



Installation, maintenance, and repair workers

This occupational group includes computer, automated teller and office machine repairers, avionics technicians, security and fire alarm systems installers, aircraft mechanics and technicians, bus and truck mechanics, diesel engine specialists, small engine mechanics, bicycle repairers, home appliance repairers, millwrights, watch repairers, wind turbine service technicians, and riggers.

Cognitive and mental requirements

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

In 2024, work was controlled by people for 87.6 percent of installation, maintenance, and repair workers, and work was self-paced for 5.9 percent.

Table 1. Percentage of installation, maintenance, and repair workers with cognitive and mental requirements, 2024

Requirement	Yes	No
Adaptability: Work schedule variability	51.3	48.7
Pace: Pause control	70.9	29.1
Telework	<0.5	>99.5
Work review: Presence of supervisor	50.8	49.2
Work review: Supervising others	10.4	89.6
Working around crowds	<0.5	>99.5

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

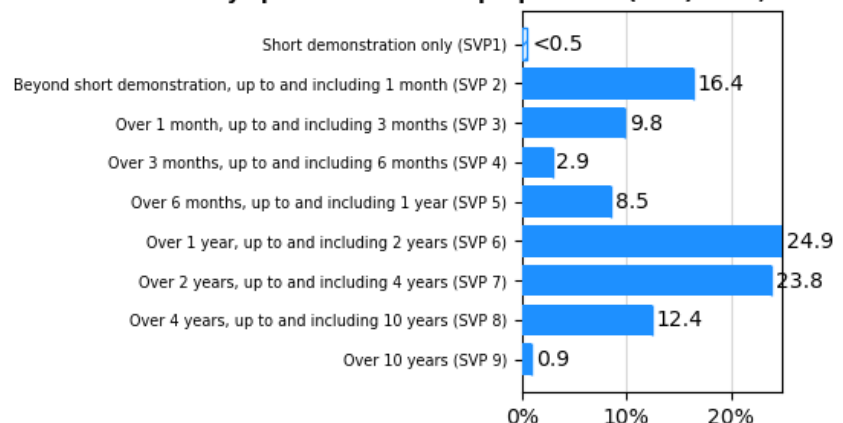
Education, training, and experience requirements

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

In 2024, prior work experience was required for 59.1 percent of installation, maintenance, and repair workers and on-the-job training was required for 76.4 percent.

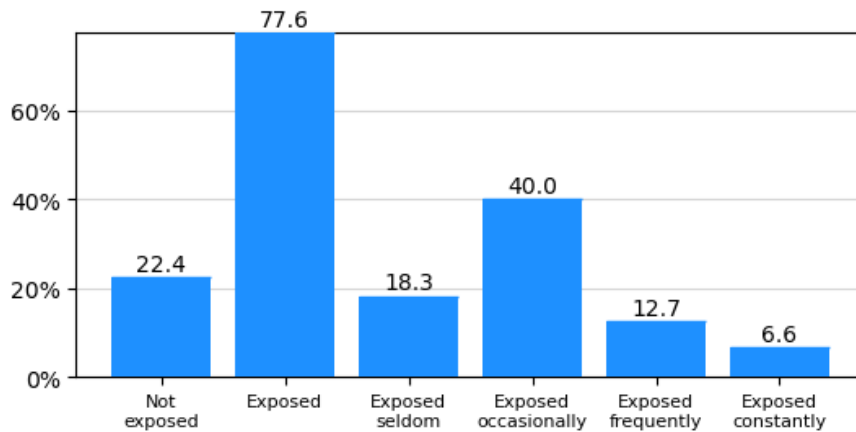
A high school diploma was required for 64.4 percent of installation, maintenance, and repair workers.

Chart 1. Percentage of installation, maintenance, and repair workers by specific vocational preparation (SVP) level, 2024



Note: Striped bars represent range estimates where precise value is unpublished.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

Chart 2. Percentage of installation, maintenance, and repair workers with outdoor exposure and duration, 2024



Environmental conditions

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

In 2024, 97.1 percent of installation, maintenance, and repair workers were not exposed to extreme cold, and 93.7 percent were not exposed to extreme heat. Wetness was not present for 48.4 percent, 91.3 percent were not exposed to heavy vibrations, and 22.4 percent were not exposed to the outdoors.

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

Physical demands

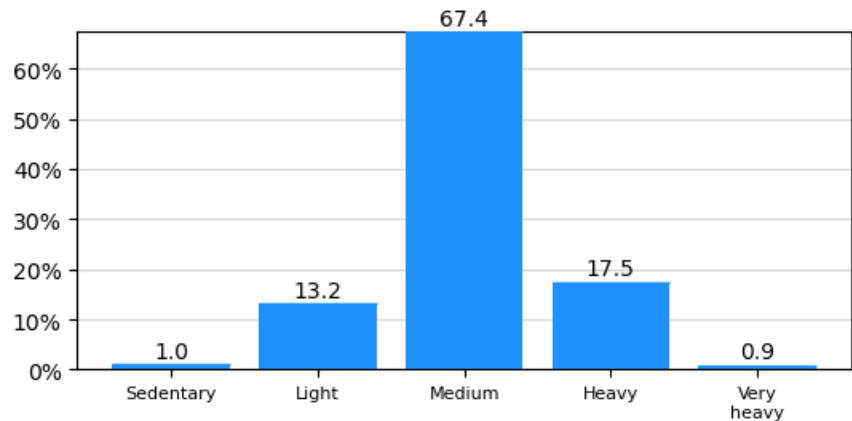
Refer to the physical activities required to perform tasks in jobs. The presence and, in some cases, duration of these activities are published.

In 2024, reaching at or below the shoulder was required for 98.0 percent of installation, maintenance, and repair workers and was not required for 2.0 percent. For 3.6 percent of workers, reaching at or below the shoulder was seldom performed, for 68.7 percent reaching at or below the shoulder occurred occasionally, 25.7 percent frequently, and for less than 0.5 percent reaching at or below the shoulder occurred constantly.

Performing work in low postures was required for 95.8 percent of installation, maintenance, and repair workers and was not required for 4.2 percent.

The choice to sit or stand when performing critical tasks was available to 7.1 percent of installation, maintenance, and repair workers. On average, workers spent 18.5 percent of the workday sitting and 81.5 percent of the workday standing.

Chart 3. Percentage of installation, maintenance, and repair workers by strength level requirements, 2024



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

Table 2. Percentage of installation, maintenance, and repair workers with physical demands, 2024

Requirement	Yes	No
Choice of sitting or standing	7.1	92.9
Climbing structure-related ramps or stairs	37.8	62.2
Driving	70.1	29.9

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