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Design and versions The whole jacket is designed to fit the exact requirements needed by real professional climbers in the high altitude mountain environment. Among such requirements is the Pro-Hand system ©, a patended solution designed to protect hands and to avoid lossing the gloves due to sudden wind gusts. The structure consists of multiple layers of fabric. The external layer is waterproof and wind resistant whilst the inner layer is thermally insulating. The external layer consists of the following basic components: a fabric that is impermeable but breathable, with a wind resistant membrane; a padded material on the back; an elasticized fabric in the lateral part of the shoulder blade; a reinforced fabric on the shoulders where the back-pack is carried; a more rigid material for the elbows; and extra support under the gloves. Special attention is given to the impermeability of the stitching through the use of advanced joining technologies. The inner layer instead is removable and interchangeable according to the needs. In this way it is possible to use the Quota Zero Shell (the version without the inner padding) as an active, wind resistant, raincoat useful in many different situations when there is no need of an extreme thermal insulation. So, for example, in the nautical sector, Quota Zero becomes an high performance thermoregulatory shell. The inner padding is proposed in three different versions, three different technologies of thermal insulation: Quota Zero - HIGH PERFORMANCE: this padding which utilizes ThinsulateTM guarantees thermal insulation in extremely harsh weather conditions, preventing heat loss whilst maintaining high breathability. Furthermore, this material is very durable and soft to the touch. Quota Zero - EXTREME AEROGEL: this second type of padding, which also offers extraordinary thermal performance, is made with one of the most insulating materials in the world, namely Nanogel. Breathable and light, this padding makes it possible to maintain body temperature. The mesoporous structure of the nanogel allows humidity produced by the body to be released gradually to the exterior. Certain parts of the interior of the garment have been identified as needing to provide maximum controlled body temperature, and thus have been covered with anatomically shaped aerogel patches. Quota Zero - BLUE AIR: breathable and light, this padding has an extraordinary thermal resistance. It is able to maintain a constant body's temperature thanks to its porous structure which can absorb body's moisture and gradualy release it to the external.

grado zero espace



K-Cap is a balaclava designed especially for high altitude use. It is being developed as part of a project for the design and development of specialized clothing equipment to be used during a scientific expedition on Mt. Everest. The balaclava has come to symbolize a new concept of protective clothing. The innovation in the materials used and the design itself makes this an example of how even an old object such as this can be made new. It consists firstly of a memory membrane fabric, which modifies its physical structure according to variations in temperature, copying the behaviour of the human skin. Secondly, it has two layers of bielastic fabric that render the structure active, allowing complete freedom of movement. This item is thus technologically very advanced and extremely comfortable to wear. K-Cap was selected by ADI design Index 2006. Technical objectives: 1. Improve breathability using the latest next-generation polymers. 2. Improve anatomical comfort through the synergy between design and new modeling solutions. 3. Reduce weight and maximize insulation. 4. Experiment with new methods of assembly in the manufacture the final product.





Styled with a retro 70's look, Grado Zero Espaces Liquid Jacket ("LQ" means liquid) is in fact ultra-modern and on the cutting edge of materials technology. LQ Jacket is a motorbike jacket design for Hyper-Sportive motorbikers. Using the ultimate materials technology together with an innovative manufacturing process, GZE present one of its latest creations. The jacket is made from ultra-thin leather that is combined with a unique material that has high thermal resistance. The process of bringing these two materials together has enabled the use of extraordinarily thin leather, whilst increasing its elasticity without affecting its durability. The leather has been treated with patented Liquid Shell treatment, making it waterproof and abrasion resistant, yet maintaining its softness and durability. The final element of this jacket's architecture is the most advanced among shock-absorbing fabrics, the "Smart absorber" by D3o labs. It is flexible and soft under normal conditions but becomes rigid in proportion on impact. An electroluminescent film integrated on the back of the jacket, is controlled by a power head inside the jacket. This element solve the visibility problem with a flexible and washable system.