

JUBIZOL thermal insulation systems with an integrated risk management system in case of natural disasters

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Forum topics	<input type="checkbox"/> Energy in 21st Century	<input type="checkbox"/> Cultural Heritage in Digital World
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Abstract: (250 to 500 words: for each heading use the bullet points or narrative - the submission including graphics should not exceed one page)

Problems - Issues / Challenges-Needs	The basic purpose of the thermal insulation system is to perform the function of maintaining the optimal temperature in the room, both in winter and in summer. By changing weather conditions and increasing the number of natural disasters, such as floods, hail, storms, extremely high temperatures, increased UV radiation, smog; the facade wrapper must also have properties that enable the management of such risks.
Solutions - Methods / Results - Findings	<p>UV resistance - COOL pigments. COOL pigments contain IR reflective particles that effectively reflect sunlight and thus prevent excessive heating and expansion of the façade surface.</p> <p>Resistance to water absorption of finishing layers - longevity of JUBIZOL systems</p> <p>Resistance to floods. Flood is the most common type of natural disaster, which in case of using an inappropriate system means an increased amount of moisture in the building material JUBIZOL system in combination with HYDROSOL Superflex 2K means waterproof protection of the lower façade parts of the building and prevents ingress of water inside the building.</p> <p>Resistance to mold and algae occurrence as a result of natural disasters. The occurrence of damage events is often the result of mold and algae on façade or inside of the building, which are not only non-aesthetic, but also harmful to health. The only precaution against microbes on the internal and external walls is the choice of finishing layers with adequate antimicrobial protection, which optimal protection is previously determined in a specialized laboratory.</p>
Novelty - Value / Relevance to ...	<p>The JUBIZOL Strong thermal insulation system has an increased bending and tensile strength of the carrier layers of the system and increased resistance of the facade surface to impacts and perforations. Both are achieved by thickening and double reinforcement, and specially designed basic plaster for this purpose, with micro-reinforcement additives that influence the increased bending and tensile strength. In this way, we ensure a high level of safety of the system, especially from damage caused by extreme weather events and vandalism, from damage caused by various animals on the façade, as well as from damage due to large heat extensions and shrinkage the consequence of the installation of finishes of dark colored tones.</p> <p>In the future we will face natural disasters that will be more frequent and whose effects will have irreversible consequences if we do not choose a technically adapted system. The choice of the façade system should be based on the analysis of the load on the site, where we will build and on the certified characteristics, on the tests which are made on accredited institutes.</p>

Keywords: JUB, Kamenski Iztok, JUBIZOL Strong, JUBIZOL sistemi, HYDROSOL Superflex 2K,

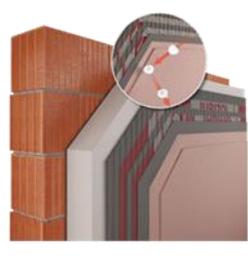
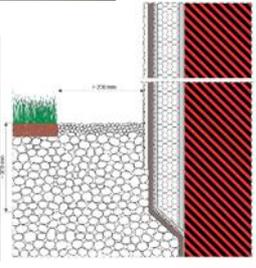
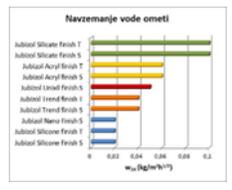


Table 2 — Categories for liquid water permeability (W)

Category		Requirement w kg/(m ² · h ^{0,5})
W ₁	High	> 0,5
W ₂	Medium	≤ 0,5
W ₃	Low	≤ 0,1



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