School of tomorrow - Gaziantep

ISOVER MULTI-COMFORT HOUSE STUDENTS CONTEST

10th International Stage – Bucharest 2014

İZOCAM

BÜYÜKŞEHİR GAZİANTEP

GAZİANTEP BÜYÜKŞEHİR BELEDİYESİ

ISOVER SAINT-GOBAIN

Bucharest, Romania May 28-31 2014

Willkommen!
Сардэчна запрашаем!
Добре дошли!
Dobro došli!
Vítame Vás!
Tere tulemast!
Tervetuloa!
Кош келдіңіздер!
Добро пожаловать!
Ласкаво просимо!
Hoşgeldiniz!
Laipni lūgti!
Sveiki atvykę!
Bine ati venit!
Vítáme Vás!
Dobrodošli!
Bienvenido!
Bienvenue!
Welkom!
Welcome!
Witamy!

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Introduction

Participating countries to final stage of ISOVER Multi-Comfort House Students Contest Edition 2014. First time participating countries: Belgium, France and Kyrgyzstan.

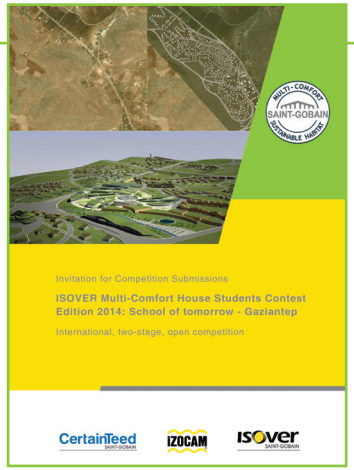
HISTORY

During 3 days, between 28th and 31st May, 58 student teams from 22 countries competed in the 10th International Stage of the ISOVER Multi-Comfort House Students Contest in Bucharest, Romania. Participants were coming from: Austria, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Estonia, Finland, France, Kazakhstan, Kirghizstan, Latvia, Lithuania, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Turkey, and Ukraine

The event, dedicated to architecture students, aims at better disseminating the ideas of energy efficiency as well as the different comfort dimension among these future opinion leaders. It is based on the Saint-Gobain Multi-Comfort Concept and it was originally held at international level in Bulgaria in 2005.

The competition is structured in 2 stages: national stages followed by an international one were the best projects from each country compete.

For 2014 edition, 1500 students from more than 100 universities registered for the participation to the national stages.



ASSIGNMENT

The participants to ISOVER Multi-Comfort House Students Contest 2014 Edition were requested to design a school dedicated to children between the ages of 6 to 10, that combined classical school elements with modern learning facilities taking in to account the existing realities for the new ECO Project developed by the Municipality of Gaziantep, Turkey.

Saint-Gobain ISOVER and IZOCAM would like to thank to the City Administration Office of GAZIANTEP for all support during the drafting of this task.

FINAL STAGE

The contest started with the opening of poster exhibition giving the participants, the jury members and the representative of Gaziantep Metropolitan Municipality a first change to see all the proposed projects.

Mr. Latif Karadağ
Vice Mayor Gaziantep Metropolitan Municipality

The members of the jury were:

- Mrs. Seda Müftüoğlu Güleç – Architect, Green Building Expert, Gaziantep Metropolitan Municipality, Turkey
- Mrs. Zaure Aitayeva – Architect, Senior Manager - Department of Architecture, National Company Astana EXPO-2017, Kazakhstan
- Mr. Roland Matzig – Architect, Certified PH designer, RMP architects, Germany
- Mr. Slawomir Szpunar – Architect, International Marketing Director, Saint-Gobain
- Mr. Leif Andersson – Engineer, International Manager Innovation & Solutions, Saint-Gobain Insulation

Participants in the ISOVER Multi-Comfort House Students Contest 2014 International Stage

The International Winners 2014

During the second day each participating team had the opportunity to present their design and ideas to the jury as well as to the other participants in the hall and to friends and colleagues watching them online as the event was webcast live.

THE INTERNATIONAL WINNERS 2014

- **1ST PRIZE**: HAGAI BEN NAIM, WENXIN NAN, MARCIA KUBRUSLY TOSIN CLOQUETTE from National Superior School of Architecture, Paris Malaquais, France
- **2ND PRIZE**: ZUZANA ZELINGEROVA, MAREK NOVAK from Czech Technical University, Prague, Czech Republic
- **3RD PRIZE**: RADU ENEA, CLAUDIU UNGUREANU from Gheorghe Asachi Technical University, Iasi, Romania

Special prizes:

- BOGUSH VICTORIA, BELAZORAVA VERANIKA from Belarusian National Technical University, Minsk, Belarus
- ANNA HOTS, ULYANA PRYTYKA, LILI RUDENKO from Lviv - National Polytechnic University, Lviv, Ukraine
- ANTON FEDYANIN from Kazakh National Technical University, Almaty, Kazakhstan
- HEBA NAZER, ABRIL BALBUENA, UMER MAHMOOD from University of Nottingham, United Kingdom

Students Hagai Ben Naim, Wenxin Nan, Marcia Kubrusly Tosin Cloquette from National Superior School of Architecture, Paris Malaquais, France - winners of the first Prize at the 10th International Edition of ISOVER Multi-Comfort House Students Contest

The Professors

KARIN STIELDORF — Austria

Graduated architecture at the Innsbruck and Vienna Universities of Technology. She has practical experience in architecture offices in Innsbruck and Vienna and wrote her thesis at the Department of Building Construction and Design (Solar and Low Energy Architecture in Austria, 1997, with Univ. Prof. DI Dr. E. Panzhauser). Since 1992 she has been an Assistant teacher at the Department for Construction and Design, with a main working focus on building physics, human ecology and sustainable building. Since 2001 she has been an Assistant Professor at the department for Architecture and Design. Since 2002 she has been teaching at the Sustainable Building and Design Group at the Department for Architecture and Design.

PROFESSOR ARCH. ANNA LITVINOVA — Belarus

Architect, designer and a leading expert in the field of architectural design and coloring, design of color and their study in architectural school. Head of the department "Design of architectural environment" at Belarusian National Technical University since 2002, Associate Professor. In 1980, graduated from the Dnepropetrovsk Civil Engineering Institute in speciality "Architecture," in 1992 - postgraduate studies (by correspondence) at the Belarusian State Polytechnic Academy. Since 1986 - Member of the USSR Union of Architects, the Belarusian Union of Architects. Full member of the AAU MOOSAO of the Republic of Belarus. Winner of the Special Prize of the President of the Republic of Belarus in the field of criticism and art history in 2003, Vth BSA National Festival of Architecture, International Science Project Competition and Exhibition mode on-line "Artistic Design Culture In the Era of Information Technologies", Russia, 2008. For creative achievements in the training of future architects awarded diplomas of the Belarusian Union of Architects and the Belarusian Union of Designers. The head of 30 graduation diploma projects (starting with 1998) marked by I and II degrees certificates in international and national contest of the best graduation projects (2 Grand Prix of the Republican contests.) Co-author of a textbook, "Architectural coloring"(two books), author over 50 scientific publications in domestic and foreign editions. The participant of republican and international conferences, symposiums, congresses and exhibitions. Jury member of international and national competitions in the field of architecture and design Author and coauthor of over 50 completed and implemented significant works of architecture and design (Belarus, Russia, Ukraine, Crimea, Armenia, Lithuania).

ARCH. TATIANA PANCHENKO — Belarus

An architect, the head of architectural project and drawing department of the Brest State Technical University since 2010. In 1997 graduated from the Belarusian National Technical University, speciality "Architecture". In 2005, the post-graduate course (correspondence deportment) of the Belarusian National Technical University. Starting with 1999 the manager of more than 20 diploma projects, awarded with certificates of I and II degrees al the republic competitions of the best diploma projects. The author of more than 40 scientific publications in native and foreign editions. The member of republic and international conferences, symposiums, congresses and exhibitions. The jury member of international, republic competitions in the field of architecture and design.

ARCH. ARMEN SARDAROV

Belarus

Doctor of architecture, professor, Dean of the Architect department of Belarusian National Technical University. The Belarusian scientist, architect and teacher. He graduated from the Architectural Faculty of the Belarusian Polytechnic Institute. In 1974 he successfully defended his thesis, for the first time in the Soviet Union on the theme "Road architecture". From 1973 to 2005 he worked in the national road organizations in Belarus, starting as a senior engineer at the Institute "Belgiprodor" to the Deputy Director General - the chief architect of RUP "Beldortsentr." Since 2005 - Dean, Faculty of Architecture BNTU. Doctor of Architecture. Researcher in the field of transport architecture and history of the roads development in Belarus. Author of 10 books and over 200 other scientific papers. Works of A. Sardarov were published in the United States, Russia, China and Poland. From 1992 to 1998 - Member of the Transportation Research Board (TRB) at the National Academy of Sciences of the USA. Editor in chief and associate editor of three scientific journals. Member of the Scientific and Methodological Council on the Protection of Historical and Cultural Heritage issues under the Ministry of Culture of Belarus.

Author of the project of the memorial sign "Pachatak darog Belarus" on October Square in Minsk, the architectural design of bridges and viaducts in Minsk, Vitebsk, Mogilev, Gomel, Orsha, the projects of monuments, public buildings and spaces in Minsk and Minsk region. He developed over 120 projects of architectural and graphic design, road and recreational facilities.

Awarded with Belarus state medal of Franzisc Skaryna, six silver medals at USSR Exhibition of Economic Achievements, signs "Honorable roadman" I and II degree, the church medal of St. Cyril of Turov, Diplomas issued by Minsk Regional Executive Committee, Minsk City Council, the Ministry of Education, Ministry of Construction and operation of highways, the Ministry of Nature and the Environment.

JOHANNES JANSSEN

Belgium

Jo Janssen, born in 1959, is lector at the University Hasselt (B), Faculty Architecture and Art. He has graduated in 1990 at the Academy of Architecture Maastricht (NL) where he was unimaster from 1995 until 2010. He is often invited as external critic of master projects at several architectural schools. In addition to his academic activities he is founder of "Jo Janssen Architecten", an architecture office in Maastricht (NL), which has a collaboration with Prof. Ir. Wim van den Bergh. The office combines research and practice; most commissions are obtained through participation in architectural competitions. Main projects of the office are music building muzyQ Amsterdam, housing and office building Piazza Céramique Maastricht, social housing Treebeek Brunssum [NL], courthouse Enschede [NL] and main office of the university Heerlen [NL]. The work of the office has been showed in many national and international publications and exhibitions. He has given lectures at several forums in the Netherlands, Belgium and Germany. He is also a member of the Architecture and Monuments committee of the historical city of Maastricht.

PROFESSOR PHD. ARCH. BORIANA GENOVA

Bulgaria

Boriana Genova was born in 1950 in Sofia. She graduated Architecture at Engineering Institute for Higher Education major in urban planning in 1974 and started her career as an architect. In 1976 she started work as a research associate at the Health Research, Technological and Design Institute. For the next three years arch. Genova worked for her doctor's degree at the Moscow Architectural Institute. Since 1982 arch. Doctor Genova works at the University for Architecture, Engineering and Geodesy in Sofia first at the research laboratory and later at the department for residential buildings. Since 2000 she leads the Department for residential buildings. As a scientist and research arch. Genova worked on different problems and regulations in the field of health and social service buildings, education and residential buildings. At the Architectural University arch. Genova holds lectures in Residential and Social Buildings as well as Urban Planning.

PROFESSOR MIA ROTH ČERINA

Croatia

Mia Roth-Cerina, assistant professor, was born in Zagreb in 1974. She has graduated from the Faculty of Architecture in Zagreb in 2000, where she has been working since 2001. She is also active as an architect through her practice. She has won numerous awards in architectural competitions (most of them in authorship with Tonci Cerina). Her projects have been published in architectural literature and periodic. For the building of the Laniste Kindergarten she and Tonci Cerina have been nominated for the Croatian architecture annual award Viktor Kovacic in 2008. She has held lectures on her work and mentored student workshops which have regularly been covered in media, catalogues and architectural magazines. As a co-author and assistant, she has participated in writing and publishing books, studies and textbooks in the field of educational buildings. She is one of the founders of the 'Little School of Architecture', a project engaged in providing and organizing free architectural workshops for children and youth which are carried out in public spaces and elementary schools, which have also been widely published. She has edited architectural books and is an executive editor of the scientific magazine 'Space' ('Prostor'). She is the president of the Faculty of Architecture's Publishing Committee, leads the 'Arhitektura i djeca' program at the Croatian Chamber of Architects and is the Croatian delegate in the UIA (Union Internationale des Architectes) Working Program Architecture and Children since 2010.

ENG. ARCH. LADA KOLAŘÍKOVÁ

Czech Republic

Born in 1964 she graduated in 1987 at Faculty of Architecture, Urban and Landscape design, University of Technology in Brno. Since 1987 till 1990 she was the architect in Chemoprojekt, specialized in paper - producing and petrochemical industries. Since 1993 till now she is a partner in architectural office RKAW, which is engaged in wide range of projects, diverse in scale and typology in fields of architecture and urbanism. Since 2001 she is Czech Chamber of Architects licensed architect, since 2011 Ministry of Regional Development of licensed inspector. She is assistant in design studio Kolařík at Faculty of Architecture at Czech Technical University in Prague since 2010.

PHD. ENG. ARCH. RADEK KOLAŘÍK

Czech Republic

Born in 1964 he graduated in 1987 at Faculty of Architecture, Urban and Landscape design, University of Technology in Brno. In 1989 he obtains his postgraduate degree in Architecture at the Academy of Fine Arts in Prague. Since 1996 till 2007 he is young professor (design studio head with Prof. Eng. arch. Eva Jiřičná) at Academy of Arts, Architecture and Design in Prague, department Architecture. Since 2007 he is associated professor (design studio head) at Faculty of Architecture at Czech Technical University in Prague. He was the architect in Czech office Stavoprojekt Liberec, SIAL and Jean Nouvel in Paris. Since 1993 he runs his own studio RKAW.

ENG. ARCH. MARTIN AUGUSTIN

Czech Republic

Graduated at Faculty of Architecture at Czech Technical University in Prague, Ph.D. thesis also there. He is working as independent architect with the focus on projects of passive houses with using high tech technologies. At same topic is also writing a couple articles. He was also teacher at Faculty of Architecture (2000-2011) and still is the teacher at Faculty of Civil Engineering. He is cooperating at educational programs with Passive house institute in Czech, etc. Focus is also on theory of architecture and urbanism, first interference modern architecture to historical environment.

PHD. ENG. ARCH. PETR SUSKE

Czech Republic

Born in 1951 in Prague. Architect and teacher at Czech Technical University in Prague at Faculty of Architecture. Also writer several publication about arts and culture.

LECTURER JAAN KUUSEMETS

Estonia

He was born in 1979 in Kärdla, Estonia. From 2002 - marine engineering, Estonian Maritime Academy. 2010 graduated as architect, Tallinn University of Applied Sciences. 2012 graduated as architect, (M. Sc A.) Brandenburg University of Technology. 2012 - member of Union of Estonian Architects (UEA). From 2002 to 2014 he worked at AB DAGOpen OÜ. 2011 - teaching at Tallinn University of Applied Sciences, Dept. of Architecture. 2014 - teaching at Tallinn University of Technology, Faculty of Civil Engineering, Department Of Structural Design. He has several awards and nominations in architectural competitions.

PROFESSOR JOUNI KOISO-KANTTILA

Finland

Born in 1947 he graduated from the Dep. of Architecture at the Univ. of Oulu in 1973 and made his PhD in architecture in 1976. He has been teaching architecture at the Dep. of Architecture, Univ. of Oulu since 1976. He is professor of Architecture from 1988 and now he also acts as the coordinator of Candidate of Technology program at the department. He has had his own architect's company for thirty years and has designed numerous buildings in northern and central Finland. He's been actively involved wood constructions, wooden architecture and energy efficiency research. He is also the head of the National Graduate School of Wood Constructing and Design and the leader of national Modern Wooden Town Program financed by the Finnish Government. He is a member of Finnish Academy of Technology and has received several national awards for wooden architecture.

LECTURER PETRI AARNIO

Finland

Graduated from Department of Architecture at University of Oulu 1994. Member of the Finnish Association of Architects since 1995. Worked in architecture offices 1984-2003 focusing on public buildings, apartment buildings and wooden buildings. Teaching architecture at the university of Oulu in the department of architecture in the laboratory of architectural construction since 2003. The main aspects in teaching: wooden structures, detailing of structures, sustainability, energy efficiency, planning of flats. Member of the management team of the architecture department of the university of Oulu. The Good Teacher Award of Oulu university 2010.

PASCAL GONTIER

France

Born in Paris in 1963, graduated from the Ecole d'Architecture de Versailles, Postgrade Polytechnic Fédérale de Lausanne in Architecture and Sustainable Development. European Master in Architecture and Sustainable Development (Ecole Polytechnique Fédérale de Lausanne, University of Climate Architectureet Leuven, Greco Schools of Architecture of Toulouse and Montpellier, Architectural Association of Architecture - London).Creating Workshop Pascal Gontier SARL Architecture in 1997 Responsible for teaching cycle continuing education post-graduation "Architecture, Territories and Sustainable Development" at the School Architecture of Lille from 2000 to 2004. Since 2004 he is teacher at the Architecture School of Paris Malaquais. He is member of the Board of AFEX (French Architects Export), ICEB (Institute for Environmental Design of Buildings)and of the scientific committee of the Earth Association Siena.

SANDRA PLANCHEZ

France

Sandra Planchez, diplomat architect and planner graduated from IEP (Institute of Political Studies in Paris). Since 2004 is teaching Theory and Practice of Architectural at the and Urban Project in ENSA PARIS MALAQUAIS .
Since 2001, she is partner at Cantin Planchez Architecture realizing design and construction of architectural projects, housing, facilities, offices urban studies, public and private sector, villas, interior architecture.
In 2013 launched www.splaar.com an entity wishing to combine experimental approach and finally pragmatism.

ABDRASSILOVA GULNARA

Kazakhstan

She is Doctor of Architecture and author of more than 150 scientific publications, educational and methodological developments. Professor in Kazakh head architecture-construction academy (KazGASA, Almaty, Kazakhstan) she is teaching tenure in university since 1980. She is also an expert of Romualdo del Bianco foundation (Florence, Italy) and regularly arranges international workshops for students of Architecture faculty.

PROFESSOR ERKIN BORONBAEV

Kyrgyzstan

Born in 1947, graduated Moscow Building Engineering Institute - Diploma of Candidate of Technical Sciences (equivalent to PhD) and Diploma (Civil Engineer on “Heat-Gas Supply and Ventilation”). He was also a student of the Faculty “Heat-Gas Supply and Ventilation” in Frunze Polytechnic Institute. He is a member of professional trade union. He has Professional Certificate on “Energy Auditing of Buildings”– Energy Saving International AS (Norway); Certificated as a Trainer for Trainers on” Project Identification and Fin acing”, Project preparation and development” and “Financial Analysis for Investment Projects” – HBT Consortium of EU TACIS project; Certificated on “International Standards ISO 9000” – Kazakhstan Academy of Quality Management. Professor, Head of Department “Heat-Gas Supply and Ventilation”, Vice-Rector, Kyrgyz State University of Construction, Transportation and Architecture.

PHD. ARCH. EDGARS BONDARS

Latvia

Architect, born in 1983, Professional degree of Architect (2007), Master of Architecture (2009), Doctor of Architecture (2013), Riga Technical University. Doctoral thesis: „Design of Spatial Environment in the Context of Bioclimatic Factors". Research fields: principles of implementation of the idea of sustainable development in architecture, bioclimatic designing. Author of several scientific publications in national and international issues. Lecturer in the Department of Architecture and Urban Planning at the Riga Technical University. Architect and member of the board of the architectural design company RR.ES, LTD.

ARCH. UĢIS BRATUŠKINS

Latvia

Architect, born in 1961, Professional degree of Architect (1984), Master of Architecture (1995), Doctor of Architecture (2006). Doctoral thesis "Development of Public Open Spaces of Riga Medieval Centre in the 19th and 20th Centuries". Member of Latvian Association of Architects. Author of many public and dwelling buildings in Riga and other towns of Latvia. Dean of the Faculty of Architecture and Urban Planning of Riga Technical University. Regular publications in the almanac "Architecture and Construction Science"//"Scientific Proceedings of Riga Technical University" and local professional magazine "Latvijas Arhitektūra".

ASSOCIATED PROFESSOR PH. ARCH. SIGITAS KUNCEVIČIUS

Lithuania

Architect, born in 1958, graduated from the Faculty Of Architecture at Vilnius Civil Engineering Institute in 1981.Since 1991 associated professor of Vilnius Gediminas Technical University (VGTU) Faculty of Architecture. Chief architect of architect company, succeeded in many different projects. Member of council Architects Chamber of Lithuania.

PROFESSOR ENG. ARCH. LECTURER ANDRZEJ DUDA

Poland

Andrzej Duda, born in 1953, graduated from Silesian University of Technology in Gliwice (1973-79), post graduate studies in The Berlage Institute of Amsterdam (1991-92), established architectural office INARKO (together with H. Zubel) in 1988. Winner of about 40 architectural competitions, Honored with many awards for his architectural works. Since 1980 a teacher at the Architectural Department of Silesian University of Technology in Gliwice and a guest professor at Warsaw University of Technology, Wroctaw University of Technology, Prague University of Technology and Tbilisi Art Academy. Since 2002 an independent expert of European Union Prize for Contemporary Architecture Mies van der Rohe Award.

ARCH. PHD. ENG. TOMASZ WAGNER

Poland

Born in 1973 in Zabrze, Poland. He graduated the Silesian University of Technology 1997 and Monument Conservation College. Assistant professor -Faculty of Architecture, Chair of Architectural Design. Issues of projects and research: public buildings architecture, preservation of cultural heritage and post industrial buildings. Member of committee of the Conference 'Modernity in Architecture'. Twice a winner of the competition of Monument Restorers Association (1998, 2002), the honorable mention in the International Biennale of Architecture 1996. Winner of award of the marshal of the Silesian province for 'The Best Public Space' in 2012.The author of many scientific publications, conferences and studies devoted to the architecture and preservation and conservation of cultural heritage. The author of the book: 'Zabrze – unknown nature of Silesian architecture' (2003) and 'Modernist Architecture in Zabrze' (2013). Member of designing team (Mexem design office), co-author of Administrative Centre in Dąbrowa Górnicza and adaptation of postindustrial buildings of Coal Mine Gliwice, within the scope of the project of Education and Business Centre "New Gliwice". Co-author of office, administrative and educational buildings, such as: Centre of Modern Technologies of the Silesian University of Technology, Students Cultural Center –"Anthill", Laboratory of the Faculty of Materials Engineering Computer Laboratory of the Faculty of Chemistry in Gliwice, modernization of Provincial Roads Board in Katowice, 'Montan Stal' Company in Tarnowskie Góry, Faculty of Biomedical Engineering and adapting army office buildings into the Faculty of Organization and Management in Zabrze, as well as co-author of restoration works carried over castles in Siewierz and Lubowice.

PROFESSOR PHD. ENG. IRINA BLIUC

Romania

Prof. Phd. Eng. Irina Bliuc graduated from Civil Engineering Faculty, "Gh.Asachi" Technical University of Iasi. She accomplished the doctoral thesis in 1984, in the same university, the topic being related to Energy Efficiency and Comfort in Residential Buildings. The rich academic experience achieved in Faculty of Architecture and in Faculty of Civil Engineering and Building Services from "Gh. Asachi" Technical University of Iasi is reflected by course like: Buildings Physics, Constructions in Buildings, Renewable Energies, Modern Finishing Methods Used in Buildings Industry. The field of research is represented by: Energy Efficiency and Sustainable Buildings, Indoor Environment Quality and the Users' Satisfaction, Adapting Buildings to Climate Changes. She encouraged the co-operation between universities, being the promoter of such a research project, its subject being "Systems of Integrated Solutions for Thermal Rehabilitation of Buildings". Prof. Irina Bliuc is author and co-author of several technical books and papers published in important journals or proceedings of national and international congresses and conferences. She is also member of CIB, W077 – Facilities Management and Maintenance.

LECTURER SERGIU CĂTĂLIN PETREA

Romania

Sergiu Cătălin Petrea is Lecturer at Faculty of Architecture - Basics of Architectural Design Department from "Ion Mincu" University of Architecture and Urbanism, Bucharest. Starting with 2012 he has also a course of Ecology and Technology in Contemporary Architecture at UAUIM. He has attended Advanced Design Methods Master Program in 2005 and has a PHD Degree in architecture on Emergency Architecture in 2011. He currently explores the perspectives of sustainable architectural design and energy efficient planning, being also concerned about themes related to poverty, experiment and urban regeneration strategies. His architectural practice includes buildings from all the fields of expertise, interior and graphic design and architectural contests. He constantly participates in international congresses and conferences and it is also involved in research projects. Many of his architectural research themes are reflected in scientific papers and various thematic studies published in specialized media.

LECTURER PHD. ARCH. MIHAI OPREANU

Romania

He is architect and lector at the Urbanism and Architecture University Ion Mincu, Bucharest, Technical science cathedra, since 1990. He has done serial research studies in ecological, bio-climatic and energy - efficient architecture as well as in historical monument restoration. Post-graduate in Architecture from UAIM Bucharest and Techniques History at EHESS Paris: Ambient Physics, Architectural Ecology and Technology, Restoration and Conservation. During 1994 and 2002 he participated to restoration workshop UAUIM - Ecole de Chaillot, Paris. He has regular articles in local architecture magazines "Arhitectura" and "Arhitext-Design" and also in "Monuments Historiques".

PROFESSOR OF ARCHITECTURE OLEG STAKHEEV

Russia

Professor of architecture, head of the department “Architectural design“, member of the union of architects of Russia TSUAB (Tomsk State University of Architecture and Building). He is specialized in architecture and town planning. Author of more than 50 articles he is member of council of town planning of Tomsk and also the head of scientific programs in the field of architecture and town planning.

PROFESSOR PHD. ENG. SERGEY OVSYANNIKOV

Russia

Doctor of Engineering, professor and head of the department “Engineering design“ at TSUAB (Tomsk State University of Architecture and Building). Area of scientific interests: protection against noise, thermal protection of buildings and constructions, power efficiency in construction. Author of more than 80 articles, head of scientific programs in the field of a heat-shielding of buildings he is member of the union of builders in Tomsk while giving lectures and practical training according to the Construction program at university.

ASSOC. PROFESSOR ING. ARCH. HENRICH PIFKO, PHD — Slovakia

Born in 1959, he is currently teaching at the Faculty of Architecture of the Slovak University of Technology in Bratislava, at the Institute of Ecological and Experimental Architecture where he is the sponsor of the educational module "Architecture and Environment". In addition to teaching he is authorized architect (SKA), specialized in green architecture and passive houses (he is Certified Passive House Designer). He is chairman of the Institute for Passive Houses (iEPD) and founding member of ArTUR (Architecture for Sustainable Development) NGO. He participated in international research projects (e.g. EcoCity, Oikodomos), and he is author of a number of publications and co-author of the books "Effective Housing" and "Handbook of Sustainable Architecture".

ASSOC. PROFESSOR PHD. MARTINA ZBAŠNIK-SENEGAČNIK — Slovenia

She was born in Ljubljana. She graduated at the University of Ljubljana, Faculty of Architecture, Slovenia, in 1986. She received a Master Degree in 1992 and in 1996 a Ph.D. degree (Negative influences of building materials on the environment and human beings). Since 1988 she has been working at the faculty, first as a teaching assistant, in the year 2000 she became an assistant professor and in 2009 an associate professor. She teaches the subjects Ecological building principles, Technology of building and building materials, Modeling of façade envelope and Design studio. Her main working focus is the field of energy efficiency (passive houses, low-energy houses, energy-efficient building technologies), ecological use of building materials, natural materials, sustainable architecture, contemporary materials for façades, building technologies.

She was the research programme leader at Faculty of Architecture (Sustainable planning for the quality living space) in 2009-2011. She is the author of two monographs: Fasadni ovoj (Façade envelope) and Pasivna hiša (Passive house) (both Slovene language) and numeral articles in scientific and professional magazines in Slovenia and abroad. The monograph Passive House was also published in Croatian and Bulgarian language.

She is a member of the Council for the efficient use of energy by Ministry of the environment and spatial planning, member of Photovoltaic technology platform – working group Integration of solar power stations in the building. Her reference is also the organization and leadership of professional seminars for the architects since 2004 (the topics: energy efficiency, passive houses, building technologies). She is a founder and a leader of Passive House Consortium Slovenia since 2008.

PROFESSOR ENRIQUE CORBAT DÍAZ

Spain

Architect from Barcelona School of Architecture ETSAB (UPC) since 1983. Speciality in bioclimatic architecture. Scholarship holder of Training Plan of Research Staff from Spanish Science and Education Ministry (1986-1989). Since 1989 professor in building construction department in Vallés School of Architecture ETSAV (UPC). Teaching centered in bioclimatic architecture and sustainable buildings. Investigations in Thermal Rehabilitation of Buildings. Since 1997 continuously teaches an elective course on Bioclimatic Architecture. In 1980 he won first prize in a competition for ideas for an exhibition center of alternative energy in the International Fair of Barcelona. He has designed and built several bioclimatic buildings along his career. Finalist at the FAD prizes of Architecture in 2001 by a bioclimatic natural cooled building housing located in old town district of Barcelona. Speaker at various courses and conferences in the Association of Architects, conferences always related to solar architecture issues and sustainability. Speaker at the Catalan Congress of Renewable and solar energy 1987 and Scientific meetings of the Mediterranean environment and building energy, 1990. Professor in Graduate Program Installations in buildings. Polytechnic Foundation of Catalonia. 2002-2008. Professor in sustainability, technology in architecture and integration of renewable energies UPC's masters.

ASSIST. PROFESSOR PHD GÜLTEN MANIOĞLU

Turkey

Gülten Manioğlu is a researcher and lecturer in the Faculty of Architecture at Istanbul Technical University (ITU) since 1993. Her post-graduate education involves "Evaluation the Heating Performance of the Building Envelope in Relation to the Heating Period from the Standpoint of the Bioclimatic Comfort and Energy Conservation". She received her doctorate in the Department of Architecture at ITU, with a focus on "An Approach for the Determination of Building Envelope and Operation Period of Heating System According to Energy Conservation and Life Cycle Cost" (2002). She has several publications on Energy Efficient Building Design and Water Conservation in Building. She is currently working as an Assistant Professor in the Environmental Control Unit at the Faculty of Architecture of ITU. Since 2009 she is a board member of the International Association of Building Physic (IABP).

DOCENT TETYANA KASHCHENKO, PHD

Ukraine

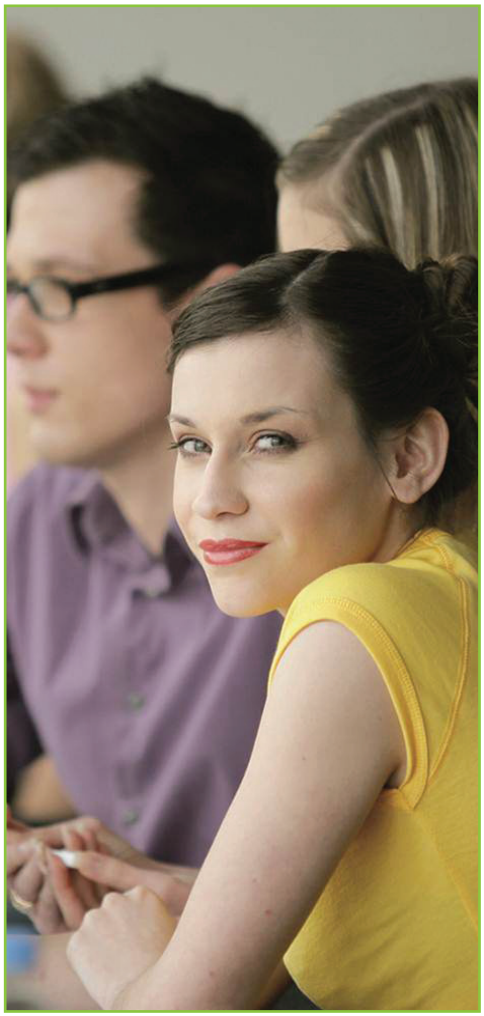
She is an architect, docent of the Department of Architectural design of Kyiv National University of Construction and Architecture (KNUCA). Her architectural professional activity is focused on architectural design of dwelling and civil buildings. Graduated with Master Degree from Architectural faculty of KNUCA. In 2001 obtained degree of Ph.D. of Architecture. At the Architectural faculty she teaches Architectural design, Theory of architectural design, launched lecture course "Architecture of energy efficient buildings". Tutor of post graduate students, bachelor and master degree. Curator of students diploma and contests projects, awarded at national and international competitions. Fulfilled internship at Architectural department of Gent State University (Belgium), course of International Passive House Summer School, Fachhochschule Karnten, Austria. Was coordinator of Ukrainian national team of EASA and coordinator of student research work in international project "RKM Save Urban Heritage". Took part at International student workshop "Smart city. City as an educational polygon", Foundation Romualdo del Bianco, Florence (Italy) as a teacher. Has publications in scientific and professional editions, professional magazines. Member of organization committee of International conference "Energy Integration", initiator and leader of several students architectural contests, exhibitions and conferences in the field of sustainable and energy efficient architecture.

LECTURER GUILLERMO GUZMAN DUMONT

UK

Full time Lecturer and director of External Relations and Communications at the Department of Architecture and Built Environment at the University of Nottingham, United Kingdom. Graduated from Architecture at the Universidad del Bio-Bio, Concepcion Chile in 1993, then carried out studies of MSc Renewable Energy and Architecture and PGCHE (postgraduate certificate in higher education) at the University of Nottingham from September 2000. He has over 15 year of experience in teaching design studio and have researched in Sustainable Energy Technologies integration to architectural design, post occupancy evaluation, pedagogic approaches in architecture related to identity, globalisation and ethics. One of the principal investigators of the Creative Energy Homes project sponsored by a number of important UK housing developers and researcher in the UK entry for the Solar Decathlon Europe 2010. Visiting professor at the Pontificia Universidad Catolica, Universidad del Bio-Bio and Universidad Tecnica Federico Santa Maria of Chile. He has set up a number of joint courses and collaboration agreements with prestigious Latin American universities, given keynote presentations, run workshops and organised joint conferences. He has been running the ISOVER competition studio for the last two years

2015 edition



Invitation for Competition Submissions ISOVER Multi-Comfort House - Students Contest 2015

Residential function in Astana, Kazakhstan

International, two-stage, open competition, 2015 edition

Content:	Develop a residential function in cold climate of Astana, Kazakhstan
Participants:	Students
Organizer:	Saint-Gobain Insulation with the participation of national Saint-Gobain ISOVER and IZOCAM organizations
Official Website:	www.isover-students.com

The task for 11th International Edition of ISOVER Multi-Comfort House Students Contest, developed by ISOVER in close collaboration with the Department of Architecture of National Company “Astana EXPO-2017”, is the design of a residential function in Astana, Kazakhstan located in the perimeter of the post exhibition residential expansion of International Exhibition EXPO 2017.

Participating countries to final stage of ISOVER Multi-Comfort House Students Contest Edition 2014. First time participating countries: Belgium, France and Kyrgyzstan.

More information about the new edition of the contest as well as full task, pictures and documents, site plan can be found at www.isover-students.com

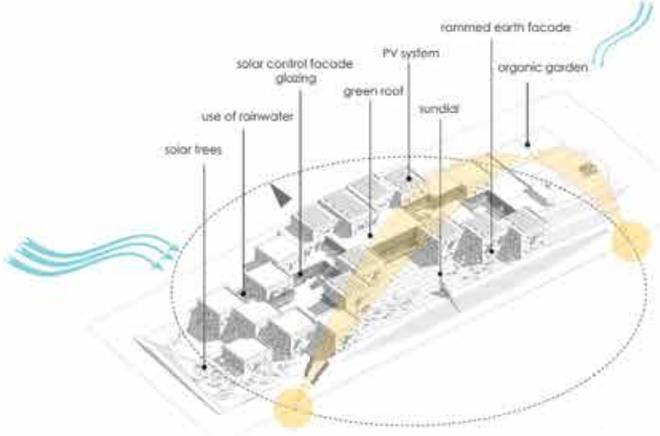
SCHOOL OF TOMORROW - GAZIANTEP

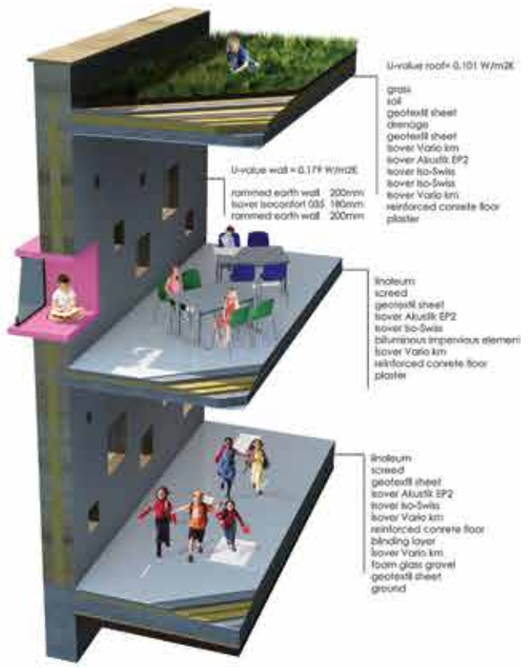
I PRIZE
AUSTRIA
National Stage 2014

KILIC
BÜSRA

KARADUMAN
ABDUSSELAM
SELMAN

Vienna - TU Vienna





more about the project on **www.isover-students.com**

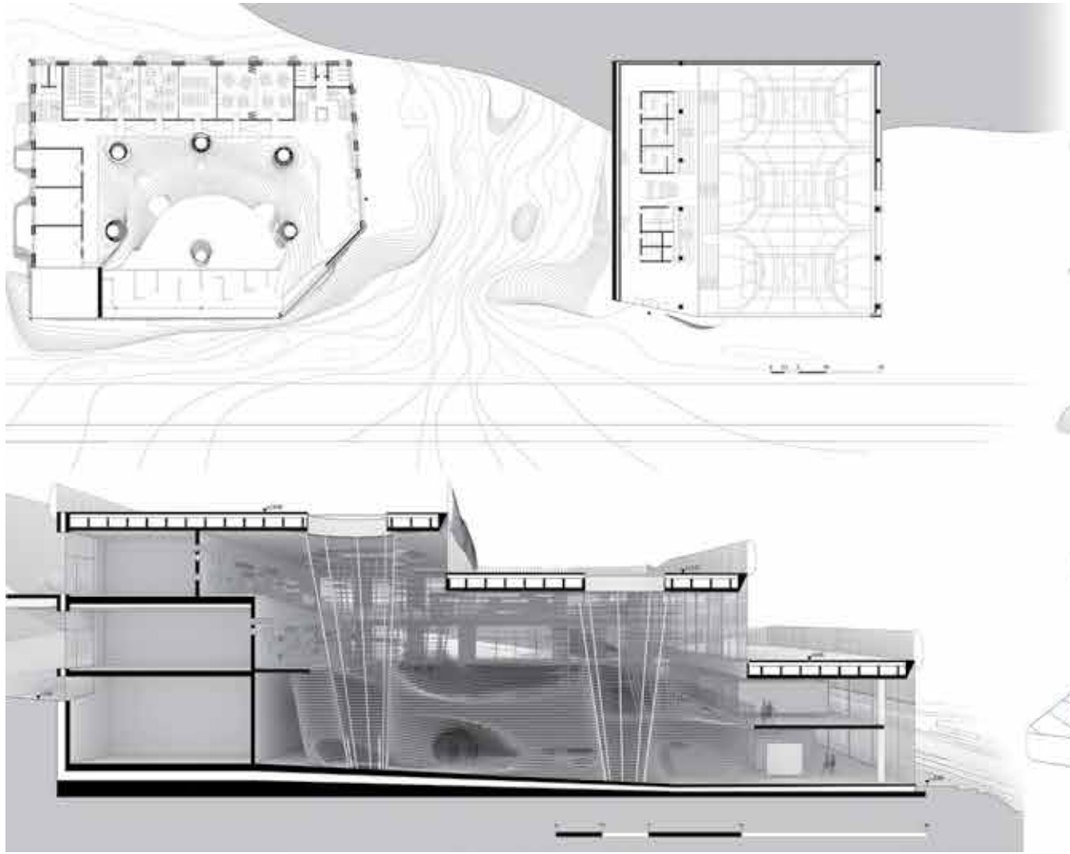
SCHOOL OF TOMORROW - GAZIANTEP

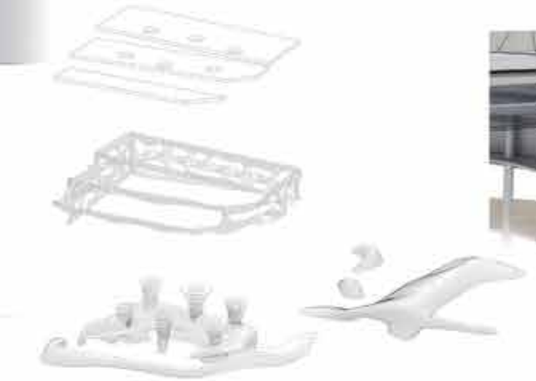
II PRIZE
AUSTRIA
National Stage 2014

HÜBNER
FABIAN
NEPOMUK

LEVY
YANIV

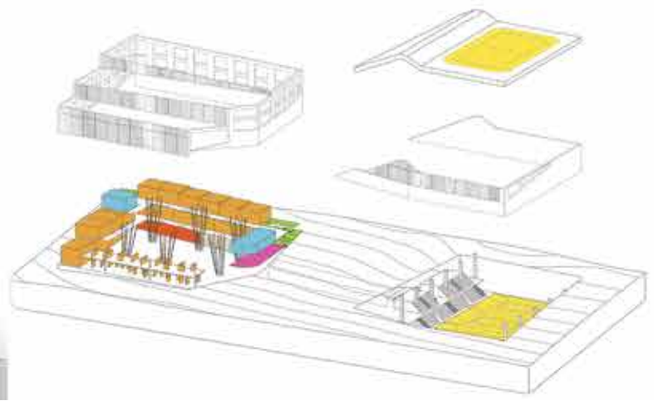
Vienna - TU Vienna





roof

3	cm	concrete paver 30X80
8	cm	gravel
2	cm	drainage
1,5	cm	seal
35	cm	*isover u tech* insulation
0,5	cm	vapour barrier
2	cm	osb slab
50x10	cm	beam grid, insulation inbetween
10	cm	suspended ceiling



wall

2	cm	outdoor rendering
15	cm	precast concrete
20	cm	*isover u tech* insulation
25	cm	reenforced concrete
1,5	cm	indoor rendering

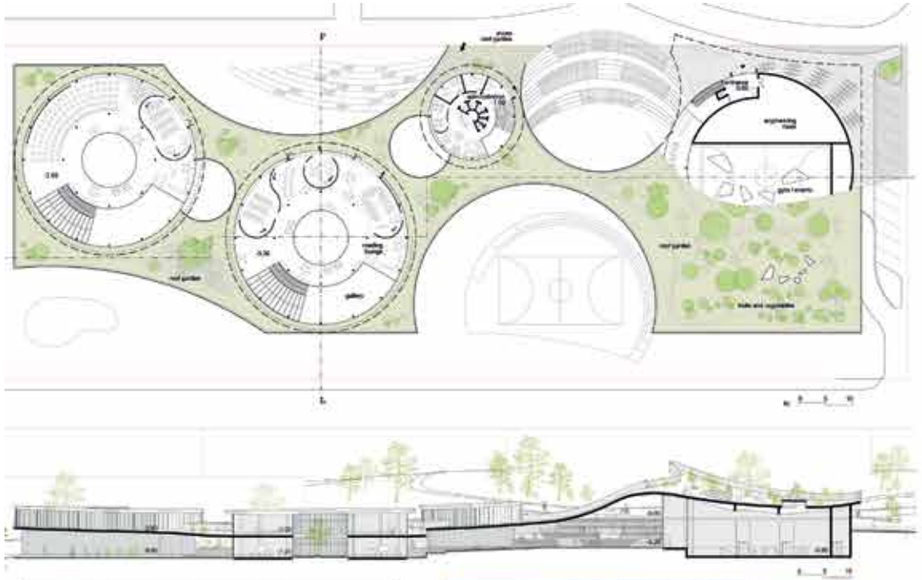
SCHOOL OF TOMORROW - GAZIANTEP

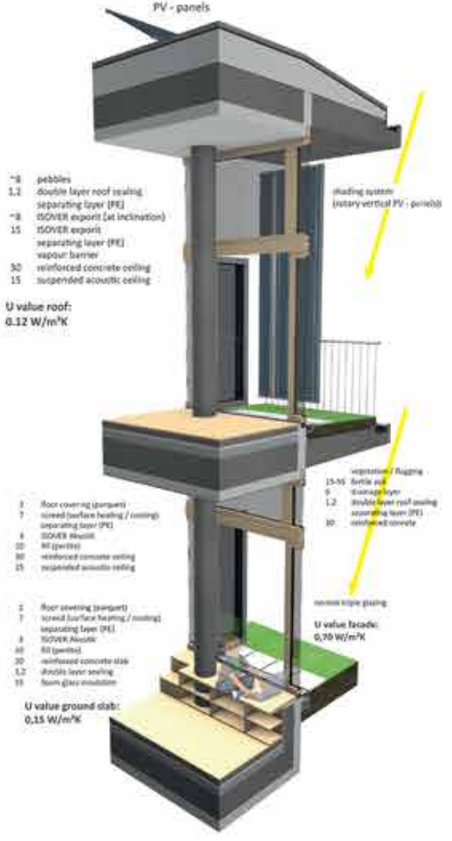
III PRIZE
AUSTRIA
National Stage 2014

BROMANN EVELYN CHRISTINA
Vienna - TU Vienna

HALBMAYR JOSEF

more information on **www.isover-students.com**





more about the project on **www.isover-students.com**

SCHOOL OF TOMORROW - GAZIANTEP

Special award

ISOVER
Multi-Comfort House
Students Contest
International stage,
Bucharest 2014

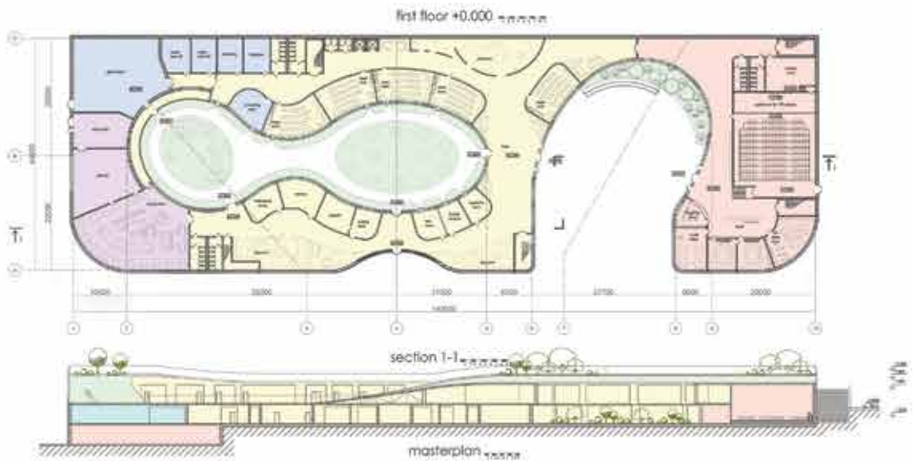
I PRIZE
BELARUS
National Stage 2014

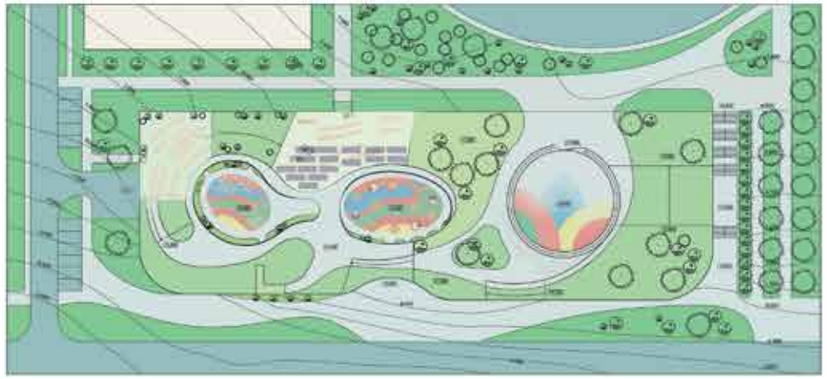
VERONIKA BELOZOROVA

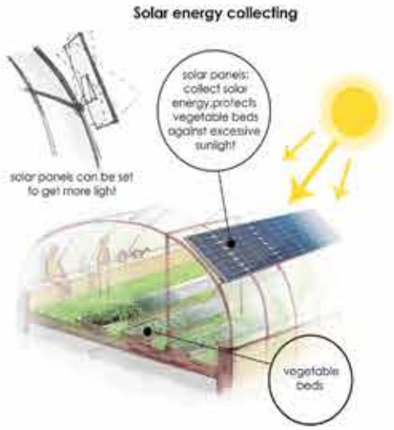
VICTORIA BOGUSH

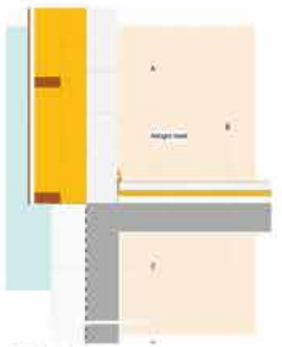
Minsk - Belarusian National Technical University, Architect faculty

more information on **www.isover-students.com**

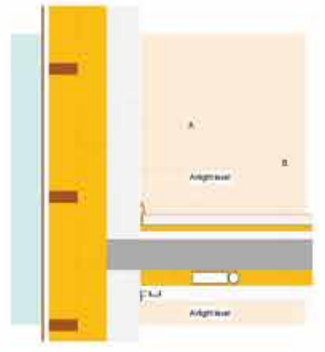




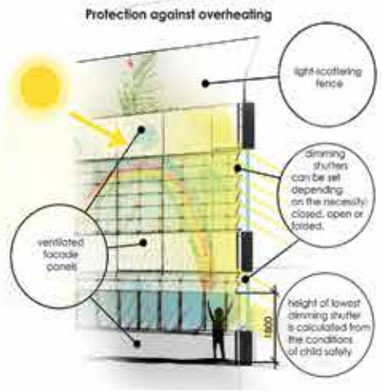


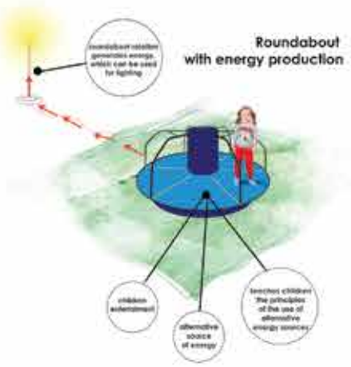


5,0 Screed
Separating layer
3,0 ISOVER Akustik EP 1
4,0 ISOVER Exporit EPS 100/035 as compensation for height of tube
16,0 Reinforced concrete ceilinge
1,0 Interior plaster



1,5 Interior plaster
17,5 Lime-sandstone KSR 6 DF (175)
16,0 ISOVER Kontur FSP 1-032 Easy Fix (wood verlica
16,0 ISOVER Kontur FSP 1-032 Easy Fix (wood horizon
3,0 Rear ventilation
1,0 Exterior cladding (e.g. wood, metal, plastic, stone)



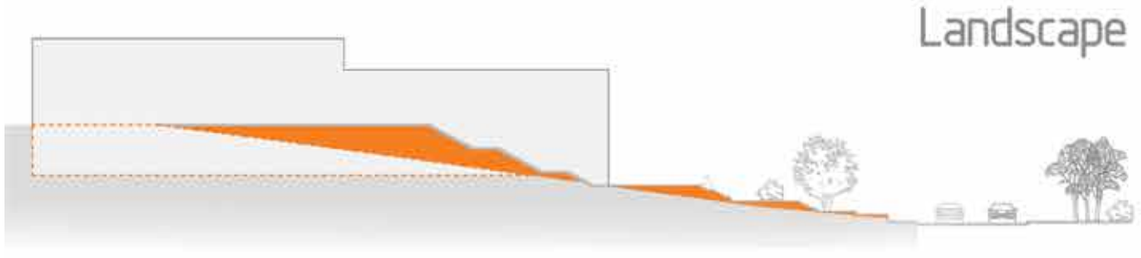


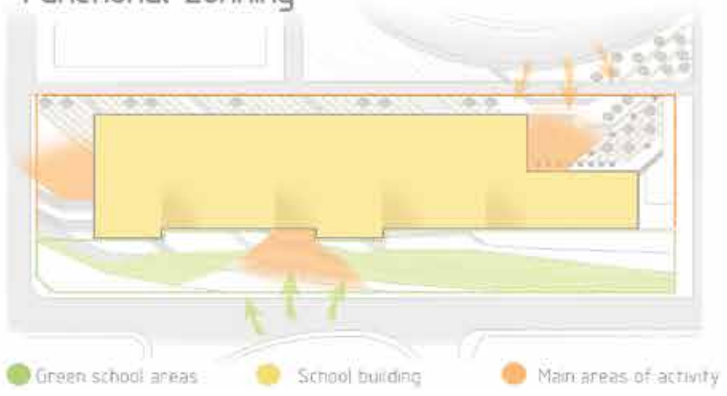
SCHOOL OF TOMORROW - GAZIANTEP

II PRIZE
BELARUS
National Stage 2014

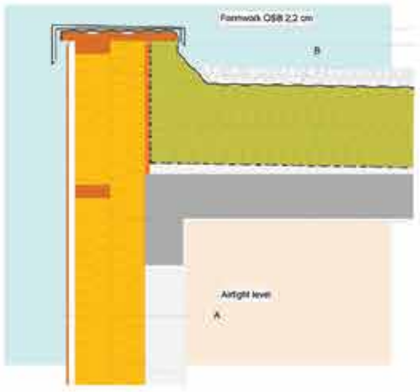
IGOR
SHAMANOUSKIJ

Minsk - Belarusian National Technical University, Architect faculty





Warm roof with pebbles (MW) Eaves



Build-up A in cm

1,5	Interior plaster
17,5	Lime-sandstone KSR 6 DF (175)
16,0	ISOVER Kontur FSP 1-032 Easy Fix (wood vertical 6/16 e=60cm
16,0	ISOVER Kontur FSP 1-032 Easy Fix (wood horizontal 6/16 e=120cm
3,0	Rear ventilation
1,0	Exterior cladding (e.g. wood, metal, plastic, stone)

Build-up B in cm

8,0	Pebbles
0,8	Double layer roof and sealing sheeting, bonded or scorched
18,0	ISOVER Metac FLP 1 Duratec
18,0	ISOVER Metac FLP 1 Duratec
	Vapour retarder
	Levelling layer, bitumen perforated glass-mat sheeting
	Preliminary coat bonding course
	Concrete laid at inclination of at least 2%
20,0	Reinforced concrete ceiling
1,5	Interior plaster

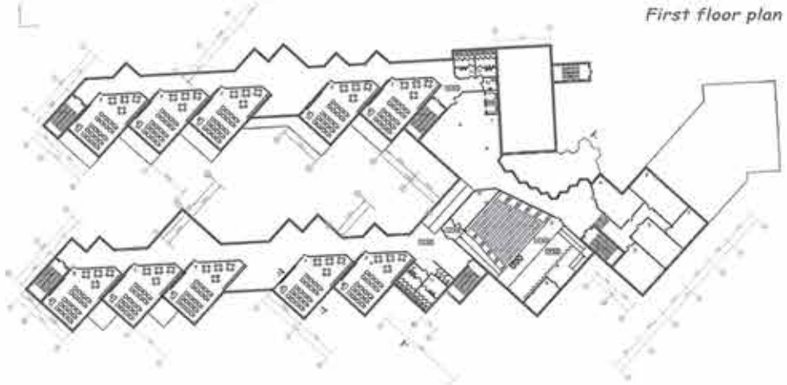
SCHOOL OF TOMORROW - GAZIANTEP

III PRIZE
BELARUS
National Stage 2014

OLGA
SCHERBACHEVICH

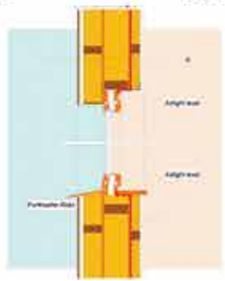
Brest State Technical University

First floor plan



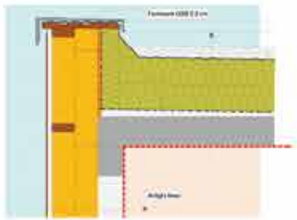
Window

ID:	WI01	
Length:	0.00	m
Height:	0.00	m
Area:	487.00	m²
U-Value:	0.80	W/(m²K)



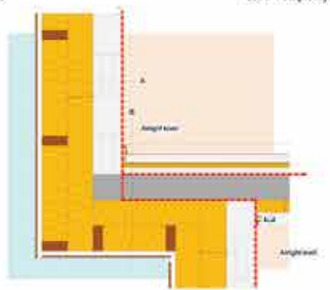
Roof flat

ID:	RF01	
Length:	0.00	m
Height:	0.00	m
Area:	2161.00	m²
U-Value:	0.11	W/(m²K)



Wall against air

ID:	EW01	
Length:	0.00	m
Height:	0.00	m
Area:	1218.20	m²
U-Value:	0.11	W/(m²K)



more about the project on **www.isover-students.com**

SCHOOL OF TOMORROW - GAZIANTEP

I PRIZE
BELGIUM
National Stage 2014

ANNELEEN CROONEN

KATRIEN DESAIR

SASKIA HORIONS

Hasselt University


GREEN _ URBAN FLOW

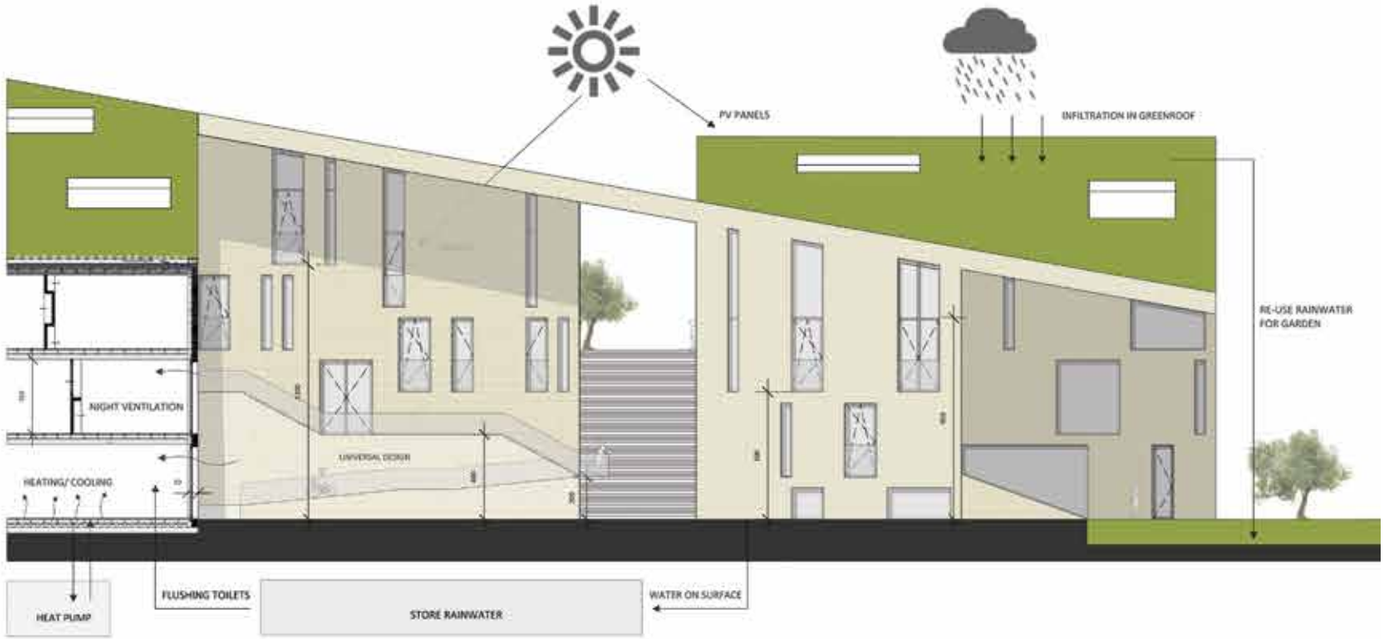

WIND DIRECTION


EDUCATION _ RECREATION/EDUCATION _ RECREATION


LEVEL +3 SCALE 1/350


LEVEL +2 SCALE 1/350


LEVEL +1 SCALE 1/350


PV PANELS
INFILTRATION IN GREENROOF
RE-USE RAINWATER FOR GARDEN
NIGHT VENTILATION
UNIVERSAL DESIGN
HEATING/ COOLING
HEAT PUMP
FLUSHING TOILETS
STORE RAINWATER
WATER ON SURFACE

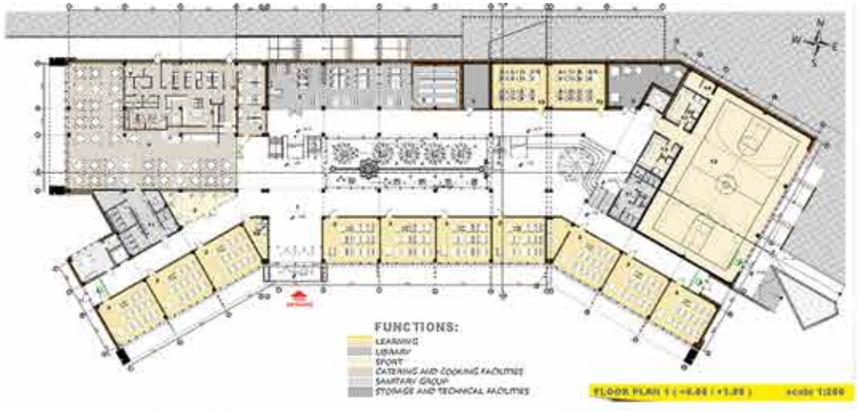
SCHOOL OF TOMORROW - GAZIANTEP

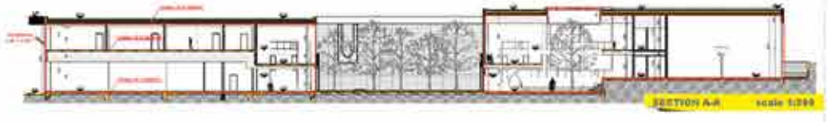
PRIZE
BULGARIA
National Stage 2014

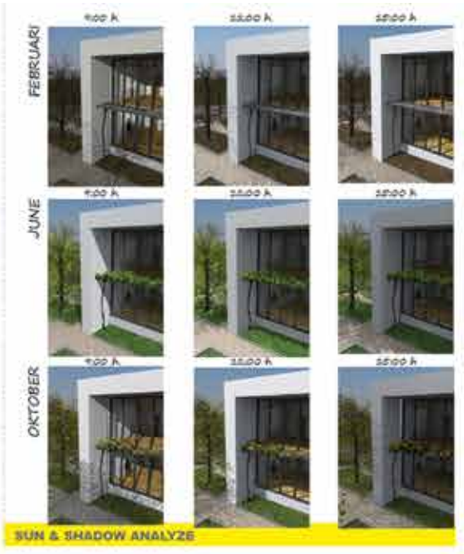
KALOYAN DIMOV

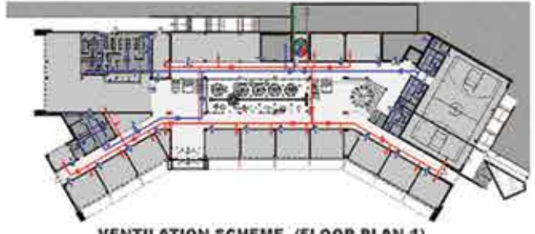
VALENTINA PETROVA

Varna Free University "Chernorizets Hrabar", Varna


FUNCTIONS:
LEARNING
LIBRARY
SPORT
CATERING AND COOKING FACILITIES
SANITARY GROUP
STORAGE AND TECHNICAL FACILITIES
FLOOR PLAN 1 (+0.00 / +1.20)
scale 1:200

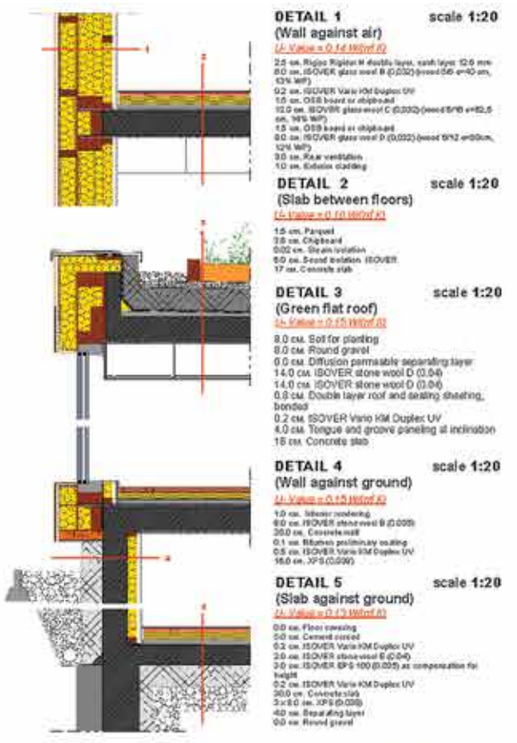

SECTION A-A
scale 1:200


FEBRUARI
JUNE
OKTOBER
SUN & SHADOW ANALYZE


VENTILATION SCHEME (FLOOR PLAN 1)
scale 1:500


VENTILATION SCHEME (SECTION B-B)
scale 1:200


SECTION B-B
scale 1:200


DETAIL 1
scale 1:20
(Wall against air)
DETAIL 2
scale 1:20
(Slab between floors)
DETAIL 3
scale 1:20
(Green flat roof)
DETAIL 4
scale 1:20
(Wall against ground)
DETAIL 5
scale 1:20
(Slab against ground)

SCHOOL OF TOMORROW - GAZIANTEP

II PRIZE
BULGARIA
National Stage 2014

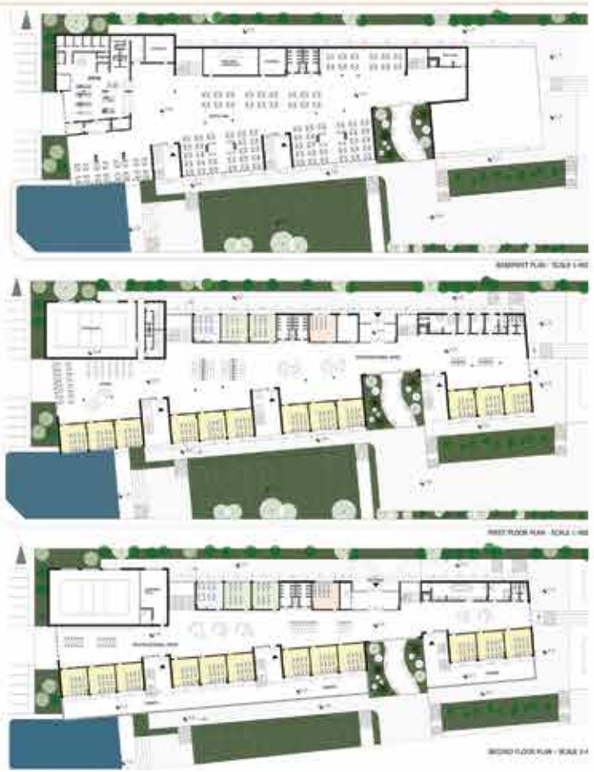
GEORGI DOBREV

POLYA DIMITROVA

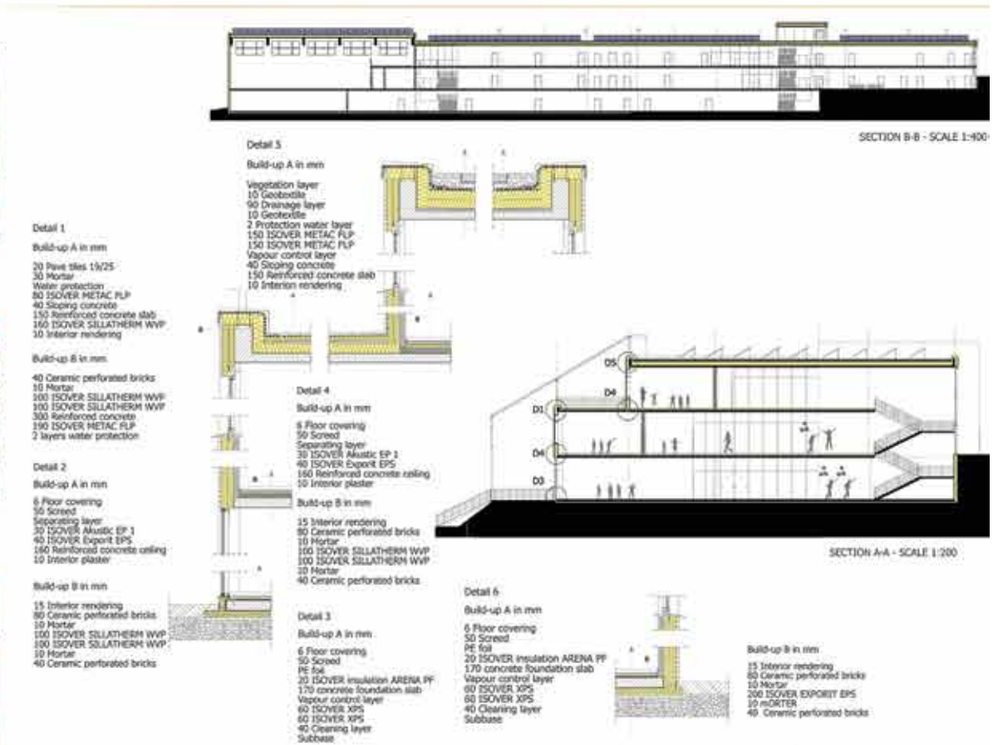
University of Architecture, Civil Engineering and Geodesy, Sofia

SITE PLAN, PLANS

classrooms
art cabinets
music cabinets
foreign language cabinet



DETAILS, SECTIONS



more about the project on **www.isover-students.com**

SCHOOL OF TOMORROW - GAZIANTEP

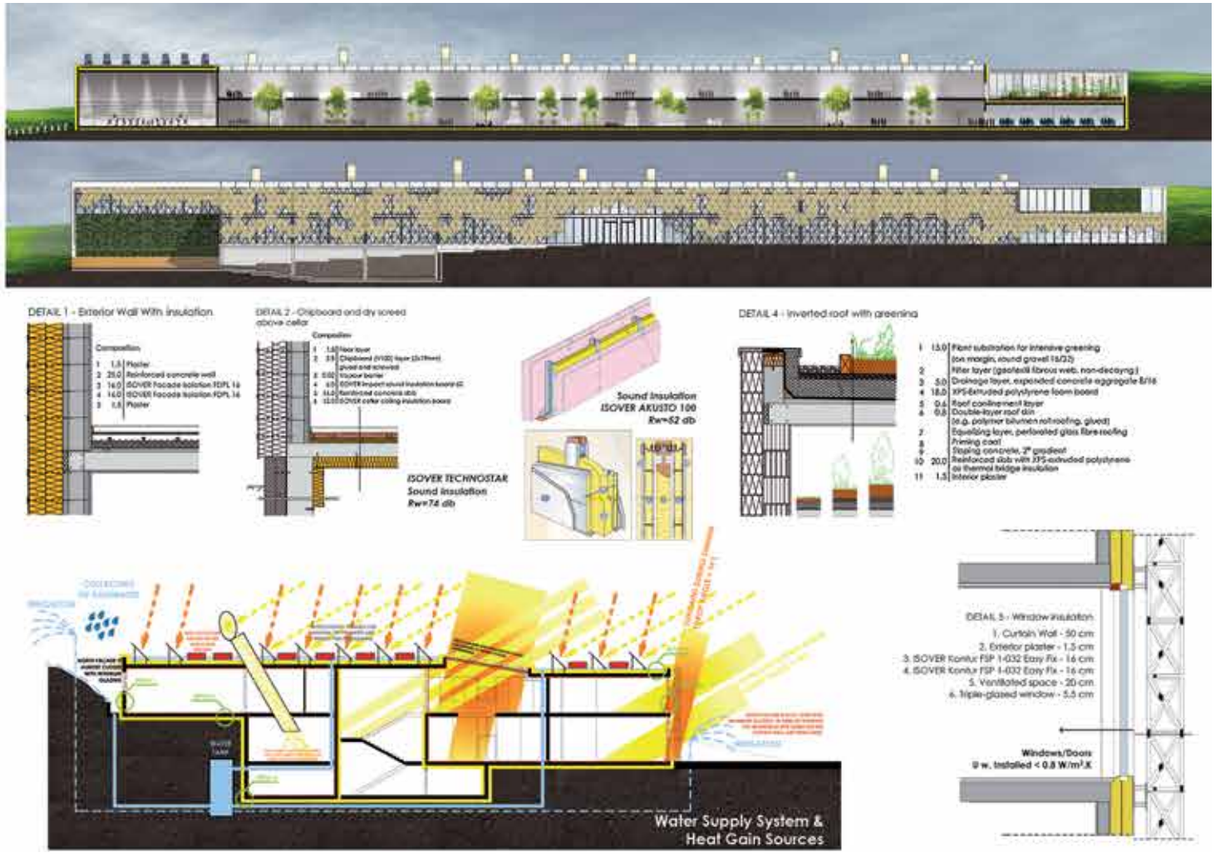
III PRIZE
BULGARIA
National Stage 2014

LACHEZAR GEORGIEV

VYARA STOYANOVA

University of Structural Engineering and Architecture (VSU) "Lyuben Karavelov", Sofia


Level 1
Entrance
Level 2
Playground area
Playground area
Vegetable garden


DETAIL 1 - Exterior Wall With Insulation
DETAIL 2 - Chipboard and dry screed above cellar
ISOVER TECHNOSTAR Sound Insulation Rw=74 db
Sound Insulation ISOVER AKUSTO 100 Rw=62 db
DETAIL 4 - Inverted roof with greening
DETAIL 5 - Window Insulation
1. Curtain Wall - 50 cm
2. Exterior plaster - 1.5 cm
3. ISOVER Kontur FSP 1-032 Easy Fix - 16 cm
4. ISOVER Kontur FSP 1-032 Easy Fix - 16 cm
5. Ventilated space - 20 cm
6. Triple-glazed window - 5.5 cm
Windows/Doors
U w, installed < 0.8 W/m².K
Water Supply System & Heat Gain Sources

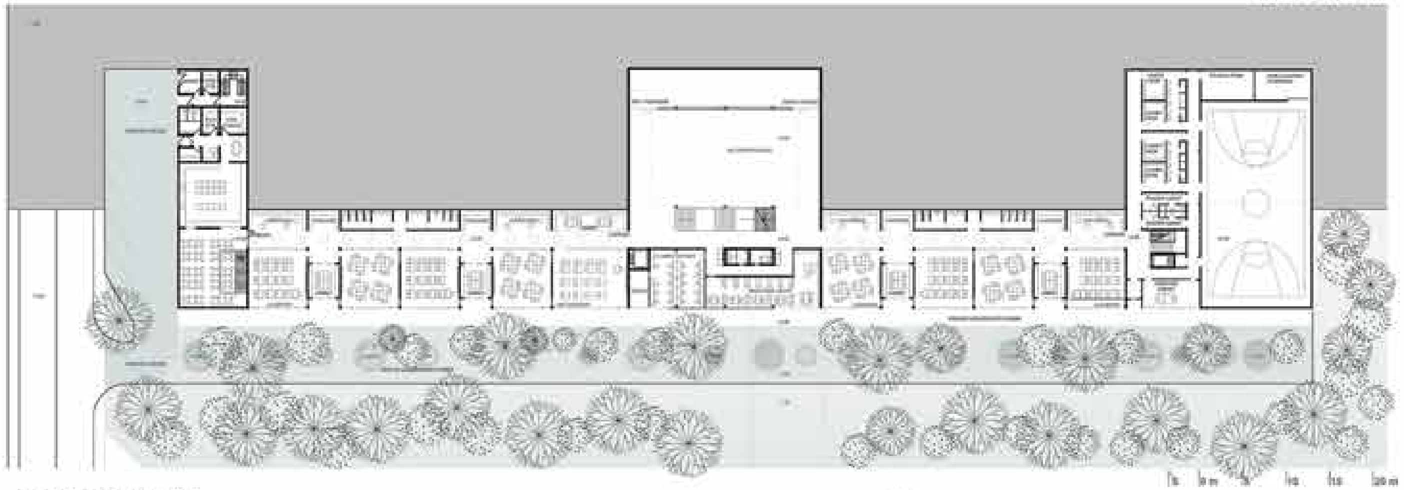
SCHOOL OF TOMORROW - GAZIANTEP

I PRIZE
CROATIA
National Stage 2014

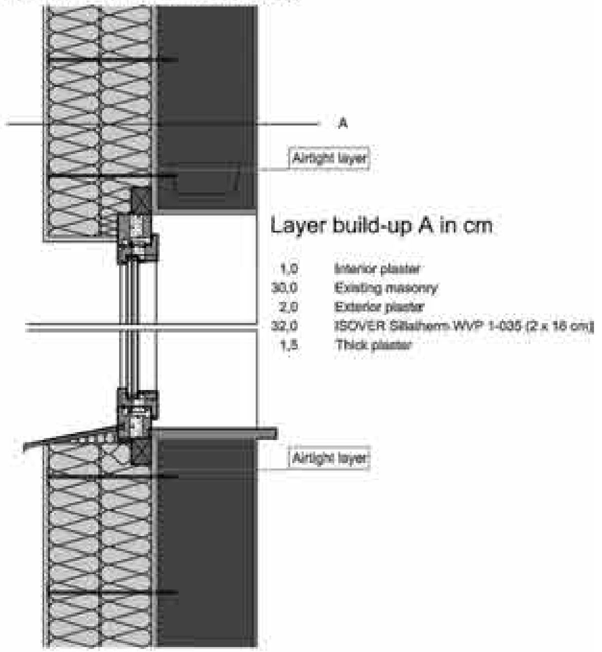
HRVOJE MAGDIĆ
INES MRAVUNAC
ŽELJKO SOVIĆ

Zagreb - University of Zagreb

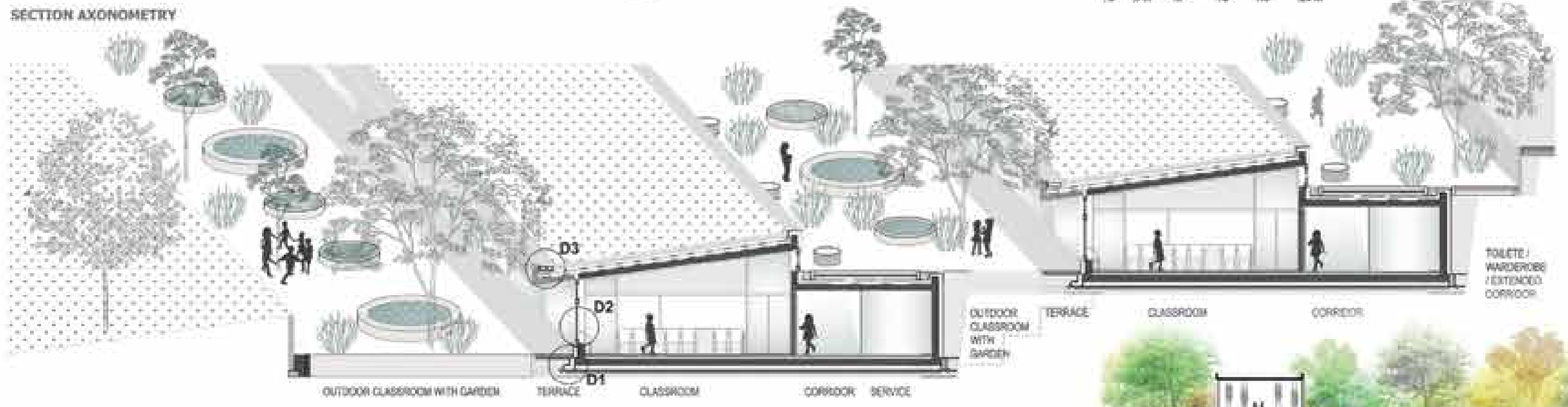
1ST FLOOR PLAN



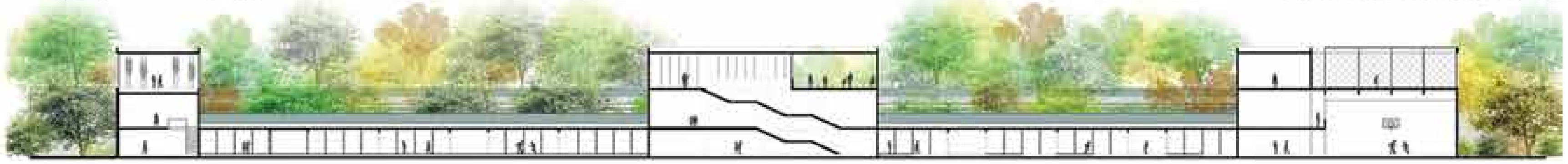
Exterior wall, window connection – below (without roller shutter casing)



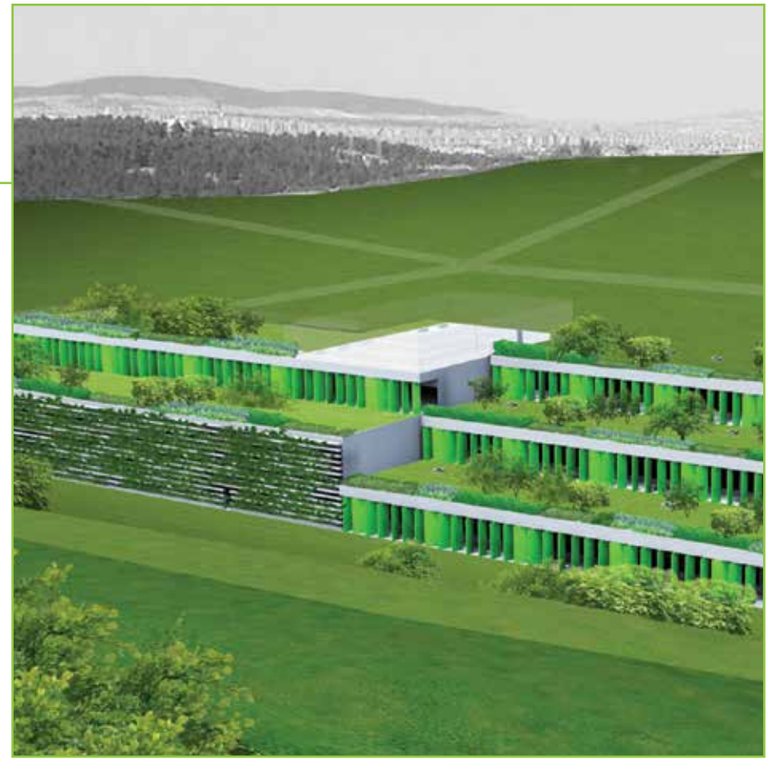
SECTION AXONOMETRY



LONGITUDINAL SECTION



SCHOOL OF TOMORROW - GAZIANTEP



II PRIZE
CROATIA
National Stage 2014

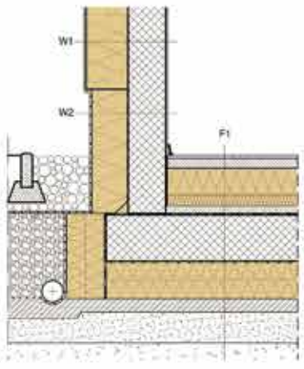
ANTONIJA GALAC

PETRA KORPAR

Zagreb - University of Zagreb

GROUND FLOOR PLAN

DETAIL 1



W1

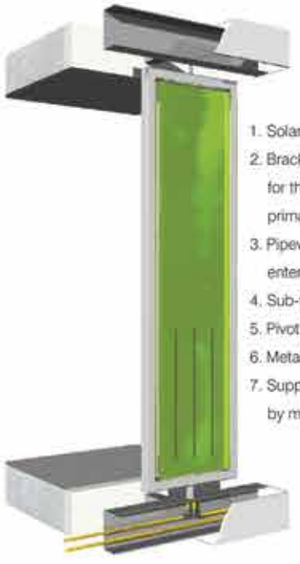
1,0	Interior plaster
20,0	Reinforced concrete wall
0,1	Bitumen priming coat
0,5	Separating layer (water barrier)
20,0	ISOVER EPS 100 F (Expanded polystyrene) glued and plugad
0,2	Leveling layer
0,3	Textil reinforced compound layer with undercoat
	Drainage sheet

W2

1,0	Interior plaster
20,0	Reinforced concrete wall
0,1	Bitumen priming coat
0,5	Seperating layer (water barrier)
18,0	ISOVER STYRODUR 3035 CS 180 (XPS - Extruded Polystyrene foam board)
	Reinforced mesh embadded in the base coat
	Leveling layer
0,2	Masonry primer
0,3	Mineral coat

F1

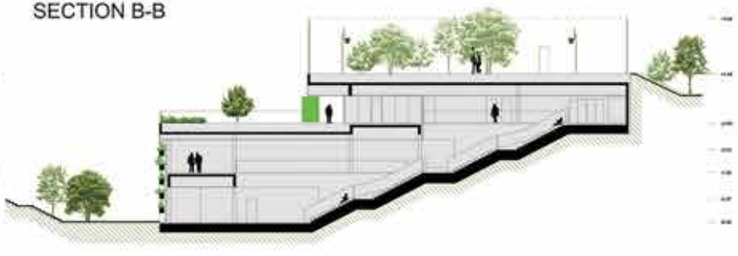
1,5	Parquet
	Floating layer
5,0	Cement screed
0,02	Vapour barrier
14,0	ISOVER EPS-W 20 (expanded polystyrene)
5,5	ISOVER impact sound insulation board 55
4,0	Protective concrete
	Separating layer
0,5	Separating layer (water barrier)
24,0	Sub-concrete
	Separating layer
20,0	2 x 10 cm ISOVER STYRODUR 4000 CS 100 (XPS - Extruded Polystyrene foam board)
	Protective concrete
	Round gravel



1. SolarLeaf external louvre
2. Brackets with thermal breaks for the transfer of loods to the primary substructure
3. Pipework for the medium to enter and leave
4. Sub-frame, rolled steel U-section
5. Pivot fixing allowing rotation
6. Metal cladding
7. Supply of pressured air, contolled by magnetic valves

SECTION A-A

SECTION B-B



SECTION C-C

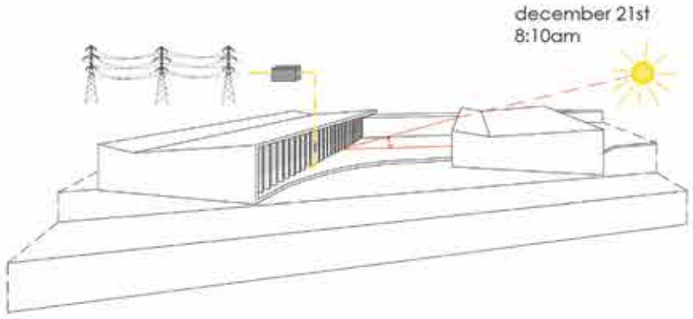
SCHOOL OF TOMORROW - GAZIANTEP

III PRIZE
CROATIA
National Stage 2014

IVAN VOJNIĆ

VALENTINA ŠTIVIČIĆ

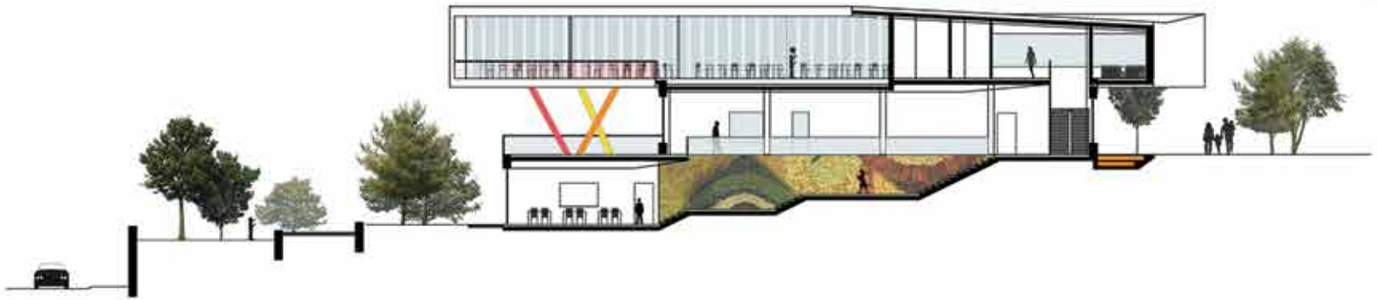
Zagreb - University of Zagreb



Thermal comfort - semitransparent brise soleil (sun - east, west)

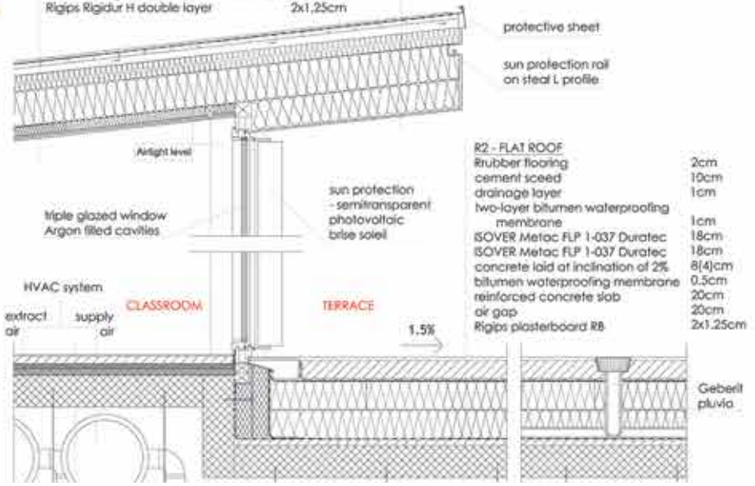
Sustainable concept - non-concentrating photovoltaic (PV) trackers integrated into movable sun-shading system

Natural daylight - sun angle check



P1 - PITCHED ROOF	
flat aluminium sheet	0.2cm
roof lathing	3cm
counter battens 5/8 with ISOVER Integra AP SupraFix fixed to rafters	5cm
ISOVER Integra AP SupraPlus	10cm
ISOVER Integra ZKF 1-032 doubled between wood 22/14	22cm
ISOVER VARIO KM Duplex UV	
ISOVER Integra UKF 1-032 bet. wood 6/6	20cm
Rigips Rigidur H double layer	2x1,25cm

P2 - PITCHED ROOF	
flat aluminium sheet	0.2cm
roof lathing	3cm
counter battens 5/8 with ISOVER Integra AP SupraFix fixed to rafters	5cm
ISOVER Integra AP SupraPlus	10cm
ISOVER Integra ZKF 1-032 doubled between wood 22/14	22cm
ISOVER Integra ZKF 1-032	18cm
exterior plaster	2x1,25cm



R2 - FLAT ROOF	
Rrubber flooring	2cm
cement sceed	10cm
drainage layer	1cm
two-layer bitumen waterproofing membrane	1cm
ISOVER Metac FLP 1-037 Duratec	18cm
ISOVER Metac FLP 1-037 Duratec	18cm
concrete laid at inclination of 2%	8(4)cm
bitumen waterproofing membrane	0.5cm
reinforced concrete slab	20cm
air gap	20cm
Rigips plasterboard RB	2x1.25cm

SCHOOL OF TOMORROW - GAZIANTEP

II PRIZE

ISOVER
Multi-Comfort House
Students Contest
International stage,
Bucharest 2014

I PRIZE

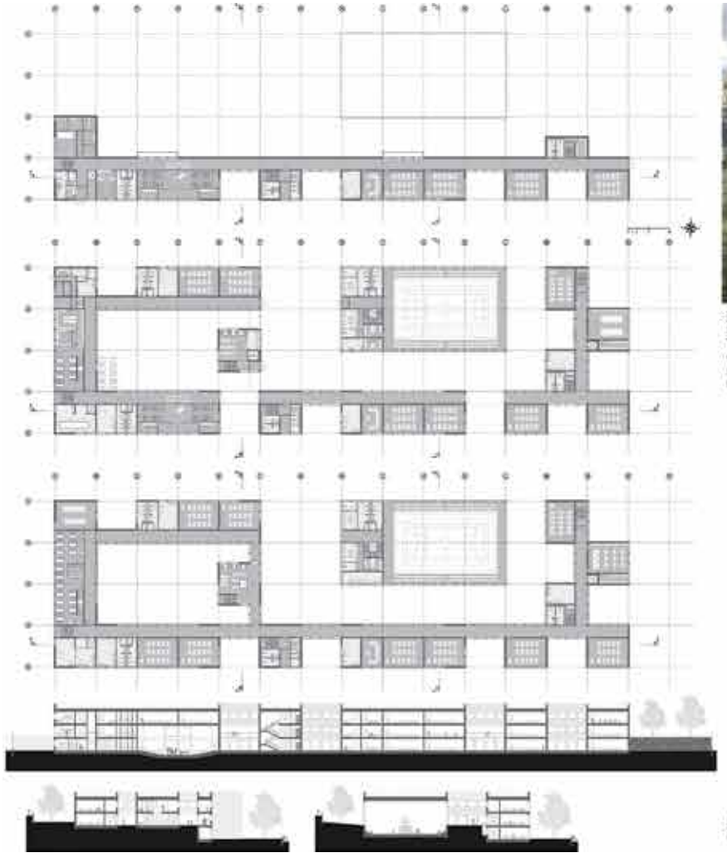
CZECH REPUBLIC
National Stage 2014

MAREK NOVAK

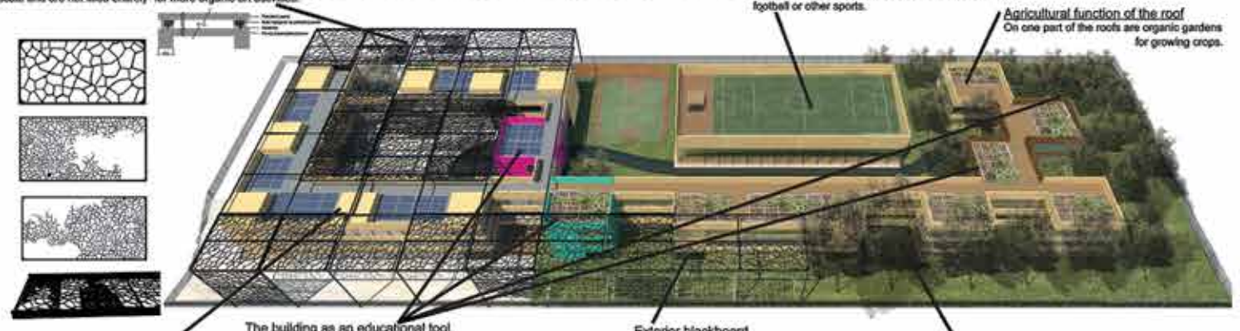
ZUZANA ZELINGEROVÁ

Prague - Czech Technical University, Faculty of Architecture

more information on **www.isover-students.com**



Sunhades
In the grid a system of shading panels was created. Because it is a school in Turkey, the panels are designed in oriental style – having an ornament. There are two levels of shading panels. The first level is stationary and the ornament of larger scale (some panels are also in the vertical plane). The second level is movable panels - panels can be moved over the beams. In the summer, the panels can be pulled out to shade outdoor space (which is also used for education) and in the winter or during periods when the sun is off, panels can be inserted over the roof. These panels have ornament smaller scale and are not filled entirely- for more organic art activities.



Sport function of the roof
The roof of the sport hall could be as a sport ground for football or other sports.

Agricultural function of the roof
On one part of the roofs are organic gardens for growing crops.

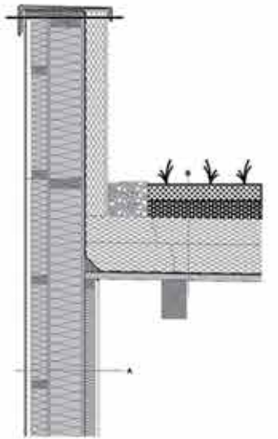
The building as an educational tool
The main material is wood, but two „cubes" (which serve to a different function than education) are designed with adobe bricks respectively fundermax boards in two colors, so that the children can learn to know ecological materials as well as other (organic) materials. Exterior walls on the ground floor are plastered with chalkboard paint, so that students and teachers can write on them and use exterior spaces as educational too. It increases the possibility of children's games during breaks and also provides lessons outside.

Exterior blackboard
Exterior walls on the ground floor are plastered with chalkboard paint, so that students and teachers can write on them and use exterior spaces as educational too. It increases the possibility of children's games during breaks and also provides lessons outside.

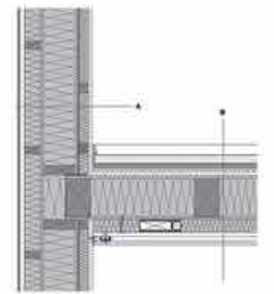
Forest
In the school area is in the eastern part growing number of trees. The eastern part of the land acts as a small forest - school nestled in the woods. The forest offers suitable environment for breaks and for science teaching.

Natural ventilation - MALQAF
For the natural ventilation are used malqafs on the roof - it is a very old system, that originaly came from the Islamic culture .

Inverted roof with pebbles (U/D) Eaves



Wood beam with RVF External wall, intermediate ceiling

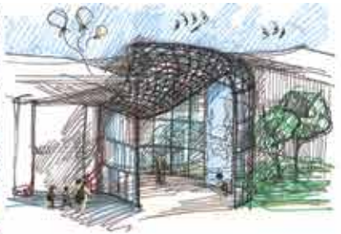


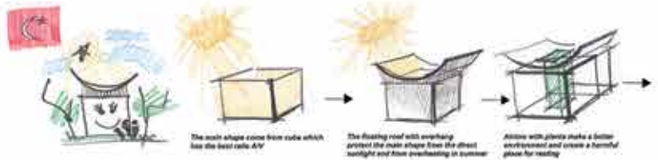
SCHOOL OF TOMORROW - GAZIANTEP

II PRIZE
CZECH REPUBLIC
National Stage 2014

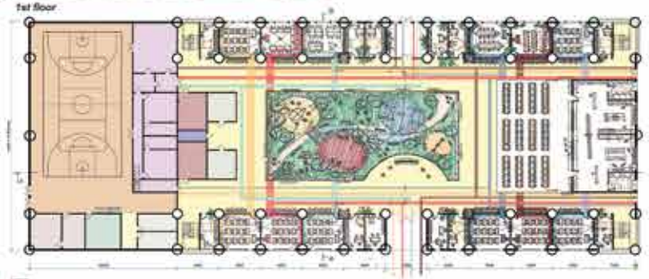
PETER
ZAŤKO

Prague - Czech Technical University, Faculty of Civil Engineering

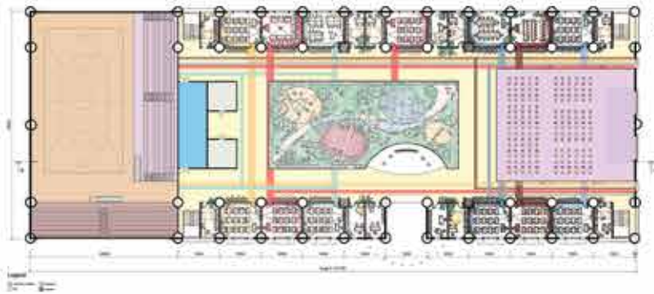




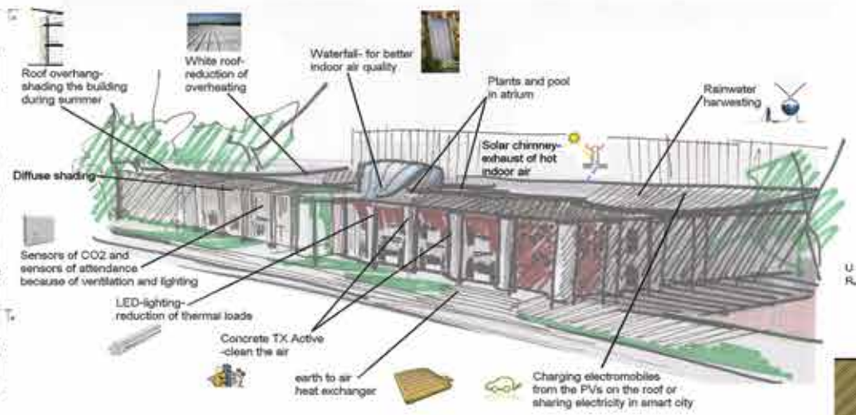
1st floor



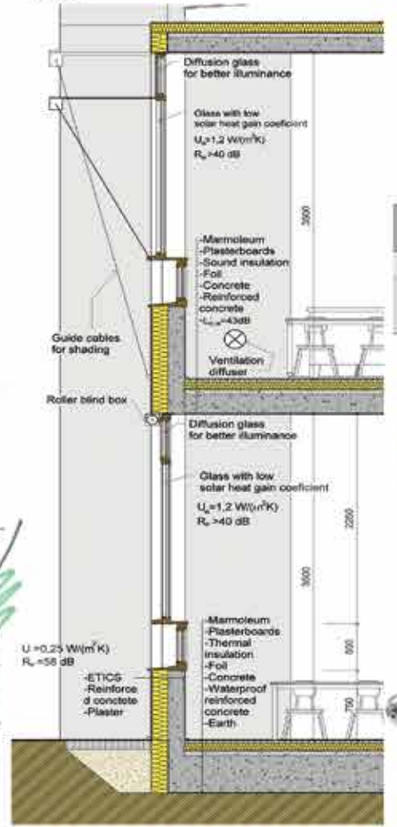
2nd floor



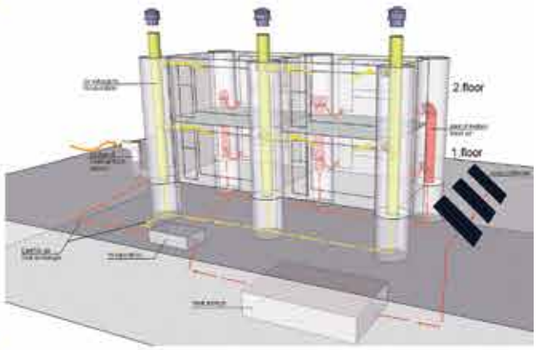
SUSTAINABILITY SCHEME



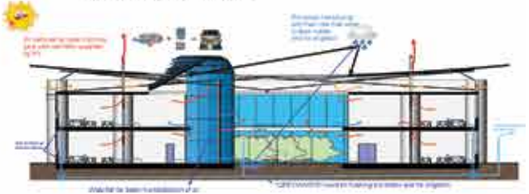
DETAIL



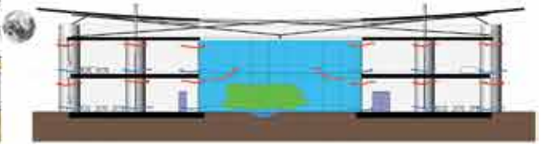
SCHEME OF WINTER VENTILATION



Ventilation in summer



Night ventilation



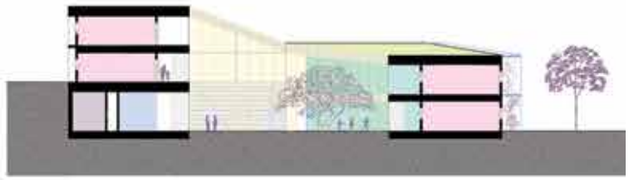
SCHOOL OF TOMORROW - GAZIANTEP

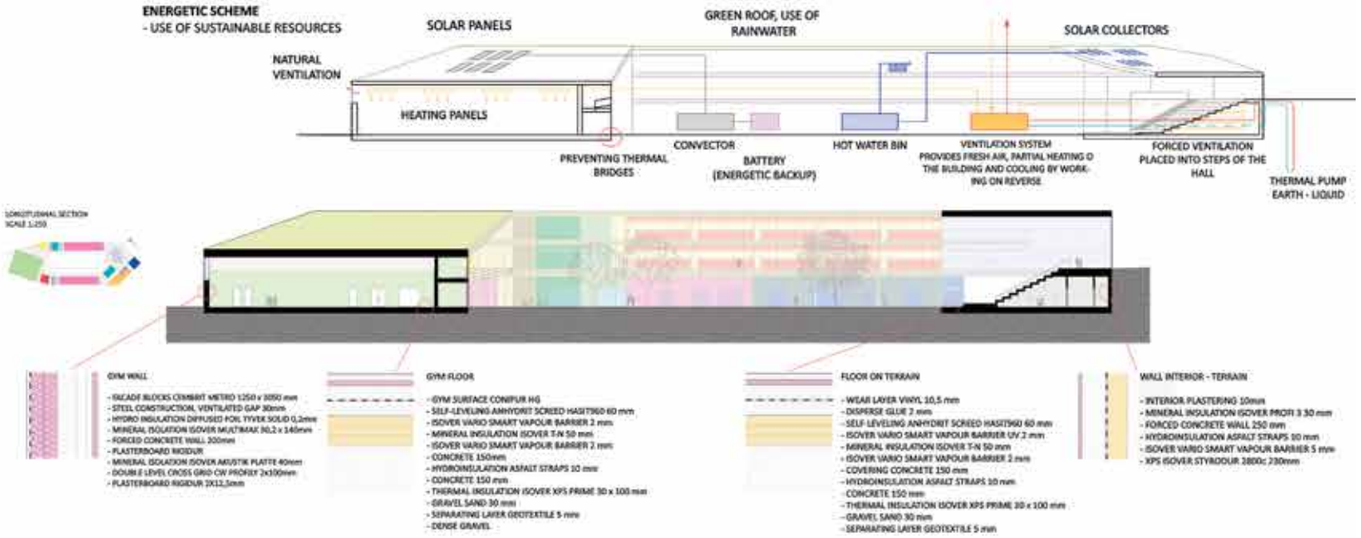
III PRIZE
CZECH REPUBLIC
National Stage 2014

BARBARA ZEDKOVÁ

TAMARA HOROVÁ

Prague - Czech Technical University, Faculty of Architecture




ENERGETIC SCHEME
- USE OF SUSTAINABLE RESOURCES
SOLAR PANELS
GREEN ROOF, USE OF RAINWATER
SOLAR COLLECTORS
NATURAL VENTILATION
HEATING PANELS
PREVENTING THERMAL BRIDGES
CONVECTOR
BATTERY (ENERGETIC BACKUP)
HOT WATER BIN
VENTILATION SYSTEM PROVIDES FRESH AIR, PARTIAL HEATING O THE BUILDING AND COOLING BY WORKING ON REVERSE
FORCED VENTILATION PLACED INTO STEPS OF THE HALL
THERMAL PUMP EARTH - LIQUID
GYM WALL
GYM FLOOR
FLOOR ON TERRAIN
WALL INTERIOR - TERRAIN

SCHOOL OF TOMORROW - GAZIANTEP

I PRIZE
ESTONIA
National Stage 2014

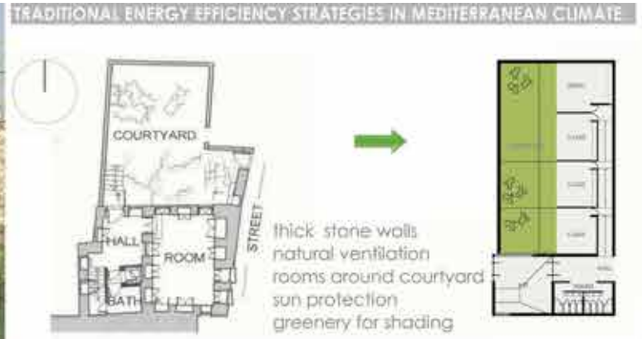
MARI RENNO

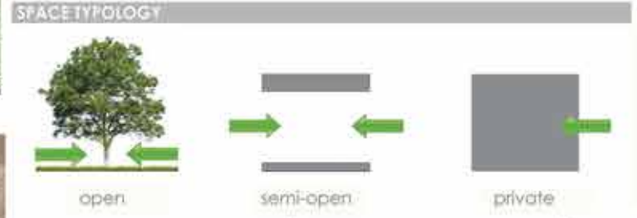
KAIDI PIIRIMETS

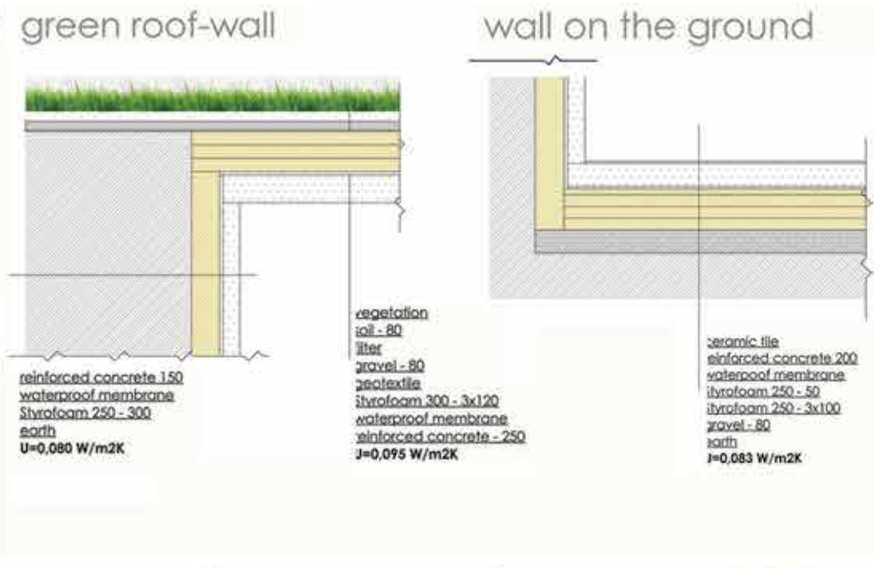
Tallinn – Tallinn University of Technology

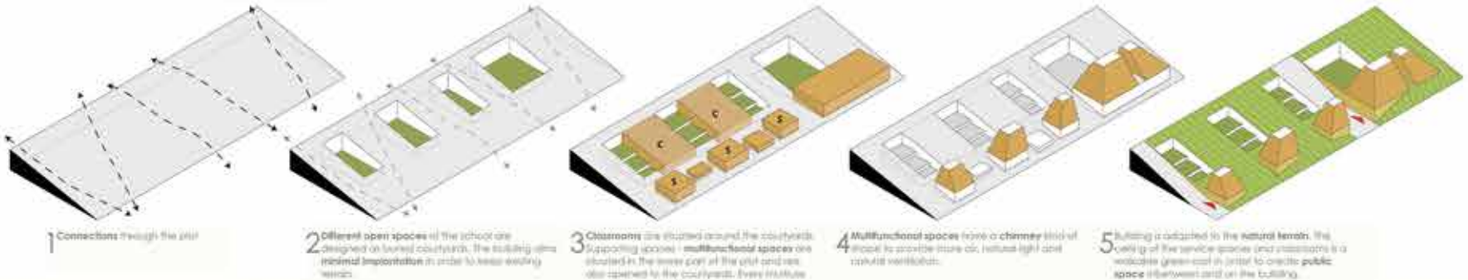

garden
sun protection
classrooms
opened to gardens
SECTION
multifunctional space
daylight and ventilation
public space


SOUTH ELEVATION 1:200
FLOOR PLAN


TRADITIONAL ENERGY EFFICIENCY STRATEGIES IN MEDITERRANEAN CLIMATE
COURTYARD
HALL
ROOM
BATH
STREET
thick stone walls
natural ventilation
rooms around courtyard
sun protection
greenery for shading


SPACE TYPOLOGY
open
semi-open
private


green roof-wall
reinforced concrete 150
waterproof membrane
Styrofoam 250 - 300
earth
U=0,080 W/m2K
wall on the ground
vegetation
soil - 80
filter
gravel - 80
geotextile
Styrofoam 300 - 3x120
waterproof membrane
reinforced concrete - 250
U=0,095 W/m2K
ceramic tile
reinforced concrete 200
waterproof membrane
styrofoam 250 - 50
styrofoam 250 - 3x100
gravel - 80
earth
U=0,083 W/m2K


1 Connections through the plot
2 Different open spaces of the school are designed as buried courtyards. The building aims minimal implantation in order to keep existing terrain.
3 Classrooms are situated around the courtyards. Supporting spaces - multifunctional spaces are situated in the lower part of the plot and are also opened to the courtyards. Every multiple
4 Multifunctional spaces have a chimney kind of device to provide more air, natural light and natural ventilation.
5 Building is adapted to the natural terrain. The ceiling of the service spaces and classrooms is a walkable green roof in order to create public space inbetween and on the building.

SCHOOL OF TOMORROW - GAZIANTEP

II PRIZE
ESTONIA
National Stage 2014

ANNE
VAISMA

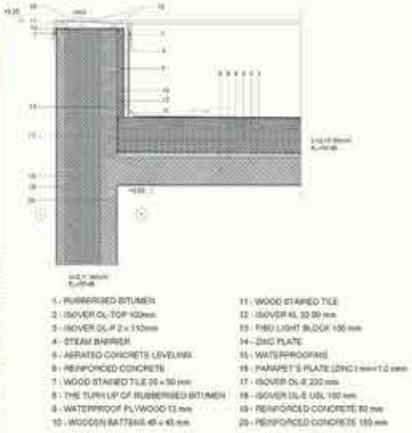
BRITT
VAHER

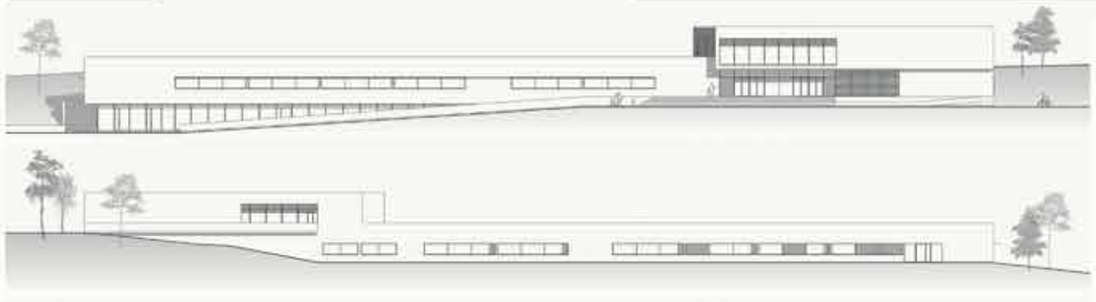
JANIKA
JÜRGENSON

Tallinn – Tallinn University of Technology

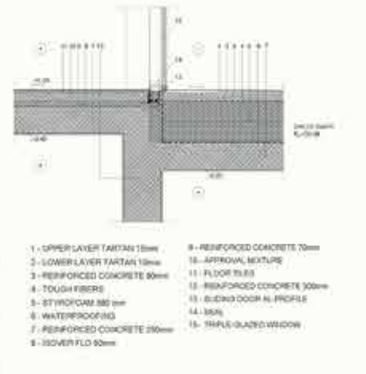

VEGETABLE GARDEN
SCHOOL BUS STOP
BICYCLE PARKING


Jingcuntou Elementary School


1 - RUBBERISED BITUMEN
2 - ISOVER OL-TOP 100mm
3 - ISOVER OL-P 2 x 110mm
4 - STEAM BARRIER
5 - AERATED CONCRETE LEVELLING
6 - REINFORCED CONCRETE
7 - WOOD STAINED TILE 20 x 50 mm
8 - THE TURN UP OF RUBBERISED BITUMEN
9 - WATERPROOF PLYWOOD 13 mm
10 - WOODEN BATTENS 40 x 40 mm
11 - WOOD STAINED TILE
12 - ISOVER KL 33 30 mm
13 - FIRD LIGHT BLOCK 100 mm
14 - ZINC PLATE
15 - WATERPROOFING
16 - PARAPET S PLATE (ZINC t mm=t 0 mm)
17 - ISOVER OL-E 200 mm
18 - ISOVER OL-E USL 100 mm
19 - REINFORCED CONCRETE 80 mm
20 - REINFORCED CONCRETE 150 mm




PV PANELS
VENTILATOR WITH HEAT RECOVERY
SUPPLY AIR
SOLID SOLAR ORIENTATION
SUN SHADING AND TRIPLE GLAZED WINDOWS
RAINWATER SAVING DEVICES
CONNECTION TO NATURE
HEAT STORE
BATTERIES
POOL HEATING


1 - UPPER LAYER TARTAN 13mm
2 - LOWER LAYER TARTAN 10mm
3 - REINFORCED CONCRETE 80mm
4 - TOUGH FIBERS
5 - STYROFOAM 380 mm
6 - WATERPROOFING
7 - REINFORCED CONCRETE 250mm
8 - ISOVER FLO 60mm
9 - REINFORCED CONCRETE 70mm
10 - APPROVAL MIXTURE
11 - FLOOR TILES
12 - REINFORCED CONCRETE 300mm
13 - SLIDING DOOR AL-PROFILE
14 - SILLS
15 - TRIPLE GLAZED WINDOW

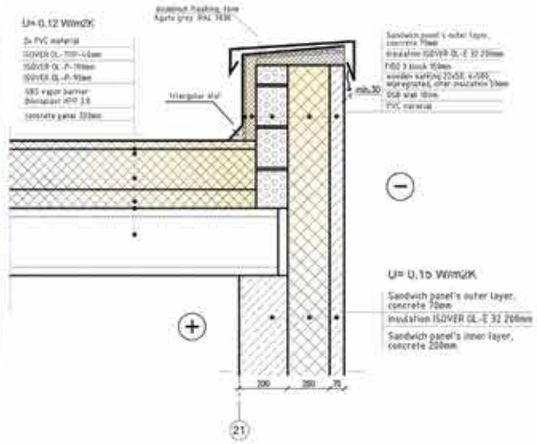
SCHOOL OF TOMORROW - GAZIANTEP

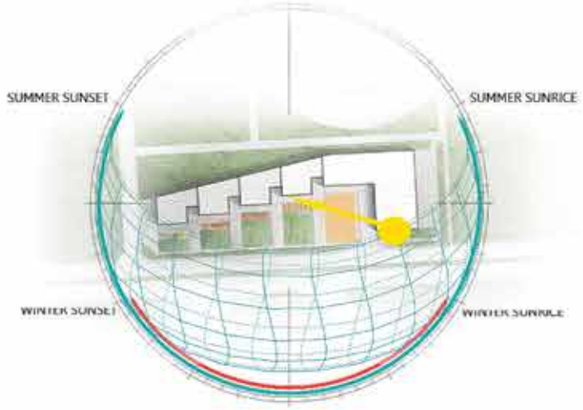
III PRIZE
ESTONIA
National Stage 2014

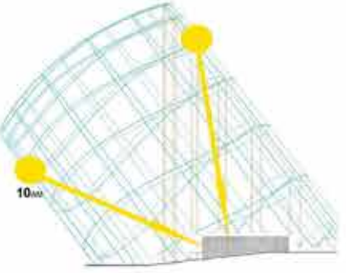
ANNE PIIRSOO

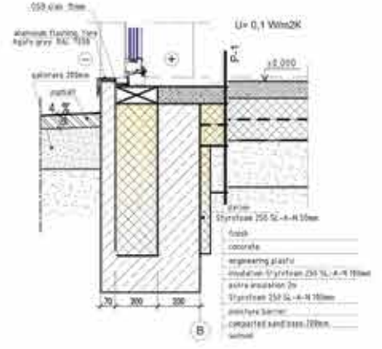
KARINA MAMONTOVA

Tallinn – Tallinn University of Technology









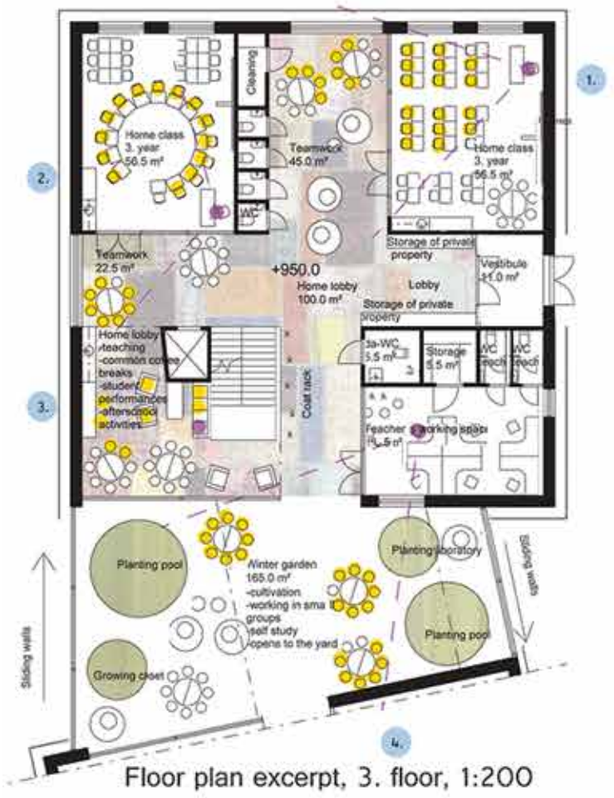
more about the project on **www.isover-students.com**

SCHOOL OF TOMORROW - GAZIANTEP

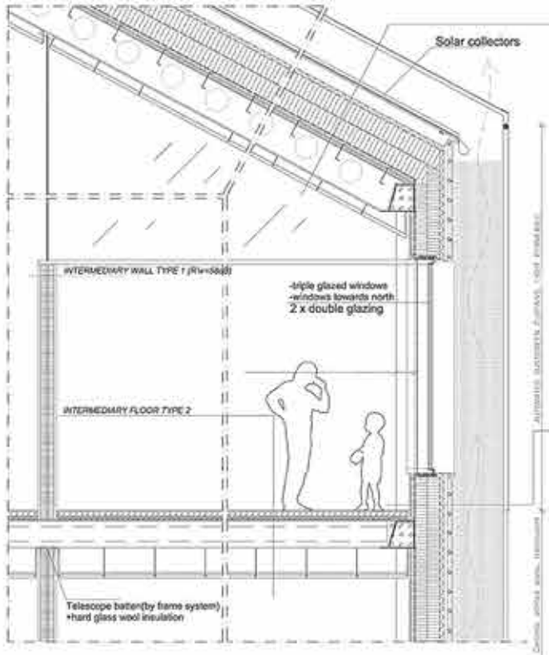
I PRIZE
FINLAND
National Stage 2014

MATTI LAKKALA

Oulu - University of Oulu, Department of Architecture



Floor plan excerpt, 3. floor, 1:200

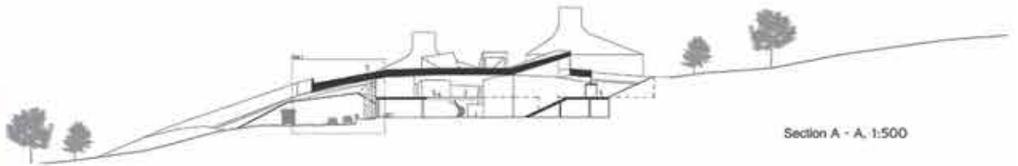


ROOF TYPE 2 u-value 0.047

Surface cladding, perforated steel sheets, color slides from white to black towards the solar chimney	500mm
Bearing structure for surface cladding, air	
Solar collectors	
Water proofing, bitumen felt, white	
Softwood plywood	18mm
Bearing structure c/c 900mm	655mm
Ventilation cavity	150mm
Wind protection surface, **ISOVER RKL-31 FACADE**	50mm
Thermal insulation, **ISOVER KL-33**	450mm
Water vapour retardant climate membrane, **ISOVER VARIO KM DUPLEX UV** seams are overlapped and taped with **ISOVER VARIO** products, with inlets **ISOVER VARIO** factory made linlet parts are used	
Softwood plywood	18mm
Bearing structure, I-beams, R60 fire protection painting	500mm
Sound insulation **Isover KT-37**	50mm
Acustical suspended ceiling system **ECOPHON Master™ Da**	96mm

OUTER WALL TYPE 1 u-value 0,076

Structural active/passive solar shading: -Sunscreen curtain automatically adjustable by solar angle, white (light permeable) -Ceramic printed facade glazing (white pattern), translucent -Vertical perforated steel sheets preventing diagonal solar radiation, color white	500mm
Outer cladding, ceramic facade tile, hidden attachment, high-gloss glazing, different colors	30mm
Ventilation cavity, suspension system	83mm
Wind protection surface, **ISOVER RKL-31 FACADE**	50mm
Thermal insulation, **ISOVER KL-33** horizontal frame 50 x 150mm, c/c 600mm vertical frame 50 x 150mm, c/c 600mm	300mm
Water vapour retardant climate membrane, **ISOVER VARIO KM DUPLEX UV** seams are overlapped and taped with **ISOVER VARIO** products, with inlets **ISOVER VARIO** factory made linlet parts are used	
Thermal insulation, **ISOVER KL-33** horizontal battens 50 x 50mm, c/c 600mm	50mm
Inner cladding, gypsum board, white painting	13mm
ECOPHON Akusto™ Wall C in some of the walls	40mm



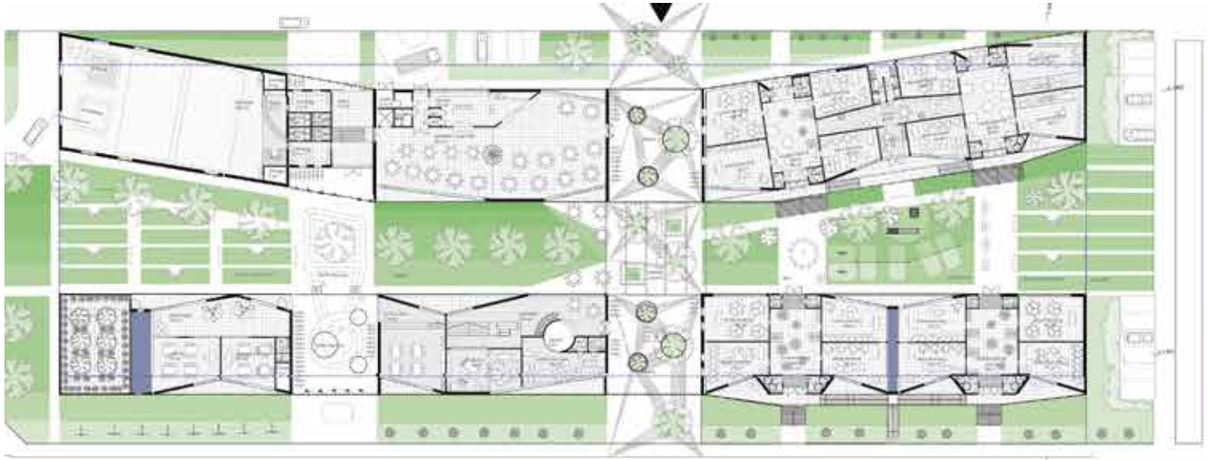
Section A - A, 1:500

SCHOOL OF TOMORROW - GAZIANTEP

II PRIZE
FINLAND
National Stage 2014

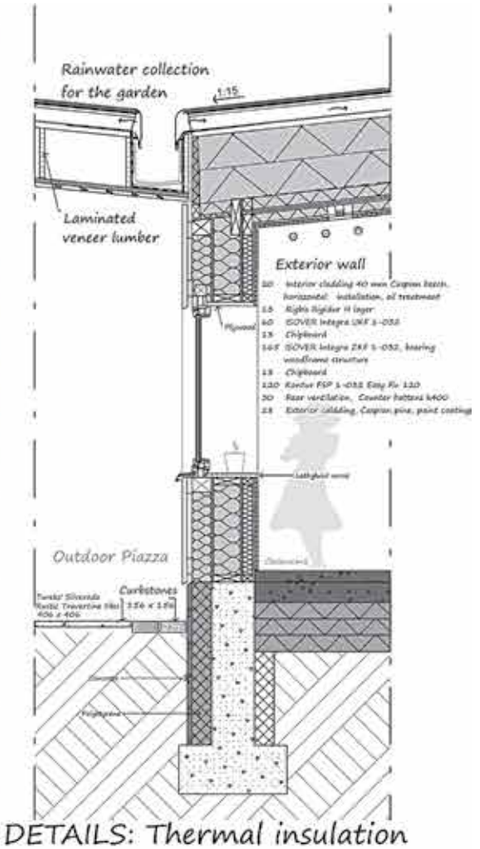
AINO KORHONEN

Oulu - University of Oulu, Department of Architecture



WINTER: Thermal mass + insulation

SUMMER: Solar shading, passive ventilation



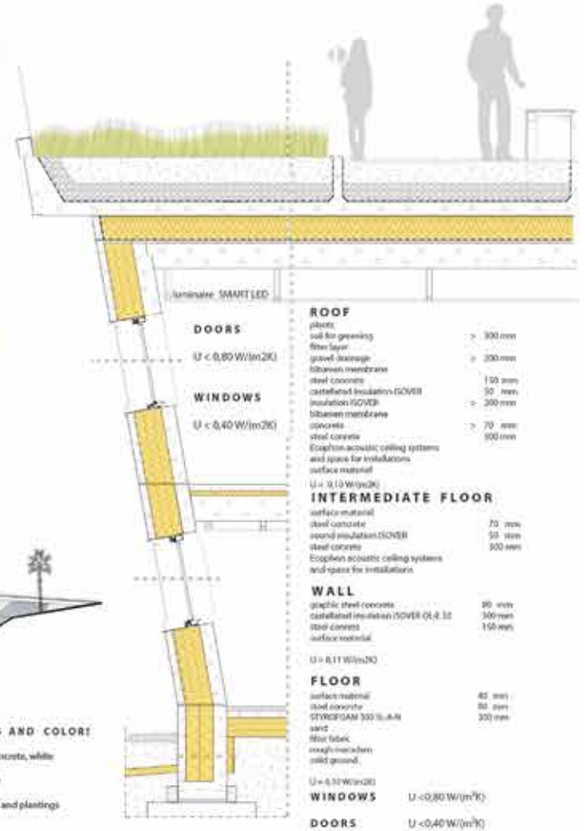
DETAILS: Thermal insulation

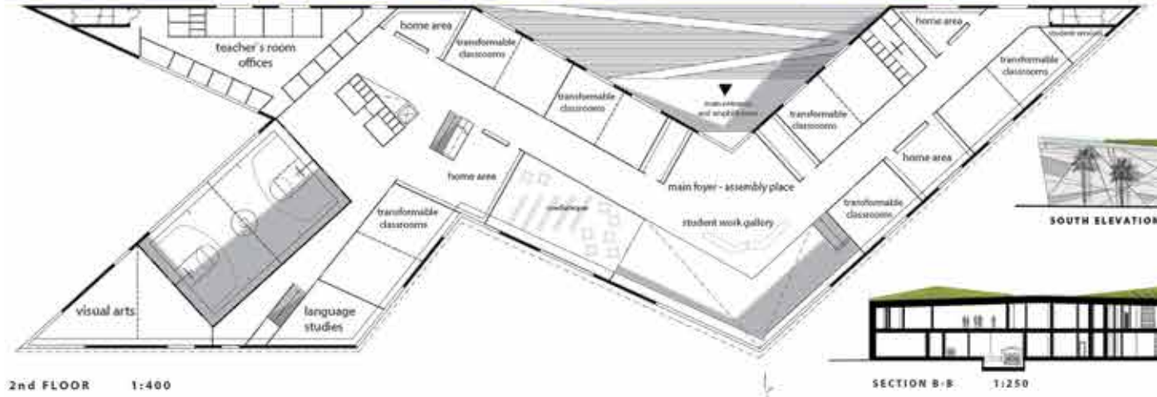
SCHOOL OF TOMORROW - GAZIANTEP

III PRIZE
FINLAND
National Stage 2014

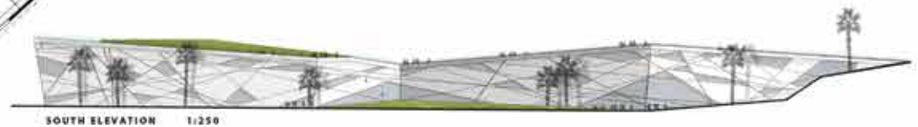
MATTI RAJAMAA

Oulu - University of Oulu, Department of Architecture

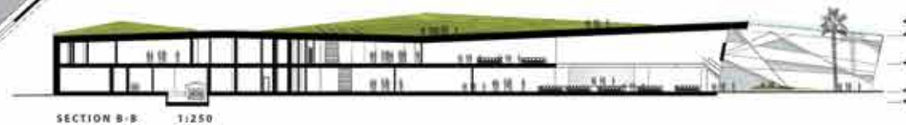




2nd FLOOR 1:400



SOUTH ELEVATION 1:250



SECTION B-B 1:250

MATERIALS AND COLORS

1. graphic concrete, white
2. glass, clear
3. green roof and plantings

SCHOOL OF TOMORROW - GAZIANTEP

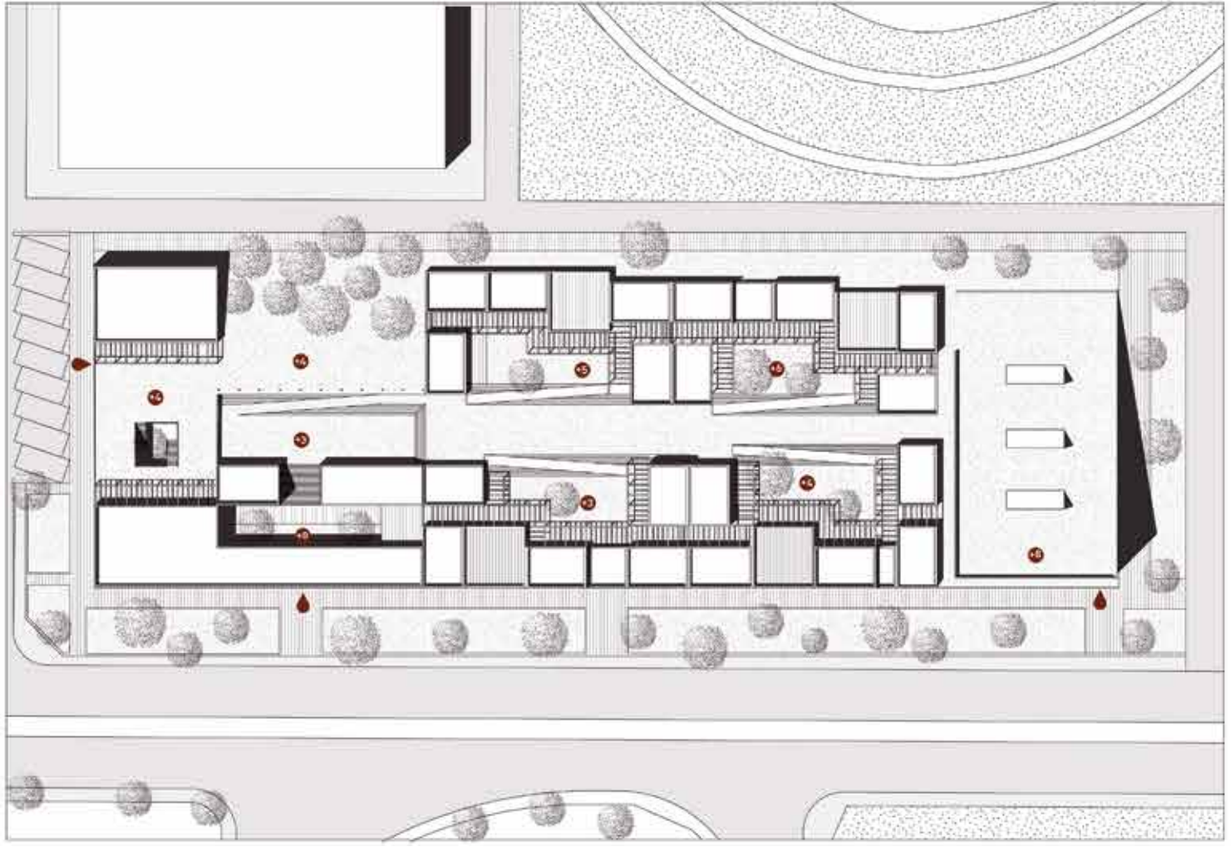
I PRIZE
FRANCE
National Stage 2014

CHLOÉ DE SALINS

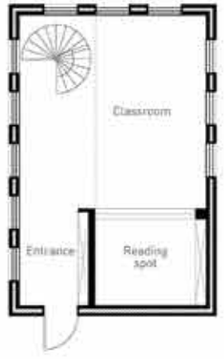
SAMIA WAHBI

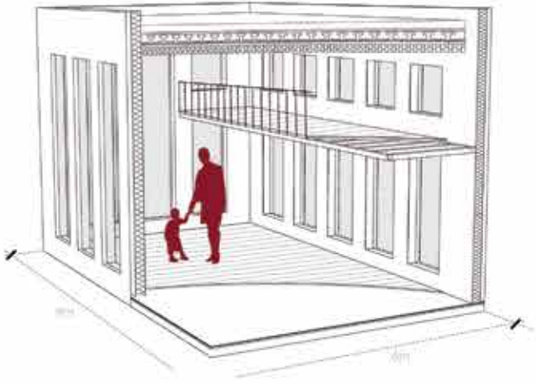
FLORIAN LEFEBVRE

Ecole Nationale Supérieure d'Architecture Paris-Malaquais

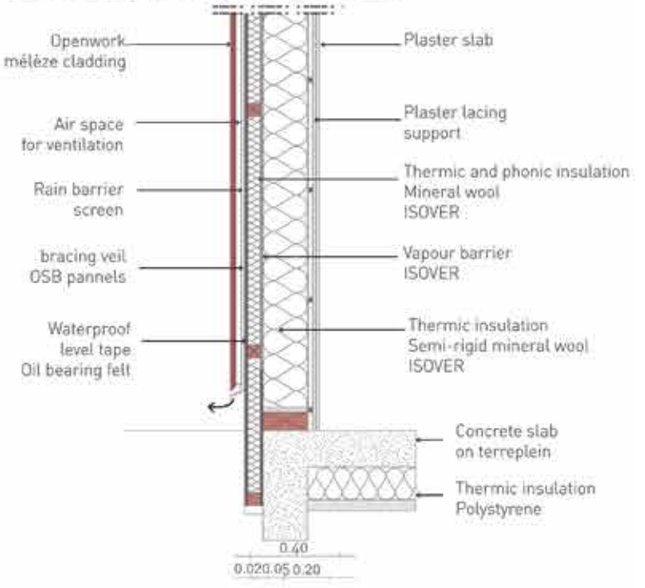


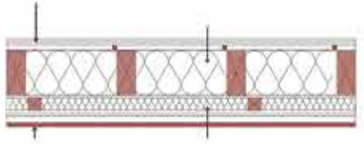
CLASSROOMS





EXTERNAL WALLS 1.20





SCHOOL OF TOMORROW - GAZIANTEP

I PRIZE

ISOVER
Multi-Comfort House
Students Contest
International stage,
Bucharest 2014

II PRIZE

FRANCE
National Stage 2014

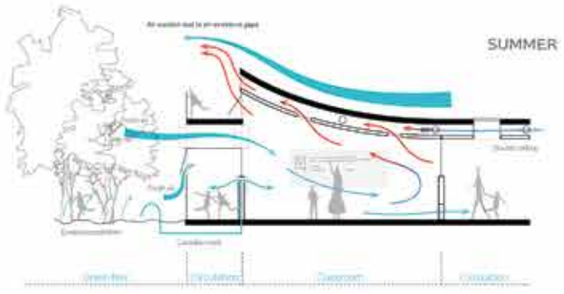
BEN NAIM
HAGAI

NAN
WENXIN

MARCIA
KUBRUSLY
TOSIN
CLOQUETTE

Ecole Nationale Supérieure d'Architecture Paris-Malaquais

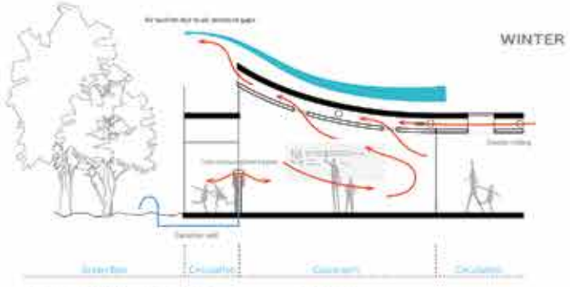
more information on **www.isover-students.com**



SUMMER

NATURAL VENTILATION
Due to the evapotranspiration of plants and the shade created by them, the air remains cool inside the Green Box. Fresh air is drawn by a Canadian Well system and distributed in the school.

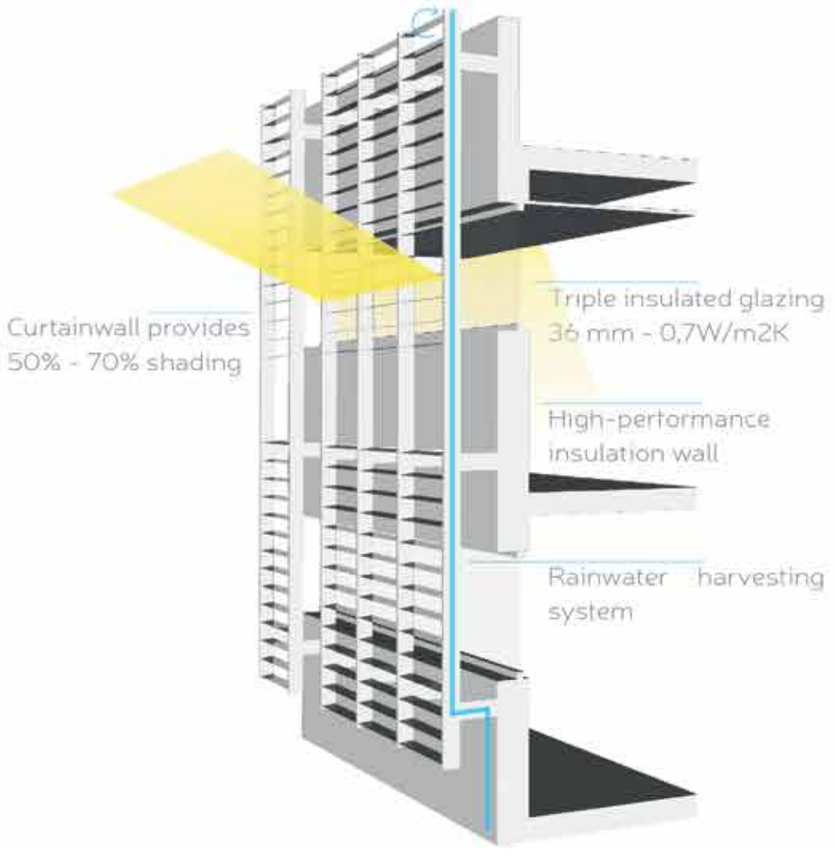
INERTIA
During the night, the windows are opened to store the maximum freshness. Due to the high inertia of materials, freshness is redistributed throughout the day.

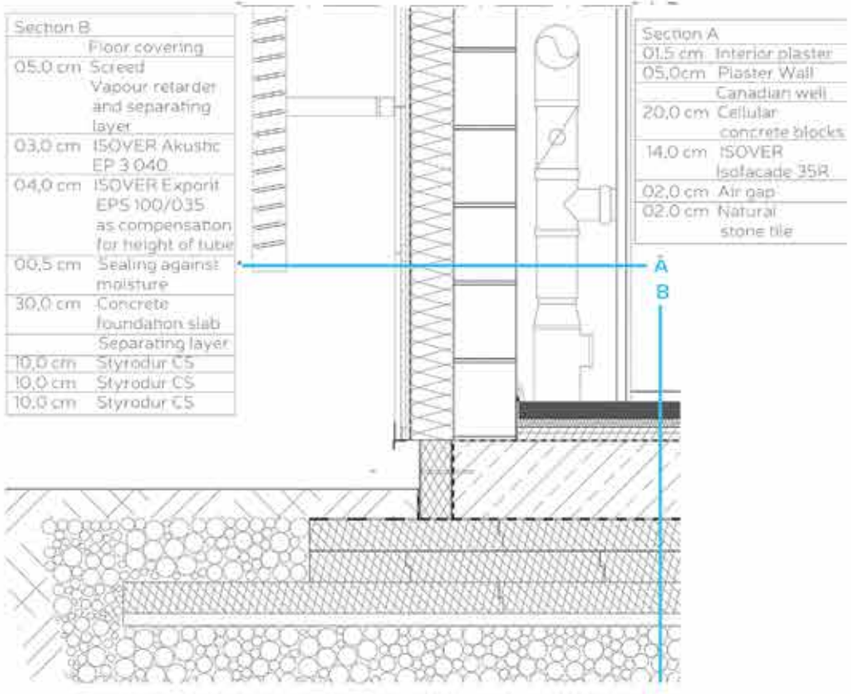


WINTER

NATURAL VENTILATION
In the winter, the fresh air from the Green Box is inhaled and pre-heated in the Canadian Well. It is then heated to the input of the room by a low consumption heater.

INERTIA
At night, the windows and louvers are closed in order to minimize heat loss. The heat stored during the day is retained and will be redistributed the following day.



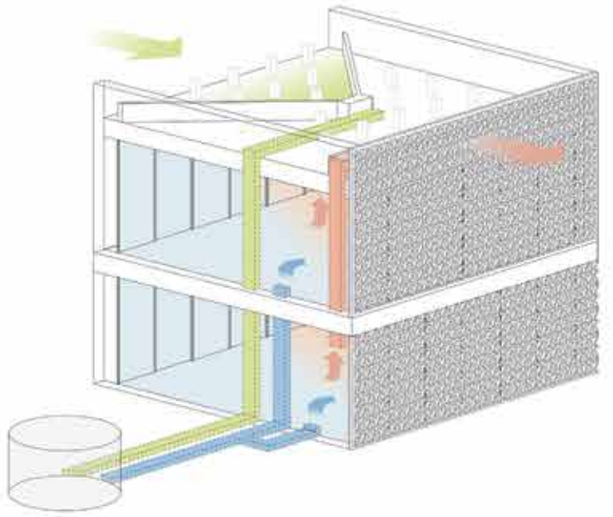


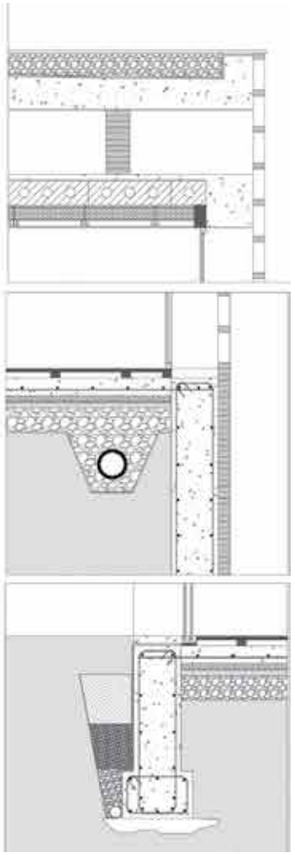
SCHOOL OF TOMORROW - GAZIANTEP

III PRIZE
FRANCE
National Stage 2014

JEAN-BAPTISTE LESCUDÉ-PLAÀ
EMELINE STETENFELD
ALEXIS JUILLOT

Ecole Nationale Supérieure d'Architecture Paris-Malaquais





more about the project on **www.isover-students.com**

SCHOOL OF TOMORROW - GAZIANTEP

Special award

ISOVER
Multi-Comfort House
Students Contest
International stage,
Bucharest 2014

I PRIZE
KAZAKHSTAN
National Stage 2014

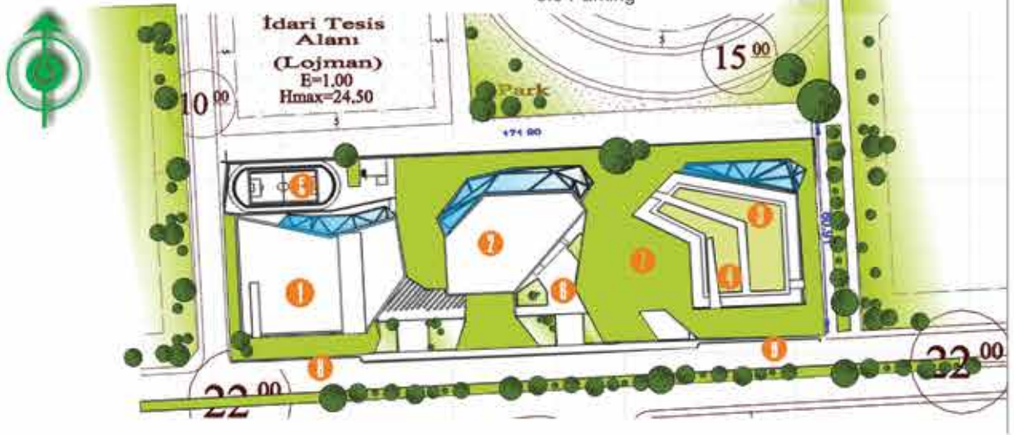
ANTON FEDYANIN

Almaty - KazGASA

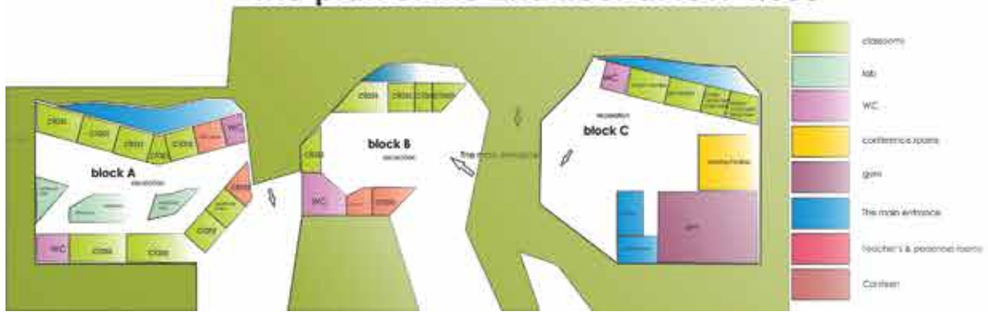
more information on **www.isover-students.com**

Master plan

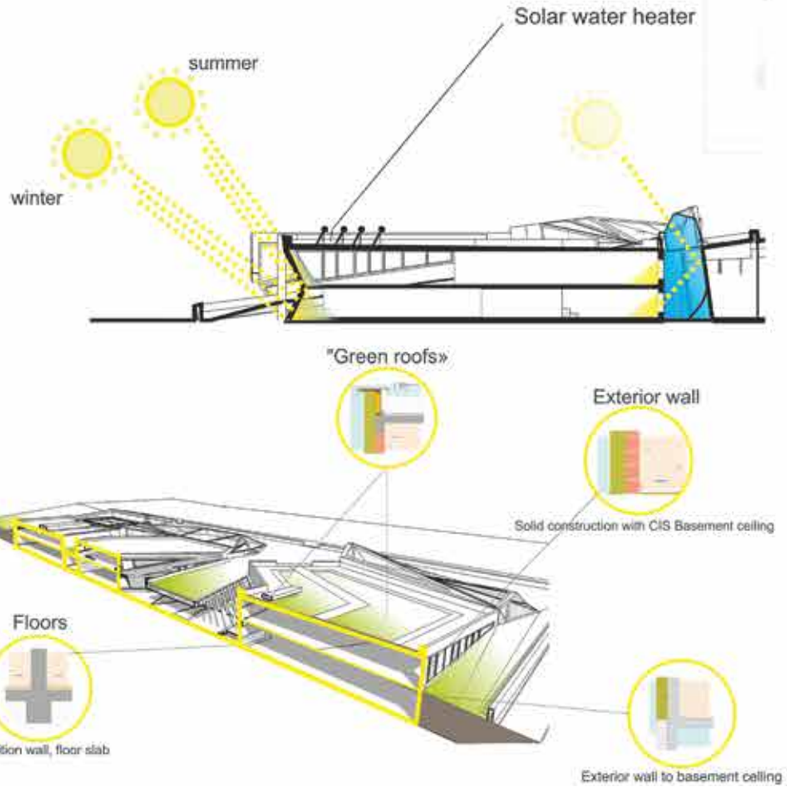
1 Block A, Block B-2, 3-unit, 4-in Roof Garden
5,6-Playground, amfitetar 7 - Green Roofing,
8.9 Parking



The plan of the 2nd floor at lev. 4.000



Insolation

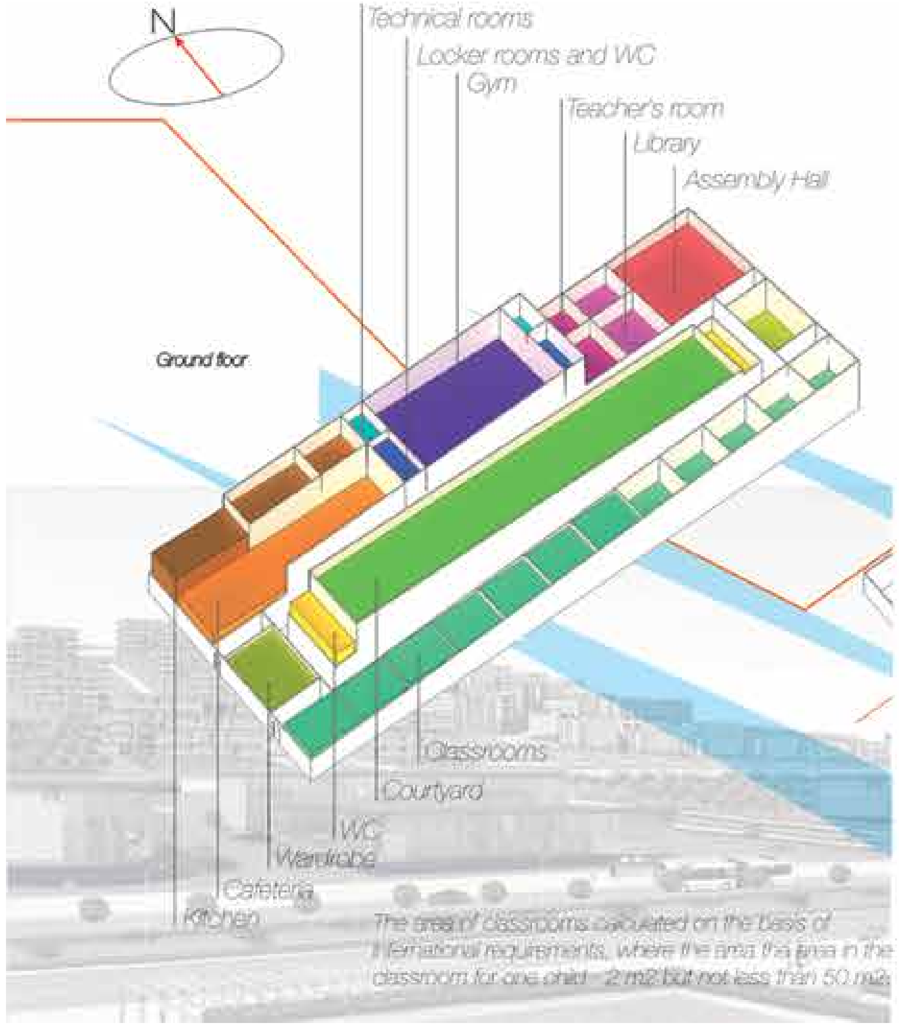


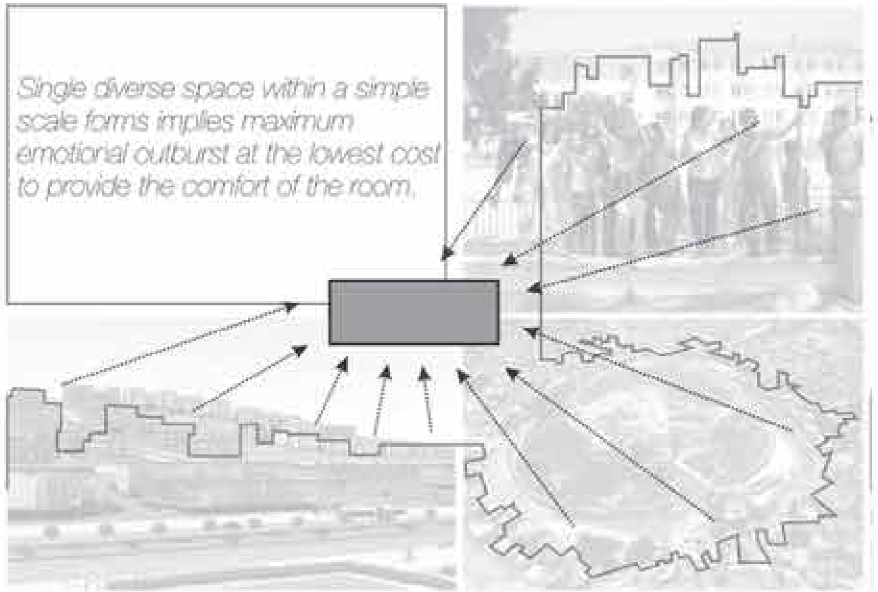
SCHOOL OF TOMORROW - GAZIANTEP

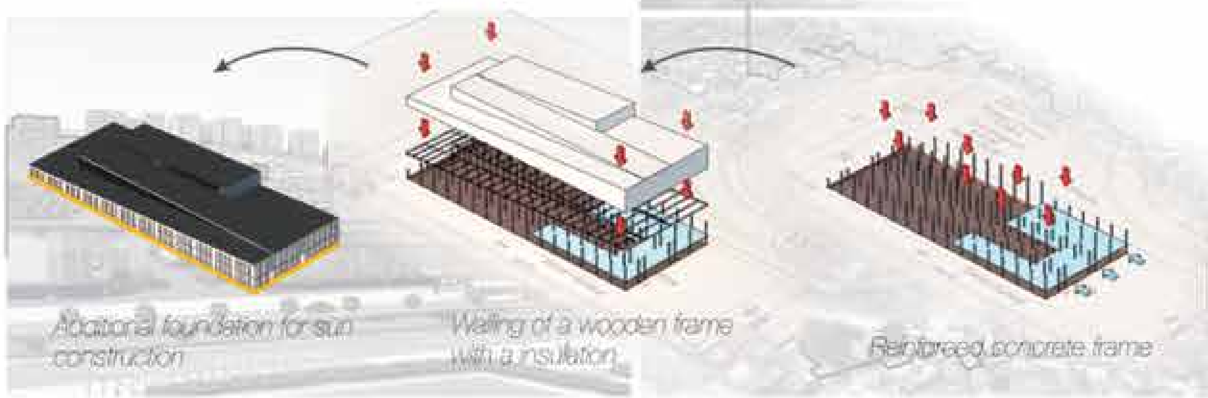
II PRIZE
KAZAKHSTAN
National Stage 2014

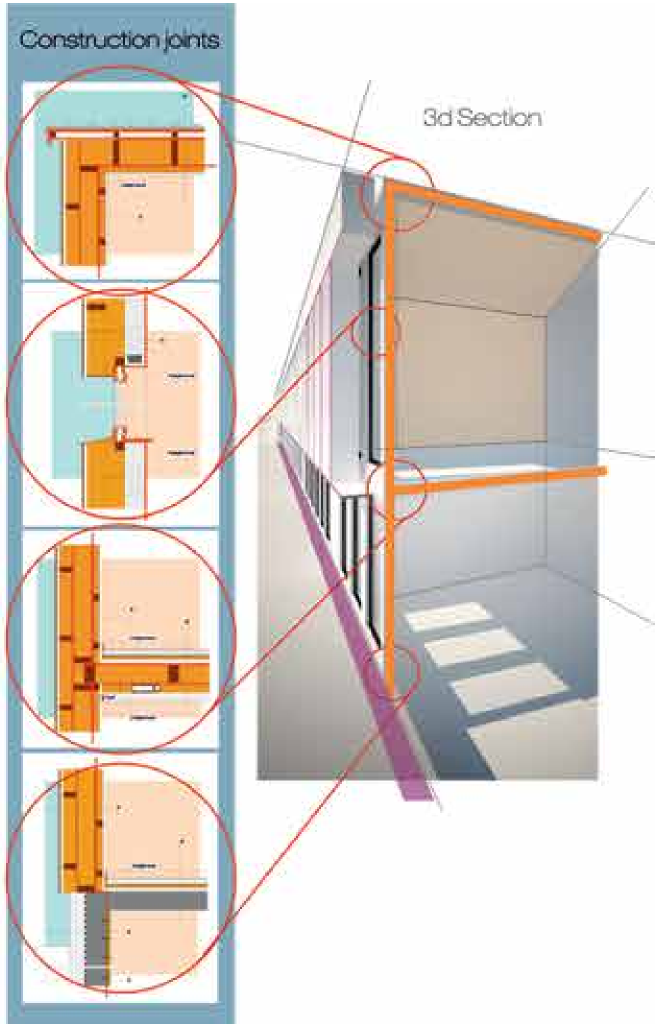
MIKHAIL
KIBITKIN

Almaty - KazGASA


N
Technical rooms
Locker rooms and WC
Gym
Teacher's room
Library
Assembly Hall
Ground floor
Classrooms
Courtyard
WC
Wardrobe
Cafeteria
Kitchen
The area of classrooms calculated on the basis of
international requirements, where the area the area in the
classroom for one child - 2 m2 but not less than 50 m2.


Single diverse space within a simple
scale forms implies maximum
emotional outburst at the lowest cost
to provide the comfort of the room.


Additional foundation for such
construction
Walling of a wooden frame
with a insulation
Reinforced concrete frame


Construction joints
3d Section

SCHOOL OF TOMORROW - GAZIANTEP

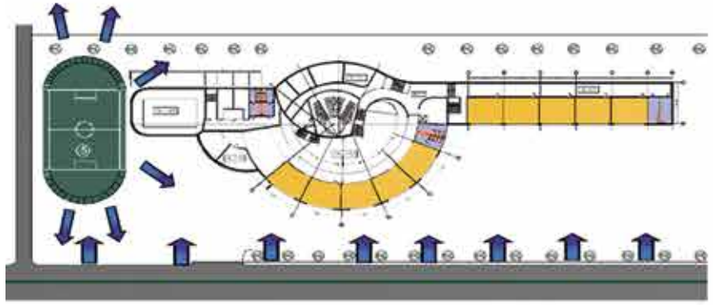
III PRIZE
KAZAKHSTAN
National Stage 2014

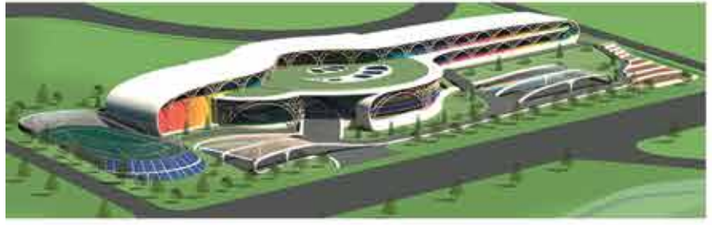
MOLDAKALYK ASSEM

KHAMZINA ELFIYA

Almaty - KazGASA

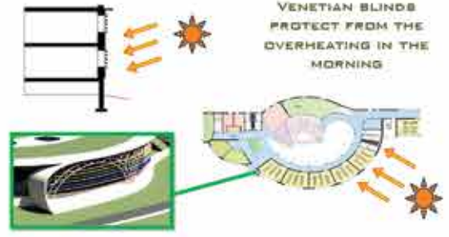
External acoustic comfort





Internal acoustic comfort

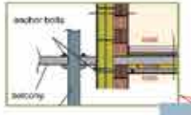
USING OF CONSTRUCTIONAL PLANNING FOR OH PREVENTING



VENETIAN BLINDS PROTECT FROM THE OVERHEATING IN THE MORNING

Construction for energy efficiency

Forced ventilation with heat recovery

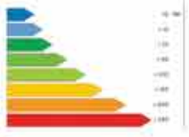


thermal gap between the balcony and the wall is used to avoid thermal bridges

arches support a balcony

Transmission Heat Losses:	26221.13 kWh/a
Ventilation Heat Losses:	81114.30 kWh/a
Total Heat Losses:	107335.44 kWh/a
Internal Heat Gains:	42096.70 kWh/a
Available Solar Heat Gains:	25873.92 kWh/a
Total Heat Gains:	65257.14 kWh/a
Annual Heat Demand:	42078.30 kWh/a
Specific Annual Heat Demand:	**8.26 kWh/(m²a)**

Energy efficiency classes



SCHOOL OF TOMORROW - GAZIANTEP

I PRIZE
KYRGYZSTAN
National Stage 2014

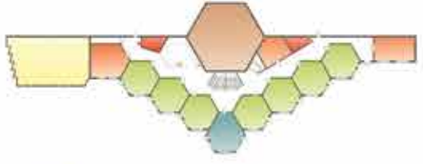
AIGUL ZHANYBEKOVA

KGUSTA

Scheme of the first floor plan 2530 m2

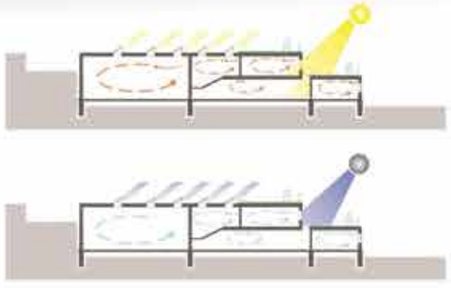
Recreation 180 m2
Dining room with kitchen 180 m2
Bathroom 32 m2
Administration
Assembly hall to 250 places 240 m2
Classrooms 360 m2
Heatroom 150m2
Sport hall 230 m2
Foyer Information centre 500 m2

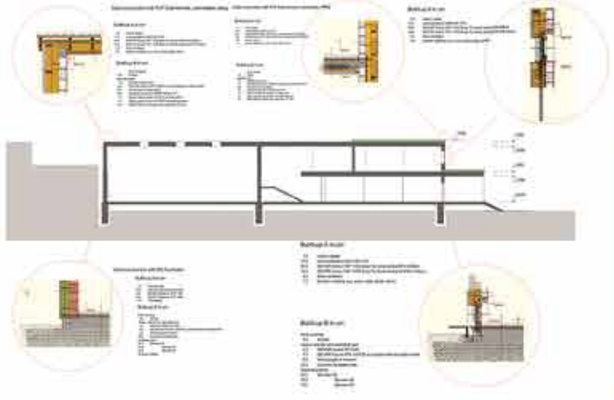
Scheme of the second floor plan 1 000 m2



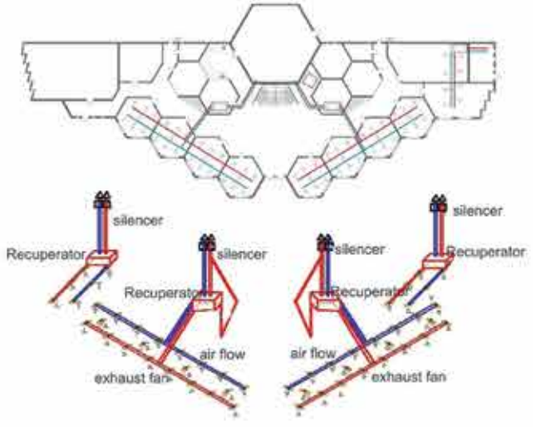
Classrooms 420 m2
Subsidiary rooms 160 m2
Administration 65 m2
Bathroom 32 m2

Stream of insolation scheme



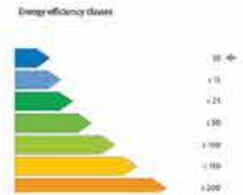


Ventilation system



Calculations

Transmission Heat Losses:	83849.56	kWh/a
Ventilation Heat Losses:	14053.20	kWh/a
Total Heat Losses:	98002.76	kWh/a
Internal Heat Gains:	34408.04	kWh/a
Available Solar Heat Gains:	30021.71	kWh/a
Total Heat Gains:	61480.98	kWh/a
Annual Heat Demand:	36521.78	kWh/a
Specific Annual Heat Demand:	6.77	kWh/(m²a)



SCHOOL OF TOMORROW - GAZIANTEP

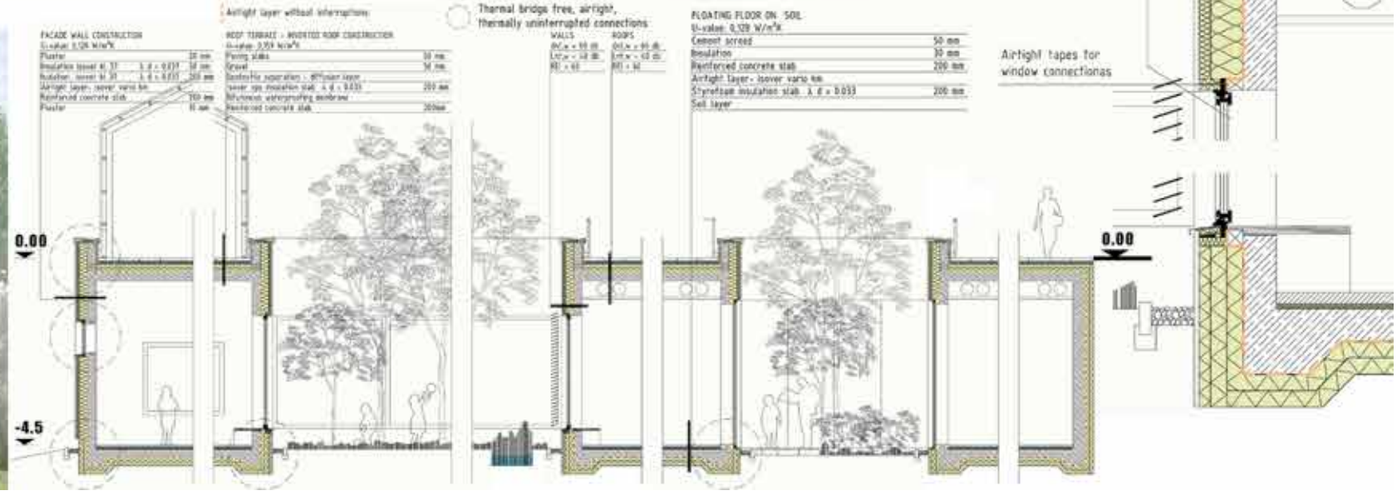
I PRIZE
LATVIA
National Stage 2014

LĪVA NORDMANE

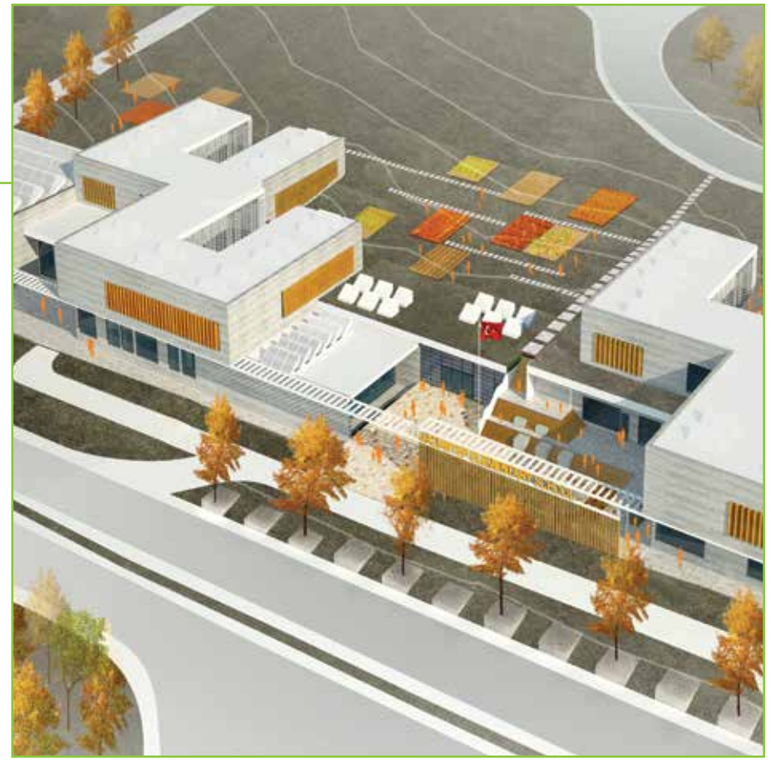
MARTA CERIŅA

OSKARS KOTELLO

Riga - Riga Technical University, Faculty of Architecture and Urban Planning


SECTION CUT B-B
FACADE WINDOWS
U-value: Frame - 0,7 W/m²K
Glazing - 0.54 W/m²K
Light weight concrete block to prevent thermal bridge
Concrete works as structural and irtight element
Airtight tapes for window connectionas
Airtight layer without interruptions
Thermal bridge free, airtight, thermally uninterrupted connections
FACADE WALL CONSTRUCTION
U-value: 0,126 W/m²K
ROOF TERRACE - INVERTED ROOF CONSTRUCTION
U-value: 0,154 W/m²K
WALLS
ROOFS
FLOATING FLOOR ON SOIL
U-value: 0,129 W/m²K
Cement screed 50 mm
Insulation 30 mm
Reinforced concrete slab 200 mm
Airtight layer- isover vario km
Styrofoam insulation slab λ d = 0.033 200 mm
Soil layer
0.00
-4.5
0.00

SCHOOL OF TOMORROW - GAZIANTEP



II PRIZE
LATVIA
National Stage 2014

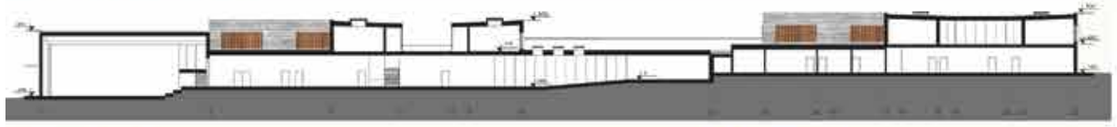
ANDRA ODUMĀNE

ANITA APELE

DĀRTA DAMBE

Riga - Riga Technical University, Faculty of Architecture and Urban Planning

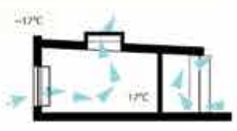
SECTION B-B M 1:200



VENTILATION

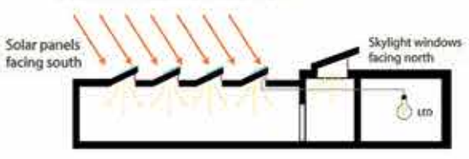
SUMMER DAY
Mechanical ventilation
Natural light through skylight

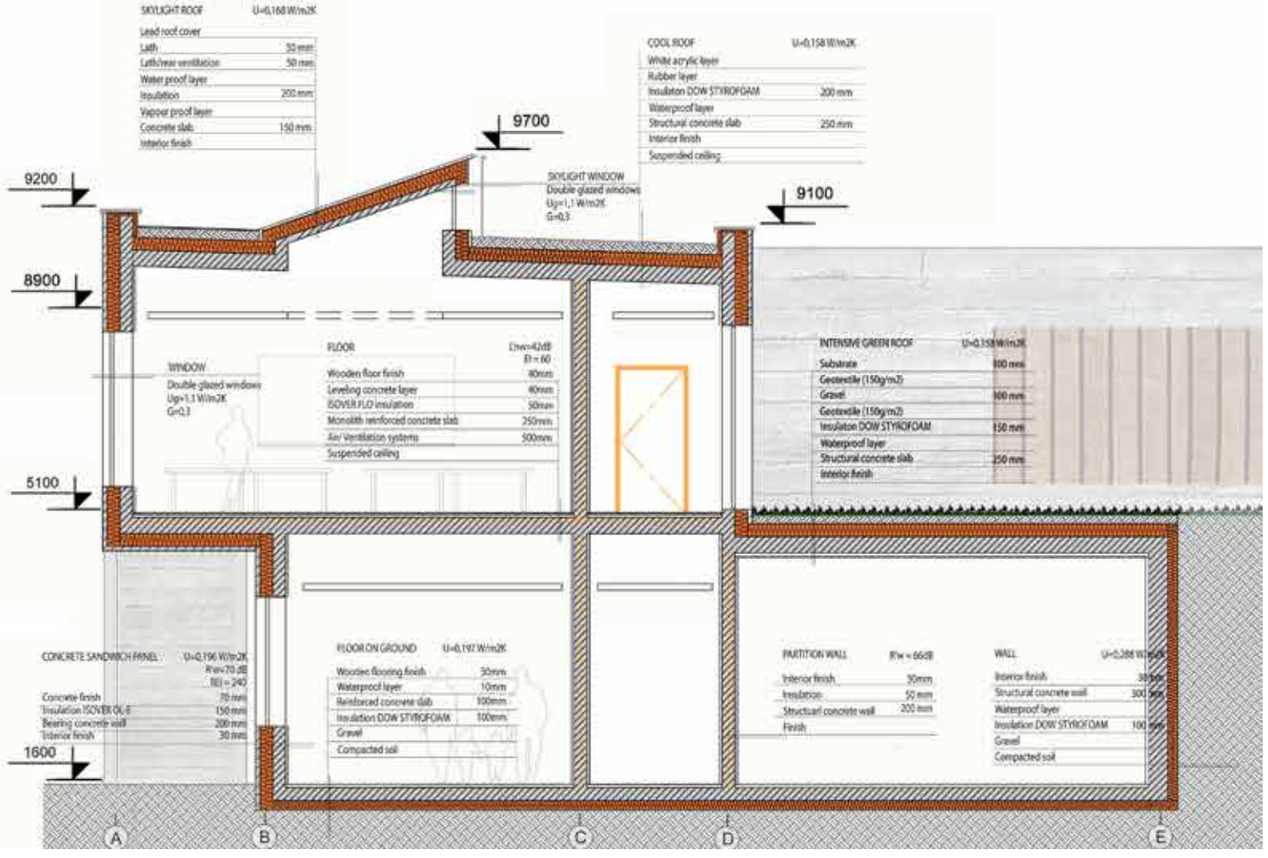
SUMMER NIGHT
Night ventilation
Cross ventilation through opened windows



SOLAR SYSTEMS

SOLAR PANELS & SKYLIGHTS





SCHOOL OF TOMORROW - GAZIANTEP

III PRIZE
LATVIA
National Stage 2014

KARĪNA ŠUMILO

LIENA VĪTOLA

NILS REMESS

Riga - Riga Technical University, Faculty of Architecture and Urban Planning

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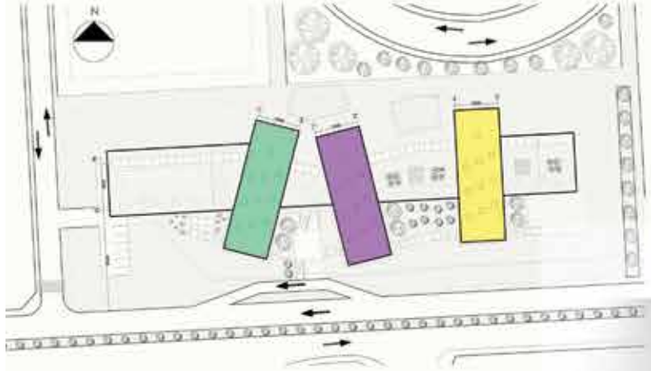
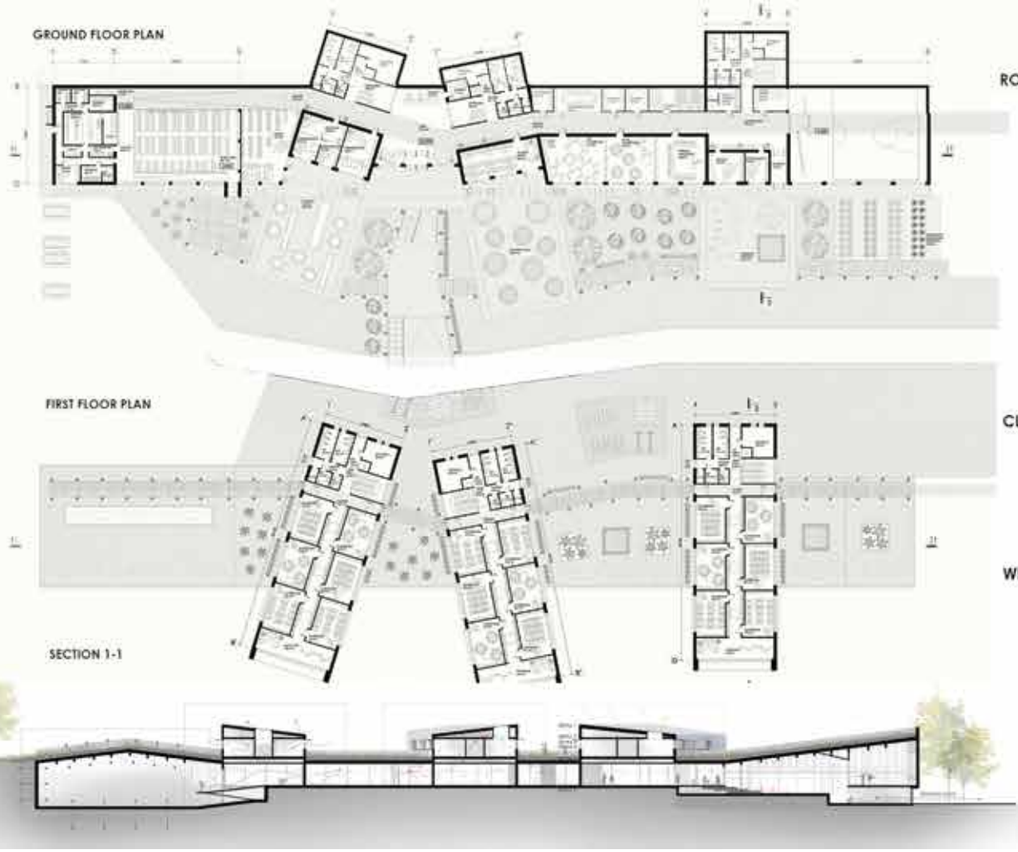
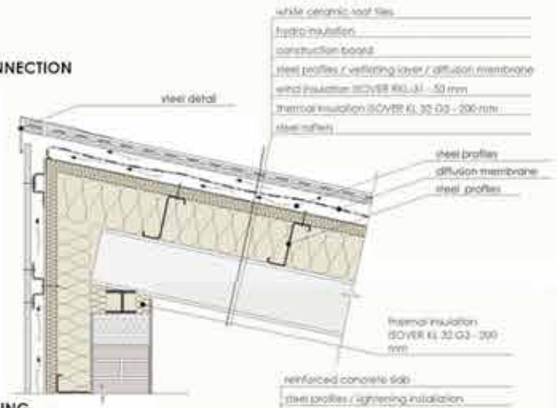
FLYING CLASSES

SITEPLAN



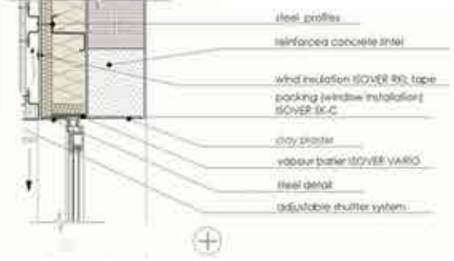


ROOF - WALL CONNECTION



CLASSROOM CEILING

WINDOW INSTALLATION/SHULTER SYSTEM



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GABRIELĖ KUNEVIČIUTĖ

Vilnius - VGTU - Faculty of civil engineering

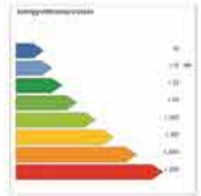
GROUND FLOOR PLAN

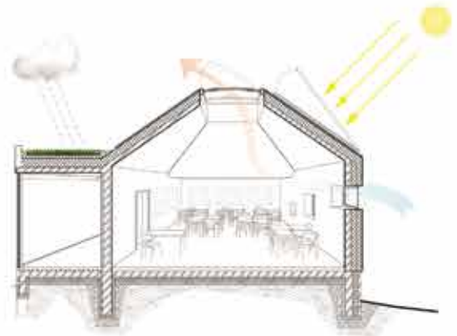
SECOND FLOOR PLAN

SECTION

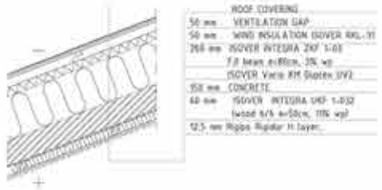
Calculations

Transmission Heat Losses:	1143.21	kWh/a
Ventilation Heat Losses:	65.67	kWh/a
Total Heat Losses:	1208.88	kWh/a
Internal Heat Gains:	405.01	kWh/a
Available Solar Heat Gains:	80.20	kWh/a
Total Heat Gains:	952.23	kWh/a
Annual Heat Demand:	726.65	kWh/a
Specific Annual Heat Demand:	14.83	kWh/(m²a)

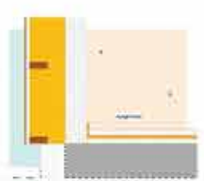


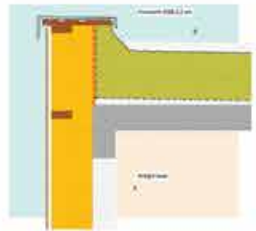


DETAIL CLASS SECTION



ROOF COVERING
50 mm VENTILATION GAP
50 mm WIND INSULATION ISOVER RKL-31
260 mm ISOVER INTEGRA 2KF 1-03
7.9 beam a=80cm, 3% wp
ISOVER Vario KM Duplex 2FV2
350 mm CONCRETE
60 mm ISOVER INTEGRA UKF 1-032
(wood 6/5 a=50cm, 11% wp)
12.5 mm Rigips Rigidur H layer





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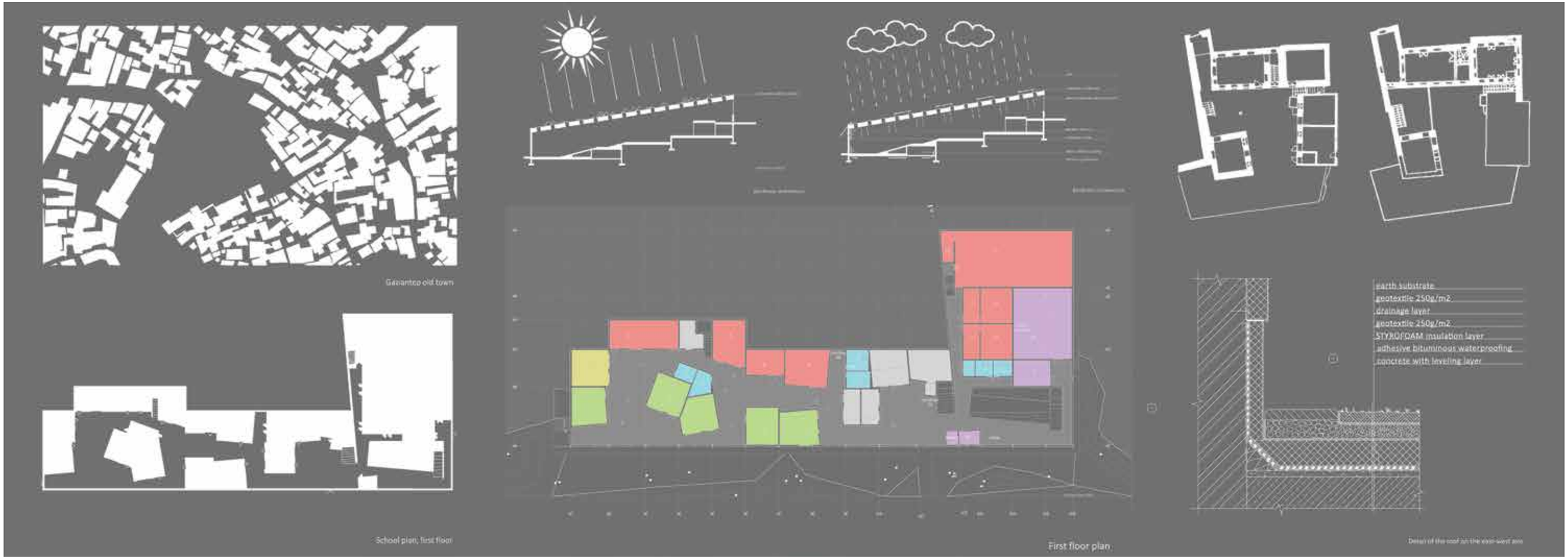
VILIUS
MARCINKEVIČIUS

Vilnius - VGTU - Faculty of civil engineering



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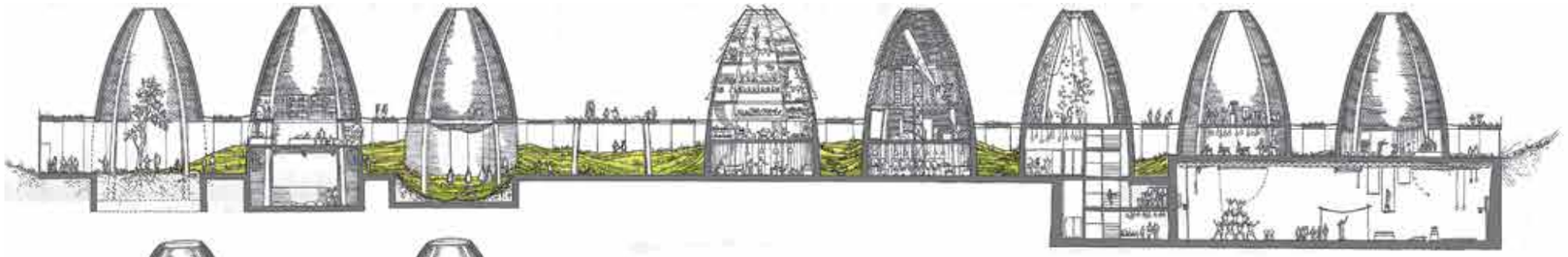
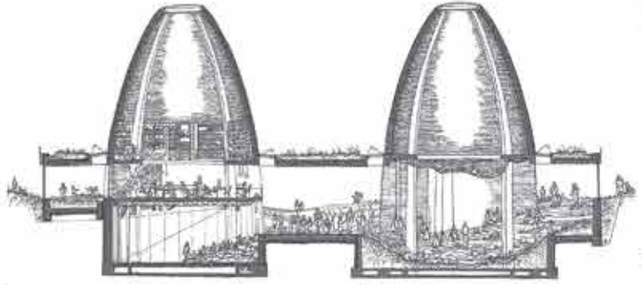
POLAND
National Stage 2014

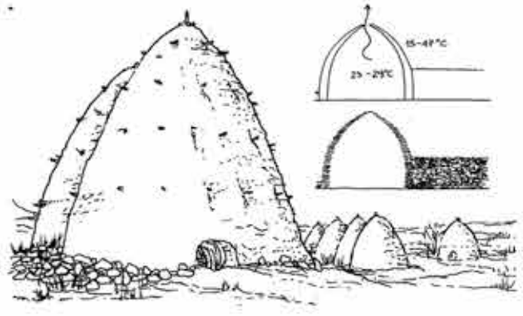
KAROLINA CHODURA

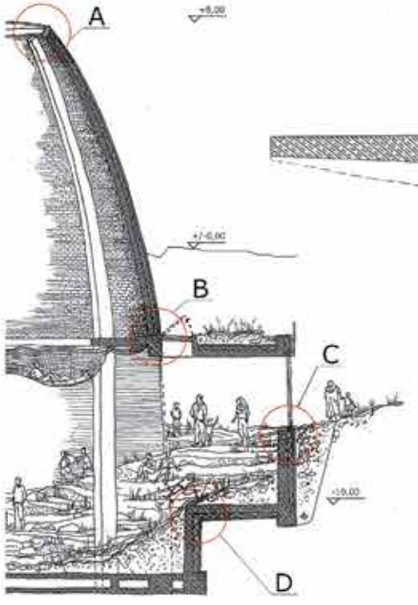
PATRYCJA POKRZYWA

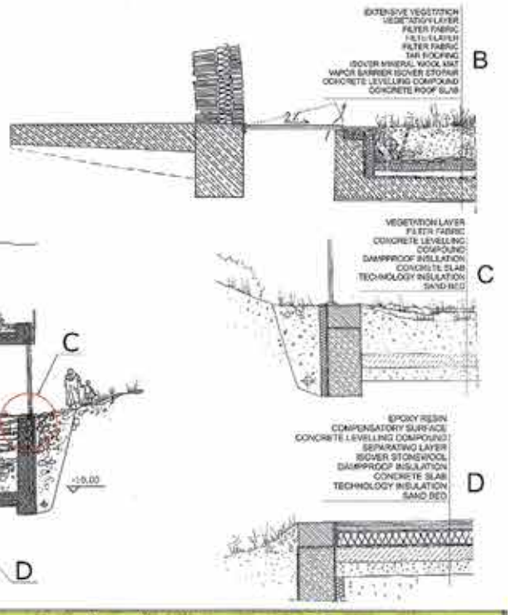
Gliwice - Silesian University of Technology

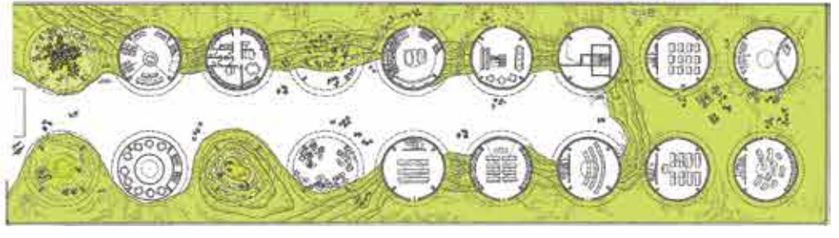












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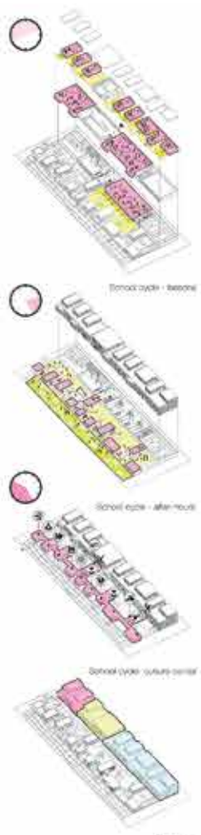
FILIP
POTOCZEK

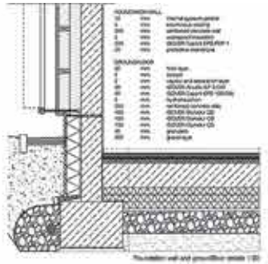
EDYTA
WIŚNIEWSKA

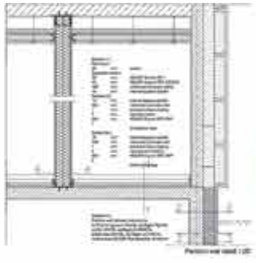
MAGDALENA
ORZEŁ

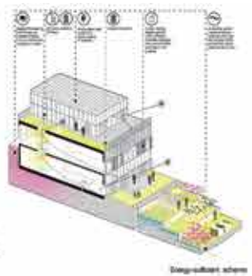
Gliwice - Silesian University of Technology

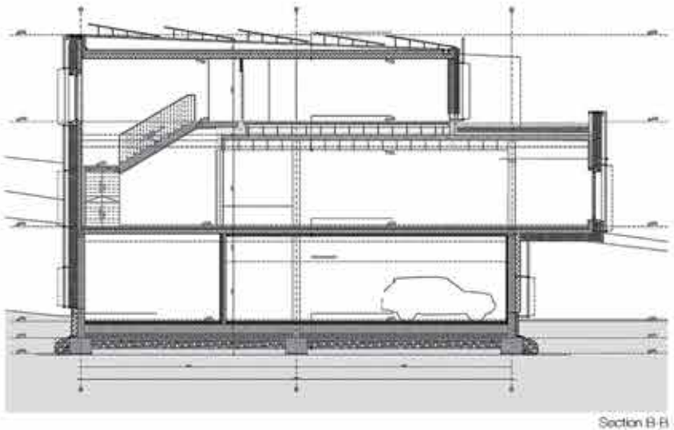

1 level floor plan
0 level floor plan
1 level floor plan
Section A-A

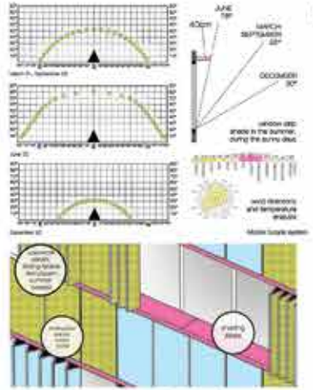









Section B-B


Shading system analysis


Details & Eco-friendly solutions in section
Calculations


South facade

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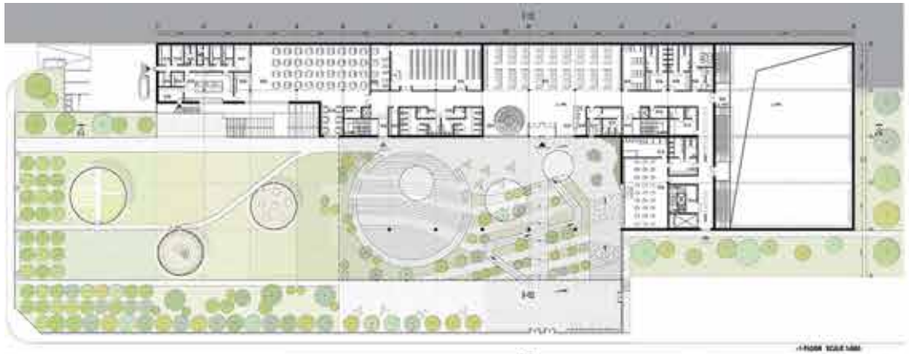
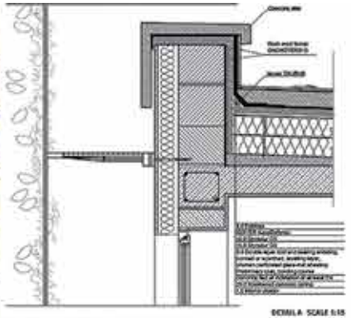
BRYGIDA ZAWADZKA

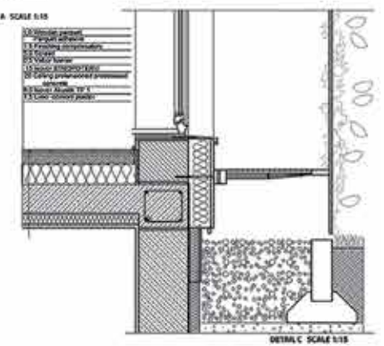
DUONG VU HONG

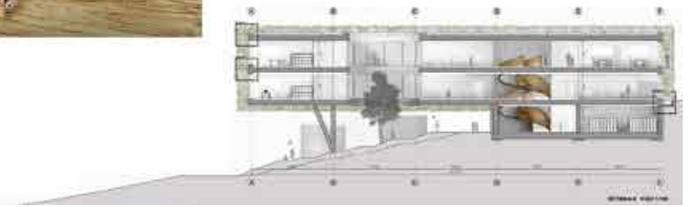
MICHAŁ SAPKO

Gliwice - Silesian University of Technology









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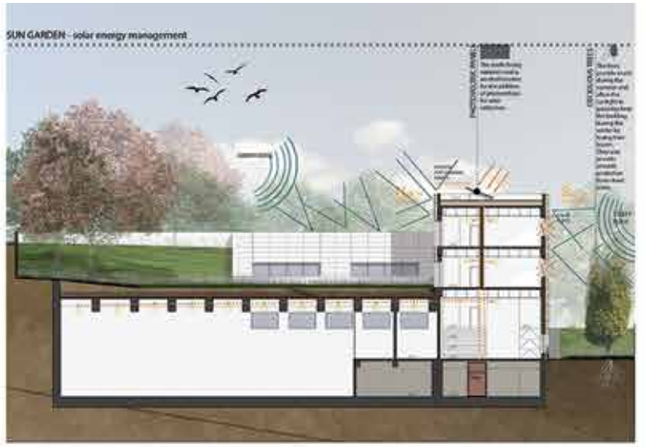
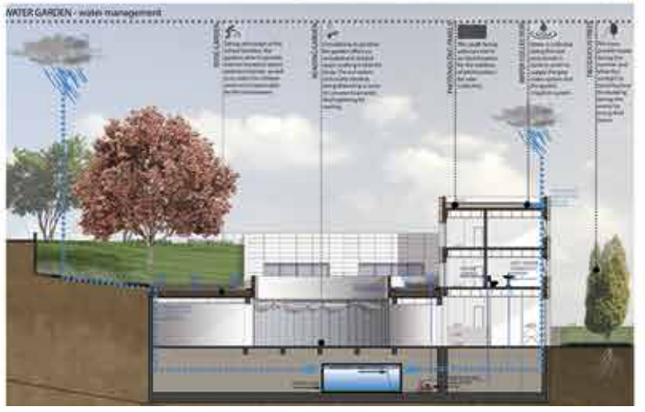
CRETU ALEXANDRA

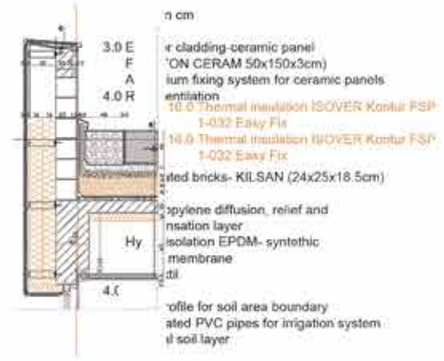
ENACHE AMALIA

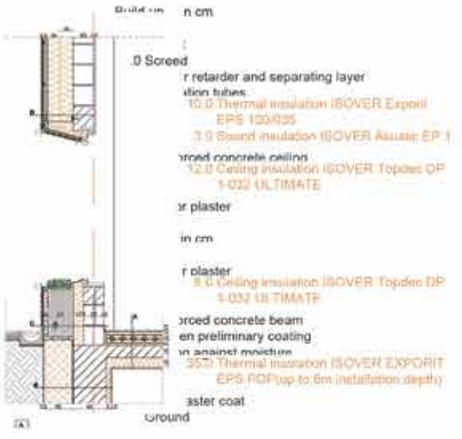
NEAGU ELENA

Bucharest - Ion Mincu University of Architecture and Urban Planning









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ISOVER
Multi-Comfort House
Students Contest
International stage,
Bucharest 2014

II PRIZE

ROMANIA
National Stage 2014

ENEA RADU

UNGUREANU CLAUDIU

Iasi - Gheorghe Asachi Technical University of Iasi

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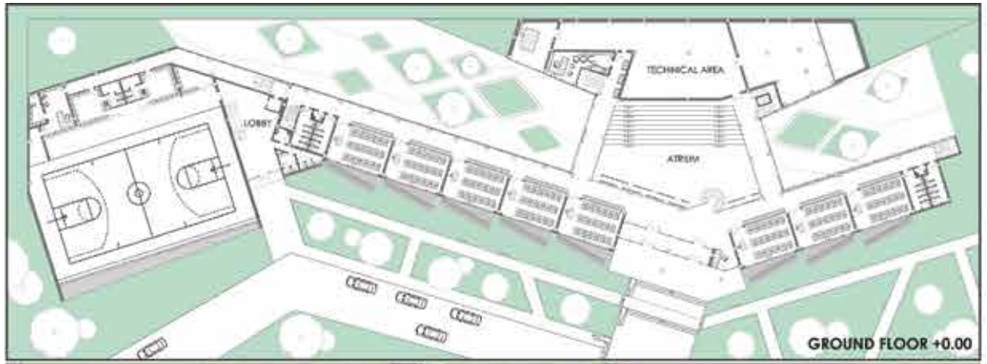

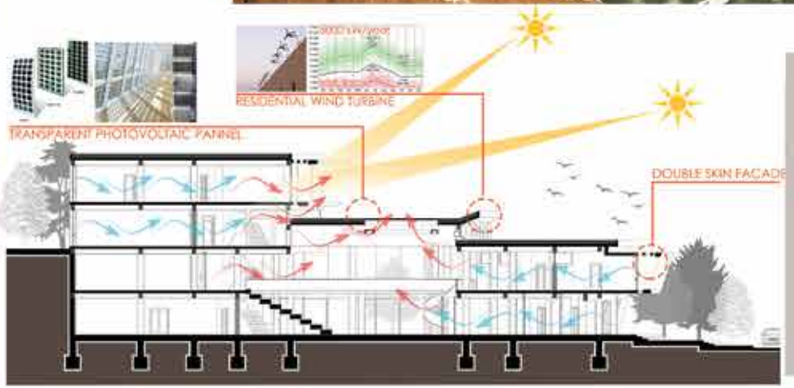

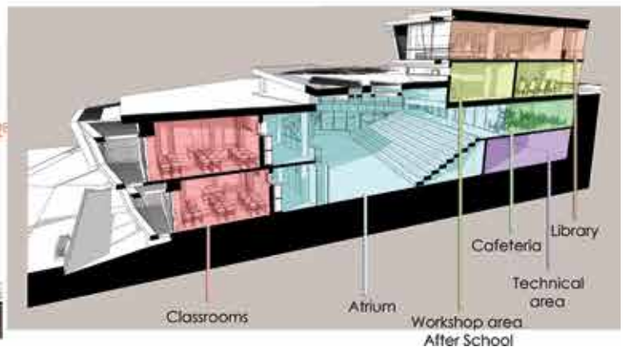

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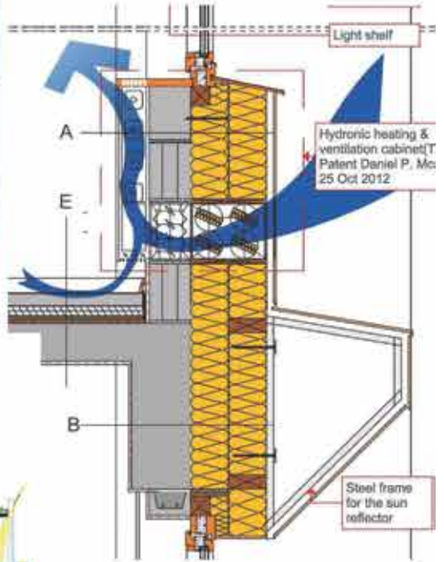
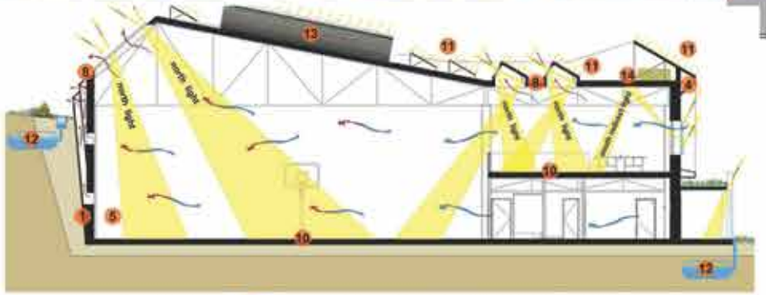
DIACONU FLORIN

Bucharest - Spiru Haret University, Faculty of Architecture and Urban Planning





1 Solar chimney 2 Aquaponic room with fluorescent light for growing circle 3 Winter simulation for cross ventilation and sun 4 Sun reflector 5 Summer simulation for cross ventilation and sun 6 Vegetation wall position at a safe height(good for health and acoustics
7 Timber gridshell roof with opac ETFE Panels (letting through only the indirect light) 8 Triple glazing skylight 9 Rooftop wind turbine 10 Radiant slab heating and cooling 11 PV & hibrid panels 30°, facing the south facade.
12 On site storm and gray water cistern for 13 New Multipurpose(hibrid) parabolic solar collector polished steel sheet roof of parabolic solarmirrors(patent in 2012 Venlo) 14 Heat exchanger 15 Bioreactor treatment system

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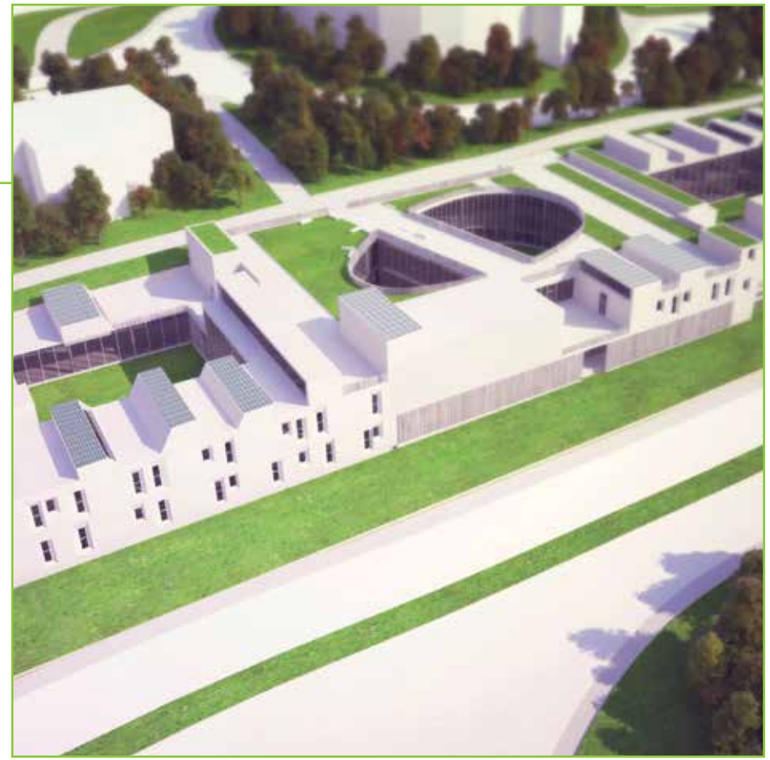

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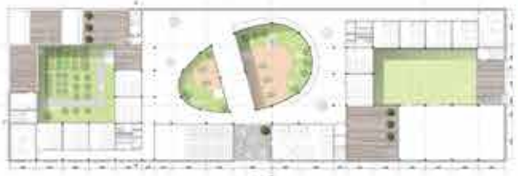
ALINA NAZMEEVA

GAYANE CHUBARYAN

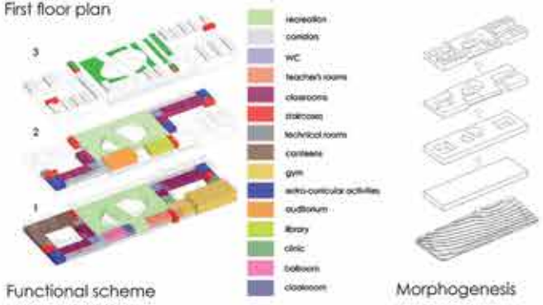
Moscow Institute of Architecture

South facade

First floor plan

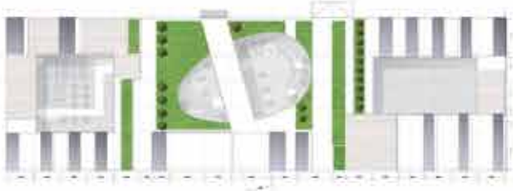


Second floor plan

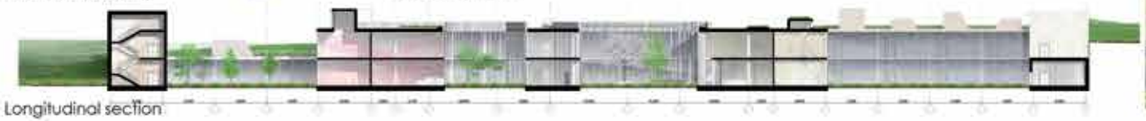


Functional scheme

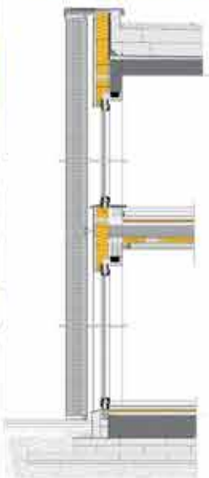
Morphogenesis



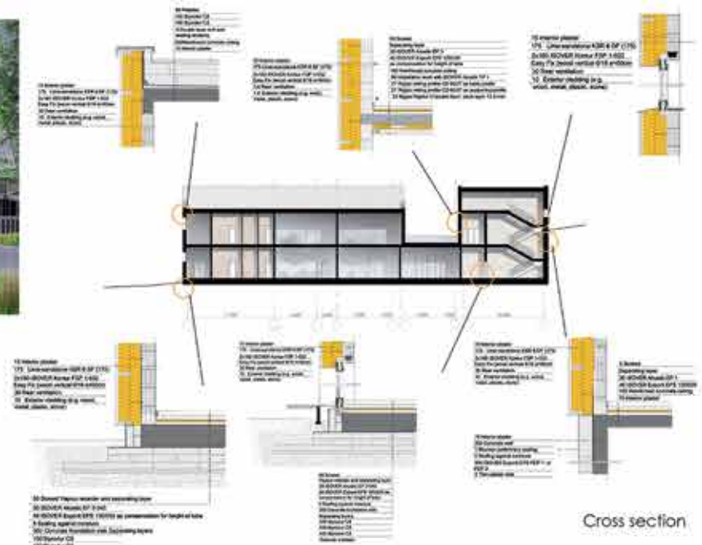
Roof plan



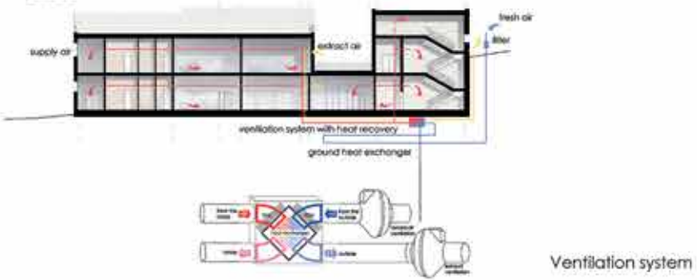
Longitudinal section



Wooden sun louvers detail



Cross section



Ventilation system

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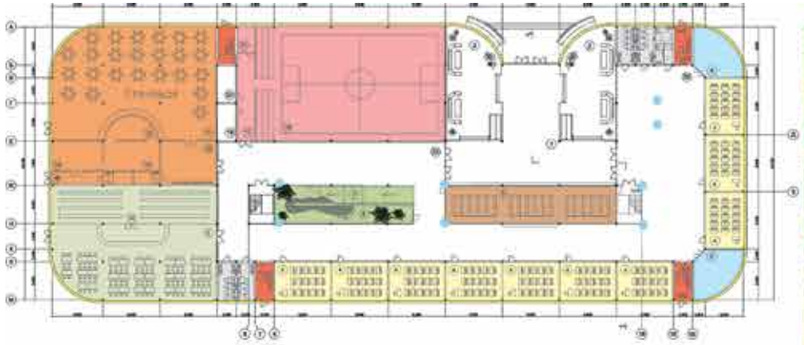
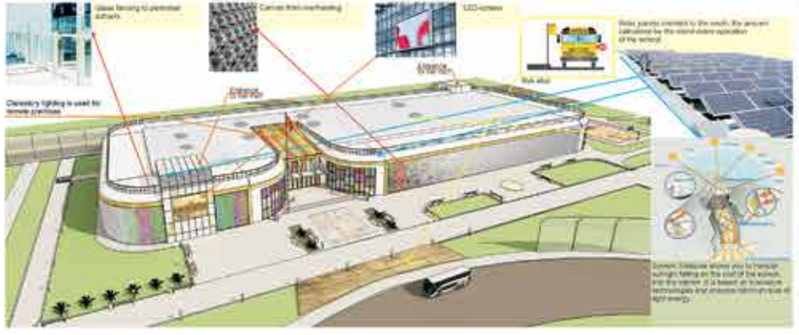
MARIA ASTAFIJEVA

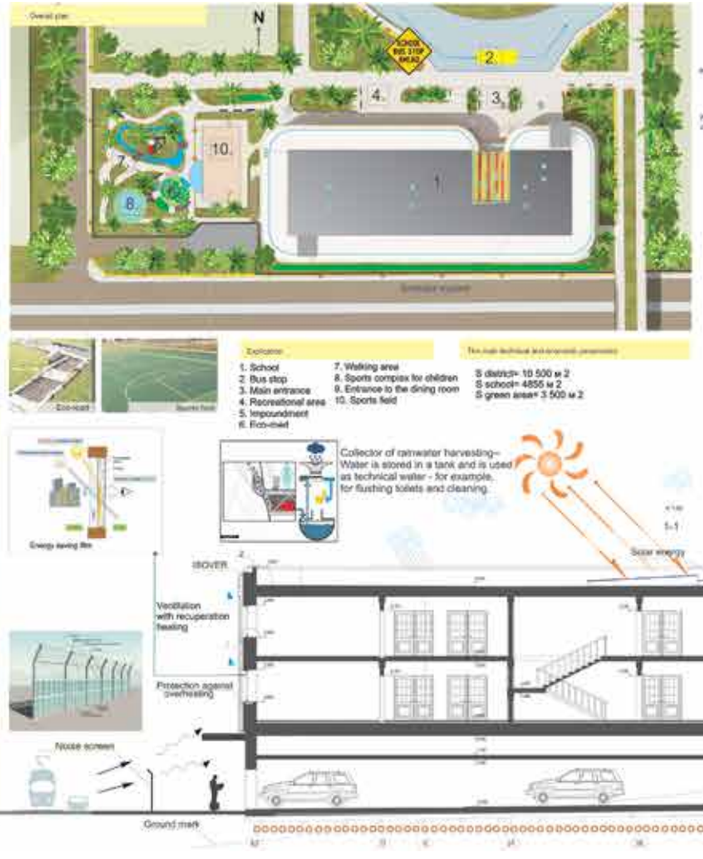
TATIANA VYAZOVA

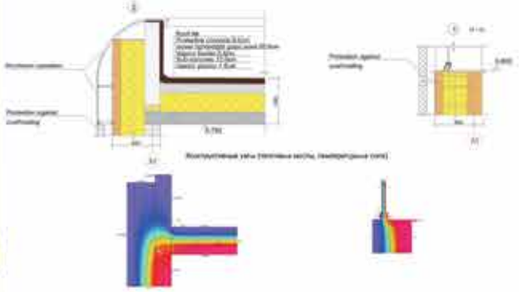
VITALIY CHEBAN

Tomsk State Architectural University, Tomsk









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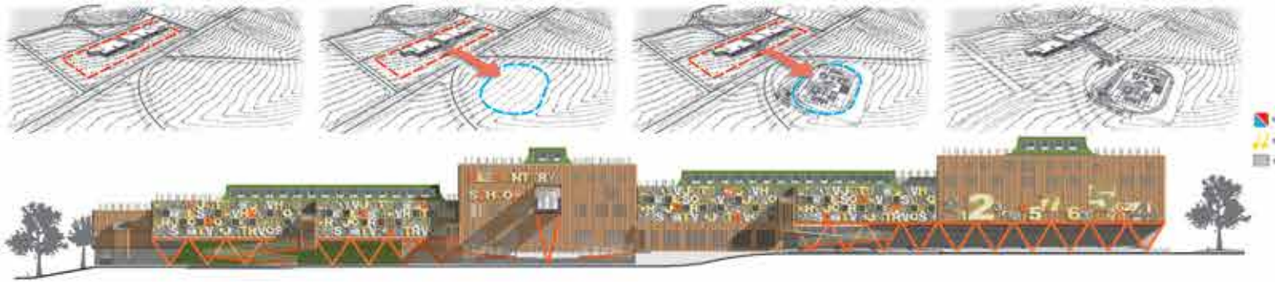
NIKITA SENOTRUSOV

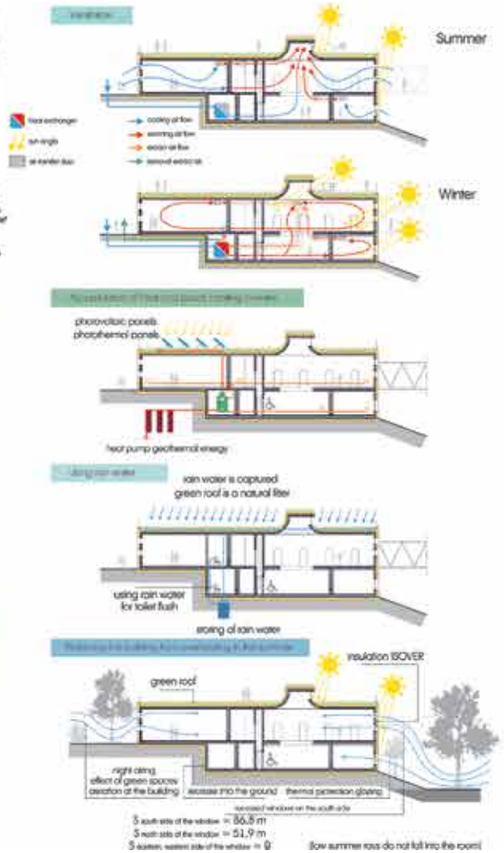
EKATERINA USTINA

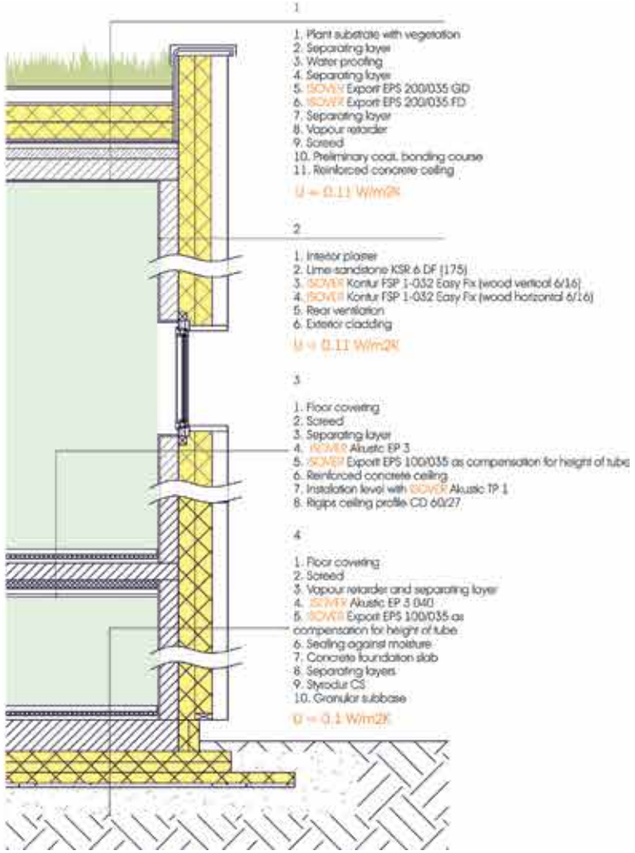
Irkutsk State Technical University (ISTU), Irkutsk



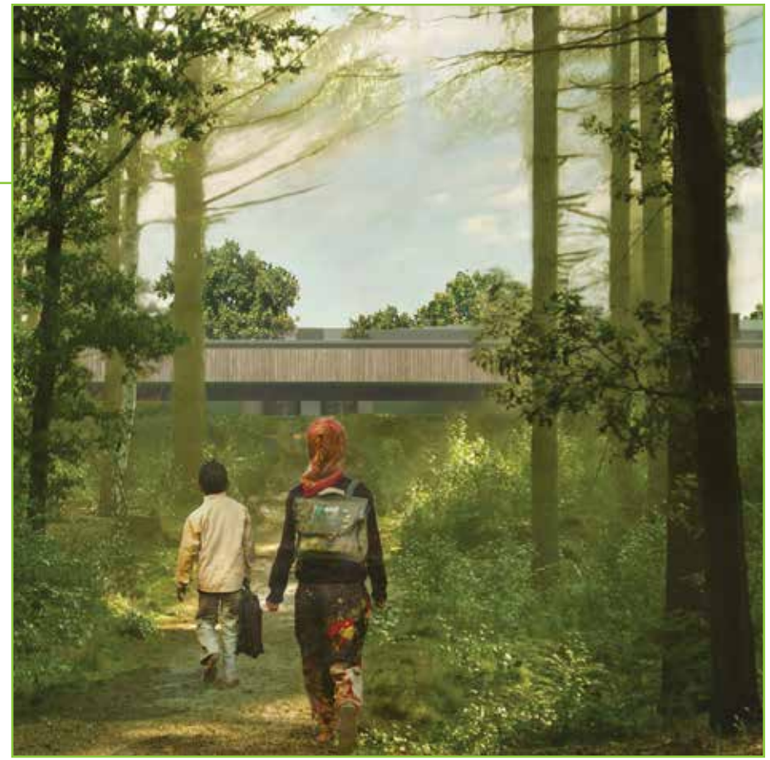

garden
unloading area
parking
viaduct
playground
sports stadium


+4,000
+3,000
+2,000
+1,000
0,000
classrooms
sport
medical room
dining room
technical room
corridor / recreation
administrative offices
library
WC


Summer
Winter
photovoltaic panels
photothermal panels
heat pump geothermal energy
rain water is captured
green roof is a natural filter
using rain water
for toilet flush
storing of rain water
insulation ISOVER
green roof
night ceiling
effect of green spaces
aeration of the building
excavate into the ground
thermal protection glazing
S south side of the window = 86,8 m
S north side of the window = 51,9 m
(low summer rays do not fall into the room)


1
1. Plant substrate with vegetation
2. Separating layer
3. Water proofing
4. Separating layer
5. ISOVER Expert EPS 200/035 GD
6. ISOVER Expert EPS 200/035 FD
7. Separating layer
8. Vapour retarder
9. Screed
10. Preliminary coat, bonding course
11. Reinforced concrete ceiling
U = 0,11 W/m2K
2
1. Interior plaster
2. Lime-sandstone KSR 6 DF (175)
3. ISOVER Kontur FSP 1-032 Easy Fix (wood vertical 6/16)
4. ISOVER Kontur FSP 1-032 Easy Fix (wood horizontal 6/16)
5. Rear ventilation
6. Exterior cladding
U = 0,11 W/m2K
3
1. Floor covering
2. Screed
3. Separating layer
4. ISOVER Akustic EP 3
5. ISOVER Expert EPS 100/035 as compensation for height of tube
6. Reinforced concrete ceiling
7. Installation level with ISOVER Akustic TP 1
8. Rigips ceiling profile CD 60/27
4
1. Floor covering
2. Screed
3. Vapour retarder and separating layer
4. ISOVER Akustic EP 3 040
5. ISOVER Expert EPS 100/035 as
compensation for height of tube
6. Sealing against moisture
7. Concrete foundation slab
8. Separating layers
9. Styrodur CS
10. Granular subbase
U = 0,1 W/m2K

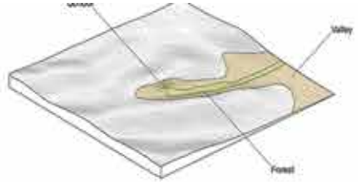
SCHOOL OF TOMORROW - GAZIANTEP



I PRIZE
SLOVAKIA
National Stage 2014

TOMÁŠ BOROŠ

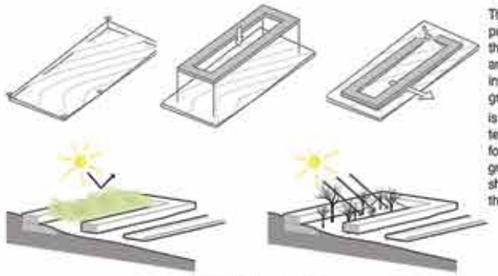
TU Košice, Faculty of Art, Architecture and urbanism



Concept

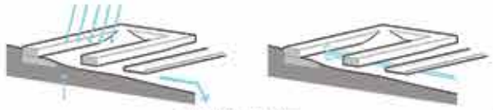
These days, surrounding nature is slowly devastated by progressive spread of the towns. These tendencies result in the air pollution increase that negatively influences inhabitants of the town. This project should present a sort of shout in which nature gives a strike back to the town. The ground, where the school is placed,

is situated at the end of a long valley through which there extends a long forest. I therefore decided to interconnect this forest with an atrium of the school. Later, the forest should outgrow into the school and from an ordinary primary school there should become a forest school. The building is divided into three functional units-



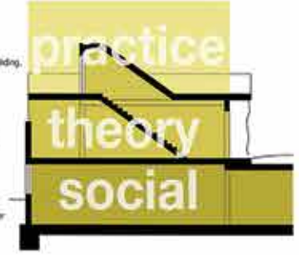
GREEN CLIMATE REGULATION

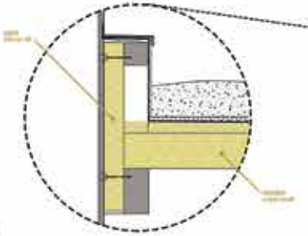
During the summer the deciduous forest protects the building from overheating. During winter the bare trees allow for the sun to heat the building.

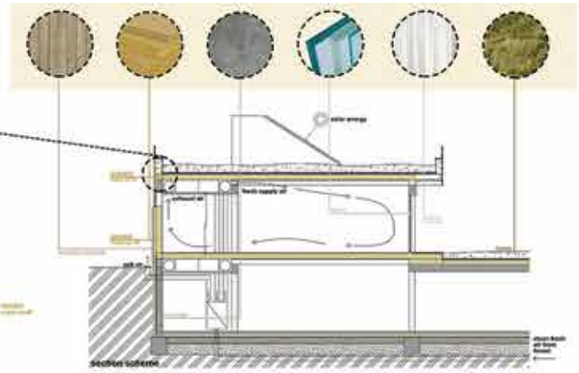


A BUILDING WITH ROOTS

Earth heating is used to create a zero energy building. It also collects and recirculates water. Fresh air from forest come to atrium, and it is used for ventilation.

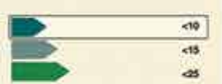






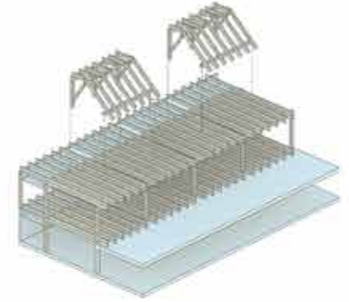
Construction

The designed construction is wooden with the concrete part in the cellar spaces. Around there is designed a wooden facade with a narrow girth of windows so it lightens the corridor and the facade of the atrium is whole made from glass. From the outside there are clothes dividing balcony from the atrium. The usage of the cloths in the project is important considering Turkey as one of the greatest exporters of the fabric in the world.



Calculations

Transmission Heat Losses:	87206.00 kWh/a
Ventilation Heat Losses:	10160.21 kWh/a
Total Heat Losses:	97368.21 kWh/a
Internal Heat Gains:	57133.56 kWh/a
Available Solar Heat Gains:	76302.90 kWh/a
Total Heat Gains:	69915.71 kWh/a
Annual Heat Demand:	7452.50 kWh/a
Specific Annual Heat Demand:	1.08 kWh/a/m2a)



Construction axonometry

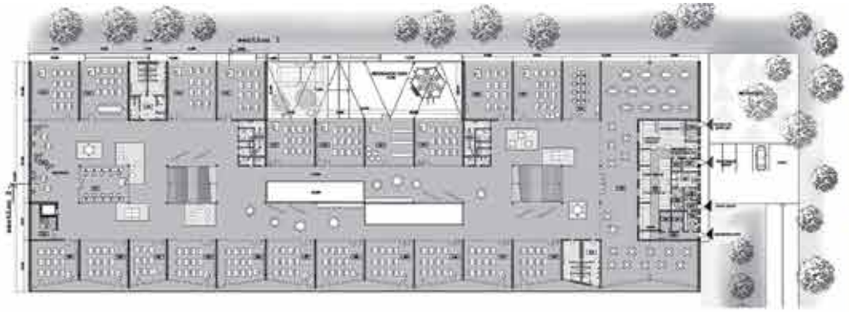
Acoustic concept scheme

SCHOOL OF TOMORROW - GAZIANTEP

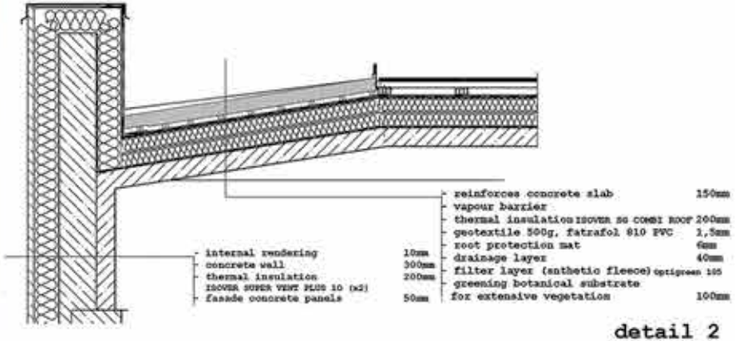
II PRIZE
SLOVAKIA
National Stage 2014

JÚLIA
GENŠOROVÁ

University of tehcnology, faculty of architecture, Bratislava



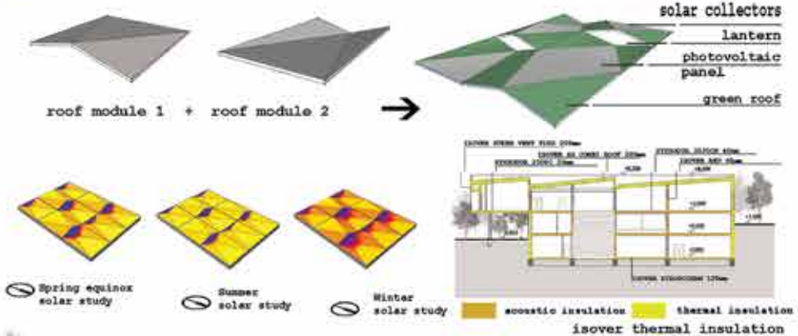
2nd floor



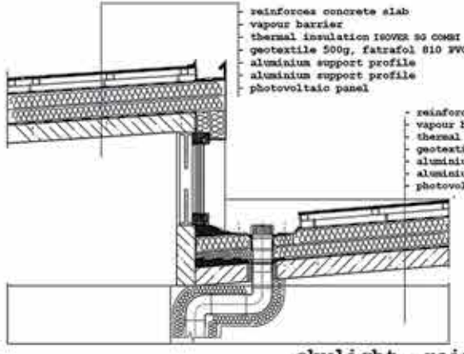
detail 2

connection of vegetation roof and photovoltaic panel

1st floor

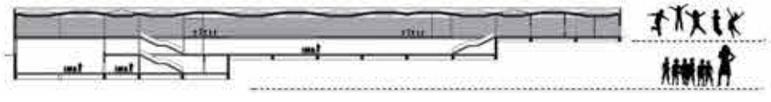


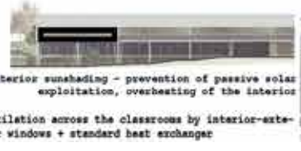
isover thermal insulation



detail 1

skylight, rainwater collecting



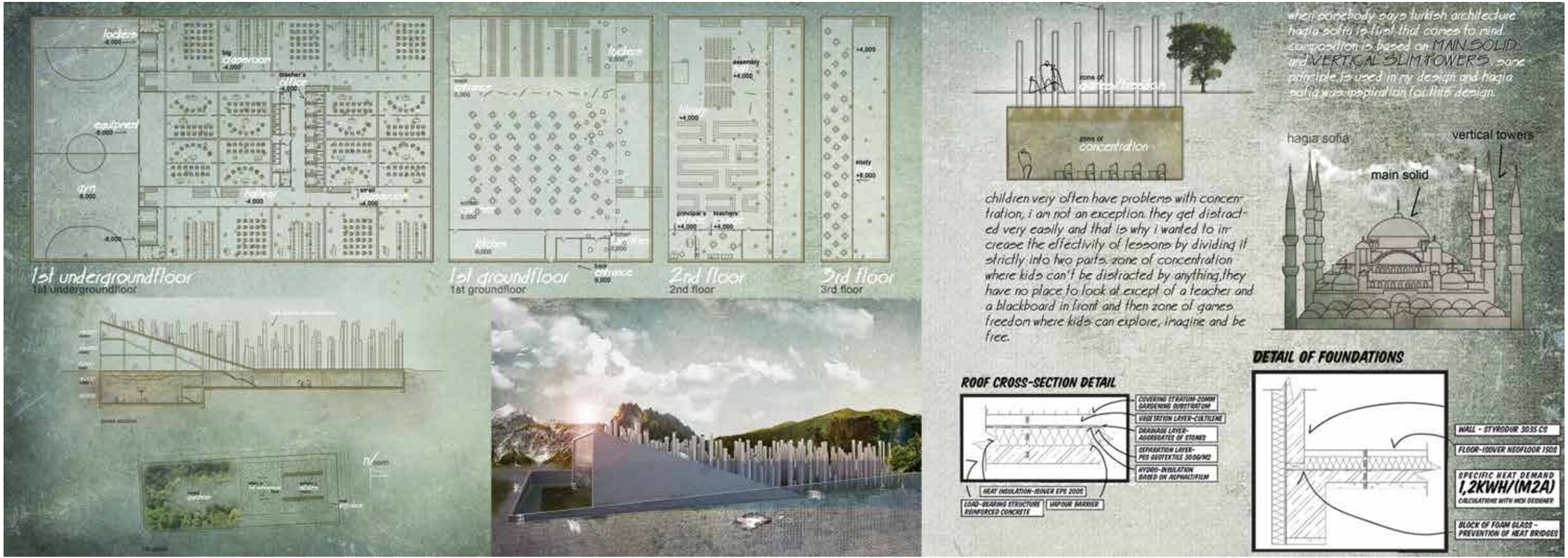


SCHOOL OF TOMORROW - GAZIANTEP

III PRIZE
SLOVAKIA
National Stage 2014

ERIKA
HRIVÍKOVÁ

Slovak technical university in Bratislava,faculty of architrcture


1st undergroundfloor
1st undergroundfloor
1st groundfloor
1st groundfloor
2nd floor
2nd floor
3rd floor
3rd floor
when somebody says turkish architecture hagia sofia is first that comes to mind. composition is based on MAIN SOLID and VERTICAL SLIM TOWERS. same principle is used in my design and hagia sofia was inspiration for this design.
hagia sofia
vertical towers
main solid
zone of concentration
children very often have problems with concentration, i am not an exception. they get distracted very easily and that is why i wanted to increase the effectivity of lessons by dividing it strictly into two parts. zone of concentration where kids can't be distracted by anything, they have no place to look at except of a teacher and a blackboard in front and then zone of games freedom where kids can explore, imagine and be free.
ROOF CROSS-SECTION DETAIL
COVERING STRATUM-20MM GARDENING SUBSTRATUM
VEGETATION LAYER-CULTILENE
DRAINAGE LAYER-AGGREGATES OF STONES
SEPARATION LAYER-PES GEOTEXTILE 300G/M2
HYDRO-INSULATION BASED ON ASPHALTIFICUM
HEAT INSULATION-ISOVER EPS 200S
LOAD-BEARING STRUCTURE REINFORCED CONCRETE
VAPOUR BARRIER
DETAIL OF FOUNDATIONS
WALL - STYRODUR 3035 CS
FLOOR-ISOVER NEOFLOOR 150S
SPECIFIC HEAT DEMAND
1,2KWH/(M2A)
CALCULATIONS WITH MOI DESIGNER
BLOCK OF FOAM GLASS - PREVENTION OF HEAT BRIDGES

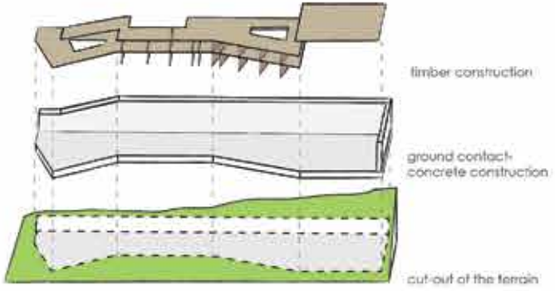
SCHOOL OF TOMORROW - GAZIANTEP

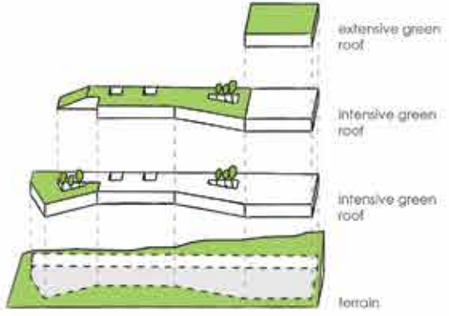
I PRIZE
SLOVENIA
National Stage 2014

JANJA STARC

DANAJA VASTIČ

Ljubljana - University of Ljubljana, Faculty of Architecture





Build-up A in cm

2,5	Rigips Rigidur H double layer, each layer 12.5 mm
6,0	ISOVER Integra UKF 1-032 (wood 6/6 e=40cm, 13% wp)
	ISOVER VARIO KM Duplex UV
1,5	OSB board or chipboard
12,0	ISOVER Integra ZKF 1-032 (wood 6/12 e=62.5cm, 9% wp)
1,5	OSB board or chipboard
14,0	ISOVER Sillatherm WVP 1-035
1,2	Thick plaster

Build-up B in cm

	Floor covering
5,0	Screed
3,0	ISOVER Akustic EP 3 040
4,0	ISOVER Exporit EPS 100/035 as compensation for height of tube
1,9	OSB board or chipboard
16,0	ISOVER Integra ZKF 1-032 (solid wood beams 10/16, e=80cm, 11% wp)
1,5	OSB board or chipboard
8,0	Installation level with ISOVER Akustik TP 1 (glass wool, WLG 040)
2,7	Rigips Ceiling profile CD 60/27 as basic profile
2,7	Rigips Ceiling profile CD 60/27 as supporting profile

SCHOOL OF TOMORROW - GAZIANTEP

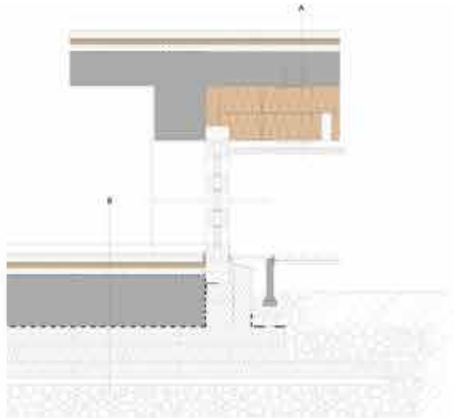
II PRIZE
SLOVENIA
National Stage 2014

ŽAKLIN KRIŽAJ

PRIMOŽ ČERNELČ

TADEJ BOGOVIČ

Ljubljana - University of Ljubljana, Faculty of Architecture

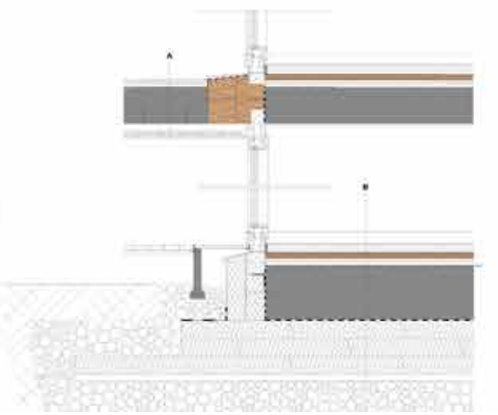


Build-up A in cm

Floor covering
5,0 Screed
Vapour retarder and separating layer
3,0 ISOVER Akustic EP 3 040
4,0 ISOVER Exporit EPS 100/035 as compensation for height of tube
0,5 Sealing against moisture
20,0 Concrete slab
16,0 ISOVER Kontur FSP 1-032 Easy Fix (wood vertical 6/16 e=60cm
16,0 ISOVER Kontur FSP 1-032 Easy Fix (wood horizontal 6/16 e=120cm)
4,0 Rear ventilation
3,0 ArGeTon Tenzo 2

Build-up B in cm

Floor covering
5,0 Screed
Vapour retarder and separating layer
3,0 ISOVER Akustic EP 3 040
4,0 ISOVER Exporit EPS 100/035 as compensation for height of tube
0,5 Sealing against moisture
30,0 Concrete foundation slab
Separating layers
10,0 Styrodur CS
10,0 Styrodur CS
10,0 Styrodur CS
Granular subbase



Build-up A in cm

1,0 Ceramic tiles
4,0 ISOVER Exporit EPS 100/035 as compensation for height of tube
0,5 Sealing against moisture
20,0 Concrete slab
4,0 Rear ventilation
3,0 ArGeTon Tenzo 2

Build-up B in cm

Floor covering
5,0 Screed
Vapour retarder and separating layer
3,0 ISOVER Akustic EP 3 040
4,0 ISOVER Exporit EPS 100/035 as compensation for height of tube
0,5 Sealing against moisture
30,0 Concrete foundation slab
Separating layers
10,0 Styrodur CS
10,0 Styrodur CS
10,0 Styrodur CS
Granular subbase

SCHOOL OF TOMORROW - GAZIANTEP

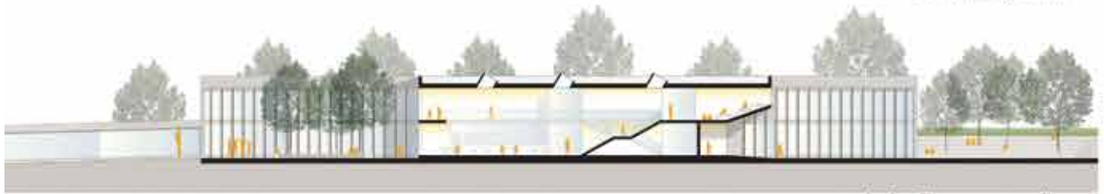
III PRIZE
SLOVENIA
National Stage 2014

AJDA TERLIKAR

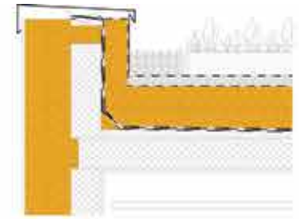
JOŠT HRIBERNIK

Ljubljana - University of Ljubljana, Faculty of Architecture

school hallway section

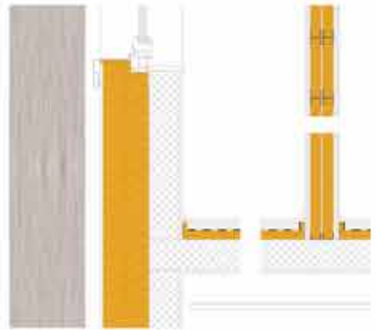


school multipurpose area section
school south elevation



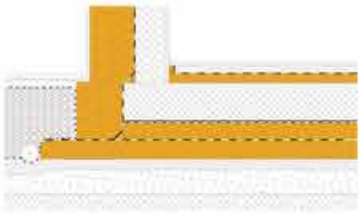
Roof - Wall Joint : Reverse Green Roof

intensive plant substrate
filter layer
drainage layer
ISOVER XPS insulation 30 cm
protection layer
moisture insulation
leveling concrete
reinforced concrete slab
plaster
instalations space
suspended acoustic ceiling



External Wall and Partition Wall

wooden shades
exterior plaster
ISOVER insulation 15 cm
ISOVER insulation 15 cm
reinforced concrete wall
interior plaster



Ground Floor : Foundation Slab for seismically dangerous areas

wooden flooring
breeze concrete
sound insulation foil
foundation slab
ISOVER XPS insulation 11 cm
moisture insulation
ISOVER XPS insulation 11 cm
leveling concrete
gravel

SCHOOL OF TOMORROW - GAZIANTEP

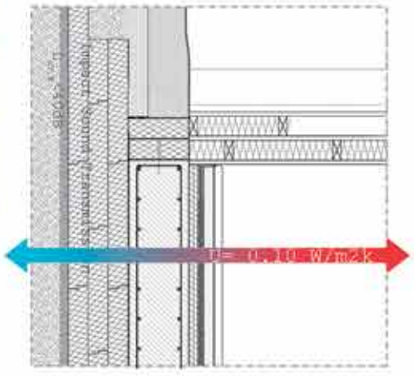
I PRIZE
SPAIN
National Stage 2014

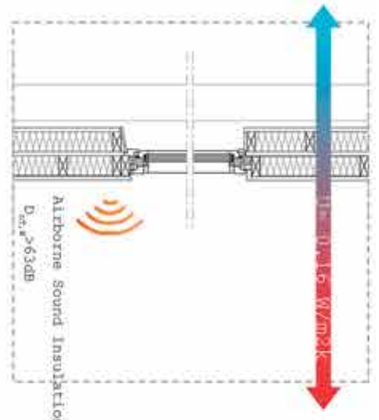
SERGI ESTRUCH TRAVERIA

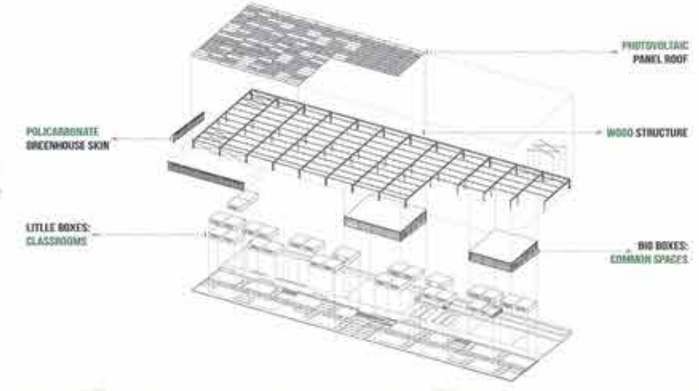
BELTRAN GRACIA GEORGINA

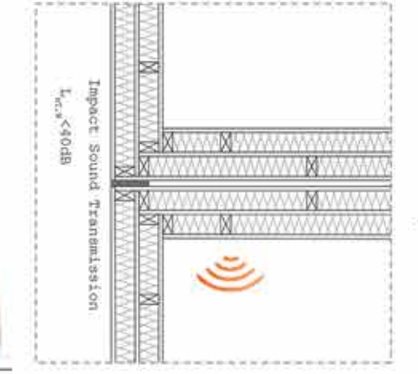
SANTI JULIÁ XERCAVINS

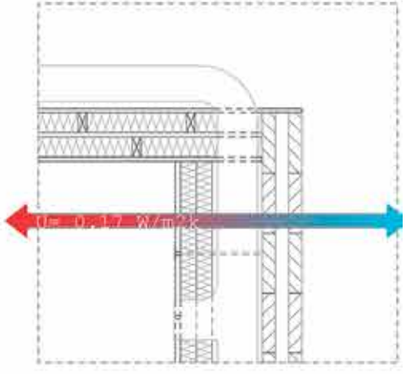
ETSAValles


Impact Sound Transmission
$L_{n,w}$<40dB
U= 0.14 W/m2K


Airborne Sound Insulation
$D_{nT,w}$>63dB
U= 0.16 W/m2K


PHOTOVOLTAIC PANEL ROOF
POLICARBONATE GREENHOUSE SKIN
WOOD STRUCTURE
LITLLE BOXES: CLASSROOMS
BIG BOXES: COMMON SPACES


Impact Sound Transmission
$L_{n,w}$<40dB


U= 0.17 W/m2K

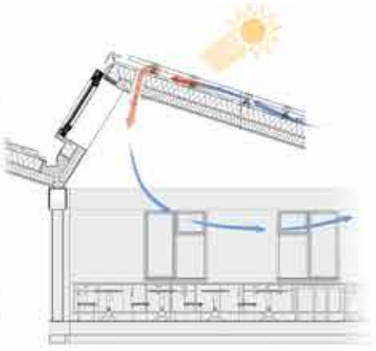
SCHOOL OF TOMORROW - GAZIANTEP

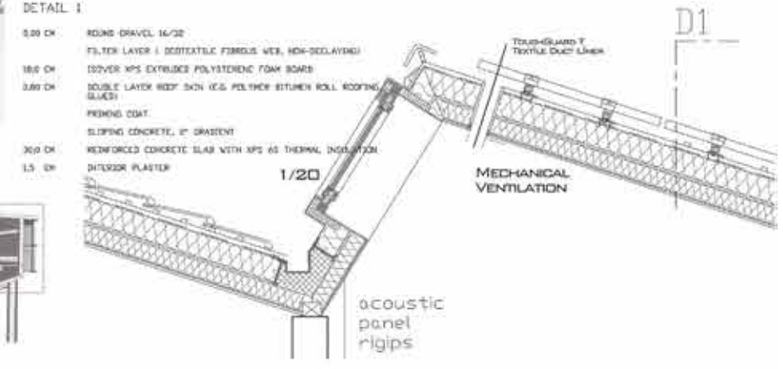
I PRIZE
TURKEY
National Stage 2014

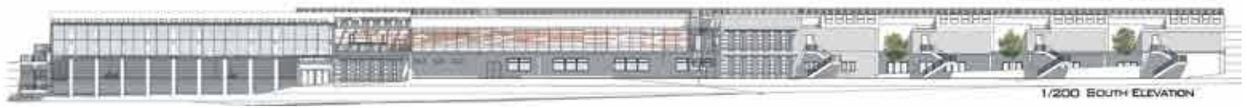
BURAK İLHAN
CEMILE CENGIZ
KUTAY BIBEROĞLU

Middle East Technical University

CERTAINTEED SOLSTICE PVS ARE PLACED WITH AN ANGLE OF 18 DEGREES BY USING ROOF INCLINATION. THE WARM EXHAUST AIR BELOW THE PVS ARE CIRCULATED IN THE CLASSROOMS BOTH TO WARM THE CLASSES AND TO INCREASE THE EFFICIENCY OF PVS. THE SYSTEM IS FED WITH HEAT PUMPS WHEN NECESSARY.







SCHOOL OF TOMORROW - GAZIANTEP

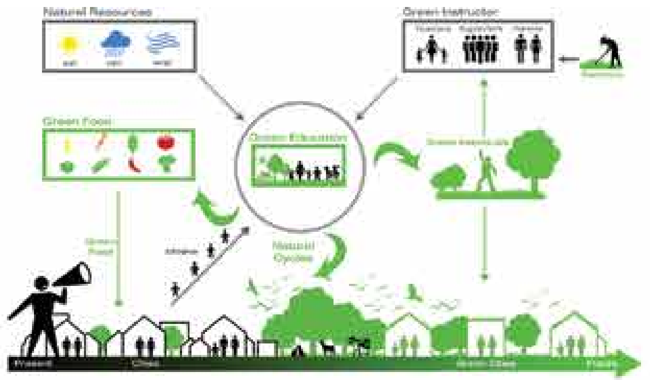
II PRIZE
TURKEY
National Stage 2014

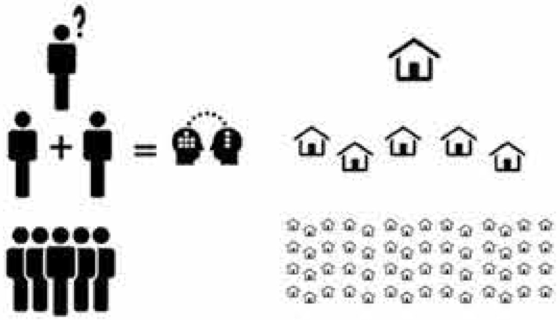
METE KESKIN

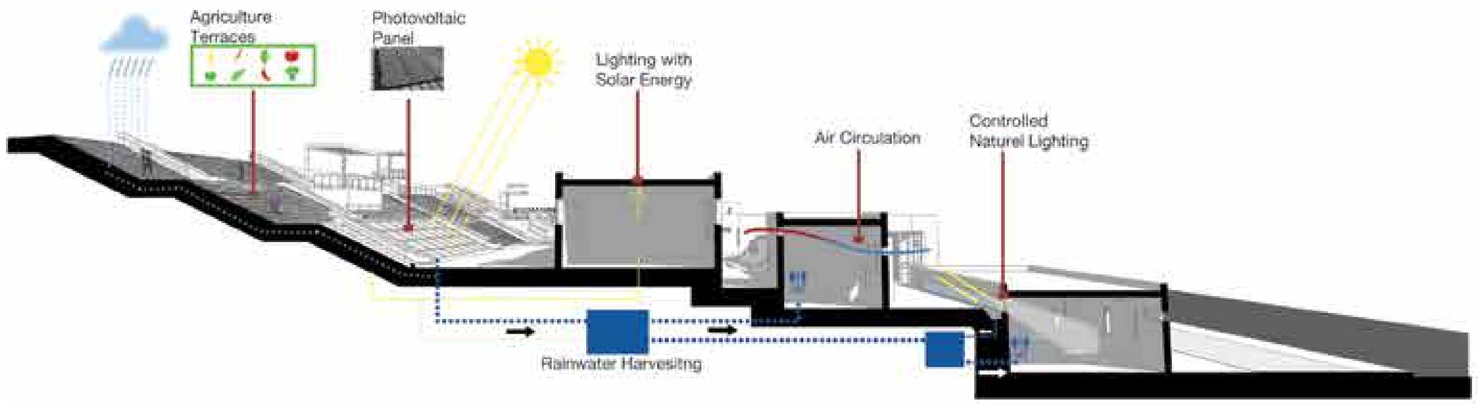
ESRA YILMAZ

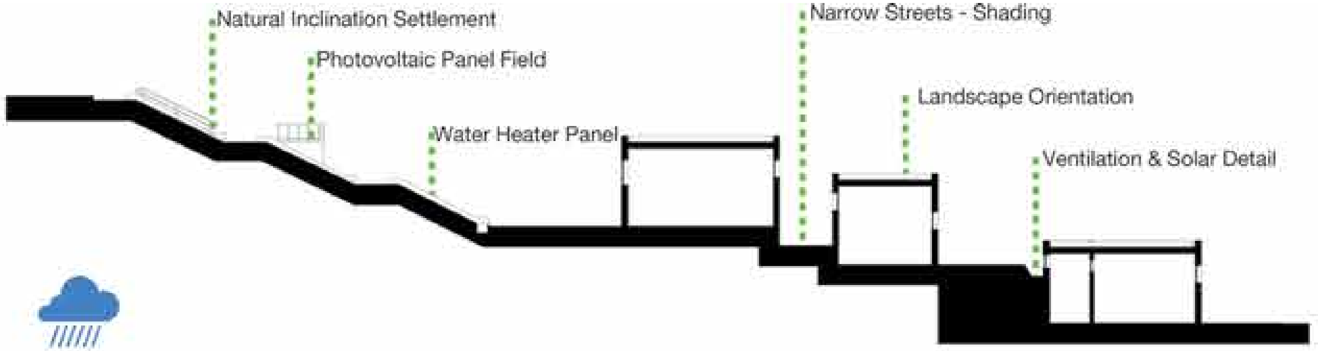
ALPEREN TURK

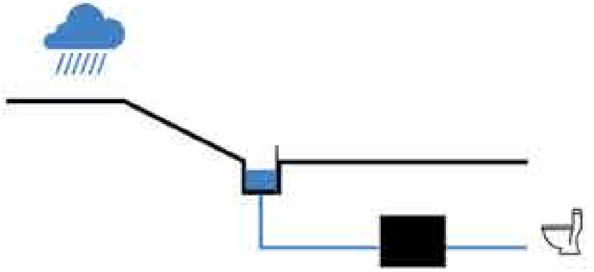
Istanbul Bilgi University and Yildiz Technical University

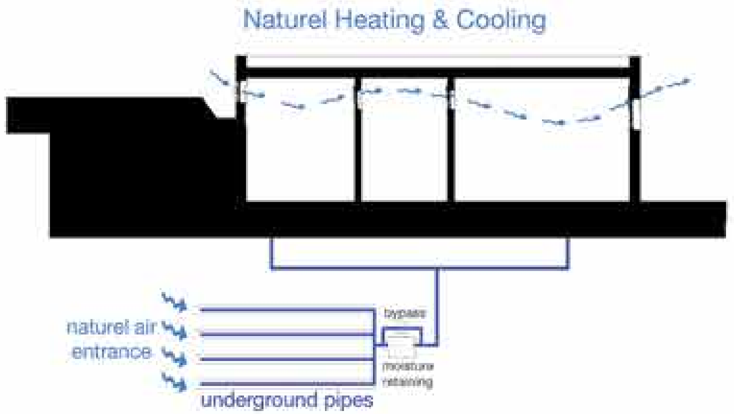




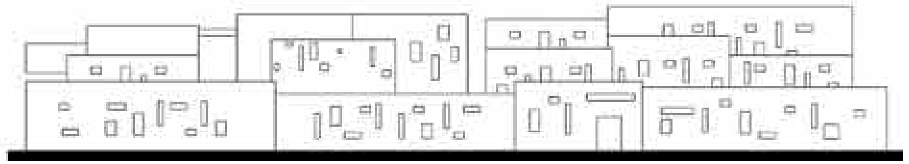

Agriculture Terraces
Photovoltaic Panel
Lighting with Solar Energy
Air Circulation
Controlled Naturel Lighting
Rainwater Harvesitng


Natural Inclination Settlement
Photovoltaic Panel Field
Water Heater Panel
Narrow Streets - Shading
Landscape Orientation
Ventilation & Solar Detail




Naturel Heating & Cooling
naturel air entrance
underground pipes


Warm Air
Fresh Air



SCHOOL OF TOMORROW - GAZIANTEP

III PRIZE
TURKEY
National Stage 2014

BARIŞ ATEŞ

FULYA MENDERES

Istanbul Technical University

Built in Slope+ Green Roof

/ Covering building with soil from the north facade and also on roof, in order to get benefit from the character of earth being cool in summer time and being warm in winter time.

Double layered walls

Interior and exterior walls are multilayered related to the acoustic needs of school building.

Cooling Tubes

Natural conversion of hot outdoor air into cool using underground tubes

Air/Light Shaft

Two level height air shaft on the north facade, creates natural air ventilation by its opposite glass cover in summer time while it creates lightening in the halls in winter.

Floor Overhangs

/to allow penetration of low winter sun

/to block the high summer sun

Determination the proper length and width of an overhang by using sun path calculator to completely shade the window during the warm months from April 21 until August 21, and let in more and more sun until maximum solar penetration is reached on December 21, when the sun is at its most southerly position.

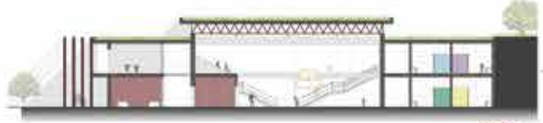
Operable Louvers

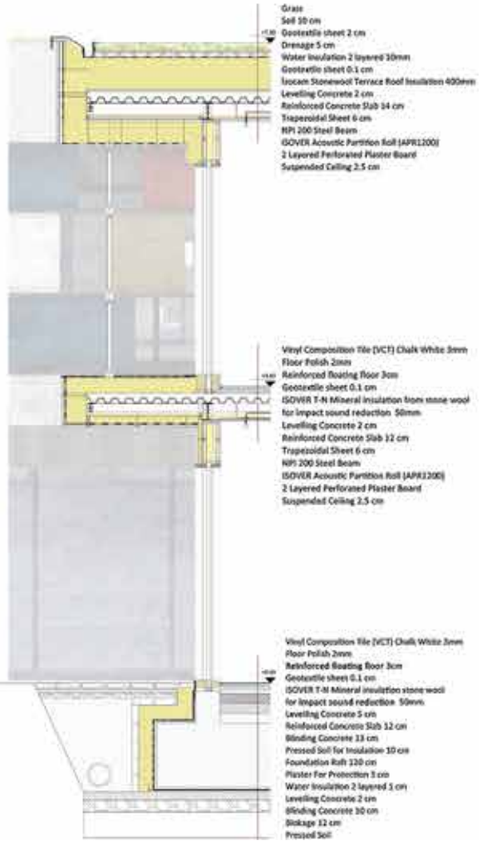
SOLAR HARVESTING SYSTEM

Louver system was design as operable to site specific in order to block solar radiation in summer as well as maximization of solar benefits in winter.

Double Layered Facade System

Facade of the building consists of 2 layer double glazed operable full height windows which will be opened in summer time in order to create natural air circulation inside of the building. Operable Louver which will work as a protection shading device for children in summer time while glass facade is open.





SCHOOL OF TOMORROW - GAZIANTEP

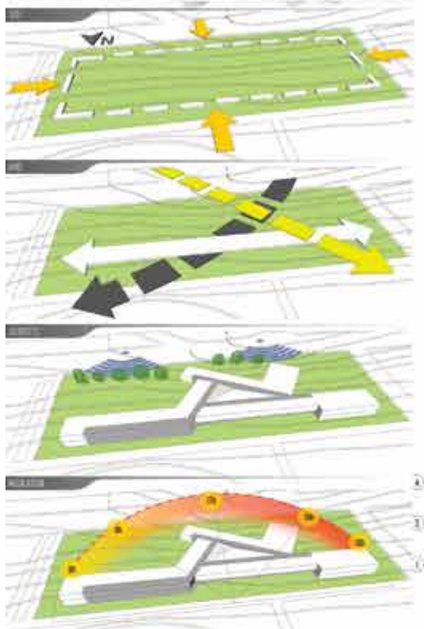
PRIZE
UKRAINE
National Stage 2014

DMYTRO KAZAKOV

VALENTYN UVAROV

VALERII ASLANIAN

Kiev national university of construction and architecture



8.drawing room 80.0 sq.m
7.music room 80.0 sq.m.
8.rooms for courses 3 x 60.0 sq.m.
total 340.0 sq.m

9.administrative office
10.office for teachers
11.office for headteacher
12.office for deputy head
total 340.0 sq.m

13.dressing room (boys)
14.dressing room (girls)
15.shower rooms
16.WCs for people with physical disabilities
17.WCs (girls)
18.WCs (boys)
19.WCs for male staff
20.first-aid post
total 280.0 sq.m

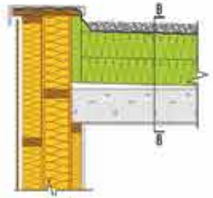
1.classrooms 20 x 60.0 sq.m
2.rooms for foreign language courses
total 1200.0 sq.m

3.greenhouse 256.0 sq.m

4.store
5.technical room
total 120.0 sq.m

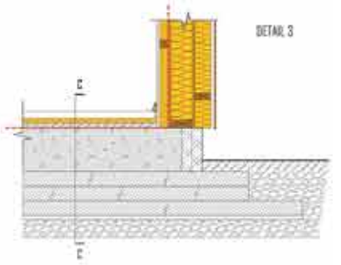
DETAILS

DETAIL 1

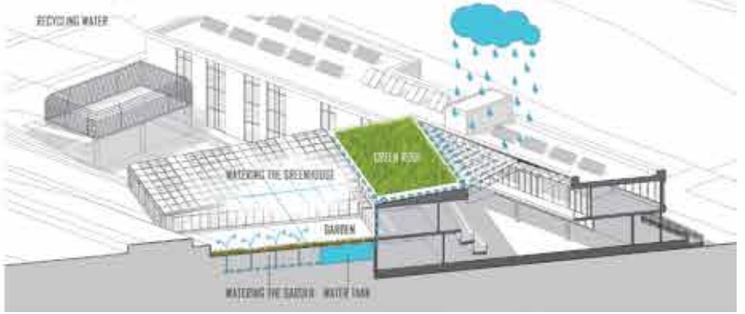


A - A
2.5 RIGIPS RIGIDUR H DOUBLE LAYER. EACH LAYER 12.5 MM
6.0 ISOVER INTEGRA UKF I-032 (WOOD 6/6 E=40CM, 12% WP)
1.5 OSB BOARD OR CHIPBOARD
16.0 ISOVER INTEGRA ZKF I-032 (WOOD 6/16 E=62.5CM, 14%WP)
1.5 OSB BOARD OR CHIPBOARD
12.0 KONTUR FSP I-032 EASY FIX 120 (WOOD 8/12 E=60CM, 12%WP)
3.0 REAR VENTILATION
1.0 EXTERIOR CLADDING (FIBER CEMENT BOARDS)

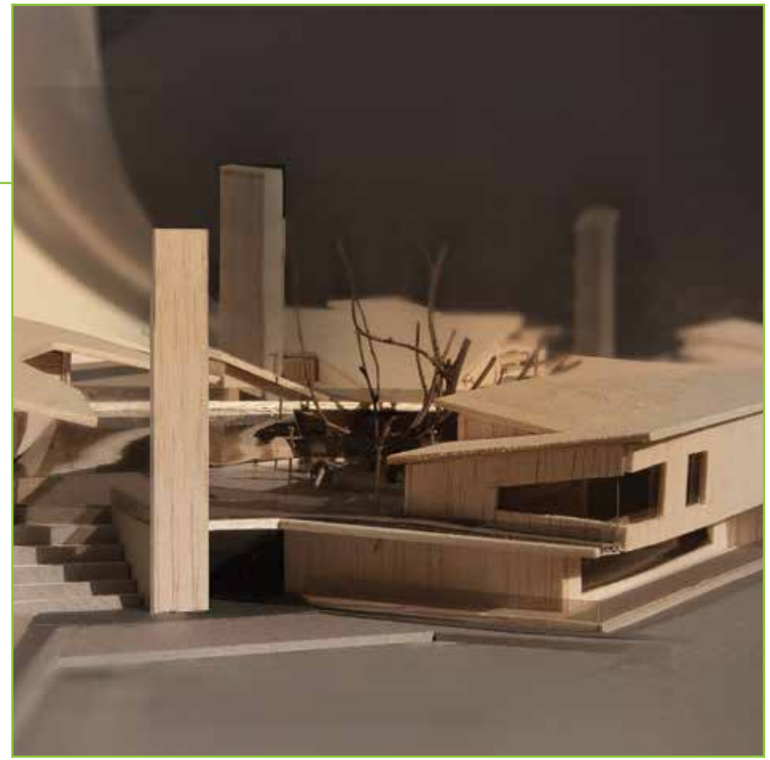
DETAIL 2
C - C
FLOOR COVERING
5.0 SCREED
VAPOUR RETARDER AND SEPARATING LAYER
3.0 ISOVER AKUSTIK EP 3 040
4.0 ISOVER EXPORIT EPS 100/035 AS COMPENSATION FOR HEIGHT OF TUBE
0.5 SEALING AGAINST MOISTURE
30.0 CONCRETE FOUNDATION SLAB
SEPARATING LAYERS
10.0 STYRODUR C2
10.0 STYRODUR C2
10.0 STYRODUR C2
GRANULAR SUBBASE



DETAIL 3



SCHOOL OF TOMORROW - GAZIANTEP



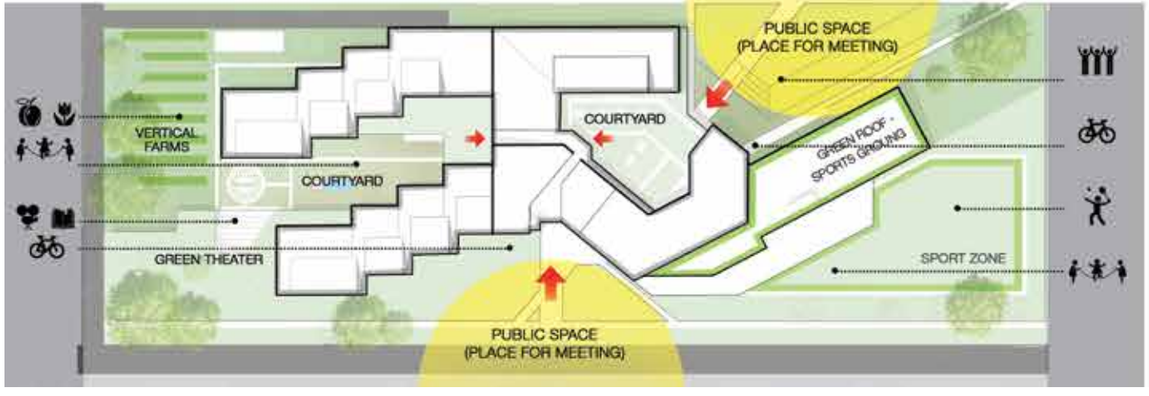
II PRIZE
UKRAINE
National Stage 2014

OLENA SHAPRAN

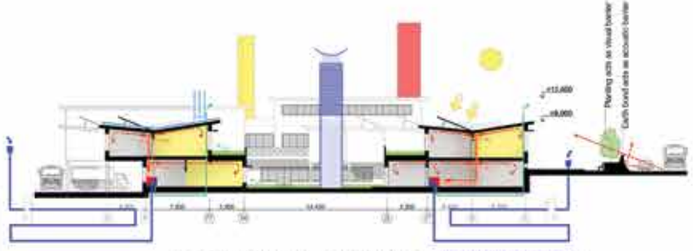
Kiev national university of construction and architecture

GROUND FLOOR

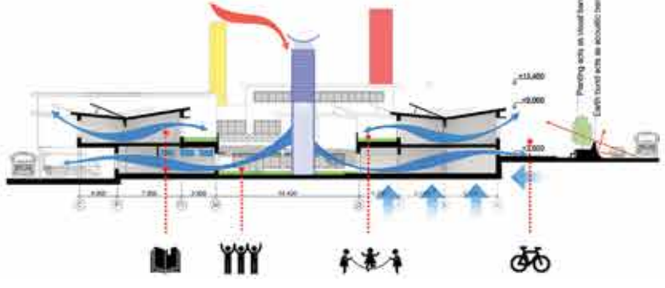
MASTERPLAN



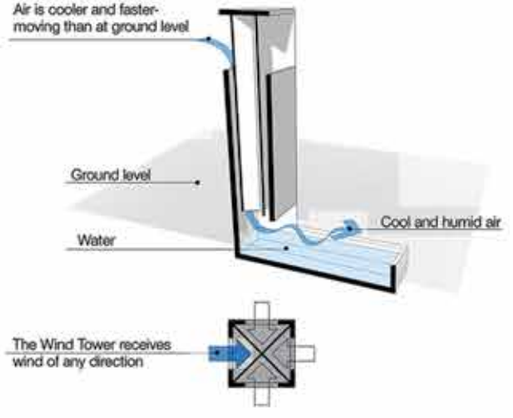
SECTION A-A. HEATING VENTILATION AIRCONDITIONING SYSTEM



SECTION A-A. NATURAL VENTILATION



WIND TOWER



SCHOOL OF TOMORROW - GAZIANTEP

Special award

ISOVER
Multi-Comfort House
Students Contest
International stage,
Bucharest 2014

III PRIZE
UKRAINE
National Stage 2014

ANNA HOTS

LILI RUDENKO

ULYANA PRYTYKA

National Polytechnic University, Lviv

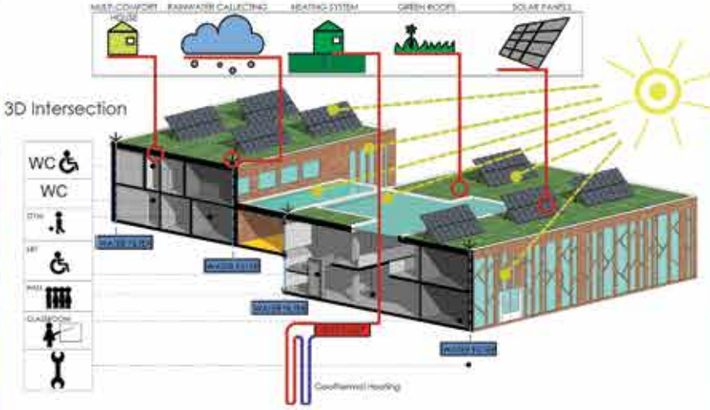
more information on **www.isover-students.com**

Master plan M 1: 300

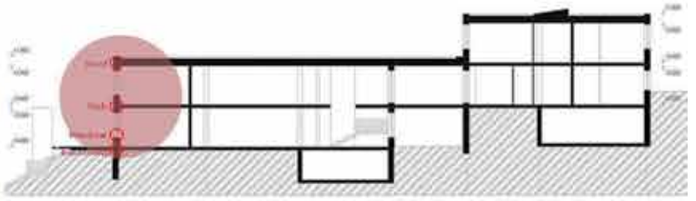
1.School
2.Cafeteria
3.Football Pitch
4.Basketball Pitch
5.Sport Playground
6.Meeting Place
7.Garden
8.Playground
9. Bio Top
10. Greenhouse
11.Parking
12.Bus Stop
13.Household Area

View

3D Intersection

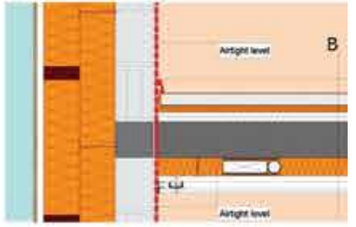


Details

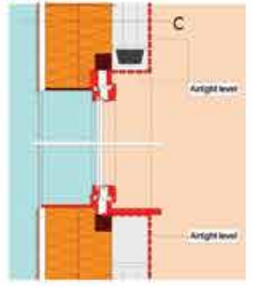


Roof

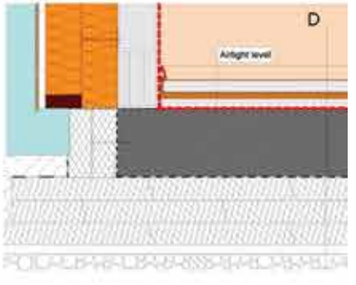
Slab



Window



Basement



SCHOOL OF TOMORROW - GAZIANTEP

Special award

ISOVER
Multi-Comfort House
Students Contest
International stage,
Bucharest 2014

I PRIZE
UNITED KINGDOM
National Stage 2014

HEBA NAZER

ABRIL DENI BALBUENA

UMER MAHMOOD

Nottingham - University of Nottingham, Institute of Sustainable Energy Technology

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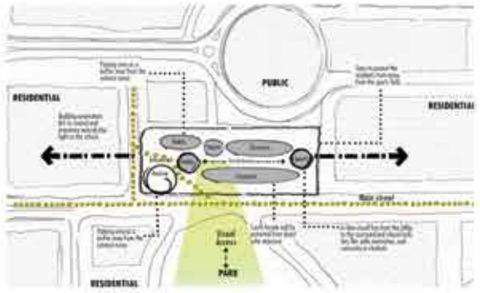
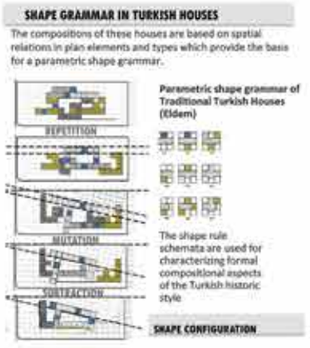
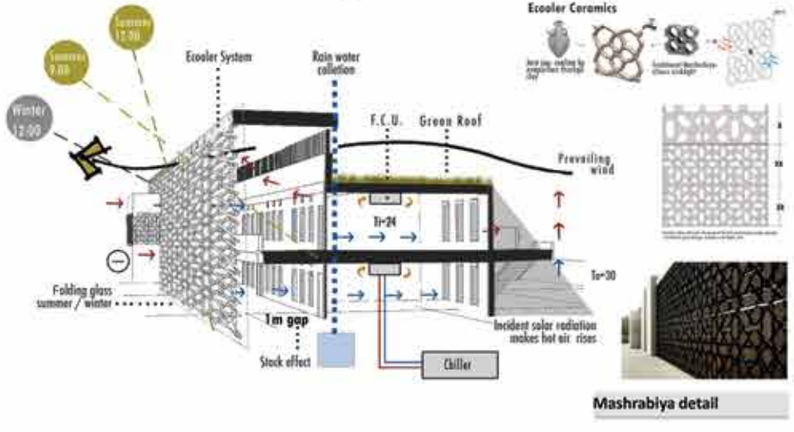




Environmental Strategies



Mashrabiya detail

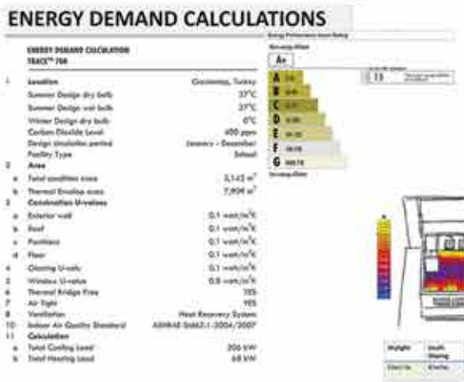
Ground floor / NTS

First floor / NTS

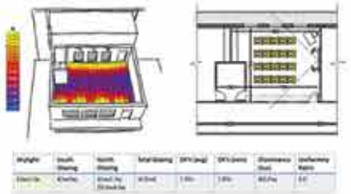
Second floor / NTS

Performance Analysis

ENERGY DEMAND CALCULATIONS

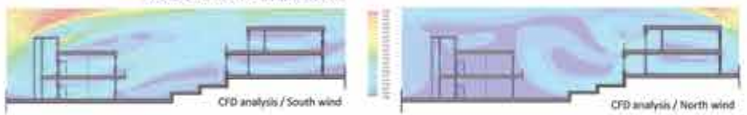


DAYLIGHT

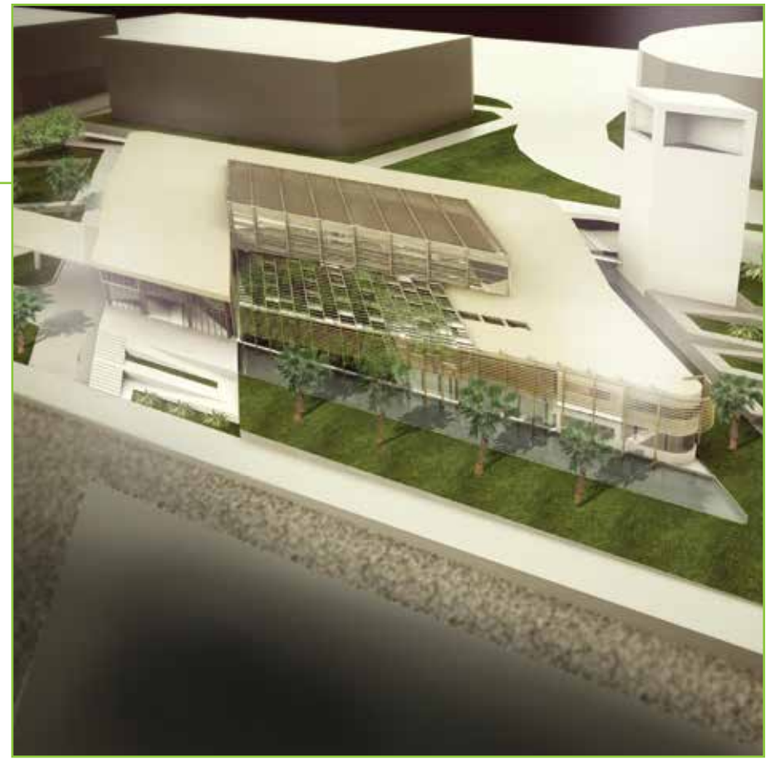


Radiance - Daylight Analysis

NATURAL VENTILATTION



SCHOOL OF TOMORROW - GAZIANTEP



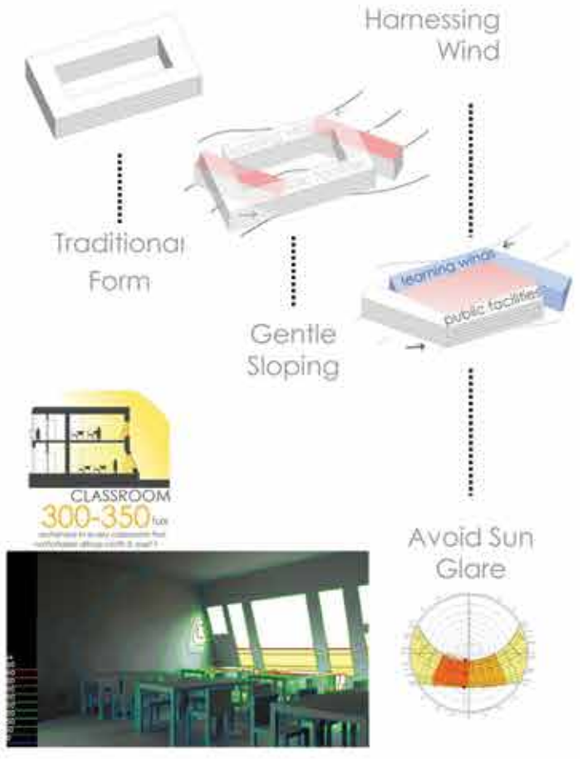
II PRIZE
UNITED KINGDOM
National Stage 2014

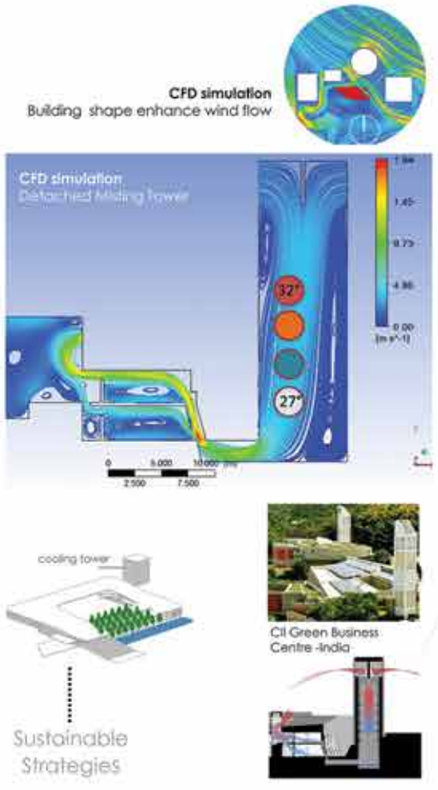
NADIA VASHTI

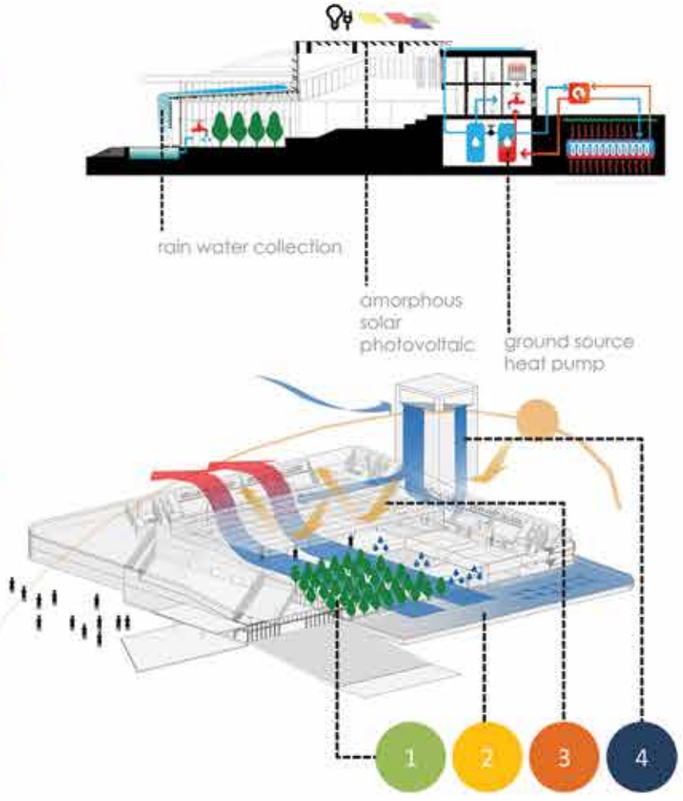
NALENDRA GIGIH

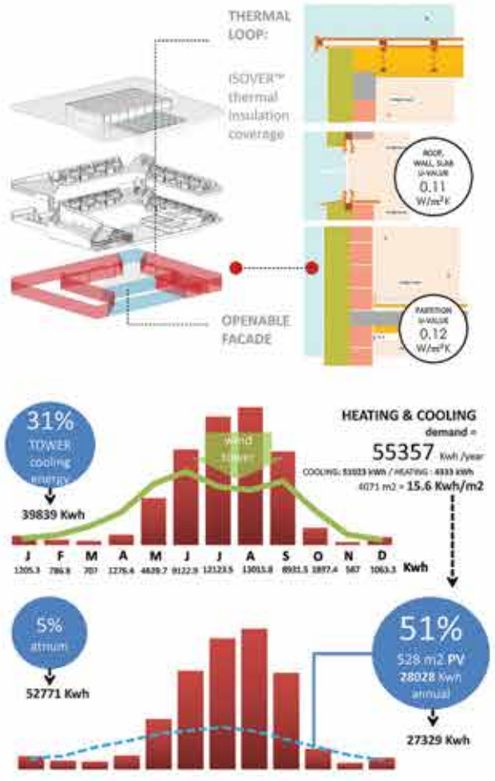
HAIPENG WANG

Nottingham - University of Nottingham, Institute of Sustainable Energy Technology


Harnessing
Wind
Traditional
Form
Gentle
Sloping
learning wings
public facilities
CLASSROOM
300-350 lux
Avoid Sun
Glare


CFD simulation
Building shape enhance wind flow
CFD simulation
Detached Mixing Tower
32°
27°
cooling tower
Sustainable
Strategies
CII Green Business
Centre -India


rain water collection
amorphous
solar
photovoltaic
ground source
heat pump
1
2
3
4


THERMAL
LOOP:
ISOVER™
thermal
insulation
coverage
ROOF,
WALL, SLAB
U-VALUE
0.11
W/m²K
PARTITION
U-VALUE
0.12
W/m²K
OPENABLE
FACADE
31%
TOWER
cooling
energy
39839 Kwh
HEATING & COOLING
demand =
55357 Kwh /year
4071 m2 = 15.6 Kwh/m2
J F M A M J J A S O N D
Kwh
5%
atmum
52771 Kwh
51%
528 m2 PV
28028 kwh
annual
27329 Kwh

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All the relevant information since 2005: all participants and their projects, video recordings of the presentations and contest tasks, documentation, literature, photo gallery

SAINT-GOBAIN