1. Record Nr. UNINA9910544013003321

Autore	Simiu Emil
Titolo	Wind effects on structures : modern structural design for wind / / Emil Simiu, P.E., Ph.D., NIST Fellow, National Institute of Standards and Technology, DongHun Yeo, P.E., Ph.D., Research Engineer, National Institute of Standards and Technology
Pubbl/distr/stampa	Hoboken, New Jersey ; ; Chichester, West Sussex, England : , : Wiley Blackwell, , 2019
ISBN	1-119-37593-2 1-5231-2861-5 1-119-37589-4 1-119-37590-8
Edizione	[Fourth edition.]
Descrizione fisica	1 online resource (523 pages)
Collana	THEi Wiley ebooks.
Disciplina	624.175
Soggetti	Wind-pressure Buildings - Aerodynamics Wind resistant design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	"The typical process by which engineered buildings are designed for wind loads in current practice has serious shortcomings. This is due to the inadequate pressure measurement technology and computational resources at the time of its development, and to an ineffective framework for the cooperation between wind and structural engineers. As a result, independent estimates of wind forces on major tall buildings performed in the early 2000s by prominent wind engineering laboratories were found to differ from each other by over 40 %. This finding, and similar findings reported in the literature, prompted intense research efforts that, along with the development of the pressure scanner, led to major advances in the state of the art. However, these advances have not yet been integrated effectively into design practice"--