

# Metadata

## The Building Cost Index (BCI)

### 1. Contact

<b>1.1 Contact organisation</b>	Statistics Iceland
<b>1.2 Contact organisation unit</b>	Prices
<b>1.3 Contact name</b>	Expert
<b>1.6 Contact e-mail address</b>	<a href="mailto:bci@statice.is">bci@statice.is</a>
<b>1.7 Contact phone number</b>	+354 5281000

### 2. Metadata update

<b>2.3 Metadata last update</b>	24 January 2022
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### 3. Statistical presentation

<b>3.1 Data description</b>	Price index which measures price levels for construction inputs for residential buildings.
<b>3.2 Classification system</b>	Construction inputs in an apartment building from 2009.
<b>3.3 Sector coverage</b>	Prices of construction inputs in the capital area.
<b>3.4 Statistical concepts and definition</b>	Fixed base, Laspeyres type index.

## Metadata

<b>3.5 Statistical unit</b>	Construction inputs for residential buildings.
<b>3.6 Statistical population</b>	Residential buildings in the capital area.
<b>3.7 Reference area</b>	Capital area.
<b>3.8 Time coverage</b>	<p>From 1 January 2022, base December 2021 = 100.</p> <p>At the beginning of 2022, two main changes were introduced to the methodology of the BCI.</p> <ol style="list-style-type: none"> <li>1) Prices of building inputs are measured excluding value added tax (VAT) and henceforth the compilation will no longer be affected by changes in VAT related reimbursements for on-site construction works.</li> <li>2) Statistics Iceland's survey on labour cost (ISWEL) is the source for labour costs in the BCI.</li> </ol> <p>The base weights continue from the index house of the 2009 base.</p>
<b>3.9 Base period</b>	Month. Base December 2021 = 100. The index house continues from the base in December 2009 = 100.
<b>4. Unit of measure</b>	
<b>4. Unit of measure</b>	Index
<b>5. Reference period</b>	
<b>5. Reference period</b>	December 2021 = 100.

# Metadata

## 6. Institutional mandate

### 6.1 Legal acts and other agreements

[Act on Statistics Iceland and official statistics no. 163/2007.](#)

#### **Repealed acts concerning the building cost index compilation:**

Act on the building cost index no. 42/1987. The law was in effect in the period 30 March 1987 – 31 December 2021.

Act on the building cost index no. 18/1983.

Act on the building cost index no. 93/1975.

Act on the building cost index no. 25/1957.

Act on fire insurances in Reykjavik no.87/1943.

## 7. Confidentiality

### 7.1 Confidentiality - policy

[Statistics Iceland's Rules of Procedure for Treating Confidential Data.](#)

### 7.2 Confidentiality – data treatment

The European Statistics Code of Practice and  
The UN Fundamental Principles of Official Statistics.

See an overview of Statistics Iceland's laws and regulations: <https://statice.is/about-statistics-iceland/laws-and-regulations/>.

## 8. Release policy

### 8.1 Release calendar

Statistics Iceland's Release Calendar.

### 8.2 Release calendar access

Statistics Iceland's website: <https://statice.is/publications/news-archive/advance-release-calendar/>.

### 8.3 User access

Users have equal access to all released BCI statistics through Statistics Iceland's website.

[www.statice.is](http://www.statice.is): **Economy** → **Prices** → **Building Cost Index**.

# Metadata

## 9. Frequency of dissemination

**9. Frequency of dissemination** The BCI is published monthly.

## 10. Accessibility and clarity

**10.1 News release** New released are disseminated when needed.

**10.2 Publication** Statistics are updated monthly on Statistics Iceland's website.

**10.3 On-line database** Link to BCI statistics:  
<https://www.statice.is/statistics/economy/prices/building-cost-index/>.

**10.4 Micro-data access** No.

**10.5 Other** -

**10.6 Documentation on methodology** (2022) This document on metadata.  
 (2004) R. Guðnason. [How do we measure inflation?](#) (Discussion on Laspeyres type indices and fixed base indices).

**10.7 Quality documentation** -

## 11. Quality management

**11.1 Quality assurance** See an overview of Statistics Iceland's laws and regulations: <https://statice.is/about-statistics-iceland/laws-and-regulations/>.

**11.2 Quality assessment** -

12. Relevance	
12.1 User needs	Users are construction companies and contractors. In addition, public bodies, analysts and individuals.
12.2 User satisfaction	-
12.3 Completeness	<p>The BCI measures changes in costs of inputs which are used in the construction of a residential building in the capital area. The base has been, since 2009, an 18-apartment building. As of January 2022, prices are measured excluding value added tax (VAT). The index is measured and calculated monthly and successively published with respect to time of calculation.</p> <p>From January 1990 to December 2021 prices were measured including VAT and the index was affected by changes in reimbursements of VAT costs, which homeowners were entitled to for paying VAT for on-site work. This was stipulated by the now repealed act on the building cost index no. 42/1987 and conformed to the act on value added tax no. 50/1988. The index was published both according to time of calculation and time of application. The time of application was defined by the act on the building cost index for the functional role of the BCI in the old credit terms index (IS. "Lánskjaravísitala") which has been discontinued. All statistical tables state clearly in footnotes which time reference is presented in table.</p>

## 13. Accuracy and reliability

### 13.1 Overall accuracy

**The index house:** The index measures accurately all costs from building the index house. The index house is chosen based on how descriptive it is when it comes to general practises in building methods. The contractors who built the index house put together a detailed breakdown of all inputs. Goods and services are chosen to best fit descriptions given in the breakdown as well as being based on comparability with quality standards. The selection of goods and services is subject to adaption when new products replace older ones in construction practices. The collection of goods and services measured in the index should therefore at any given time aptly represent building inputs being used within the construction industry. Nevertheless, the index is a fixed base index and all major advances in construction can only be incorporated through a rebase of the index.

**Base structure:** The base for the building cost index is an actual apartment house. It is chosen to be representative of current building techniques; however, buildings inevitably vary in one way or another from the index house. Building techniques also evolve over time, presumably leaving the index base less and less representative the older it becomes.

### 13.2 Sampling errors

**Sampling and data sources:** Sellers of construction products and services are handpicked into the sample with the aim of covering the index base as well as possible. Price changes reported by a seller of a particular product may not be representative for all comparable products; however, efforts are made to have at least three independent price quotations for every elementary item to diminish sampling errors.

Labour costs are measured through Statistics Iceland's survey on wages, earnings and labour costs (ISWEL). The survey measures all costs of labour for employees of firms in the construction industry and average cost per hour by trade is calculated using the information.

**Construction inputs:** Inputs for the index house must meet requirements put forth in the index base. Sellers of construction products and services give price quotations for solutions commonly chosen by contractors and industry experts. The sellers replace products when they become obsolete, which works to minimize errors of obsolete inputs. Substitution errors can still be found if appropriate upgrades in the product selection are not being made.

## Metadata

### 13.3 Non-sampling errors

**Measurement:** The risk of measurement errors occurring is greatest when new individuals take over the responsibility of submitting price data. In most cases price measurements are linked to the seller's product numbers, so the probability of wrong prices being reported is not high. With many sellers reporting prices via web forms there is always a risk of typing errors occurring.

**Processing:** As price data is received digitally, the risk of typing errors during processing is diminished. Price data is imported into a data base where further processing occurs. Processing errors can occur when data errors are not detected or when products are being replaced.

No specific measurement of the extent of errors in the building cost index has been carried out.

## 14. Timeliness and punctuality

### 14.1 Timeliness

The BCI is published monthly within and referring to the month of compilation.

### 14.2 Punctuality

The BCI is published according to [Statistics Iceland's release calendar](#), at 9:00 (GMT) in the morning of the release date.

## 15. Coherence and comparability

### 15.1 Comparability – geographical

The BCI measures the cost of building an apartment building in the capital area.

### 15.2 Comparability – over time

The BCI is a fixed base index (Laspeyres type). The means to internalise advances in construction are through a rebasing process. Comparability is strongest in a validity period of a base. It is important to note that changes in methodology, classification and changes in construction materials or techniques eventually reduce comparability with time.

### 15.3 Coherence – cross domain

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## Metadata

### 15.4 Coherence – internal

Comparability is straightforward within a validity period in a time series (single base). As a new base is introduced in compilation, measurements are discontinued in the former base. However, price changes in the new base are used to extrapolate the time series of the former base and earlier bases. This causes indices, on different bases, and yet with same compilation time references, to show same price changes in periods where they exist parallelly in time. Variations can however become visible due to decimals and rounding.

## 16. Cost and burden

### 16. Cost and burden

The response burden for stores and companies is minimised through monthly web-based data collection procedures.

## 17. Data revision

### 17.1 Data revision - policy

Statistics Iceland's data revision policy.

### 17.2 Data revision -practice

The BCI is not revised. If an error is found or added information becomes available, which needs to be considered, then the effect will materialise in the next compilation of the index.

## 18. Statistical processing

### 18.1 Source data

Data is collected from stores, companies and public bodies which provide construction materials or services to construction companies or contractors. Prices are collected for construction inputs according to terms offered to contractors with a reliable payment history and considering quantities equivalent to what is needed in the index's 18 apartment building.

The compilation of labour cost is based on Statistics Iceland's wage survey (ISWEL). Data on wages in a month become available in the following month. Each cycle processes the newest labour cost data for the previous month as well as checks if data for the two months before need to be reprocessed due to delays in data deliveries. The BCI labour cost is not revised due to revaluations of this kind, but the effect emerges in the next compilation.



# Metadata

18.2 Frequency of data collection	Monthly
18.3 Data collection	Webforms
18.4 Data validation	Validation processes are run to look for deviations. The processes seek outliers in prices or price changes. Furthermore, the representativity of construction inputs is also validated.
18.5 Data compilation	<p>Data is processed in databases, where the aggregation of indices is in line with provisions for fixed base Laspeyres type indices. Geomeans are used for elementary aggregates.</p> <p>Breakdown is available by the IST51 Standard on Building Stages for building houses, by trade and by input categories.</p> <p>The building cost index is an input index. Prices cover all inputs, such as labour, material, rent of machinery, transport of construction materials or surpluses, energy use etc. relevant to the construction. Prices are weighed by quantity weights in the index house. Prices are excluding VAT.</p> <div data-bbox="1471 507 2045 941"> <p><b>Contractor</b></p> <pre> graph LR     subgraph Input_categories [Input categories]         Materials         Labour         Machines         Transportation         Energy         Other     end     Materials --&gt; Index     Labour --&gt; Index     Machines --&gt; Index     Transportation --&gt; Index     Energy --&gt; Index     Other --&gt; Index     subgraph Index_Box [The Building Cost Index (input index)]         Index     end         </pre> </div>
18.6 Adjustment	-
19. Comment	
19. Comment	-