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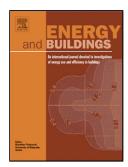
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## ACCEPTED MANUSCRIPT

Experimental evaluation of thermal comfort, ventilation performance indices and exposure to airborne contaminant in an Airborne Infection Isolation Room equipped with a displacement air distribution system

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#### Nomenclature

| ACH                 | Air changes per hour (h <sup>-1</sup> )                                  |
|---------------------|--|
| AIIR                | Airborne infection isolation room  |
| $\langle c \rangle$ | Mean tracer gas concentration of contaminant of the chamber (ppm)        |
| $c_e$               | Average tracer gas concentration of the exhaust air (ppm)                |
| $c_i$               | Average tracer gas concentration in a determined point (ppm)             |
| $c_{exh}$           | Average contaminant concentration emitted through the P exhalation (ppm) |
| $c_{inh}$           | Average contaminant concentration inside the inhalation airway of the HW |
| titit               | manikin (ppm)  |
| $c_{i,max}$         | Average of the maximum tracer gas concentration values registered in a   |
| tyrrectst           | determined point (ppm)   |
| $C_S$               | Average tracer gas concentration in the supply air (ppm)                 |
| Ď                   | Displacement diffuser  |
| DV                  | Displacement ventilation   |
| E                   | Exhaust grille   |
| $e_{P,max}^c$       | Local relative maximum exposure coefficient                              |
| $f_{e_{P,max}^c}$   | Local maximum exposure frequency (h <sup>-1</sup> )                      |
| IÁQ                 | Indoor air quality   |
| IF                  | Intake fraction  |
| Н                   | Total height of the chamber (m)  |
| $HR_i$              | Average relative humidity in a determined point (%)                      |
| HW                  | Health worker  |
| MV                  | Mixing ventilation   |
| P                   | Patient  |
| P3                  | Pole located far from thermal loads                                      |
| PHW                 | Pole located near health worker  |
| PMV                 | Predicted mean vote  |
| PP                  | Pole located near patient  |
| PPD                 | Predicted percentage of dissatisfied (%)                                 |
| $Q_{b,exh}$         | Breathing rate of P (l/min)  |
| $Q_{b,inh}$         | Breathing rate of HW (l/min)   |
| $T_{i}$             | Average ambient temperature in a determined point (°C)                   |

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