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Nota di contenuto	Intro -- FIRE SAFETY -- FIRE SAFETY -- CONTENTS -- PREFACE -- SMOKE AND FIRE DYNAMICS IN ATRIA AND LARGE ENCLOSURES: AN OVERVIEW -- ABSTRACT -- 1. INTRODUCTION -- 2. ATRIUM DEFINITION -- 3. ATRIUM TYPOLOGY -- 4. ATRIUM FIRE DYNAMICS AND SAFETY PROBLEMS -- 5. FIRE STRATEGIES AND DESIGN -- 6. COMPUTER MODELLING -- 7. SPRINKLERS AND SMOKE DETECTORS -- 8. THE PROCESS OF SMOKE FILLING -- 9. NATURAL VENTING OF SMOKE -- 10. MECHANICAL VENTING OF SMOKE -- 11. SPILL PLUME DYNAMICS -- 12. CURRENT DESIGN TRENDS IN FIRE SAFETY -- ACKNOWLEDGMENTS -- REFERENCES -- A BRIEF REVIEW ON APPLYING COMPUTATIONAL FLUID DYNAMICS IN BUILDING FIRE HAZARD ASSESSMENT -- ABSTRACT -- 1. INTRODUCTION -- 2. LITERATURE REVIEW -- 3. TURBULENCE MODEL -- Reynolds Averaging of Navier-Stokes Equation (RANS) -- Large Eddy Simulation (LES) -- 4. DISCRETIZATION OF THE CONSERVATION EQUATIONS: FINITE VOLUME METHOD -- 5. VELOCITY-PRESSURE LINKED EQUATIONS -- 6. COMBUSTION AND MODELLING OF THE HEAT RELEASED -- 7. THE FIRE DYNAMICS SIMULATOR -- 8. VERIFICATION AND VALIDATION -- 9. APPLICATION TO FIRE SAFETY ENGINEERING -- 10. AN EXAMPLE -- 11. FUNCTIONAL ANALYSIS -- 12. FREE BOUNDARY CONDITIONS -- 13. CONCLUSIONS -- REFERENCES -- SIMPLIFIED ASSESSMENT OF

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Sommario/riassunto

This volume discusses the first aim of fire safety - to provide the safety of occupants, and to avoid and/or reduce the number of fatalities (and/or the number of injuries). A broad overview of the current state-of-the-art of fires in atria is also discussed.