

ACTIVE AND PASSIVE AVALANCHE PROTECTION STRUCTURES
DEVELOPMENT OF PROTECTION SYSTEMS IN 40 YEARS OF SNOWS AND AVALANCHES

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ABSTRACT: Starting from an analysis of 40 years of history of avalanche protection works conceived and produced by Mair Wilfried GmbH, with the present work we want to present the development undergone in active protection works in the starting zone as well as passive protection works in the creeping area in order to be able to adapt to regulatory changes, climatic changes and technical developments related to the industrial production of protection systems and to the new construction site technologies for their setting up.

KEYWORDS: active defense measure, snow supporting structures

Active and passive avalanche works have become an integral part in danger reduction and risk mitigation interventions in areas subject to avalanche events.



Fig. 1 – Example of snow supporting structure in starting zone made by Mair Wilfried GmbH

Residential areas, tourist areas and communication routes in the Alpine environment have always been subject to avalanche problems, but in recent years "climate changes" have increased extreme weather events, alternating seasons with few snowfalls to seasons with a considerable amount of snowfalls.

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Fig. 2 – Example of snowdrift control structures made by Mair Wilfried GmbH

In our poster, starting from an analysis of 40 years of history of avalanche protection works conceived and produced by Mair Wilfried GmbH, we want to present the development undergone in active protection works in the starting zone as well as passive protection works in the creeping area in order to be able to adapt to regulatory changes, climatic changes and technical developments related to the industrial production of protection systems and to the new construction site technologies for their setting up.