

WHAT IS A HOT AIR BALLOON? This is called the 'whisper burner' and it is used when flying over residential areas or livestock. The burner mixes liquid propane from pressurised gas tanks with oxygen and ignites it. The pilot pulls a small valve which fires the burner and aims the flame into the mouth of the balloon to heat the air inside. Baskets have reinforced steel frames and are clad in woven wicker which is traditional, but also sufficiently light, strong and durable. Envelopes are traditionally a familiar 'inverted tear drop' shape like ours, but some famous brands have 'special shape' hot air balloons for advertising purposes. Our balloons generally also have specially-fitted heat shields below the burners which stop it getting too toasty for you (but we still recommend a hat). A third kind is a pure gas balloon which doesn't use hot air and the altitude can only be controlled by dropping ballast or venting the gas. Hybrid and gas balloons have been used for many long-distance ballooning records as they require less fuel to stay airborne for extended periods of time. The biggest passenger balloon in the UK is our '400' Virgin balloon, which towers over 120ft tall once inflated. Steering a Hot Air Balloon Balloons cannot be steered in the normal sense of the word so they travel in the direction of the wind, which varies at different altitudes. Landing in a Hot Air Balloon Hot air balloons don't land in pre-decided locations like planes or helicopters do. They can't be steered in the same way (that's why it's always an adventure!). The next type is a hybrid balloon which uses hot air in the same way, but also has a compartment of helium or hydrogen gas in the top. A modern hot air balloon is made up of the following things: Balloons or Envelopes The balloon or 'envelope' is a fabric bag made of strong, light nylon with an opening at one end called the mouth. The envelope is laid out on the ground before a flight and partially inflated with cold air from high-powered fans before the air is heated with the burners to create lift required. Most balloons have a vent at the top and at the sides, so the pilot can let out air or rotate the balloon by pulling certain ropes as required. Hot Air Balloon Baskets The balloon basket which carries passengers is attached to the bottom of the envelope by extremely strong metal cables. By heating the air inside the balloon with the burner, it becomes lighter than the cooler air on the outside. Pilots have a great deal of control over the altitude of the balloon which they monitor with various instruments. They develop incredible anticipation skills over time and can often control a balloon's descent within centimeters. The pilot asks all passengers to crouch down in the seated landing position (knees bent, back facing in the direction of travel and holding ropes provided).