

What are the productivity and ergonomic benefits of a curved keyboard?

And how does Kensington's Pro Fit® Ergo Wireless curved keyboard compare to its top competitor — according to users?

A curved, ergonomic keyboard is designed to make computing comfortable, healthy, and efficient. Also referred to as a split keyboard, contoured keyboard, sloped keyboard, or V-shaped keyboard, its use **encourages a neutral wrist and forearm position**. It has become a popular addition to the ergonomic workstation, adopted for helping knowledge workers **avoid serious RSIs (Repetitive Strain Injuries) and MSDs (Musculoskeletal Disorders) such as carpal tunnel syndrome** that can result from improper typing technique.

Our team wanted to see hard data on these benefits, so we conducted a study to capture typing speeds and postures exhibited with a curved keyboard as compared to a traditional (QWERTY layout) keyboard. We also isolated how long it takes the average employee to adapt to a curved keyboard and recorded distinct user preferences between Kensington's Pro Fit® Ergo and its top competitor.



The study: 30 computer users, two weeks, four typing tests

The ergonomists leading the research selected 30 computer workers that type six or more hours per day to participate in the study. Each worker was typing on a traditional keyboard and had no prior experience with a curved, ergonomic model. The ergonomists first measured the participants' average typing speed (factoring in errors) to establish a baseline for comparison of speed. They also measured wrist and forearm positions — to establish a baseline for comparison of ergonomics.*

Half of the study's participants were then given the Kensington Pro Fit® Ergo keyboard while the other half were given its competing product — a curved, ergonomic keyboard with similar design from one of Kensington's top competitors. Over the course of a week, the same data points on typing speed and posture were measured.** The participants then switched keyboard models, and the corresponding data points were measured again. Each user's personal experience with both curved keyboard models was also captured to gauge preferences concerning aspects such as ease of use, general comfort, and overall design.

** The ergonomists used a goniometer to precisely measure postural angles.*

*** Both of the curved, ergonomic keyboard models reviewed in the study have a 10-key feature and built-in wrist rests of different depths and materials.*

Standard Keyboard (Baseline) vs. Kensington Comfort Keyboard Adjusted Speed

Descriptive Statistics

	Mean	Std. Deviation	N
Standard Keyboard Adjusted Speed	46.90	16.092	31
Kensington Test 1 Adjusted Speed	39.74	13.127	31
Kensington Test 2 Adjusted Speed	45.19	14.409	31
Kensington Test 3 Adjusted Speed	50.19	14.914	31
Kensington Test 4 Adjusted Speed	52.58	16.006	31

Computer users type more quickly on a curved, ergonomic keyboard similar to the Kensington Pro Fit® Ergo.

Adjusted typing speed factors in errors.

Productivity results: average typing speeds increase in less than two weeks of use

A week and a half into using the product, participants' average adjusted typing speed on the Kensington Pro Fit® Ergo exceeded their original speed.* This data point is noteworthy; none of them had used a curved keyboard before, and their typing rate still surpassed their average within less than two workweeks of trying one out.





Adaptation results: it takes one workweek to adapt to a curved keyboard

These data points reveal a second valuable insight: it took participants about one workweek, on average, to adjust to a curved, ergonomic keyboard. That is, to reach (and eventually exceed) what was their average typing speed before the study. It is worth noting that participants recovered their original typing speed just 3-4 days into using the Kensington Pro Fit® Ergo, on average — adapting to the Kensington product more quickly than they did to its top competitor.

Participants recovered their original typing speed just 3-4 days into using the Kensington Pro Fit® Ergo.

Injury prevention results: a curved keyboard can prevent discomfort, pain, and injury

Participants exhibited **68% less bilateral ulnar deviation** and **77% less bilateral wrist extension**, on average, when using the Kensington Pro Fit® Ergo keyboard than when using their old keyboard.* These measurements represent two forms of unhealthy torquing in the forearm and wrist that, if not addressed, can potentially lead to discomfort, pain, and injury.

Because the Kensington Pro Fit® Ergo encourages neutral postures in the wrists and forearms, its use prevents serious computer-related RSIs and MSDs.

**Bilateral ulnar deviation refers to outward bending of either hand from the wrist, and bilateral wrist extension refers to the upward and backward bending from the wrist.*

*Participants exhibited 68% less bilateral ulnar deviation and 77% less bilateral wrist extension, on average, when using the Kensington Pro Fit® Ergo keyboard than when using their old keyboard.**

Kensington Comfort Keyboard vs. Competitor Split Keyboard Adjusted Speed

Descriptive Statistics

	Mean	Std. Deviation	N
Kensington Test 1 Adjusted Speed	39.74	13.127	31
Kensington Test 2 Adjusted Speed	45.19	14.409	31
Kensington Test 3 Adjusted Speed	50.19	14.914	31
Kensington Test 4 Adjusted Speed	52.58	16.006	31
Microsoft Test 1 Adjusted Speed	37.71	14.920	31
Microsoft Test 2 Adjusted Speed	42.77	14.990	31
Microsoft Test 3 Adjusted Speed	49.13	15.628	31
Microsoft Test 4 Adjusted Speed	47.87	16.136	31

- *Participants typed 9% faster with the Kensington Pro Fit® Ergo*
- *Because of the larger size of the competitor's keyboard, 92% of participants had to reduce their speed when using the competitor product to avoid mistakes*
- *84% preferred the overall design of the Kensington Pro Fit® Ergo to its competitor*

According to
user feedback

84%

*prefer the tactile switch type
on the Kensington Pro Fit®
Ergo to the clicky switch
type on its top competitor**

68%

*prefer the soft wrist rest
on the Kensington Pro Fit®
Ergo to the firm wrist rest
on its top competitor*

94%

*prefer the shorter wrist
rest on the Kensington
Pro Fit® Ergo (3") to the
more extended wrist rest
on its top competitor*

77%

*prefer the shorter key travel
on the Kensington Pro Fit®
Ergo to the longer key travel
on its top competitor***

* Switch type refers to the
typing feel.

** Key travel refers to the distance
between the key at rest and the
key at full depression.

Take their word for it: the Kensington Pro Fit® Ergo is the winner

In reviewing user feedback, the ergonomists found that people preferred the **“compact” layout** of the Kensington Pro Fit® Ergo to the “bulky” and “spaced out” design of its competitor. Many said the spacing between keys created a more **“natural layout” for their hands**. Participants also preferred the **“low-profile” design** (key travel) of the Kensington keyboard. Numerous people described the **tactile, laptop-like typing feel** of the Kensington Pro Fit® Ergo as “lighter,” “more precise,” and “easier to press down,” and its aesthetic as **“modern”** and **“sleek”** rather than “bulky” and “chunky” as in the case of its competitor. The majority of users said the **wrist rest on the Kensington product was more comfortable**, and that their fingers, hands, or shoulders didn’t “hurt” or feel “discomfort” when typing. The ergonomists speculated that because the Kensington Pro Fit® Ergo is shorter than its competing product, users were able to bring their mouse in closer to their side and work with the more neutral hand, wrist, and shoulder posturing observed.

All of these design-related preferences likely contributed to the quicker and easier adoption of the Kensington product and the fact that **74% of study participants chose to take the Kensington Pro Fit® Ergo keyboard home with them** at the end of the study to use instead of their old keyboard.

The Kensington Pro Fit® Ergo Wireless Keyboard is a split and sloped keyboard with an adjustable reverse tilt and built-in wrist rest. Its ergonomist-approved design positions users’ hands, wrists, and forearms for improved comfort and neutral alignment. With quiet, tactile keys that allow smooth, non-disruptive typing, the Pro Fit® Ergo is an excellent addition to any ergonomic workstation.



[Pro Fit® Ergo Wireless
Keyboard and Mouse—
Gray](#)



[Pro Fit® Ergo Wireless
Keyboard and Mouse—
Black](#)



[Pro Fit® Ergo Wireless
Keyboard—Gray](#)



[Pro Fit® Ergo Wireless
Keyboard—Black](#)



[Pro Fit® Ergo
Wired Keyboard](#)



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