

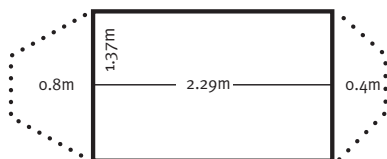
MEC LIGHTFIELD

This booklet tells you how to prepare, assemble, and maintain your new tent; please keep it for future reference. Set up your tent 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 tent and on you.



Your Lightfield tent package includes:

- Tent body
- Tent fly
- Four shock-corded poles
- Aluminum stakes and nylon guylines
- Aluminum pole repair sleeve



LIGHTFIELD Height inside 0.95m

 **MOUNTAIN
EQUIPMENT
CO-OP**

SEAM SEALING

The seams of your tent have been waterproof taped on all exposed seams. All features, such as Velcro® pole anchors and door tiebacks, have been welded onto the inside of the fly to avoid any small leak points. However, for extremely wet and windy conditions, you may want to re-seal selected parts of your tent. These include parts of the inner tent where condensation or windblown rain could potentially wick through, such as lantern loops or pole clip suspension points. You may also wish to seal the “in” side of any untaped floor seams exposed to ground moisture or rainfall. For seam sealing and tent repairs, we recommend a quality after-market polyurethane sealer such as McNett Seam Grip®.

Work in a well-ventilated area to avoid inhaling sealant vapours. For complete sealing, evenly apply only the minimum required amount of sealant into needle holes, thread, and fabric joints. Allow to dry and cure overnight. McNett sealants (Seam Grip, and similar) cure more quickly in a moist or humid environment. Before packing the tent for the first time, dust newly sealed areas with talcum powder or spray them with 303™ Protectant; freshly cured sealer can bond to itself even when dry. If the tent is used hard and often you may need to reapply seam sealer in high-wear areas.

SITE PREPARATION

Remove sharp objects that might puncture the tent floor.

A ground sheet beneath the tent is not necessary for waterproofness, but it will reduce long-term wear on the tent floor. A ground sheet should be cut or folded smaller than the tent floor to prevent water pooling between the floor and the ground sheet. Another light and convenient option is MEC's custom-made, coated nylon Footprint.

In winter conditions, we recommend digging out a platform with surrounding walls. To avoid melting depressions in the snow under the tent, pack the snow down solidly by ski or foot.

SET-UP

A note about shock-corded poles

Shockcord (bungee cord) is meant to keep pole sections in the proper order—not as an automatic assembly mechanism for poles. Do not hold one section while whipping the rest of the pole back and forth, or toss the poles into the air; either procedure excessively stresses the pole joints and shockcord. 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 tent body and fly.

Assembling the Tent

1 *Assemble all poles carefully as described in the previous paragraph.* You will have two long gold poles and two shorter black poles.

2 *Lay the tent body out flat.* In windy conditions, you may wish to peg one or more corners at this stage.

3 *Lay the gold poles on top of the tent body so that they criss-cross diagonally along the long axis of the tent.*

4 The pole clip webbing is colour-coded to ease set-up. *Attach the pole clips that have yellow webbing to the gold poles, following the diagonal seam lines. Plug the pole ends into the outermost grommets at the four tent corners. Be careful to avoid excessive bending of the poles, especially in wind.*

There is more than one grommet on all the pole webbing tabs so that you can increase or decrease the tautness of the tent to compensate for fabric slackening or tightening caused by changes in humidity. When first erecting the tent it is best to use the outermost (loosest) grommet on each tab.

5 *Install the short black poles, one at each end of the tent, under the long gold poles.* Note that one black pole has an angled centre arch connector; this pole goes at the front end of the tent body (the end with the largest of the two doors).

a) Insert ends into the outermost grommets of the nearest unused webbing loops.

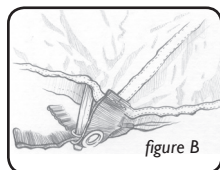
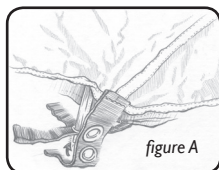
b) Attach the black plastic pole clips.

6 *Spread the fly over the tent, with the larger door/vestibule at the front (angled pole) end of the tent.* On the underside of the fly, opposite each of the four points where the long and short poles overlap, is a Velcro® wrap-tie. Attaching these wrap-ties over both poles helps make the tent

its strongest: The wrap-ties allow the poles to reinforce one another in a series of trusses; they also connect the guyline attachment points directly to the poles for maximum stiffness when these guylines are rigged.

7 *Fit the eight webbing tabs of the fly on to the ends of all the poles, placing the grommets over the grommets from the tent body as shown in figures A and B. Fold the grommet tab under the body of the tent, facing the finger pull loop away from the tent to allow for easy removal of the fly later.*

Alternatively, instead of attaching the four mid-point webbing tabs to their pole ends, peg them out to the side of the tent using short pieces of guyline cord; this will provide maximum ventilation and wind stability.



8 *Peg out the four vestibule anchor loops at the front and back doors of the tent fly; after completing the set-up, you can tighten these anchor loops for a taut pitch.*

Basic Tensioning

Anchor the four corners of the tent to flatten the floor and provide a stable platform for the poles. The corner loops can accommodate skis and ice axes as pegs.

Extreme Weather Rigging

The Lightfield's anchor loops and external and internal guy points allow it to be rigged increasingly securely as conditions worsen, as explained in the following points roughly according to their order of "need."

- If you have not already done so (see Step 6 above), connect the four Velcro loops inside the fly to the pole intersections. Peg out the four grommet web loops at the bases of the short black poles. Guy out the triangular guy points located midway up the fly sidewalls.
- There are four inset blue triangle-shaped guypoints, located on the fly over the intersections of the gold and black poles. Guy these out with the lines at a 45° angle to the door axis.
- There are four internal guy loops on the top of the inside of the tent and six on the floor. Attach lines connecting the top of one side of the tent to the bottom of the other side to improve stability and support the frame. Combine these with the external guy lines if the terrain prevents the use of external guy points.

Condensation on the Canopy

The polyester canopy fabric absorbs much less water than nylon, so the inner tent walls will usually feel dryer than nylon would, and, unlike nylon, will not stretch and sag in damp conditions. MEC's proprietary Tensilk-HT™ polyester is exceptionally strong, yet weighs about the same as no-see-um mesh. Tensilk-HT gets its strength from an extremely tight weave, so under very cold conditions (minus 15°C or below) some condensation and icing may occur on the inside of the canopy. If it does, simply brush off and sweep out any accumulated frost before packing the tent.

Ultralight Set-up

Using a custom Footprint (available separately), you can erect just the fly. This configuration provides a very light, compact, and basic shelter, and will dry more quickly in the morning because of better airflow. However, the set-up is not readily bug-proof, it is subject to more condensation forming on the inside of the fly, and it does not keep foul weather out as effectively.

This set-up is easiest with two people. Spread the Footprint out flat on the ground. Insert the two long gold poles into the appropriate grommets at the front and back corners of the Footprint, while one person holds the two poles steady at the point where they cross. Spread the fly over the poles (and the person). Ensure the fly doors are correctly oriented to the Footprint, then use the Velcro fasteners at the centre inside top of the fly to secure the pole crossing by wrapping around the crossover point. Insert the two short black poles into the appropriate Footprint grommets, with the angled pole to the front. Secure them to the gold poles at the four crossing points using the Velcro strips on the fly. Attach the remaining Velcro strips directly to individual poles. Attach the grommet strips at the base of the fly to the pole tips, folding them under as for usual set-up. The tent may be guyed and pegged out as usual. In wind, peg out the Footprint before beginning. Keep vents and doors open as much as possible to minimize condensation. Snow, sand, etc. may be piled up or scooped away around the base of the fly to vary the airflow through the tent. Disturb soil as little as possible to leave the site untouched for others to enjoy.

Anchoring the Tent

The #7001-T6 aluminum stakes included with the tent are suitable for general use on relatively soft ground. However, in very hard-packed ground you will need stronger (and heavier!) stakes that can withstand the force needed to drive them in. On snow, sand, or other loose-packed surfaces, wider T-Stakes or aluminum snow stakes will hold better; these stakes hold best buried horizontally. You can also improvise with other "stakes" (hiking staffs, ice axes, branches, rocks, trees), using the tent's stake loops or cord as required.

When packing for your trip, consider the conditions you'll likely encounter and what sort of anchors you'll require. You can often leave several of the supplied pegs at home and replace them with improvised anchors, thereby saving weight and space in your pack.

Ventilating the Tent

Proper ventilation is the key to minimizing condensation in any tent. Keep fabric doors open as widely as the prevailing weather permits. If bugs or drafts aren't a problem, leave mesh doors open too. Crack each door open from the top down; warm, moist air rises and will escape through high openings. If the design of your tent allows for it, have openings at both ends or both sides of the tent to allow air to flow through for best ventilation. On very hot nights, when you are confident there will be no rain or dewfall, you can leave the flysheet off and use the inner tent alone as a "bug tent."

Disassembling the Tent

The most important consideration in taking down a tent is not to stress the poles and fabrics. First, disconnect guylines and release the tension from the tent. Next, release all the poles. If your tent has pole sleeves, push the poles out of the sleeves instead of pulling them out. To minimize the stress on the bungee cord in the poles and to speed disassembly, fold each pole in half first, and then fold down towards the outsides, two sections at a time.

Packing the Tent

If possible, fold and roll the tent rather than stuffing it into its sack—rolling makes a smaller package, and causes fewer creases in the polyurethane coating. The tent and poles may be carried separately for easier packing or load sharing. There are two drawcords on the tent sack. Use the lower one when carrying the tent separately from the poles; this makes a shorter package that fits sideways into a pack. If carrying the pole sack on the outside of a pack, securely attach the drawcord to the pack to avoid loss.



CARE AND MAINTENANCE

Protecting the Tent

Ultraviolet damage is the single largest hazard your tent 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. The uncoated fabrics of the tent canopy are most susceptible to damage from UV and should be covered by the more durable fly. If extended exposure is unavoidable, cover the tent with a tarp or a sheet of nylon.

Lighting your Tent

Using a candle lantern in a tent 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 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 tent. Cooking in a tent is strongly discouraged because of fire hazards and carbon monoxide inhalation risks. Unlike campfire smoke and other fumes, which cause you to gasp for air, **carbon monoxide can render you unconscious without any warning.** 

Food in Tents

Mop up spills promptly with water. Many foods, particularly acidic ones like fruit or juices, can weaken synthetic fabrics over time. In any case it is best to eat and store food away from a tent to avoid attracting animals.

Cleaning

Clean the tent by hand while it is set up, using a sponge, a mild non-detergent soap, and warm water. Rinse thoroughly. Do not dry clean, machine wash, or machine dry. Stubborn stains like tar can be left in place and dusted with talcum powder to prevent transfer to other areas of the tent in storage. After cleaning, a spray-on water repellent designed for synthetic fabrics may be applied to the flysheet if surface water repellency is weakening. (This is apparent when water droplets no longer bead up on the fabric.)

If the poles are exposed to salt or salt water, rinse them in fresh water and allow them to dry 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 tent pole connections. If the poles are used extensively in marine environments, treat them more frequently.

Storing your Tent

Dry the tent and poles completely before storage to avoid mildew or hidden pole corrosion. Store in a cool, dry place out of direct light.

Mildewed tents can be cleaned as described above, but there is no way to remove the dark stains without damaging the fabric. Mildew will probably take some time to affect the waterproof coatings, so the tent should still be usable.



REPAIRING YOUR TENT

Fabric Tears

Watertight repairs to rips can be made with seam sealant such as McNett Freesole™, Aquaseal™, or Seam Grip®. For tears shorter than about 1.5cm (1/2in.), apply duct tape to one side and sealant to the other. On longer tears, apply duct tape to one side of the tear and, on the other side, a patch of no-see-um netting that extends about 6-12mm (1/4-1/2in.) 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 in 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 narrow-diameter (2.5mm) tent pole shockcord. Coghlan's Seam Saturant or the like will prevent wicking through a tent fly via seams or webbing.

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 not to damage the tent fabrics when removing the damaged pole.

Replacing a Broken Pole Section

The MEC Grip-Tip™ pole tips are press-fitted into place. 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 silicone-based lubricant will help reduce wear. Grit accelerates slider wear. Keep zippers clean by rinsing them under water after use in windy/sandy environments. Sometimes, carefully squeezing the top ends of the slider with a pair of pliers will restore some life. If an inner door 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.