



*In the foreground: difficult to restore material. In the background: successful restoration with ready-made alpine grass (Saalbach, SchattbergXPress upper station)*



*Production area of ready-made alpine grass*

# Alpine sod rolls – a new development in high-zone restoration

## Immediate full erosion protection following building operations

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### The problem

In high zones above the tree line, only successful and permanent restoration following building operations is currently possible with the use of site-specific, alpine-seed mixtures. This also requires the use of high-quality restoration techniques. Through extreme weather conditions at high zones, the vegetation grows very slowly and requires at least two growth periods before sufficient erosion protection is assured.

Intervention in small areas can be repeatedly necessary into the autumn. The possibility of rapid, site-specific and permanent restoration with immediate, full erosion protection would be the uppermost priority. But this is only achieved with the use of vegetation components containing climatically adapted grasses and herbs. Such material is either utterly unavailable or available in only small amounts from natural sites.

### The solution

This problem has been addressed within the sphere of an innovative, strategic partnership for production, marketing and research (HBLFA Raumberg – Gumpenstein, Dept. for Alpine Vegetation Technique). The solution is

found in the production of alpine grasses, which under extreme alpine-site conditions can survive at altitudes of up to 2,500 metres. Suitable ecological species were combined to make a site-specific mixture and checked for its suitability for the production of alpine sod rolls. These tests were carried out to the greatest satisfaction of the participating partners, and extensive production was started. Trials were made at several sites, which were

scientifically observed over several years by the experts at the HBLFA Raumberg-Gumpenstein. This served to make an optimum product available to all interested parties. Alpine sod rolls, or a seed-roll combination, can be used on areas in which one requires rapid, full erosion protection and must be quickly restored.



*Idalpe Ischgl, ready-made alpine grass after laying*

