**Air technology**

All Air helmets are designed in a highly innovative concept that allows for excellent breathability thanks to the insert in perforated polypropylene placed on the outer shell and to the joint design of the inner shell, which is also equipped with air inlets.

**Crash Absorb**

Special material (water-repellent elastic-visco nitrile rubber) with shape retention memory and excellent energy absorption that adapts perfectly to the shape of the body and ensures optimum fit.

**Aluminium honeycomb**

The central layer of the Wave back protector features an aluminium honeycomb structure with excellent shock absorption performance combined with the capacity for progressive and controlled deformation in order to ensure better protection at lower weight than other solutions.

**Multilayer Treatment**

The term “multilayer” means that a coating composed of layers of metals evaporated under vacuum with alternating high and low refraction indexes such as titanium oxide and magnesium fluoride is applied to the outer surface of the lens. These materials with different refraction indexes deviate the ray of light inside the layers continuously. A multi-layer coating works with the base lens (colored), introducing the quantity of light that reaches the eye while simultaneously offering the possibility to calibrate/balance colors and therefore improve vision under any weather conditions at all.
Polypropylene honeycomb structure

Polypropylene honeycomb structure with excellent impact absorption performance and progressive, controlled deformation capacity while also offering the elimination of body heat, efficacious ventilation, and low weight at the same time.

Polypropylene

Synthetic polymer used to produce the stiff shell in protectors. Distinguished by elevated resistance to abrasion and impact. Very light, and completely watertight.

Pro-Shape

Constant technological research and study for the ideal ergonomics have led to the development of a new generation of protectors certified to EN 1621.1/97 Standard capable of combining a high level of protection for compliance to the Standard with extreme flexibility and incomparable comfort. A sandwich composed of an outer layer in polymer derived from F1 racing with the highest shock absorption capacity and remarkable elasticity is bonded to an inner layer of polyethylene foam of the highest thickness to create an extremely flexible and deformable structure that also vaunts high shape retention for adaptation to the shapes of the body in order to ensure excellent ergonomics able to follow the body in even its smallest movements. The perforated structure also ensures the correct ventilation of the area for greater riding comfort.

Anti-shock structure

The pursuit of excellence in mechanical performance and comfort has led to the development of a rigid external shell with corrugation and perforation that distributes over a wider area the force generated by impact while ensuring light weight and breathability at the same time.
Shoulder, elbow and knees protectors 

Certificates E1621.1/97

With their special construction, composite protectors on the shoulders, elbows and knees homologated to EN 1621.1/97 Standard offer elevated protection. A rigid external plastic shell absorbs and distributes impact energy over the protector’s entire surface thanks to a patented reticulate structure that also offers lower thickness and weight. The inside of the protector in high-density polyethylene foam has elevated deformability and high shape memory retention that ensures greater comfort through adaptation to the wearer’s body, which is also served by perforation on the outside that increases breathability.

Ergonomics protectors

Active safety also means preventing accidents; the study of ergonomics underlies all Dainese® protectors developed to follow the lines of the human body in order to ensure the greatest freedom of movement and increase comfort for the greatest concentration of attention on skiing. One example is provided by the back protector developed with a sectional structure in order to permit both the total backward and forward bending of the trunk and lateral flexure thanks to the lumbar joint.

The thorax project

The particular structure of the human chest responds to impact by compressing itself, with potentially harmful consequences to both the bones and the internal organs; this required the development of a protector capable of effectively reducing both thoracic compression and VC Viscus criteria. Collaboration with important international partners on the Aprosys Project, the study of accident dynamics, complex simulation software and strict validation testing has finally led to the development of a new family of chest protectors based on the concept of impact force distribution in addition to absorption.

3D Bubble

Born and tested to the needs of the athletes, this particular threedimensional liner permits the creation of an air chamber between the protector and the athlete body, helping to evacuate the heat and humidity that are created in excess.