

ISO 8996
 PMV
 3 PMV
 PMV
 가
 , PMV
 4.
 . ISO standard 7730 80%
 (PPD) 10%
 PMV 가 -0.5 +0.5 [3].
 -0.5 +0.5 PMV 가
 4 4m(가)×4m()×2.5m()
 PIR
 12
 LG LPNH523D
 on/off 가
 5 30
 PMV
 on/off 가 22
 PMV 가 가



Fig. 4 Experiment test bed of air-conditioning control algorithm

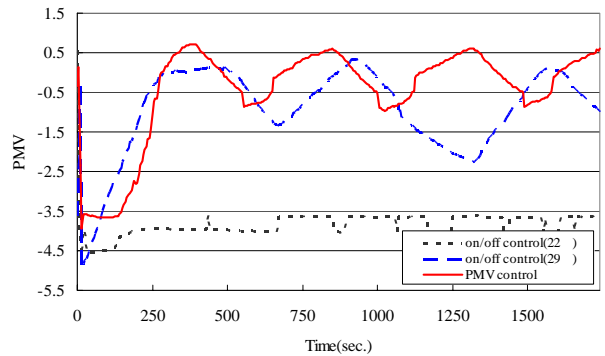


Fig. 5 Reclining case - PMV control vs. on/off control

29

5

PMV

+0.5 -0.5

5.

PMV

가

가

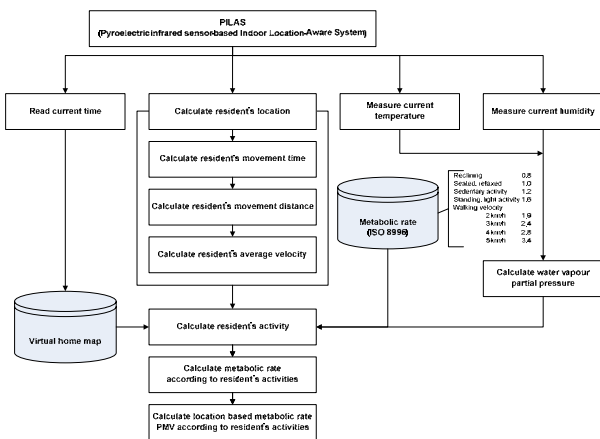


Fig. 2 PMV calculator algorithm

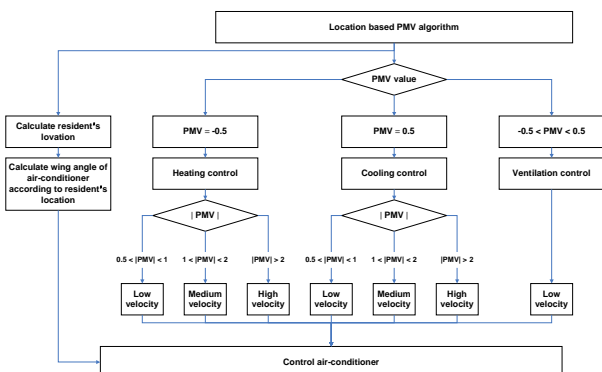


Fig. 3 Air-conditioning control algorithm using PMV

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2. Suk Lee, Kyoung Nam Ha, Kyung Chang Lee, "A Pyroelectric Infrared Sensor-based Indoor Location-Aware System for the Smart Home," IEEE Transaction on Consumer Electronics, vol. 52, no. 4, pp. 1311-1317, November. 2006.
3. ISO 7730:2005(E), Ergonomics of the thermal environment- Analytical determination and interpretation of thermal comfort using calculation of the PMV and PPD indices and local thermal comfort criteria.
4. ISO 8996:2004(E), Ergonomics of the thermal environment- Determination of metabolic rate.