Architecture and engineering workers

This occupational group includes architects, surveyors, cartographers, photogrammetrists, engineers, drafters, engineering technicians, electro-mechanical technicians, and mapping technicians.

Cognitive and mental requirements

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

In 2023, more than basic people skills were required for 92.4 percent of architecture and engineering workers, and basic people skills were required for 7.6 percent.

Table 1. Percentage of architecture and engineering workers with cognitive and mental requirements, 2023

Requirement	Yes	No
Pace: Pause control	95.1	4.9
Interaction with general public	62.1	37.9
Working around crowds	<0.5	>99.5
Telework	33.7	66.3
Work review: Supervising others	16.1	83.9
Work review: Presence of supervisor	66.4	33.6

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

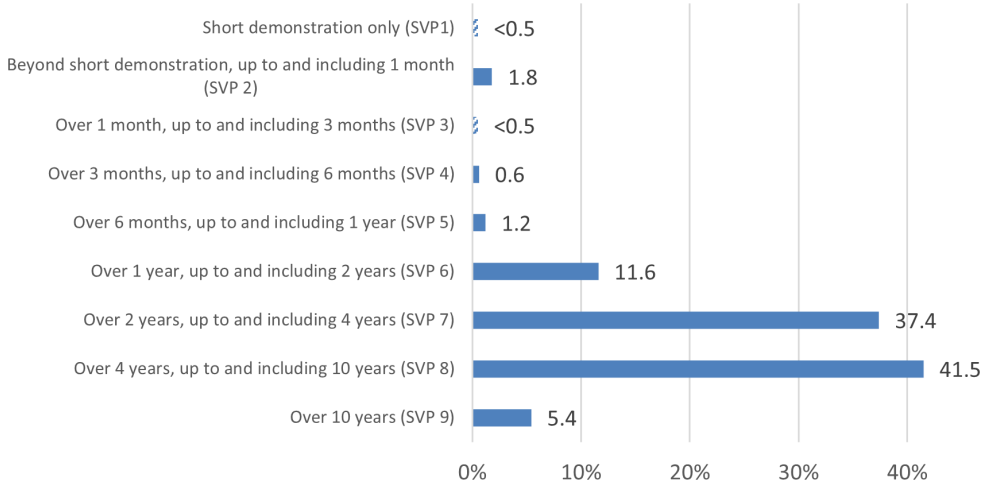
Education, training, and experience requirements

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

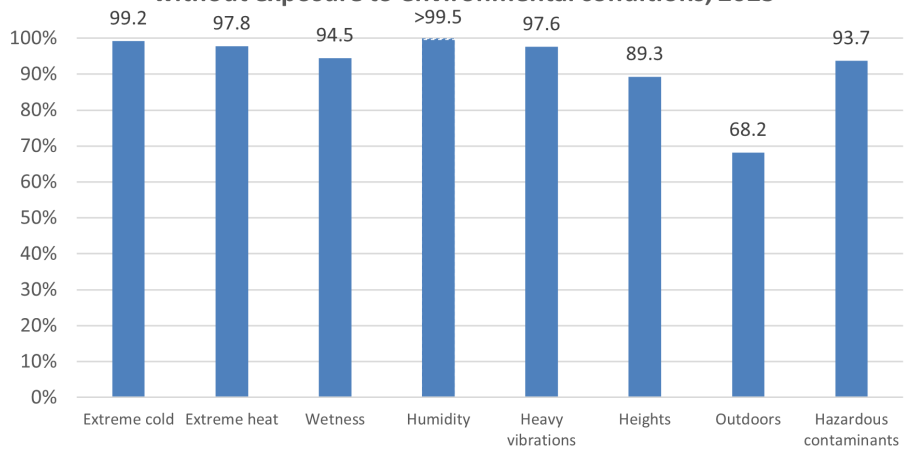
In 2023, credentials were required for 40.1 percent of architecture and engineering workers. Prior work experience was required for 68.0 percent and on-the-job training was required for 71.4 percent.

A bachelor's degree was required for 69.5 percent of architecture and engineering workers.

Chart 1. Percentage of architecture and engineering workers by specific preparation time (SVP) level, 2023



Note: Striped bars represent range estimates where precise value is unpublished.
Source: U.S. Bureau of Labor Statistics, Occupational Requirements Survey



Note: Striped bars represent range estimates where precise value is unpublished.
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.

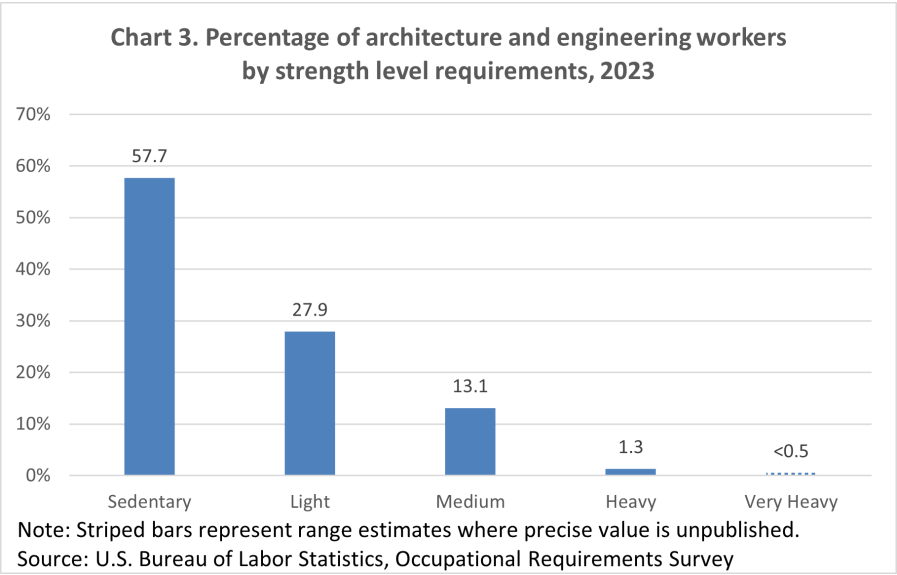
In 2023, 99.2 percent of architecture and engineering workers were not exposed to extreme cold, and 97.8 percent were not exposed to extreme heat. Wetness was not present for 94.5 percent, 97.6 percent were not exposed to heavy vibrations, and 68.2 percent were not exposed to the outdoors.

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 2023, keyboarding was required for greater than 99.5 percent of architecture and engineering workers and was not required for less than 0.5 percent. For less than 5 percent of workers, keyboarding was seldom performed, for 27.2 percent keyboarding occurred occasionally, 64.5 percent frequently, and for 5.4 percent keyboarding occurred constantly.

Performing work in low postures was required for 29.0 percent of architecture and engineering workers and was not required for 71.0 percent.



Note: Striped bars represent range estimates where precise value is unpublished.
Source: U.S. Bureau of Labor Statistics, Occupational Requirements Survey

The choice to sit or stand when performing critical tasks was available to 83.7 percent of architecture and engineering workers. On average, workers spent 73.6 percent of the workday sitting and 26.4 percent of the workday standing.

Table 2. Percentage of architecture and engineering workers with physical demands, 2023

Requirement	Yes	No
Choice of sitting or standing	83.7	16.3
Driving	31.6	68.4
Climbing structure-related ramps or stairs	22.8	77.2

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