

**INFORMATION NOTE ON THE REVISION**  
**OF THE MATERIALS COST INDEX FOR THE NEW RESIDENTIAL**  
**BUILDINGS CONSTRUCTION**

**Base year 2010 = 100.0**

*Piraeus, March 2013*

## **Revised Material Costs Index for New Residential Buildings Construction (2010=100.0)**

1. The Material Costs Index for New Residential Buildings Construction (variable 321 of Regulation 1165/98), which is calculated since 1971, is a monthly specific index of the quarterly Overall Costs Index for the Construction (variable 320 of the same Regulation). It is an input index that refers to the prices paid for materials by the constructors of new residential buildings.

2. The weights for base year 2010 have been calculated on the basis of the corresponding weights of previous revision 2005, which had resulted from an ad hoc structural survey of construction enterprises in 2000. Specifically, the 2010 weights were obtained from the relevant 2005 weights, following their extrapolation so as to refer to 2010 prices, in accordance with the changes of individual material costs indices for the period 2005-2010. After that, with the help of experts on buildings construction, the relevant results were assessed with respect to the following criteria:

- the representativeness of the surveyed materials concerning their frequency of use in each group
- the importance of the materials, based on their participation in the groups to which they belong, as expressed by weighting aggregates.

This cooperation has led to the addition of two new materials and to changes in groups and relevant weight updates.

More specifically, the following new materials were agreed: Heat pump package units (146120716), Energy glass (146121005).

The final weights for 2010 are presented in Table 1 of the Annex.

3. The prices of these materials are those which are actually paid by the construction enterprises for materials supplied at the site and do not include VAT or other taxes. Prices are collected on a monthly basis and usually refer to the middle period of the reference month. 280 commercial or industrial enterprises, supplying materials to constructors or construction enterprises, are used as the reporting units. For electricity, prices are collected from the Public Power Corporation, while for water, data are provided by water supplies companies. The first reference period for the new materials of the index is January 2013. The geographical coverage of the index includes the country as a whole, but prices are collected only in the biggest cities of the country (Greater Athens, Thessaloniki, Patra, Herakleion, Larisa and Volos). The index calculates the price changes of 91 categories of materials aggregated in 15 groups, by recording price data of 1,515 varieties of that kind of materials.

4. Year 2010 was used as the base year for comparing prices for the index. The index with the new weights and base year 2010=100.0 is being released since March 2013, with February 2013 as the first reference month. Base prices for every material were calculated by division of the current prices of December 2012 with the corresponding price index of December 2012. For the base prices of the new materials, the indices of the corresponding groups were used.

5. To record the prices and to process and calculate the indices, we used the Integrated Information System (IIS).

6. Indices were calculated using a variation of the Laspeyres formula, as follows:

$$I^{(t)} = \sum_{i=1}^n R_i^{(t)} \cdot w_i$$

Where:

$I^{(t)}$ : is the general index for the current period ( month )  $t$  and

$R_i^{(t)}$ : the individual index of the material  $i$  during the current period (month)  $t$  and

$w_i$ : the corresponding weight of product  $i$ ,

with  $w_i = \frac{x_i}{\sum_{i=1}^n x_i}$

$x_i$ : Value of product  $i$  in 2010 year.

$i = 1, 2, \dots, n$ , Where  $n$  number of products

The individual index  $R_i^{(t)}$  of the material  $i$  is the simple arithmetic mean of the relevant prices of this material's varieties obtained from all reporting units, i.e.:

$$R_i^{(t)} = \frac{1}{N_i} \sum_{j=1}^{N_i} \frac{P_{ij}^{(t)}}{P_{ij}^{(0)}}$$

Where :

$N_i$ : the count of materials varieties  $i$  from all reporting units,

$P_{ij}^{(t)}$ : the price  $j$  of the material's variety  $i$  in the current period  $t$  and

$P_{ij}^{(0)}$ : the average price  $j$  of the variety of the material  $i$  during base year 2010.

7. Backdated calculations for the monthly and annual materials price indices in the period January 2000 – January 2013, were calculated using the individual annual price index of every material in 2010 year, according to the following type:

$$R_{i(2010)}^{(t)} = \frac{R_{i(2005)}^{(t)}}{R_{i(2005)}^{(2010)}} * 100$$

Where:

$R_{i(2010)}^{(t)}$  is the individual index of material  $i$  in the current period (month, year)  $t$  with 2010 as base year,

$R_{i(2005)}^{(t)}$  is the individual index of material  $i$  in the current period (month, year)  $t$  with 2005 as base year and

$\bar{R}_{i(2005)}^{(2010)}$  is the individual annual index of material  $i$  in 2010, with 2005 as base year

For the new materials, for which individual indices didn't exist, those of the corresponding groups to which they belong were used; without recalculating the group indices, as well as the general index, using the weights of the year 2010.

The individual annual indices per material for the years 2005-2012, with base year 2010=100.0, are presented in Table 2 of the Annex.

8. The methodological manual of Short-term Business Statistics, Interpretation and guidelines, 2006, includes a comprehensive set of guidelines for the compilation of short-term statistics, which is available into:

[Methodology of short-term business statistics - Interpretation and Guidelines](#)

## Tables Annex

**Table 1: Weights with 2010 as base year**

Code	Description	weights (2010=100)	Observations
<b>14612</b>	<b>Overall Index</b>	<b>100.00</b>	
<b>1461201</b>	<b>Cement, mortars and ready-mixed concrete</b>	<b>16.81</b>	
146120101	Cement	3.11	
146120102	Lime	0.74	
146120103	Ready-mixed mortars	0.11	
146120105	Ready-mixed concrete	11.52	
146120106	Reinforcements of mortars and ready mixed concrete	1.33	
<b>1461202</b>	<b>Natural stone</b>	<b>1.77</b>	
146120201	Quarry gravel	0.20	
146120202	Quarry sand	1.33	
146120203	Pumice gravel	0.09	
146120204	Sea sand	0.15	
<b>1461203</b>	<b>Marble products, granites</b>	<b>3.96</b>	
146120301	Marble slabs	2.51	
146120303	Ground marble	0.66	
146120304	Granites	0.79	

Code	Description	weights (2010=100)	Observations
<b>1461204</b>	<b>Artificial stone</b>	<b>4.67</b>	
146120401	Bricks	2.78	
146120402	Roof tiles	0.30	
146120403	Lightweight bricks	0.09	
146120404	Breeze blocks	0.09	
146120405	Concrete flags	0.56	
146120406	Roof insulation slabs	0.37	
146120407	Plasterboard	0.48	
<b>1461205</b>	<b>Timber and builders' carpentry</b>	<b>15.39</b>	
146120501	Builders' timber	2.22	
146120502	Parquet flooring	2.18	
146120503	Windows	4.29	
146120506	Internal doors	3.29	
146120507	Wall cupboards	1.95	
146120508	Cupboards	1.46	
<b>1461206</b>	<b>Basic metals</b>	<b>24.78</b>	
146120601	Steel reinforcing rods	12.96	
146120603	Steel railings	0.62	
146120604	Aluminium railings	0.84	
146120605	Security gates and doors	1.38	
146120606	Aluminium door and window frames	7.17	
146120607	Garage doors	1.17	
146120608	Stainless railings	0.64	
<b>1461207</b>	<b>Plumbing and heating equipment and supplies</b>	<b>9.29</b>	
146120702	Copper pipes	2.50	
146120703	Steel pipes	0.11	
146120704	Plastic pipes	0.93	
146120705	Circulating pumps	0.17	
146120706	Oil-fired central heating burners	0.33	
146120707	Boilers	0.50	
146120708	Central heating radiators	2.29	
146120709	Seepage pits	0.03	
146120710	Drain traps	0.03	
146120711	Washbasins	0.33	
146120712	Oil tanks	0.16	
146120713	Brass taps	0.07	
146120714	Brass stopcocks	0.13	
146120715	Solar Heaters	0.14	
146120716	Heat pump package units	1.57	<i>new</i>
<b>1461208</b>	<b>Door and window fittings</b>	<b>2.03</b>	
146120801	Sliding door mechanisms	0.10	
146120802	Garage door mechanisms	1.23	
146120803	Locks in general	0.43	
146120804	Door handles	0.27	
<b>1461209</b>	<b>Electrical equipment</b>	<b>4.74</b>	
146120901	Extractor fans	0.05	
146120902	Plastic tubes	0.85	
146120903	Cupreous Pipes	2.45	
146120904	Switches	0.55	
146120905	Power points	0.22	
146120906	Panels	0.44	
146120907	Entrance video	0.07	

Code	Description	weights (2010=100)	Observations
146120908	System of central aerial of television	0.11	
<b>1461210</b>	<b>Glass sheets</b>	<b>3.25</b>	
146121001	Plain glass	0.68	
146121002	Safety glass	1.48	
146121003	Mirrors	0.18	
146121004	Glass bricks	0.01	
146121005	Energy glass	0.90	<i>new</i>
<b>1461211</b>	<b>Paints and varnishes</b>	<b>2.75</b>	
146121101	Emulsion paints	2.34	
146121102	Enamel paints	0.05	
146121103	Varnishes	0.05	
146121104	Undercoats	0.25	
146121105	Red lead	0.03	
146121106	Resolvents of colours	0.03	
<b>1461212</b>	<b>Floor and wall tiles and sanitary ware</b>	<b>4.7</b>	
146121201	Floor and wall tiles generally	2.43	
146121202	Washbasins	0.38	
146121204	Toilet bowls	0.31	
146121205	Bathroom suites	0.15	
146121206	Sink mixer taps	0.12	
146121207	Washbasin mixer taps	0.12	
146121208	Bath mixer taps	0.14	
146121209	Baths	0.92	
146121211	Showers	0.13	
<b>1461213</b>	<b>Insulating materials</b>	<b>1.33</b>	
146121301	Bituminous emulsion	0.02	
146121302	Cork-based insulating materials	0.06	
146121303	Fibreglass	0.03	
146121304	Expanded polystyrene	0.40	
146121305	Tar-cloth	0.23	
146121306	Pumice concrete	0.50	
146121307	Sandwich insulators	0.06	
146121308	Spreaded driers	0.03	
<b>1461214</b>	<b>Lifts</b>	<b>2.91</b>	
146121401	Lifts	2.91	
<b>1461215</b>	<b>Fuel for mechanical excavators and other building machinery</b>	<b>1.62</b>	
146121501	Diesel fuel	0.77	
146121502	Electric energy	0.61	
146121503	Water	0.24	

**Table 2: Individual annual indices per material for the years 2005-2012,  
2010=100.0**

Code	Description	2005	2006	2007	2008	2009	2010	2011	2012
<b>14612</b>	<b>Overall Index</b>	<b>81,9</b>	<b>86,4</b>	<b>91,9</b>	<b>97,8</b>	<b>97,0</b>	<b>100,0</b>	<b>102,5</b>	<b>103,1</b>
<b>1461201</b>	<b>Cement and ready-mixed concrete</b>	86,7	89,0	93,6	97,2	98,9	100,0	100,1	99,7
146120101	Cement	83,1	86,0	90,3	96,3	98,9	100,0	100,2	100,4
146120102	Lime	89,8	91,6	94,7	98,2	99,7	100,0	100,8	101,5
146120103	Ready-mixed mortars	86,5	90,8	95,4	98,9	100,2	100,0	99,1	99,1
146120105	Ready-mixed concrete	87,3	89,4	94,2	97,3	99,0	100,0	99,9	98,9
146120106	Reinforcements of mortars and ready mixed concrete	87,8	90,1	94,8	97,6	98,4	100,0	101,4	103,4
<b>1461202</b>	<b>Natural stone</b>	85,8	89,0	93,7	96,9	98,7	100,0	100,5	99,4
146120201	Quarry gravel	85,0	88,6	94,2	96,8	97,0	100,0	102,1	101,2
146120202	Quarry sand	86,2	89,3	93,8	97,1	99,1	100,0	100,3	99,1
146120203	Pumice gravel	89,3	90,3	93,2	96,3	98,5	100,0	100,0	97,3
146120204	Sea sand	81,7	86,4	92,3	95,5	97,3	100,0	100,9	100,9
<b>1461203</b>	<b>Marble products</b>	84,0	90,1	94,9	98,0	99,4	100,0	100,2	101,3
146120301	Marble slabs	82,6	89,5	95,0	98,1	99,5	100,0	100,2	101,9
146120303	Ground marble	85,8	88,0	89,8	94,4	98,0	100,0	100,5	99,6
146120304	Granites	87,1	93,6	98,7	100,6	100,4	100,0	99,9	100,9
<b>1461204</b>	<b>Artificial stone</b>	76,4	83,0	98,8	104,8	101,8	100,0	102,2	103,1
146120401	Bricks	72,9	80,9	102,4	108,8	103,1	100,0	103,1	103,9
146120402	Roof tiles	73,1	79,0	90,2	97,1	99,5	100,0	101,8	105,4
146120403	Lightweight bricks	83,2	85,7	91,5	95,8	98,3	100,0	100,5	100,8
146120404	Breeze blocks	79,9	83,6	87,7	94,6	99,5	100,0	101,2	102,4
146120405	Concrete flags	84,8	88,0	91,3	96,6	98,9	100,0	102,8	104,3
146120406	Roof insulation slabs	83,5	88,5	93,1	96,8	97,8	100,0	100,5	102,5
146120407	Plasterboard	86,9	90,6	94,1	99,5	101,6	100,0	96,8	95,4
<b>1461205</b>	<b>Timber and builders' carpentry</b>	84,6	87,9	92,1	97,5	99,4	100,0	100,5	99,3
146120501	Builders' timber	84,8	89,4	96,4	100,2	99,4	100,0	102,8	103,4
146120502	Parquet flooring	84,2	87,3	91,5	98,3	98,7	100,0	100,6	100,1
146120503	Windows	88,1	90,2	92,9	97,0	99,7	100,0	100,1	97,6
146120506	Internal doors	85,5	88,6	91,9	97,2	99,5	100,0	100,0	98,3
146120507	Wall cupboards	80,0	84,1	89,7	96,7	100,0	100,0	99,9	98,8
146120508	Cupboards	79,2	83,4	88,3	95,7	98,9	100,0	100,2	99,3
<b>1461206</b>	<b>Basic metals</b>	76,7	81,8	88,1	99,0	94,0	100,0	104,6	106,1
146120601	Steel reinforcing rods	71,5	77,2	85,0	100,6	90,0	100,0	107,9	110,9
146120603	Steel railings	81,1	85,5	89,6	97,5	101,0	100,0	99,5	99,5
146120604	Aluminium railings	77,8	84,2	89,5	95,1	98,6	100,0	99,9	99,0
146120605	Security gates and doors	89,4	90,6	93,4	96,9	99,1	100,0	100,6	99,2
146120606	Aluminium door and window frames	82,7	87,7	92,5	96,6	98,8	100,0	100,8	100,6
146120607	Garage doors	85,9	89,8	93,0	97,9	100,1	100,0	99,1	99,4
146120608	Stainless railings	78,9	84,1	90,6	98,5	99,8	100,0	99,5	98,0
<b>1461207</b>	<b>Plumbing and heating equipment and supplies</b>	75,1	82,9	88,0	92,9	92,4	100,0	106,5	109,9
146120702	Copper pipes	58,9	76,7	85,0	87,0	80,8	100,0	115,3	122,2
146120703	Steel pipes	86,7	90,4	97,3	106,7	100,4	100,0	102,1	104,5
146120704	Plastic pipes	81,3	84,4	89,3	94,5	92,8	100,0	106,5	114,1
146120705	Circulating pumps	82,7	85,1	88,6	93,1	96,8	100,0	102,8	107,0
146120706	Oil-fired central heating burners	89,7	91,7	94,2	98,0	99,0	100,0	101,1	102,4
146120707	Boilers	84,5	87,3	91,4	95,7	98,6	100,0	101,0	102,2
146120708	Central heating radiators	81,8	84,1	86,2	94,4	99,4	100,0	101,2	101,0
146120709	Seepage pits	85,3	88,3	90,0	94,9	99,1	100,0	101,1	101,3
146120710	Drain traps	86,3	88,5	91,7	96,1	96,8	100,0	101,0	100,6

Code	Description	2005	2006	2007	2008	2009	2010	2011	2012
146120711	Washbasins	82,2	87,0	94,6	98,4	99,0	100,0	102,2	101,8
146120712	Oil tanks	88,5	92,9	97,4	101,9	101,7	100,0	100,1	100,3
146120713	Brass taps	80,3	85,0	94,9	99,0	97,1	100,0	104,0	106,2
146120714	Brass stopcocks	81,1	85,8	89,9	93,5	94,7	100,0	105,5	107,3
146120715	Solar Heaters	82,0	90,5	96,1	100,3	100,4	100,0	99,7	98,4
146120716	Heat pump package units						100,0	106,5	109,9
<b>1461208</b>	<b>Door and window fittings</b>	<b>83,5</b>	<b>87,7</b>	<b>91,5</b>	<b>96,0</b>	<b>99,0</b>	<b>100,0</b>	<b>99,5</b>	<b>99,2</b>
146120801	Sliding door mechanisms	82,8	87,5	93,7	97,7	99,5	100,0	100,7	99,9
146120802	Garage door mechanisms	82,9	87,1	91,3	96,0	99,0	100,0	99,0	98,5
146120803	Locks in general	84,6	88,3	90,6	95,2	99,1	100,0	100,2	100,7
146120804	Door handles	84,6	89,8	93,0	96,7	99,2	100,0	100,0	100,0
<b>1461209</b>	<b>Electrical equipment</b>	<b>78,5</b>	<b>87,6</b>	<b>92,0</b>	<b>95,3</b>	<b>92,7</b>	<b>100,0</b>	<b>107,8</b>	<b>108,3</b>
146120901	Extractor fans	80,1	84,1	88,8	93,8	97,4	100,0	102,3	103,7
146120902	Plastic tubes	77,9	81,8	87,2	92,1	95,6	100,0	105,0	106,7
146120903	Cupreous Pipes	73,7	88,1	93,1	95,7	88,6	100,0	112,2	110,9
146120904	Switches	86,4	88,5	90,9	94,6	96,7	100,0	102,6	108,0
146120905	Power points	87,1	89,5	91,8	95,6	97,2	100,0	102,2	105,6
146120906	Panels	91,0	93,4	96,0	99,1	99,3	100,0	101,5	102,5
146120907	Entrance video	82,3	92,0	96,5	101,4	101,2	100,0	98,8	97,9
146120908	System of central aerial of television	79,7	89,1	93,5	98,0	99,0	100,0	100,3	101,4
<b>1461210</b>	<b>Glass sheets</b>	<b>88,2</b>	<b>90,7</b>	<b>96,8</b>	<b>98,4</b>	<b>98,8</b>	<b>100,0</b>	<b>99,7</b>	<b>100,1</b>
146121001	Plain glass	87,1	90,4	96,6	97,7	98,0	100,0	99,9	100,5
146121002	Safety glass	88,6	90,7	96,8	98,8	99,2	100,0	99,6	99,8
146121003	Mirrors	88,9	91,6	97,1	98,7	99,2	100,0	100,0	100,3
146121004	Glass bricks	85,1	87,5	93,4	95,6	97,4	100,0	100,7	100,7
146121005	Energy glass						100,0	99,7	100,1
<b>1461211</b>	<b>Paints and varnishes</b>	<b>87,9</b>	<b>91,9</b>	<b>95,1</b>	<b>98,1</b>	<b>99,6</b>	<b>100,0</b>	<b>101,0</b>	<b>101,9</b>
146121101	Emulsion paints	87,5	91,6	94,9	98,0	99,5	100,0	101,1	102,1
146121102	Enamel paints	89,7	92,4	95,1	97,8	99,9	100,0	100,5	101,5
146121103	Varnishes	89,6	92,9	95,4	97,8	99,3	100,0	100,4	100,3
146121104	Undercoats	90,4	94,4	97,1	99,3	100,2	100,0	100,5	101,0
146121105	Red lead	89,2	93,2	96,6	99,5	100,4	100,0	100,4	101,8
146121106	Resolvents of colours	89,8	94,0	97,3	100,3	101,5	100,0	99,8	100,8
<b>1461212</b>	<b>Floor and wall tiles and sanitary ware</b>	<b>88,2</b>	<b>90,4</b>	<b>94,1</b>	<b>97,6</b>	<b>98,8</b>	<b>100,0</b>	<b>100,5</b>	<b>101,3</b>
146121201	Floor and wall tiles generally	88,8	90,4	94,1	97,7	99,0	100,0	100,4	101,7
146121202	Washbasins	85,0	88,8	93,3	97,3	98,8	100,0	100,6	101,3
146121204	Toilet bowls	88,8	91,5	94,3	98,7	99,3	100,0	100,7	102,2
146121205	Bathroom suites	88,1	90,2	93,9	97,7	100,0	100,0	100,0	99,3
146121206	Sink mixer taps	88,3	91,2	95,9	97,7	98,9	100,0	100,9	101,1
146121207	Washbasin mixer taps	90,3	92,8	96,9	98,9	99,4	100,0	100,9	101,2
146121208	Bath mixer taps	88,5	91,4	94,6	97,8	99,2	100,0	100,8	100,3
146121209	Baths	87,7	90,2	93,9	97,2	97,8	100,0	100,3	100,5
146121211	Showers	87,6	89,8	93,5	96,8	98,3	100,0	101,2	102,1
<b>1461213</b>	<b>Insulating materials</b>	<b>87,0</b>	<b>91,6</b>	<b>96,4</b>	<b>99,2</b>	<b>100,6</b>	<b>100,0</b>	<b>100,9</b>	<b>101,8</b>
146121301	Bituminous emulsion	86,6	89,2	91,9	95,5	98,8	100,0	106,1	108,5
146121302	Cork-based insulating materials	87,0	90,0	96,4	100,5	100,7	100,0	101,4	103,8
146121303	Fibreglass	88,1	90,5	94,0	95,8	98,6	100,0	101,6	101,9
146121304	Expanded polystyrene	91,5	95,5	100,5	102,5	102,1	100,0	101,1	102,1
146121305	Tar-cloth	84,3	89,3	93,7	98,0	100,4	100,0	101,5	102,7
146121306	Pumice concrete	84,4	90,1	94,9	97,8	100,0	100,0	100,0	100,6
146121307	Sandwich insulators	91,4	92,5	97,3	99,4	100,0	100,0	101,7	102,5
146121308	Spreaded driers	85,9	90,5	95,2	97,2	99,1	100,0	101,2	102,9
<b>1461214</b>	<b>Lifts</b>	<b>90,6</b>	<b>94,9</b>	<b>97,4</b>	<b>99,0</b>	<b>100,4</b>	<b>100,0</b>	<b>99,9</b>	<b>97,9</b>



Code	Description	2005	2006	2007	2008	2009	2010	2011	2012
146121401	Lifts	90,6	94,9	97,4	99,0	100,4	100,0	99,9	97,9
<b>1461215</b>	<b>Fuel for mechanical excavators and other building machinery</b>	74,7	78,9	81,6	94,1	87,0	100,0	110,0	118,1
146121501	Diesel fuel	70,7	76,1	77,8	95,1	76,1	100,0	117,3	121,5
146121502	Electric energy	77,2	80,7	83,9	93,9	96,6	100,0	104,6	120,1
146121503	Water	81,3	83,4	87,9	91,6	97,2	100,0	100,7	102,2