CLAIMS

1. A method for cost early warning of a prefabricated building, comprising:

acquiring price information of materials of components in different purchase periods, and performing statistics on the price information to acquire a price change trend corresponding to the material of each component;

acquiring a current price of the material of the component, a bid price of the material, a cost profit and loss of the material that has been purchased for a construction project, a quantity of the material remained and a pre-made component production plan, and generating a procurement plan of the material according to the price change trend, the current price of the material, and the bid price of the material, the cost profit and loss of the material that has been purchased for the construction project, the quantity of the material remained and the pre-made component production plan;

calculating a real-time cost profit and loss of the construction project according to the procurement plan, the bid price, and the cost profit and loss of the material that has been purchased.

2. The method for cost early warning according to claim 1, wherein the acquiring the price information of the materials of the components in different purchase periods comprises:

acquiring historical purchase time of the materials of the components pre-stored on a prefabricated building construction platform and historical price information corresponding to the historical purchase time.

3. The method for cost early warning according to claim 2, wherein before acquiring the historical purchase time of the materials of the components pre-stored on the prefabricated building construction platform and the historical price information corresponding to the historical purchase time, comprising:

pre-storing the historical purchase time of the materials of the components in each construction project contained in the prefabricated building construction platform and the historical price information corresponding to the historical purchase time in a database associated with the components;

correspondingly, the acquiring the historical purchase time of the materials of the components pre-stored on the prefabricated building construction platform and the historical price information corresponding to the historical purchase time comprises:

acquiring the historical purchase time of the materials of the components pre-stored on the prefabricated building construction platform and the historical price information corresponding to the historical purchase time from the database.

4. The method for cost early warning according to claim 1, wherein the generating the procurement plan of the material according to the price change trend, the current price of the material, and the bid price of the material, the cost profit and loss of the material that has been purchased for the construction project, the quantity of the material remained and the pre-made component production plan comprises;

acquiring an expected price of the material according to the price change trend;

determining whether the current price of the material is greater than the expected price, and determining whether the current price of the material is greater than the bid price;

when the current price of the material is greater than the expected price, and the current price of the material is greater than the bid price, generating a first procurement plan according to the quantity of the material remained and the pre-made component production plan, and the first procurement plan is used to meet minimum material requirements of the current construction period;

when the current price of the material is greater than the expected price, and the current price of the material is less than the bid price, generating a second procurement plan according to the cost profit and loss of the material that has been purchased, the quantity of the material remained, and the pre-made component production plan, and the second procurement plan is used to make up for shortfall when the cost of the purchased materials is in deficit, and to meet the minimum material requirements of the current construction period;

when the current price of the material is less than the expected price, and the current price of the material is greater than the bid price, generating a third procurement plan according to the quantity of the material remained and the pre-made component production plan, and the third procurement plan is used to stock a first quantity of the material;

when the current price of the material is less than the expected price, and the current price of the material is less than the bid price, generating a fourth procurement plan according to the quantity of the material remained and the pre-made component production plan, and the fourth procurement plan is used to stock a second quantity of the material, wherein the second quantity is greater than the first quantity.

5. The method for cost early warning according to claim 4, wherein the acquiring the expected price of the material according to the price change trend comprises:

acquiring a price range of the material within a preset time period in the future according to the price change trend, and take an average price of the price range as the expected price of the material.

6. The method for cost early warning according to claim 4 or 5, wherein the generating the material procurement plan according to the price change trend, the current price of the material, the bid price, the cost profit and loss of the material that has been purchased for the construction project, and the quantity of the material remained and the pre-made component production plan comprises:

generating a procurement plan for one or more batches of materials according to the price change trend, the current price of the material, the bid price, the cost profit and loss of the material that has been purchased for the construction project, the quantity of the material remained and the pre-made component production plan, and the procurement plan for each batch of materials comprises a purchase time and a purchase quantity of the material.

7. The method for cost early warning of claim 1, wherein the calculating the real-time cost profit and loss of the construction project according to the procurement plan, the bid price, and the cost profit and loss of the material that has been purchased comprises:

generating an estimated profit and loss of a current purchase according to the procurement plan and the bid price;

summing the estimated profit and loss and the cost profit and loss of the material that has been purchased to acquire the real-time cost profit and loss of the construction project.

8. A device for cost early warning of a prefabricated building, comprising:

an acquisition unit configured to acquire price information of the materials of the components at different purchase periods, and to perform statistics on the price information to acquire a price change trend corresponding to the material of each component;

a generation unit configured to acquire a current price of the material, a bid price of the material, a cost profit and loss of the material that has been purchased for a construction project, a quantity of the material remained and a pre-made component production plan, and to generate a procurement plan of the material according to the price change trend, the current price of the material, the bid price of the material, the cost profit and loss of the material that has been purchased for the construction project, the quantity of the material remained and the pre-made component production plan;

a calculation unit configured to calculate a real-time cost profit and loss of the construction project according to the procurement plan, the bid price and the cost profit and loss of the material that has been purchased.

9. A terminal device, comprising a memory, a processor, and a computer program stored in the memory and running on the processor, wherein the computer program implements the steps of the method according to any one of claims 1 to 7 when the computer program is executed by a processor.

10. A computer-readable storage medium storing a computer program, wherein the computer program implements the steps of the method according to any one of claims 1 to 7 when the computer program is executed by a processor.