

WINTERgear

1982
EQUIPMENT



Be tempted!
Whether you're a
tiger or mouse
choose
WINTERGEAR
and avoid
the equipment jungle



The wonder fabric
That's why we use it!

WINTERgear

WINTERGEAR is owned and run by Ben and Marion Wintringham, (hence the Company name). They are both well known and active climbers with experience in the Himalayas, Alps, USA, Kenya and Norway as well as climbing most weekends in the UK. On many of their trips they found that they had equipment problems, not fundamental but annoying enough to make them less enjoyable than they could have been. They could see many ways of improving basic gear on which their survival often depended. From tentative beginnings of personal one-offs they decided that the market, (that today has become so much more knowledgeable), was ready for an end user, designer/manufacturer approach rather than the more usual professional producer relying on feedback after the event. From this WINTERGEAR was born - Marion's early haute couture and Ben's retail trade experiences adding considerable advantages to the venture. 1981 was WINTERGEAR's first real business year and they are pleased to say that such well known mountaineers as Joe Brown, Mo Anthoine, Martin Boysen, the Burgess twins and Alex MacIntyre are now using WINTERGEAR items. They have also supplied many expeditions, the most well known probably being the Winter 80/81 Everest West Ridge. For 1982 there are new designs and significant improvements to existing items following savage testing in real usage. They now have new manufacturing premises as the old livingroom although large, just couldn't cope with three people, machines and the vast quantities of fabrics! WINTERGEAR intend to keep their product range relatively small, making quality control much

easier and to produce the very best gear of its kind. The whole approach to expeditions and serious Alpine climbing during the last decade has changed completely from multi-camp/fixed rope to lightweight continuous push which has necessitated a new generation of lightweight, high performance gear. A good example being WINTERGEAR's Gore-Tex BIVI BAG which has revolutionised bivouac-ing.

WINTERGEAR DESIGN CONCEPTS AND MATERIALS. It is worthwhile reading the following facts as many aren't generally known and could well make your intended gear purchase more knowledgeable, perhaps even safer.

DOVE TENTS. Last year saw many designs mushrooming onto the market. What is perhaps not readily appreciated by those who like the space offered by a dome are the design principles and relative stabilities between different models. There are two types of structure. The SIMPLE CROSSOVER pole pattern, suitable really only for smaller SINGLE SKIN tents, which can therefore be made self supporting, and the GEODESIC which is essential for LARGE tents and severe weather conditions. The GEODESIC utilises very sophisticated concepts that were worked out by the world famous 'inventor' Richard Buckminster Fuller whereby the poles follow the arcs of great circles. A great circle being the shortest distance between two points on a curved surface. By crossing the tent poles to form polygons whose outward thrusts are balanced by equalising compression factors, a virtually undeformable structure is produced. It may seem rather complicated but in practice is

extremely simple - WINTERGEAR's EMERALD and DIAMOND tents using the geodesic principle can be erected in as little as 4 minutes. The tent walls are held in almost perfect wrinkle-free tension and wind loading is always distributed over the entire pole system with the very real advantage of virtually eliminating that dreadful flapping experienced in conventional tents, that not only keeps you awake but weakens the fabric. The CROSSOVER pole system, where the pole intersections are all at the same point - the roof apex - deforms more easily and for this reason WINTERGEAR will only use this system for a small SELF SUPPORTING SINGLE SKIN tent. (The EYRIE, in GORE-TEX fabric). **FLYSHEET ERECTING FIRST v SELF SUPPORTING INNER** The only advantage of the former is that the inner can be put up undercover when it is raining, although this is often not as easy as it sounds. With a fly erecting first system it is only possible to HANG the inner tent. This results in - A)-reduced volume, B)-an inner which is untensioned and will flap in high winds, C)-a relatively weak structure. With a SELF SUPPORTING INNER however, you get, 1) maximum internal volume, 2) a perfectly tensioned inner - that can also be used on its own in hot climates, as well as a perfectly setting fly, and 3) greatly improved stability as the pole feet are held by the inner's groundsheet 'tray' against the pole sleeve tensioning. COMPARE the interior space of 'competitive' domes with WINTERGEAR's EMERALD and DIAMOND. There isn't much point in buying a better wind shedding shape if the inner tent is little better

than a conventional tent, especially if the fly occupies more ground space. **POLES** WINTERGEAR have experimented with hollow glass fibre, (tends to fracture in the cold), solid glass fibre, (heavy) and a 'space' alloy tubing. The latter was found to be superior for the following reasons. It is very light, strong and flexible and is the least affected by low temperature embrittlement alloy that is currently available. It also forms a more rigid structure than a glass fibre one. All WINTERGEAR poles are anodised, not for looks but to resist corrosion and hinder the adhesion of snow and dirt. They are all shockcorded between sections, have ferruled close fit joints and are generally all the same length to avoid sorting problems. For the tighter curves of the HOOPED BIVI and THE KENNEL the sections are slightly pre-curved. **INSECT NETTING** No tent should be without a SEPARATE zipped netting door. Separate for use on its own when it's hot yet can be completely covered by the outer door when cold. WINTERGEAR are now using ultra fine mesh no-see-um - proof against the aptly named no-see-um bugs of the USA - or any other insect. **SEAMS** At present WINTERGEAR are the only manufacturer whose PU proofed NYLON flysheets as well as GORE-TEX tents, bivvi bags and clothing, (with the exception of mitts and gloves), have their seams sealed using the latest HOT AIR welding machine thereby ensuring completely waterproof seams. Full care instructions are included with all WINTERGEAR products.

Ben and Marion Wintringham

WINTERgear and Gore-Tex[®] FABRIC

CHARACTERISTICS GORE-TEX fabrics

- Totally waterproof.
- Completely windproof.
- 'Breathable' fabric.
- Virtually no condensation in all but exceptional conditions.

CONSTRUCTION. GORE-TEX fabrics have a PFTE membrane with 9 billion pores to the square inch, laminated between protective fabrics such as nylon. Each pore is too small to permit the entry of LIQUID water i.e. rain, but large enough to allow water VAPOUR to escape i.e. perspiration and breath in cold conditions. In TENTS minimal condensation and frosting will occur in certain conditions as there is no fabric that is TOTALLY condensation free. Because GORE-TEX fabrics are wind-

proof, one of the major causes of HEATLOSS is drastically REDUCED. Apart from weight saving, GORE-TEX fabric enables you to rest in contact with it WITHOUT causing capillary leaking. All our SEAMS are now COMPLETELY SEALED using the latest GORE-TEX tape welding machine: Excepting our MITTS. GORE-TEX fabric was one of the reasons why WINTERGEAR started. It enabled us to design items that we had wanted for several years but had been unable to produce with the existing fabrics of the day. We feel that GORE-TEX fabric is unsurpassable when used for BIVVI BAGS, SMALL lightweight tents and CLOTHING. For reasons relating to the laws of physics, GORE-TEX fabric if used for large

tents isn't quite so effective and due to its complex manufacture the COST FACTOR becomes rather prohibitive.

* GORE-TEX is the trademark of W L GORE & ASSOC. Inc.



Our original, now very well established GORE-TEX fabric 'Bivi' Bags for 4 seasons use in all situations anywhere in the world PLUS an entirely new HOOPED BIVI for a greater degree of comfort.

Gore-Tex*
FABRIC

Bivi Bags



All Gore-Tex Bivi Bag

Designed to give a completely windproof, waterproof, breathing, sleeping bag cover for use in any conditions, that has great versatility for either simple camping or high altitude expedition use.

- Completely wind, waterproof breathing GORE-TEX tent fabric - breathes better than clothing type Gore-Tex fabrics, is lighter and warm to the touch on the inside surface.
- Eliminates condensation in all but very exceptional conditions.
- GORE-TEX, waterproof tape covered seams.
- Drawcords with grips on hood and bag.
- 4 seasons, any use in any terrain.
- Ultra lightweight. 567g (20oz) with stuff sac.

Budget Bivi Bag

Basically as the ALL GORE-TEX bag but with a slightly wider parallel sided shape and a PU NYLON BASE/SIDES. A compromise to give a lower price at the expense of some condensation on the PU nylon. We do not recommend it therefore for extended use. 510g (18oz) with stuff sac.



Hooped Bivi NEW

This is an entirely new concept that gives a greater degree of comfort than our other Bivi Bags. It is designed specifically for ultra lightweight overnight camping in all weathers but not primarily for expedition use.

- Windproof, waterproof, breathing GORE-TEX tent fabric tunnel and outer door with elasticated zip cover, PU nylon base/groundsheet.
- GORE-TEX welded tape covered seams.
- Pre-curved, shockcorded sectioned anodised alloy hoop pole.
- No-see-um insect netting zipped inner door.
- Sets up in 30secs. or less.
- Ultra lightweight. 0.9kg (2lb) complete with pole, pegs and stuff sac.

The 3oz GORE-TEX tent fabric that we use has a polyester scrim lining, looking something like a 'J' cloth texture, that is warmer to the touch than standard nylon taffeta lined Gore-Tex. This scrim side is yellow and can be used for signalling in an emergency.



All sizes and weights are approximate and WINTERGEAR reserves the right to alter and improve specifications without prior notice.

SEE PAGE 7 FOR SPECIFICATIONS OF ALL OUR CATALOGUE PRODUCTS.

Throughout our catalogue all items with BLUE HEADINGS are either wholly constructed from or have the major part of their fabric content in GORE-TEX laminated fabric.

- Denotes a new feature or improvement to an existing design introduced with this '82 Equipment Catalogue.

Tents in Gore-Tex^{*}

1 to 2 man, single skin, mini and small tents in windproof, waterproof, breathing GORE-TEX where comfort has been sacrificed to a degree in order to achieve very light weights.

* GORE-TEX is the trademark of W L GORE & ASSOC. Inc.

The Kennel

The original British, mini hooped tent; now with significant improvements. An ideal ultra lightweight 1 man tent giving more than an acceptable degree of comfort for its weight and size. Suitable for all weathers, 4 seasons, in any terrain, although not primarily intended for expedition or Alpine use.

- GORE-TEX tent fabric tunnel and outer door, PU nylon groundsheet and windbreak porch.
- GORE-TEX welded tape covered seams for complete waterproofing.
- Pre-curved, sectioned, shockcorded anodised alloy poles. The slight curving of the pole sections enables them to be inserted more easily through the tighter radius sleeves of a small tent.
- No-see-um ultrafine net, zippered inner door.
- New windbreak porch aids cooking.
- Erects in approximately 2 minutes.
- With poles snapped into the eyeletted peg-out tapes the tent can be picked up and repositioned at will.
- Weight: approx. 1.25kg (2.75lb) complete.



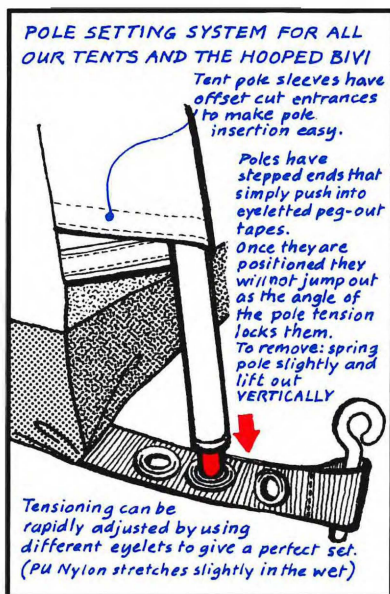
The Eyrie

NEW

An entirely new design that is suitable for 4 seasons in any terrain where a small 2 man dome tent occupying minimal ground area is an advantage. CROSSOVER poles, SELF SUPPORTING, single skin GORE-TEX.

- GORE-TEX tent fabric 'dome', PU nylon groundsheet and porch.
- GORE-TEX welded tape covered seams.
- Very good headroom.
- Sectioned, shockcorded, anodised alloy poles (2 for tent, 1 for porch), hold the tent walls in almost perfect OUTWARD tension with virtually NO FLAPPING.
- Large semicircular zippered door backed by similar no-see-um net door.
- Raised, hooped, zippered porch for gear storage and cooking.
- Very stable in adverse conditions.
- Erects in around 2 minutes.
- Very lightweight for its size: 2.05kg (4.5lb) complete with poles, pegs and stuff sac.

SEE PAGE 7 FOR SPECIFICATIONS OF ALL OUR CATALOGUE PRODUCTS.



Large, DOUBLE SKIN, lightweight dome tents where ultra lightweight has been sacrificed for exceptional interior space and real comfort. SELF SUPPORTING, inner first erecting, for maximum space and unrivaled stability. (See page 2 for our reasoning on this system).

2-4 man Geodesics



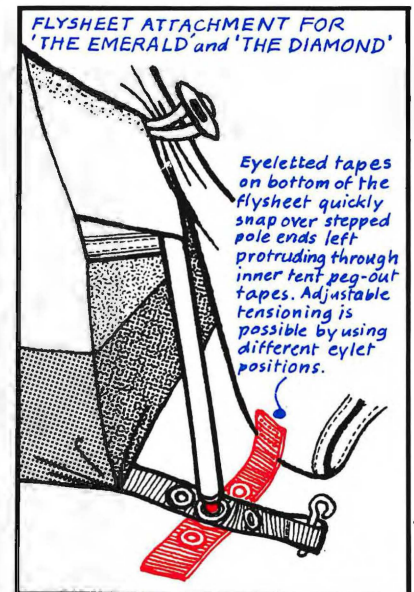
The Emerald NEW

- Another new design for our range. Exceptionally spacious 2 to 4 man GEODESIC dome tent with the premium on comfort for extended camping where very severe wind, rain and snowfall are not expected.
- Remarkably stable in all but severe conditions.
 - Sectioned, shockcorded, anodised alloy poles (3).
 - Self supporting, (when poles are set the entire tent can be picked up and repositioned), inner first erecting.
 - Vast interior (similar to The DIAMOND).
 - Headroom permits trousers to be pulled on whilst standing in stooped position.
 - PU nylon flysheet clips positively to the inner tent. (see diagram below).
 - Fly seams sealed with PU welded tape.
 - Large 2-way zipped porch for cooking and gear storage.
 - Zipped inner door backed by similar no-see-um netting door.
 - 2 large fixed no-see-um vents backed by zipped covers on inner tent rear walls for effective crossflow ventilation.
 - 2 see-through oddments pockets.
 - Weight: only 3.9kg (8.5lb) inc. pegs & sac.



The Diamond

- Significantly improved. A proven, amazingly stable geodesic structure giving a no compromise, 4 seasons, all terrain, very spacious long stay tent. Ideal for expedition base camps. Sheds wind rain and heavy snow like no other tent that we have seen in the world. Self supporting system.
- Maximum stability from 4 pole GEODESIC configuration, all sectioned, shockcorded anodised alloy. Erects in approx. 5 mins.
 - Apexed roof to shed rain and heavy snow.
 - Huge interior with room for stooped standing. 2 see through oddments pockets.
 - PU nylon fly has 1 large porch with a 5th sectioned alloy hoop pole, plus a smaller porch to the rear. 2-way zips to both.
 - Fly seams sealed with PU welded tape.
 - Very large zipped doors backed by similar no-see-um net doors allow 2-way entry/exit for maximum versatility and cross-flow ventilation when required.
 - Snow valence fly available on request.
 - Neoprene groundsheet although heavier, offers extra durability and waterproofing.
 - Exceptionally light for its size and superior components: approx. 4.9kg (10.8lb) complete with poles, pegs and stuff sac.



Clothing in Gore-Tex^{*} FABRIC

Sallopette

All GORE-TEX fabric heavy duty sallopette. Ideal waterproof, breathing outerwear for ice climbing, ski-ing, backpacking, sailing or even motorbiking.

- 4oz heavy duty oxford weave GORE-TEX fabric
- Full length opening side zips for easy putting on over boots, crampons etc.
- Full length protective zip flaps with velcro and pop-stud closure.
- Elasticated wide straps with adjustable quick release nylon buckles.
- High chest, cut slightly lower to the elasticated back eliminates waist level clothing gaps.
- 2 large deep pockets; velcro closure.
- Seams now sealed with GORE-TEX welded tape for complete waterproofing.
- Note: we no longer fit double knees and seat to our sallopette as it was found that doubling GORE-TEX defeated its unique properties and caused condensation.
- Weight: 0.7kg (1.5lb)
- Colour: Forest Green only.
- Sizes: small, medium, large, extra large.

Overmitts

Top quality overmitt with many uses.

- GORE-TEX back and gauntlet. Not lined.
- Cordura, canvas textured proofed heavy duty nylon palm and thumb for abrasion resistance and a better grip.
- Nylon quick pull/release wrist-strap buckle for secure, comfortable fit.
- Half elasticated gauntlet slips over clothing more easily than other types.
- Strong tie-on loops to prevent loss by accidental dropping.
- Colours: various - usually blue or olive.
- Sizes: small, medium and large.

Wintermitts with Thinsulate[®] Thermal Insulation

Same design as our Overmitt but with a lining of THINSULATE insulation. (See X for description). Very warm low bulk mitt used on Winter 80/81 Everest West Ridge Expedition.

- Lightweight
- Only 6mm thick; gives good freedom of movement yet has remarkable insulation.
- Warmest, 200 grade THINSULATE insulation used.
- Colours and sizes as for OVERMITTS.

Thermal Gloves **NEW**

Reasonably priced thermal glove. Smooth fine knit exterior with a light pile on the inside, non absorbent, wicks away perspiration and moisture, gentle stretch fit and ribbed, elasticated cuff. 73% polypropylene/27% acrylic. Colour: Black only. Sizes: small or medium/large.

WINTERseal

Versatile seam sealant/adhesive for nylon-based fabrics including GORE-TEX, neoprene and PU proofed.

NO stitched seam, unless sealed by welded tape - (see most of our products), will be waterproof. Use on your existing gear and our MITTS. 125ml and 250ml tins.

"Thinsulate" is a registered trademark of 3M

* GORE-TEX is the trademark of W L GORE & ASSOC. Inc.

Sallopette

40mm (1.5") wide, shoulder straps with adjustable quick release nylon Fixlocks

Full length chest high Fly zip covered by wide pop-studded Flap


2 large chest to waist level pockets with Velcro closure

Legs are cut Full enough to go over other clothing without being too baggy


Full length fully opening zips on BOTH sides enables you to put on the sallopette even whilst wearing skis or crampons and with both feet on the ground at all times. 60mm (2.5") Flap covers zip with full length Velcro strip and pop-stud closure for as complete a weather seal as possible

All seams that could leak are now completely sealed using the latest GORE-TEX fabric tape that is hot air welded.

Thermal Gloves

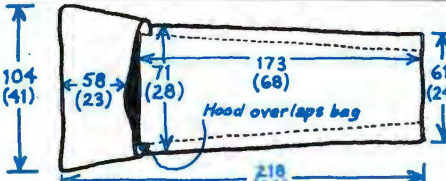
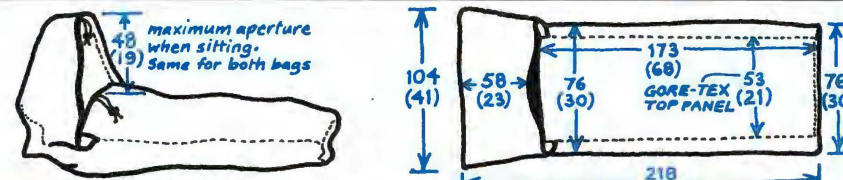
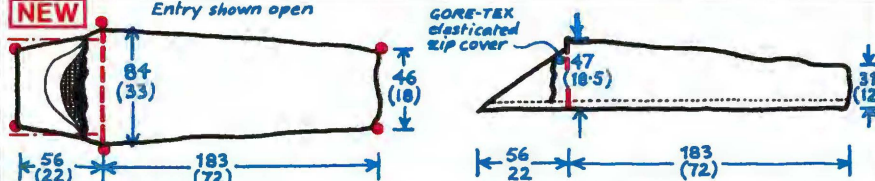
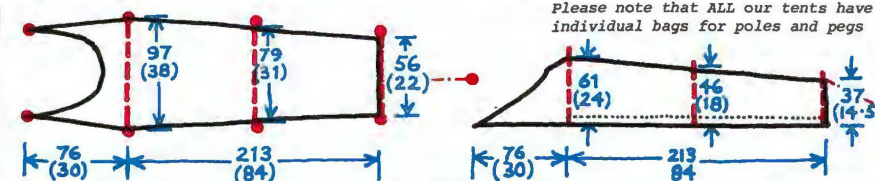
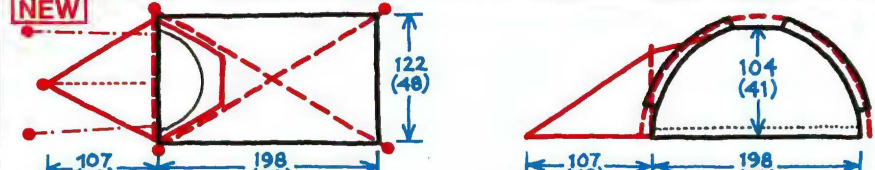
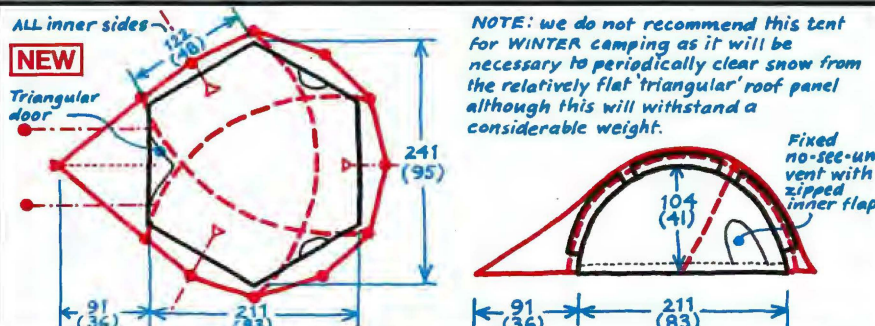
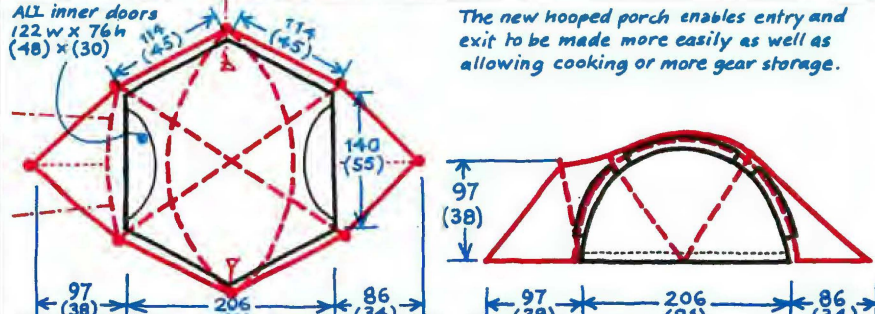


Overmitts and Wintermitts



These specifications were correct when going to press but we reserve the right to change them and include improvements to designs and materials at any time. As an example see all items marked ● which have significant improvements on former specifications.

Specifications

Model name & end usage	Plans and elevations (not to the same scale) Dimensions in cm, (inches in brackets)	Approx. weights	Materials & colours
<p>All Gore-Tex Bivi Bag</p> <p>4 seasons, any terrain; expeditions, Alpine, backpacking etc.</p>	<p>KEY TO DIAGRAMS</p> <ul style="list-style-type: none"> — Line of inner or single skin - - - Line of flysheet - · - Line of tent pole system • Peg-out points - · - Guy lines (mainly storm use) - · - Fly zipper 	<p>567g (20oz) with stuff sac</p>	<p>GORE-TEX 3oz tent fabric throughout Colours: Mid Blue or Olive with warm yellow scrim lining - a sort of 'J' cloth look that is warm to the touch</p>
<p>Budget Bivi Bag</p> <p>4 seasons all terrain short-stay:- (condensation on PU nylon: use closed cell mat inside to minimise this)</p>		<p>510g (18oz) with stuff sac</p>	<p>GORE-TEX tent fabric hood and top panel PU nylon base and sides. Colours: Mid Blue (Gore-Tex) fabric with Navy base, or Olive/Olive</p>
<p>Hooped Bivi</p> <p>4 seasons, any terrain although not primarily for expedition use.</p>	<p>NEW Entry shown open</p> 	<p>0.9kg (2lb) with pole, pegs & stuff sac</p>	<p>GORE-TEX tent fabric bag tunnel and door, PU nylon groundsheet, no-see-um inner door, 1 pre-curved, sectioned shockcorded anodised alloy pole. Colours: Mid Blue/Navy or Olive/Olive</p>
<p>The Kennel</p> <p>Usage as for Hooped Bivi but with greater comfort. Will take two (just!) in an emergency</p>	<p>Please note that ALL our tents have individual bags for poles and pegs</p> 	<p>1.25kg (2.75lb) with poles, pegs & stuff sac</p>	<p>GORE-TEX tent fabric tunnel and outer door PU nylon groundsheet and windbreak porch, no-see-um inner door. 3 pre-curved poles as for HOOPED BIVI. Colour: Olive/Olive only</p>
<p>The Eyrie</p> <p>4 seasons, any terrain, 2 man single skin, self supporting dome tent with minimal ground area</p>	<p>NEW</p> 	<p>2.05kg (4.5lb) with poles, pegs & stuff sac</p>	<p>GORE-TEX tent fabric 'dome' PU nylon groundsheet and porch, no-see-um inner door. 3 poles, sectioned, shock-corded anodised alloy. Colour: Olive/Olive only</p>
<p>The Emerald</p> <p>3 seasons, long-stay tent, double skin, self supporting, very spacious GEODESIC structure. 2 to 4 man (See note on winter camping)*</p>	<p>NEW</p> <p>ALL inner sides 122 (48)</p> <p>Triangular door</p>  <p>NOTE: we do not recommend this tent for WINTER camping as it will be necessary to periodically clear snow from the relatively flat 'triangular' roof panel although this will withstand a considerable weight.</p>	<p>3.9kg (8.5lb) with poles, pegs & stuff sac</p>	<p>2.5oz PU nylon fly and groundsheet, 2oz uncoated nylon inner tent, no-see-um inner door and vents. 3 pole system as above. Colours: Olive fly and groundsheet, plain white inner tent.</p>
<p>The Diamond</p> <p>4 seasons, any terrain, 2 to 4 man, 2 door, 2 porch, maximum stability base camp type, self supporting double skin GEODESIC dome. Comfortable and spacious.</p>	<p>ALL inner doors 122 w x 76 h (48) x (30)</p>  <p>The new hooped porch enables entry and exit to be made more easily as well as allowing cooking or more gear storage.</p>	<p>4.9kg (10.75lb) with poles, pegs & stuff sac</p>	<p>Same as for the EMERALD with the exception of 5 pole system and neoprene coated nylon groundsheet.</p>



Ben Wintringham approaching the crux
of 'Right Wall', Dinas Cromlech.