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## ZEMLJOTRES U STOCU APRILA 2022., UZROCI, PREVENCija I POSLJEDICE

### **Sažetak:**

Dana 22.04.2022. u 23.07h došlo je do nastanka zemljotresa sa epicentrom na području Općine Berkovići, na dubini od 5 km, jačine M 5.7 po Ruhteru. Isti se osjetio u cijeloj BiH, ali i u široj regiji. Prouzrokovao je rušenje dimnjaka, oštećenje objekata i nastanak odrona u padinskim dijelovima, tako da su mještani istočne Hercegovine (Stolac, Čapljinam Ljubuški, Berkovići, ali i Mostar) noć proveli na ulicama. Općina Stolac je značajno stradala, sa jednom žrtvom i više povrijeđenih uslijed odrona, koji su se aktivirali prilikom zemljotresa. Poslije zemljotresa ove jačine uvijek uslijedi relaksacija tla, tako da je tokom perioda od par mjeseci poslije Stolac i okolinu potreslo na desetine manjih potresa, koji su kod stanovnika Stoca izazvali dodatno uznemirenje.

Prema istraživanjima koja su izvedena na licu mjesta i dobijenim informacijama, slučaji odronjavanja stijena nisu rijedak slučaj na ovim prostorima. Uzroci odronjavanja su različiti, od velikih kiša, jakog vijetra, temperaturnih oscilacija i zemljotresa, kao što je bio ovaj slučaj. Geološki gledano teern je izgrađen od trošnih, krednih dolomita i krečnjaka. Kako se isti nalaze u izdanku, velikog nagiba, preko 65 stepeni, a objekti se nalaze odmah ispod kosine, onda nam to i pojašnjava „granatiranje“ kamenim projektilima objekata pri bilo kojem od gore navedenih hidrološko-geoloških promjena.

Kako se radi o značajnom broju stambenih objekata, potrebno je što hitnije detaljno snimiti teren i utvrditi koji je najefikasniji i ekonomski najisplativij način stabilizacije kosine iznad objekata, odnosno instalacija zidova i hvatača stijena u podnožju kosine koji bi na određeni način osigurali objekte od sličnih inženjersko-geoloških procesa u budućnosti i zaštitili živote stanovnika ovog prostora.

**Ključne riječi:** Zemljotres, odroni, prevencija, evakuacija, geološka grada terena

## THE EARTHQUAKE IN STOLAC APRIL 2022., CAUSE, PREVENTION AND CONSEQUENCE

### **Summary:**

On the April 22, 2022. at 11:07 p.m., an earthquake occurred with the epicentre in the area of Berkovici Municipality, at a depth of 5 km, magnitude M 5.7 according to Richter. The same was felt throughout BiH, but also in the wider region. It caused the collapse of chimneys, damage to buildings and landslides in parts of the slopes, so that the residents of eastern Herzegovina (Stolac, Capljina Ljubuski, Berkovici, but also Mostar) spent the night on the streets. The municipality of Stolac suffered significantly, with one victim and several injured due to landslides, which were triggered during the earthquake. An earthquake of this magnitude is always followed by a relaxation of the ground, so that during a period of a few months afterwards Stolac and its surroundings were shaken by dozens of smaller earthquakes, which caused additional anxiety among the residents of Stolac.

According to the research carried out on the spot and the information obtained, cases of rock falls are not a rare case in these areas. The causes of landslides are different, from heavy rains, strong winds, temperature fluctuations and earthquakes, as was the case here. Geologically speaking, the tern is made of crumbling, chalky dolomite and limestone. Since they are located in an outcrop, with a large slope, over 65 degrees, and the objects are located immediately below the slope, then this explains the "shelling" of objects with stone projectiles during any of the above-mentioned hydrological-geological changes.

As we are dealing with a significant number of residential buildings, it is necessary to record the terrain in detail as soon as possible and determine which is the most efficient and economically profitable way of stabilizing the slope above the buildings, i.e. the installation of walls and rock catchers at the foot of the slope, which would in a certain way secure objects from similar engineering-geological processes in the future and protect the lives of the inhabitants of this area.

**Key words:** Earthquake, rockfall, prevention, evacuation, geological properties terrain

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