

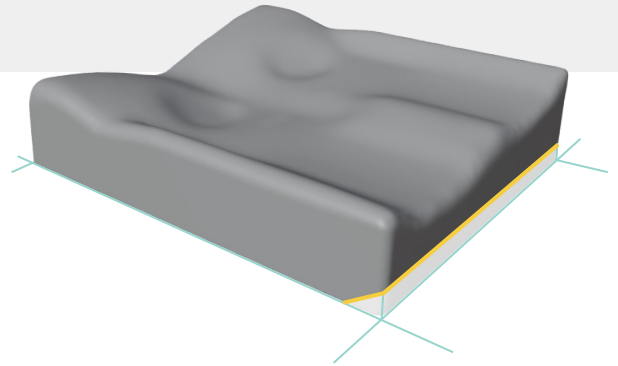
CUSHION MODIFICATION and ACCESSORY OPTIONS ●●●●

The following is an at-a-glance reference to the cushion shape modifications and accessories available through Matrix Seating Systems, to help understand changes being made and their purpose.

Please reference the CUSHION MODIFICATION DECISION TREE to help determine whether one or more cushion modifications or accessories may be needed.

UNDERCUTTING (FRONT UNDERCUT)

Undercutting removes material from the front underside of the cushion to create space beneath the distal thighs. It reduces pressure at the front edge, improves circulation, prevents the cushion from pushing the pelvis backward, allows better foot placement for foot propellers, and accommodates limited knee extension or contractures.



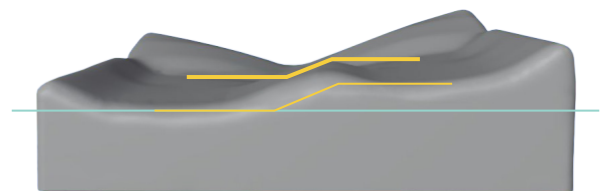
PRESSURE RELIEF ZONE (aka SOFT SPOT)

A pressure relief zone is a strategically targeted area within a seating system that provides increased immersion, softer support, or reduced loading to protect vulnerable regions. It redistributes pressure away from high-risk bony prominences to reduce discomfort, improve blood flow, and help prevent skin breakdown or pressure injury. Common areas include the ischial tuberosities, sacrum, coccyx, and trochanters.



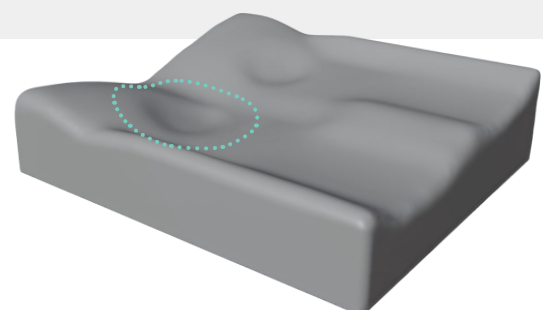
PELVIC OBLIQUITY BUILD UP (CORRECTIVE or ACCOMMODATIVE)

A pelvic obliquity build-up is a customized adjustment added to one side of a cushion to correct or accommodate uneven pelvic height. It helps level a reducible obliquity or safely support a non-reducible one to improve alignment, comfort, and pressure distribution.



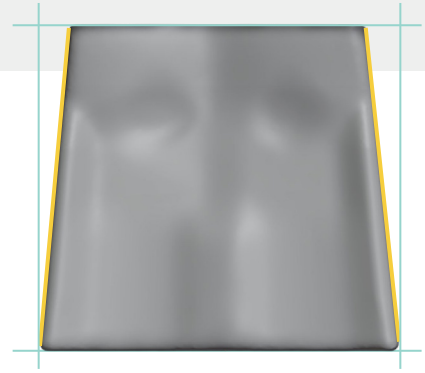
DIGITAL RELIEF

A digital relief is a precisely designed area of off-loading created within a 3D printed or digitally modeled cushion to reduce pressure over sensitive or high-risk anatomical regions.



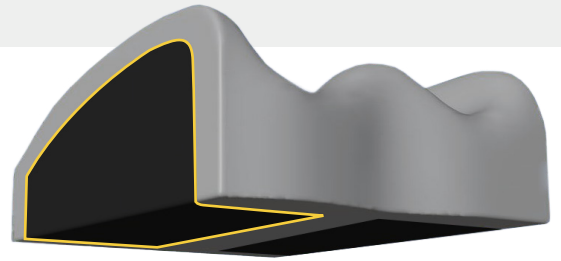
TAPERED CUSHION

A tapered cushion is designed so the front or rear of the cushion narrows to better fit the wheelchair frame and match the client's individual body dimensions.



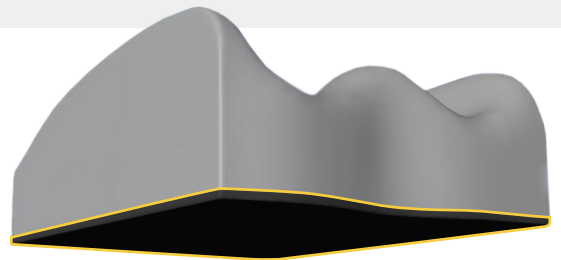
LATERAL THIGH REINFORCEMENT

Lateral thigh support reinforcement adds ABS to the outer edges of a foam cushion, increasing the rigidity of the lateral adductors and enhancing overall postural stability of a foam cushion.



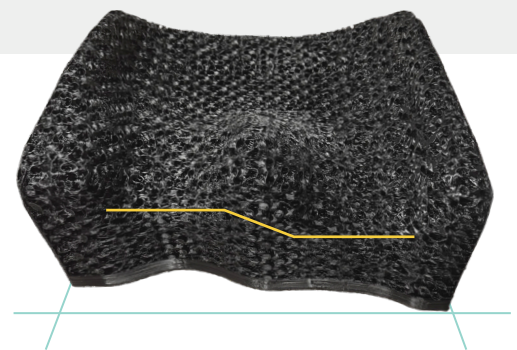
INTEGRATED RIGIDIZER

The integrated rigidizer is an ABS layer added to the bottom surface of a foam cushion or an internal reinforcement integrated within the base of an AIREZ cushion. This component can help maintain cushion shape, improve stability, and reduce seat-sling hammocking.



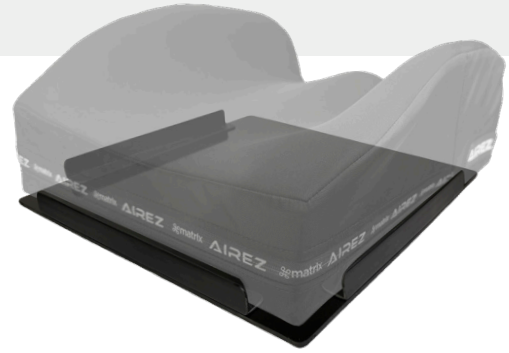
ONE-SIDE LEG LENGTH ADDITION

A one-side leg length addition is a custom cushion modification that adds material to one femoral side of the cushion to accommodate a true or functional leg length discrepancy. This adjustment ensures that each thigh receives appropriate support based on its individual length, helping maintain pelvic alignment, improve weight distribution, and enhance sitting stability and postural alignment.



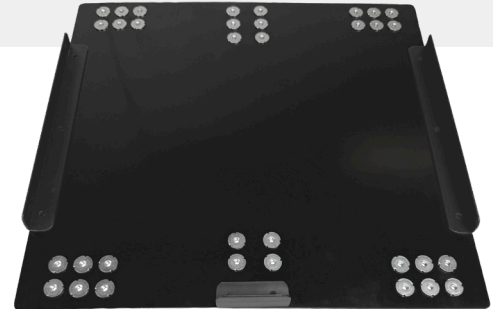
SEAT POSITIONING TRAY

The seat positioning tray is an ABS rigid base that mimics the cushion's underside and velcros securely onto the seat pan. Side and rear tabs guide the cushion back into proper alignment after removal, ensuring consistent positioning relative to the back support. The rigid base also helps prevent seat-sling hammocking, maintaining a stable and supportive seating surface.



SEAT POSITIONING TRAY WITH T-NUT UPGRADE

With the pre-installed T-nut upgrade, the Seat Positioning Tray becomes a versatile mounting platform capable of securely attaching back hardware brackets, positioning belts, thigh or knee support hardware, and a variety of adaptive accessories, allowing precise, repeatable alignment without the need to modify the tray.



NOTCHING THE CUSHION

A modification in which small cutouts or recessed areas are created in the cushion to accommodate wheelchair components including back canes, rails, and seat belts. These can allow the cushion to sit fully and securely on the seat pan without interference, preventing forward displacement and ensuring proper alignment with the back support and other wheelchair parts.

