

# **ROHO® Hybrid Elite® Cushion**

**Operation 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®

# TABLE OF CONTENTS

INTENDED USE	3
PRODUCT SPECIFICATIONS	3-4
CAUTIONS	5
PARTS DETAIL	6
PLACEMENT AND ADJUSTMENT INSTRUCTIONS	7
COVER AND CUSHION INSERT REMOVAL	8
COVER AND CUSHION INSERT REPLACEMENT	8
CLEANING AND DISINFECTING PRODUCT	8-9
TROUBLESHOOTING	9
RETURN POLICY	10
DISPOSAL	10
LIMITED WARRANTY	10
ESPAÑOL	11
FRANÇAIS	20
DEUTSCH	29
ITALIANO	38
NEDERLANDS	47
DANSK	56
SVENSKA	65
NORSK	74
SUOMI	83
PORTUGUÊS	92

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

ROHO<sup>®</sup> Cushioning Products are manufactured by ROHO, Inc., 100 North Florida Avenue, Belleville, Illinois 62221-5429, www.therohogroup.com. U.S.A.: 1-800-851-3449, Fax 1-888-551-3449 Outside the U.S.A.: 1-618-277-9150, Fax 1-618-277-6518 Email: cs@therohogroup.com

 $^{(\!0\!)}$  ROHO, Inc., 2009-2010 The following are trademarks and registered trademarks of ROHO, Inc.: ROHO<sup>(®)</sup>, DRY FLOATATION<sup>(®)</sup>, shape fitting technology<sup>(®)</sup>, and Hybrid Elite<sup>(®)</sup>.

# **INTENDED USE:**

The ROHO<sup>®</sup> Hybrid Elite<sup>®</sup> Cushion (Hybrid Elite) is a therapeutic cushioning device intended for users who weigh 500 lbs. (225 kg) or less, who require low to moderate postural and positioning support, and/or who are at moderate to high risk for skin breakdown. The contoured foam base of the Hybrid Elite is designed to enhance seating stability and support while the adjustable ROHO DRY FLOATATION<sup>®</sup> cushion insert provides an environment to protect the user from soft tissue breakdown. The Hybrid Elite must be properly sized to the user and the wheelchair. The cushion must be used with a Hybrid Elite cover. The Hybrid Elite is intended to be part of an overall care regimen.

For best positioning results when using a wheelchair with a sling seat, ROHO, Inc. recommends the use of a solid seat in conjunction with the Hybrid Elite.

#### 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 Hybrid Elite is appropriate for the user's particular seating needs.

#### **CONTRA-INDICATIONS:**

The Hybrid Elite is not intended for use by individuals with severe postural needs. It is not intended for use by individuals weighing more than 500 lbs. (225 kg). The Hybrid Elite must not be used with a cover other than the one provided.

WARNING: When using a new seating support surface, it is especially important to inspect the skin, especially those areas covering bony prominences, which are at greater risk for breakdown. If any discoloration (ie. redness, bruising, purple, or darker areas versus normal skin tone, which may be the beginning sign of skin breakdown) is noted and does NOT disappear within 30 minutes after removal from the product, discontinue use and consult a healthcare provider immediately.

# PRODUCT SPECIFICATIONS:

#### 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 Hybrid Elite with cover complies with EN 1021-1 and EN 1021-2 flammability requirements.

# Sizing Table:

Item Number					
Single Valve	Dual Valve	Foam Base Width (W)		Foam Base Depth (D)*	
1RHY1414C	2RHY1414C	13.75 in.	(35.0 cm)	14.75 in.	(37.5 cm)
1RHY1415C	2RHY1415C	13.75 in	(35.0 cm)	15.75 in.	(40.0 cm)
1RHY1416C	2RHY1416C	13.75 in	(35.0 cm)	16.75 in.	(43.0 cm)
1RHY1515C	2RHY1515C	14.75 in.	(37.5 cm)	15.75 in.	(40.0 cm)
1RHY1516C	2RHY1516C	14.75 in.	(37.5 cm)	16.75 in.	(43.0 cm)
1RHY1517C	2RHY1517C	14.75 in.	(37.5 cm)	17.75 in.	(45.0 cm)
1RHY1615C	2RHY1615C	15.75 in.	(40.0 cm)	15.75 in.	(40.0 cm)
1RHY1616C	2RHY1616C	15.75 in.	(40.0 cm)	16.75 in.	(43.0 cm)
1RHY1617C	2RHY1617C	15.75 in.	(40.0 cm)	17.75 in.	(45.0 cm)
1RHY1618C	2RHY1618C	15.75 in.	(40.0 cm)	18.75 in.	(48.0 cm)
1RHY1620C	2RHY1620C	15.75 in.	(40.0 cm)	20.75 in.	(53.0 cm)
1RHY1716C	2RHY1716C	16.75 in.	(43.0 cm)	16.75 in.	(43.0 cm)
1RHY1717C	2RHY1717C	16.75 in.	(43.0 cm)	17.75 in.	(45.0 cm)
1RHY1718C	2RHY1718C	16.75 in.	(43.0 cm)	18.75 in.	(48.0 cm)
1RHY1816C	2RHY1816C	17.75 in.	(45.0 cm)	16.75 in.	(43.0 cm)
1RHY1817C	2RHY1817C	17.75 in.	(45.0 cm)	17.75 in.	(45.0 cm)
1RHY1818C	2RHY1818C	17.75 in.	(45.0 cm)	18.75 in.	(48.0 cm)
1RHY1820C	2RHY1820C	17.75 in.	(45.0 cm)	20.75 in.	(53.0 cm)
1RHY2018C	2RHY2018C	19.75 in.	(50.0 cm)	18.75 in.	(48.0 cm)
1RHY2020C	2RHY2020C	19.75 in.	(50.0 cm)	20.75 in.	(53.0 cm)
1RHY2218C	2RHY2218C	21.75 in.	(55.5 cm)	18.75 in.	(48.0 cm)
1RHY2220C	2RHY2220C	21.75 in.	(55.5 cm)	20.75 in.	(53.0 cm)
1RHY2418C	2RHY2418C	23.75 in.	(60.5 cm)	18.75 in.	(48.0 cm)
1RHY2420C	2RHY2420C	23.75 in.	(60.5 cm)	20.75 in.	(53.0 cm)

\*Depths shown include .75 in. (1.5 cm) of foam base that fits between wheelchair back posts.

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

Average product weight based on a 1RHY1817C cushion is 3.5 lbs. (1.5 kg).

**NOTE:** All measurements are approximate. Width and depth measurements are taken from the top of the foam base and are rounded to the nearest .25 in. or .5 cm. Cushion item numbers and cover tags indicate the wheelchair size the cushion is designed to fit.



# 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 a Hybrid Elite cover, air cells facing
  up, and in the rear of the chair, with the foam support in the front, under user's thighs. 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 Hybrid Elite or any of its components in conjunction with any other seat cushioning products except as indicated in Intended Use section. Doing so will reduce the cushion's positioning benefits. DO NOT use the components of the Hybrid Elite separately.
- INSTABILITY AND FALL HAZARD: DO NOT use cushion on top of, or in conjunction with, any other
  products or materials, except as indicated in Intended Use section. Doing so may add to user
  instability resulting in falls. Consult with your clinician for proper usage.
- 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 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 Hybrid Elite 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 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 hook and loop fasteners to help secure cushion in chair.
- **B.** Cushion Insert: Individual interconnected air cells. Hook and loop fasteners on bottom to help secure to contoured foam base.
- C. Inflation Tube(s): Used to transfer air to and from the cushion insert. Models available with either one or two inflation tubes.
- D. Inflation Valve(s): Used to open and close the cushion insert's airway. Models available with either one or two inflation valves.
- E. Contoured Foam Base: Enhances stability and helps to position pelvis and thighs. Hook and loop fasteners on top to help secure cushion insert.
- F. Operation 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 insert.
- Product Registration Card: Used to register product. Complete card and mail to ROHO, Inc. or register online at www.therohogroup.com.

# HYBRID ELITE PLACEMENT AND ADJUSTMENT INSTRUCTIONS:

**NOTE:** For demonstration purposes, cover not shown. Product must be used with a Hybrid Elite cover.



**STEP 1:** Place Hybrid Elite 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. *(Location of patch shown in step 4.)* 



STEP 2: Tum 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 air valve on dual valve cushion inserts.)



STEP 4: Have the user sit on the<br/>cushion, making sure the boniest<br/>prominences are supported by the<br/>air cells. Check to make sure the<br/>cushion is properly sized to the<br/>user and the wheelchair. Consult a<br/>clinician as needed.STEP 5: Slide h<br/>cushion and the<br/>Lift the user's le<br/>for the lowest bu<br/>Then lower the u<br/>sitting position.



**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 — 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. 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.

# To Remove The Cover:

- 1. Unzip the zipper.
- 2. Push the inflation valve(s) back through the valve opening(s) in the cover.
- 3. Remove contoured foam base and cushion insert from cover.

# To Remove the Cushion Insert:

- 1. Remove the inflation tube(s) from the groove(s) in the contoured foam base.
- 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 so the hook and loop fastener strips are separated.

# COVER AND CUSHION INSERT REPLACEMENT:

# To Replace the Cushion Insert:

- 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 hook and loop fastener 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. 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.
- 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 pull the inflation valve(s) through the opening(s).
- 4. Zip the cover. If hook fastener 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 use by different individuals.

To Clean the Cover: Remove the cover from the cushion. If detachable hook fastener 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 ( $105^{\circ}F / 40^{\circ}C$ ) with mild detergent, gentle cycle, or wipe clean with neutral detergent and warm water. Tumble G 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 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). **NOTE:** Most germicidal disinfectants are safe for use with the cushion insert if used following the disinfectant manufacturer's dilution directions. 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.

To Sterilize the Cushion Insert: Note: ROHO products are not packaged in a sterile condition nor are they intended or required to be sterilized prior to usage. 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. In any process using pressure, ensure all valves are open to prevent damage to the product. ROHO, Inc. highly discourages sterilization methods using temperatures greater than 200°F (93°C).

**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. Completely air dry before reassembly.

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

# TROUBLESHOOTING:

**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, over-inflate cushion insert, 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 properly sized for the user and 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:

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 Warranty 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, contact ROHO International at 1-618-277-9150 or email us at cs@therohogroup.com.

#### DISPOSAL:

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

# LIMITED WARRANTY:

#### 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 other than ROHO authorized replacement parts 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 Service Department at 1-800-851-3449 toll free. Note: Any items sent to ROHO, Inc. without prior authorization will not be returned to the customer. **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, contact ROHO International at 1-618-277-9150 or email us at cs@therohogroup.com.

#### Questions?

Call our Warranty Service 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, contact ROHO International at 1-618-277-9150 or email us at 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:





100 North Florida Avenue Belleville, IL 62221-5429 U.S.A. <u>www.therohogroup.com</u> cs@therohogroup.com U.S.A.: 1-800-851-3449 Fax 1-888-551-3449 Outside the U.S.A.: 1-618-277-9150 Fax 1-618-277-6518



MDSS GmbH Schiffgraben 41 30175 Hannover, Germany



The Quality Management System of ROHO, Inc. is certified to ISO 9001:2008 and ISO 13485:2003.

Item #: T20192 Rev Date: 7/12/10 Print Date: \_\_\_\_\_