



# APPLIED ERGONOMICS

ERGONOMIC PRINCIPLES  
HOME OFFICE + SHARED OFFICE



## THE AE APPROACH

Applied Ergonomics has over ten years of experience in Remote Ergonomic Consulting for home-based workers.

The Ergonomic Principles of working at a computer are the same in a home office as in a shared office, but if your kitchen table is suddenly your work desk, creating an ergonomic workspace can be a difficult goal to accomplish.

We are here to help.

### CONSULTING

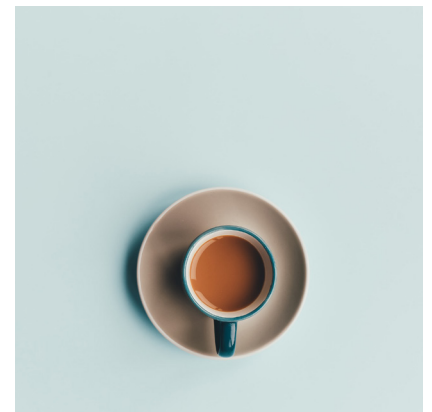
We start by learning about the people working within the space.

We listen and observe from a wellness and design minded perspective.

We teach our individuals how to modify their existing office equipment, provide supplementary product recommendations to improve their posture, educate them on best practices for equipment use, and develop ergonomic spatial arrangements for enhanced comfort and productivity.

For a home office redesign, we offer step-by-step guidance and collaboration to develop a restorative space that better suits their needs.

Sessions are billed at a flat rate and typically range from 45 to 90 minutes. Discounting on all Applied Ergonomics product recommendations is included.



# EVERY BODY IS DIFFERENT, THERE IS NO UNIVERSAL SOLUTION.

We all sit and we all stand on a daily basis, so it's natural to believe that we have an awareness of our body position while sitting and standing during work.

Ergonomics helps us avoid hunched seated positions or standing locked and straight.

It is important to learn the Ergonomic Principles and be mindful of our bodies.



# SITTING

The goal is to be supported, not engulfed. Chairs are made with a variety of mechanisms. The mechanism determines the adjustments that can be made to fit your body as well as how the chair moves while sitting.

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## STEP ONE

Position the knees below the hips creating a 110 degree hip angle, imagine a line from the head to the lower back and relax your shoulders

## STEP TWO

Sit back in your chair so that your lower back is touching the back of the chair and position the backrest to fit your lower back

## STEP THREE

Adjust the back height and angle to support the lumbar and to help roll the pelvis forward to encourage a curve in your spine

## STEP FOUR

Have your feet supported on the floor or to remove undue pressure on the bottom of your thighs near your knees

## STEP FIVE

Make sure there is approximately three to four fingers of space between the front edge of the seat and the back of your knees

## IF YOUR CHAIR HAS A DEPTH ADJUSTABLE SEAT

Slide it to the position indicated in STEP FIVE

## IF YOUR CHAIR DOES NOT HAVE A DEPTH ADJUSTABLE SEAT

Add a lumbar pillow to push yourself forward and support your lumbar

## IF YOUR CHAIR HAD ADJUSTABLE ARMRESTS

Adjust your armrests to support your forearms. If your shoulders move into a shrug position, lower the armrest.



## ERGO TIP

When sitting on a dining chair or something similar, add a seat cushion and back cushion to remove pressure from your legs and support your back

## ERGO TIP

When reclining, it can be helpful to use a keyboard tray to bring the keyboard and mouse into your lap to minimize reaching.

## ERGO FACT

Your ankles serve to pump blood back up from your lower leg. Pressure behind the knees impedes blood flow.

# STANDING

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## ERGO TIP

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Be sure to wear comfortable, supportive, cushioned shoes.

## ERGO TIP

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Further cushion your spine with an anti-fatigue mat.

## ERGO TIP

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You may need to readjust your monitors for standing than sitting.

## ERGO TIP

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Shift your weight regularly. Consider using a balance board to maintain movement.

## ERGO TIP

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Set the height of your standing desk or desktop riser roughly at elbow height to maintain good keying posture.

## ERGO TIP

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Stretch your body at least once per hour to help reduce injury, muscular tension and stiffness.

## ERGO FACT

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If you have an electric height adjustable desk, it may have a programmable switch.

You can program the desk to preset heights but, as a safety feature, almost all brands require the user to hold the up or down button throughout the travel range until it reaches the preset height.



# MONITORS

Whether you are using one, two, three or more monitors, size and placement directly impact your posture. Pay attention to your neck and head to make sure that viewing your monitors doesn't make you crane your neck or twist your head.

## STEP ONE

Pretend to read a book - notice that your eyes naturally gaze downward, not straight ahead

## STEP TWO

Adjust the top of the screen to align with your eye level

## STEP THREE

This allows your eyes to gaze downward to the center of the monitor and decreases stress on the neck

## STEP FOUR

Make sure the top of the screens align and use matching monitors, when possible

## STEP FIVE

If your monitors are positioned correctly, your head should be in a natural position atop your neck with a plumb line down from your head through your spine and no overextension forward, downward or sideways



### LAPTOP + NOTEBOOK SET UP

Use an external mouse, keyboard, and raise the level of the screen with a laptop stand. If possible, use a large external monitor.

### DUAL MONITOR SET UP: OPTION A

If you use a primary and secondary screen - place your primary screen directly in front of you and position the secondary screen to the side most natural for you

### DUAL MONITOR SET UP: OPTION B

If you use both screens equally - center both monitors directly in front of you, the monitor edges should meet, and angle them inward

## ERGO TIP

Avoid placing your monitors off to the side. It creates neck and torso twisting which causes undue stress on your body that can lead to back and neck pain.

## ERGO TIP

Avoid angling the monitor down towards the worksurface. The angle forces a hunched posture which often leads to back, neck and shoulder pain.

## ERGO TIP

Notebook computers were designed for mobility, not ergonomics. When using a notebook on a desk, raise the monitor and use an external keyboard and mouse.

# KEYBOARDS + MICE

If your keyboard and mouse are not in an ergonomic position the continual reach will force you to roll your shoulder(s) forward and place a static load on your muscles. Both are high risk postures.

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## PROBLEM: ARM + WRIST PAIN

Wrists are angled to approach the keyboard

### STEP ONE

Hold your hands out, thumbs facing up like you are going to shake someone's hand

### STEP TWO

Rotate your arms so that your palms are facing downward

### STEP THREE

Notice at which point it feels uncomfortable or when the pressure becomes noticeable

### STEP FOUR

Notice if your mousing hands or arms are tense and pinching

## PRODUCT SOLUTION

Split angle adjustable keyboard and vertical or angle adjustable mouse

## PROBLEM: STRESS ON THE BACK

Arms extended outward or off to the side

### STEP ONE

Try relaxing your arms with your elbows at your side and your hands out, palms parallel to the floor

### STEP TWO

Move your hands and forearms in an arc

### STEP THREE

Adjust the location of your keyboard, mouse and other input devices to match the positioning of your hands and forearms



## ERGO TIP

Pay attention to your wrists and hands. Carpal tunnel and tendinitis are real and can be avoided.

## ERGO TIP

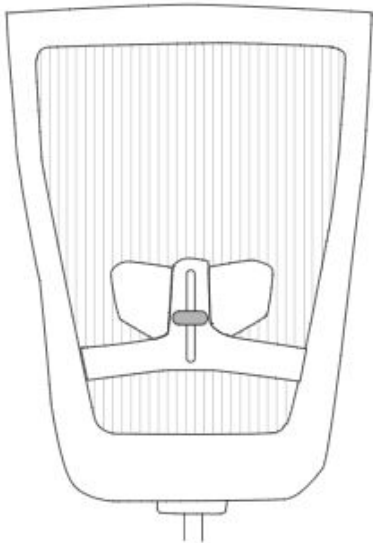
Use a soft touch when typing and a keyboard with superior ergonomic tactile experience to decrease unnecessary strain.

# MECHANISMS

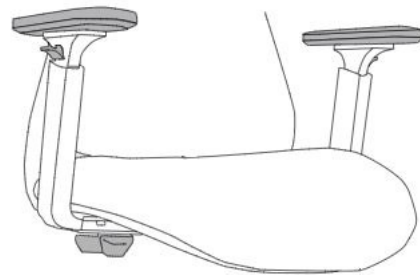
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Most task chairs are designed to be easily adjustable. Operation guides help drill down into the technical details behind the natural, ergonomic fit across our seating lines. Available for control mechanisms, stool control mechanisms, adjustable arms, adjustable lumbar support and adjustable headrests.

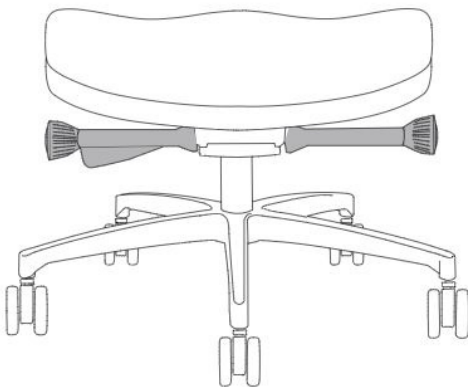
## ADJUSTABLE LUMBAR



## ADJUSTABLE ARMS



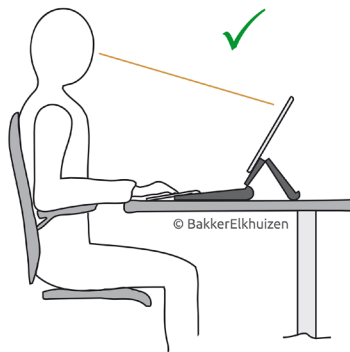
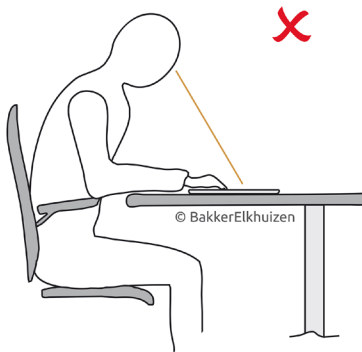
## SEAT CONTROL



## STOOL CONTROL



## TABLET HOLDERS

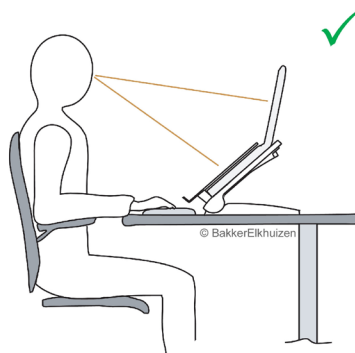
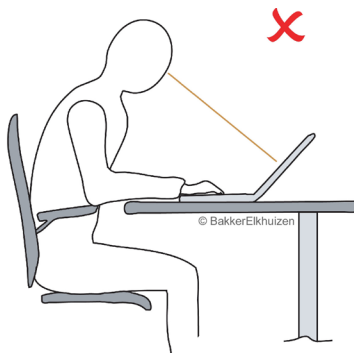


## ERGO FACT

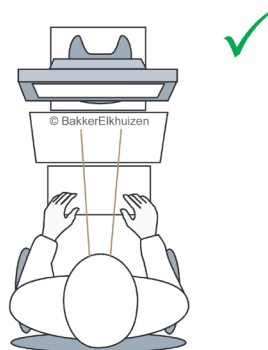
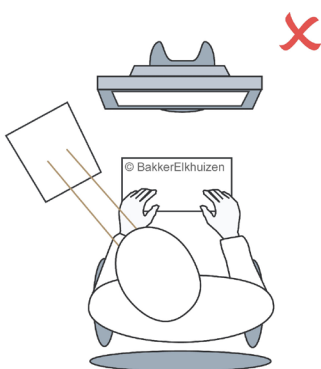
Research shows that being sedentary, whether sitting or standing, not only decreases your energy levels, it negatively impacts your health.

Take breaks.  
Move.  
Walk around.

## LAPTOP STANDS



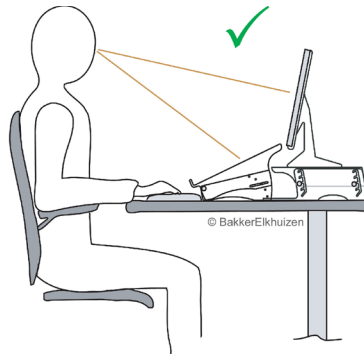
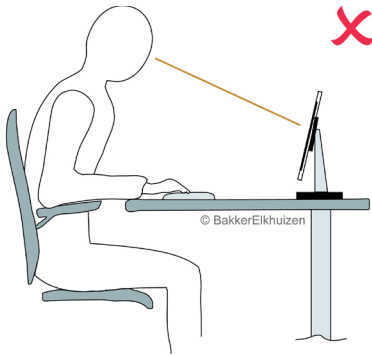
## DOCUMENT HOLDERS



## ERGO TIP

Put a piece of paper on the desktop next to your keyboard and read from it. Notice how your neck feels. Now hold it up next to your monitor, or on an upward slanted angle between your keyboard and monitor. Notice how much less that stresses your neck.

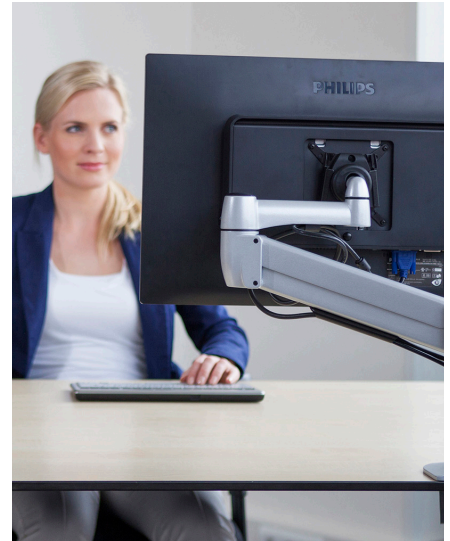
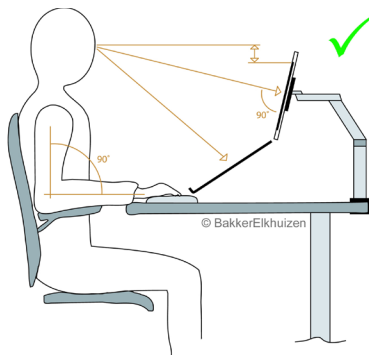
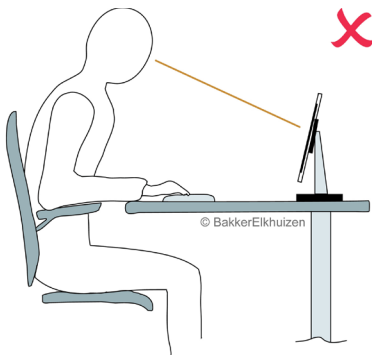
## MONITOR RISER + DOCUMENT STAND



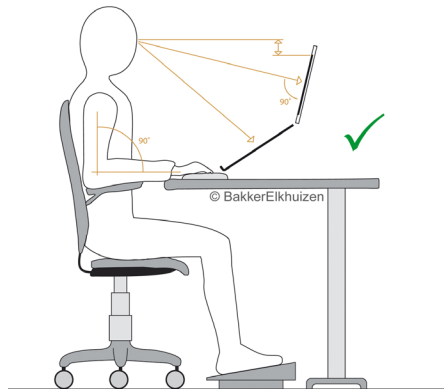
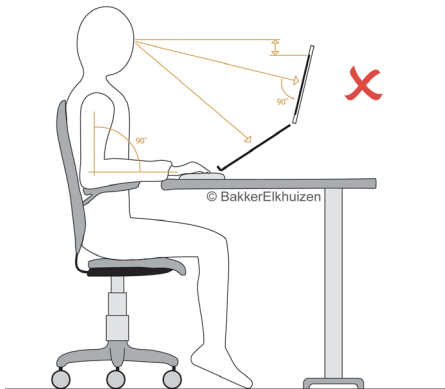
### ERGO TIP

Illuminate reading materials, like printed documents, with ample lighting. As we age, we require exponentially more light to see well - especially for reading.

## MONITOR ARMS



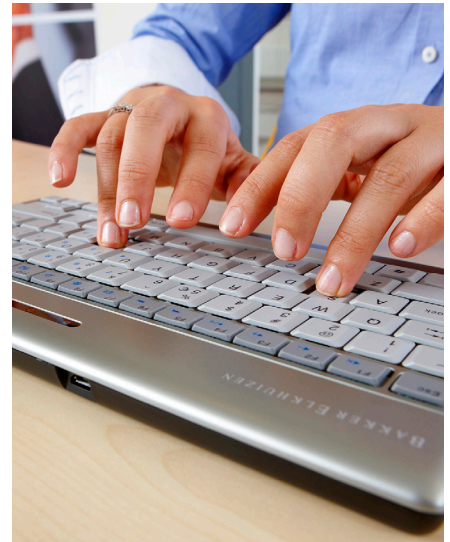
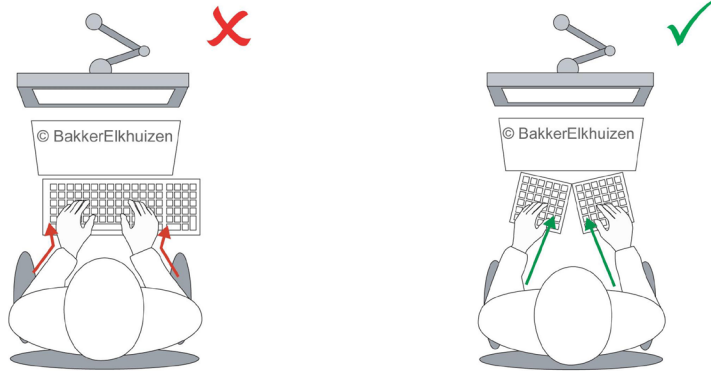
## FOOTRESTS



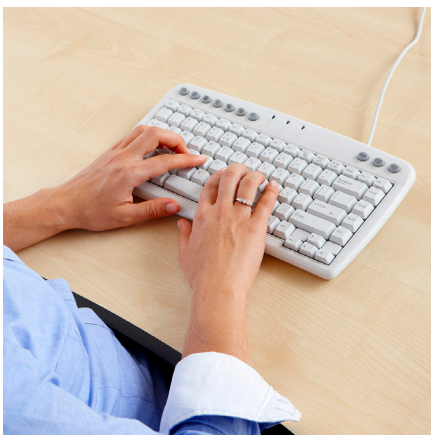
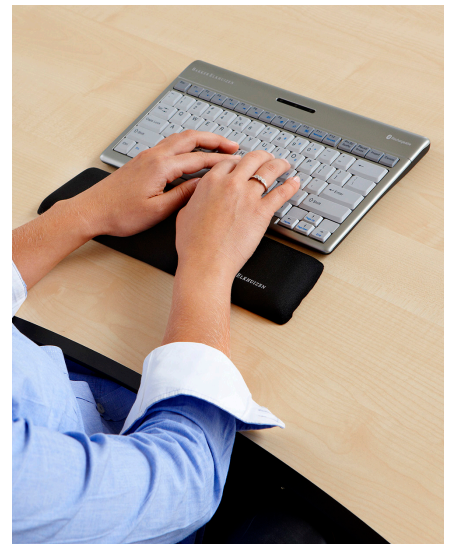
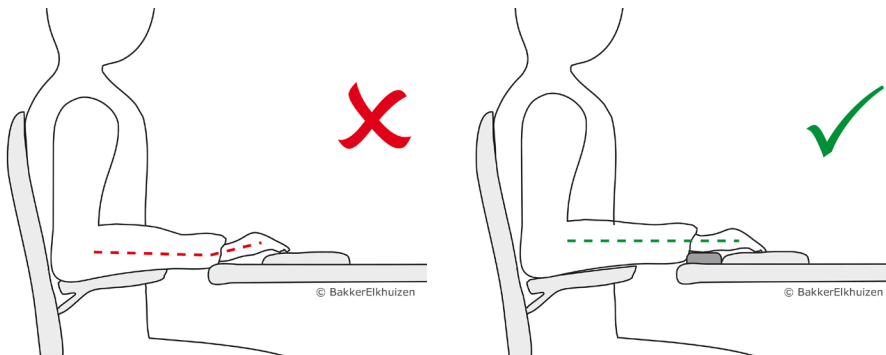
### ERGO TIP

Give your eyes a break by looking away from your screen and refocus on something across the room or out the window.

## WRIST POSITION



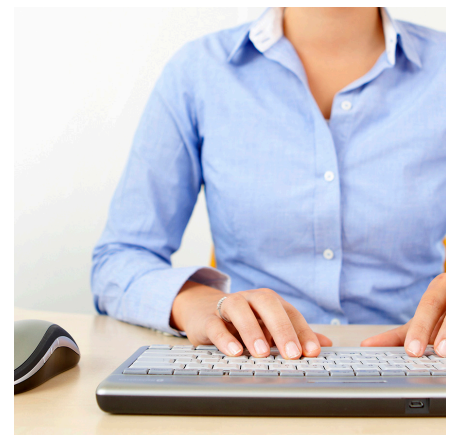
## WRIST RESTS



Maintain pronated neutral wrist angles, both up-down and side-to-side

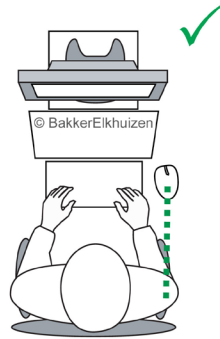


Avoid bending the wrist upward for extended periods of time, this motion pulls on the tendon causing friction in the carpal tunnel



Create a surface height close to elbow height

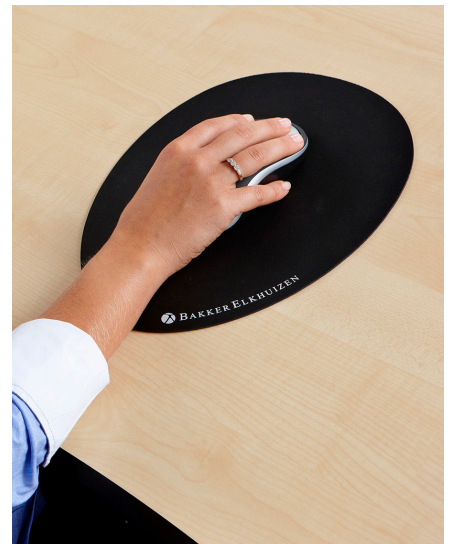
## MOUSE PLACEMENT



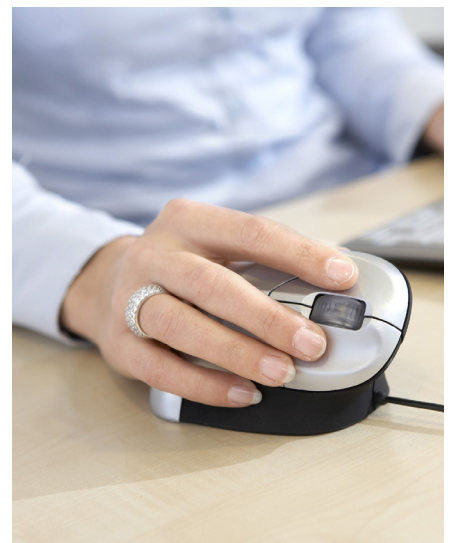
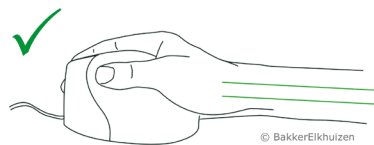
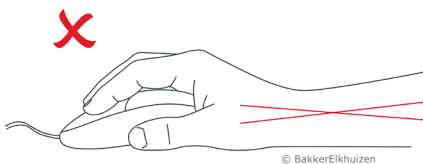
### ERGO TIP

If your keyboard and mouse are not in an ergonomic position the continual reach will force you to roll your shoulder(s) forward and place a static load on your muscles, both of which are high risk postures. Use a narrower keyboard, allowing the mouse to be placed closer.

## MOUSE PADS



## ERGONOMIC MICE





# CONNECT

Our team is equally adept at helping one person improve their home office or developing design and furniture packages for a corporate campus. Connect with one of our team members for information on specific products, to place an order, or to start developing healthier interiors.

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