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Corrigendum

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Udrea I, Croitoru C, Nastase I, Crutescu R and Badescu V (2020)
A new adaptive thermal comfort model for the Romanian climate.
Proceedings of the Institution of Civil Engineers – Engineering Sustainability **173**(3): 151–159, <https://doi.org/10.1680/jensu.18.00005>.

The originality justification was omitted from the paper; it follows here, along with an additional reference (which is cited only in this justification). The authors apologise to the readers of *Engineering Sustainability* for this omission from the original paper.

The method of determination, in accordance with BS EN 15251:2007 (BSI, 2007) of the adaptive comfort equation, applied in the paper by Udrea *et al.* (2017) was extended, in the sense that in this paper two adaptive thermal comfort equations were determined, one for Griffiths constant $G = 0.4$ and another for $G = 0.5$. Both equations are presented in Figure 3 and Table 2 of this paper. The article then details the justification for choosing one equation as being most suitable for the Romanian climate; the chosen equation is the one with $G = 0.5$. There are small differences between this equation – $T_{\text{comf}} = 0.322T_{\text{rm}} + 18.496$, equation 4 in this paper – and the equation $T_{\text{comf}} = 0.325T_{\text{rm}} + 18.474$ (equation 72.3 from Udrea *et al.* (2017)). This is due to the fact that, although the same database was used, in this article 42 records were disregarded. The relevance of the database was analysed and it was found that on one day of the survey, the questionnaires were given in the Installations Laboratory Building of the Faculty of Building Services of UTCB. Although apparently a free running building, this building can be considered to have been conditioned on that day because some demonstrations of the functioning of certain didactic HVAC systems had been performed for the students. In conclusion, this change from the work of Udrea *et al.* (2017) led

to the improvement of the accuracy of the database. The difference of the 42 questionnaires is noted between table 72.1 of Udrea *et al.* (2017) and Table 3 of this article, although the number in the +4 column represents the number of questionnaires for which the thermal sensation vote falls within the range (-4, +4) and not the total number of questionnaires.

In addition, compared to Udrea *et al.* (2017), this article validates the equation obtained against other experimental data, obtained in May 2015, one year after the initial measurements. These experimental data consisted of operative temperature measurement, which was plotted on the new ATC equation diagram for acceptable indoor temperatures (see Figure 5). At the same time as the measurement of the operating temperature, thermal comfort questionnaires in which the subjects expressed thermal sensation votes were distributed.

In the article by Udrea *et al.* (2017) the equation is compared with only three equations in the literature, two of them being equations that are in international standards (see table 72.2). In this paper, 14 equations of thermal comfort are presented (see Table 4), including the newly determined ones, and discussions are generated.

In conclusion, it can be said that the article by Udrea *et al.* (2017) represents preliminary results in order to obtain a thermal comfort equation specific to the Romanian climate used as a starting point for this article.

REFERENCE

- Udrea I, Croitoru C, Nastase I, Crutescu R and Badescu V (2017)
An adaptive thermal comfort model for the Romanian climate.
In *Mediterranean Green Buildings & Renewable Energy*
(Sayigh A (ed.)). Springer, Cham, Switzerland, pp. 921–930.