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Ferdinando Salata, Iacopo Golasi, Virgilio Ciancio, Federica Rosso



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DRESSED FOR THE SEASON: clothing and outdoor thermal comfort in the Mediterranean population

Ferdinando Salata^{1,α}, Iacopo Golasi¹, Virgilio Ciancio¹, Federica Rosso²

¹ DIAEE (Department of Astronautical, Electrical and Energy Engineering – Applied Physics Area), Faculty of Civil and Industrial Engineering, University of Rome “Sapienza”.

² DICEA (Department of Civil, Constructional and Environmental Engineering), Faculty of Civil and Industrial Engineering, University of Rome “Sapienza”.

^αCorresponding author: Ph.D. Ferdinando Salata - Postal address: Via Eudossiana, 18 - 00184 Rome, Italy;

Phone: +390644585402; Fax. 064880120; Email: ferdinando.salata@uniroma1.it

Abstract

Outdoor comfort, as perceived by the average person, is linked to a wide variety of parameters. Microclimatic, physiological and psychological factors influence the perception of each individual and more generally, that of the local population, given the acclimatization phenomenon with respect to local climate. One of the few mechanisms available to protect ourselves from the outdoor climate to achieve thermal comfort is choosing adequate thermal insulation in our clothing. Each individual can easily implement this protection mechanism to adjust her/his own thermal sensation. In order to quantitatively evaluate the comfort provided by thermal insulation of clothing, the following parameters must be considered: (i) outdoor thermal conditions, such as air and mean radiant temperature, relative humidity and wind speed; (ii) the individuals' genders and ages; and (iii) their expressions of thermal comfort, with reference to the specific local climate to which each subject is usually exposed (acclimatization). This work aims at analyzing these factors, by means of an experimental investigation, with particular reference to a statistically relevant sample of the Mediterranean population. To this end, thermal comfort is expressed by means of the Mediterranean Outdoor Comfort Index (MOCI), which was specifically created to describe the thermal comfort of the

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