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Climate Changes Brought About by Urban Living: Chiu-Ying Lam; Temperature; On climate changes brought about by urban living; Wind; State of the sky; Evaporation; Thinking about people

6. Urbanization and City Climate: A Diurnal and Seasonal Perspective: Wing-Mo Leung and Tsz-Cheung Lee Urban heat island (UHI) intensity; Diurnal variation of UHI intensity; Seasonal variation of UHI intensity; Favourable conditions for high UHI intensity; Conclusions;

7. Urban Climate in Dense Cities: Lutz Katzschner; Introduction; Problems; Urban climatic maps; Urban climate and planning; Part III: Environmental Aspects of High-Density Design;

8. Thermal Comfort Issues and Implications in High-Density Cities: Baruch Givoni; Thermal comfort; Recent research on comfort

Conclusions: Implications for building design and urban planning

9. Urban Environment Diversity and Human Comfort: Koen Steemers and Marylis Ramos; Introduction; Background; Monitoring outdoor comfort; Conclusions;

10. Designing for Urban Ventilation: Edward Ng; Introduction; Urban ventilation in high-density cities; Wind velocity ratio for urban ventilation; Building and city morphology for urban ventilation; Case study: Hong Kong; Design guidelines; Conclusions;

11. Natural Ventilation in High-Density Cities: Francis Allard, Christian Ghiaus and Agota Szucs; Introduction; Role of ventilation

Cooling potential by ventilation in a dense urban environment

Natural ventilation strategies in a dense urban environment;

12. Sound Environment: High- versus Low-Density Cities: Jian Kang; Sound distribution; Sound perception; Noise reduction;

13. Designing for Daylighting: Edward Ng; Introduction; Context; Graphical tools for design; The need for daylight; Towards high density; A tool for high density; The way forward; Conclusions;

14. Designing for Waste Minimization in High-Density Cities: Chi-Sun Poon and Lara Jaillon; Introduction: Waste management and waste minimization

Designing for waste minimization

Sommario/riassunto

Compact living is sustainable living. High-density cities can support closer amenities, encourage reduced trip lengths and the use of public transport and therefore reduce transport energy costs and carbon emissions. High-density planning also helps to control the spread of urban suburbs into open lands, improves efficiency in urban infrastructure and services, and results in environmental improvements that support higher quality of life in cities. Encouraging, even requiring, higher density urban development is a major policy and a central principle of growth management programmes u