



AirPal[®] Patient Transfer System

Questions & Answers

1. How does the AirPal Patient Transfer System promote Safe Patient Handling more effectively than similar products?

It has become generally accepted that air-assisted lateral transfer pads create many efficient safe patient handling benefits. AirPal's product line is the broadest offering on the market with nine available widths in the PVR reusable standard 78" length line (18, 24, 26, 28, 30, 32, 34, 39, 50") and four available widths in the SPS disposable line (28, 34, 39, 50"). Additionally, AirPal offers 47" ShortPads™ (Reusable widths: 28, 30, 32, 34, 39, 50", Disposable widths: 34, 39") that are perfect for specialty patient positioning applications like Labor and Delivery, drop table procedures, or the Operating Room.

An air-assisted lateral TransferPad™ has an underside that is perforated for air release. The device is attached to an air supply which forces a constant flow of high volume/low pressure air which causes the device to inflate a semi-rigid surface for patient transfers or positioning. Upon inflation, excess air escapes out through the perforations on the bottom of the device and a "cushion" of air is formed upon which the patient is moved almost effortlessly. The technology itself is efficient in terms of reducing the number of staff required for a lateral transfer; the device has been shown to reduce the amount of exertion required for transfer by up to 90%. In general an AirPal TransferPad solves many problems and offers higher operational efficiencies. The product is portable and requires little room to store, reduces lifting requirements, aides patient comfort, is easy to use, requires little training, and is suitable for MRI and X-Ray transfers (Note: MRI requires 25' air hose). TransferPads have a demonstrated ability to reduce the occurrence of musculoskeletal disorders (MSDs) associated with repetitive lifting stresses thus reducing caregiver injury related costs. Of equal importance, air-assisted TransferPads use technology to bring greater patient comfort to the lateral transfer process.

Over the last 30 years AirPal has steadily applied new innovation to make the air-assisted lateral patient transfer process even better.

SKIN MANAGEMENT: Realizing that caregivers have skin integrity concerns about leaving patients on any surface for an extended length of time, AirPal uses a doubled layered surface to reduce friction and shear. In the PVR Premium-Value-Reusable line, Airpal uses advanced four way stretch fabrics on all patient contact surfaces. In the SPS Single-Patient-Stay line, Airpal employs an independent polypropylene cover to minimize friction and shear.



Independent pressure mapping studies have shown that air assisted lateral transfer devices whether reusable or disposable do not significantly impact the pressures on the patient. This test was based on a variety of patient weights and a variety of support surfaces.

There have not been any scientific studies as to the effects of a long term patient stay on an air assisted lateral transfer device. The longest known continuous patient stay on an Airpal TransferPad was three months. Full hospital protocol was followed at all times with no adverse skin effects. The Airpal TransferPad was used as a therapeutic support surface to moderate skin pressure on the patient on a regular basis.

DURABILITY: To reduce the chance of seam failure, all AirPal TransferPads are double stitched with nylon bonded thread rather than the less costly heat sealing method. Handles are reinforced through the sidewall and are designed to distribute stresses through the handles and not the patient surface. This means Airpal products are extremely well built. As a result, the PVR line carries a five year warranty - the longest in the industry. The use of stitched seams also facilitates repairs, enabling the replacement of panels if they are inadvertently ripped or punctured.

INFECTION CONTROL: Airpal takes infection control beyond the standards of others. For the PVR line, all seams on the patient surface are covered by one of several medical fabrics specially designed for the hospital environment. The "PVR-N" series employs Herculite's Sure-Chek Fusion III® or Brookwood's DERMA-PLUSH® - materials that are used for many premium hospital bed covers. These materials offer molecular migration technology to make it self-deodorizing and anti-bacterial for the entire life of the fabric. The "PVR-L" series employs Herculite's 'Lectrolite fabric - a product developed for operating table use. In addition to being well suited for high fluid applications, Lectrolite is electrically conductive. By dissipating static electricity, it helps reduce the hazard of explosion in flammable, gaseous atmospheres and electrical interference with sensitive operating room electrical equipment. For the SPS Single-Patient-Stay disposable line, the patient surface is a waterproof polypropylene with anti-microbial and anti-stain coatings.

As an even greater step toward infection control, Airpal offers reusable and disposable protective covers called Sani-Liners. The extended size Sani-Liners offer additional protection from soiling and fluids by extending down the sides of the TransferPad to cover the sidewalls and handles. They attach to the AirPal TransferPad with non-ferrous snaps so they will stay in place under the patient. Some of the durable Sani-Liners are available in the same specialty fabrics used for TransferPad construction.

ERGONOMICS AND SAFETY: AirPal employs an easy to use exclusive double loop extended handle design, so caregivers of any stature can remain upright without the rails becoming an obstacle and without unnecessary over extension.



MOBILITY AND STORAGE: The AirPal Air Supply can be used with or without our STAND or CART accessory transport and storage solutions. When not used with an AirPal accessory, the Air Supply can attach to the bed or stretcher with an integrated hook and travel with the patient.

2. What are the key features that differentiate the AirPal Patient Transfer System from similar products?

Since AirPal invented air-assisted lateral patient transfer technology nearly 30 years ago, several competitors have introduced conceptually similar products. However, the following high-quality features differentiate AirPal products:

MEDICAL FABRICS: AirPal PVR Premium-Value-Reusable products are manufactured using specialized medical fabrics from Herculite, Inc. and Brookwood Companies Incorporated. Unlike generic nylon twills, the fabrics have special engineered properties which make them particularly suitable to conform to pressure management surfaces - providing four-way stretch and cushioning, and reducing shear. The use of specialized fabrics means that AirPal PVR products can be left under a patient for an extended length of time without raising skin management concerns. This benefit is especially important when working with obese and morbidly obese patients who are at a higher risk for skin concerns. All fabrics are fire resistant and include an antimicrobial system that lasts the life of the fabric. TransferPads and Sani-Liners are also available in Lectrolite fabric, an Airpal exclusive, for use in high fluid situations such as the Operating Room or Obstetrics.

EXTENDED HANDLES: AirPal has extended handles on all of its products. This means that caregivers of any stature can maintain proper posture without needing to bend their back during a transfer thus avoiding unnecessary stress to the lower lumbar region of the caregiver's spine. Additionally, the extended handles easily permit use of the stretcher or bed's safety rail without itself becoming an obstacle. What this means to caregivers is the ability to transfer a patient with a higher degree of patient safety.

STABILIZATION BANDS: AirPal utilizes a unique system of radial bands for our PVR line that are integral to the extended handle attachment points. The Stabilization bands provide multiple benefits: Because they are integrated with our handles they help to create an incredibly strong and thus durable design. Patient cradling is an inherent feature of most air assisted lateral transfer devices. However if the patient is not initially centered on the transfer pad at the time of placement the patient will not be cradled as the device is inflated. Because of Airpal's stabilization bands, a caregiver can give a slight upward tug on the handle closest to a slightly off centered patient and the stabilization bands will help to re-center the patient as the device inflates and the patient cradling effect takes over.

COLOR CODING: AirPal PVR TransferPads utilize a color coding scheme to help identify the different widths. Additionally AirPal color codes its Sani-Liner covers which make it easy to match the right cover with the right TransferPad.



PROTECTIVE SANI-LINERS: Sani-Liner protective covers are secured with non-ferrous snaps and are MRI safe (the snaps are located well outside the patient's footprint). Since the Sani-Liner is secured to the TransferPad, caregivers can easily place the Sani-Liner protected TransferPad under the patient without the liner itself becoming an obstacle or "bunching up" beneath the patient. This also means when the device is removed from beneath the patient, the Sani-Liner stays in place and makes removal a one step process. Another key feature of the protective Sani-Liner is its extended width. Because it is extended, it offers an extra level of protection from soiling and fluids to the sidewalls and handles

FIVE YEAR WARRANTY: All AirPal PVR TransferPads and Sani-Liner products carry an unprecedented five year warranty for defects in materials and workmanship.

DOUBLE LAYERED PATIENT SURFACE: Designed to specifically address skin management concerns the Airpal double layered surface provides multiple benefits for all of its products:

First, AirPal offers a choice in patient surfaces so that its TransferPads are tailored to specific needs and applications.

AirPal's PVR-N is our most popular patient surface option. Herculite's Sure-Chek Fusion III® and Brookwood's DERMA-PLUSH® offers unique stretch characteristics along both the horizontal and vertical axes. The stretch characteristics allow the fabric to move with the patient, provide a cushioning effect, and ultimately means a more comfortable experience for the patient while reducing skin management concerns.

AirPal's PVR-L option is perfect for trauma care or other applications where fluids are anticipated. Since 'Lectrolite® is a vinyl laminated surface it is easily cleaned and resistant to staining, which means a longer service life - especially since it is a laminated and not a coated surface (coatings on the patient surface are prone to wear). Since 'Lectrolite is highly conductive (and anti-static) it is also the best surface to use for procedures where electro cauterization is to be used (routinely used in surgery to remove unwanted or harmful tissues).

AirPal's polypropylene fabric used in its SPS disposable line of products is treated with state of the art coatings to provide many of the features of advanced fabrics for use in a disposable form. The absorbent material has a waterproof coating to hold fluids away from the underlying transfer pad. The Anti-Stain coating allows for easy fluid clean up with minimal staining facilitating re-use by a single patient. Additionally the anti-microbial coating promotes patient safety and hygiene.

Second, AirPal's double layered surface means that seams are covered. Since seams are covered, the patient surface is smooth, which means pressure points and pressure ridges are reduced - decreasing the skin management issues that seams produce. Additionally, the smooth surface makes wipe-downs between patients easier.



Third, double layering the patient surface means that the two layers of specialized fabrics can slide against one another. Since the double layered patient surface can slide over the lower surface the chance of skin shear is dramatically reduced, once again maximizing the ability of the caregiver to manage skin related concerns for their patients.

3. Are the materials used in construction of the AirPal TransferPads flame retardant and bacteriostatic?

FLAME RETARDANT FEATURES: Herculite and Brookwood maintain Material Safety Data Sheets (MSDS) and publishes flame resistance and cigarette ignition test procedures and results for the fabrics AirPal uses in the PVR line. All fabrics used in the PVR durable and SPS disposable products by AirPal are flame resistant and self-extinguishing when a source flame is removed.

BACTERIOSTATIC FEATURES: Herculite and Brookwood fabrics are treated with a proprietary antimicrobial additive designed to slowly release over the life of the fabric. A controlled release feature allows migration of the antimicrobial agent to the fabric surface. The antimicrobial agent helps protect the fabric from microbial attack and reduces undesirable organic odors. Fabrics used in the construction of disposable products have similar properties achieved through the application of anti-microbial coatings.

4. Where can I find a list of cleaning and disinfection procedures for the AirPal Patient Transfer System?

The label at the foot end of all AirPal TransferPads lists cleaning instructions for the TransferPads. Cleaning Guidelines for all components of the AirPal system and a list of approved disinfectants is provided on the AirPal website (www.airpal.com) under the Documents Tab.

5. Are AirPal TransferPads radiolucent?

The materials used in construction of AirPal TransferPads are radiolucent, indicating that they are more transparent than the patient being x-rayed. The issue of whether a material is radiolucent refers to a measure of transparency. Radiodensity is the property of relative transparency to the passage of X-rays through a material and is measured on the Hounsfield Scale. No materials are completely Radiotransparent - complete Radiotransparency can only be achieved within a perfect vacuum. However, on the Hounsfield Scale any differences between similar materials would be negligible and nearly imperceptible. The benefit of being able to x-ray a physically dependent or seriously injured patient on an x-ray table without lifting or pulling the patient far outweigh the chance of ghosting or artifact generation on the exposure plate. Skilled x-ray technicians can adjust the attenuation to compensate for these issues and highly trained Radiologists usually can discern these aberrations quickly if produced in the process.



6. What are the available widths and lengths of the AirPal TransferPads?

DURABLE - Full Length 78" AirPal PVR TransferPads (widths):

18", 24", 26", 28", 30", 32", 34", 39", 50"

DURABLE - Short Length 47" AirPal PVR ShortPads (widths):

28", 30", 32", 34", 39", 50"

DISPOSABLE - Full Length 78" AirPal SPS Single-Patient-Stay (widths): 28", 34", 39", 50"

DISPOSABLE - Short Length 47" AirPal SPS ShortPads (widths): 34", 39"

7. Why would I want to use a Short TransferPad (ShortPad)?

Certain applications requiring patient transfer or positioning can benefit from the Short Length AirPal PVR ShortPads. Since the transfer pad is shortened, you can easily position patients for procedures where the legs are elevated or stirrups are used (OB/Gyn, Labor and Delivery, Urology, Oncology, and Bariatric procedures). The shortened length means that a portion of the transfer pad is not off the edge of the patient surface - thus, accessing the air hose attachment point is easier, the patient surface does not interfere with headboards or other equipment, and access to the patient is preserved. Additionally the shortened length is perfect for in bed repositioning and patient transfers to convertible chairs and cardiac chairs

8. What accessories are available for use with the AirPal Patient Transfer System?

- AirPal Air Supply (1100W 110/120V or 1200W 220/240V versions)
- All versions of the AirPal STAND
- All versions of the AirPal CART
- All versions of Sani-Liner protective covers
- Air Hose Extension for use in MRI Environment (25NMAH)
- Transfer Bridge

9. What type of training or certification is required for operation of the AirPal Patient Transfer System?

No certification is required. The Airpal Patient Transfer System is simple and intuitive to use, and In-Service time is brief. Instructional videos, online learning modules, and detailed user manuals are available online at www.airpal.com.

