

ТЕМА 2.4.1 ЭТАПЫ И ПЛАНИРОВАНИЕ СТРОИТЕЛЬНОГО ПРОЦЕССА THE BUILDING CONSTRUCTION PROCESS

1. Use the QR-code and learn the words and word combinations.

Assemble, blueprint, building site, convertible, demolish, excavate, frame, insulate, prefabricated units, partition, rotate, supervise.



2. Read the international words, guess their meanings and check the pronunciation.

Architect, boiler, bulldozer, certificate, client, component, consult, electrical, expert, homogeneously, horizontal, information, local, machine, manoeuvrable, mobility, operation, panel, position, process, transport.

3. Give Russian equivalents to the derivatives. Pay attention to the prefixes and suffixes.

To build – to rebuild – building – builder; to excavate – excavation – excavator; to found – foundation – founder; to operate – operation – operator; to place – to replace – to displace – placement; structure – structural – structurally; to support – supportable – supportive – supporter; to supervise – supervision – supervisor; efficient – efficiently – efficiency.

4. Match the words to their synonyms and give Russian equivalents to them.

1. transfer	a) surround
2. foundation	b) mobile
3. ground	c) destroy
4. supervise	d) productive
5. construct	e) soil
6. frame	f) base
7. efficient	g) assemble
8. demolish	h) manage
9. enclose	i) transmit
10. portable	j) structure

5. The words can be used both as verbs and nouns. Make up sentences with them to show the difference in their usage.

Check, design, part, cover, place, manufacture, hoist, paint, support, lift, structure.

6. Complete the sentences with the correct forms of the words in brackets. Give Russian equivalents to the sentences.

1. The expert will check local zoning laws and ..., building and plumbing codes (electricity).
2. The architect makes specifications and blueprints that become the basis for the contract between the ... and the client (build).
3. The building process takes place under the ... of foremen and engineers (supervise).
4. ... operations on the site begin with clearing and grading the site area (build).
5. The cleared and excavated site is ready for ... (construct).
6. The contractor and the architect must certify that the building is fully ... (function).
7. An excavator is important heavy ... widely used in the construction industry (equip).
8. The ... sits in the cab and from there he can have visibility of the site (operate).
9. Some types of cranes require special ... to the building site (transport).
10. A typical concrete mixer uses a ... drum to mix the components (revolve).

7. A. Work in pairs. Discuss the questions.

1. What are the main stages of building construction process?
2. What does this process start from?

B. Read the text Stages of Building Construction and check if your answers are correct.

The building construction process is a series of routine tasks completed by skilled persons. It involves a lot of time and tedious work and must be managed carefully. This process can be split into three stages: pre-construction, construction, and post-construction.

Pre-construction stage If a person decides to build a house, he or she must first select a lot or piece of land. The next step is to consult an architect. This expert will check local zoning laws and electrical, building and plumbing codes. The architect then designs the house according to the client's ideas. He or she makes specifications and blueprints that become the basis for the contract between the builder and the client. They provide information on size, materials, and how the house is to be built. The architect also supervises the construction of the house.

Building construction stage A construction site is an area or piece of land where construction work is taking place. Sometimes construction sites are referred to as 'building sites'. This usually implies that buildings or houses are being constructed, whereas 'construction site' covers a wider scope of work. The building construction process takes place under the supervision of foremen and engineers, and the structure is put up by bricklayers, carpenters, plasterers, plumbers, painters, locksmiths, glass-cutters, etc.

Building operations on the site begin with clearing and grading the site area. This work is done by bulldozers and scrapers. The cleared and excavated site is now ready for construction, and the foundation can be poured. It transfers the building's loads to the ground.

The frame is the skeleton around which the rest of the house is built. Workers put beams into the foundation that support the outside walls. Slabs are the horizontal parts of the frame that separate the floors. When the frame is finished the walls are raised.

Walls are constructed to enclose areas and to support the weight of floors and roofs. Exterior walls are usually made of brick, stone, concrete blocks or panels. In the case of a brick structure, raising the walls follows directly the foundation work. Making brick walls, bricklayers lay down courses of brick and bond them together with mortar. Openings for windows and doors are made in the walls. After that, window-frames and door-frames are placed in position. Partitions are made to divide the house space into rooms. Floors divide the building into storeys. The whole structure is crowned by the roof.

Today most of the blocks of flats are assembled on the site from prefabricated units. All the units for houses are manufactured at house building plants and delivered to the construction sites by powerful lorries or trailers. Efficient cranes pick up the prefab units from the lorries and hoist them into position. Erection is simple. A team of assembly workers of 7-9 men complete erection in a short time.

When the outside of the house is finished, builders start working on the interior. Windows, doors have to be built into the frame. Wires must be laid for electricity and power. Plumbers install the pipes through which water flows. A new house has to be insulated in order to reduce heating costs and to save money. Finally, the walls are painted and the rooms are decorated.

Post-construction stage The post-construction stage is the final process before the building is handed over to the client or owner. Once the construction is complete, the team must walk through the building to confirm that all the project specifications have been met. The contractor and the architect must certify that the building is fully functional.

8. Use the QR-code and put the stages of building a house in the correct order.



9. A. Find English equivalents to the word combinations in the text Stages of Building Construction.

Строительный кодекс; местные законы о зонировании; участок земли; строительные работы; выравнивание строительной площадки; наружные стены; дверная коробка; сборное изделие; снизить расходы на отопление; соответствовать требованиям местных властей; акт о завершении строительства.

B. Choose three word combinations from ex. 9. A and make up sentences with them.

10. Work in pairs. Discuss the questions.

1. What are the main stages of building construction?
2. What is necessary to do first if you decide to build a house?
3. What is a building site?
4. What do building operations on the site begin with?
5. What is the frame?
6. What materials are exterior walls made of?
7. What specialists lay down courses of brick?
8. What is the function of partitions and floors?
9. What is the crowning part of a house?
10. Where are prefabricated units for houses manufactured? How are they delivered to the site?
11. What does the post-construction stage include?
12. Who issues a certificate of occupancy?

11. Make up a short summary of the text Stages of Building Construction using the word combinations. Retell it using your notes.

To select a piece of land; to consult an architect or builder; to make a blueprint; building operations; to grade the site area; to transfer the building's loads; exterior walls; prefabricated units; to work on the interior; the post-construction stage; to meet the local authorities' requirements; a certificate of occupancy.