that there has been some reclassification within work categories while new ones have been identified. Also within work categories there has been some changes in the product mix as well as the introduction of some new products.

**(v) Data collection**

The data needed for the computation of the index are collected every month from a sample of 50 outlets in 8 regions of the island. Prices are collected in respect of some 109 items, representative of all items that go into the computation of the index.

**(vi) Calculation of the Construction Price Index**

The Construction Price Index is a weighted average of price relatives of individual items, based on the modified Laspeyres formula:

$$I_t = \frac{\sum W_i (P_{it} / P_{io})}{\sum W_i} \times 100$$

where  $I_t$  = index for current period t  
 $P_{io}$  = price of item i at base period 0  
 $P_{it}$  = price of item i at current period t  
 $W_i$  = weight of item i

The base period is the 2<sup>nd</sup> quarter of 2009.

**(vii) Uses**

- a) Construction price indices give an indication of the change in the level of prices of construction works. As such, they are used as deflators for the measurement of real growth in the construction sector.
- b) They are also useful for evaluating cost fluctuations in contracts regarding construction works and for renegotiating owner-tenant agreements.

**(viii) Description of model dwelling**

The model used is a single storey (ground floor) detached house of 138 square metres (1,485 square feet) in floor area measured at plinth level to the external face of the external walls. The overall area is inclusive of 18.55 square metres (200 square feet) in respect of a garage.

It comprises three bedrooms, a living-dining room, a kitchen, two toilets, a utility room, a bathroom, a verandah and an attached garage. The building has concrete block walls, reinforced concrete flat roof, internal flush plywood doors, aluminium openings for windows and entrance door, screeded floor and roof, tiling to floor and walls of w.c. and bathroom and kitchen worktop; the ceilings and walls are rendered and painted both internally and externally. Plumbing, sanitary installation and electrical installation are included as well as drainage which is to be connected to the sewerage system.

Provision has been made, in the form of more substantial foundations and of stub columns on the roof, for converting the single into a two-storey house eventually. Site works are restricted to spreading and leveling surplus excavated material around the site.

The index excludes the cost of the building permit and the draughtman's fee.

It is assumed that although the house is not constructed by a contractor, the client has recourse to the services of a foreman.

**Changes in weights from 2001 to 2009 by input category**

<b>Input Categories</b>	<b>2001</b>	<b>2009</b>
<b>LABOUR</b>	<b>34.5</b>	<b>28.2</b>
<b>HIRE OF PLANT</b>	<b>3.0</b>	<b>3.3</b>
<b>MATERIALS :</b>	<b>57.2</b>	<b>64.2</b>
Hardcore (remplissage)	1.0	1.8
Cement	10.0	12.7
Sand	6.1	4.2
Aggregate	2.9	3.4
Block	4.4	5.2
Steel bars (armature)	5.8	10.6
Galvanised corrugated cast iron sheeting	1.2	0.6
Timber: (a) Carpentry	3.9	3.9
(b) Joinery	4.2	1.6
Metal openings	6.1	2.7
Aluminium openings	-	4.1
Ceramic tiles	1.3	0.9
Glass and putty	0.7	-
Adhesive	-	1.7
Paint	2.0	2.5
Plumbing	1.5	1.5
Sanitary installation	2.3	2.2
Electrical installation	2.6	4.7
Other	1.2	-
<b>TRANSPORT</b>	<b>5.3</b>	<b>4.3</b>
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>

### Changes in weights from 2001 to 2009 by work category

Work Categories	2001	2009
Setting up	2.3	1.5
Setting out	0.5	0.5
Temporary works	0.5	-
Site preparation, excavation & disposal, hardcore filling	5.8	-
Earthworks	-	3.3
Concrete	20.2	21.3
Reinforcement	9.2	14.6
Formwork (coffrage)	7.8	8.5
Blockwork	8.5	8.7
Softwood joinery	4.5	1.5
Ironmongery	0.5	-
Metal openings	6.5	4.1
Aluminium Doors and Openings	-	6.0
Rendering to wall/ceiling (crépissage)	9.9	10.4
Bed & screed to floor/roof	4.2	3.8
Tiling	2.1	1.7
Glazing	1.0	-
Painting	5.2	3.2
Plumbing/sanitary installation	5.0	5.0
Electrical installation	4.2	6.0
Drainage	2.1	-
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>