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Building Construction is a compulsory subject for all students at the Faculty of Architecture at Slovak University of Technology in Bratislava. Building Construction is taught from the first year of study and is divided into five parts during the five terms. *Building Construction 1* and *Building Construction 2* are taught in the first year, *Building Construction 3* and *Building Construction 4* are taught in the second year. *Building Construction 5* is taught in the summer term of the third year of study.

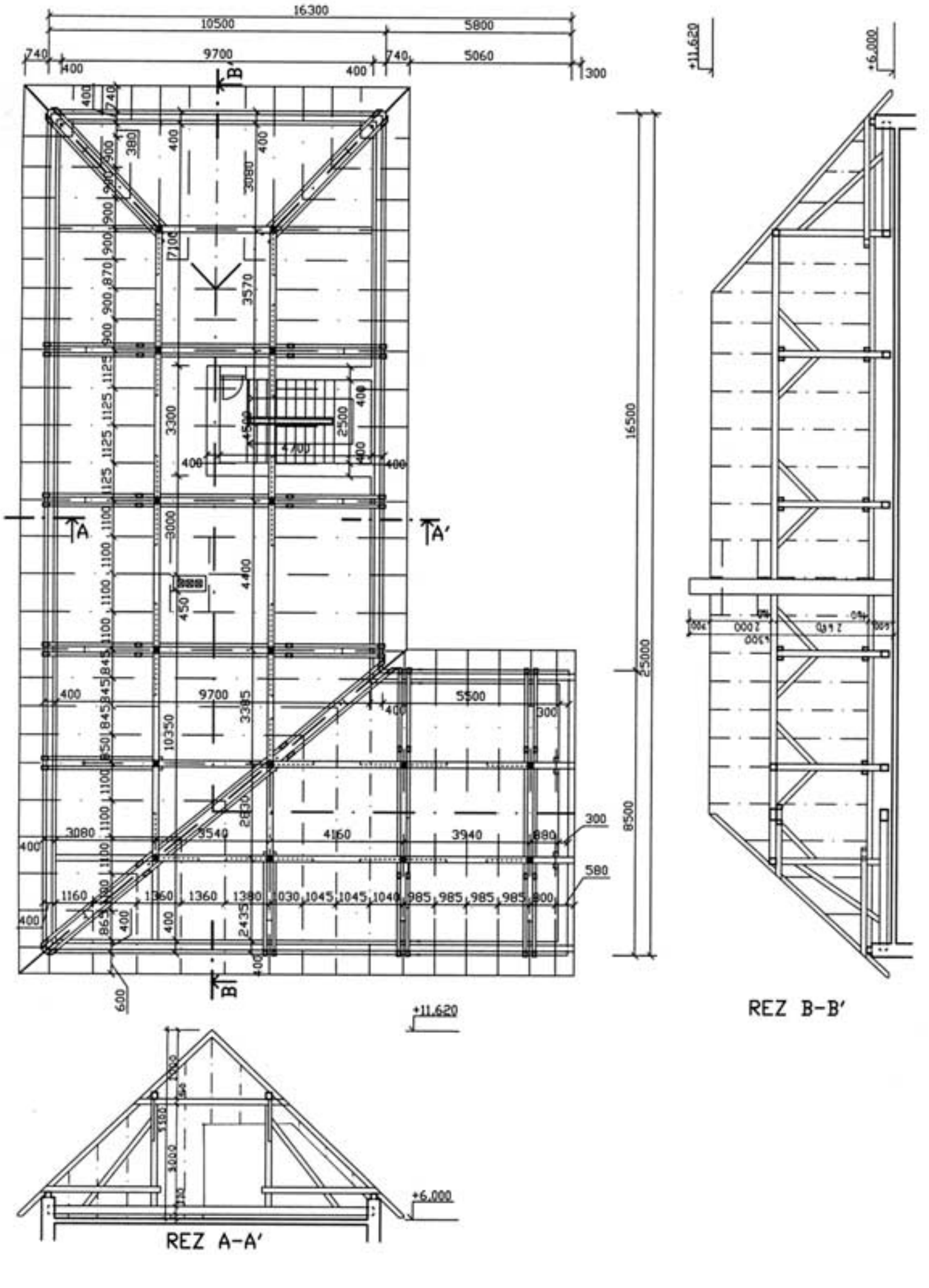
## Teaching Methods

The students are informed about certain types of constructions at the lectures, before they get tasks to solve and design some types of constructions on the seminars (explain). The lecturer explains the principles of the construction and the rules of drawing, quotes a list of recommended literature and connects with the Slovak Technical Standards. The seminars are always led by two assistants; each one has a group of about 10 students. At the seminar, students get a precise interpretation of the problem they have to solve in their drawings (transfer). At the seminars students consult their work with assistants (memorise and act). The assistant repeats the explanation of the construction by correcting the students' drawings. When the drawings are complete and the construction is designed correctly, the assistant signs the drawings. The students elaborate usually 6 themes in one term, each on one or two A3 drawing papers. The first A3 drawing usually contains the design of the construction in the scale 1:100 or 1:50 and the second A3 drawing contains characteristic details of the structure solved at 1:10, 1:20 or 1:5 scales. Students in the first year of study must do their drawings manually. In the years of study that follow, they may do their drawings by computer.

## The Truss Constructions and the design of the Loft Space

The posters contain a student's output, which is an unsupported student work in the second year of the study *(Building Construction 3)*. The shape of the loft plan and the slope of the roof are specified at the seminar and students have to design the loft space structure with no tutorial support. The student's task is to design the construction of a timber truss in a tie beam system. The result of the student work is a horizontal projection of the truss, vertical cross section and vertical longitudinal section at A3 format. All drawings are at 1:100 and must be drawn by the rules of the Slovak Technical Standards. Dimensions of the truss elements are designed approximately without exact calculations.

The topic presented is the design of an apartment into the truss construction. The student design of the attic apartment disposition is documented by horizontal projection, vertical cross section and vertical longitudinal section in the scale 1:100. The student also has to design the position of roof windows, the composition of the roof envelope and the composition of the new floor in the apartment on a separate A3 format.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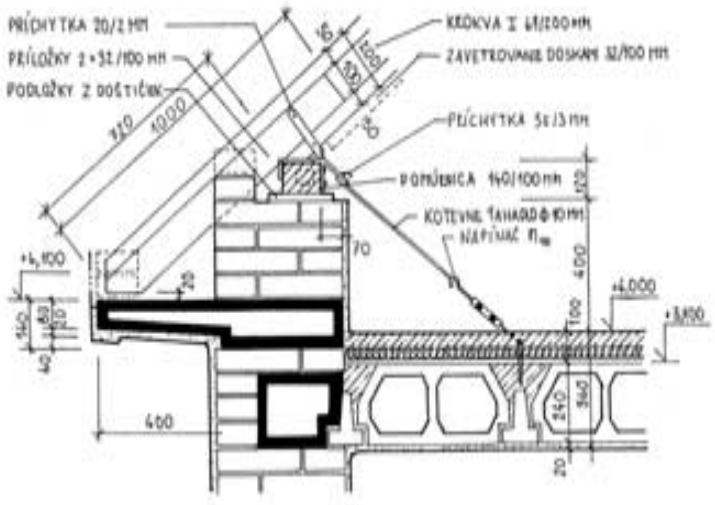
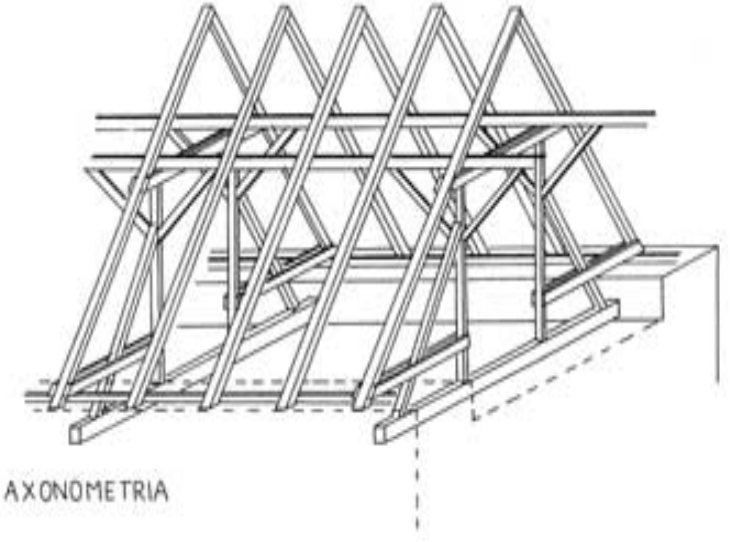
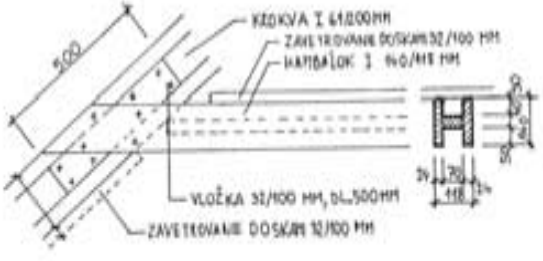


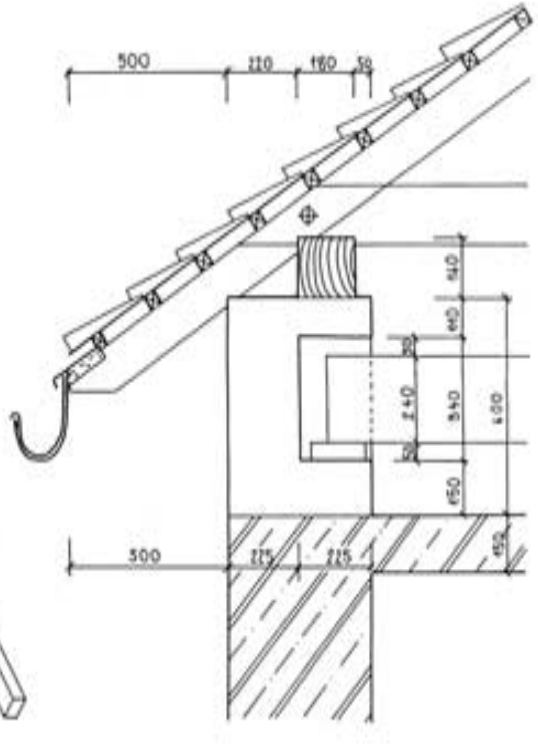



AXONOMETRIA

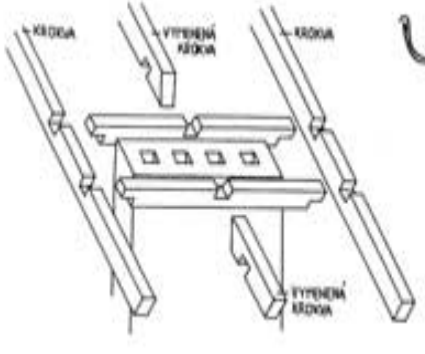
SPOJENIE HAMBÁLKU S KROKVOU



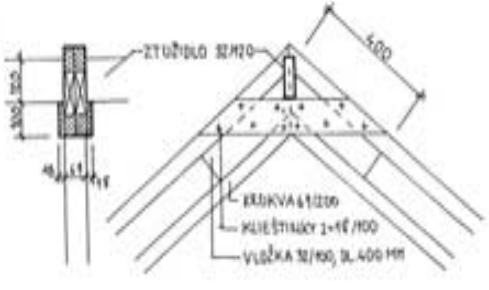

REZ RÍMSOU M 1:10

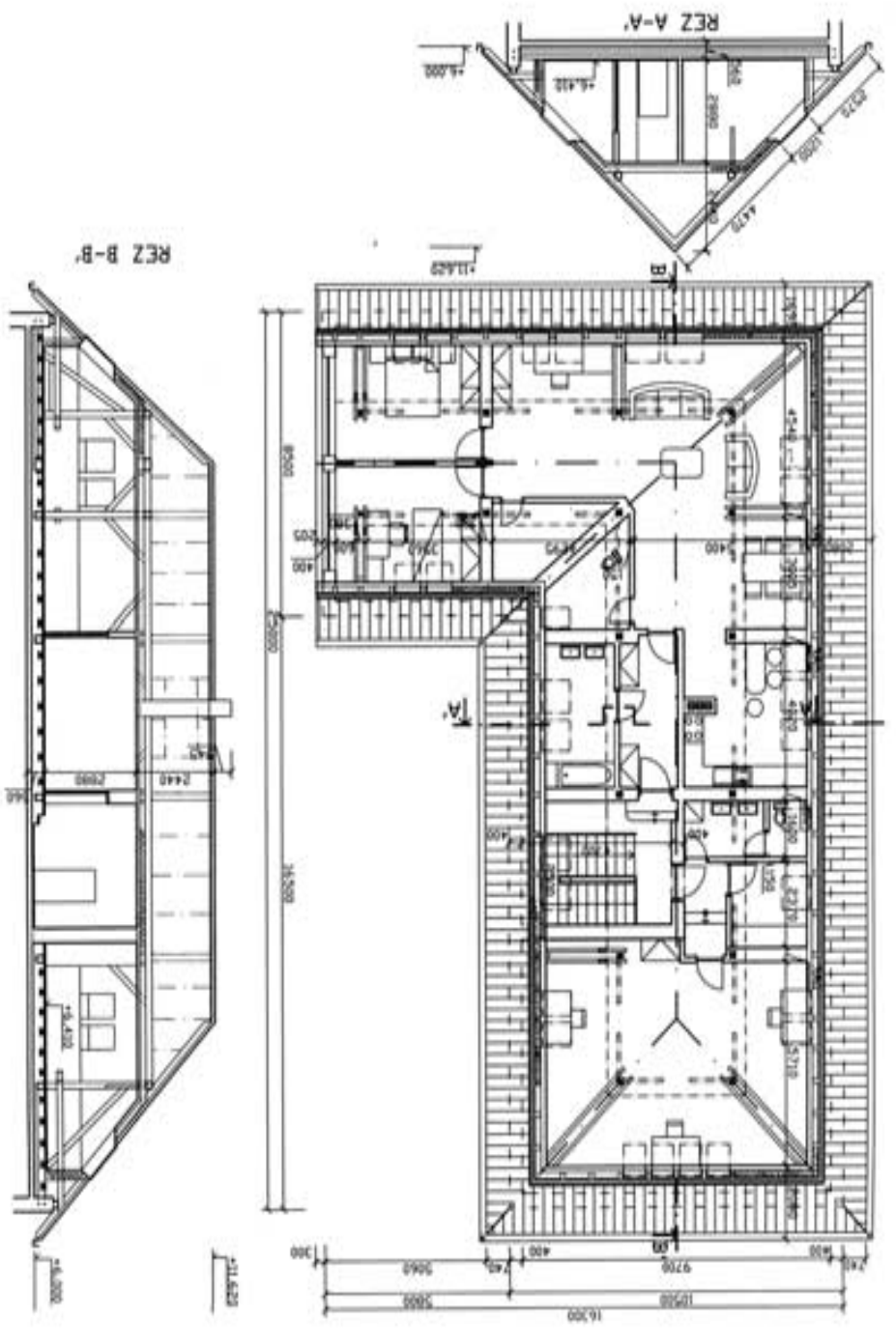


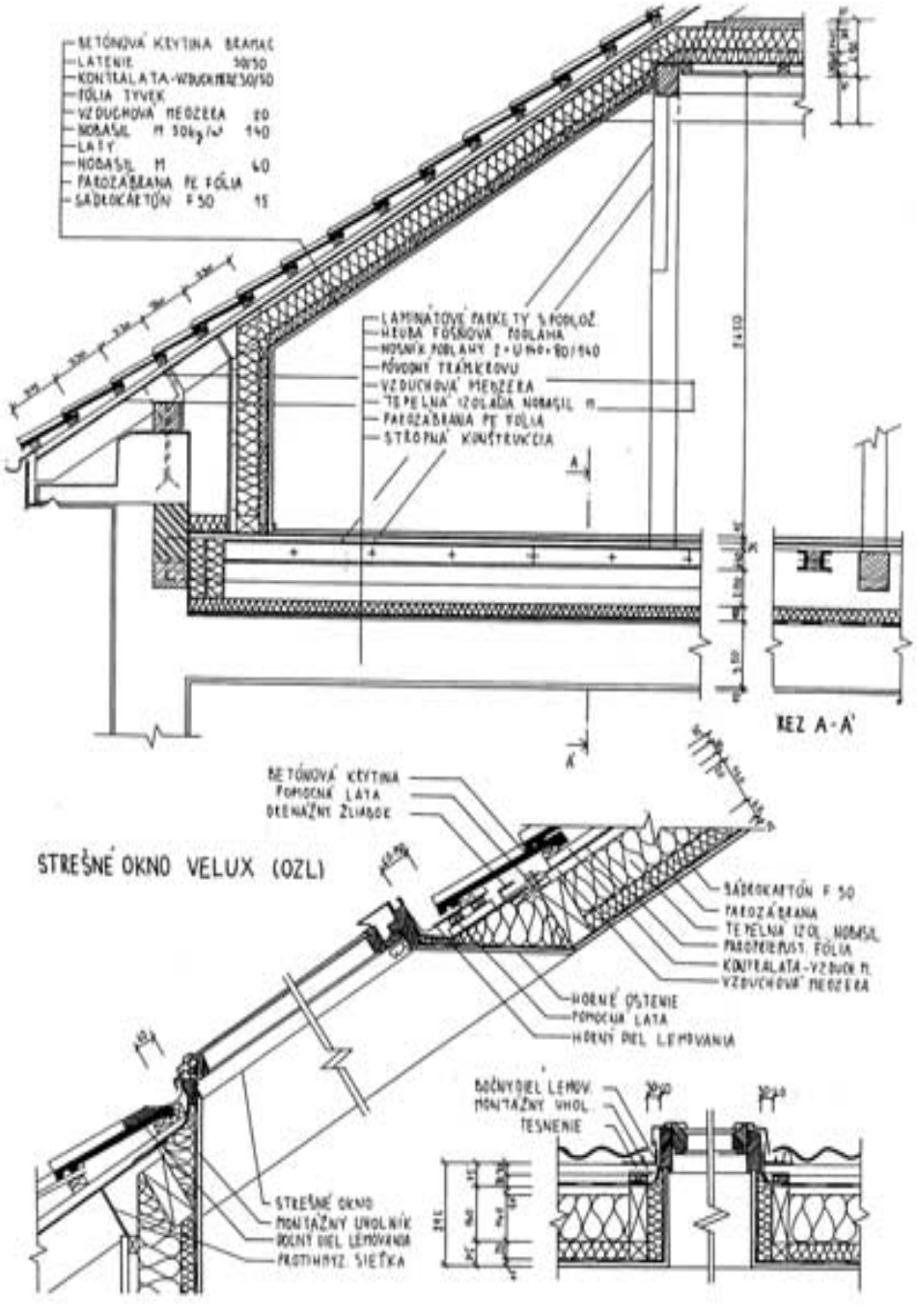

ÚPRAVA PRI KOMÍNE




ÚPRAVA KROVU VO VRCHOLE




REZ A-A'
REZ B-B'


BETÓNOVÁ KRYTINA BRAMAC
LATENIE 50/50
KONTRALATA-VZDUCHOVÁ 50/50
FÓLIA TYVEK
VZDUCHOVÁ MEDZERA 20
NOBASIL M 50kg/m² 140
LATY
NOBASIL M 40
PAROZÁBRANA PE FÓLIA
SÁDROKARTÓN F 50 15
LAMINÁTOVÉ PARKETY S PODLOŽ.
MEDZA FOSNOVÁ PODLAHA
NOSNÍK PODLAHY I-U140+80/140
PÔVODNÝ TRÁMOVÝ
VZDUCHOVÁ MEDZERA
TEPELNÁ IZOLÁCIA NOBASIL M
PAROZÁBRANA PE FÓLIA
STROPNÁ KONŠTRUKCIA
REZ A-A'
BETÓNOVÁ KRYTINA
POMOCNÁ LATA
OKENNÝ ŽLIABOK
STREŠNÉ OKNO VELUX (OZL)
SÁDROKARTÓN F 50
PAROZÁBRANA
TEPELNÁ IZOL. NOBASIL
PROTIDIFÚZNA FÓLIA
KONTRALATA-VZDUCH M
VZDUCHOVÁ MEDZERA
HORNÉ OSTENIE
POMOCNÁ LATA
HORNÝ DIEL LEMOVANIA
BOČNÝ DIEL LEMOV.
MONTÁŽNY UHOL
TESNENIE
STREŠNÉ OKNO
MONTÁŽNY UHOLNÍK
BOČNÝ DIEL LEMOVANIA
PROTIHRYZ. SIEŤKA