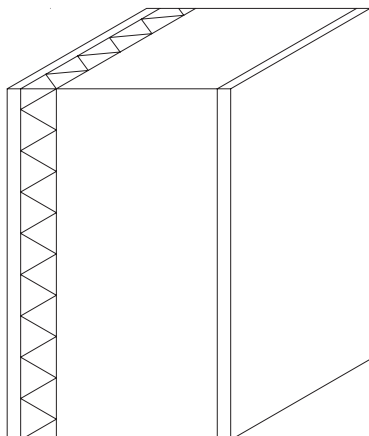
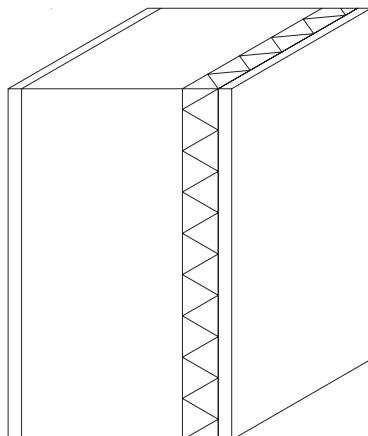


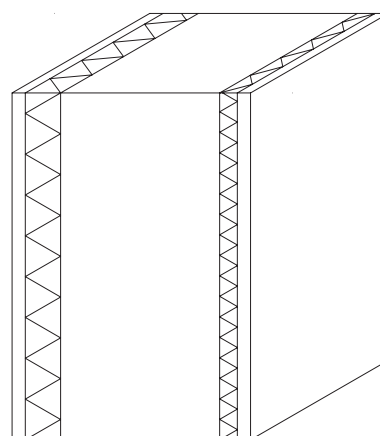
neprezračevana neprosojna fasada
unventilated opaque façade



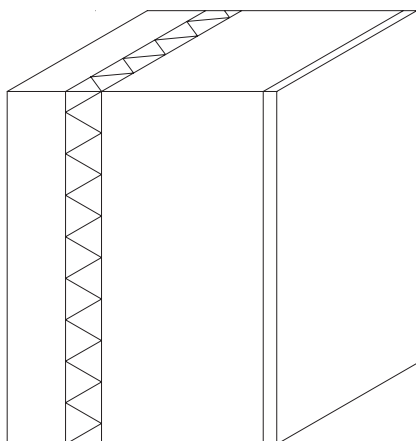
Slika 1: Fasada z zunanjo toplotno izolacijo.
Façade with external heat insulation.



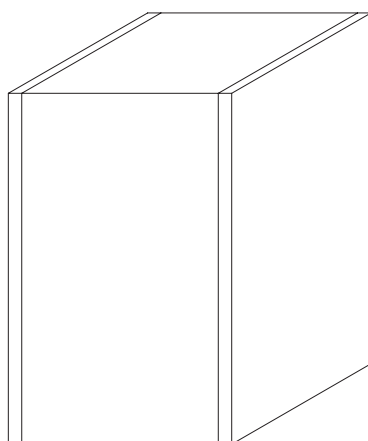
Slika 2: Fasada z notranjo toplotno izolacijo.
Façade with internal heat insulation.



Slika 3: Fasada z obojestransko toplotno izolacijo.
Façade with heat insulation on both sides.

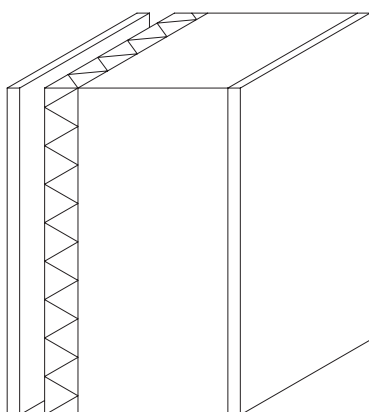


Slika 4: Fasada z vmesno toplotno izolacijo.
Façade with intermediate heat insulation.

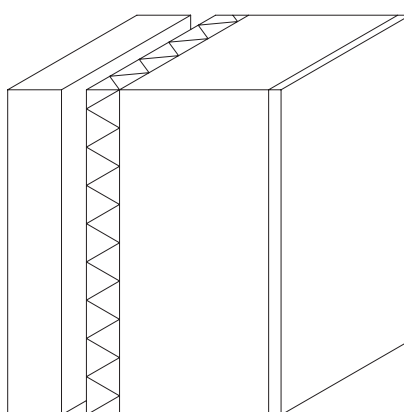


Slika 5: Fasada brez toplotne izolacije.
Façade without heat insulation.

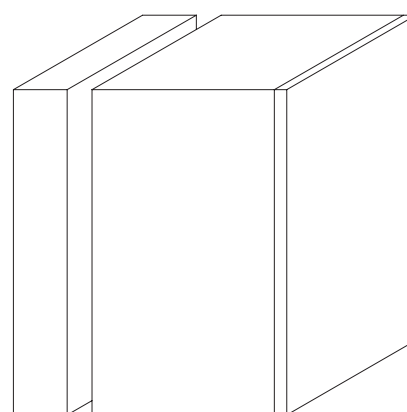
prezračevana neprosojna fasada
ventilated opaque façade



Slika 6: Fasada z nenosilno fasadno oblogo.
Façade with carried façade coat.



Slika 7: Fasada s samonosno fasadno oblogo.
Façade with self-bearing façade coat.



Slika 8: Masivna fasada s samonosno fasadno oblogo.
Solid façade with self-bearing façade coat.

povzetek

V raziskovalni nalogi Fasadni ovoj je obravnavana zunanja fasada stena, ki je bistveni element za zagotavljanje bivalnega ugodja. Tematika fasadnega ovoja je razdeljena v dva glavna sklopa - neprosojne in prosojne fasade, vsak od njiju pa v neprezračevane in prezračevane fasade. Sestava **neprosojnih fasad** ne nudi vizualnega kontakta z okolico, za razliko od **prosojnih fasad**, ki so iz prosojnih gradiv, ki delno ali popolnoma prepuščajo svetlobo. Pri **neprezračevanih fasadah** so posamezne plasti tesno skupaj, **prezračevane fasade** pa imajo za fasadno oblogo prezračevalno plast, ki izboljša nekatere fizikalne parametre. Pri vsakem sistemu so predstavljene glavne funkcije in značilnosti, prednosti in slabosti ter kriteriji za izbiro. Obdelane so posamezne plasti, ki sestavljajo obravnavane konstrukcije (**toplotne izolacije, fasadne obloge, zračni sloj, parna zavora, vetrna zavora**). Pri neprosojnih fasadnih sistemih so podrobno obdelana toplotnoizolativna gradiva (naravna, umetna anorganska, sintetična, posebna toplotnoizolativna gradiva) in fasadne obloge (ometi, kovinske, lesene, steklene, kamnite, opečne in keramične obloge ter obloge iz mineralnih kompozitov in umetnih snovi). Pri prosojnih fasadah so dodana **mineralna in sintetična prosojna gradiva in sistemi za uravnavanje svetlobe** (zastiranje svetlobe, razprševanje svetlobe, sončna zaščita). V vsako poglavje je vključen sistematičen pregled obravnavanih pojmov.

doseženi cilji, namen in rezultati

Naloga razčlenjuje fasadni ovoj v štiri glavne sklope: neprosojne in prosojne fasade in vsako od njih naprej v neprezračevane in prezračevane fasade. Posebej so obdelane posamezne plasti, njihove funkcije in gradiva, ki jih sestavljajo. Posamezni sklopi so analizirani in vrednoteni ter uvrščeni v pregledne sheme, ki pripomorejo k razumevanju obravnavane tematike. Rezultat raziskave bo služil kot gradivo pri predmetu Tehnologija gradnje in gradivo v arhitekturi in projektantom v praksi.

problematika v arhitekturi, umestitev obravnavane teme v te tokove in njen pomen

Sodobna tehnologija gradnje se razvija izredno hitro. Tudi na področju fasadnega ovoja se pojavljajo številni novi sistemi. Zaradi nepoznavanja in nerazumevanja njihovega delovanja se v arhitekturni praksi pojavljajo napake in poškodbe, ki bi jih projektant z ustreznim znanjem moral predvideti in preprečiti. Naloga predstavlja doprinos k izobraževanju strokovne arhitekturne javnosti in bo učno gradivo v študijskem procesu.

ključne besede

fasada, neprosojna fasada, prosojna fasada, neprezračevana fasada, prezračevana fasada

summary

The research project The Façade Coat deals with the exterior façade wall, which is an essential element for ensuring living comfort. The topic is divided into two main sections - opaque and translucent façades, and furthermore, both are divided into ventilated and non-ventilated façades. The composition of opaque façades cannot offer visual contact with the surroundings, contrary to translucent façades, which are composed of translucent materials that fully or partially allow the passage of light. Particular layers of non-ventilated façades lie tightly against each other, while in ventilated façades the façade coat has a ventilating layer, which can enhance certain physical parameters. The main functions and characteristics with advantages and weaknesses of each system are presented, as well as criteria for selection. Separate layers that compose the presented structures were discussed (heat insulation, façade coat, aired layer, steam block, wind block). In the discussion about non-translucent façades there are detailed accounts about heat insulation materials (natural, artificial inorganic, synthetic, special heat insulation material) and façade coats (plaster, metal, wood, glass, stone, brick and ceramic coats, as well as coats of mineral composites and artificial materials). In the discussion about translucent façades, mineral and synthetic translucent materials were added, as well as systems for regulating lighting (screening-off light, diffusion of light, solar blocks). A systematic overview of discussed concepts is added to each chapter.

intentions, goals and results

The project structures the façade coat into four main sections: opaque and translucent façades, and furthermore each into ventilated and non-ventilated façades. Special attention was given to particular composite layers with their functions and materials. These sections were analysed, evaluated and positioned in clear tables, which help understanding of the researched theme. The research results will be used as study material for the subject Building technology and materials in architecture and by practising architects.

architectural issues, positioning the topic in ongoing debate and its' significance

Modern building technology is developing very fast. Even in the field of façade coats numerous new systems are emerging. Because of poor knowledge or understanding of their operability mistakes and accidents are occurring, which a practising architect with adequate knowledge should predict and avoid. The project is a contribution to the education of professional architectural publics and will be used as study material in the education process.

key words

façade, opaque façade, translucent façade, unventilated façade, ventilated façade