

1. In a 28-meter-tall residential building, the client is requesting the removal of one of the two elevators for cost savings. There are six apartments per floor. Is it possible to retain one elevator?
2. What should be the depth of an elevator car with a lifting capacity of 630 kg, if the car width is 1100 mm, to ensure the transportation of a patient on a stretcher?
3. Is it possible to design a living room without natural light if enhanced artificial lighting and supply ventilation are provided?
4. The client wants to glaze the balconies on all floors of a 17-story residential building. Will this affect the smoke-proofing calculations for the stairwells?
5. Is it permissible to design a kitchenette without natural light in a one-room apartment, and what are the ventilation requirements for this?
6. The multi-apartment residential building has a walkable roof. The client is proposing a 0.6 m high fence (as for a technical roof), arguing that the exit is only from the technical room. Is this solution acceptable?
7. What is the minimum vestibule width at the main entrance to a shopping center to ensure access for people with disabilities?
8. The client is requesting that the entrance to a residential building be located at -0.450 from ground level, without a ramp, only with a lifting platform. Is this sufficient to ensure access for people with disabilities?
9. Is it possible to connect the emergency exit from the underground parking garage directly to the stairwell of the residential building if a vestibule-airlock is provided?
10. The client is requesting that the cross-section of the underground parking garage columns be reduced from 400x400 to 300x300 mm to increase the usable area. The building has 16 floors, and is made of B30 concrete. Is there a standard minimum cross-section for monolithic columns?
11. In the design of a 9-story residential building, the load-bearing walls are designed using unreinforced brickwork 380 mm thick. The construction area is located in a seismicity zone with a design seismicity of 8 points according to MSK-64.

Is this design solution permissible in terms of the maximum number of floors and the type of load-bearing structures, in accordance with the requirements of the SP on earthquake-resistant construction?

Is it necessary in this case to provide for masonry reinforcement or other structural measures, and what regulations should be considered when making this decision?
12. We are designing a monolithic floor with a span of 8.5 meters. The client requests that intermediate beams be omitted, and the slab thickness is 200 mm. Is this feasible, or are there regulatory limitations on deflection?

13. Is it permissible to use fiberglass reinforcement instead of steel in the foundation slab of a residential building if the building is no higher than 5 stories?
14. During an inspection of an existing building, cracks with an opening width of 0.4 mm were discovered in the beams. The building is in normal use. Is this acceptable or does it require reinforcement?
15. The contractor proposes replacing B25 heavy-duty concrete with B15 expanded clay concrete in the exterior walls of a 4-story building to improve thermal insulation. Is this acceptable for load-bearing walls?
16. We are designing a pile field for a 12-story building. Geological surveys have shown type II subsidence soil. Can driven piles be used, or are bored piles with widening required?
17. The client wants to create a 2x2 meter opening in an existing load-bearing wall of a P-44 panel house. What are the reinforcement requirements, and is approval from the project author required?
18. Is it possible to drill a 200 mm diameter hole for a sewer pipe in an existing hollow-core slab (PK series) on-site?
19. We are designing a 4-meter-tall retaining wall on a slope. The soil is saturated loam, with a groundwater level of 1.5 meters. Is wall drainage required by regulations, or is this a recommendation?
20. During construction, the client decided to increase the number of floors from 9 to 12. Is it necessary to re-conduct the assessment, or is it sufficient to amend the design and obtain a revised report?
21. Is it the basic responsibility of the general contractor (as the entity carrying out construction) to plan, monitor, and coordinate the work of all contractors on the site?
22. The author's supervision recorded a 35 mm deviation of the column axis from the design position. The contractor states that this is within the tolerance. What is the maximum permissible tolerance according to the SP, and who makes the acceptance decision?
23. The client wants to commission the facility without completing landscaping, citing the winter period. Is it permissible to issue a construction permit without fully completing the landscaping work?
24. A 5-meter-deep excavation pit in sandy soil. The contractor proposes excavating without supporting the walls with a 1:1 slope. Is this slope angle sufficient according to regulations for this type of soil?
25. What is the maximum permissible hydrostatic pressure at the elevation of the lowest sanitary fixture established in SP 30.13330.2020? Based on this limitation, is it necessary to provide zoning for the water supply system for a residential building 75 meters high?

26. The pool at a sports complex has a bowl volume of 600 m^3 . The client proposes to supply the pool directly from the city water supply network without interrupting the flow.

27. The designer used the German DIN standard to calculate the anchor fastening for the curtain wall without providing a comparison with Russian standards. Can this calculation be accepted?

28. When removing the waterproofing, we discovered one layer instead of two. The contractor claims the material is thicker. Can this be accepted?