

# Height-Adjustable ADA Compliant Desks and Tables Alleviate Pain, Improve Productivity

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In this digital age, increasing numbers of entrepreneurs, employees, researchers, and students are spending many hours seated in front of a computer screen either at a desk or table. While not only harmful to one's health, working while seated also diminishes productivity and workplace efficiency. Height adjustable computer furniture and sit/stand desks have great utility as they accommodate different work styles.

In addition to their beneficial height-adjustable features, these desks are all Americans with Disabilities Act (ADA) compliant desk tables. The comfort levels of 26-30 inches for workers in wheelchairs and 16-inch highchairs require that a computer desk table raise and lower according to each user's preference. And, because every computer table and desk user has his or her own preferences, most adjustable height tabletops can be adjusted for an even greater range.

Height-adjustable ADA compliant tables have effective uses in classrooms, offices, healthcare facilities, factories, and labs. For example, in the classroom, students can stand to work on science experiments or art projects, but later be seated for essay writing and math tests. In offices, weary employees could use a motorized desk or table to change position and stand to relieve pressure points in their backs, and shift their weight from foot to foot. When they tire of the standing position, they can simply adjust the tabletop to a lower height returning to sit desk or table height. Hospitals also require adjustable height ADA compliant table flexibility because of rotations and shift changes. Employees can adjust the table top to their personal levels when it is their turn to work, thereby increasing comfort and productivity. For factories and labs, the height flexibility of a sit/stand desk or table is key, as each task may require a different stance of table level.

Elaine Schwartz, K-12 school teacher, shared her insights on how she and her students work best. Reflecting on an activity where her students moved about in class, she said: "I did a [student] line up and definitely got more engagement [than when the students remained seated and raised hands]." She also stated, "you need the technology to help you both stand and sit at the table/desk because everybody has different needs when they're working."

Ms. Schwartz also discussed "how technology should have the right incentive – which allows you to become productive, but sometimes technology creates incentives that diminish productivity." By enabling users to work either in a chair or on their feet, they experience an incentive to work more productively. Adjustable height sit/stand table or desks are crucial to a seamless work experience while standing because they smoothly

re-adjust to the required height and position of each individual user, sitting, standing or using a wheelchair at the computer desk or table.

When a worker is standing at his or her computer desk or table, fellow employees are far less likely to interrupt. With focused stance on foot, employees appear more immersed in their project and less likely to desire social interaction. By contrast, a worker typing and sipping coffee at a desk looks inviting, even if he or she needs uninterrupted work time. Therefore, a height adjustable ADA compliant desk or table provides the ideal workstation because it offers both options; standing increases privacy and creates a “work bubble;” sitting is ideal for meetings and interpersonal interactions.

In a 2004 Cornell University Study, “Effects of an Electric Height-Adjustable Work Surface on Self-Assessed Musculoskeletal Discomfort and Productivity in Computer Workers,” Professor Alan Hedge discovered that 33 survey participants found improved comfort and less pain in upper-body muscles after using height-adjustable ADA compliant desks/tables for four to six weeks. Additionally, the study determined that alternating between sitting and standing at their work desk or table reduced foot swelling and spinal shrinkage, as well as it increased productivity. The participants in the study were full-time computer users at a desk or table in the office. Additionally, 64.7% of participants indicated a preference for ADA compliant height-adjustable workstations in the future.

The human body is designed for movement, and the option of using a sit/stand desk helps relieve restlessness and improves focus. As users stand at their desks and tables, they release extraneous energy by shifting their weight and improving circulation. According Jack Dennerlein, professor of ergonomics at Harvard and quoted in the New York Times: “Can we design work and workstations that allow for more opportunities to exercise while performing specific tasks? Does standing at a computer workstation improve health outcomes as well as performance? Or does it introduce other health problems associated with sustained standing? Future research needs to ask these important questions. In the meantime, find comfort in your seat, but don’t sit still. Get up and move frequently.”

In another piece, by Julia Judson for the New York Times, she somewhat logically argues against sedentary activity by citing this study: “Men who normally walk a lot (about 10,000 steps per day, as measured by a pedometer) were asked to cut back (to about 1,350 steps per day) for two weeks, by using elevators instead of stairs, driving to work instead of walking and so on. By the end of the two weeks, all of them had become worse at metabolizing sugars and fats. Their distribution of body fat had also altered - they had become fatter around the middle.” By contrast, she showed that people who moved more regularly by taking work breaks etcetera, retained a thinner waistline. The incorporation of a motorized desk or table that could adjust would promote increased physical activity.

In conclusion, movement is key to maintaining a healthy work style. Adjustable height ADA compliant tables and desks safeguard against bodily discomfort and weight gain.

In schools, the flexibility to stand or sit at desks and tables undoubtedly improves focus and productivity. In offices, the effects are largely similar. Motorized height-adjustable, ratchet, and pneumatic systems all can offer the support individuals need while working.

The effects of a more active working style are positive. Flexible workspaces with height-adjustable computer desks or tables are paramount to successful task completion and overall health.

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