

PROCENA TOPLOTNOG KOMFORA, OSVETLJENJA I BUKE NA RADNOM MESTU

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Sažetak. Komfort na radnom mestu odnosi se na to kako pojedinci kontrolišu, prilagođavaju i upravljaju svojim radnim okruženjem kako bi obezbedili sopstveno blagostanje. Pored osnovnih zahteva kao što su bezbednost i zdravlje, radno okruženje mora da pruži i odgovarajuću podršku. Fizički komfort obuhvata standarde i propise koji osiguravaju bezbedno, zdravo i prijatno radno okruženje. To uključuje odgovarajuću temperaturu, kvalitet vazduha, dovoljno osvetljenje, prihvatljiv nivo buke, sanitarne prostorije i opštu čistoću. Funkcionalni komfort znači da radno okruženje podržava izvršavanje konkretnih zadataka koje zaposleni obavljaju. Psihološki komfort odnosi se na osećaj kontrole nad sopstvenim radnim prostorom, privatnošću i socijalnom dinamikom, što utiče na osećaj sigurnosti, pripadnosti i odgovornosti. Posebna pažnja mora se posvetiti mikroklimi, jer je ona ključni faktor komforta na radnom mestu. Kada su temperatura, relativna vlažnost i brzina kretanja vazduha pravilno prilagođeni prirodi posla i fizičkim zahtevima zaposlenih, govorimo o toplotnom komforu. Odstupanja, poput visoke temperature (iznad 28 °C), promaje ili veoma suvog vazduha, mogu izazvati nelagodnost i smanjiti radnu efikasnost. Poslodavci su dužni da obezbede odgovarajuće toplotne uslove u skladu sa zakonima i potrebama zaposlenih. Odgovarajuće osvetljenje treba da obezbedi dovoljno i ravnomerno osvetljenje, odgovarajuću temperaturu boje, dovoljne kontraste i da spreči odsjaj ili treperenje svetla. Pored veštačkog osvetljenja, važna je i dostupnost prirodne svetlosti. Nivo buke na radnom mestu mora ostati u dozvoljenim granicama kako ne bi narušavao koncentraciju ili izazivao stres. U decembru 2024. godine sprovedi smo merenja mikroklimatskih uslova, osvetljenja i nivoa buke u dve zgrade, u ukupno 15 kancelarija sa 37 zaposlenih. Rezultati su pokazali nisku relativnu vlažnost u tri kancelarije, preveliku brzinu kretanja vazduha u šest i nedovoljno osvetljenje u dve kancelarije. Na osnovu ovih nalaza, pripremljene su preporuke za poboljšanje uslova i prosleđene upravama obe organizacije.

Ključne riječi: bezbednost i zdravlje na radu, kancelarija, mikroklima, osvetljenje, nivo buke

ASSESSMENT OF WORKPLACE THERMAL COMFORT, LIGHTING AND NOISE

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Abstract. Workplace comfort refers to how individuals control, adapt to, and manage their work environment to ensure their own well-being. In addition to basic requirements such as safety and health, the work environment also needs to provide adequate support. Physical comfort includes standards and regulations that ensure a safe, healthy and pleasant environment for work. It includes adequate temperature, air quality, sufficient lighting, acceptable noise levels, sanitary facilities and general cleanliness. Functional comfort means the working environment supports the execution of specific tasks performed by individuals. Psychological comfort refers to the feeling of control over one's workspace, privacy and social dynamics, which affects the sense of safety, belonging and responsibility. Special attention must be paid to the microclimate, as it is a key factor in workplace comfort. When temperature, relative humidity, and air velocity are appropriately adjusted to the nature of the work and physical demands on employees, we speak of thermal comfort. Deviations, such as high temperature (above 28 °C), draughts or very dry air, can cause discomfort and reduce work efficiency. Employers are obligated to ensure suitable thermal conditions in line with legislation and employees' needs. Adequate lighting should provide sufficient and uniform illumination, appropriate colour temperature, adequate contrasts and avoid glare or flickering. In addition to artificial lighting, the availability of natural light is also important. Noise levels at the workplace must remain within permissible limits to avoid impairing concentration or causing stress. In December 2024, we carried out measurements of microclimatic conditions, lighting and noise levels in two buildings, covering 15 offices and 37 employees. The results showed low relative humidity in three offices, excessive air velocity in six offices, and insufficient lighting in two offices. Based on the findings, recommendations for improving the conditions were made and shared with the management of both organisations.

Keywords: occupational safety and health, office, microclimate, lighting, noise levels