
Concave Rail System

8" High Density Concave Foam Rail System

Found on the Bed 4 Life 10K3, 9500 and 7500 Airbeds, we designed and patented the concave foam cavity system because it fits the natural shape of a filled air mattress. This patented design gives the mattress a much smoother transition from the sidewall to the sleeping surface. Our patented "I-Beam" construction allows the air chamber to extend into the side rail which actually helps support the side rail and blend the transition from the edge of the mattress to the sleeping surface. This feature alone gives you about 6 inches in sleeping surface compared to straight wall foam sides.

For added strength and durability we reinforce the foam cavity by wrapping the foam rails in a non woven fabric which connects the side rail together while the head and foot rails are also tied together with another piece of the same material. This is commonly known as a sling rail system. Some companies utilize a sling rail system however, they will not use Non Woven (Non Stretch) Fabric in order to save some money. A wrapped side rail is very important when it comes to protection. If the foam rails are not wrapped air alone can cause the foam to weaken as oxygen itself will break down the foam. Unwrapped foam will lose strength when it comes in direct contact with another material such as a rubber air chamber. The rubber air chamber will tend to pull the plastisizers directly out from the foam causing the foam to weaken and fail. Most owners of unwrapped foam will notice that the side of the air chamber that is touching the exposed foam will tend to see the color bleed into the air chamber. This problem was recognized in the waterbed industry in their soft-sided waterbeds. Waterbed manufacturers noticed that exposed foam rails that came directly into contact with vinyl mattresses or vinyl liners tended to lose half of its life expectancy. This problem was solved by developing side rails that were wrapped with some sort of fabric to act as a barrier between the foam and mattress. All of our Bed 4 Life Air Bed side rails are individually wrapped with a Non-Woven (Non-Stretch Fabric). As you browse our site, you'll notice that the differences is in the details. Don't be afraid to ask your sales person to unzip their bed and explain how each part is designed to strengthen or lengthen the life of your air bed mattress.