



# ROHO® Hybrid ELITE™ Cushion

Operations Manual



**SUPPLIER:** This manual must be given to the user of this product.

**USER:** Before using this product, read instructions and save for future reference.

shape fitting technology®

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ROHO, Inc. has a policy of continual product improvement and reserves the right to amend specifications presented in this manual.

ROHO® Cushioning Products are manufactured by ROHO, Inc.,  
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Velcro® is a registered trademark of Velcro Industries B.V.

## **INTENDED USE:**

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The ROHO® Hybrid ELITE™ Cushion is a therapeutic cushioning device intended for users who weigh 500 lbs. (225 kg) or less and who require basic postural and positioning support, have a Stage I or Stage II ischemic ulcer, as well as prevention of soft tissue breakdown. The contoured foam base of the Hybrid ELITE Cushion is designed to enhance seating stability and support while the adjustable ROHO DRY FLOATATION® cushion insert provides an environment to protect the user from soft tissue breakdown. The ROHO Hybrid ELITE Cushion must be properly sized to the user and the wheelchair. The cover provided must be used with the ROHO Hybrid ELITE Cushion.

For best positioning results when using a wheelchair with a sling seat, ROHO, Inc. recommends the use of the ROHO Contour Base, the ROHO Solid Seat Insert, or a drop seat in conjunction with the ROHO Hybrid ELITE Cushion.

## **CLINICIAN CONSULTATION:**

ROHO, Inc. recommends that a clinician, such as a physician or therapist experienced in seating and positioning, be consulted to determine if the ROHO Hybrid ELITE Cushion is appropriate for the user's particular seating needs.

## **CONTRA-INDICATIONS:**

The ROHO Hybrid Elite Cushion is not intended for use by individuals who have a Stage III or Stage IV ischemic ulcer. It is not intended for use by individuals with aggressive postural needs. It is not intended for use by individuals weighing more than 500 lbs. (225 kg). The ROHO Hybrid ELITE Cushion must not be used with a cover other than the one provided.

## **PRODUCT SPECIFICATIONS:**

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### **MATERIALS:**

The contoured foam base is comprised of water resistant polyethylene closed cell foam.

The cushion insert is made of neoprene rubber with nickel plated brass inflation valve(s).

The cover top layers and side materials are flame resistant polyester. Bottom and valve opening reinforcements are polyester reinforced PVC. Comfort foam inside the cover is polyurethane.

The ROHO Hybrid ELITE Cushion with cover complies with EN 1021-1 and EN 1021-2 flammability requirements.

### **SIZING SPECIFICATIONS:**

<b>Assembled Cushion</b>			
<b>Smallest Width</b>	<b>Smallest Depth</b>	<b>Largest Width</b>	<b>Largest Depth</b>
13.5 in. (34.5 cm)	14.25 in. (36.0 cm)	23.5 in. (59.5 cm)	20.25 in. (51.5 cm)

Average product height is 4 in. (10.0 cm).

Average product weight based on a 17.75 in. x 18.5 in. (45.0 cm x 47.0 cm) cushion is 3.5 lbs. (1.5 kg).

**NOTE:** All measurements are approximate.

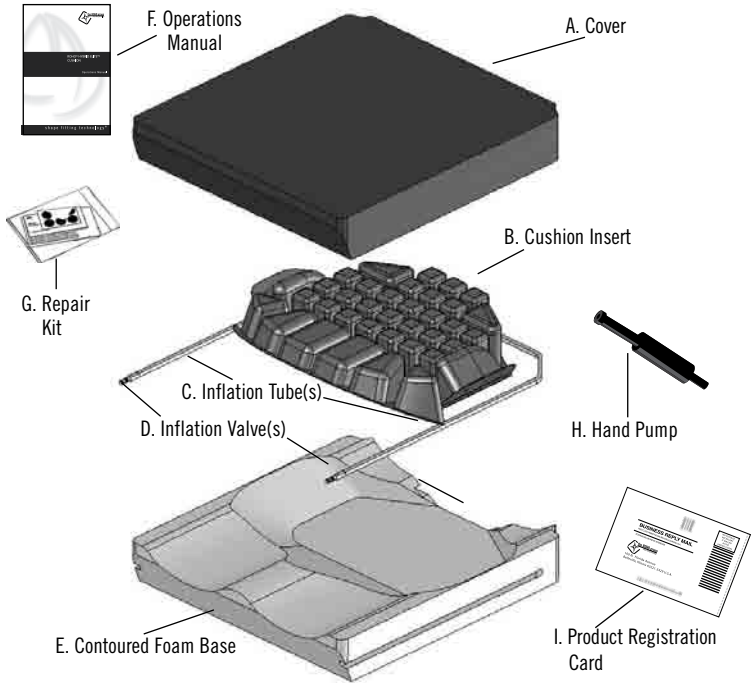
For specific cushion sizes, contact ROHO Customer Service at 1-800-851-3449 toll free **in the U.S.A.** **Outside the U.S.A.**, contact your country's ROHO International distributor. For a current list of ROHO International distributors, visit our website at [www.therohogroup.com](http://www.therohogroup.com), contact ROHO International at 1-618-277-9150 or email us at [cs@therohogroup.com](mailto:cs@therohogroup.com).



## CAUTIONS

- **CHECK INFLATION AT LEAST ONCE A DAY!**
- **UNDER-INFLATION: DO NOT** use an under-inflated cushion insert. Doing so reduces or eliminates the cushion's benefits, increasing risk to the skin and other soft tissue. If cushion insert appears under-inflated or does not appear to be holding air, see Troubleshooting in this manual. If cushion insert is still not holding air, contact a clinical caregiver, distributor, or ROHO, Inc. immediately.
- **OVER-INFLATION: DO NOT** use an over-inflated cushion insert. Doing so will not allow user to sink into the cushion insert and will reduce or eliminate the cushion's benefits, increasing risk to the skin and other soft tissue.
- **CUSHION AND COVER ORIENTATION:** Product must be used with the provided cover, air cells facing up, contoured foam area in the front portion of the chair and the cushion insert in the back portion of the chair. If the cover is not used correctly or if the cover is the wrong size, it may reduce or eliminate the cushion's benefits and could increase risk to the skin and other soft tissue.
- **PRODUCT USE: DO NOT** use the ROHO Hybrid ELITE Cushion in conjunction with any other seat cushioning products except as indicated in Intended Use section. **DO NOT** use the components of the ROHO Hybrid ELITE Cushion separately. **DO NOT** use the components of the ROHO Hybrid ELITE in conjunction with any other seat cushioning products.
- **DO NOT** use cushion as a water flotation device (e.g. a life preserver).
- **DO NOT** use any pump, cover or repair kit other than those provided by ROHO, Inc. Doing so may damage the cushion insert and void product's warranty.
- **OBSTRUCTIONS: DO NOT** place any obstructions between the user and the cushion or the cushion insert and the contoured foam. Doing so will reduce product effectiveness.
- **WEIGHT LIMIT:** The cushion is not intended for use by individuals weighing more than 500 lbs. (225 kg).
- **SIZE:** The cushion must be properly sized to the user and the wheelchair.
- **PRESSURE:** Changes in altitude may require adjustment to cushion insert. Check cushion insert when changing altitude of 1,000 feet (300 meters) or greater.
- **PUNCTURE:** Keep cushion insert away from sharp objects which may puncture the air cells and cause deflation.
- **HEAT/FLAME: DO NOT** expose cushion to high heat, open flames or hot ashes.
- **CLIMATE:** If a cushion has been in temperatures less than 32°F / 0°C and exhibits unusual stiffness, allow the cushion insert to warm to 72°F / 22°C. Open corner air valve(s). Refer to Cover and Cushion Insert Removal. Roll up the cushion insert and then unroll it until the neoprene is soft and pliable again. Refer to Cover and Cushion Insert Replacement. Repeat Adjustment Instructions before using.
- **HANDLING: DO NOT** use any valve as a handle for carrying or pulling cushion. Carry cushion either by the cover's carrying handle or by holding the cushion base.
- **SOLUTIONS: DO NOT** allow oil-based lotions or lanolin to come in contact with product. Doing so may degrade materials used in the manufacture of product.
- **OZONE GENERATORS:** Prolonged exposure to ozone will degrade materials used in the ROHO Hybrid ELITE Cushion and may affect the product performance and invalidate the product warranty. Avoid prolonged exposure of the cushion to direct sunlight or other sources of ultraviolet (UV) light.

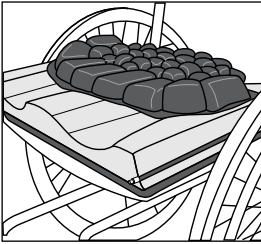
## PARTS DETAIL:



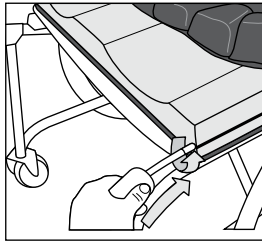
- A. Cover:** Used to protect cushion. Includes comfort foam sewn inside two-layer top, reinforced valve openings, carrying handle and non-skid bottom with Velcro® to help secure cushion in chair. Additional Velcro tabs included if needed.
- B. Cushion Insert:** Individual interconnected air cells. Velcro on bottom to help secure to contoured foam base.
- C. Inflation Tube:** Used to transfer air to and from the cushion insert. Some models may have two inflation tubes.
- D. Inflation Valve:** Used to open and close the cushion insert's airway. Some models may have two inflation valves.
- E. Contoured Foam Base:** Enhances stability and helps to position pelvis and thighs. Velcro on top to help secure cushion insert.
- F. Operations Manual:** Instructions on adjustment, care, warranty and other important information about cushion.
- G. Repair Kit:** Patch kit for minor repairs of the cushion insert.
- H. Hand Pump:** Used to inflate cushion.
- I. Product Registration Card:** Used to register product. Complete card and mail to ROHO, Inc. or register online at [www.therohogroup.com](http://www.therohogroup.com).

## **ROHO HYBRID ELITE PLACEMENT AND ADJUSTMENT INSTRUCTIONS:**

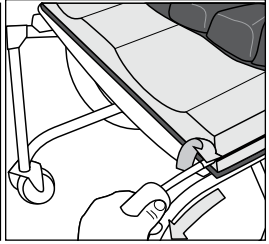
**NOTE:** Cover not shown for demonstration purposes only. Product must be used with provided cover.



**STEP 1:** Place ROHO Hybrid ELITE Cushion in wheelchair seat so the user will be properly supported and immersed when in their normal sitting position. Use the directional patch on the right side of the cover as a guide.

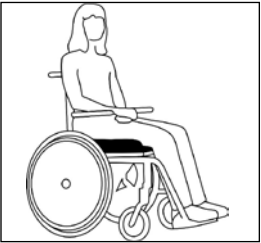


**STEP 2:** Turn valve **counterclockwise** to open. Slide the pump's rubber nozzle over a valve and inflate the cushion insert until it begins to slightly arch upward.

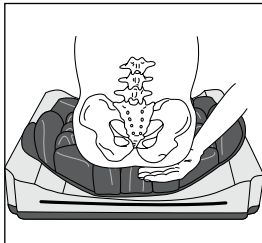


**STEP 3:** Pinch the pump's nozzle and turn valve **clockwise** to close. Remove pump.

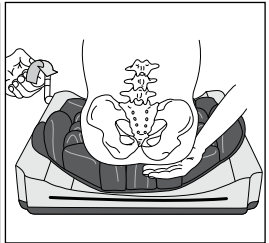
*(Repeat steps 2 and 3 for remaining valve on dual valve cushion inserts.)*



**STEP 4:** Have the user sit on the cushion, making sure the bony prominences are supported by the air cells. Check to make sure the cushion is properly sized to the user and the wheelchair. Consult a clinician as needed.



**STEP 5:** Slide hand between the cushion and the user's bottom. Lift the user's leg slightly and feel for the lowest bony prominence\*. Then lower the user's leg to a sitting position.



**STEP 6:** Turn valve **counterclockwise** to let out air, while keeping hand under the user's lowest bony prominence. Release air until finger tips barely move – no more than 1 inch (2.5 cm) and no less than 1/2 inch (1.25 cm). Turn valve **clockwise** to close.

*(Repeat steps 5 and 6 for remaining air valve on dual valve cushion inserts.)*

**\*Dual Compartment Cushion Inserts:** Dual compartment cushion inserts may be used for side-to-side positioning. To maximize the positioning benefits for individuals with a pelvic obliquity, the side with the deepest bony prominence must be adjusted first. Once both adjustments are made, recheck each compartment to ensure proper adjustment.

**NOTE: DO NOT** sit on an improperly inflated cushion insert. Doing so reduces or eliminates the cushion's benefits and could increase risk to the skin and other soft tissue. The cushion is most effective when there is 1/2 inch (1.25 cm) to 1 inch (2.5 cm) of air maintained between the cushion insert and the user's lowest bony prominence.

## **COVER AND CUSHION INSERT REMOVAL:**

### **To Remove The Cover:**

1. Unzip the zipper.
2. Carefully push the inflation valve(s) back through the valve opening(s) in the cover.
3. Gently remove contoured foam base and cushion insert from cover.

### **To Remove the Cushion Insert:**

1. Gently remove the inflation tube(s) from the groove(s) in the contoured foam base.
2. Extract the inflation tube(s) from the corresponding hole in the foam base corner by gently pushing and pulling until the entire tube, including the valve, is out.
3. Peel the cushion insert away from the foam base and separate the Velcro strips.

## **COVER AND CUSHION INSERT REPLACEMENT:**

### **To Replace the Cushion Insert:**



1. Place the cushion insert, cell side up, in the cutout section of the contoured foam base with the BACK of the cushion insert facing the BACK of the foam base. Refer to directional labels.
2. Line up the Velcro strips on the bottom of the cushion insert and top of the foam base then press firmly to secure.
3. Insert the inflation valve(s) into the corresponding hole on the back corner of the foam base and carefully push the inflation tube(s) through until the valve(s) protrude on the side.
4. Gently pull the inflation tube(s) toward the front of the cushion until the tube(s) extend the length of the foam base.
5. Press the inflation tube(s) into the groove(s) in the foam base. Inflation valve(s) must be accessible in the front of the cushion.



### **To Replace The Cover:**

1. Place cover with non-skid surface side facing DOWN and zipper unzipped. Refer to directional patch for confirmation of orientation.
2. With the cushion insert placed into the contoured foam base, insert the cushion into the cover FRONT first, cells up.
3. Reach inside the cover valve openings and carefully pull the inflation valve(s) through the opening(s).
4. Zip the cover. If hook Velcro strips were removed prior to washing, replace the strips.
5. Follow adjustment instructions.

## **CLEANING AND DISINFECTING PRODUCT:**

Cleaning and disinfecting are two separate processes. To be effective, cleaning must precede disinfecting. Product components must be cleaned and disinfected separately. Product must be cleaned, disinfected and checked for proper functioning between multiple patient use.

**To Clean the Cover:** Remove the cover from the cushion. If detachable hook Velcro strips are in place on bottom of cover, remove prior to washing to help prevent damage to cover or other fabrics in wash. Machine wash cover in warm water (105°F / 40°C) with mild detergent, gentle cycle, or wipe clean with neutral detergent and warm water. Tumble dry low.  

**To Disinfect the Cover:** Hand wash in warm water using 1/2 cup household liquid bleach per quart of water (125 ml bleach to 1 liter of water), then rinse thoroughly. The cover can also be machine washed in hot water (140°F / 60°C) to disinfect. Tumble dry low.  



**NOTE:** Follow safety guidelines on bleach container.

**To Clean the Cushion Insert:** Remove the cover from the cushion and the cushion insert from the contoured foam base (See Cover and Cushion Insert Removal). Deflate the cushion insert and close the inflation valve(s). Place only the cushion insert in large sink. Use a soft plastic bristle brush, sponge or washcloth to gently scrub all cushion insert surfaces. ROHO, Inc. suggests using a dishwashing soap, laundry detergent or other multi-purpose detergent used for general cleaning. For institutional cleaning, a general housekeeping disinfectant cleaner may be used. Rinse with fresh water. Pat dry with towel or air dry.

**To Disinfect the Cushion Insert:** Repeat cleaning instructions using a germicidal that meets infection control needs (ROHO, Inc. suggests a disinfectant with tuberculocidal properties). A solution of 1/2 cup liquid household bleach per quart of warm water (125 ml bleach to 1 liter of warm water) can also be used. Keep the clean cushion insert wet with bleach solution for 10 minutes. Rinse and dry per cleaning instructions. **NOTE:** Most germicidal disinfectants are safe for use with the cushion insert if used following the disinfectant manufacturer's dilution directions.

**To Sterilize the Cushion Insert:** ROHO, Inc. highly discourages sterilization methods using temperatures greater than 200°F / 93°C. High temperatures accelerate aging and may cause damage to the cushion insert. If institution protocol demands sterilization, open the valves and use the lowest temperature possible for the shortest time possible. Gas sterilization is preferable to steam autoclave, but neither is recommended. If steam autoclaving, make sure all valves are open.

**NOTE: DO NOT** use oil-based lotions, lanolin, or phenolic-based disinfectants on cushion insert. Doing so may compromise the integrity of the neoprene.

**To Clean the Contoured Foam Base Surface:** Wipe lightly with a damp cloth. **DO NOT** use soap. **DO NOT** submerge in water. Wipe off with a clean cloth. Let completely air dry before reassembly.

**NOTE:** Disinfectants are not effective on porous surfaces such as foam. If the foam becomes soiled or contaminated, **DO NOT** use with multiple users. Replacement foam parts may be purchased. Replace with ROHO foam parts only.

## **TROUBLESHOOTING:**

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**Cushion Insert Not Holding Air:** First, make sure all valves are closed tightly by turning clockwise. If still not holding air, visibly check for holes. If no holes are visible, close all valves and immerse **ONLY** the inflated cushion insert in sink or tub of water and look for air bubbles.

If 'pin-hole' sized holes are found, see "Minor Repairs" below. If large holes or other leaks are found, see "Limited Warranty".

**Cushion is Uncomfortable/Unstable:** Make sure cushion insert is not over-inflated (see Placement and Adjustment Instructions). Make sure air cells, contoured foam base, and the cover's stretch top are facing UP\*. Make sure the **FRONT** of the contoured foam is facing the front of the chair and the cushion insert is in the back portion of the chair. Make sure cushion is not too big or too small for the wheelchair. Allow the user to sit on the cushion for at least one hour to get used to the texture of the product's surfaces and immersion into the air cells.

**Cushion Slides On Wheelchair:** Make sure non-skid bottom of the cushion cover is facing **DOWN\***.

\***NOTE:** Use directional labels as guides.

### **Minor Repairs:**

If cushion insert develops a small leak, use the repair kit that came with product and follow repair kit instructions.



## **RETURN POLICY:**

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All products returned must be new and unused, require prior authorization from ROHO, Inc. and are subject to a restocking charge. Before returning product, contact our Customer Service Department at 1-800-851-3449 toll free **in the U.S.A.**

**Outside the U.S.A.**, contact your country's ROHO International distributor. For a current list of ROHO International distributors, visit our website at [www.therohogroup.com](http://www.therohogroup.com), contact ROHO International at 1-618-277-9150 or email us at [cs@therohogroup.com](mailto:cs@therohogroup.com).

## **DISPOSAL:**

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When properly used and disposed, there are no known environmental hazards associated with the components of the ROHO Hybrid ELITE Cushion. Dispose of the product and/or components in accordance with the applicable regulations in your jurisdiction. **DO NOT INCINERATE.**

## **LIMITED WARRANTY:**

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### **What is covered?**

ROHO, Inc. covers any defects in materials or workmanship of the product.

### **For how long?**

24 months from the date the product was originally purchased, with the exception of the cover, which has a 6-month Limited Warranty.

### **What is not covered?**

A product that has been misused, damaged by an accident, or damaged from "an act of Nature", e.g., flood, tornado, earthquake, fire. Any substitutions of supplied hardware or modification to the product will void the warranty.

### **What the customer must do.**

**Within the U.S.A.**, the customer must contact ROHO, Inc. Warranty Department at 1-800-851-3449 toll free. **Outside the U.S.A.**, contact your country's ROHO International distributor. For a current list of ROHO International distributors, visit our website at [www.therohogroup.com](http://www.therohogroup.com), contact ROHO International at 1-618-277-9150 or email us at [cs@therohogroup.com](mailto:cs@therohogroup.com).

### **Questions?**

Call our Warranty Department toll free **from the U.S.A.** at 1-800-851-3449. **Outside the U.S.A.**, contact your country's ROHO International distributor. For a current list of ROHO International distributors, visit our website at [www.therohogroup.com](http://www.therohogroup.com), contact ROHO International at 1-618-277-9150 or email us at [cs@therohogroup.com](mailto:cs@therohogroup.com).

### **Disclaimer.**

Any implied warranties, including the MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE are limited to the same time period of the product types referenced above in the "For How Long" section and any action for a breach of such warranties or any express warranties herein must be commenced within that time. ROHO, Inc. shall not be responsible for any incidental or consequential damages with respect to economic loss to property, whether as a result of a breach of express or implied warranties or otherwise.

### **Your Rights and the Effect of this Warranty upon Them**

This warranty restricts the duration of all implied warranties as noted above and limits or excludes recovery for incidental or consequential damages. Some jurisdictions do not allow limitations on how long implied warranties will last and some jurisdictions do not allow the exclusion or limitation of consequential or incidental damages, so those provisions may not apply to you. While this warranty gives you specific legal rights, you may also have other rights which vary from jurisdiction to jurisdiction.

A PRODUCT SUPPORTED BY:



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The Quality Management Systems  
of ROHO, Inc. are certified to  
ISO 9001:2000 and ISO 13485:2003.