## 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 2023, verbal interactions were required constantly (every few minutes) for 13.3 percent of architectural and engineering managers, and were required not constantly, but more than once per hour for 64.8 percent.

### Table 1. Percentage of architectural and engineering managers with cognitive and mental requirements, 2023

| Requirement | Yes | No |
|---|---|---|
| Pace: Pause control | >99.5 | <0.5 |
| Interaction with general public | 71.8 | 28.2 |
| Working around crowds | <0.5 | >99.5 |
| Telework | 42.2 | 57.8 |
| Work review: Supervising others | 98.0 | 2.0 |
| Work review: Presence of supervisor | 45.0 | 55.0 |

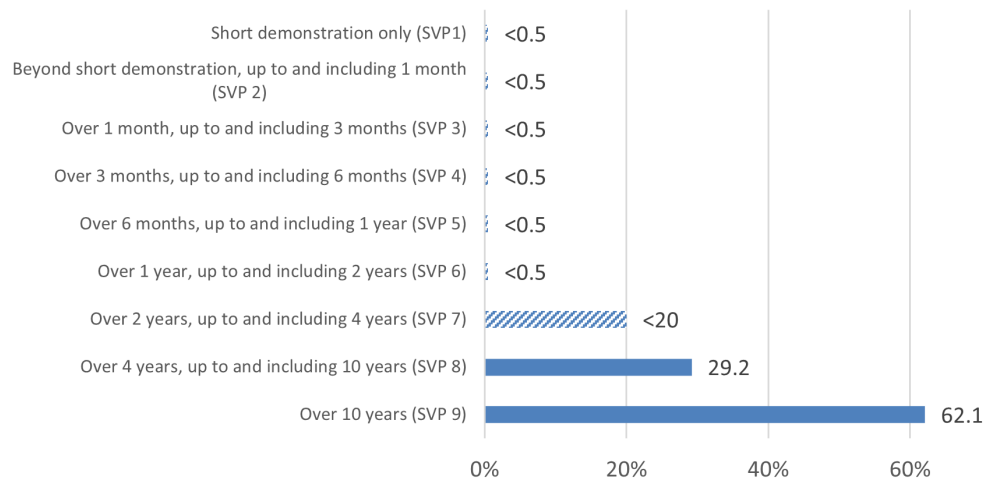Source: U.S. Bureau of Labor Statistics, Occupational Requirements Survey

## 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 42.9 percent of architectural and engineering managers. Prior work experience was required for greater than 80 percent and on-the-job training was required for 43.7 percent.

A bachelor's degree was required for 88.7 percent of architectural and engineering managers.
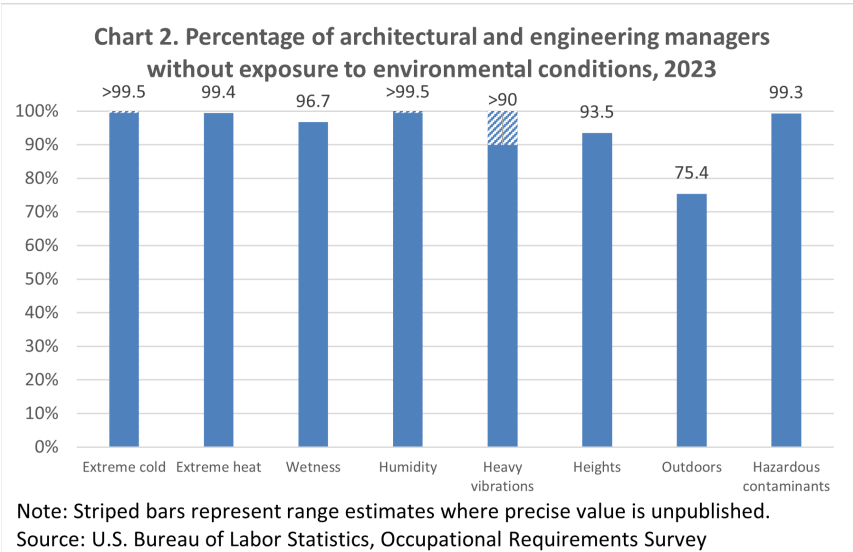
**Chart 1. Percentage of architectural and engineering managers by specific preparation time (SVP) level, 2023**

| SVP level | Percentage |
|---|---|
| Short demonstration only (SVP1) | <0.5 |
| Beyond short demonstration, up to and including 1 month (SVP 2) | <0.5 |
| Over 1 month, up to and including 3 months (SVP 3) | <0.5 |
| Over 3 months, up to and including 6 months (SVP 4) | <0.5 |
| Over 6 months, up to and including 1 year (SVP 5) | <0.5 |
| Over 1 year, up to and including 2 years (SVP 6) | <0.5 |
| Over 2 years, up to and including 4 years (SVP 7) | <20 |
| Over 4 years, up to and including 10 years (SVP 8) | 29.2 |
| Over 10 years (SVP 9) | 62.1 |

Note: Striped bars represent range estimates where precise value is unpublished.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

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**Chart 2. Percentage of architectural and engineering managers without exposure to environmental conditions, 2023**



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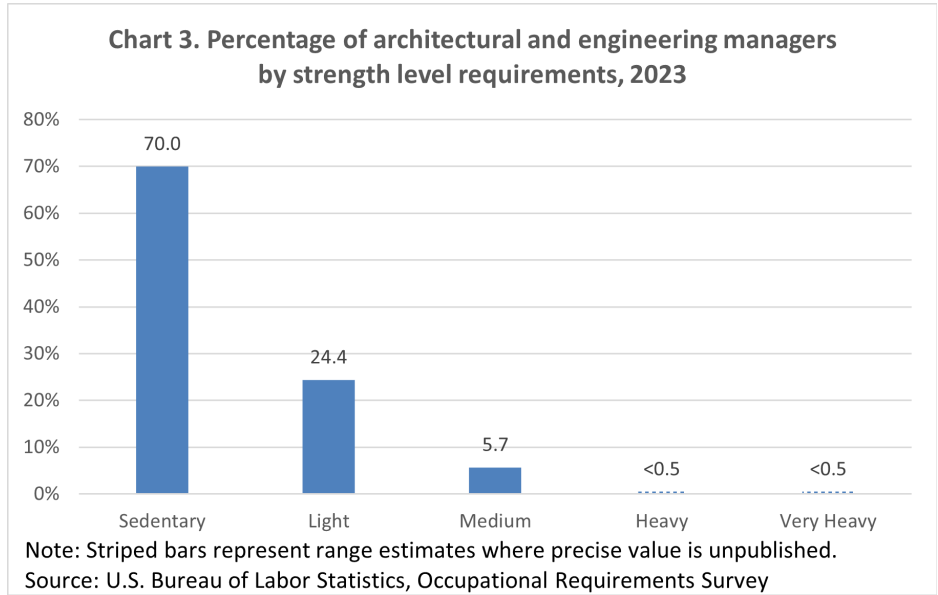
## Environmental conditions

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

In 2023, greater than 99.5 percent of architectural and engineering managers were not exposed to extreme cold, and 99.4 percent were not exposed to extreme heat. Wetness was not present for 96.7 percent, greater than 90 percent were not exposed to heavy vibrations, and 75.4 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 architectural and engineering managers and was not required for less than 0.5 percent. For less than 0.5 percent of workers, keyboarding was seldom performed, for 30.4 percent keyboarding occurred occasionally, 66.1 percent frequently, and for less than 10 percent keyboarding occurred constantly.

**Chart 3. Percentage of architectural and engineering managers by strength level requirements, 2023**



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

Performing work in low postures was required for 11.5 percent of architectural and engineering managers and was not required for 88.5 percent.

The choice to sit or stand when performing critical tasks was available to 89.4 percent of architectural and engineering managers. On average, workers spent 84.3 percent of the workday sitting and 15.7 percent of the workday standing.

## Table 2. Percentage of architectural and engineering managers with physical demands, 2023

| Requirement | Yes | No |
|---|---|---|
| Choice of sitting or standing | 89.4 | 10.6 |
| Driving | 20.9 | 79.1 |
| Climbing structure-related ramps or stairs | 19.8 | 80.2 |
| Source: U.S. Bureau of Labor Statistics, Occupational Requirements Survey | | |