



Designed &  
Engineered in  
Great Britain



**BROTHERWOOD**®

ENGINEERING TO ENABLE

by **SENZATI**

MERCEDES-BENZ V-CLASS

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## Our Service Promise

The highest quality product deserves the highest quality service. We are committed to delivering personal, expert, friendly service, to every client - without pressure or obligation.

**As part of our commitment to providing the perfect product for your needs, we will perform a free home demonstration and provide your personal needs assessment, without charge, at a time and place that suits you.**

We gather feedback from every client to ensure our service is the best it can be - and you can see all feedback, good or bad, on our website.

**Rated 4.8/5**



For Customer Service  
based on 238 verified reviews



*"On a drive from Paris to Derbyshire the car came up trumps... We can't thank you enough for this wonderful vehicle. The only problem is it's spoiled us - we'll never be able to settle for anything less now!"*







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## A Quality Provenance

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The Brotherwood® 'Klaster' Mercedes-Benz V-Class conversion is designed and engineered from the ground up at our manufacturing facility in Dorset, England, to be the ultimate Wheelchair Accessible Vehicle.

The Klaster conversion is unique in its development, handbuilt and finished by a select team of our most experienced engineers; ensuring a quality of finish and craftsmanship a class above any other Wheelchair Accessible Vehicle available today.

We have been manufacturing Wheelchair Accessible Vehicles since 1985, with attention to detail, customer care and commitment to quality that means our 'WAVs' carry an excellent reputation across the world; we believe that the 'Klaster' is our best work yet.



# A Heritage of Trust & Understanding

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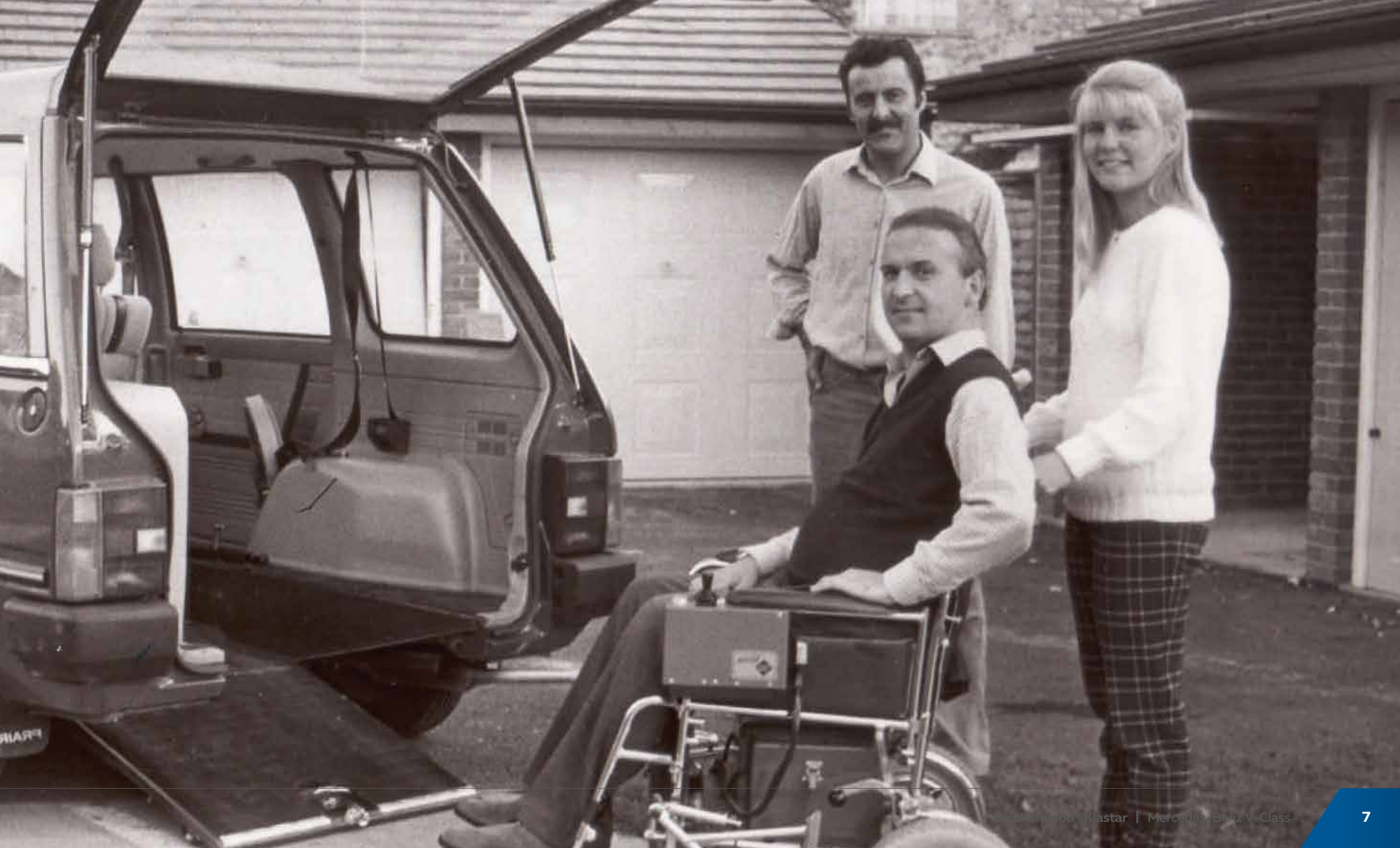
Brotherwood® was founded in 1985 by Rod Brotherwood OBE, and began with the conversion of a Nissan Prairie for wheelchair user, friend and neighbour, John Lambert. John, a former airline pilot, had become dependent on his wheelchair as a result of a motorcycle accident.

At this time the 'Wheelchair Accessible Vehicle', as it is known today did not exist. The only options available to John were clumsy, conspicuous vehicles, which John referred to as 'Pope-mobiles'. John asked Rod, a vehicle engineer, if he could use his extensive knowledge to design and build him a better vehicle which could transport him in his wheelchair.

John wanted the things anyone would look for in a new car; good looks, convenience, and everyday usability. He especially wanted something that didn't stand out as a vehicle for the disabled. This was a point Brotherwood® has never forgotten.

Rod set about designing an innovative new vehicle conversion that enabled John to travel with his family, comfortably and discretely. By understanding John's needs, Rod produced a unique vehicle, which perfectly suited John's lifestyle, and the Brotherwood® conversion process was born.







*57" internal headroom at the travelling position*

*Remote-controlled electric one-piece ramp with high traction coating*

*Full-size second-row passenger seats with ISOFIX fittings*

*Flat, level lowered floor for central wheelchair position*

*Rear tie down points with self-tensioning STORQ system*

*Custom 57L capacity alloy fuel tank*





## Innovation and Evolution

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Since our foundation we have strived to produce the very best Wheelchair Accessible Vehicles. The original Brotherwood® ethos of carefully hand-building a discrete vehicle that provides comfort, inclusion and visibility for the wheelchair passenger still holds true today, and is evident in every vehicle we create.

Whilst our ethos has remained unchanged, Brotherwood® has grown to employ over 50 staff and apprentices producing hundreds of vehicles per year at our dedicated production facility in Beer Hackett, near Sherborne in Dorset.

With this experience we have adopted industry-leading design and engineering techniques to ensure that our vehicles deliver an outstanding travelling experience for all. We have strived to establish harmonised safety standards across the Wheelchair Accessible Vehicle market, ensuring that our vehicles are independently tested and approved to the highest levels.

Throughout these changes we have retained our core principle: to fully understand and appreciate your lifestyle, in order to provide you with the very best Wheelchair Accessible Vehicle for your needs.

# The 5 Benefits of a Lowered Floor

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## 1 Greater Space

The Brotherwood® Klastar conversion features a unique full length, flat, level lowered floor. By lowering the floor, more interior space is created for the wheelchair user, for a more enjoyable travelling experience. The lowered floor conversion is also extremely discreet and visually imperceptible from an unadapted vehicle.

## 2 Superior View

Lowering the floor also creates better visibility for the wheelchair user, who can enjoy a clearer view out of the windows and windscreen of the vehicle. Many wheelchairs, especially power chairs, sit higher than an average car seat - making travelling in a WAV with a standard height floor uncomfortable and hard to see out of.

## 3 Composed Ride

By lowering the floor that the wheelchair travels on, the centre of gravity for the wheelchair user is also lowered. This considerably reduces the sensation of body roll as the vehicle leans from side to side when cornering, making every journey more enjoyable and enabling longer journeys without discomfort.

## 4 Inclusive Experience

Lowering the floor creates an equal head-height for able-bodied and wheelchair seated passengers alike; this enables easier conversation and promotes the feeling of inclusion for the wheelchair user. Sitting between the rear passengers, the central wheelchair position enables the wheelchair user to travel as part of the family.

## 5 Convenient Access

The unique 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 also reduced. This makes loading and unloading easier and safer, and means that the ramp can be shorter, making it easier to deploy and use in any parking space.



**1450mm / 57"**  
INTERNAL HEADROOM





## SEATING LAYOUT

**Comfort. Inclusion. Safety.** The Brotherwood® lowered floor conversion places the wheelchair user centrally, between 2 standard size Isofix-approved passenger seats. As a further option, up to two folding cantilever seats or a full-size spare wheel and bracket can be equipped in the rear.

*European Community Whole Vehicle Type Approval No: e11\*2007/46\*3833\*01*

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*The Klastar can be completed with 2 optional third row cantilever seats, finished in matching Mercedes-Benz upholstery, which tip and fold when wheelchair entry or egress is required.*





## Class Leading Capacity



Registered Firm  
ISO 9001:2015

|                               | mm   | inches |
|-------------------------------|------|--------|
| Entry Height                  | 1425 | 56.1   |
| Max. Internal Headroom        | 1450 | 57.1   |
| Max. Wheelchair Armrest Width | 660  | 26     |
| Lowered Floor Length          | 2200 | 86.5   |
| Lowered Floor Width           | 711  | 28     |
| Access Ramp Length            | 1070 | 42     |
| Access Ramp Width             | 740  | 29     |
| Exterior Length               | 5140 | 202.4  |
| Exterior Width ex. mirrors    | 1928 | 76     |
| Exterior Width inc. mirrors   | 2249 | 88.5   |

Internal headroom may vary depending on wheelchair travelling position.

# Brotherwood & Sensati: A Quality Partnership

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At Brotherwood®, we strive to create the most comfortable, inclusive, and safe travelling experience for the wheelchair user, and for over 34 years have pushed the boundaries of quality for Special Purpose Vehicles across the UK and the world.

Our mission to deliver an exceptional class of vehicle is realised by our partnership with Sensati®: the recognised leader in bespoke, handcrafted luxury interiors for Mercedes-Benz Vito and V-Class.

Sensati® are an approved Mercedes-Benz partner, coachbuilders of VIP Luxury People Carriers that are second to none. Sensati® share our commitment to the highest quality standards, with strict conformity of production and European Whole Vehicle Type Approval.

Brotherwood® and Sensati®: two Great British brands; one amazing Special Purpose Vehicle.



SENZATI



*Wheelchair customisation available at additional cost. Contact us for details.*









**SENZATI**

## Another Level of Refinement

We believe that just because a vehicle is adapted for accessibility, it should not sacrifice comfort; practicality should be no barrier to luxury. That is why we have collaborated with Sensati® to deliver a Special Purpose Vehicle of unprecedented quality.

We begin with our class-leading 'Klaster' Mercedes-Benz V-Class conversion - the only adaptation of its' kind, with a long, flat, level lowered floor, powered access ramp, custombuilt passenger seats and integrated winch and restraint system with STORQ self-tensioning rear restraints.

The expert Sensati® coachbuilders enhance our flagship with a handcrafted, customised interior package of outstanding refinement, resulting in travelling experience unlike any other adapted vehicle. From the quilted suede headlining, complete with sensory lighting, to the elegant leather trim panels and upholstery, the Sensati® package is exquisite in its' detail.

At the centre, a bespoke centre console, beautifully finished, presents the passengers with a full interactive experience via colour touchscreen with Apple TV and audio control; plus a pair of air-flow controls, for optimal comfort.

# Bespoke Luxury You Can Feel

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Dare to be different. In addition to the standard range of colours and trims available from Mercedes-Benz, there is an almost unlimited range of Leather & Stitch combinations available, enabling you to build the Special Purpose Vehicle of your dreams. Mix and match your choice of upper suede finishing for the headlining and pillar trims, trim colour and design for the door, console and dash panels, and lower furniture upholstery for the seats and side panels. Every Klastar by Sensati® is built to your exacting requirements - so there's no reason not to have the accessible vehicle you've always wanted.

For an added touch of quality and comfort, why not match your wheelchair to your vehicle? Sensati can even retrim your existing wheelchair seat in flawless matching Super Soft diamond quilted Nappa Leather, in the same style and colour as your chosen interior finish. Enjoy the best seat in the house, centrally seated within easy reach of the Apple TV and DAB Radio colour touchscreen.

The Sensati interior is so comfortable, you'll never want to leave - but you can take the comfort with you, with a bespoke hand-finished upholstery set for your wheelchair.



SENZATI









*Senzati Design Pack includes:*

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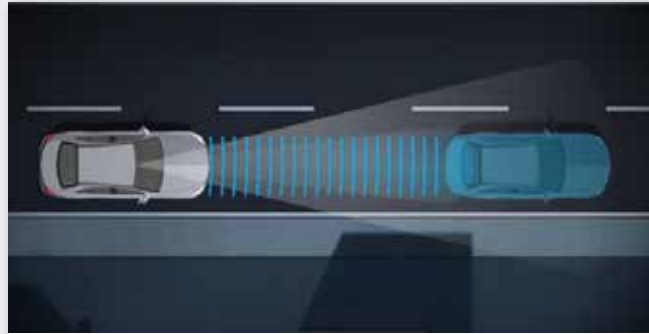
- *Diamond Quilted Fibre Optic Headlining with Matching A,B,C & D Pillars*
- *Senzati Soundproofing & insulation package*
- *Entire Side Furniture, Dash Lower and Tailgate retrimmed in Super Soft Nappa Leather*
- *Fascias and dash refitted in bespoke gloss veneer*
- *4 Seat senzati retrim in Diamond Quilted Super Soft Nappa Leather*
- *Long Centre Console with Padded Lifting Armrest, Audio Panel, Double Din Touchscreen, Additional Cup Holders in Stainless Steel with Flocked Spares*
- *4G Roof Mounted Domed Antennae with On-Board Multi-User Wi-fi (sim required)*
- *Apple TV, DAB radio, FM and Bluetooth*
- *Additional USB Charging Points Mounted in Side Furniture*
- *Senzati Pressed Illuminating Stainless Steel Kick Plates*
- *Senzati Exterior Badge Set*
- *Sound Output via MB Audio Aux facility*
- *240v Sockets in Rear Passenger Compartment*

*Wheelchair customisation available at additional cost. Contact us for details.*



### ATTENTION ASSIST

This innovative system can use a variety of parameters to detect signs of tiredness and alert the driver when it's time to take a well earned break.



### PRE-SAFE ANTICIPATORY SAFETY SYSTEM\*

If the system detects a critical driving situation, preventive occupant protection measures are initiated, including reversible seat belt tensing, and closure of windows



### SIDEWIND ASSIST SYSTEM

Detects sudden, strong gusts of wind to the side of your vehicle, and helps to prevent your car from "drifting" out of lane with targeted braking on one side of the vehicle.



### HOOK-I PAWRS

The Power Assisted Wheelchair Restraint System is tested and approved to safely restrain wheelchairs in conformance with ISO10542.



### STORQ SYSTEM

The new patented Brotherwood STORQ System makes securing the wheelchair simple. Ensuring the wheelchair restraints are tensioned is critical for passenger safety.



### DISTANCE PILOT\*

Comfortably maintains the distance to the vehicle in front when driving in stop-start traffic, automatically maintaining a set speed above 20 km/h and keeping a safe distance.



#### TESTED & APPROVED

Brotherwood® WAVs meet the highest standards, and the Klastar is no exception, having been tested and approved to European Community Whole Vehicle Type Approval standards. This vehicle conversion has undergone rigorous testing to ensure high levels of performance and safety, giving you complete peace of mind.

## Setting the Standards in Safety

Safety for all means peace of mind; for driver and passengers alike.

The Mercedes-Benz V-Class is the pinnacle of passenger safety, with innovative driver assistance and passive safety systems safeguarding all occupants.

The Brotherwood Klastar conversion is also designed with passenger safety in mind; the Power Assisted Wheelchair Restraint System is tested to restrain wheelchairs in conformance with ISO10542, whilst the standard 'STORQ' Self-Tensioning Restraint System automatically applies tension to the rear wheelchair restraints; ensuring a safe and stable ride for the wheelchair user.

The two standard size second-row seats are not only comfortable, but are Isofix approved, for safe journeys for the whole family.

\*Some features shown may be optional extras. Please refer to the manufacturer for up-to-date model specifications.

# Tailored to Your Needs

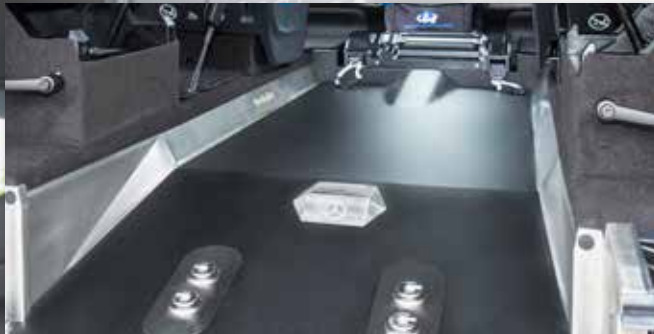
Brotherwood® conversions are recognised as the very best, because we go the extra mile to put the wheelchair user first. Our innovative engineering solutions are designed to make access easy and journeys more comfortable for all.

By designing our conversions around the demands of the wheelchair user we can create vehicles which are not only the most comfortable and inclusive, but also easy to use for the driver, carer or attendant.

We leave no stone unturned in our quest to make our Wheelchair Accessible Vehicles the very best they can be. So when you travel in a Brotherwood® conversion, you know it was designed with your needs in mind.







### LOWERED FLOOR

The low, flat, level floor increases the headroom, and the visibility, for the wheelchair user, as well as offering a more comfortable ride with a lower centre of gravity.



### SECOND ROW SEATS

The full size rear passenger seats are Isofix approved, ensuring that the whole family can travel together. Centre armrests can be optionally equipped for greater comfort.



### DURABLE DESIGN

From the hard-wearing floor covering, to the stainless steel finishing touches, the conversion is built to be durable, easy to clean, and finished to match the interior ambience.



### POWERED RAMP

Convenience and luxury go hand in hand. The access ramp with high traction surface can be deployed without effort using the remote control, with manual override if necessary.



### INTERIOR LIGHTING

Clever touches hint at the attention to detail in the design: The interior is gently illuminated by bespoke lighting, meaning no more searching in the dark for restraint belts.



### POWERED LOADING

In addition to the ability to safely restrain the wheelchair, the PAWRS unit has a powered winching facility that enables effortless loading of weights up to 250kg (< 15°).



### ACTIVE PARKING ASSIST

Helps the driver find somewhere to park and assists when reversing into or out of a parking space, making every journey relaxing and hassle free.



### MBUX INFOTAINMENT SYSTEM

Activated by saying "Hey Mercedes", the new intelligent interface lets you control many of the infotainment functions, including destination, phone calls or music selection.



### HEATED FRONT SEATS

The driver and front passenger seats are finished in Nappa leather and can be independently heated in 3 stages, making long journeys and cold days comfortable.



### THERMATIC CLIMATE CONTROL

The 3-zone climate control automatically controls temperature, air flow and distribution to the front and rear, the climate is kept constant at the desired level at all times.



### 9G-TRONIC PLUS

The automatic transmission offers outstandingly smooth gear changes and tremendous potential for saving fuel, with intelligently optimised power delivery.



### MEMORY SEAT PACKAGE\*

For ultimate convenience, equip the optionally available fully electric front passenger and driver seats; with memory storage of multiple seat and exterior mirror settings.



## Luxury at Your Fingertips

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The Mercedes-Benz V-Class is the perfect base from which to create the ultimate Wheelchair Accessible Vehicle. A host of luxurious features and innovative technologies mean that driver and passengers alike enjoy a first-class travelling experience.

\*Some features shown may be optional extras. Please refer to the manufacturer for up-to-date model specifications.



## STANDARD EQUIPMENT

• = Standard feature   - = Not Available

| TRANSMISSION AND SUSPENSION                                 | SPORT | AMG LINE |
|---|-------|----------|
| 9G-TRONIC PLUS automatic transmission                       | •     | •        |
| Agility Control comfort suspension                          | •     | •        |
| Dynamic Select w/4 driving modes (Comfort, ECO, Sport, Ind) | •     | •        |
| ECO start/stop function                                     | •     | •        |

| EXTERIOR   | SPORT | AMG LINE |
|--|-------|----------|
| 19" AMG alloy wheels (4) – 7-twin-spoke design   | -     | •        |
| AMG styling – front & rear apron, side skirts, rear spoiler  | -     | •        |
| Anodised roof rails  | •     | •        |
| Automated headlamp assist  | •     | •        |
| Electrically folding mirrors and automatically dimming exterior driver's mirror and rear-view mirror | •     | •        |
| Electric sliding doors – both sides  | •     | •        |
| Headlamps – LED Intelligent Light System including integral LED daytime running lamps                | •     | •        |
| Heated windscreen wash   | •     | •        |
| Panoramic glass sunroof (V-Class Long only)  | •     | •        |
| Perforated fr. brake discs, calipers w/ Mercedes-Benz logo   | •     | •        |
| Radiator grille with star – two louvres in matte iridium silver                                      | •     | -        |
| Radiator grille – diamond w/ integrated star, chrome pins  | -     | •        |
| Rain-sensing windscreen wipers   | •     | •        |

| EXTERIOR   | SPORT | AMG LINE |
|--|-------|----------|
| Rear lamps – LED tail lamps, brake lamps and indicators            | •     | •        |
| Tinted rear windows – black  | •     | •        |
| Split tailgate – separately opening rear window with chrome handle | •     | •        |

| INTERIOR   | SPORT | AMG LINE |
|--|-------|----------|
| 12 V socket in boot/load compartment and rear passenger compartment                        | •     | •        |
| Ambient lighting – three colours   | •     | •        |
| ARTICO leather upper dashboard with contrast stitching                                     | •     | •        |
| Carpet floor covering in passenger compartment   | •     | •        |
| Chrome air vents   | -     | •        |
| Electric air heater system – 1.2 kW output   | •     | •        |
| Electric ventilation windows in passenger compartment                                      | •     | •        |
| Electric windows (front) with one-touch opening and closing, including obstruction sensors | •     | •        |
| Electronic key – chrome surround   | •     | •        |
| Footwell lighting, reading light and illuminated handle in rear compartment                | •     | •        |
| Illuminated front door sills with 'Mercedes-Benz' lettering                                | •     | •        |
| Instrument cluster with 5.5-inch colour trip computer                                      | •     | •        |

## STANDARD EQUIPMENT

• =Standard feature    - = Not Available

| INTERIOR  | SPORT        | AMG LINE        |
|---|--------------|-----------------|
| Locking glove compartment   | •            | •               |
| Lumbar support for driver and front passenger   | •            | •               |
| Luxury centre console with retractable cover, two cup holders, 12 V socket and multimedia box | •            | •               |
| Outside temperature display   | •            | •               |
| Seats – comfort driver and front passenger seats, including armrests                          | •            | •               |
| Seats – heated front seats, three stages  | •            | •               |
| Sun visors with illuminated vanity mirrors  | •            | •               |
| Sports pedals in brushed stainless steel with rubber studs                                    | -            | •               |
| THERMATIC 3-zone automatic climate control – front and rear                                   | •            | •               |
| <b>STEERING</b>   | <b>SPORT</b> | <b>AMG LINE</b> |
| Direct-Steer – speed-sensitive steering   | •            | •               |
| Steering column – manually adjustable for height and reach                                    | •            | •               |
| Steering wheel – 3-spoke multi-function, trimmed in nappa leather                             | •            | •               |
| Steering wheel – multifunction, controls audio and onboard settings                           | •            | •               |

| SAFETY AND ASSISTANCE SYSTEMS   | SPORT | AMG LINE |
|---|-------|----------|
| Anti-Theft Protection package Consisting of a break-in and anti-theft alarm system (ATA), interior monitoring and tow-away protection | •     | •        |
| Active Parking Assist with reversing camera   | •     | •        |
| Active Brake Assist & Adaptive brake lights   | •     | •        |
| Adaptive Brake System with HOLD function and brake drying in the wet  | •     | •        |
| Airbags – sidebag for driver and front passenger (combined thorax/pelvis bag)   | •     | •        |
| Airbags – windowbag for driver and front passenger  | •     | •        |
| Anti-lock braking system (ABS)  | •     | •        |
| ATTENTION ASSIST – can help alert to long journey fatigue   | •     | •        |
| Automated headlamp assist   | •     | •        |
| Brake wear warning display  | •     | •        |
| Central locking with interior switch, automatic locking   | •     | •        |
| Childproof locks for rear doors   | •     | •        |
| Cruise control with SPEEDTRONIC variable speed limiter  | •     | •        |
| Diesel Particulate Filter   | •     | •        |
| EASY-PACK automatic powered tailgate  | •     | •        |

## STANDARD EQUIPMENT

• =Standard feature    - = Not Available

### SAFETY AND ASSISTANCE SYSTEMS

|  | SPORT | AMG LINE |
|--|-------|----------|
| Electric parking brake                                   | •     | •        |
| Electronic Stability Programme (ESP )                    | •     | •        |
| First-aid kit and warning triangle                       | •     | •        |
| Hill Start Assist  | •     | •        |
| Seat belts – three-point                                 | •     | •        |
| Seat occupancy sensor for front passenger seat           | •     | •        |
| Service indicator ASSYST                                 | •     | •        |
| Sidewind Assist System                                   | •     | •        |
| Status display for rear seat belts in instrument cluster | •     | •        |
| Tyre pressure monitoring system                          | •     | •        |

### COMMUNICATIONS AND ICE

|   | SPORT | AMG LINE |
|---|-------|----------|
| Digital radio   | •     | •        |
| MBUX – 10.25 inch touchscreen display, with Mercedes me connect, and live traffic information | •     | •        |
| Mercedes me connect (standard services)   | •     | •        |
| Speakers with Frontbass   | •     | •        |
| Two USB ports and one SD card slot  | •     | •        |

## OPTIONAL EQUIPMENT

### Driving Assistance package

Blind Spot Assist, Distance Pilot DISTRONIC, Lane Keeping Assist and PRE-SAFE anticipatory safety system

### Parking Package with 360° camera

Cameras in front grille, wing mirrors and boot. PARKTRONIC with vehicle contours and guidelines displayed

### Memory package

Fully electric front passenger and driver seats; storage of seat and exterior mirror settings

### Burmester surround sound system

15 speakers and a 640 W DSP multi-channel amplifier

### Smartphone integration

MBUX Media System smartphone integration

### Mercedes me connect (Remote Online)

Onboard use of remote and location services, e.g. geographic vehicle monitoring, vehicle location, remote door locking and unlocking, remote interrogation of vehicle status. Remote Online subscription services are limited to three years from initial registration, and can be extended at additional cost

### Luxury centre console with refrigerator

Includes two temperature-controlled double cup holders in the front, a multimedia box with two USB ports and an SD card slot, a large stowage compartment and a 3.2-litre refrigerated compartment that can accommodate two half-litre bottles





Nationwide  
Support

## Aftersales & Warranty

We're not just here to get you on the road. Our dedicated Aftersales team are on hand to keep your Wheelchair Accessible Vehicle running at its' best for years to come. We appreciate that you may rely on your vehicle to keep you mobile, and we provide nationwide customer support to ensure that your WAV performs at its very best, no matter when you might need it.

Our team of mobile engineers provide dedicated customer support at a time and place that suits you. We can carry out a number of services on-site including:

- Annual WAV conversion safety checks
- Post delivery familiarisation visits
- Replacement of consumable conversion components such as restraint belts



**BROTHERWOOD**<sup>®</sup>  
ENGINEERING TO ENABLE

## The UK's Wheelchair Accessible Vehicle Specialists est. 1985



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Brotherwood.com



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Whilst we make every effort to ensure specifications are correct both conversion and manufacturer specifications are subject to change without notice.

Please contact us or refer to the vehicle manufacturer via local dealer or website for up to date specification, E&OE.



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