Mölnlycke®

Z-Flex™ Fluidized Heel Boot

Easy-to-use, comfortable heel protection

Mölnlycke®

The need for Heel Protection

The heel is the second most common site for facility-acquired pressure ulcers and deep tissue injuries, and the most common site for perioperative patients.[1] Healing a heel pressure ulcer can require over a year; delays in healing are often due to underlying comorbid problems and difficulty in maintaining pressure relief for the heel.[2]

Heel pressure ulcers can be **devastating** to mobility and quality of life

One study found:

- 11% of patients with ischemic heel ulcers and gangrene required amputation
- 42% of patients (18 of 43) with heel ulcers required leg amputation as a result of persistent infection or non-healing wounds[2]

Because of small surface area and high tissue-interface pressure, the heel is difficult to effectively off-load. Among the risk factors predisposing a patient to heel pressure ulcers are diabetes mellitus, vascular disease, immobility and an overall Braden Scale score of 18 or less.[3]

Effective offloading and protection for the heel

Regular, effective repositioning of the extremities, skin assessments and use of heel-protective devices can significantly reduce the incidence of hospital-acquired heel pressure ulcers.[4]

The Mölnlycke® Z-Flex™ Fluidized Heel Boot was designed to lift the heel and redistribute weight and pressure across the entire lower leg, shin and foot, as recommended by AORN and NPUAP.[5,6] As the surface area increases, the pressure decreases. Not only does the Z-Flex's single low-pressure air chamber add comfort, it also encourages neutral alignment of the leg without the need for a wedge or pillow under the knees.

the Benefits:
Mölnlycke® Z-Flex™ Fluidized Heel Boot

- Lifts the heel and distributes pressure across the entire lower leg
  - Incorporates Mölnlycke's Z-Flo Fluidized Positioner, which molds and contours around the vulnerable Achilles tendon
  - Single low-pressure air chamber uses positive air displacement to redistribute pressure from the heel and Achilles tendon to the lower leg, shin and foot
- Adjustable ankle straps accommodate a variety of leg sizes
  - Support an anatomically neutral foot position
  - Attached to boot (can't be removed or lost)
- Facilitates use of sequential compression devices
- Built-in foot gate at the bottom of the boot provides easy access for skin assessments
- Comfortable for patients
  - No need for additional pillows or wedges
  - Lined with state-of-the-art thermal regulating material to prevent overheating

Real-world success in reducing HAPUs

Baton Rouge General [7]

is a community hospital with a 24-bed CCU. After a sharp spike in pressure injury incidence in 2016, they introduced a new bundled prevention protocol that included the Z-Flex™ Fluidized Heel Boot to achieve pressure redistribution for at-risk patients. The hospital saw a significant drop in their HAPI incidence rate.

HAPI Incidence Decreased
Per 1000 Patient Days

11.11 (Q2 2016)

↓

1.75 (Q2 2017)

NEW AVERAGE 2.39

Cost for treatment of ONE Stage 2 pressure injury
$10,000+

Cost for treatment of ONE Stage 3 or 4 pressure injury
$70,000+

Cost of ONE Prevention Bundle
$242.18

Approximately **41 ICU patients** could each benefit from a Prevention Buncle for the price of treating **one** Stage 2 pressure injury

St. Vincent Healthcare[8]

in Billings, MT is a regional Level 2 trauma center with a 22-bed ICU. Staff said the prior offloading heel boot was difficult to use and patients complained it was too hot. Adoption of the Z-Flex Fluidized Heel Boot improved staff and patient satisfaction. Staff praised it for being easy to apply, remove and open to assess skin, and patients found it more comfortable, increasing compliance.

90%
INCIDENCE REDUCTION

1 HAPI in 2017:
a 90% incidence reduction as compared to the 9.7 average incidence in 2014-2016

100%
INCIDENCE REDUCTION IN HEEL HAPIs

Zero heel HAPI in 2017† :
a 100% reduction in heel HAPI over the average of 4 per year

Approximately
$128,001
SAVED
in Q1-Q3 2017

Potential
92%
cost reduction

Based on the actual number and stages of all HAPI for 2014-2016[9]

Mölnlycke® Static Air Boot

The Mölnlycke Static Air Boot features a flocked lining, molded trough for the Achilles tendon and single air chamber, which allows for dynamic contouring and support. This lower limb protector relieves pressure over the entire extremity while completely suspending the heel. The single chamber design can be adjusted to fit a wide range of patients.

- Available in a variety of sizes for different patient needs
- Provides ease of use and comfort for patients

NOTE: Both the **Z-Flex™** and **Static Air** boots are for single patient use only, but may travel with the patient across the continuum of care.

Ordering Information

Mölnlycke®
Z-Flex™ Fluidized Heel Boot

Product Code	Description	Pcs/case
1400122	Z-Flex Fluidized Boot (Case of 2 Z-Flex Fluidized Heel Protector w/ gate, Ankle Strap - One size)	2
1400123	Z-Flex Fluidized Boot (Case of 8 Z-Flex Fluidized Heel Protector w/ gate, Ankle Strap - One size)	8

Mölnlycke®
Static Air Heel Boot

Product Code	Description	Pcs/case
1400111	Static Air Boot (Case of 8 Static Air Boots - Petite/Pediatric)	8
1400117	Static Air Boot (Case of 8 Static Air Boots - Adult Short)	8
1400119	Static Air Boot (Case of 8 Static Air Boots - Adult Standard)	8
1400125	Static Air Boot (Case of 8 Static Air Boots - Bariatric)	8

Reference: **1.** Levy A et al., The biomechanical efficacy of dressings in preventing heel ulcers, Journal of TissueViability (2015), http://dx.doi.org/10.1016/j.jtv.2015.01.001 **2.** Black J. Preventing pressure ulcers occurring on the heel. Wounds International 2010. Vol 4, eSupplement. **3.** Delmore, B., Lebovitz, S., Suggs, B. Risk Factors Associated With Heel Pressure Ulcers in Hospitalized Patients. J Wound Ostomy Continence Nurs. 2015;42(3):242-248. **4.** Salcido, R., Lee, A., Ahn, C. Heel Pressure Ulcers: Purple Heel and Deep Tissue Injury. ADVANCES IN SKIN & WOUND CARE & VOL. 24 NO. 8. **5.** AORN's Guidelines for Perioperative Practice. 2018 **6.** The National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel, Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline. East Washington, DC: National Pressure Ulcer Advisory Panel; 2014. **7.** Cooper et al. Baton Rouge Bundling for Change: Implementing Pressure Injury Prevention. Poster – WOCN 2017 Conference. **8.** Maccartney, K. et al. Reduce the Pressure – Reduce the Injury. Poster – NTI 2018 Conference. **9.** Padula W, Mishra M, Makic M, et al. Improving the quality of pressure ulcer care with prevention: a cost-effectiveness analysis. Medical Care. 2011;49(4):385-92.

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