

ISO 11855-1:2021 (E)

Building environment design — Embedded radiant heating and cooling systems — Part 1: Definitions, symbols, and comfort criteria

Contents

| | |
|---------|------------------------------------------------------------------------------------|
| | Foreword |
| | Introduction |
| 1 | Scope |
| 2 | Normative references |
| 3 | Terms and definitions |
| 4 | Symbols and abbreviated terms |
| 5 | Comfort criteria |
| 5.1 | General |
| 5.2 | General thermal comfort |
| 5.2.1 | Operative temperature |
| 5.2.1.1 | Definition |
| 5.2.1.2 | Relationship to thermal comfort |
| 5.2.2 | PMV (predicted mean vote) and PPD (predicted percentage of dissatisfied) |
| 5.3 | Local thermal discomfort |
| 5.3.1 | Surface temperature limit |
| 5.3.1.1 | Floor heating and cooling |
| 5.3.1.2 | Wall heating and cooling |
| 5.3.2 | Radiant temperature asymmetry |
| 5.3.3 | Vertical air temperature difference |
| 5.4 | Acoustical comfort |
| 5.4.1 | Water velocity and noise |
| 5.4.2 | Acoustical comfort in water-based heating and cooling systems |
| 5.4.3 | Acoustical comfort in thermally active building systems (TABS) |
| Annex A | (informative) Floor surface temperature for thermal comfort |
| A.1 | Examples of ranges of floor surface temperature |
| A.2 | Relation between floor temperature and skin temperature in electric heating system |
| A.3 | Relation between skin temperature and discomfort |
| Annex B | (informative) Draught |

Page count: 27