BROTHERWOOD®

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# The Brotherwood® Difference

An Essential Guide to WAV Design
for Medical & Clinical Professionals

Designed &
Engineered in
Great Britain

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# About Brotherwood

Brotherwood have been converting cars for wheelchair passengers since 1985. Over that time we have developed a unique approach to vehicle conversion, one which puts the experience of the wheelchair user first.

As a result, Brotherwood conversions stand a class apart for their comfort, visibility, inclusion, safety and ease of use.

Read on to see the unique benefits that this expertly-engineered process can offer for your clients, providing mobility that enhances quality of life and ensuring a successful outcome.

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# Passenger Comfort


"A longitudinally central location in which a person is seated as close to the vehicle chassis as possible, i.e. as low in the vehicle as possible, is considered to be the most comfortable position in which to be transported in a vehicle."

Posture & Mobility Group
"Best Practice for the Transportation of People Seated in Wheelchairs"

Ensuring that the wheelchair travels in the centre of the vehicle, on a **flat, level lowered floor,** contributes to **more comfort** for the wheelchair user. Sitting centrally in the car creates a **smoother ride**, with a naturally ergonomic seating position.

A lowered floor also reduces the **centre of gravity** of the wheelchair user. This is extremely important as it greatly reduces the feeling of 'body roll' as the vehicle corners, leading to a much more comfortable and enjoyable ride.

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# Space & Visibility


Ensuring that the wheelchair is positioned with all wheels on a level surface gives a much more natural seating angle, offering **improved visibility** out of the front and side windows.

By lowering the eyeline of the wheelchair user, it enables better outward visibility, without having to bend or crane their neck to enjoy the view. Combined with the flat, level lowered floor, **optimal posture** is maintained at all times, meaning that longer journeys can be made in comfort.

The lowered floor also creates **more headroom for the wheelchair user** - particularly useful for taller clients, but creating a beneficial feeling of spaciousness for all passengers.

> "The field of vision and visibility of the wheelchair occupant, for communication or attendance, are also important considerations when choosing the wheelchair position within a vehicle."
>
> Posture & Mobility Group
> "Best Practice for the Transportation of People Seated in Wheelchairs"

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# Inclusion & Safety


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"When using a typical four-point wheelchair tie-down, it is best to position the wheelchair so that the floor anchor points for the rear tie-down straps are directly behind the securement points on the wheelchair. A side-view angle of 30° to 45° relative to the horizontal is desirable."

Posture & Mobility Group
"Best Practice for the Transportation of People Seated in Wheelchairs"

Many wheelchair users comment on how they have felt isolated travelling in other Wheelchair Accessible Vehicles. With a Brotherwood® conversion, the lowered floor and central wheelchair position enables wheelchair users to travel **inclusively with family and friends** as part of the social group.

An equal head-height for able-bodied and wheelchair seated passengers alike enables easier conversation and promotes the feeling of **inclusion and wellbeing** for the wheelchair user.

The extreme rear of the vehicle is not considered to be **the safest position** within the vehicle for the wheelchair user, who may feel more vunerable when seated too close to the rear door.

Moving the wheelchair position forward **reduces this risk** and enables the WTORS (Wheelchair Tie-Down & Occupant Restraint System) to affix at the recommended 45 ° angle.

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# Easier Access


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A lowered floor is not only better when travelling; the loading procedure is also made much easier for all. By lowering the floor, the gradient of the ramp is reduced.

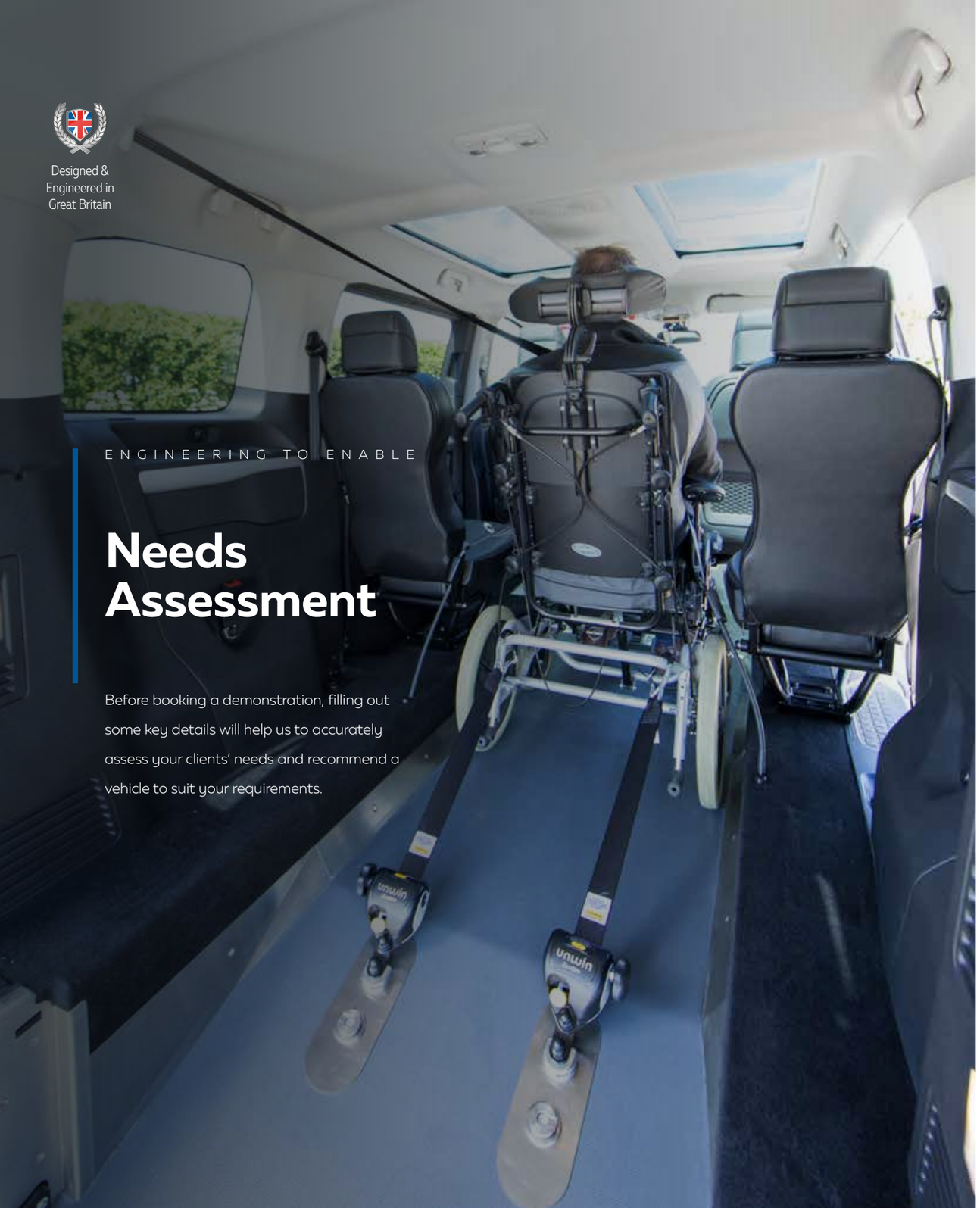
This makes loading and unloading **easier and safer for wheelchair user and carer alike**, and means that the lightweight, counterbalanced rear ramp can be shorter, making it easier to deploy and use in almost any parking space.

The ramp is also durable and maintenance-free, and ensures reliable access at any time.

**Passenger Lifts vs. Ramps**

"Use of passenger lifts for access to vehicles has proven to be a high risk activity where wheelchairs and their occupants have suffered injury as a result of falling from a lift platform.
Passenger lifts are required by EU law to undergo a critical safety inspection every 6 months."

Posture & Mobility Group
"Best Practice for the Transportation of People Seated in Wheelchairs"



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# Needs Assessment

Before booking a demonstration, filling out some key details will help us to accurately assess your clients' needs and recommend a vehicle to suit your requirements.

## Wheelchair & User Dimensions

**Seated Height** ____ cm / ____ in

Enter the Wheelchair User's Seated Height from ground to top of head at normal posture.

**Wheelchair Length** ____ cm / ____ in

Enter the Wheelchair Length from furthest rearward point to furthest forward point

**Wheelchair Front Track** ____ cm / ____ in

Enter the Wheelchair Width at the front wheels.

**Wheelchair Front Track** ____ cm / ____ in

Enter the Wheelchair Width at the front wheels.

**Wheelchair Armrest Height** ____ cm / ____ in

Enter the Height of the armrests.

**Wheelchair Armrest Width** ____ cm / ____ in

Enter the Width of the armrests.

## Weights

**Wheelchair Weight** ____ kg

Enter the Weight of the Wheelchair in kg.

**Occupant Weight** ____ kg

Enter the Weight of the Wheelchair User in kg.

## Wheelchair Details

**Wheelchair Make** _____

Enter the Name of the Wheelchair imanufacturer.

**Wheelchair Model** _____

Enter the Model Name or Number of the Wheelchair.

**Wheelchair Type**

Enter the type of mobility device.

☐ Push / Manual Wheelchair ☐ Powered / Electric Wheelchair ☐ Mobility Scooter

## Vehicle Requirements

**Transmission**

☐ Manual

☐ Automatic

**Fuel Type**

☐ Petrol ☐ Diesel ☐ Electric

**Number of Seats** _____

## Demonstration Details

| | | | |
|---|---|---|---|
| Date of Demonstration | | Time of Demonstration | |
| Location | | Client Name | |
| | | Appointee | |
| | | Client Disability | |
| | | Age | |

## Vehicle Details

| | | | |
|---|---|---|---|
| Vehicle Make | | Vehicle Model | |
| Transmission | ☐ Manual ☐ Automatic | Registration | |

## Demonstration Notes


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# Home Demonstrations

Use our helpful form to record key information about your clients' demonstration.

**The UK's Wheelchair Accessible Vehicle Specialists** | established in 1985


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