

Quality report

Price index in construction in the Republic of Kazakhstan for 2024

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- S.1 Contact details
- S.1.1 Organization

Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan (further - Bureau)

S.1.2 Structural unit

Department of Price Statistics

S.1.3 Name of contact person

Makhsotova Raigul Alpysbaevna

S.1.3.1 Name of the head of the responsible structural unit

Director of the Department: Zhakypbekuly Kuanyshbek

S.1.5 Postal address of the contact person

010000, Republic of Kazakhstan, Astana, Mangilik el ave. 8, House of Ministries, entrance 4

S.1.6 Contact person's email address

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S.1.7 Contact person's telephone number

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S.2 Introduction-Relevance

The price index in construction characterizes the change in prices for material and technical resources used at all stages of the technological cycle of construction production: construction and installation work, machinery and equipment, other work and costs.

The purpose of constructing a price index in construction is to assess changes in the cost of material and technical resources required for construction production.

Price indexin construction they are used to calculate indices of physical volume of construction activity indicators; to calculate gross domestic product and other economic and analytical calculations; by construction and design organizations to adjust the cost of a construction project in connection with changes in the cost of construction resources.

The Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan holds meetings of working groups (focus groups) with the participation of potential users and respondents, representatives of interested government agencies, as well as the Atameken National Chamber of Entrepreneurs, at which indicators of national statistical forms are analyzed in detail for their relevance and elimination of duplication with indicators of departmental statistical forms and administrative data forms.

- S.3 Updating Metadata
- S.3.1 Last confirmation of updated metadata

30.11.2024

S.3.2 Last Placement of Metadata

30.11.2024

S.3.3 Last Metadata Update

S.4 Presentation of statistical information

S.4.1 Data Description

The price index in construction is calculated by regions of the Republic of Kazakhstan; by elements of the technological structure (construction and installation works, machinery and equipment, other works and costs), by types of economic activity by comparison periods (reporting month to the previous month, December of the previous year, to base years, month and period of the reporting year to the corresponding months and periods of the previous year, reporting quarter to the previous quarter, the corresponding quarter of the previous year, to the estimated prices of 1991).

S.4.2 Classification system

When constructing a price index in construction, the following classifications are used:

- 1) The General Classifier of Economic Activities (OKED) is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Statistical Classifications» / «National»;
- 2) The Directory of Industrial Products (Goods, Services) (SKPP) is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Statistical Classifications» / «Directories».
- 3) The Directory of types of materials, parts and structures used in construction production, for price monitoring (hereinafter referred to as the List), (SVMSP) is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Statistical Classifications» / «Directories».
- 4) The Commodity nomenclature of foreign economic activity of the Eurasian Economic Union" (TN VED EAEU) is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Statistical Classifications» / «Interstate».

S.4.3 Sectoral Coverage

The surveyed segment of the economy, according to the current General Classifier of Economic Activities, is represented by section F «Construction».

S.4.4 Statistical concepts and definitions

Observation type - sample survey.

Form index – "1-CSM".

Submission deadline – according to the Schedule for the provision of primary statistical data by respondents on national and departmental statistical observations.

The construction of the price index in construction is carried out in accordance with the «Methodology for constructing price indices in construction», is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Statistics» / «Economy» / «Price statistics» / «Methodology».

Monitoring of the price level for construction materials is carried out in accordance with the «Methodology for monitoring changes in prices for construction materials, parts and structures purchased by construction

organizations», is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Statistics» / «Economy» / «Price statistics» / «Methodology».

The following definitions are used in the above Methodologies:

- a) aggregation combining low-level economic indicators into larger aggregates at all subsequent levels;
- b) aggregate price index a relative indicator that characterizes the change in prices for a separate subgroup, group or the phenomenon being studied as a whole and is formed on the basis of individual (elementary) price indices;
- c) individual (elementary) price index change in the prices of one element of the studied population (a specific product, service);
- d) price index in construction a relative indicator characterizing the change in prices for material and technical resources used at all stages of construction production: construction and installation work, machinery and equipment, other work and costs.

The data collection tool is the statistical form of the national statistical observation «Report on prices of purchased construction materials, parts and structures» (index 1-CSM, monthly frequency).

The statistical form is available on the website of the Bureau www.stat.gov.kz in the section «For respondents» / «Statistical forms for 2024» / «Monthly forms» / «1-CSM».

S.4.5 Statistical object

A statistical object in the construction sector is considered to be a business entity engaged in the creation of fixed assets for production and non-production purposes by constructing new and (or) changing (expanding, modernizing, technically reequipping, reconstructing, restoring, overhauling) existing objects (buildings, structures and their complexes, communications), installing (dismantling) the technological and engineering equipment associated with them.

The list of contractors is formed based on the most significant volumes of work performed. The sample includes construction organizations of all forms of ownership and organizational and legal forms.

S.4.6 General population (principle of selection of survey units)

The general population consists of general construction and specialized organizations that, in accordance with OKED, belong to the type of economic activity «Construction».

When selecting basic objects, the volume of contract work performed by the construction organizations' own forces is taken into account. Based on statistical data from the report on the work (services) performed by construction organizations for the previous year, the indicator "cost of construction and installation work actually performed by the construction organization" is determined for the entire general population of construction organizations.

The list of large and medium-sized contracting organizations is formed based on the most significant volumes of work performed. Small contracting organizations are included in the sample in a limited way in order to take into account the variety of building materials for highly specialized work.

When selecting, the sample population does not include individual entrepreneurs, who are characterized by their frequent turnover and ongoing product range shifts in the acquisition of building materials and specifications of representative goods.

Construction organizations are included in the sample at the place where construction work is actually carried out, regardless of the place of their legal registration. Branches and representative offices of a construction organization located outside the location of the parent organization, carrying out construction activities in a significant volume in a given territory, are taken into account.

The selection of building materials (representative goods) for price registration is carried out according to the List of types of materials, parts and structures used in construction production for price monitoring. The List presents the types of building materials that are most typical for construction production and representative throughout the republic.

S.4.7 Territorial Coverage

The Republic of Kazakhstan regions, cities of republican significance.

S.4.8 Time Coverage

The price index in construction has been formed since 1993

S.4.9 Base period

The base period changes every five years.

In 2011-2015 the base period is December 2010.

in 2016-2020 - December 2015 in 2021-2025 - December 2020, etc.

S.5 Unit of measurement

Percent

S.6 Reporting period

Month

- S.7 Legal basis
- S.7.1 Legal basis
 - 1. Law of the Republic of Kazakhstan dated March 19, 2010 No. 257-IV «On State Statistics»;
- 2. Rules for the submission of primary statistical data by respondents, approved by the order of the Chairman of the Agency of the Republic of Kazakhstan on Statistics dated July 9, 2010 No. 173 (registered in the Ministry of Justice of the Republic of Kazakhstan on September 8, 2010 No. 6459);
 - 3. A statistical work plan approved in accordance with the established legislative procedure of the Republic of Kazakhstan by the Order of the Head of the Bureau;
 - 4. «The Methodology for Monitoring Changes in Prices for Construction Materials, Parts and Structures Purchased by Construction Organizations» was approved by the order of the Acting Chairman of the Statistics Committee of the Ministry of

National Economy dated December 30, 2015 No. 232;

5. «Methodology for constructing price indices in construction», approved by the order of the Chairman of the Statistics Committee of the Ministry of National Economy dated December 14, 2016 No.315.

S.8 Confidentiality and data protection

S.8.1 Privacy Policy

- 1. Article 8 of the Law of the Republic of Kazakhstan dated March 19, 2010 No. 257-IV «On State Statistics», in accordance with which a guarantee of confidentiality and protection of the data provided by respondents is ensured.
- 2. Article 28 of the Entrepreneurial Code of the Republic of Kazakhstan dated October 29, 2015 No. 375-V ensures the protection of information constituting a commercial secret;
- 3. The Information Security Policy (hereinafter referred to as the Policy), approved by the Order of the Head of the Bureau dated February 10, 2021 No. 20, defines the goals, objectives, guidelines and practical techniques in the field of ensuring the information security of the Bureau. The main goal of the Policy is to ensure the availability of official statistical information, the confidentiality of information stored and processed on the Bureau's computing equipment, subject to its integrity and authenticity.

S.8.2 Confidentiality - handling of data

Rules for the presentation of databases in de-identified form for use in scientific and scientific-technical activities, approved by the order of the Chairman of the Agency of the Republic of Kazakhstan on Statistics dated July 2, 2010 No. 168.(registered in the Ministry of Justice of the Republic of Kazakhstan on August 13, 2010 No. 6388).

S.9 Publication Policy

S.9.1 Publication calendar

paragraph 1, paragraph 2 of Article 26 of the Law of the Republic of Kazakhstan «On State Statistics» dated March 19, 2010 No. 257.

The Statistical Work Plan and the Schedule for the Dissemination of Official Statistical Information for 2025 are available on the Unified Portal of Government Agencies www.gov.kz in the section «Government Agencies» / «Others» / «Agency for Strategic Planning and Reforms of the Republic of Kazakhstan» / «Bureau» / «Documents».

S.9.2 Access to the Schedule

The schedule for dissemination of official statistical information for 2025 is available on the Unified Portal of Government Agencies www.gov.kz in the section «Government Agencies» / «Others» / «Agency for Strategic Planning and Reforms of the Republic of Kazakhstan» / «Bureau» / «Documents».

S.9.3 User Access

Official statistical information shall be disseminated in accordance with the schedule for dissemination of official statistical information in the volumes

stipulated by the statistical work plan.

State statistics bodies shall provide users with equal rights to simultaneous access to high-quality official statistical information and statistical methodology by posting them on the Internet resource of the Bureau's www.stat.gov.kz.

Internet resource of the Bureau www.stat.gov.kz in the section «Main» / «Statistics» / «Economy» / «Price statistics»

S.10 Frequency of distribution

Monthly

- S.11 Distribution format, accessibility and clarity
- S.11.1 News Publications

Operational information in the form of a press release is not published.

- S.11.2 Publications
 - 1) Statistical Bulletin «Price Indices and prices in construction in the Republic of Kazakhstan» contains data on price indices in construction, price levels by types of building materials and price indices by groups of building materials in the republic and by regions in the reporting period compared to the previous month, December of the previous year, to the base year, the corresponding month and period of the previous year, in the reporting quarter to the previous quarter, the corresponding quarter of the previous year, to the estimated prices of 1991. The information is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Statistics» / «Economy» / «Price statistics» / «Electronic tables».

S.11.3 On-line databases

IAS "Taldau" https://taldau.stat.gov.kz in the "Price Statistics" section.

S.11.3.1 AC1. Data tables-consultation

Not implemented

S.11.4 Access to microdata

Rules for the presentation of databases in de-identified form for use in scientific and scientific-technical activities, approved by the order of the Chairman of the Agency of the Republic of Kazakhstan on Statistics dated July 2, 2010 No. 168. (registered in the Ministry of Justice of the Republic of Kazakhstan August 13, 2010 No. 6388).

S.11.5 Other

No

S.11.5.1 AC2. Consultation Metadata

Not implemented

- S.12 Availability of documentation
- S.12.1 Methodology documentation
 - 1) «Methodology for monitoring changes in prices for construction materials, parts and structures purchased by construction organizations» approved by the order of the Acting Chairman of the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan dated December 30, 2015 No. 232 (registered with the Ministry of Justice of the Republic of Kazakhstan on January 27, 2016 No. 12940). The information is available on the Bureau's Internet

resource <u>www.stat.gov.kz</u> in the section «Main» / «Methodology» / «Price statistics»

2) «Methodology for constructing price indices in construction», approved by the order of the Chairman of the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan dated December 14, 2016 No. 315 (registered with the Ministry of Justice of the Republic of Kazakhstan on January 19, 2016 No. 14694). The information is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Methodology» / «Price statistics»

S.12.2 Quality documentation

- 1. Standard methodology for describing the process of producing statistical information by government agencies, approved by the Order of the Chairman of the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan dated March 30, 2015 No. 53;
- 2. Quality assessment methodologyofficial statistical information, approved by the Order of the Chairman of the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan dated May 23, 2018 No. 63.

S.13 Quality Management

S.13.1 Quality Assurance

The quality and reliability of price statistics data is maintained by generally accepted procedures:

- compliance with the basic principles of primary accounting;
- -use of standard statistical classifications of goods, products, services;
- at the stages of collecting and processing primary data, all control schemes (format-logical, arithmetic) have been developed and implemented;
- to confirm the reliability of primary data, the possibility of obtaining additional information from respondents is established by law;
- rotation of sample sets of lists of goods, products, services and basic objects selected for price observation;
- annual revision of weighing systems;
- the use of uniform formulas for calculating price indices at all levels of aggregation.

S.13.2 Quality assessment

The «Methodology for monitoring changes in prices of construction materials, components and structures purchased by construction organizations» and the «Methodology for constructing price indices in construction» were developed taking into account the principles and recommendations of the «Manual on the Producer Price Index: Theory and Practice» prepared by the International Labor Organization, the International Monetary Fund, the Organization for Economic Cooperation and Development, the Statistical Office of the European Communities, the United Nations Economic Commission for Europe and the World Bank.

S.14 Relevance

S.14.1 User Needs

The price index in construction meets the needs of a wide range of users, internal (industry statistical departments), external (government agencies, economists, employees of management bodies and financial and economic services of enterprises, organizations, scientific, entrepreneurial and banking employees, faculty, students, mass media).

S.14.2 User Satisfaction

The user questionnaire is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Surveys» / «User questionnaire». In addition, in order to maintain constant feedback with users and respondents, the Unified Contact Center of Bureau 1446 operates.

S.14.3 Completeness/R1. Data completeness-proportion

Not applicable

S.15 Accuracy and reliability (to be filled in taking into account the type of observation)

S.15.1 Overall Accuracy

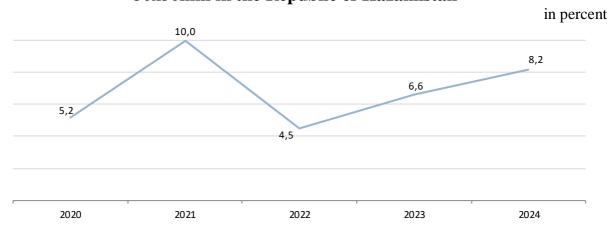
The analysis of the accuracy and reliability of data on average prices for building materials purchased by construction organizations for construction production over the past five years was carried out using the variation coefficient. The variation coefficient is a measure of the relative dispersion of a random variable. It shows what proportion the average dispersion of a random variable is from the average value of this variable. The greater the value of the standard deviation, the relatively greater the dispersion and the less uniformity of the values under study.

The coefficient of variation is calculated using the formula: $C_V = \frac{\text{SD}}{\overline{X}} * 100\%$ where SD is the standard deviation;

$$\overline{X}$$
 – average value.

The standard deviation is calculated using the formula: $.SD = \frac{\sqrt{\sum_{i=1}^{n}(X_i - \overline{X})^2}}{n-1}$

Coefficient of variation of average prices for small-sized metal corners, 50x50mm in the Republic of Kazakhstan



As the analysis of average prices for small metal corners showed, in 2020-2024 the studied data were quite homogeneous. The greatest price variation observed in 2021 is largely due to the consequences of the COVID-19 pandemic and the quarantine restrictions introduced in 2020.

S.15.2 Sampling Errors-Indicators/A1.

Cannot be estimated due to purposive sampling.

S.15.3 Non-sampling error

Not identified.

S.15.3.1 Coverage Error

Cannot be estimated due to purposive sampling.

S.15.3.1.1 A2. Excess Coverage-Share

Cannot be estimated due to purposive sampling.

S.15.3.1.2 A3. General units-ratio

Cannot be estimated due to purposive sampling.

S.15.3.3 Non-response errors

S.15.3.3.1 A4. Unit of absence-share

Methods for replacing missing prices for construction materials are applied in accordance with the Methodology for monitoring changes in prices for construction materials, parts and structures purchased by construction organizations. The share of missing responses is not calculated.

S.15.3.3.2 A5. Non-response item-proportion

No calculation is carried out.

S.16 Timeliness and Punctuality

S.16.1 Timeliness

S.16.1.1 TP1. Waiting period - first results

The time taken to process the first results, from the time respondents provided their data until the first publication of the construction price index, was 15 days.

The first results are published on the 5th day of the month following the reporting period and are final.

The release dates are approved and published in the Statistical Work Plan and the Schedule for the Dissemination of Official Statistical Information.

S.16.1.2 TP2. Waiting period - latest results

The first results are final.

S.16.2 Punctuality

S.16.2.1 Punctuality/TP3

The data are published and disseminated in accordance with the Schedule of dissemination of official statistical information, approved annually by the order of the Head of the Bureau. The publication deadlines are set in the Statistical Work Plan, approved annually by the order of the Head of the Bureau and registered with the Ministry of Justice of the Republic of Kazakhstan.

Actual and planned dates coincide, there were no failures to meet publication deadlines for 2021. The release of publications is postponed to the next working day if the publication falls on a weekend or holiday.

S.17 Comparability

S.17.1 Geographical comparability

Within the territory of the Republic of Kazakhstan.

S.17.1.1 Asymmetry in mirror statistics of flows-coefficient/CC1

No

S.17.2 Length of Comparable Time Series/CC2

The dynamic series of price indices of industrial enterprises is comparable and continuous since 1992. Published on the Internet resource of the Bureau www.stat.gov.kz in the section «Main» / «Statistics» / «Economy» / «Price statistics» / «Dynamic series».

S.18 Consistency

S.18.1 External consistency, cross-consistency

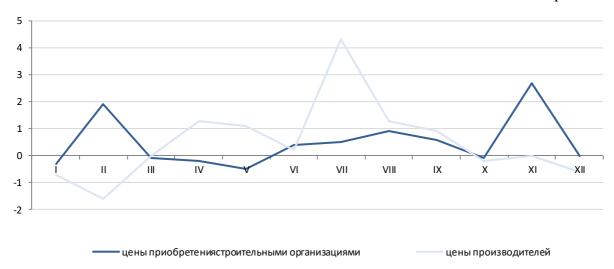
The main approaches to the methodology for constructing a price index in construction have been agreed upon and developed taking into account the principles and recommendations of the «Manual on the Producer Price Index: Theory and Practice» prepared by the International Labour Organization, the International Monetary Fund, the Organization for Economic Cooperation and Development, the Statistical Office of the European Communities, the United Nations Economic Commission for Europe and the World Bank.

S.18.2 Internal consistency

Changes in prices for purchased building materials, parts and structures are consistent with changes in prices from manufacturers. Manufacturers' prices begin to be reflected in purchase prices with a time lag.

Change in cement prices

to the previous month



S.19 Load

Price collection is carried out electronically and on paper at the respondent's request.

Data collection is carried out electronically or on paper. The statistical form is filled out electronically through the «Respondent's Office» on the Bureau's Internet resource (https://cabinet.stat.gov.kz/), in which automated arithmetic and logical controls are provided for the respondent, eliminating the possibility of typical input errors.

Information processing processes are automated using local software packages; controls of input and output information and procedures for imputing missing data are provided.

There is no duplication with other examinations.

Administrative data or other sources are not used.

When forming individual elements of the index, the indices of industrial producer prices, imports, consumer prices, wholesale sales, freight transportation, and the wage index are used.

- S.20 Revision of data
- S.20.2 Data revision/A6

There was no republication in 2024.

- S.21 Processing of statistical data
- S.21.1 Initial data

The construction of the price index in construction is based on the elements of the technological structure of investments in construction. The technological structure is understood as the composition of costs for the construction of an object and their share in the total estimated cost. The estimated cost of construction, in accordance with the structure of investments and the procedure for planning the activities of construction and installation organizations, is divided into the following types of work and costs:

- 1) construction and installation works;
- 2) costs of purchasing machinery and equipment;
- 3) other work and expenses.

The specific weights of the elements of the technological structure of investments in construction are determined based on data from the national statistical monitoring of investment activity for the year close to the reporting year.

S.21.2 Frequency of examination

Month

S.21.3 Method (technique) for collecting primary statistical data

Data collection is carried out by respondents filling in and submitting a statistical form on paper or in electronic form. Completion of the statistical form in electronic form is carried out through the «Respondent's Office» on the Bureau's Internet resource (https://cabinet.stat.gov.kz/).

S.21.4 Reliability of primary statistical data

In accordance with Article 17 of the Law of the Republic of Kazakhstan "On State Statistics", the respondent is obliged to submit reliable primary statistical data when conducting statistical observations in accordance with the schedule for the submission of primary statistical data by respondents and with the statistical methodology.

When entering primary statistical data, format-logical controls are included for minimum and maximum price indices; comparison with the price level of the previous month, etc.

If prices change in the reporting month for crushed stone, road petroleum bitumen, Portland cement, sheet steel, hot-rolled reinforcing steel (wire rod) of class A-III, the respondent, in order to confirm the reliability of the primary statistical data, submits additional information to the statistical authorities simultaneously with the statistical form: consignment notes, invoices, certificates of conformity and test reports.

For other types of building materials, in the event of price changes and significant differences in prices, at the request of statistical authorities, supporting documents shall be submitted within one working day in accordance with subparagraph 17) of Article 12 of the Law of the Republic of Kazakhstan «On State Statistics».

S.21.5 Imputation - share /A7

Imputation is carried out in accordance with the Methodology for monitoring changes in prices for building materials, parts and structures purchased by construction organizations.

To ensure the continuity of the dynamic series of price indices, in the event of a temporary absence of price information due to the irregularity of construction activities and the cyclical nature of the technological process during the year, the following methods are used to replace missing prices for construction materials:

- 1) a new type of material is selected to replace the temporarily unavailable assortmentwith the same technological parameters, it is directly compared with the missing representative product, provided that the difference in price levels between them is insignificant;
- 2) Instead of the missing price, the price of the last registration is used for significant volumes of purchases of building materials for the purpose of their long-term use (the period for substituting the unchanged price is determined by agreement with the specialist of the base object).

S.21.6 Adjustment

Not applicable.

S.21.6.1 Seasonal Adjustment

Not applicable.

S.22 Notes

Continue work to ensure the quality of statistical data.