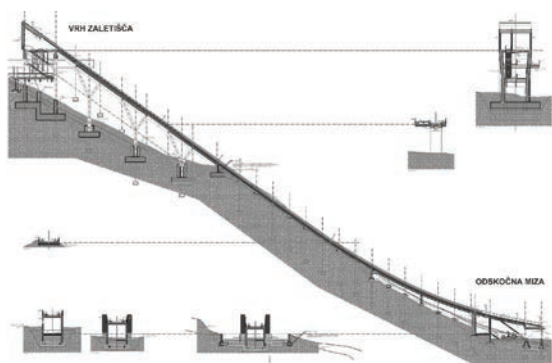


dva nova RTV stolpa (mali in veliki), trenerska tribuna, vetrna zaščita, ogrevalni objekt na vrhu zaletišča, konstrukcija za TV zaslon ter rekonstrukcija stavbe Kavka in sanacija obstoječega sodniškega stolpa. Prispevek prikazuje lokacije načrtovanih novih objektov in kratke opise konstrukcijsko najbolj zanimivih detajlov.

LOPATIČ, Jože (ur.), MARKELJ, Viktor (ur.), SAJE, Franc (ur.). Zbornik 35. zborovanja gradbenih konstruktorjev Slovenije, Ljubljana, Fakulteta za gradbeništvo in geodezijo, 22. november, 2013. Ljubljana: Slovensko društvo gradbenih konstruktorjev, 2013, str. 79-88, ilustr. [COBISS.SI-ID 2947460]



Zaletišče HS225 – vzdolžni in prečni prerezi.

Larisa Brojan

CREATIVITY, ALTERNATIVE WAYS OF DESIGNING AND CONSTRUCTING: STRAW BALE WALL DESIGN ALTERNATIVES

ArchTheo 13-THEORY OF ARCHITECTURE CONFERENCE
Istanbul, Turčija, 4. - 5.12.2013

Mednarodna konferenca je organizirana v okviru združenja DAKAM (Eastern Mediterranean Academic Research Center) in Mimar Sinan Fine Arts University. Na konferenci je bilo veliko predstavitev s področja arhitekture, teorije načrtovanja in snovanja prostorskega oblikovanja. Poleg javnih predstavitev prispevkov so bile organizirane tudi razprave. S kolegi smo sodelovali pri tematiki socialne vloge arhitekture in vplivom arhitekture na bivanjske navade ljudi. Vsi prispevki so objavljeni v zborniku z naslovom 'Sources of creativity, autonomy & function', kamor je vključena tudi spodaj predstavljena študija. Koordinator konference je bil Efe Duyan.

This paper focuses on the straw bale wall functionality. It is evident from analyses of straw bale houses, how diverse the design of straw bale building can be. Straw bale building has many advantages especially in sense of ecological aspect which is many times also the main reason to build with straw bales.

Floor plan design doesn't need any special treatment; there are many possibilities especially when straw bales are used as an infill which is in most projects. But when it comes to building, at first special attention needs to be devoted to bales stacking, bales alignment and finally, the crucial segment of plastering. Since most of builders apply the plaster by hand, extreme precision is needed especially when flat surface is needed.

When bales are stacked, alignment is done by pushing and hammering the bales into right position. Next step is straw trimming which makes the wall smooth. Well aligned wall insures the static safety but also many builders decide to increase the safety with mesh which also makes the plaster application easier. Plaster can be applied in case of straw building by hand or by machine. Manual, hand application is most common way though. Functionality is supplemented with appropriate furniture. In case of straw bale walls special attention needs to be devoted to pre-determination of hanging furniture like cupboards or just wall decoration as pictures or other accessories. Since the plaster itself is not thick enough to hold all the weight and straw itself is to 'soft' to hold added item additional substructure is needed. Final image of straw bale plastered wall depends on application precision. Roughly, surface finish can be divided into three groups:

1. Organically shaped surface
2. Semi leveled surface
3. Completely leveled surface

Based on the diversity of design that straw bale building offers many requests can be realized. Straw bale building itself does not represent any functional disadvantages if details are carefully planned and delivered.

BROJAN, Larisa. Straw bale wall design alternatives. V: ÇATAK, Neslihan (ur.), DUYAN, Efe (ur.). ARCHTHEO '13: conference proceedings, December 4-6 2013, Mimar Sinan Fine Arts University, [Istanbul], Creativity, autonomy, function in architecture. Istanbul: Mimar Sinan Güzel Sanatlar Üniversitesi Yayınları, cop. 2013, str. 43-50, ilustr. [COBISS.SI-ID 2956164].

Larisa Brojan

ADVANTAGES AND DISADVANTAGES OF STRAW BALE AS BUILDING MATERIAL

The Constructed Environment

Lizbona, Portugalska, 4. – 5.10.2013

Mednarodna konferenca je organizirana v okviru združenja Constructed Environment. Tematika konference je bila odnos človeka do naravnega in grajenega okolja. Udeleženci konference so bili s celega sveta (ZDA, Evropa, Azija, Južna Amerika itn.). Poleg javnih predstavitev prispevkov so bile organizirane tudi razprave na vodilno temo.

Paper is focused on general properties of straw bale as a building material which is proven by numerous buildings to be an appropriate material choice in several aspects. The research is divided on to two parts in which advantages and disadvantages of such a building are discussed.

The building techniques are relatively easy to learn and performance of straw bale structures has a high value in terms of several aspects as long as the general guidance is considered. The primary benefit of straw bale as building material is its low embodied energy. Therefor the impact on the environment is low which is important since the awareness of building negative impacts on the environment. Above all, the isolation properties are on a high level as thermal as well as sound isolation.