

# MINIBUS BUYERS GUIDE



**MINIBUS OPTIONS**

The Specialists for custom built minibuses

**30th Anniversary**



# Safe and reliable Accessible Transport Solutions.

Whether it is Flooring Systems, Wheelchair Lifts, Ramps, Wheelchair Tie-downs or Occupant Seatbelts; we offer quality products and on-time delivery worldwide.



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# Welcome

Welcome to the Minibus Options Buyer's Guide, a simple way to configure the perfect vehicle for your needs.

Whether you are a school, community transport operator, care home, outreach unit, patient transport service, special needs transport or even commercial passenger transport, Minibus Options can help you build a vehicle which suits you.

One of the leading wheelchair accessible minibus manufacturers in the UK, this year celebrating 30 years in the business, we have supplied over 5,000 minibuses to organisations all over the UK. This guide is aimed at customers who need wheelchair-accessible minibuses but we can also design and build highly specialised van conversions to suit any application.

As a core philosophy, we don't set out to sell what we have 'off the shelf', we work with our customers through the buying process to ensure that the vehicle we build to order will be perfect for your customers... the passengers.

We build to Type Approval standards, giving you complete peace of mind that the vehicle you receive meets all current regulations and safety standards. Our build process is fully audited, we are approved convertors for Renault, Volkswagen and Vauxhall and have professional working arrangements with Fiat, Ford, Mercedes, Peugeot and Iveco.

Following this guide, step by step, will ensure that Minibus Options can give you a firm quote with no 'hidden extras' and a reliable delivery schedule which will enable your fleet manager to plan fleet replacements with complete confidence.

As a family-run company, we are very proud of our achievements during our three decades in creating passenger vehicles. In our 30th year, our hard work has resulted in Minibus Options being selected by the Department for Transport as key supplier to deliver over 200 Community Minibus Fund vehicles, this in addition to helping a great number of returning customers.

For us, that is the greatest accolade of all.



**Fred James**  
Sales Director

# How to use this guide

It goes without saying that the most important consideration when selecting the huge number of options available for a custom-built minibus is the safety and convenience of the passengers.

This guide will take you through a process of logical steps which have been established by Minibus Options over its long experience.

In addition to this guide, we have provided links to videos which further explain the options, and the considerations buyers should have in mind when specifying a new minibus.

The guide is divided into colour sections for each aspect of the specification, beginning with the base vehicle selection. In each section, the guide explains what's possible as well as what's available.

Links to video guides, where available, are at the bottom of the page.

## Before you begin

The most important preference to establish is the planned use of the vehicle, and thus the number and type of passengers you expect to be carrying, at peak, on any one journey.

Among your considerations should be the number of seated passengers, and number of passengers travelling in a wheelchair.

As your minibus may be your primary, or only, wheelchair-accessible vehicle, it may be a priority to ensure it can accommodate all of your likely wheelchair users.

Only you, the operator, can decide on the priorities, so ensure you begin with knowing the ideal combination. If you need assistance to work this out, our team are ready to help.

## Minibus size guide

Each manufacturer describes their vehicles in different ways. While there are some common language and model codes to do with vehicle size, when applied to each model they do not provide a direct comparison.

For the purpose of this guide we have adopted terminology with a view to indicating the typical steps up in size from one minibus category to the next.

As in all things minibus there are always exceptions to the rule, for example: a particular passenger capacity may be applied to a shorter vehicle where an underfloor tail lift is fitted instead of an internal lift.

The size guide is merely intended as an overview, and where there are specific questions over combinations of make, passenger configurations and conversion components we are always on hand to talk you through the process.

## Size Guide Codes:

L1H1 = Length 1, Height 1 or Short wheelbase, Low roof

L2H2 = Length 2, Height 2 or Medium wheelbase, High roof

L3H2 = Length 3, Height 2 or Long wheelbase, High roof

L4H2X1 = Length 4, Height 2 or Extra long wheelbase, High roof

L4H3 = Length 4, Height 3 or Extra long wheelbase, Extra High roof

L4H2X2 = Length 4, Height 3 or Extra long wheelbase, High roof

The L4H2 models have two possible length variations coded as X1 and X2

## Add the extras...

As you work your way, in sequence, through the guide, you'll see the very many other options which may be available to you.

Your choice of wheelchair access may be restricted by the vehicle size or drive orientation but you usually have a choice of a wheelchair ramp, an internal lift or an underfloor cassette, all having their merits. Please note that manual ramps only suit a handful of front-wheel drive vehicles. Rear-wheel drive vehicles must be specified with a tail lift.

The vehicle will be fitted with a seat tracking system, which will also provide the anchorage points for wheelchair restraints.

There are a myriad of seating options. On some configurations, having flexibility to provide space for a wheelchair "on the move" may be required, for which it may be possible to consider tip-and-fold seats or perhaps tip-and-slide seating which can be 'bunched' instead of removed, the suitability of which is determined by a number of factors. A vital consideration will be the seat covering; some fabrics are easier to clean than others, and some waterproof. If comfort's key, you may tend towards the latest flat fabrics or even faux leathers.

The base vehicle will have been designed to ventilate and heat the driver, not the loadspace, and although some systems may be adequate for a passenger saloon, there are plenty of upgrade options available, from sliding window vents to coach style roof vents, and from economical diesel-fired heaters to air conditioning units.

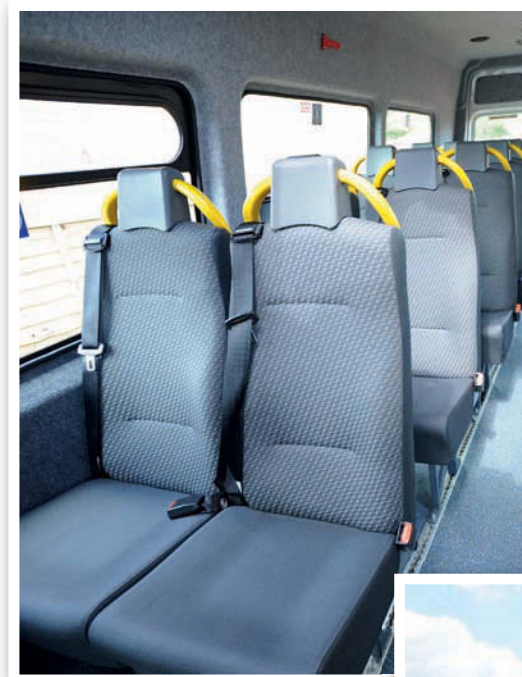
Finally, every vehicle needs storage for the restraints and webbing but can also be equipped with overhead lockers, lockable compartments, luggage pens, racking, roof stowage systems and even cycle carriers. Often, adding simple stowage utilises a spare corner and need not reduce seating capacity. An important point to note is that additional load space requires further consideration on a vehicles payload.

## And finally...

This guide will take you through all the options in a logical order, so you will have a realistic target for your next new minibus.

The final section of this guidance highlights areas of legislation that may affect you, so read it carefully.

But there's no substitute for the personal service Minibus Options' staff can provide. When you are ready to create your specification, call us on 01663 735355 and our experienced team will double-check your wish list and provide a quote along with comparisons and suggestions appropriate to your specific needs.



FRONT END VARIATIONS

SIDE ENTRANCE

WHEELCHAIR ACCESS

SEATING

REMOVABLE SEATING

TIP & FOLD SEATING

WHEELCHAIR OCCUPANT

VENTILATION & TEMPERATURE

STOWAGE

REGULATIONS & ADVICE

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PAGES 20-22

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PAGES 31-35



Carefully consider the number of type of seats you will need



There are a number of wheelchair access options

## Video guides

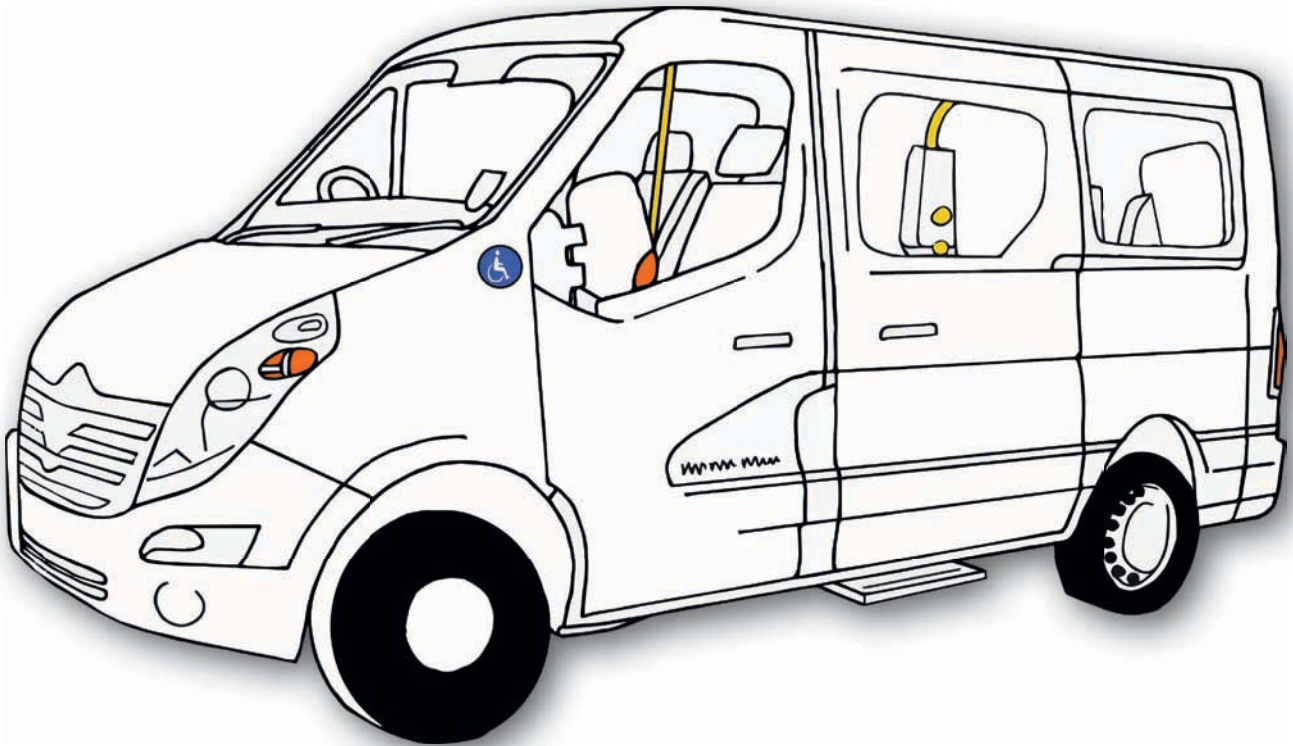
Minibus Options has a series of six video guides to use alongside this guidance. Look for the Video Guide shortcodes, type them into your browser, and see the videos.



**VIDEO LINK**

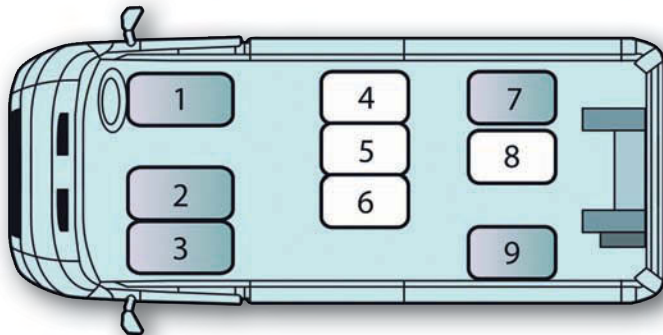
<http://bit.do/buspro1>

# L1H1



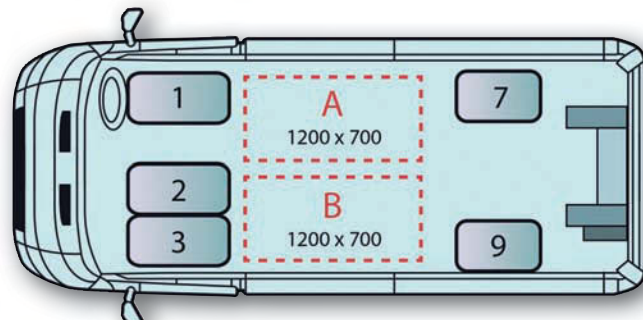
Entry level size to the minibus category. This accessible version is M1 by virtue of seat numbers. Fixed seat version can be up to 12 including driver

**X** H1 indicates low roof height, therefore interior head height is reduced. Underfloor cassette lift not available



9 seats including driver. Removable seats shown in white. Inboard tail lift for wheelchair access

4 removable seats provide space for up to 2 wheelchairs



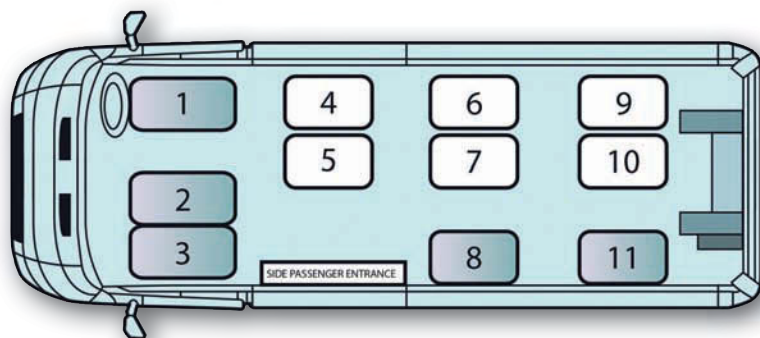
Now go to page 15 for alternative front-end configurations

# L2H2



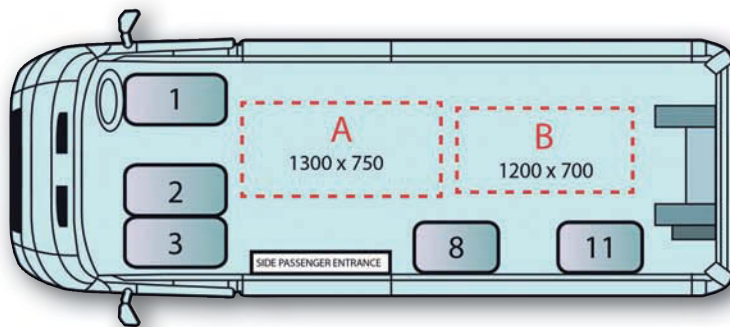
Full height roof for improved access. Accessible minibus with 11 seats or up to 2 wheelchairs. Fixed seat version can be up to 15 seats including driver.

**X** Underfloor cassette lift not available but ramp available on some front-wheel-drive models



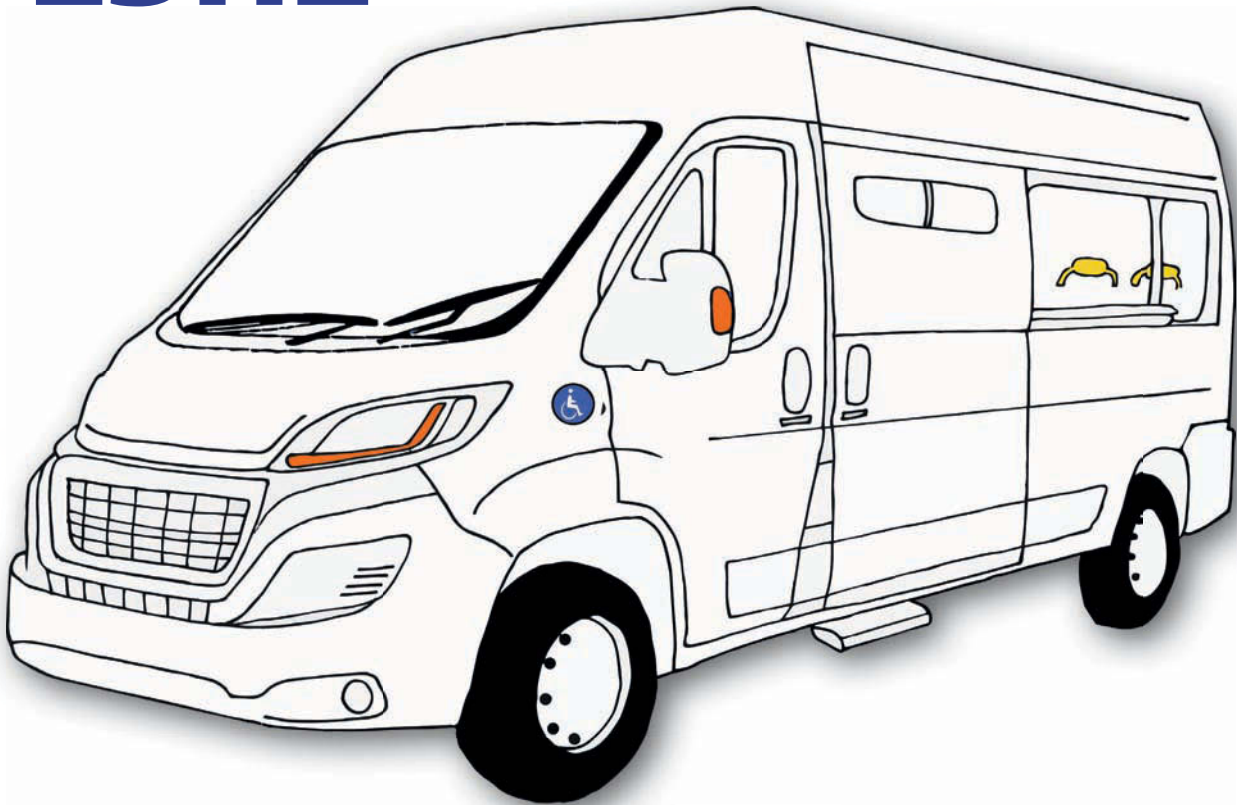
11 seats including driver. Removable seats shown in white. Inboard tail lift for wheelchair access

6 removable seats provide space for up to 2 wheelchairs



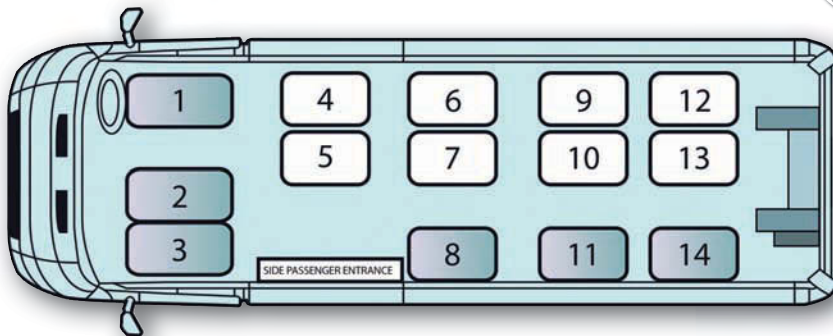
**VIDEO LINK**  
<http://bit.do/buspro2>

# L3H2



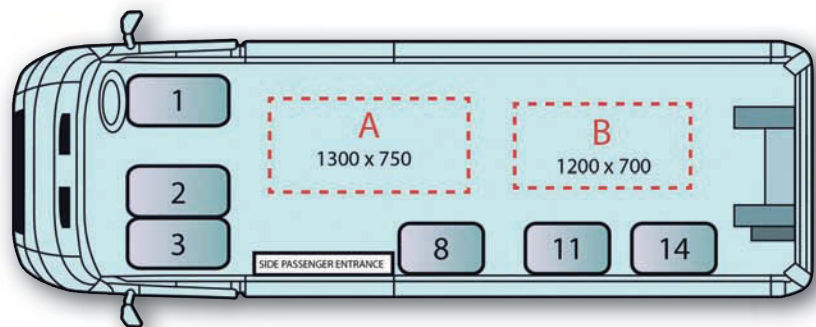
Mid sized wheelchair accessible minibus with a useful capacity. This example has 14 seats or up to 2 wheelchairs. Fixed seat version can be a compact 17 seats including driver

**X** Underfloor cassette lift available only in conjunction with an extended rear bumper



14 seats including driver. Removable seats shown in white. Inboard tail lift for wheelchair access

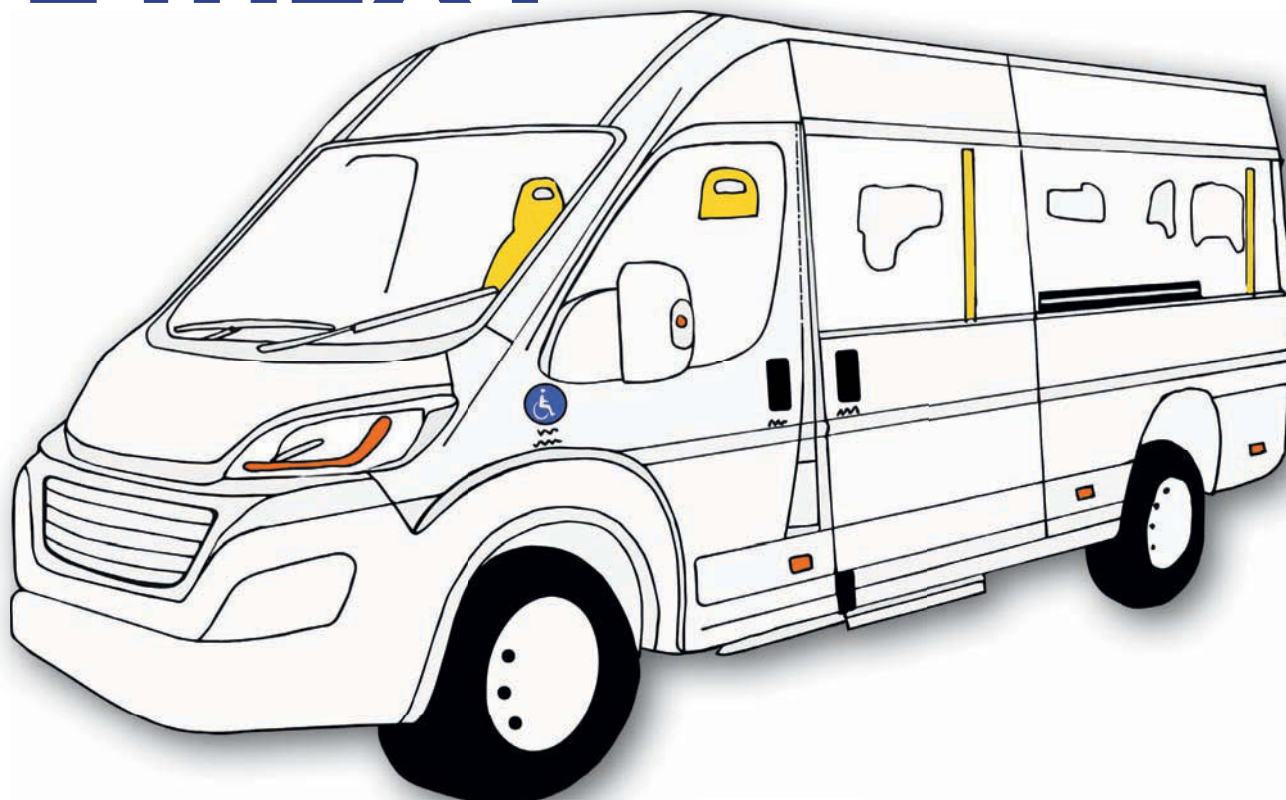
8 removable seats provide space for up to 2 wheelchairs



**✓** Now go to page 15 for alternative front-end configurations

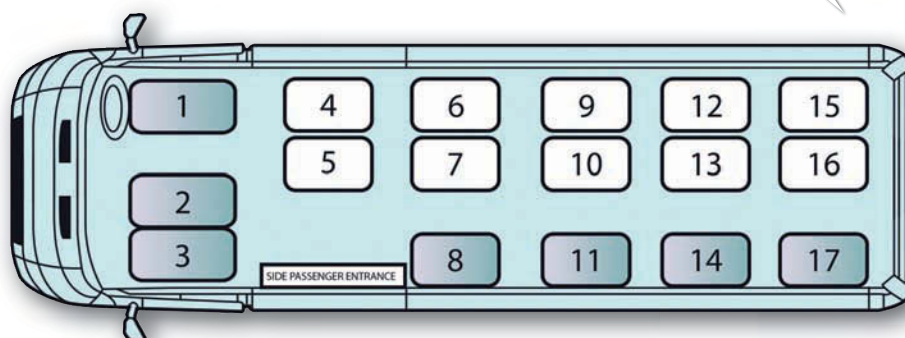


# L4H2X1



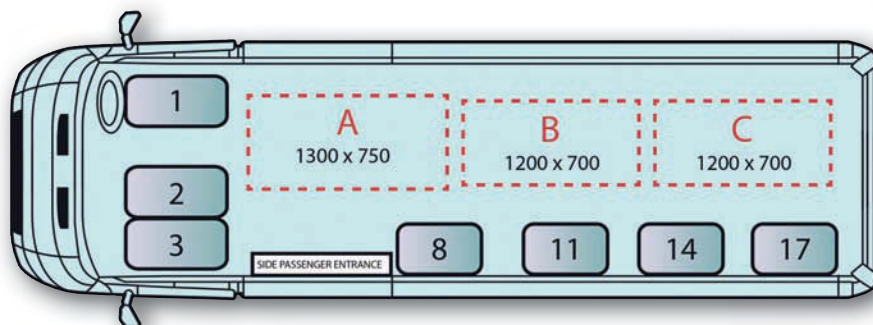
Entry level 17 seat wheelchair accessible minibus with space for up to 3 wheelchairs. Maximum 4250kgs. Available with ramp and tail lift access

**X** Due to Type Approval requirements, access for 1 wheelchair requires 4 seats to be removed



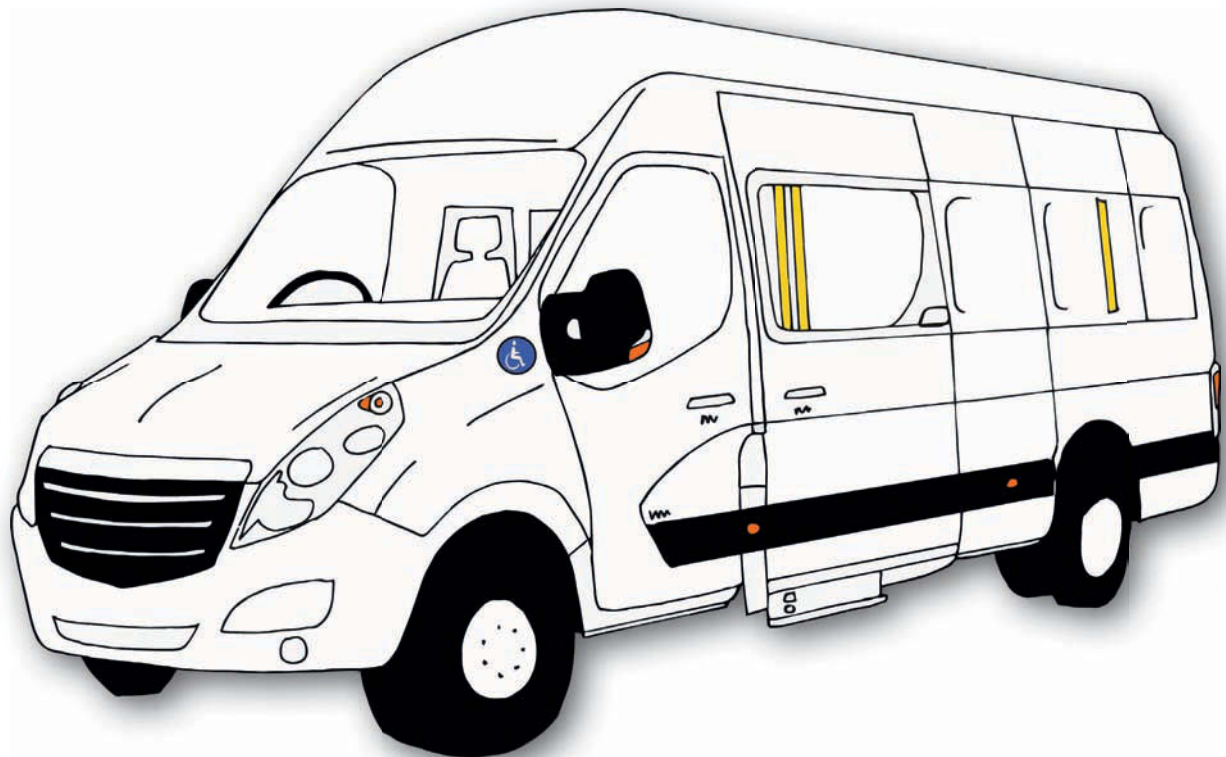
17 seats including driver. Removable seats shown in white. Underfloor tail lift for wheelchair access

10 removable seats provide space for up to 3 wheelchairs



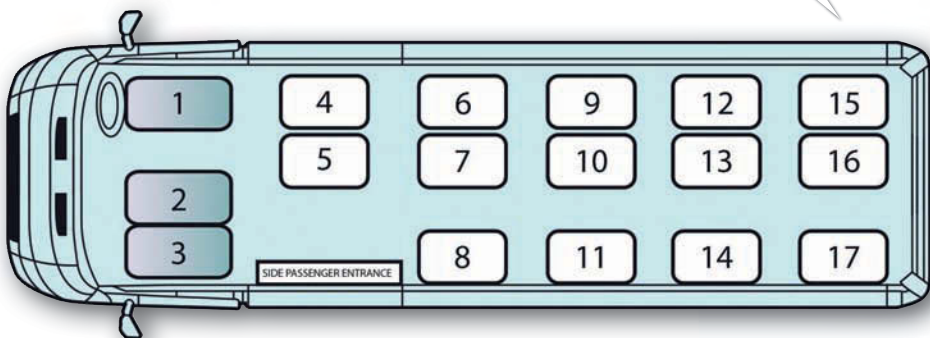
**VIDEO LINK**  
<http://bit.do/buspro2>

# L4H3



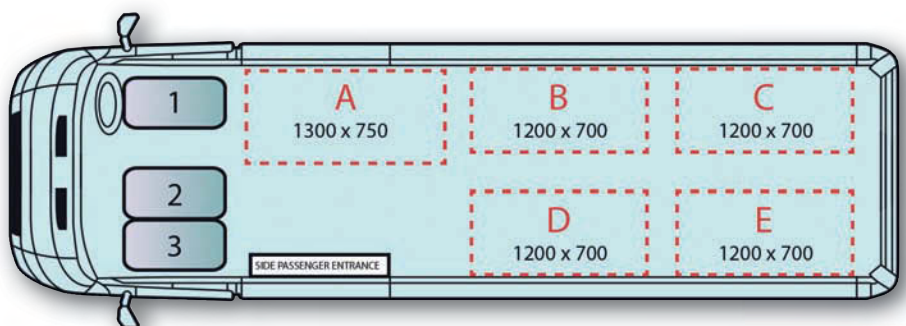
Heavy M2 category vehicle, D1 driving licence required. This example offers 17 seats or up to 5 wheelchairs

**X** Some models underfloor cassette lift available only in conjunction with an extended rear bumper. Ramp not available



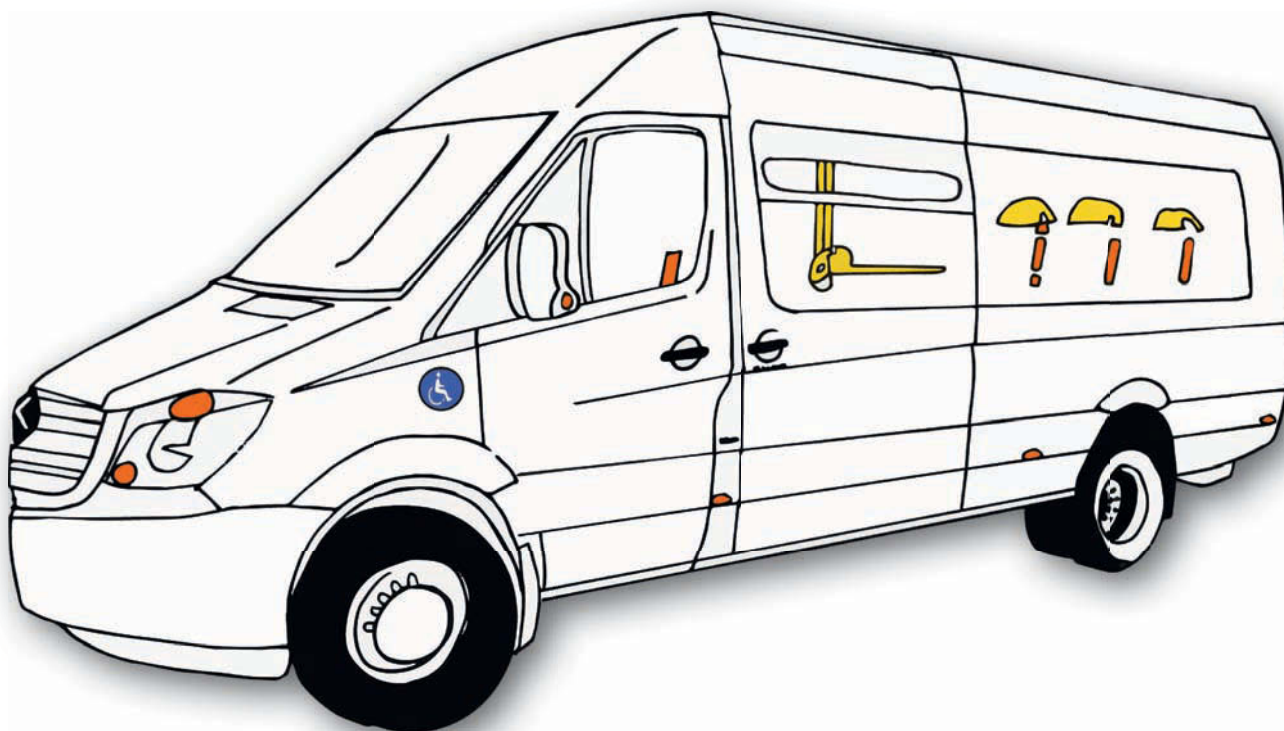
17 seats including driver. Removable seats shown in white. Underfloor tail lift for wheelchair access

14 removable seats provide space for up to 5 wheelchairs



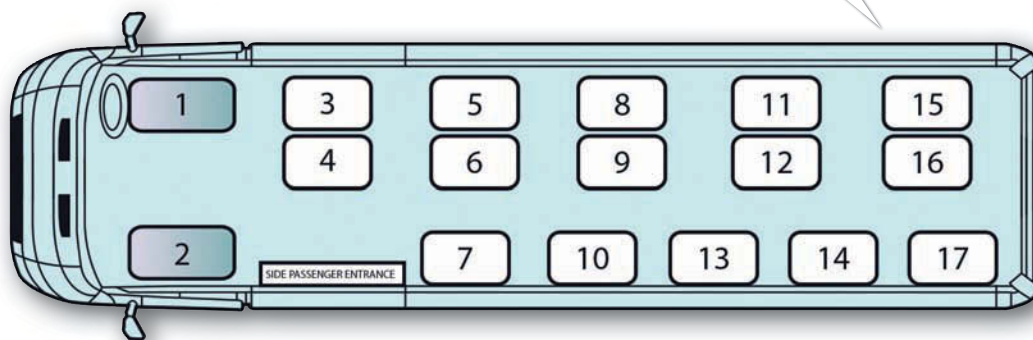
**✓** Now go to page 15 for alternative front-end configurations

# L4H2X2



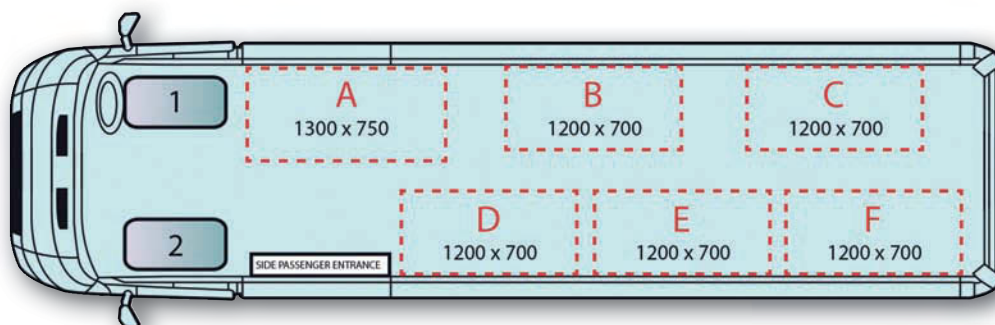
Heavy M2 category vehicle, D1 driving licence required. This example offers 17 seats or up to 6 wheelchairs

Limited range of manufacturers of this size of vehicle. Ramp not available



17 seats including driver. Removable seats shown in white. Underfloor tail lift for wheelchair access

15 removable seats provide space for up to 6 wheelchairs



**VIDEO LINK**  
<http://bit.do/buspro2>



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- » Smartfloor is M1 certified according to EU Directive 76/115 for all major vehicle makes
- » Smartseats stand for safety and the highest quality standards, meeting R14 requirements
- » All Smartseat types have been tested and approved based on the latest UN/EC guidelines for M1 vehicles

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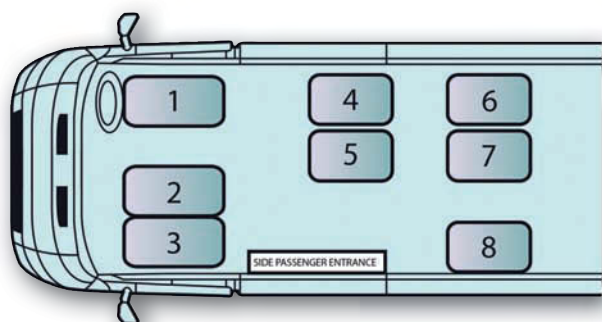
[www.stayco.com](http://www.stayco.com)

# Front end variations

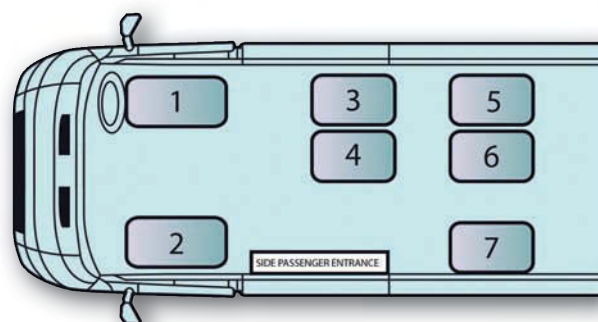
Access to the passenger saloon can be configured in several ways to take into account everything from the mobility of the passengers to the need for luggage stowage.

Usually, the sliding side door is the main entrance, though on some base vehicles, the cab entry door can be used. Some customers prefer to specify a single cab passenger seat, giving the driver and assistant immediate access to the vehicle saloon.

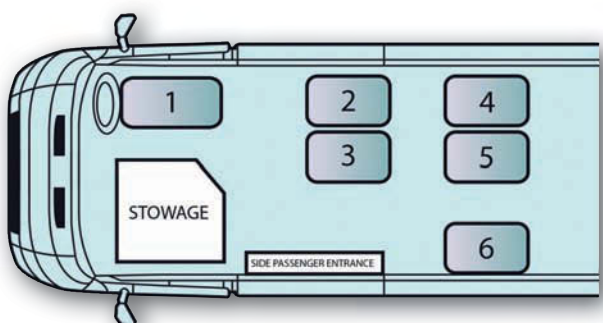
There are two luggage pen options; alongside the driver to the left of the sliding door; or opposite the sliding door. Clearly, luggage pens (and other seating and stowage options) can reduce overall seating capacity when installed depending on the size of the chosen base vehicle. Please note, not all variations are available on all base vehicles.



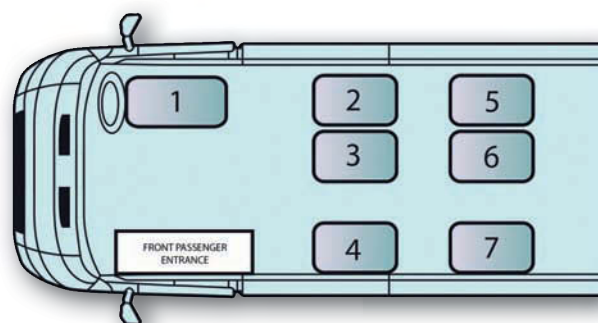
Double cab passenger seat



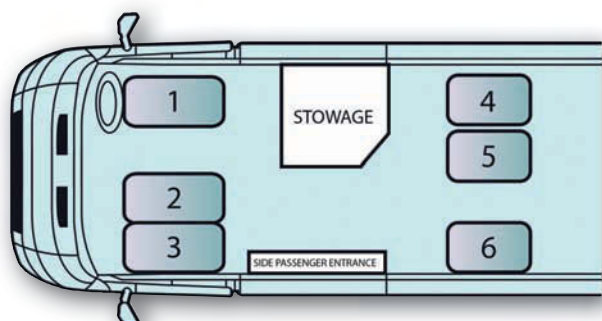
Single cab passenger seat



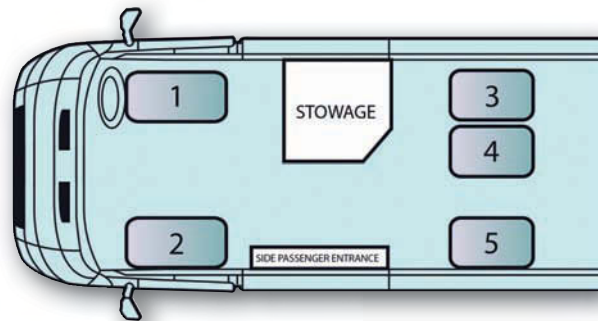
Luggage pen or other stowage space alongside driver



Nearside cab entry



Double cab passenger seat with saloon stowage



Single cab passenger seat with saloon stowage

Now go to page 14/15/16 to decide on step options

 **VIDEO LINK**  
<http://bit.do/buspro3>



## PROTEKTOR

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# Passenger

The choice of base vehicle will have a strong bearing on the type of walk-in passenger entrance.


As shown in the previous section, the entrance for a minibus can be to the nearside front, directly opposite the driver, or through the side loading door, which usually offers increased headroom.

M2 Type Approval regulations dictate maximum step heights and minimum step tread dimensions. Therefore, all minibuses based on a panel van (bar a few unusual examples) will feature an auxiliary step to the side passenger entrance. Subject to the design of the base vehicle, this may be mounted below the entrance or fitted into the standard stepwell.

Certain models can feature a special cut-in stepwell and flush folding step. The step lies flush with the saloon floor when not in use, and when lowered provides three or four low entry steps depending on the base vehicle.

Sometimes a cassette step below the entrance is the only practical solution, despite this requiring regular cleaning and



 Cassette step with vertical and half-height rail and modesty screen

being at greater risk of accident damage. A cassette step may be manually deployed (foot operated) or electrically operated—either when the door opens or as operated by the driver, the step is powered into position. A step mounted in this position is exposed to harsh conditions, and when selected, only the better, more expensive models should be considered.

A manual cassette step would have a buzzer to warn the driver if it has been left out when the vehicle is moving, whilst an electric version should have an automatic retract feature.

On some minibuses, we can offer a power-operated door. This would be electrically operated, possibly in conjunction with an electrically-operated auxiliary step. Costs can vary significantly subject to the choice of base vehicle and type of door.

As a legal requirement, all minibuses must feature a grab handle to assist entry at the passenger door, though in practice most of our vehicles would feature additional handrails, to each side of the entrance, fixed or folding.

# access and steps

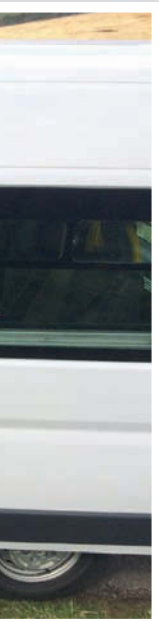


Generally handrails are 32mm in diameter, slip resistant and colour coated to contrast with the background.

Highlighted step edges can be specified to the passenger entrance. They clearly identify step edges and are of particular benefit to the partially sighted.



Basic, 'OE' step with single vertical rail



Flush-folding four-step entrance with twin fold-out rails, modesty screen and weather screen above it



Flush folding three-step entry with twin fold-out rails, modesty screen and weather screen

 **VIDEO LINK**  
<http://bit.do/buspro4>

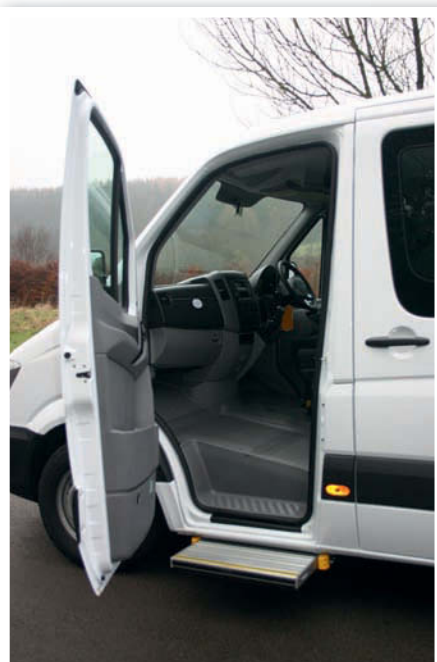
# Passenger access and steps *cont.*



Flush folding three-step entry with vertical and half-height rail and modesty screen



Cassette step to underside of deepened stepwell, plus handrails

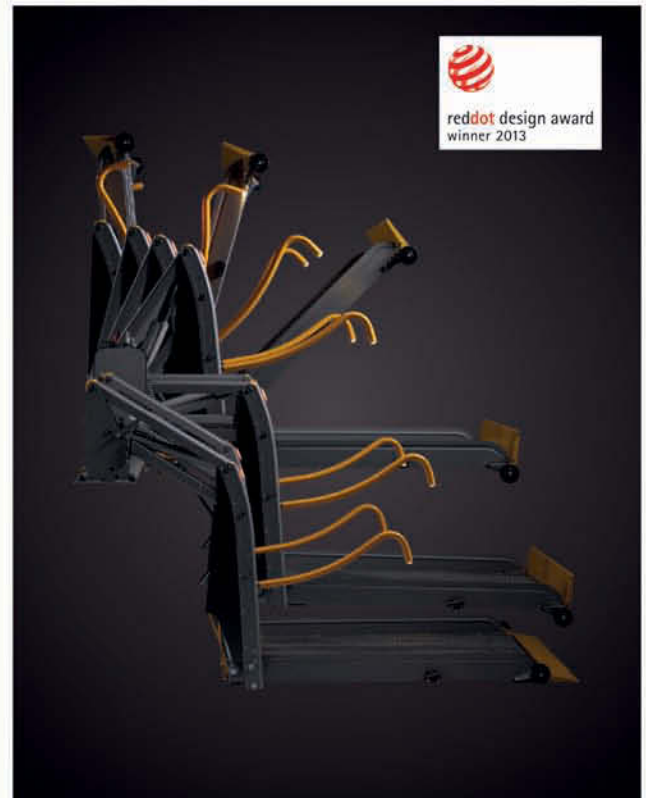


Cassette step to underside of standard stepwell



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# Wheelchair Access

To load wheelchairs on to a front-wheel-drive vehicle with a low loading height, it may be practical to consider a wheelchair ramp.

The ramp folds in two and stows upright inside the rear doors when not in use. It can feature gas strut assistance, for easy stowage and deployment. The full width ramp platform has a non-slip tread.

For many, an internal electro-hydraulic tail lift will be the best option. There are a number of platform designs. Some platforms split as they fold away, to provide a passageway through the back doors. Another design folds in a half within its length so that it does not block the view through the rear door windows. Some platforms do not split or fold and simply stand upright inside the rear doors when stowed.

Underfloor 'cassette' tail lifts are available from a number of manufacturers. All lifts are available with a range of different platform sizes though the largest platforms will not suit all models. M2 Type Approval dictates a minimum platform size of 800mm wide, 1200mm long. Tail lifts generally offer a capacities of 300kgs, 350kgs and 400kgs SWL, although heavier Bariatric models are available tested up to 500kgs.

Tail lifts must be checked every six months and weight tested every year in accordance with LOLER regulations.

## Ramp



A wheelchair ramp cannot break down as a tail lift might, it is less expensive, and is quicker to use when more than one wheelchair is to be loaded. However, you must consider the strength of the attendant and the weight of the occupied wheelchair. An electrically operated winch may be specified to assist with loading. Manual ramps are not available for wheelchair access on rear-wheel drive vehicles. They do not offer safe access and do not meet access angles dictated by Type Approval.

### Lowerable air suspension and ramp

This is available as an option on all Renault, Vauxhall, Ford (FWD models), Fiat Ducato and Peugeot Boxer models. By operation of a switch from the cab, or from the rear entrance, the rear suspension is lowered to provide a reduced loading height. The associated ramp is then manually lowered to provide easy wheelchair access.

The angle of ascent/descent is less than with a standard ramp, but its suitability must still be governed by the strength of the attendant and the weight of the occupied wheelchair. As an additional benefit, the air suspension will provide improved road holding, and passengers will be afforded a more comfortable ride.



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## Underfloor tail lift



Where the base vehicle design allows, an underfloor tail lift can be fitted. Some models dictate an extended rear bumper to accommodate the lift. When not in use, the electro-hydraulic tail lift is stowed within a fully enclosed cassette, to the vehicle underside. All feature a non-slip platform, toe guard/bridge plate, automatic roll off prevention bar, twin handrails and an auxiliary hand pump.

## Internal tail lift



Internal electro-hydraulic tail lifts are all automatic in operation. This automatic function allows deployment and stowing of the lift platform from a remote wander lead handset. This same hand set also controls the raising and lowering of the platform in use. The lift is stowed upright inside the rear doors, when not in use.

Internal lifts occupy some 18" to 20" (450mm to 500mm) of saloon space and as such must be allowed for when the seat plan is created. Internal lift platforms are available in a wide range of sizes. It is important to assess what size of wheelchairs are to be loaded. If the attendant is to travel on the platform, stood behind behind the wheelchair then this must be taken into account.



**VIDEO LINK**

<http://bit.do/buspro4>

# Seating

There are many styles of saloon seat, from a selection of manufacturers. A large number are on display in our showroom.

The seat choices offer different heights of backrest, cushion widths, and varying depths of contour. The saloon seats may be trimmed in cloth, to match the drivers seat, or vinyl to colour choice. A popular option is for the backrest to be trimmed in cloth, with a fabric effect vinyl to the cushion. For extra hard-wearing applications a moquette trim may be specified. Moquettes are available in a wide colour and pattern choice, and cab seats can be retrimmed to match.

Whatever seat style is selected it is necessary to review the required seat plan, ensuring adequate knee room and gangway dimensions for the typical passenger to be catered for. The number of seats required will effectively dictate the size of vehicle and its weight.

Where removable seats are selected (usually to provide wheelchair spaces), these are mounted in low profile tracking, with "anti-rattle", quick release, lockable seat fixtures. A number of choices of which are available.

Consider headrests to all passenger seats, to reduce the likelihood of whiplash and other similar injuries, in the event of an accident.

Seat grab handles can assist passengers up from their seat, or along the gangway. These might be stand alone items or integral to the headrest.



Semi-high back seat, trimmed in moquette and vinyl



High back seat, trimmed in cloth, top mounted grab handle



Semi-high back seat, trimmed in cloth, twin grab headrest



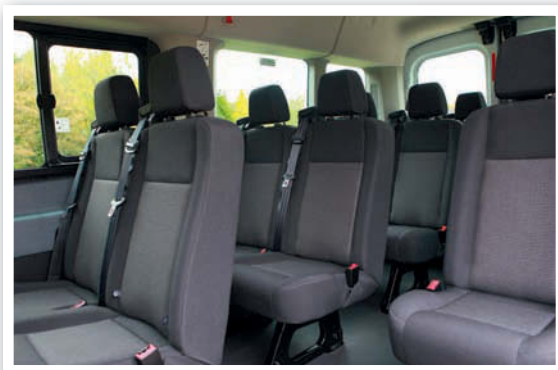
Semi-high back seat, trimmed in cloth, no headrest



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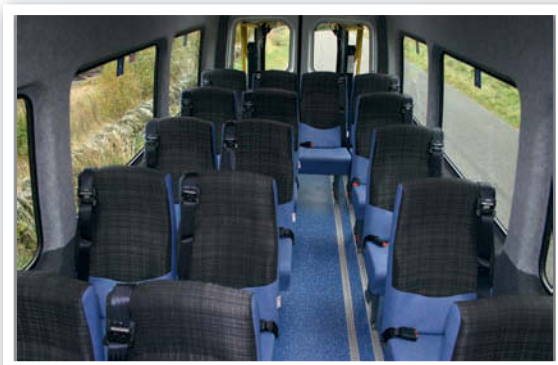
**RESGROFT**<sup>®</sup>  
OutSTANDING InSEATING



Semi-high back seat, trimmed in cloth, trimmed headrest



Semi-high back seat, trimmed in cloth and vinyl, no headrest



Semi-high back seat, trimmed in cloth and vinyl, no headrest



Semi-high back seat, trimmed in vinyl, twin grab headrest



Semi-high back seat, trimmed in vinyl, trimmed headrest

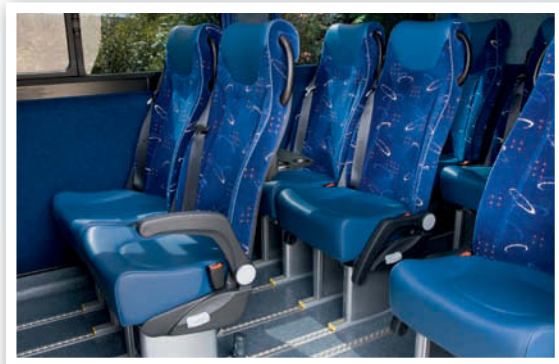


Semi-high back seat, trimmed in cloth and vinyl, twin grab headrest



Semi-high back seat, trimmed in cloth and vinyl, twin grab headrest

High back luxury seat, trimmed in moquette and leather



 **VIDEO LINK**  
<http://bit.do/buspro3>



Semi-high back seat, trimmed in cloth and vinyl, trimmed headrest



Semi-high back seat, trimmed in cloth and vinyl, twin grab headrest



Semi-high back seat, trimmed in cloth, twin grab headrest, red webbing



Semi-high back seat, trimmed in cloth and vinyl, trimmed headrest



Semi-high back seat, trimmed in vinyl, no headrest



High back seat, trimmed in cloth, top mounted grab handle, ABS back



Semi-high back seat, trimmed in vinyl, trimmed headrest, armrest



Cab seats retrimmed in moquette to match saloon

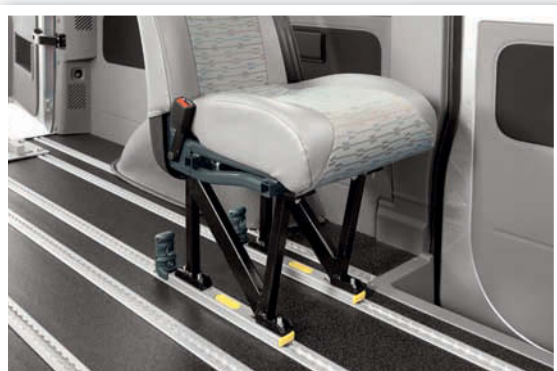
# Removable seating

The advent of seat tracking systems has brought with it great flexibility in the way in which vehicle operators can specify and configure seating patterns.

Instead of passengers having to adapt to a seating layout, the seating can be matched to their needs, whether in terms of legroom or the number of seats being provided. First and foremost, however, the systems allow seating to be removed completely to allow access for a wheelchair, and then to secure the wheelchair and occupant safely within the minibus.

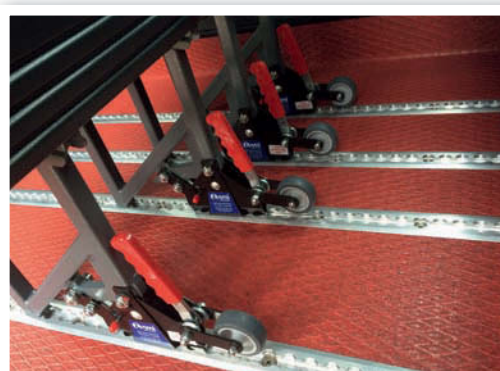
Although it is fairly easy to remove and replace seats in the tracking, bear in mind the weight of the seat when you wish to remove it; depending on how heavy the seat is, for safe manual handling, this may be a two-person job. When the seat is removed, ensure you have sufficient clean, dry storage space available.

Seat component manufacturers have devised several different quick-release systems which make the job of moving and removing seats much easier. Minibus Options can supply all leading certified tracking systems.



1

Unwin's HAL seat fixing is very easy to operate. To remove this seat...



NMI's lever-released seat with wheels to aid repositioning



2

... just pull back the grey lever and...



Simple and robust, this is Unwin's Removable Seat Fixture

3

... the seat can be tilted back on to its wheels and moved or taken out



Koller's Lockable is an M1-tested alternative

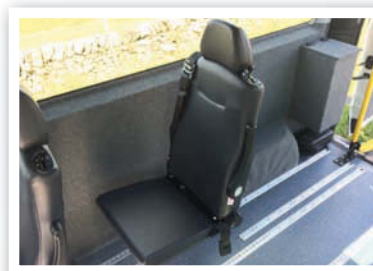
 **VIDEO LINK**  
<http://bit.do/buspro3>

# Tip & fold seating

There are several designs of 'tip and fold' seat, which in some configurations will allow the rear part of the saloon to be converted into wheelchair space without the need to remove seats from the vehicle.

With the design shown below, the operator lifts the seat squab upwards to sit flat against the backrest, and then the entire seat is folded against, or swiveled to, the body side. Although this system can create space to provide a wheelchair position, it cannot, alone, provide multiple wheelchair positions on a high-capacity, 17-seat minibus.

In use, the tip-and-fold sits against the vehicle side



Lift the seat squab upwards against the backrest



...and fold it back to create access to floorspace for a wheelchair



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# Wheelchair restraints

Any wheelchair and its occupant must be securely restrained. There are many systems available though most are a variation on a four-point webbing system. There are a number of "backrest" or "rear-locking" systems, however due to their size do not suit most minibus applications. Not all restraints are suitable for all designs of wheelchair, and some will not suit all wheelchair positions in different vehicles.

The wheelchair occupant must wear a restraint (unless travelling on a local service bus where standees are permitted). A lap belt or harness attached to the wheelchair only will not be suitable. There are several designs of restraint and all are attached directly or indirectly to the vehicle. Ideally, any restraint should pass over the passenger's lap and at least one shoulder. A restraint with an additional high level mounting might be more comfortable for the wearer.



Third-point fixings in the cant rail are mandatory on M1 category vehicles



A wheelchair and user in situ, safely secured



The front webbing straps are fixed, and secure the wheelchair



The retractable rear cassette fixing ensures the wheelchair is 'braced' against the front fixings



The passenger restraint is available as a 2 point system, or a 3 point system with the addition of the upper anchorage point

 **VIDEO LINK**  
<http://bit.do/buspro3>

# A comfortable environment whatever the weather

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- Air conditioning.
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- 3 year warranty.

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systems for the 30 years.



# Ventilation

One of the key areas to providing Comfort on a minibus is providing ventilation and a means of controlling the temperature.

Ventilation on a minibus is provided by opening windows and roof vents. There is no minimum standard for ventilation and so on a basic minibus only the cab windows provide any circulation of air. For many customer types additional ventilation is seen as a necessity, but the number and type of windows or vents needs to be considered and should form part of your specification.

Ventilation options on a minibus are usually: sliding windows; coach-style opening vents, fixed vents, spinning and electric vents, which may all be specified either on their own or in conjunction with sliding windows and coach style roof vents.

The standard base vehicle heating system can provide heat to the whole vehicle. That said, due to the volume of air in a large vehicle it would take a long time for the passenger at the rear of the vehicle to feel any benefit. Additional heating may be specified in the form of diesel fired heaters. These provide heating which is independent of the base vehicle system. Various power outputs are available the most suitable of which is determined by the size of the vehicle and the frequency of opening and closing doors.

In addition to ventilation and heating it is possible to add air conditioning. While it can be prohibitively expensive, a system appropriate for the size of the vehicle can provide the same cooling function found in a modern car. However please note: Systems come with differing capabilities. A unit suitable for a mini will not be adequate for a full size 17-seat minibus. If the unit is not of a sufficient size, at the source you will feel cold air but it will not have the capacity to reduce the temperature to the whole vehicle.

The difference between having cold air at source versus providing a specific temperature throughout the vehicle comes at a high cost. If an additional £3,000 or more sounds prohibitively expensive, consider adding forms of ventilation as a less expensive alternative.



There are a number of options for additional air conditioning



Sliding windows are relatively inexpensive and effective



Independent heating ensures the whole saloon is warmed



Coach style roof vents provide extra light as well as fresh air



Vents connected to a spinning external rotor work well to reduce condensation



Electric blown-air fan units like this are simple and effective

 **VIDEO LINK**  
<http://bit.do/buspro5>

# Stowage

At Minibus Options, we've engineered some solutions to very specific stowage requests – including bicycles.

In any vehicle, ensuring the secure stowage of luggage, restraint systems and any special luggage such as sports equipment is vital; apart from the obvious need for clear gangways, such objects can become missiles in the event of a collision.

There are a huge number of options for stowage, many of which can be engineered specifically for the customer, but commonly you will need stowage for all tie-down webbing and clamps, and on many vehicles, for passenger's hand luggage.

For regular carriage of, for example, sports teams, a boot may be the best solution, though a roof rack may be useful for outdoor sports equipment.

The location and space available for stowage depends on the vehicle and the seating layout, but most designs have a 'spare corner' in which a simple restraint stowage box can be fitted. You could even have additional side mounted tracking fitted to attach spare webbing.

Here are a few examples of stowage solutions – but ask if what you want isn't shown!



Lidded storage for restraint systems and other small items



Full racking systems may be good for sports teams and schools



Stowage over the driver uses some 'dead' space but can obscure view by passengers



Stowage lockers can be equipped with locks for valuable items



A stowage pen in the nearside cab is popular for accessible vehicles



The downside is loss of use of the door and reduced saloon accessibility for the driver



Instead of storage boxes, tracking can be used to stow restraint fixings



Overhead lockers are possible on high-roof vehicles



Outdoor sports groups often choose a ladder and roof rack like this



Full height lockable cupboard in the forward saloon provides secure storage



A separate space for storage can be created for specialised vehicles



Though shallow, an overhead locker like this can be useful for documents, etc



Covering open overhead lockers with cargo netting prevents objects falling out on to passengers

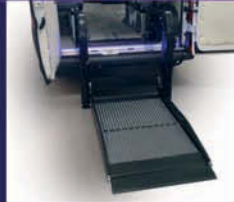


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<http://bit.do/buspro3>

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# Minibuses and volunteer drivers

As more and more drivers who passed their driving test after 1997 volunteer to drive minibuses, many minibus owners are faced with a problem.

Drivers who passed their tests before January 1997 automatically got a D1 entitlement, but those whose full car driving licence was obtained from 1997 onwards can only drive a vehicle with a maximum capacity of eight passengers, providing the gross weight of the vehicle does not exceed 3500kg.

There is however a dispensation for a volunteer to drive a Minibus with a higher capacity of 16 passengers, providing the gross weight does not exceed 3500kgs, unless the Minibus is modified for the carriage of disabled persons, when the gross weight may be as high as 4250kgs.

The definition of "modified for the carriage of disabled persons", has not been tested in the courts, but is generally held to be a Minibus modified for the carriage of wheelchairs. This should include an electro-hydraulic tail lift or a full width, folding ramp to provide wheelchair access. Individual channel ramps, or removable ramps are no longer acceptable on a new Minibus. The Minibus will almost certainly feature removable track mounted seats to create space for at least one wheelchair, equipment to secure the wheelchair and occupant, and other features mandated by Type Approval regulations. The additional 750kg gross weight allowance is intended to provide for all the extra necessary equipment.



Drivers like the one who has this licence passed their test pre-1997 and thus have automatic D1 entitlement

**“** With the introduction of Euro 6 engines resulting in lower available payloads, it is no longer possible to build a 17 seat minibus at 3500kgs GVW, which meets Type Approval.

With the arrival of the new regulations in October 2011 the construction weight of basic Minibuses increased, as did the required payload allowance per passenger. With the introduction of Euro 6 engines resulting in lower available payloads, it is no longer possible to build a 17 seat minibus at 3500kgs GVW, which meets Type Approval.

Other conditions apply for volunteers: the driver must be at least 21 years old and have held the licence for at least two years; and a volunteer making use of this dispensation may not tow a trailer.

This provision for volunteers may only be relied upon while driving in the UK.

## Who can take advantage of the provision?

A qualifying volunteer is someone who drives a Minibus for a non-commercial organisation, for social purposes, who is not paid to drive. They are allowed to receive out of pocket expenses.

Many people taking advantage of this provision are teachers, where driving is not included as part of their contract of employment.



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# Minibus Type Approval – an

Vehicle Type Approval is confirmation that the vehicle meets prescribed standards. These standards derive from European Whole Vehicle Type Approval regulations (ECWVTA).

For vehicles sold for use in the UK, certification is likely to be achieved through National Small Series Type Approval (NSSSTA) or Individual Vehicle Approval (IVA). Standards for M1 passenger vehicles have been in place for several years, while those for multi-stage build M2 passenger vehicles became a legal requirement as from October 2011.

The regulations for M2 Minibuses are complex and wide-ranging. The regulations include the introduction of hundreds of dimensions that must be observed, affecting the design of entrances and exits, gangways, seats and seat layouts. Some of the regulations seem quite sensible, some irksome and others just bewildering.

While it is possible to avoid these regulations, by means of a rather silly loophole, such a course of action may be foolhardy. There may be a risk that once the loophole is closed any vehicle that did not comply would need very expensive modification, or else face being written off. If a vehicle is not certified to meet Type Approval requirements, then it will not meet all the latest safety requirements and indeed aspects of its actual method of construction might be doubtful.



## What is GVW?

Gross weight, also known as Gross Vehicle weight (GVW), Gross Vehicle Mass (GVM) or Maximum Authorised Mass (MAM) is shown on the chassis plate; also known as the VIN (vehicle identification number) plate.

A series of four-figure numbers are usually shown: these state the maximum permissible weight (in kilograms) on the front axle (axle 1); the maximum permissible weight on the rear axle (axle 2); the maximum permissible weight of the complete vehicle (GVW, GVM); the maximum permissible weight of the complete vehicle & trailer, when towing a trailer (Gross Train weight [GTW] or Gross Train Mass [GTM]).

The VIN or Chassis plate can be found on the inside of a front door pillar, on the base of the driver's seat or under the bonnet on the front closing edge. The VIN/Chassis number (vehicle serial/identification number) is usually displayed here as well. This same number will be recorded on the V5 log book, although the weights are not usually shown.





# overview



Skilled engineers work to Vehicle Approval standard

Minibus Options strongly recommend that Type Approval regulations are observed. Minibus Options specialise in the detail of this subject, and will always find the best way forward to meet your needs and available budget.



The VIN plate provided by the base vehicle manufacturer explains the maximum weights on the axles and for the complete vehicle

## Top tips to choose your vehicle

### Start with the purpose in mind

The reason for considering a specialist passenger vehicle is because there are no standard, off-the-shelf vehicles which meet your needs.

In this case, our primary need is to accommodate a number of people on board a vehicle, whilst taking into account their levels of mobility and their intended journey.

The rest of the minibus specification should be shaped around this primary need, rather than the other way round.



### Start with a blank piece of paper

When buying a minibus there is always the temptation to pick up an old specification and tweak it to fit your current purpose.

This can add confusion to the process, and may mean that you end up with features you don't need, or that the end product doesn't quite fit the bill

### Remain open to new ideas

If a customer has a particular feature or piece of equipment in mind and places this as a high priority you can end up having to fit a whole specification around it, often compromising other areas to the detriment of the finished product.

The key to creating a specification that works for you is to be flexible at the planning stage, maintaining passengers as the prime consideration, and be willing to compromise in other areas to achieve a workable outcome.

### Seek advice – but choose your “expert” wisely

It's always good to discuss vehicle specifications with people who have immediate experience of creating them. This may be a regular buyer of minibuses, or a commercial vehicle professional.

Whilst you may be able to find any number of well meaning members of the motor trade, or former engineers wanting to assist, they may not always know the facts. In the case of Minibus Options, we have decades of experience and up to the minute, first-hand knowledge. True expert advice, given freely.

### Don't be constrained by too much detail

Technically gifted writers can produce pages and pages of highly detailed specification, delving into the most minute details of construction method, materials and equipment. If the specification is technically correct, and takes into account the most up to date legislation, this would make a great start for a tender process. However, at the planning stage, too much detail can stifle creativity and significantly increase the amount of time it takes to produce the right specification.

### Keep in mind the rules and regulations

Make sure you have a clear understanding of which rules apply to your drivers, and your organisation as a transport operator. Misunderstanding these rules can mean that you exclude some volunteers from driving, or that you miss a vital piece of equipment required for you to legally operate a vehicle. Minibus Options are experts in this field and would be pleased to lead you through the legislative mine field.

### Leave plenty of time to get a vehicle on the road

In addition to the time it takes to design a specification, get funding in place and agree on a purchase, you will need to consider the lead time for a vehicle designed specifically for your requirements. Base vehicles can take anywhere between 3 and 6 months to arrive in the UK, after which it can take between 2 and 4 months to convert, certify and register a minibus. Some times stock chassis, or completed vehicle may be available to reduce this timescale, however, scarcity of such vehicles can often lead to compromise on specification and / or price. If you want to make sure you get the vehicle you really need – leave plenty of time.

### Don't cut corners

Being budget conscious is wise in this day and age and we would discourage increasing a specification for the sake of it. We do however take the time to consider how a specification may be improved. Some times a minor tweak, such as improvements to access for passengers or something to help a driver to their job safely can make a massive difference to how a vehicle is used, often for a relatively small additional cost.



# Minibus



A choice about funding a vehicle should be made separately to the vehicle itself. It is better to hand a detailed minibus specification to a finance provider and ask for figures based on your choices to make sure that the end product is based on your requirements, rather than a loose interpretation.

Engaging with Minibus Options to create that specification is a great starting point, but once you are ready to place an order, how will you fund the vehicle?

Leasing has become a catch-all term to describe a financial arrangement other than an outright purchase. There are, in fact, a number of financial profiles that may be used to fund a vehicle, but the terminology used by different companies can lead to confusion. Regardless of the financial package, the basic principle is to pay to use a vehicle while spreading the cost. In some cases, like Contract Hire, it also means paying to 'leverage' some of the upkeep.

There are many variations of financial packages available to consider when you want to do something other than buy the



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## Come and take

At our Whaley Bridge headquarters we have an extensive showroom, with examples of equipment and accessories, everything from seating to wheelchair lifts which we can demonstrate to you. Our showroom facility is the only one of its kind in the UK, a permanent display from the best in the industry. Next door our production facility offers the chance to see dozens of vehicles from different manufacturers in various stages of build.

There's nothing to beat seeing vehicles and equipment 'in the metal' before making your choice, and our customers get to appreciate the complete flexibility with which their new vehicle can be built.

Our sales staff have decades of experience and can offer you sound advice to ensure that you are aware of what is possible to achieve with a bespoke vehicle, and ensure that each vehicle meets regulations to the finest detail.

Minibus Options builds all its vehicles to current Type Approval standard, which ensures no corners have been cut during the production process, and inspection has taken place throughout the build.

We would like to extend an invitation to our showroom to anyone interested in developing a new minibus specification.



# finance options



Fixed costs with low capital outlay is the chief benefit of Contract Hire over outright purchase

vehicle outright, upfront for cash. As a professional, knowledgeable minibus supplier Minibus Options will be pleased to discuss which alternatives are going to suit you best.

Normally when people say leasing, they mean Contract Hire, that is a contract with maintenance.

Contracts can be created that include all manner of helpful things – servicing, maintenance, MOT's, roadside assistance, tyres, batteries, exhaust – for example.

A contract hire consists of paying a monthly premium to use a vehicle, to have it serviced and maintained with no additional cost for the life of the contract. It means that you can have a predictable cost for the lifetime of the contract, at least for the vehicle itself. Insurance and fuel are notable and costly exceptions to any contract hire.

Contract hire is often seen as the way to “hassle free” vehicle ownership, effectively paying someone else to deal with the upkeep of the vehicle and have them deal with the risk of having to pay for unforeseen non warrantable repairs.

Whilst contract hire can remove some of the hassle of vehicle ownership there are always going to be things you will need to deal with yourself.

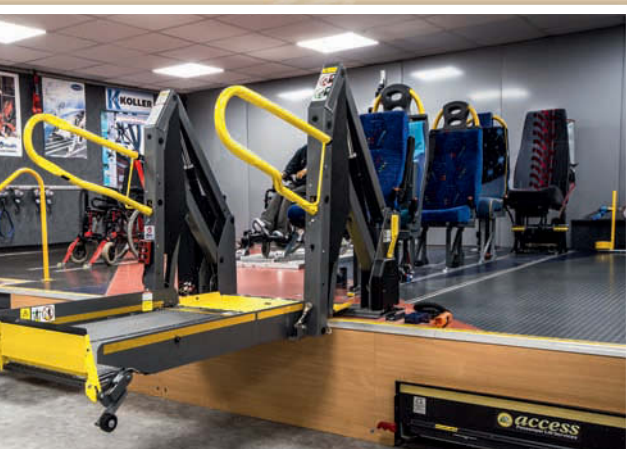
Even if you have the most comprehensive maintenance package available for the vehicle, you still retain overall responsibility for the safe operation of your minibus which as well as making sure the vehicle is in a roadworthy condition, includes ensuring drivers are trained properly and that passengers have also received instructions on vehicle safety.

A third alternative to outright purchase and contract hire is hire purchase.

Hire Purchase is a straightforward, affordable route to ownership. This route allows eventual ownership over a period of time having spread out the overall cost of owning a vehicle. At the start of the agreement you pay a deposit on your chosen minibus. Then, throughout the duration of your agreement, you pay the agreed payments over the agreed term until the remainder of its value is repaid. Once all payments are made, at the end of the term, ownership of the vehicle passes to the hirer on payment of a document fee.

## a closer look

Founder Steve Moore, with sons, Jonluka, Fred and David



### About Whaley Bridge

Whaley Bridge, the “Gateway to the Goyt Valley” is an attractive small town situated on the edge of the Peak District. The town – and Minibus Options’ headquarters – is at the head of the Peak Forest Canal with the canal basin designated as a conservation area and home to the listed Transhipment Warehouse.

The towpath from the canal basin allows pleasant walks and cycles to Bridgemoor and Buxworth or can be the starting point for longer distance routes such as the Goyt and Midshires Way.

A wonderful array of local pubs, restaurants and cafes can be found in the town along with a number of independent shops selling a fine selection of wines, food and gifts. A monthly Farmers’ Market, usually held on the second Saturday of each month takes place at the Uniting Church on Buxton Road.

Call us on 01663 735355 or  
email [support@minibusoptions.co.uk](mailto:support@minibusoptions.co.uk)



# The Community Transport Association

For and about inclusive and accessible transport

## The Community Transport Association

is a national membership body for anyone, across the United Kingdom, who provides accessible and inclusive transport to those in their communities.

“ We want to see community transport thriving across England, Scotland, Wales and Northern Ireland, enabling people to live independently, participate in their community and to access education, employment, health and other services. ”

At the Community Transport Association we work with our members to **promote high standards of practice** in community transport. We provide **quality assured training** and **comprehensive advice** to support members in delivering excellent services.

We ensure that **community transport is part of the conversation**. We work closely with the Department for Transport and others in government to **influence the formation of better policy, regulation and investment** for the benefit of the communities served by our members.

### Get Involved

To become a member of the Community Transport Association or to find out more, contact our membership team on **0161 351 1475** or visit **[www.ctauk.org/cta-membership/join-now.aspx](http://www.ctauk.org/cta-membership/join-now.aspx)**

### Join the conversation

Keep up to date with the latest community transport news. Follow us on Twitter **@CTAUK1** or follow our blog at **[www.ctauk.wordpress.com](http://www.ctauk.wordpress.com)**.