



Architectural and engineering managers

Plan, direct, or coordinate activities in such fields as architecture and engineering or research and development in these fields.

Cognitive and mental requirements

The qualifications that workers need to use judgment, make decisions, interact with others, and adapt to changes in jobs.

In 2022, verbal interactions were required constantly (every few minutes) for 15.3 percent of architectural and engineering managers, and were required not constantly, but more than once per hour for 59.8 percent.

Table 1. Percentage of architectural and engineering managers with cognitive and mental requirements, 2022

Requirement	Yes	No
Pace: Pause control	100.0	-
Interaction with general public	67.8	32.2
Working around crowds	-	100.0
Telework	41.6	58.4
Work review: Presence of supervisor	41.9	58.1

Source: U.S. Bureau of Labor Statistics, Occupational Requirements Survey

Education, training, and experience requirements

The minimum level of formal education required, credentials necessary, on-the-job training, and prior work experience necessary for average performance in jobs.

In 2022, credentials were required for 43.4 percent of architectural and engineering managers. On-the-job training was required for 44.0 percent.

A bachelor's degree was required for 86.8 percent of architectural and engineering managers.

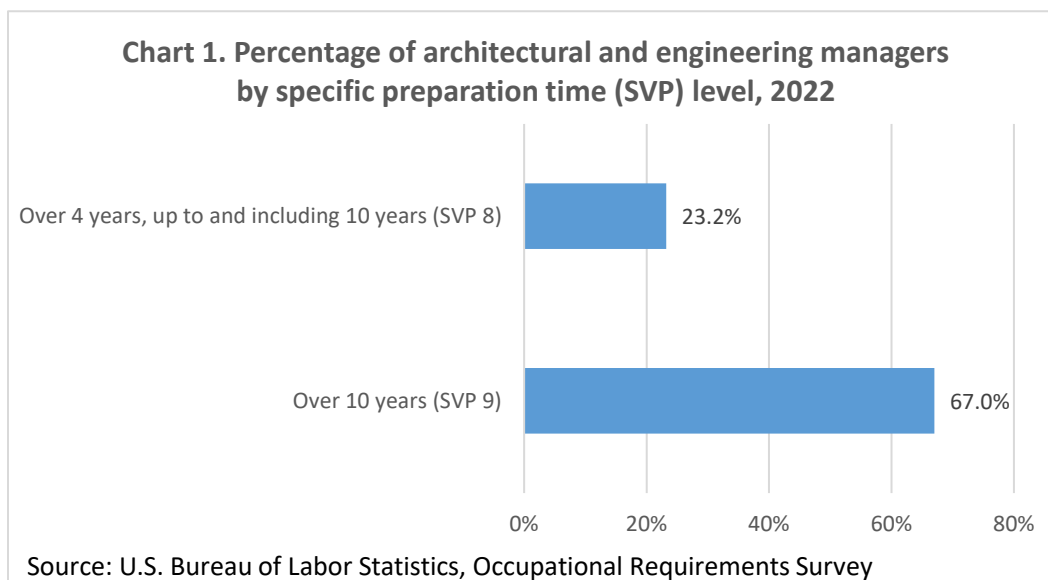
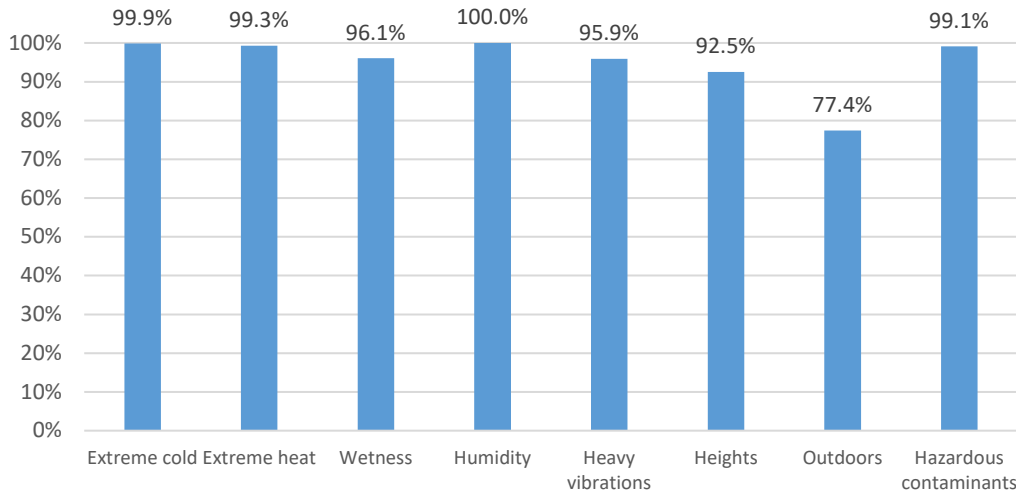


Chart 2. Percentage of architectural and engineering managers without exposure to environmental conditions, 2022



Source: U.S. Bureau of Labor Statistics, Occupational Requirements Survey

Environmental conditions

The various tangible or concrete hazards or difficulties that are in the vicinity of where jobs' critical tasks are performed.

In 2022, a quiet noise exposure was present for 19.3 percent of architectural and engineering managers, and 80.5 percent were exposed to moderate noise. Personal protective equipment (PPE) was used by 4.8 percent of workers to mitigate noise exposure and was not used by 95.2 percent.

Physical demands

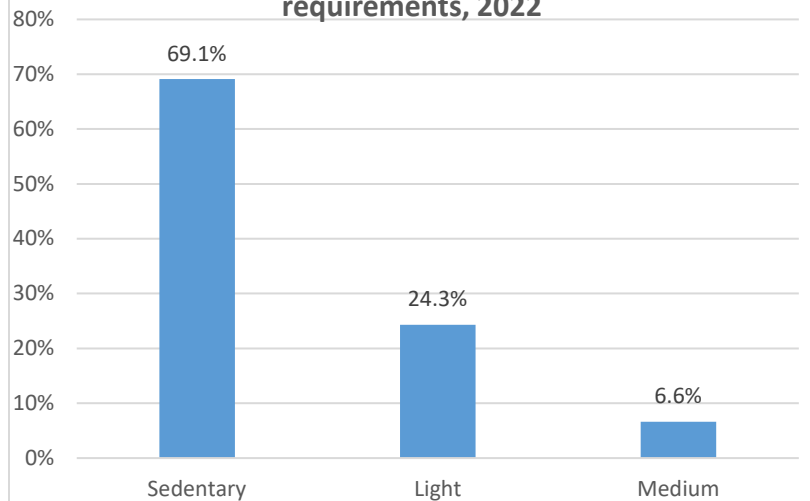
Refer to the physical activities required to perform tasks in jobs. The presence and, in some cases, duration of these activities are published.

In 2022, reaching at or below the shoulder was required for 44.8 percent of architectural and engineering managers and was not required for 55.2 percent. For 18.7 percent of workers, reaching at or below the shoulder was seldom performed, and for 25.1 percent reaching at or below the shoulder occurred occasionally.

Performing work in low postures was required for 10.6 percent of architectural and engineering managers and was not required for 89.4 percent.

The choice to sit or stand when performing critical tasks was available to 88.2 percent of architectural and engineering managers. On average, workers spent 85.4 percent of the workday sitting and 14.6 percent of the workday standing.

Chart 3. Percentage of architectural and engineering managers by strength level requirements, 2022



Source: U.S. Bureau of Labor Statistics, Occupational Requirements Survey

Table 2. Percentage of architectural and engineering managers with physical demands, 2022

Requirement	Yes	No
Choice of sitting or standing	88.2	11.8
Driving	18.5	81.5
Climbing structure-related ramps or stairs	21.1	78.9

Source: U.S. Bureau of Labor Statistics, Occupational Requirements Survey