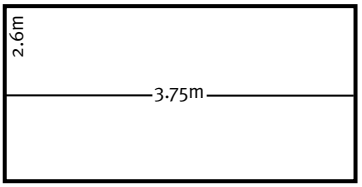
MEC™ MESH HALL SHELTER

This booklet tells you how to prepare, assemble and maintain your new shelter; please keep it for future reference. Set up your Mesh Hall at home before your first trip; this will allow you to inspect it for any manufacturing defects, check that all parts are present, and learn the assembly procedure with minimal stress on the shelter and on you.

Your Mesh Hall package includes:

- Four aluminum poles
- Wire stakes
- Tubing stakes
- Nylon guy lines
- Shelter sack and pole sack



MESH HALL Height inside 1.85m

MOUNTAIN EQUIPMENT CO-OP®

ASSEMBLING THE SHELTER

A note about shock-corded poles

Shockcord (bungi cord) is meant to keep pole sections in the proper order — not to function as an automatic assembly mechanism for poles. Do not hold one section while whipping the rest of the pole back and forth, and do not toss the poles into the air. These procedures excessively stress the pole joints and shock cord. Instead, fit poles together section by section, making sure that each piece slides completely into the next. Forcing an improperly assembled pole into place can damage the pole and/or the shelter.

Assembling the shelter

1 Assemble all poles carefully as described above. You will have four arch poles of equal length, each with a small angled section in the middle.

2 Lay the shelter body out flat. There are four seams with yellow pole clips running across the top of the shelter from one side to the other. At the bases of these seams are webbing straps. These straps are meant to run across the shelter floor, connecting the two bottom ends of each seam. If these straps are not yet connected, connect them now.

3 In windy conditions, peg out the floor corners before proceeding. Zip up both doors, lay the four poles out across the shelter, and connect all the clips to the poles. Each pole follows the line of a single seam, and only the clips from that seam are attached to that pole.

4 Carefully fit the pole ends into the grommets that are set into webbing loops at ground-level on the shelter.

5 If you have not already done so (Step 3), peg out at least the four corner loops at this point. For added stability, also peg out the four floor-level webbing loops at the base of the body seams.

6 Using the two longer guy lines provided, guy-out the ridge peaks at each end of the shelter; this provides the ridgeline tension that holds the shelter up. If desired, use the plastic guy line tensioners on these lines to quickly adjust the line tension.

7 Attach the eight Velcro® guypoints to their locations about halfway up the poles on each side of the shelter, by wrapping them over the poles.

The basic set-up is now complete.

Alternative setup options

1 The Mesh Hall may be set up "short" with only three (or even two) poles if desired. Simply leave out one or both middle poles, and attach all of the clips from the "empty" seam(s) to the nearest end pole. There will then be two sets of clips attached to one end pole. This has the effect of shortening the resulting shelter by one or two panels, allowing it to fit a smaller space. Alternatively, you can collapse a panel between two poles and simply attach alternate clips to each pole, so that the two poles act as a single pole.

2 Lighter set-up is possible (with some reduction in strength/stability) by only using the two end poles, and allowing ridgeline tension to support the centre panels.

3 To join two Mesh Halls together, place them end-to-end, open the adjoining doors, and "cross-clip" the two end poles to each other with alternate clips. To ensure adequate strength, tie the adjacent ridge points and floor corners together where they touch.

Rigging for bad weather

The Mesh Hall is large, so it requires extra guying and careful positioning in high winds. Keep this in mind when selecting and preparing a site; a little shelter from trees or rock will make the shelter better able to withstand windy conditions. If winds are anticipated, you can guy-out the hook-and-loop tiepoints (halfway up the poles on the sides of the shelter) as needed. Start with whichever side the wind is coming from, as this is the side that will likely require support. Since it is rarely necessary to use all the guypoints at the same time, only enough guy lines are provided for a "typical" set-up. Bring along extra lines if you anticipate a need to use all the guypoints simultaneously.

In rainy weather, one or more tarps may be rigged over the structure. The MEC SuperTarp is specially sized to fit over the Mesh Hall. (Note: any tarp, including the SuperTarp, needs to be suspended separately from trees or poles; the Mesh Hall's poles aren't designed to support tarps against winds.)

The Mesh Hall is deliberately made "floor-free". This saves weight and bulk, allows people to walk around with their boots on, and lets food spills drain directly onto the ground. A custom-sized, optional floor that fastens in is available; it helps make the shelter more bug-resistant, and provides a dry platform if you're sleeping in the Mesh Hall.

Keeping the bugs out

The Mesh Hall has floor-level ground flaps, which seal the bottom against most flying insects, such as mosquitoes. Lay them inside or outside of the shelter as desired: laying them on the inside gives the easiest seal against bugs because the flaps overlap more in the corners; this arrangement also provides a small "floorspace" around the perimeter of the inside of the shelter. Laying the flaps on the outside keeps them out of the way of stomping feet (a consideration if you have a large group of campers). In either case, dead wood, sand, duff, pebbles or other natural materials may be placed on the flaps to improve the seal against bugs and help anchor the shelter down. Please restore the appearance of the shelter site as you break camp.

Anchoring the shelter

The wire stakes supplied are suitable for general use on relatively soft ground. Where better holding power is required, use the supplied tubing stakes.

For really hard-packed ground you may wish to get a few stronger (and heavier!) stakes that can withstand the more forceful hammering needed to drive them in. On sand, snow, or other loosely-packed surfaces, wider T-Stakes or aluminum snow stakes will hold better. These stakes hold best if buried horizontally — dead-man style.

For even more solid anchors, experiment with hiking staffs, ski poles, ice axes, branches, rocks, trees, or logs; fit these improvised "stakes" directly through the shelter's stake loops, or attach them with cord as required. When packing for your trip, think about the conditions you'll likely encounter and what sort of anchors you'll be using. In many cases six pegs, plus materials available at the site will be enough.

Disassembling the shelter

When taking down the shelter, be careful not to stress the poles and fabrics. Disassemble the shelter by reversing the assembly instructions above. The flap fabric is strong, but care is still required not to tear it when taking the shelter down if it has become frozen in, or has wood or sand piled on it.

Packing the shelter

The shelter and poles may be carried separately for easier packing or load sharing. If carrying the pole sack on the outside of a pack, be sure the drawcord is securely attached to the pack to prevent loss. A pole tip: the short angled middle section of each pole has one longer and one shorter adjoining section. If you leave the angled section plugged into the shorter section rather than into the longer one, the final pole package will be shorter; experiment to see which side is the correct one to unplug. You may wish to mark the shorter section with a piece of tape as a reminder.

CARE AND MAINTENANCE

Protecting the shelter

Ultraviolet damage is the single largest hazard your shelter faces in its lifetime. Fabrics should not be exposed to sunlight for extended periods of time; this will eventually result in colour fading and fabric failure. If extended exposure is unavoidable, cover the entire shelter with a tarp or extra sheet of nylon.

Cleaning

Hand wash in a basin or the bathtub with mild, non-detergent soap and warm water. Rinse thoroughly to remove all soap residue. Do not dry-clean, machine wash, or machine dry. Consider leaving stubborn stains like tar or tree gum in place and dusting them with cornstarch or baby powder to prevent transfer to other areas of the shelter in storage. If the poles are exposed to salt or salt water, rinse them in fresh water and allow them to dry thoroughly before storing; while aluminum does not rust, it can become brittle through unseen corrosion over time.

Lubricating the poles

Occasionally apply a light coating of a silicone-based lubricant like 303™ Protectant to the shelter pole connections. If the poles are used extensively in marine environments, treat them more frequently.

Storing your shelter

Dry the shelter and poles completely before storage to avoid the irreversible consequences of mildew or hidden pole corrosion. Store in a cool dry place, out of direct light. Mildewed shelters can be cleaned as described above, but there is no way to remove the stains without damaging the fabric.

REPAIRING YOUR SHELTER

Fabric tears

Repairs to rips can be made with urethane sealant such as McNett Freesole™, Aquaseal™, or Seam Grip®. For tears shorter than about 1.5cm (½ in.), apply duct tape to one side and sealant to the other. For longer tears, apply duct tape to one side of the tear, and on the other side place a patch of no-see-um netting, extending about 6-12mm (¼ - ½ in.) beyond each edge of the tear. Use oval or circular patches (rounded edges are less likely to peel away than sharp corners). Cover the patch thoroughly with a thin layer of sealant. Once the sealant is completely dry, the duct tape can be removed from small and large repairs alike. For longer trips, we recommend taking an expedition sewing kit and extra nylon, webbing, a spare pole section, and extra narrow-diameter (2.5mm) tent pole shockcord.

Fixing a pole in the field

Slip the pole repair sleeve over one pole end. Slide the sleeve along until it is centred over the break in the pole, then wrap it into place with duct tape. Be careful to avoid damaging the shelter fabrics when removing the damaged pole. Replace the damaged section as soon as possible.

Replacing a broken pole section

Carefully tug out the pole end tip nearest to the broken section. Being mindful of how to retie it later, untie the end tip. Slide pole sections off the cord until you reach the damaged section. Remove the broken piece, being careful not to damage the shockcord. Thread on a new section of appropriate length and diameter, followed by the other sections, then re-tie the end tip knot.

Zippers

A worn slider is the cause of most zipper problems. An occasional application of 303™ Protectant or a silicon-based lubricant will help reduce wear. Grit greatly accelerates slider wear. Keep zippers clean by rinsing them under water after use in windy/sandy environments. Sometimes, carefully squeezing the top ends with a pair of pliers will restore some life. If a slider fails, run it as far as possible toward one end of the zipper, and use only the other slider for the duration of the trip. A sewing repair shop can replace inoperable sliders.

Lighting your shelter

Using a candle lantern in a shelter carries definite risks. Never leave a candle lantern burning unattended; always watch for fire hazard from overheating fabrics or spilling wax. Spilling wax can be dangerous, particularly to eyes and other sensitive areas. It is entirely your responsibility to use candle lanterns wisely and with extreme caution; we do not endorse the use of any flame or heat source in a shelter. Cooking in a shelter is strongly discouraged because of fire hazards and carbon monoxide risks. Unlike campfire smoke and other fumes, which cause you to gasp for air, **carbon monoxide can render you unconscious without any warning.**☠