



High altitudes are not the most obvious place to find architecture, yet hikers and climbers around the world can enjoy more and more inventive refuges that complement the adventure of conquering peaks. Surrounded by dramatic landscapes, whether cabins with just a few beds or huts that can accommodate larger groups, they are not merely shelters but also spaces that offer an entirely new way of experiencing mountains. The main objective is of course to provide a safe hide-out to rest or overnight, but contemporary architects pay no less attention to creating a special relationship with the spectacular natural context. This can be achieved through a playful shape or installation – some cabins seem to be suspended in the air or literally stick out into the void, which puts the mountaineer guests in the middle of the landscape. Meditation on the views is often enabled by generous openings that act as a passage between the majestic outside and the shelter provided inside. Made of reinforced glass, these connections allow for observation and open to the horizon while keeping hikers protected from the elements.

There are several essential aspects in mountain cabin design. The first and most important is that of limiting the environmental impact of the architecture to a minimum. Even if the volumes are quite distinctive and durable, they should be easily reversible and fixed to the usually rugged terrain with the smallest possible intervention into the site. Given the speedily changing weather conditions at high altitudes, elements of cabins are usually prefabricated and brought to the sites by helicopter. It is extremely important that they can be assembled in a short time, so the structures have to be thoughtfully considered in every single detail. To be able to transport them by air, architects make very conscious material choices. The lightness is obviously only part of the task, while the other, and biggest, endeavour is to create structures that will stand up to the elements, usually including in the winter. Advanced technologies offer the possibility of equipping new cabins with self-sufficient solutions, which are not limited to solar panels. Many examples featured in this selection demonstrate inventive approaches that lead to uncompromising architecture built in the most challenging of locations. At the same time, comfort is never neglected. Many of the interiors feature a wood-panelled envelope with natural colour and texture, creating an atmosphere of nest-like cosiness for visiting mountaineers. This unpretentious aesthetic is obviously in line with the character of the remote locations but it also further highlights the striking contrast between the human scale and the vastness of nature.



NEW TRACUIT HUT

ZINAL, SWITZERLAND

The story of this cabin goes back to 1929. Extended and developed several times in the past century, it was finally replaced by a brand new hut designed by Savioz Fabrizzi Architectes to meet the standards of mountaineers and hikers of the 21st century. The latest technologies allow for comfort for the guests but also ensure that the building respects the striking natural environment of the Val d'Anniviers in the heart of the Valais Alps. The building offers comfortable dormitories (for 4, 12 and 24 guests) on the top floor as well as a refectory on the ground floor, filled with natural light and open to spectacular views over the Val de Zinal. The below-ground level houses lavatories and technical rooms. As it sits between a cliff and a glacier, both the placement and the shape were perfectly adjusted to fit the site's topography – the building literally becomes an extension of the rugged rocks. The most striking element of the volume is the south façade: envisioned to extend from the cliff, it acts as an extensive sun radiation collector through generous openings and solar panels, which profit from exposure to the sun. The other sides were planned with only a few and relatively small openings to reduce heat loss, which is also achieved through the compact shape and efficient wall insulation.

To optimise the construction, the architects limited the use of concrete, which can be found only in the foundations, while the structural frame of the building is made entirely of wood. All other elements like the wall and floor components were prefabricated and brought to the site by helicopter. To adapt the building to adverse weather conditions, the architects wrapped the volume in protective stainless steel cladding. Low-tech ventilation is used to cope with the heat emitted by the guests and prevent excess humidity during the months the hut is closed. The interiors are entirely lined with light wood and are furnished in a minimalist but comfortable manner. New Tracuit Hut is open from March to September, but a spare room remains open in the off-season with a wood-burning stove both to heat the room and to cook. A dormitory with room for 24 guests is also available. It is used as a perfect 'base camp' to attack several neighbouring peaks including the Bishorn and the Weisshorn.

ACCESSIBILITY

A path from the village of Zinal is said to be of average difficulty, but it is a relatively long route of nearly five hours and with a 1500-metre difference in altitude.

ARCHITECTURE

Savioz Fabrizzi
Architectes, 2013

LOCATION

Zinal, Switzerland

ALTITUDE

3256 m

NUMBER OF BEDS

120

INFO

www.tracuit.ch



Hikers who take a break from the trail or spend more time to admire the midnight sun or northern lights can enjoy this cave-like hide-out.









BIVACCO FELTRE & WALTER BODO

DOLOMITES, ITALY

Also called 'Red shacks', the Bivacco Feltre and Walter Bodo are located in the Val Canzoi, a valley known for its rocky foundation intertwined with spans of grassy wilderness, featuring beautiful landscapes. The two minimalist huts covered with pitched roofs are encircled by a picturesque amphitheatre of the peaks, offering breathtaking vistas. Climbers are advised to leave their cars in an extensive lot below Lago della Stua. The hike starts very gently, largely along a flat area around a scenic lake. Then the climb up the Val Canzoi starts (along CAI path 806), with some demanding parts requiring ropes and ladders. Even though the altitude difference is quite modest and the trail is technically not difficult, it requires climbers to be fit and should be not underestimated. On the way, climbers pass by many waterfalls, gullies and ravines. The last part of the route becomes steep, but once at the top, climbers can admire a 360-degree vista of the magnificent amphitheatre that creates a striking setting for the two small bivouacs. They are visible from afar thanks to their red hue, which stands out against the rocky landscape. Their location marks the junction where the most significant paths meet.

As much as the route is a fantastic opportunity to see the wild side of the Feltre Dolomites, hikers should also carefully consider the atmospheric conditions. Rain, damp leaves on the rocky ledges and slopes in the autumn, and ice in the winter all require special attention, not only while climbing up but particularly during the descent. Summer thus seems to be the best season to visit, especially for less experienced hikers. Even with excellent weather, to do a loop in a day, mostly due to the length of the trail, climbers must be well trained and equipped. The shacks are quite simple inside. Both are equipped with bunk beds; the smaller volume can host five and the larger up to twelve hikers. The second also has a larger space with tables and benches to prepare food and eat. There is a water spring at the bivouacs.

ACCESSIBILITY

The route is technically not difficult but climbers should not underestimate its substantial length or some of the more challenging sections, like ascents in the upper, rocky part of the trail. The climb starts at a large parking area below Lago della Stua.

LOCATION

Val Canzoi,
Cesiomaggiore, Dolomites,
Italy (the province of
Belluno)

ALTITUDE

1930 m

NUMBER OF BEDS

5 and 12





MOUNTAIN & CLOUD CABINS

YICHANG, HUBEI PROVINCE, CHINA

An interesting collection of 18 cabins with a cafe house and a swimming pool sit on wooded slopes, with a touristy mountain village of Hubei province at the foot. Placed cosily among the lavish greenery, the cabins are certainly not closed off from the views. Most striking are their shapes, often embraced by clouds, and the mirroring effect of the façades. Stacked on the hill, the huts range from 35 to 65 square metres and are available in several different types. The Bridge type takes the form of a 14-metre-long bridge that is suspended above a tea field and features a courtyard terrace. The vertical (14-metre-high) Loft type has two floors and is reminiscent of a multifaceted gem. Cabins of types T and Y have a so-called viewfinder layout, with their bathroom, bedroom and living area facing the panoramic mountain view of Deng Village, including spectacular sunsets.

Made of timber, the cabins are prefabricated using the mature HBE glue-laminated timber panels system, and their main structures can be assembled in one day. Not only does this provide structural strength but it also ensures a low deformation rate of the wood. The cabins use “a floor heating system and a fresh air system with an air exchange rate of 100 cubic metres per hour,” explain the architects. “Energy consumption and somatosensory design make the cabin a container for breathing in nature,” they add. The interior design, in the spirit of Nordic

minimalism, features natural wood textures and was planned by Shanghai EERI studio and Ximan Design. Mu Wei, the leading architect in the project, used his experience of living in Norway in the design process. As the mountainous setting reminded him of the Norwegian aurora, he decided to make the architecture disappear into the natural surroundings. The volumes indeed seem to fuse smoothly with the landscape thanks to the mirrored metal plates as well as wooden grilles on the outer shells. The visual effects change depending on the time of the day and the sun’s path. “They are the viewfinders of nature and breathe freely in the forest,” reads the architects’ statement. One of the goals of the architects was to create structures that would seem to be floating in clouds to enhance the feeling of being immersed into nature. One of the solutions to achieve this was placing the cabins on point foundations (with a system of columns in an inverted umbrella shape), which also demonstrates the architects’ respect for the natural environment. A fantastic base for hikes in the surrounding tea fields and mountains, the cabins can be reached by a minibus from the village below.

ACCESSIBILITY

Easy, best reached by an urban minibus from the Yichang city centre, which is around one hour away.

ARCHITECTURE

Wiki World + Advanced Architecture Lab(AaL), 2019–2020

LOCATION

Yichang, Hubei province, China

ALTITUDE

1000 m

NUMBER OF BEDS

36