Integrating wind turbines to tall buildings

Based on this approach, this chapter presents design strategies from the literature to integrate wind energy to tall buildings using computational fluid dynamics (CFD) simulation.

Building-integrated wind turbines (BIWTs) represent a potential solution, especially in urban areas where space is limited.

The present review addresses wind resource assessment, tall building aerodynamics, wind turbine types and characteristics, and a case study of representative wind turbine systems currently present on tall ...

Designs that incorporate wind turbines are increasingly being seen on the drawing boards for skyscrapers across the globe. The project forms a testing ground for new architectural strategies for a place-based ...

Putting wind turbines on top of buildings--especially tall buildings--should allow them to take advantage of height without an expensive, full-size tower. In some cases, building geometry can enhance ...

While Strata is the first residential building to integrate wind turbines which generate electricity on site, Park House integrates retail, office and residential space in an innovative building set to revitalize the Western end ...

Integrating wind energy systems into building design is a small but growing trend, and high rises with their elevated wind speeds seem particularly suited to the technology. Designs that incorporate wind turbines are ...

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