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the Faculty of Architecture, we use the Mental Rotation Test which is one of generally recognized tests for checking spatial ability. The conditions of the test have stayed the same throughout the years (time, exam papers etc.) which enables us to objectively compare different generations.

Considering the structure of the test, its primary goal is to check the capability of mental rotation, which is an integral part of spatial ability. More than 2000 (n=2094) students have performed the test up to now. Besides basic data about generations, for the past three years we have also been comparing the differences in terms of lefthandedness and right-handedness. The results show no statistically provable differences. But it is true that the tested population of left-handed students is, despite the above, relatively small (n=66)even though it proportionately does not deviate from the share of the entire population. An interesting phenomenon is also the poorer results of each third generation, which has been appearing throughout the years. This difference has been statistically proven for 2009 and 2012, while the difference for 2003 and 2006 has not yet been statistically proven.

Processing of results with the help of statistical software makes it possible to check various hypotheses from the area of spatial ability and provides interesting conclusions, presented in the article. A large digital database also makes it possible to evaluate the test and the students' approach towards solving it. This opens up new possibilities in the area of comprehensively treating spatial ability and, at the same time poses new questions and dilemmas. One such dilemma is the existing scoring system.

Results obtained in the joint project of the Faculty of Architecture of the University for Technology and Economics in Budapest, Ybl Miklos University for Architecture and Civil Engineering of the Szent Istvan University of Budapest and the Faculty of Architecture of the University of Ljubljana namely show that the existing scoring system is not the most appropriate since it does not provide the envisaged normal distribution of the sample. Based on obtained data, a new scoring system has been proposed which enables a normal sample distribution.

KUŠAR, Domen, VOLGEMUT Mateja: Thirteen Years of MRT -Results, Options and Dilemmas. V: SCHROCKER, Hans Peter, HUSTY Manfred. The 16th International Conference on Geometry and Graphics, Innsbruck, August 4-8, 2014. Program and Abstracts. Innsbruck, University of Innsbruck, 2014, str 269.

Martina Zbašnik-Senegačnik **Boris Azinović** SEISMIC SAFETY OF PASSIVE HOUSES FOUNDED ON THERMAL INSULATION 17th International Passive House Conference 2013 **Passive House Institute** Frankfurt (Main), Nemčija, 19. - 20.4.2013 http://passiv.de/former_conferences/siebzehnte/Englisch/index_eng.html

The inserting of soft thermal insulation (TI) layers under the foundation of a building increases its period of vibration, what could result (in the case of very stiff structures) in larger earthquake forces acting on the building. The presented paper deals with the seismic response of passive buildings founded on TI layer made of extruded polystyrene (XPS). In order to obtain the material characteristics of XPS thermal insulation boards, the axial compressive and shear tests were carried out. The obtained data were then used in a numerical parametric study. The research has shown that in general the seismic safety of passive houses with the height up to 2 or 3 stories is not of critical concern. For higher (or slenderer) buildings, however, the negative effects of TI layer under foundation slab are more important and can lead to overstress in the TI layer itself, or to the increase of stresses and top displacement of the building.

KOREN, David, KILAR, Vojko, ZBAŠNIK-SENEGAČNIK, Martina. Seismic safety of passive houses founded on thermal insulation. V: 17th International Passive House Conference 2013, 19-20 April, Frankfurt am Main. FEIST, Wolfgang (ur.). Conference proceedings. Darmstadt: Passive House Institute, 2013, str. 573-574, ilustr. [COBISS.SI-ID 2842244]

Boris Azinović SEISMIC SAFETY OF LOW-ENERGY BUILDINGS Erasmus izmenjava za pedagoge in zaposlene na FA Escola Tècnica Superior d'Arquitectura de Barcelona Barcelona, Spain, 5. - 10.10.2013

Predavanje je bilo osredotočeno na predstavitev koncepta energijsko učinkovitih stavb, med katere štejemo tudi pasivne hiše. V obravnavani predstavitvi je bil največji poudarek posvečen zahtevi o sklenjenemu toplotnoizolacijskemu ovoju, ki je ena izmed zahtev takšnih stavb. V osrednjem delu predavanja pa je bil predstavljen vidik njihove potresne varnosti. Izpostavljena je bila problematika temeljenja na toplotni izolaciji, ki je eden izmed detajlov z največjim vplivom na potresni odziv. Podani so bili kratki zaključki in priporočila za projektiranje energijsko zelo učinkovitih stavb na potresno ogroženih območjih.

AZINOVIĆ, Boris. Seismic safety of low-energy buildings: [predavanje na Escola Tècnica Superior d'Arquitectura de Barcelona (ETSAB), Španija, 8. 11. 2013]. 2013. [COBISS.SI-ID 2933636]

Vojko Kilar **Boris Azinović** GRADBENA KONSTRUKCIJA NOVE LETALNICE **HS225 V PLANICI**

35. zborovanje gradbenih konstruktorjev Slovenije Slovensko društvo gradbenih konstruktorjev UL, Fakulteta za gradbeništvo in geodezijo Ljubljana, Slovenija, 22.11.2013

V prispevku je opisana načrtovana gradnja nove letalnice bratov Gorišek v okviru novega Nordijskega centra v Planici, ki vključuje odstranitev obstoječih objektov, poglobitev in razširitev obstoječega doskočišča in izgradnjo novega zaletišča, ki poteka kot mostna konstrukcija na treh parih Y stebrov visoko nad obstoječim terenom. V obravnavani 1D fazi se gradita še