

TIED DOWN CELLS

In the past, there have been many proponents of tying down cells to create no pressure areas under the seated surface. However, unless medically necessary, we recommend not tying down cells, as the cushion performs best when distributing pressure over the entire contact area.

The following are reasons not to tie down cells:

1. The device used to tie down cells, whether it is a rubber band or a piece of tape, creates a “hard spot”. You may not be able to immerse your client into the cushion as far as possible because you must be sure that they are not making contact with the “hard spot”, thereby taking away from the maximum therapeutic value of the cushion.
2. By tying down cells, you create an area of no contact, surrounded by an area of increased forces. You have, essentially, created a “donut” cushion. And, as most clinicians are aware, the donut ring is very ineffective at maintaining skin integrity. It prevents blood flow from reaching the area and encourages edema and is contraindicated according to AHCPR Guidelines.
3. Because air transfers along the bases of the cushion, eventually, that air will force the tied cell and the rubber band closer to the individual. This situation must be monitored closely.

A ROHO cushion simulates water floatation; see “Cushioning to Benefit Tissue Viability” by R.H. Graebe. The sitting weight of the user is uniformly distributed over the total skin to cushion contact surface. With no peak pressure points, there is less deformity to the body’s soft tissues caused by unequal external forces.

However, when a no contact area is incorporated into a cushion, a high pressure perimeter surrounding the no contact area is created. This variance in pressure between the perimeter and no contact area tends to cause shear, deformity and trauma to the tissue, thus increasing risk of ischemia. In addition, there is the possibility for pooling of interstitial fluids (edema) at the no contact area reducing efficient cellular nutrient transfer. Enhancing blood flow and nutrient transfer is essential and the DRY FLOATATION® cushion allows for this healing process to occur. If you tie down cells, you run the risk of delaying healing or actually increasing the size of a wound.

Our goal is, of course, to provide an optimal environment for wound healing and to facilitate blood flow. This is accomplished by immersing the client as deeply as possible and by maintaining complete contact so as to evenly distribute weight. Avoiding cut-out areas and tied down cells will enhance blood flow, reduce edema, and facilitate healing.