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# Features, Benefits, and Considerations for QUICKIE Folding Wheelchairs

## How do you choose?

In a previous blog, [Why Technology Matters for Folding Wheelchair Riders](#), we discussed the clinical implications for choosing a folding frame versus a rigid frame. QUICKIE has different models (QUICKIE 2, QS5 X, QXi, M6) of folding manual wheelchairs, each having unique features. During the clinical evaluation, as the therapist, you will determine the client’s functional abilities and goals. By knowing your options, you will be able to make an informed decision about which product will best meet the rider’s needs by matching the available features of the frame with the rider’s individual goals and abilities. Below are some considerations when choosing between various QUICKIE folding wheelchairs.



QS5 X	QUICKIE 2	QXi
<ul style="list-style-type: none"> <li>• Lightweight</li> <li>• FreeFold and Fold-n-Lock Technology</li> <li>• Personalized style with functional features</li> </ul>	<ul style="list-style-type: none"> <li>• Personalized fit and broad configuration options</li> <li>• Modularity and adaptability</li> <li>• Meets simple to complex seating and mobility needs</li> </ul>	<ul style="list-style-type: none"> <li>• Lowest seat-to-floor height at 12.5"</li> <li>• Simplistic and durable: minimizes maintenance</li> <li>• Ease of serviceability</li> </ul>

## Low Seat-to-Floor Height

The QXi has the lowest seat-to-floor height (STFH) at 12.5 inches with 4-inch casters or 13 inches using 4-5" casters and 22-24" rear wheels. The QUICKIE 2's lowest STFH is 13.5 inches and the QS5 X starts at 14 inches. A rider with hemiplegia or who has better strength and mobility in their lower extremities than their arms may require an especially low seat-to-floor height for optimal foot propulsion. A young child or riders with short statures may also benefit from a low seat-to-floor height.

## Growth and True Fit

As discussed in the blog [Benefits of the True Fit Growth Program](#), you may need to consider growth needs for your clients. Do you have a growing child/adolescent or an adult who is prone to weight fluctuation after a new injury or due to a change in medical status? The QUICKIE 2 and QS5 X offer True Fit which allows one free growth kit within a 5-year period. The QUICKIE 2 is a great choice for pediatrics due to endless configuration options as well as frame sizes as small as 12x12", with growth available through True Fit as mentioned above. The QUICKIE 2 also has a depth-adjustable rear frame.

If weight gain is the concern, the QUICKIE 2 has a width range up to 20" with a heavy-duty option up to 24". The M6 is available in widths up to 30".

## Modularity

The QUICKIE 2 has been a top choice in the industry since the 1980s and for good reason. The QUICKIE 2's modular frame by far has the most options for individualized customization. The 11-page order form illustrates just how many options are available to meet most needs. From elevating leg rests to 90-degree hangers, or the most back height options from which to choose (9-21 inches), the QUICKIE 2 is the right choice for riders with even the most complex or changing needs. Due to its modularity, the side frames, axle plate and front riggings, along with multiple other options can be swapped out to ensure the wheelchair fit remains appropriate as the client's postural and functional requirements evolve over time.

## Weight

The QS5 X is one of the lightest folding frames on the market. Having a lightweight folding wheelchair may be a necessity for riders or their caregivers to safely and independently lift the wheelchair into their vehicle for travel outside the home. The QS5 X is made of heat-treated 7000-series aluminum designed for an exceptionally high strength-to-weight ratio and is used in many aerospace applications where strength, durability, and weight are essential factors.

While weight does play a role in propulsion efficiency, as increased weight increases rolling resistance, weight alone is not the only consideration. The [RESNA Position Paper](#) states that optimal ultra lightweight wheelchair configuration is essential to maximizing functional potential, propulsion efficiency, and wheelchair performance. For additional information on this topic you can review our previous blog: [Weighing Weight: Thinking Critically about Wheelchair Optimization](#)

## Configurability

Proper configuration maximizes a rider's functional performance. Whether the rider is independent using their upper and/or lower extremities or dependent; maneuverability, stability, and postural alignment can be optimized by selecting the appropriate frame options to meet the individual needs of the rider. The QUICKIE 2, QS5 X, and QXi all have the ability to adjust STFH, center of gravity, back angle, and seat slope to optimize the fit and function of a rider's wheelchair to ensure best outcomes. From the RESNA Position Paper on the Application of Ultralight Manual Wheelchairs: "When a mobility device is matched to the individual, it can facilitate more active engagement, meaningful interactions, and opportunities, as well as a person's satisfaction with how they are able to participate. It is important to note that this opportunity is only realized if the ULWC is properly and individually configured."<sup>1</sup>

## Foldability

The QS5 X features FreeFold technology which is an innovative cross-brace design that reduces folding forces resulting in 40% energy savings with every fold. This makes folding the wheelchair a breeze, which riders and caregivers will surely appreciate. It also offers an optional folding fastener (Fold-n-Lock) that keeps the wheelchair tightly locked to prevent any unintentional opening during transport.

## Fixed Front End

For riders who would benefit from a rigid frame but require a folding frame for other reasons, a fixed front end may be recommended to help rigidize the wheelchair and reduce overall weight. It may also reduce overall length, making the wheelchair more maneuverable in tight spaces. The lack of swing-away components results in fewer moving parts, thus reducing maintenance and improving durability. The combination of being more rigid, lighter weight and more maneuverable results in increased propulsion efficiency for the rider. The fixed front end feature is available on the QS5 X.

## Increased Weight Capacity

What about bariatric clients? Having a heavy-duty option is important to ensure safety and durability of a wheelchair. The QUICKIE 2 offers a heavy-duty package with a weight capacity up to 350 lbs. and seat size range of 18-24" wide. The M6 has a 650-pound weight capacity with a seat width range from 22-30".

## Durability and Serviceability

Durability may be a necessity due to increased tone, spasticity, dystonia, thrusting, behavioral issues or for clients who are especially rough on their wheelchair. Access to service and repairs may also be a consideration for some clients.

The QXi is a durable frame made of 6000-series aluminum. The one-piece side frames and three-arm cross-brace that locks inside the side frames reduce moving parts and give the folding QXi wheelchair a more rigid ride quality. The QXi wheelchair is also remarkably easy to service. Many of the most common adjustments, including center of gravity, seat height, camber, and back height, can be made using only one tool. The QXi's low-maintenance design ensures less downtime for the rider.

The QUICKIE 2 is also known for its durability. It features Q-Fit technology and is made of 7000-series aerospace aluminum for increased durability and reliability. Q-Fit is characterized by the tight fit of arm-rests (swing-away, flip-back, and removable options), composite side guards, hanger latches, footrest clamps, and seat rail saddles.

## Personalization

When it comes to style, all QUICKIE folding frames have a variety of color options, from sophisticated to fun, to express a rider's style and personality. The QS5 X and QUICKIE 2 have the option of an anodized color package to accent the frame color. The QS5 X also has the ability to coordinate the cross-brace, caster fork, and wheel colors, which further provides personalized design. The optional LED lights and ergonomic touch points also add unique touches to enhance aesthetics and functionality. The QS5 X also has an online 3-D visualizer which allows the rider to participate in the design and make choices based on computerized images. The resultant graphic representation of the wheelchair allows the clinician and rider to see how the wheelchair will look in its final configuration.

## Power Assist

For riders who require power assist to increase their independence with self-propulsion, reduce shoulder pain and/or fatigue with propulsion, or who may not be ready or willing to transition to a full power wheelchair, the Empulse R90 is an option. This power add-on device has a folding frame adapter which is compatible with the QS5 X and the QUICKIE 2. The sturdy spring-loaded crossbar makes adding power assist to a folding frame quick and easy. The durable design ensures that it will stay in place for optimal performance. The adapter frame fits folding wheelchairs 12-21 inches wide.

If the goal is to reduce the effort of pushing and minimize the caregiver's risk of fatigue and injury, power assist can be a valuable solution. In that case, the Empulse R20, a power-assist device designed to support caregivers, can be considered. Whether assisting the rider uphill, downhill, or on a long trip, the R20 can help in all situations and not impede the rider's ability to self-propel. It can also remain on the wheelchair when folded or easily removed to make transport easier. The R20 is available on all QUICKIE folding wheelchairs with seat widths up to 23".

## One-Arm Drive

A person with hemiplegia or an upper extremity amputation may require a one-arm drive attachment to effectively propel the wheelchair with their more intact upper extremity. Both the QUICKIE 2 and QXi offer one-arm drive attachments.

## Conclusion

A properly configured ultra-light wheelchair optimizes a person's function and independence while also providing positioning and postural control. No matter what goals a rider may present to optimize fit, function and style, QUICKIE has a folding wheelchair frame to meet every need. From the QS5 X with its innovative oval tubing, heat-treated 7000-series aluminum lightweight frame, FreeFold and Fold-n-Lock technologies; to the classic tried-and-true QUICKIE 2 with over 100,000 configuration options; to the simple and durable QXi, the choice is yours. What will you choose? Hopefully after reading this resource, you have a better understanding of the features, benefits, and considerations of QUICKIE folding frame wheelchairs. This will help you choose the right folding frame for your client.

**For a comprehensive comparison of features across all QUICKIE manual wheelchairs, explore the [QUICKIE Manual Wheelchair Reference Guide](#).**

	QS5 X	QUICKIE 2	QXi
Lowest STFH			X
True Fit option	X	X	
Most modularity/configurations offered		X	
Lightest weight	X		
Fixed front end	X		
Heavy duty package		X	
FreeFold and Fold-N-Lock	X		
One tool adjustments			X
Compatible with R90	X	X	
Compatible with R20	X	X	X
One-arm drive		X	X
Cross-brace in-between frame			X
Seat width range	13-20"	12-24"	14-20"
Seat depth range	13-20"	12-22"	14-20"

## Chairs Folded



QS5 X



QUICKIE 2



QXi

## References

1. Berner, T., Bernstein, J., Black, J., Cabarle, M., Roesler, T., Scarborough, S., Ott, J., & Worobey, L. (2022). RESNA position on the application of ultralight manual wheelchairs. Rehabilitation Engineering & Assistive Technology Society of North America.

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