

# CAPS II Clinician Guide



## **IMPORTANT!**



**Wheelchair manufacturers' recommendations on usage should be checked prior to fitting, especially with regard to limitations or exclusions of use and weight limits (total combined weight should be considered).**

**Stability must always be checked in accordance with MDD guidelines, before using the seating system. Note that forwards stability may be adversely affected when using the seating system.**

**This seating system must be finally set and adjusted by a qualified therapist and/or rehabilitation engineer before use.**

**Ensure you fully read the User Guide in addition to this document.**

Please contact us if you require a 5mm allen key and 13mm spanner to adjust this seating system.

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## Parts Included in this CAPS II Seating System

- ☐ Seat Unit
- ☐ Pommel or kneeblock
- ☐ Footrests
- ☐ Headrest
- ☐ Harness
- ☐ Lap Belt
- ☐ Tray
- ☐ Interface Board

# 1 Your seating system

This User Guide will help you to get the most from your seating system – please take some time to read the relevant sections carefully!

We work hard to bring the best evidence-based products to market using the latest manufacturing techniques. We work as a multi-disciplinary team to develop our products, and have a highly skilled manufacturing unit to manufacture our designs in the UK.

Training, support and customer service are a key part of what we do to help to ensure you get the most from your seating system and it meets your postural and lifestyle needs.

All of our products are developed with durability in mind.

## 1.1 Important

- Wheelchair manufacturers' recommendations on usage should be checked prior to fitting, especially with regard to limitations or exclusions to use and weight limits (total combined weight should be considered).
- This system must only be fitted by a competent person.
- Stability must always be checked in accordance with MHRA guidelines, before using the seating system.
- Please refer to the MDD guidelines, No. MDD92/07, and the section on Transportation in the CAPS II User Guide before using the seat in transport.
- We recommend you read the CAPS II User Guide in conjunction with these instructions, and ensure a copy is passed onto the user when the seating system is issued.

## 1.2 Installation

Before attaching the seating system to the wheelbase, an interface board will need to be fitted to each of the wheelbases to be used. The seating can then be adjusted to the client. The installation should only be completed by a competent person.

### 1.2.1 Attaching the interface board

The interface board should be attached following the instructions supplied 'Fitting an Interface Board'.

### 1.2.2 Initial settings

The CAPS II seating system will be delivered already set up to the measurements recorded during the assessment with the pelvic lateral supports both symmetrical and centrally aligned.

If measurements were not provided with your order always preset the chair for the client before they are positioned in it.

Before positioning the client in the seating system, retake key measurements to check for growth since the measurements were taken at the assessment. Adjust the seating system if required.

### 1.2.3 Position the client

Place the client in the CAPS II, ensuring that they are right back in the seat, ie. with the sacrum against the sacral pad. Secure and tighten the pelvic strap.

### 1.2.4 Seat depth adjustment

Check the position and tilt of the pelvis, if necessary adjust the seat depth to ensure the pelvis is in a neutral position. When adjusting the seat depth always measure both sides to ensure the backrest is kept square to the seat.

- 1 Loosen the locking nut on each side of the seating system



- 2 Move the backrest to the required position



- 3 Use a tape measure to measure a fixed point on the seating system to ensure the backrest is square to the seat base.



- 4 Tighten the bolts.

On some occasions, the backrest tubes may need to be offset. It is still useful to use a tape measure to determine the offset required.

After loosening the locking bolts, the backrest does not move, check the other bolts are not tight to ensure the backrest moves freely.

### 1.2.5 Footrests

Adjust the footplates to support the feet with the femur horizontal and both the knees and ankles at 90°. Footrests and footstraps must always be used if kneeblocks are to be fitted.

- 1 Loosen the clamp on the top bracing point. You might find it easier to remove the bolt completely while adjusting the footplate position.



- 2 To adjust the height of the footrest, loosen the bolt on clamping the footrest vertical tube.





- 3 To adjust the depth position of the footrest, loosen the bolt on the tube that runs from front to rear



- 4 To adjust the width position of the footrest, loosen the bolt on the tube that runs from side to side



- 5 You can check the footrests are at the same height and centrally aligned by checking the tubes that run side to side are pointing towards each other.



- 6 If you removed the bolt securing the footrest rear strut in stage 1, ensure it is fixed back into place. Ensure all fixings are tight.

### 1.2.6 Lateral supports

Align the pelvic and thoracic lateral supports so that the client can be easily positioned, even with thicker clothing. Allow approximately 5cm clearance between the top of the thoracic support and the axilla. The pads should not be brought around the front of the client to hold back the trunk.

- 1 Hold the lateral support with one hand, and loosen the fixing bolts with the other.



- 2 Adjust the lateral support to the required height. Tighten the fixings.
- 3 The laterals will typically be positioned so they are symmetrical, parallel or pointing very slightly outwards.



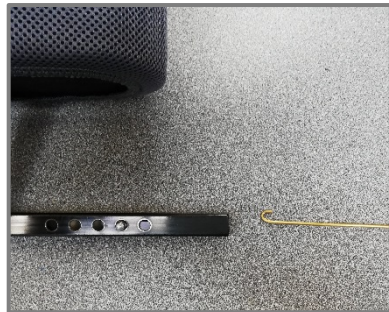
## 1.2.7 Kneeblock

Before adjusting the kneeblock, ensure the client is correctly positioned in the seat with their sacrum against the sacral pad.

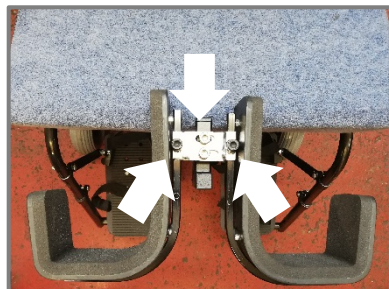
- 1 Decide on the position of the spring pin. To move the spring pin further into the tube, depress the pin and push it along the tube hole by hole until it is in the required position. This will move the pommel or kneeblock closer to the client.



- 2 To move the spring pin towards the end of the tube, fabricate a small hook (perhaps from a large paperclip). Insert it into the tube. Depress the pin, hook the hook onto the spring pin and pull it hole by hole towards the end of the tube.



- 3 To adjust the kneecups, loosen the four bolts of the kneeblock and place in position. Tighten the bolts.



- 3 To adjust the height, loosen the bolt at the bottom of the kneeblock vertical tube. Set the height to align with the patella tendon. Tighten the bolt.



- 4 Adjust the angle of the individual kneecups to follow the line of the inner thigh

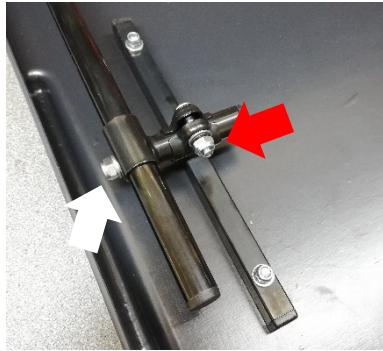


- 5 Finally, adjust the depth setting of the kneecups taking account of any leg length discrepancies. Ensure all fixings are tight.

If correcting windswept hips, adduct the previously abducted hip and push back to de-rotate the pelvis and abduct the previously adducted hip, but apply no force along the line of the femur.

### 1.2.8 Tray settings

- 1 Insert the tray and ensure there is sufficient clearance to remove it. If not, it can be adjusted.
- 2 To adjust the tray, remove it and place it upside down on a bench. The depth of the tray can be adjusted by loosening the bolts shown by the white arrow. The width can be adjusted by loosening the bolts shown by the red arrow. Ensure both sides are adjusted equally and that it fits onto the seat. Ensure bolts are fully tightened.
- 3 If required, adjust the height of the tray to a comfortable elbow height.



### 1.2.9 Other settings

The headrest and strap can now also be adjusted.

Observe the client once the adjustments have been made and ask if they are comfortable; carry out any minor adjustments. Pay particular attention to the seat depth, kneeblock and footrest settings.

Check all nuts and bolts are tightened using the spanner provided. Check both the red straps securing the seat to the wheelchair are securely fastened, and that the armrests are correctly fitted.

## 1.3 After Delivery

Inform all staff and family involved with the client of the reasons behind the CAPS II Seating System and the importance of the various components. Ensure the copy of the CAPS II User Guide is supplied with the seat is passed on.

During the first few days check for redness of the bottom, knees and thighs. If redness subsides quickly there is no cause for concern, however if redness persists check alignment of the kneeblock, height of the footrests and the seat depth adjustment. Ask the child if they are comfortable.

Check the child's postural ability in the seat. It should be better than out of the seat. Refer to our leaflet "Problem Solving in Seating" for help with specific problems. Always consider the postural management of the child in other situation, i.e. lying and standing.

Occasionally, ability in certain tasks may appear to decrease when the client is first placed in the CAPS II Seating System, especially with regard to head control and some functional tasks such as eating. This should not present immediate cause for concern as it may simply reflect the need for motor learning to take place within the new equipment following normal patterns of movement.

The chest strap should be used during transport or when the patient is being moved. It should not be used all the time as the patient could develop a tendency to rely on it for support without developing their postural ability. Use caution when using tilt of the wheelchair and can bring unexpected results and adverse affects on posture.

Check the use of the seat by carers, teachers and parents especially when positioning the child in the seat and with the use of the kneeblock.

During the first two weeks closely monitor the child's acceptance of the seat and any changes in their ability. Check the seat depth adjustment, especially when a kneeblock is used. As the child gets used to sitting with their weight down through the ischial tuberosities they will naturally assume the upright sitting posture. As a result the seat depth and/or kneeblock adjustments will often require shortening. Check that all nuts and bolts are tight and wheelchair fittings are secure.

## 2 Seat Options

The seating system may be supplied in one of a number of configurations with several possible options fitted. If you have any of these fitted to your seat, ensure you read through this section.

### 2.1 Lynx Backrest



To adjust a Lynx Backrest follow these initial steps:

- Assess the client out of the seat to establish their sitting ability, and the position you would like to achieve once they are positioned in the seat.
- Depending on the age of the user, you may find it easier to position them with a colleague to enable one of you to observe the position you are aiming to achieve.
- With the user out of the seat, observe the seat and back cushions carefully and identify any signs of wear or compression that may indicate areas of higher pressure or shear.
- Remove the back cushion and position Evazote spacers into the central hole of the Lynx crosses (please contact us if you require some of these). These replace the seat cushion and enable you to feel through the backrest to identify or investigate areas of high or no pressure during the assessment.
- With the user back in the seat, feel through the Lynx crosses from behind to identify areas of Lynx you want to move in, and those you want to move out.



- Once you have established your objectives, use the following steps to adjust the backrest.

Once these steps have been completed, the backrest can be adjusted.

- 1 The brackets that hold the Lynx onto the backrest tubes need to be loosened in the area of Lynx you want to adjust. Loosen the nut and bolt on the top leg of the angle brackets. Do not remove it, loosen it sufficiently to allow it to rotate.



- 2 Loosen the bolt that runs through the backrest in a similar way. You may need to do this with the client out of the seat.





- 3 Loosen the bolt that fixes the bracket to the clamp on the backrest tube.



- 4 Loosen the Lynx nuts in the area you would like to adjust. Work methodically in either rows or columns. Once loose, pull the Lynx out or push it in until you obtain the required shape. Tighten the Lynx nuts, again working methodically in rows or columns to ensure they are all tight. Repeat the process as required.



Remove the Evazote spacers and place the seat cushion back into position. If the shape of the backrest has changed significantly you will need to consider if a new backrest cushion is required. One may be required if it:

- does not fit
- moves too much or cannot be attached in the correct position
- does not fully cover the Lynx backrest
- causes discomfort.

If a replacement back cushion is required:

- draw around the existing cushion onto a large piece of paper or card
- record on the sheet the top and bottom and whether the view is from the front or rear
- draw on any changes required with a different colour pen
- mark any relevant notes on the drawing, specific Velcro of fixing positions if required.

## 2.2 Dynamic Backrest

Basic information on the Dynamic Backrest is provided in the user manual. The additional information provided here indicates how to complete final adjustments before handover.

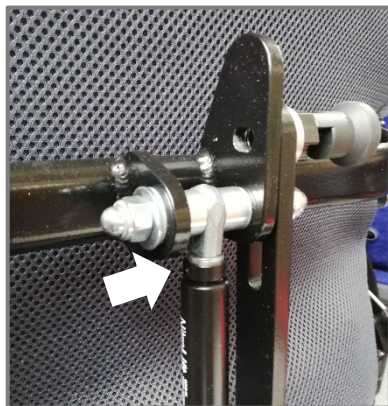


**Ensure the user is made aware that the backrest should be locked in position during transport.**

### 2.2.1 Adjusting the gas strut

It is possible to adjust the gas strut to REDUCE the force required to operate it. It CANNOT be adjust to INCREASE the force required. Once the gas has been released, it can only be refilled by the manufacturer, so proceed with caution! If too much gas is released, the dynamic element of the seat will not be useable.

- 1 Identify the location of the grub screw used to release the gas. This will be on the side of the main body at the top.



- 2 Loosening the grub screw will vent the gas. Tighten the grub screw to stop.

- 3 Turn the grub screw anti-clockwise a quarter of a turn and vent for 1 second before retightening. Do not overtighten the grub screw.
- 4 Only release a small amount of gas in short bursts to avoid releasing too much. Test the backrest as required between venting.
- 5 Each one second burst will reduce the force required by around 50N.
- 6 Once you have reached the required level, gently brush the grub screw with washing up liquid. If gas can be seen bubbling through the liquid the grub screw is not fully tight.

## 2.2.2 Adjusting the Pelvic Lateral Supports

The Pelvic Lateral Supports are fitted in a different location to a standard seating system.

- 1 Locate the lateral support bolt head. It is positioned just in front of the backrest tubes. You may like to use a 13mm socket on a short extension with the ratchet behind the backrest to adjust the lateral support.



### 2.2.3 Adjusting seat depth

The seat side plates have a different profile on a Dynamic Backrest. The two nuts on both sides need to be loosened to allow seat depth of adjustment.

- 1 Loosen the two nuts on each side of the seat and move the backrest to the required position.



- 2 Ensure all fixings are tightened once the adjustment has been completed.

Note that the backrest cannot be adjusted asymmetrically as there is a bracing bar joining the two sides of the backrest.

# 3 Transportation

Active Design seating systems should only be used

- in transport on a wheelchair base that meets the performance requirements of ISO 7176-19:2008 and whose securement points conform to the design requirements of the same standard.
- in a forward-facing position when used in a vehicle.
- in line with their user instructions.

Also:

- trays should always be removed and safely secured elsewhere in the vehicle during transport
- postural support devices, such as postural lap straps and postural harnesses, should NOT be the PRIMARY means of restraint in transport.
- if you wish to modify the seat, you need to ask us first.
- Vehicle-based occupant restraint pelvic and shoulder straps should meet ISO 10542-1:2001
- children less than 22kg should be transferred to a car safety seat.

## 3.1 Introduction

This document describes the way in which our seating systems should be used when they are transported with an occupant. It should only be read as an addition to the Posture and Mobility Group document “Best Practice Guidelines: Transportation of People Seated in Wheelchairs” and the Medicines and Healthcare Products Regulatory Agency (MHRA) guidance on the safe transportation of wheelchairs, in particular documents DB2001(03) and DB2003(03). We provide here an interpretation of these guidelines with specific reference to our products. If you do not have a copy of these guidelines please obtain the relevant documents before reading any further.

## 3.2 Background

The transport provider (not just the operator) has a duty of care to provide transport to allow an individual to travel in safety and reasonable comfort. The complexity and unique nature of each individual’s disability and the combination of wheelchair and special seating, will require that all children using our seats should ideally have an individual risk assessment to establish best practice and reduce all the risks associated with travel to an acceptable level.

Research undertaken on behalf of the Department for Transport established that in forward facing crash tests, wheelchairs provided similar (or better) levels of occupant protection than conventional bus seats. However rear facing was found

to be unsafe unless a padded head and back support was provided in accordance with ECE R17. This research also identified a reduced risk associated with larger vehicles.

None of our seats have been designed for use as a vehicle safety seat, therefore whenever possible the occupant should be transferred to vehicle seat or an approved safety seat. This especially applies to young children who would normally travel in a car safety seat.

There could be occasions when it may be necessary to transport a person whilst using their seat, possibly to ensure adequate postural support. All of our seating systems are suitable for this purpose when used in accordance with this guidance.

The following information provides further guidance for the safe use of our seating systems when this is necessary and when they are used in conjunction with commonly used wheelchairs. It is essential to refer to the wheelchair manufacturer (or supplier) for their recommendations relating to the use of their product in transport particularly the maximum weight limits.

### 3.3 Transporting the Seat

The system should normally be secured using a three stage process:

Seat > Wheelchair > Occupant

We have also produced a Journey Checklist that will help to ensure all steps are taken to secure the system.

#### 3.3.1 Securing the Seat

The following steps should ALWAYS be carried out. We have produced a journey checklist that can be attached to the seating system and provide instruction to those involved with transporting the seating system.

The seat should be securely fastened into the wheelchair. The red seat retaining strap must always be securely fastened around the wheelchair push handles in all cases.

Additional straps to independently secure the seating system are not normally required.

#### 3.3.2 Securing the Wheelchair

The wheelchair should be secured in accordance with the manufacturers recommendations and with reference to the Department of transport code of practice 'The Safety of Passengers in Wheelchairs on Buses' No.VSE87/1 and DB2001(03).

It should normally only be used forward facing. This will typically be a four point tie-down system.

### 3.3.3 Securing the Occupant

A minimum level of occupant restraint is a 'lap and diagonal' belt securely fastened to the vehicle. Higher levels of protection may be provided by a four or five point system secured directly to the vehicle.

Care should be taken with the placement of the lap strap to ensure it is placed so as to lie across the hips in a position where it will anchor the pelvis and not ride up into the abdomen. The shoulder strap should be positioned across the torso and over the shoulder, ensuring the strap neither cuts into the neck or slides off the shoulder.

In addition particular attention is drawn to the shoulder strap anchorage which should be secured approximately 40mm above the height of the shoulder to minimise the risk of compression injuries. We would recommend, however, that if this type of fixing is not possible the shoulder straps must still be used and must be secured directly to the vehicle.

If a chest strap or harness is used for postural purposes, this should remain secured in addition to the lap and diagonal belt.

An example of a journey checklist which may be a useful aide is set out below, this is not an exhaustive checklist, but may be useful to consider having undertaken an appropriate risk assessment.

### 3.3.4 Journey Checklist

- ☑ Seat secured to wheelchair
- ☑ Seating system latched onto locking interface
- ☑ Red strap tightened
- ☑ Wheelchair secured into vehicle
- ☑ Normally a four point webbing system
- ☑ Lap and diagonal seat belt fitted around user
- ☑ Postural straps to remain in place
- ☑ Kneeblock used as normal
- ☑ Headrests used as normal
- ☑ Tray should normally be removed
- ☑ Other items are secured or fitted in line with transport plan

## 3.4 Other Considerations

### 3.4.1 Postural Straps

Postural straps supplied with the seat should continue to be used as normal, however the occupant must still be restrained as indicated above, irrespective of the number or type of straps, harnesses or waistcoats fitted (unless specifically designed as an occupant restraint).

Take care to ensure that any buckles on the postural straps are not caught beneath the vehicle lap and diagonal strap, since this may be uncomfortable and may increase the risk of injury in the event of a crash.

### 3.4.2 Headrests

Headrests should always be used. Our headrests are not tested for use as a 'vehicle head restraint', however it has been successfully used on all 'crash tests' undertaken by Active Design. Always check that the occupant cannot slide down in the seat and get their head/neck stuck in the gap between the backrest board and headrest.

If the headrest is used, ensure that it is correctly mounted and all bolts are securely tightened.

### 3.4.3 Trays

Trays should be removed and stored safely on the vehicle. If the support provided by the tray is important for posture a 'custom made' foam block (polystyrene or similar) could be considered as an alternative to an actual tray.



### 3.4.4 Kneeblocks

We recommend that if a kneeblock is normally used then it should continue to be used in transport. This has been verified by additional 'crash testing' over and above the requirements of any current ISO standards.

If the seat was supplied before 1st May 2003, we recommend the seat should have a strip of 'hook' Velcro™ glued and stapled to the seat board, please contact us for full instructions on this simple modification (Leaflet No. INS083).

### 3.4.5 Interfaces

Any of the interfaces manufactured by Active Design are suitable for use in transport. However it is preferable to use a 'Passive Locking' type interface, since this provides a more secure attachment and eliminates movement of the seat on the wheelchair during cornering and normal braking.

### 3.4.6 Tilt in Space Wheelchairs

Our seats can be used in a tilted position in transport and have successfully passed a 'crash test' in accordance with the impact test requirements of ISO 7176-19 on a tilt in space base set to full tilt (30 degrees). Not all tilt in space bases can be used in transport in a tilted position, therefore it is important to check this with the wheelchair manufacturer before use.

## 3.5 Risk Assessment

The number of factors to be considered and the potential conflicts created make the process of risk assessment very difficult, requiring a knowledge of medical conditions, postural management, wheelchairs, restraint equipment and the types of vehicle available.

A number of people may also need to be consulted possibly including the user, parents, care staff, therapists, wheelchair service, transport provider, transport operator, education, social service, NHS trust and manufacturers. Information on many of the factors to consider can be found in the documents listed in the References section below.

You may find it useful to refer to BS 8603:2013 Code of practice for wheelchair passport schemes as it contains a useful section on risk assessment.

It is important that the potential risk of an injury is weighed against the chance of this happening (statistically wheelchair users are far less likely to be involved in a major crash than other car or bus users). The benefit of gaining access to transport should also be considered.

Some factors to consider during an individual risk assessment:

- Consider the individual's health & safety for his normal journey, not just what might happen in a crash
- Duration of typical journey
- Type of journey, rural, town, motorway etc.
- Type and condition of wheelchair
- Type and condition of vehicle
- The individual's postural ability The individual's weight, and any handling considerations
- Any special requirements, medical, postural or psychological
- Type of injury anticipated in each travel scenario
- The probability of an incident happening – a serious crash is unlikely, whereas a negotiating a roundabout is almost certain
- Means of evacuation or escape and obstacles created by equipment
- Other means of restraint / support or alternative seating systems
- Alternative positions
- Safe and secure storage of any removable items
- Access to the vehicle – ramps and lifts
- Disability discrimination and the individuals right to travel in safety and reasonable comfort
- Human Rights

## 3.6 Training

All matters relating to transport should be discussed in detail with the user wherever possible and the user's parents, carers, school and transport providers. In particular parents or guardians must be involved in any decisions affecting a child's safety, since they carry the overall responsibility for their child.

It is important that all drivers, parents, carers and escorts are trained appropriately in the use of any restraints, including evacuation procedures. It is also important that they understand how the MiniCAPS and CAPS II seats work and the importance of removing or leaving relevant components in place for each child.

## 3.7 Summary

As a summary, remember these key points:

- Take care getting on or off the vehicle
- Transfer to a vehicle (safety) seat wherever possible
- Travel forward facing
- Secure the seat (CAPS II or MiniCAPS) to the wheelchair
- Secure the wheelchair to the vehicle
- Use a lap & diagonal occupant restraint
- Use the headrest
- Use the kneeblock if normally used
- Remove the tray
- Larger vehicles = less risk to occupants

Travelling in a vehicle whilst seated in a wheelchair is normally safe if you follow basic safety guidelines. Whilst thousands of people are killed on the roads each year almost none of these deaths include people seated in wheelchairs. The highest risk to most wheelchair users occurs whilst getting on or off the vehicle. The hazards of normal driving, cornering and heavy braking often present a greater hazard than those off a crash.

If you would like further clarification on the transport of the MiniCAPS or CAPS II please contact us.

## 3.8 Notes on ISO 16840-4:2009

- Active Design seating systems meets the requirements of ISO 16840-4:2009.
- The CAPS II seat has met the Performance Requirements of the Frontal Impact Test.
- Belt Restraint Accommodation: Active Design seating systems are rated A (Good). This is on a 3 point scale where systems are rated as A (Good), B (Acceptable) or C (Poor).

## 3.9 References

ISO16840-4:2009 Wheelchair Seating Part 4: Seating systems for use in motor vehicles (2009) International Standards Organisation

BPG1 – Transportation of people seated in wheelchairs – Posture and Mobility Group. Download from [www.pmguk.co.uk/bpg-transportation-comment](http://www.pmguk.co.uk/bpg-transportation-comment)

BS8603: 2013 – Code of practice for wheelchair passport schemes

Guidance on the Safe Transportation of wheelchairs DB2001(03) (2001), MHRA, Tel: 01253 596000, [www.mhra.gov.uk](http://www.mhra.gov.uk)

Guidance on the Safe Use of Wheelchairs and Vehicle Mounted Passenger Lifts DB2003(03) (2003), MHRA, Tel: 01253 596000, [www.mhra.gov.uk](http://www.mhra.gov.uk)

Safety Guidelines for Transporting Children in Special Seats, MDD/92/07 (1992), MHRA, Tel: 01253 596000, [www.mhra.gov.uk](http://www.mhra.gov.uk). Out of print.

The Safety of Wheelchair Occupants in Road Passenger Vehicles (2003), Department for Transport, Tel: 020 7944 5281, [www.dft.gov.uk](http://www.dft.gov.uk)

The Safety of Passengers in Wheelchairs on Buses VSE87/1 (1987), Department for Transport, Tel: 020 7944 5281, [www.dft.gov.uk](http://www.dft.gov.uk)

Safe Journey, Home to School Transport (1996), Association for Transport Co-ordinating Officers, Community Transport Association, Tel: 0161 351 1475, [www.communitytransport.com](http://www.communitytransport.com)

It's not my Problem (1991), Department for Transport, Department for Transport, Tel: 020 7944 5281, [www.dft.gov.uk](http://www.dft.gov.uk)

School Transport: The Comprehensive Guide (1994) Sian Thornthwaite, Community Transport Association, Tel: 0161 351 1475, [www.communitytransport.com](http://www.communitytransport.com)

Guidance on Manual Handling of Loads in the Health Service (1992), Health & Safety Commission

## 4 Maintenance

### 4.1 Routine Maintenance

The seating and interface should be checked by the organisation who provided the seat every 6 month for security of fixings, nuts and bolts.

Seat and back cushions and lateral supports should be checked for wear and degradation of the foam.

Straps should also be checked for signs of wear (especially stitching). The seating Fusion is fully guaranteed for 24 months but should last between 3 and 5 years if the seat is correctly maintained.

The interface should be checked every 6 months (maximum period 12 months) for security of fixings, nuts and bolts and the correct operation of the spring loaded catches.

#### 4.1.1 Cushion

Check the condition of the seat and back cushions annually.

#### 4.1.2 Harnesses

This product should be checked every six months for security of fixings and for signs of wear. It should be replaced if:

- There are any signs of damage to the buckles or they do not latch securely
- It cannot be adjusted to the correct length to support the required posture
- The webbing is frayed, or the stitching failing.

#### 4.1.3 Lap Straps

This product should be checked every six months for security of fixings and for signs of wear. It should be replaced if:

- There are any signs of damage to the buckles or they do not latch securely
- It cannot be adjusted to the correct length to support the required posture
- The webbing is frayed, or the stitching failing.

## 5 Important Information

### 5.1 Statutory Compliance

Our seating systems are manufactured to comply with the Medical Devices Directive MDD93/42/EEC and amendments in 2007/47/EEC. In terms of the Medical Devices Directive, our seating systems are classified as Class I Medical Devices.

The MAPS Seating System is a custom made medical device manufactured for a specific patient to specifications provided by a named clinician. Details of this can be found by contacting Active Design or the prescribing authority and quoting details that can be found on the label attached to the device.

### 5.2 Wheelchair Stability

The stability of this system should be checked in accordance with local guidance, best practice and MHRA guidelines before being used. Dynamic stability as well as static stability should be considered.

The configuration of a seating system and its position will have an impact on the performance of the wheelchair on which it is interfaced, and this can effect braking and acceleration, and the ability to navigate kerbs for example. You may need to consider anti-tippers on a manual chair and the drive settings on a powerchair. Where relevant we would recommend a risk assessment if completed. You may wish to provide the user with a copy of the BHTA leaflet on wheelchair stability 'Get wise to making sure your wheelchair remains stable'.

### 5.3 Testing

#### 5.3.1 Fabric

We need our fabrics to last. We independently test the materials used in our seating systems to the following standards:

- BS EN ISO 105-C06:1997 (Colour fastness)
- BS EN ISO 105-BO2:1999 (Fastness to light)
- BS EN ISO 12947-2:1998 Martindale abrasion resistance (30000 rubs with 12kPa load)

#### 5.3.2 Foam

Our Reflex foams are tested to:

- BS 5852-2:1982 using Ignition Source Crib 5

### 5.3.3 Actiflex

The fabric used in our Actiflex lap straps and harnesses has been tested to the Aerospace standard C525.853 Part 1 Appendix F a-I for flammability.

## 5.4 Warranty

All of our products are manufactured to the highest standards.

Active Design Ltd warrants that seating systems supplied by Active Design will be free of all defects in material and workmanship for a period of 24 months from the date of purchase. Active Design will not be held responsible for any damage or injury due to misuse or modifications of these products

We provide a full two year warranty against manufacturing defects for our Actiflex range of lap straps and harnesses.

## 5.5 Who to contact for support

If you have a problem with any of our products, your first contact should be the organisation who supplied the product to you. If there is a problem that your therapist is unable to answer then please do get in touch directly.

## 5.6 Further information

If you find any part of this User Guide unclear, or if you require further information please call us on 0121 326 7506 to speak to one of our team members.



Active Design Ltd

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