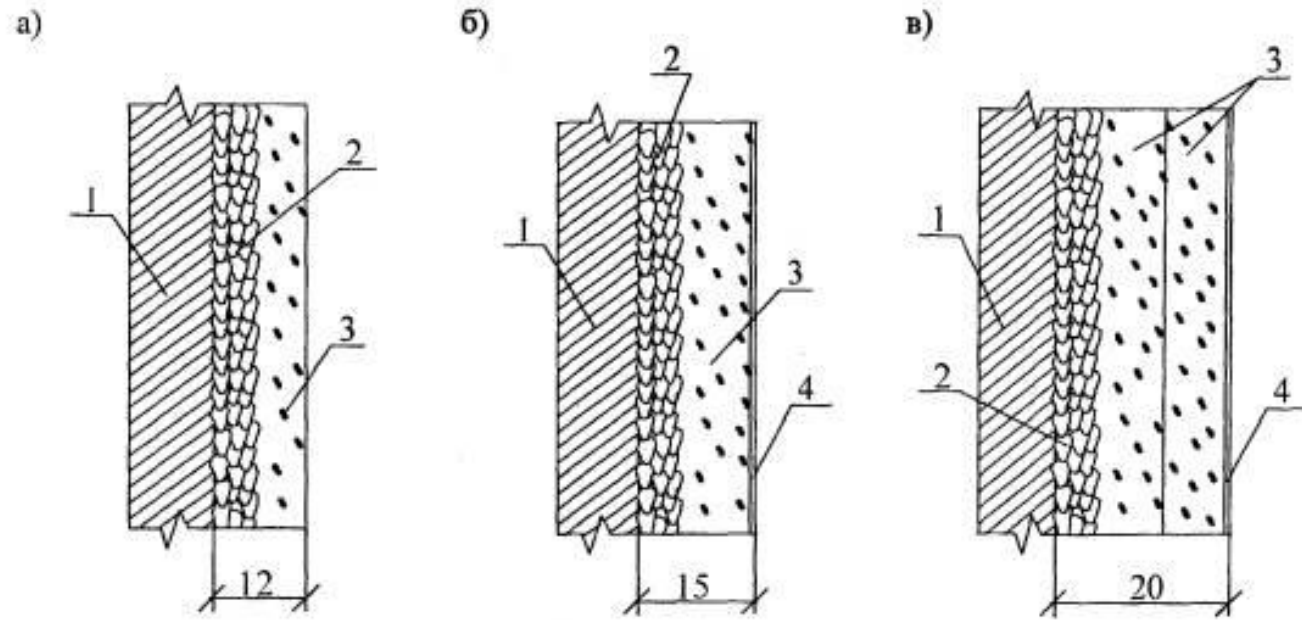


Technological processes of  
plastering various surfaces and  
structures with simple,  
improved and high-quality  
plasters

# GENERAL DATA

- 1.1 The technological map has been developed for the installation of simple, improved and high-quality plaster coatings of internal brick surfaces of walls and partitions up to 3.5 meters high (hereinafter referred to as plastering works) using lime-cement mortars in a mechanized way.
- 1.2 Plaster is a finishing layer on the surfaces of various structures of buildings and structures (walls, partitions, ceilings, columns), which aligns these surfaces, gives them a certain shape, protects structures from moisture, weathering, fire, increases heat transfer resistance, reduces air permeability and sound conductivity of enclosing structures.
- 1.3 According to their purpose and properties, monolithic plasters are divided into ordinary ones - intended for use in normal temperature and humidity conditions, special ones - performing protective functions in relation to the base, and decorative ones - for finishing facades and some rooms of public buildings (lobbies, halls, stairwells).
- 1.4 Conventional plasters, depending on the thoroughness of execution, are divided into three categories: simple, improved and high-quality, which are shown in Figure 1.



а - простая; б - улучшенная; в - высококачественная; 1 - основание; 2 - обрызг; 3 - грунт; 4 - накрывка

**Рисунок 1 - Виды штукатурки**

# ORGANIZATION AND TECHNOLOGY OF WORK

- 2.1 Plastering is applied to the surfaces of brick, concrete, gypsum concrete and other walls and partitions in order to give the surface of the structure, regardless of the category and class of buildings and structures, protective and decorative properties, increase heat transfer resistance, reduce air permeability and sound conductivity of enclosing structures. The readiness of the object for transfer for finishing is determined by a commission, which includes representatives of the production and technical department, a quality engineer, senior foremen and foremen-executors of general contracting and specialized construction organizations, with the registration of the transfer-acceptance certificate of the object.
- 2.2 This technological map provides for the mechanized installation of simple, improved and high-quality plaster coatings of internal brick walls and partitions.

- Before the start of plastering work, it is necessary:
- - finish the installation and general construction works, including the installation of the roof;
- - perform entrances to the building and arrange canopies over the entrances;
- - finish laying all communications and seal communication channels;
- - to seal up joints and gaps of interfaces of walls, partitions, ceilings, as well as places of interfaces of window, balcony and door blocks with elements of external and internal enclosing structures;
- - install window sills;
- - to test the internal plumbing, heating and sewerage systems;- insulate the room and ensure that the temperature in it is not lower than +10 °C and humidity of the air no more than 60%, as well as drying of damp places;

- - check the strength and stability of the scaffolding;
- - thoroughly clean the surfaces of walls and partitions from dust, dirt, grease and bitumen stains, and the room
- - from the remnants of building materials and debris;
- - illuminate workplaces;
- - provide installations for communication of plasterers with the machinist with light or sound alarms;
- - deliver tools, inventory, fixtures and materials to the workplace;- check the mechanisms at idle, carefully inspect the hoses, eliminate kinks and kinks;
- - rinse the hoses with lime milk;
- - correct all detected defects and deviations from the tolerances established by SNiP 3.03.01-87 "Load-bearing and enclosing structures" during the construction of internal walls.

- The sequence of technological operations in the production of plastering works, depending on the types of plaster, is taken according to Table 1.

Технологические операции	Оштукатуривание		
	простое	улучшенное	высококачественное
Подготовка поверхностей под оштукатуривание	+	+	+
Провешивание поверхностей	+	+	+
Установка маяков	-	-	+
Нанесение обрызга	+	+	+
Нанесение грунта	+	+	+
Разравнивание нанесенного грунта	+	+	+
Нанесение грунта (второй слой)	-	-	+
Разравнивание нанесенного грунта (второго слоя)	-	-	+
Разделка углов	+	+	+
Разделка потолочных рустов	+	+	+
Нанесение накрывочного слоя	-	+	+
Затирка	+	+	+
Отделка откосов и заглушин	+	+	+



- Surface preparation for plastering consists in cleaning the surface from the plasters that have lost their adhesion and binding properties, brick destruction products, old peeling paint layers, dust and dirt. Methods and means of cleaning depend on the chemical composition of the material being cleaned, the nature of contamination and layering. The requirements for the quality of cleaning are determined by the type of finish being designed. Dedusting of surfaces should be carried out before applying each layer of priming or plaster compositions. If necessary, surface notches should be made. The adhesion of the plaster coating to the base depends on the quality of surface preparation for plastering. For interior decoration of ceilings, walls and partitions, this indicator according to Table 8 of SNiP 3.04.01-87 should be at least 0.1 MPa. Grease, bitumen and oil stains (traces of grease), efflorescence, protruding fittings, rust are not allowed on the surfaces to be plastered. The surfaces of the walls are cleaned from the influx of mortar, cutting them down with scrapers and plaster hammers, after which the surface is cleaned of dust with a rag. When plastering brick walls and partitions laid out with mortar-filled seams, pre-scratch the seams to a depth of 10 - 15 mm or evenly cover the surface, and then remove the dust. The cleaning method is prescribed taking into account the nature of contamination, the comparative chemical resistance of the surfaces to be cleaned, the properties and capabilities of the detergents and flushes used (for example, some components of detergents and flushes can cause corrosion of old materials).

- Plastering of the surface is carried out by applying plaster compositions in the following sequence:

- - with a simple plaster:
  - a) spraying from conventional solutions;
  - b) applying a layer of soil from ordinary solutions, followed by leveling and grout.
- - with improved plaster:
  - a) spraying from conventional solutions;
  - b) applying a layer of soil from ordinary solutions with its subsequent leveling and reconciliation;
  - c) cutting corners, husks, usenkov;
  - d) cutting of ceiling roosts;
  - e) application of a covering layer followed by grout.
- - with high-quality plaster:
  - a) spraying from conventional solutions;
  - b) applying a layer of soil from ordinary solutions (in two layers) with its subsequent leveling and reconciliation;
  - c) cutting corners, husks, usenkov;
  - d) cutting of ceiling roosts;
  - e) application of a covering layer followed by grout.