

Roof Damage Bibliography

Ali, H. M., Senseny, P. E. "Models for standing seam roofs," *Journal of Wind Engineering and Industrial Aerodynamics*. Vol. 91, Issues 12-15, Pages 1689-1702. December 2003.

Baskaran, A., Murty, B. and Wu, J. "Calculating roof membrane deformation under simulated moderate wind uplift pressures" *Engineering Structures*, Vol. 31, (3), pp. 642-650. 2009.

Baskaran, A. "Dynamic wind uplift performance of thermoplastic roofing system with new seaming technology," *Journal of Architectural Engineering*. Vol. 8, no. 4, pp. 97-107. Dec. 2002.

Baskaran, B. A., Koa, S., & Molleti, S. "A novel approach to estimate the wind uplift resistance of roofing systems," *Building and Environment*. Volume 44, Issue 4, Pages 723-735. April 2009.

Bienkiewicz, B., Meroney, R. N. "Wind effects on roof ballast pavers," *Journal of Structural Engineering*. Vol. 114, no. 6, pp. 1250-1267. June 1988.

Brown, J. "Technology: Roof vent harnesses wind to prevent uplift," *Civil Engineering—ASCE*, Vol. 78, No. 7, pp. 36-37. Jul 2007.

Cochran, L. "Wind engineering as related to tropical cyclones," *Storms*, Vol. 1, Routledge Press (2000). <http://www.cppwind.com/support/papers/papers/structural/storms.pdf>

Chung, K., Liu, Y. "Reduction of wind uplift of a solar collector model," *Journal of Wind Engineering and Industrial Aerodynamics*, Vol. 96, no. 8-9, pp. 1294-1306. Aug 2008.

Cope, A. D., Gurley, K. R., Gioffre, M., & Reinhold, T. A. "Low-rise gable roof wind loads: Characterization and stochastic simulation," *Journal of Wind Engineering and Industrial Aerodynamics*. Vol. 93, no. 9, pp. 719-738. Sept. 2005.

Eaton, K. J. "Cladding and the wind" *Journal of the Structural Division*, Vol. 102, no. 5, pp. 1043-1058. May 1976.

Henderson, D. J., Ginger, J. D., Morrison, M. J., & Kopp, S. A. "Simulated tropical cyclonic winds for low cycle fatigue loading of steel roofing," *Wind & Structures*. Vol. 12, no. 4, pp. 383-400. Jul 2009.

Huang, P., Mirmiran, A., Chowdhury, A., Abishdid, C., & Wang, T. "Performance of Roof Tiles under Simulated Hurricane Impact," *Journal of Architectural Engineering*, no. 1, pp. 26-34. Mar. 2009.

Kopp, G. A.; Surry, D., Mans, C. "Wind effects of parapets on low buildings: Part 1. Basic aerodynamics and local loads," *Journal of wind engineering and industrial aerodynamics*. vol. 93, no11, pp. 817-841. 2005.

- Lee, K., Rosowsky, D. V. "Fragility assessment for roof sheathing failure in high wind regions," *Engineering Structures*. Vol. 27, no. 6, pp. 857-868. May 2005.
- Li, Y., Ellingwood, B. "Hurricane damage to residential construction in the US: Importance of uncertainty modeling in risk assessment," *Engineering Structures*. Vol. 28, no. 7, pp. 1009-1018. June 2006.
- Liao, D. "Physically-based visualization of residential building damage process in hurricane," (Doctoral Dissertation, University of Central Florida, 2007).
- Mahendran, M., Mahaarachchi, D. "Cyclic pull-out strength of screwed connections in steel roof and wall cladding systems using thin steel battens," *Journal of Structural Engineering*. Vol. 128, no. 6, pp. 771-778. June 2002.
- Mahendran, M. "Wind-Resistant Low-Rise Buildings in the Tropics," *Journal of Performance of Constructed Facilities*. Vol. 9, no. 4, pp. 330-346. Nov. 1995.
- Mahendran, M., Tang, R.B. "Pull-out strength of steel roof and wall cladding systems," *Journal of Structural Engineering*. Vol. 124, no. 10, pp. 1192-1201. Oct. 1998.
- Mahendran, M., Mahaarachchi, D. "Splitting failures in trapezoidal steel roof cladding," *Journal of Performance of Constructed Facilities*. Vol. 18, no. 1, pp. 4-11. Feb. 2004.
- Meecham, D. "Improved performance of hip roofs in extreme winds. A case study," *Journal of Wind Engineering and Industrial Aerodynamics*. Vol. 43, pt 3, pp. 1717-1726. 1992.
- Meloy, N. "Roof damage in new homes caused by Hurricane Charley," *Journal of Performance of Constructed Facilities*. Vol. 21, no. 2, pp. 97-107. Mar.-Apr. 2007.
- Okada, H., Kikitsu, Hi. "Evaluation of wind resistance performance of clay tile roof based on survey of construction method and pulling-up tests," *Journal of Structural and Construction Engineering*, no. 596, pp. 9-16. Oct. 2005.
- Pan, F., Sun, B., Wen-Juan, & Chen, Y. "Random wind-induced dynamic response of long-span roof to thunderstorm downbursts in the time domain," *Acta Aerodynamica Sinica*, vol. 26, no. 1, pp. 119-125, Mar. 2008.
- Peterka, J.A.; Cermak, J.E.; Cochran, L.S. "Wind uplift model for asphalt shingles," *Journal of Architectural Engineering*, Vol. 3, No. 4, pp. 147-155. Dec 1007.
- Reinhold, T. A. "Wind Loads," *ASHRAE Journal*. Vol. 48, no. 3, pp. 36-38, 40-41, 43. Mar. 2006.
- Smith, T. L. "Causes of roof covering damage and failure modes: Insights provided by Hurricane Andrew," *Conference: Hurricanes of 1992: Lessons learned and implications for the future*, pp. 303-312.

Suaris, W, Khan, M. "Performance of prestressed concrete roofs during Hurricane Andrew," *Journal of Performance of Constructed Facilities*. Vol. 8, No. 1, pp. 16-30. Feb 1994.

Thompson, T. S., Kuberski, M. A. "Galvanic corrosion causes failure of concrete roof tiles," *Materials Performance (USA)*. Vol. 37, no. 8, pp. 73-74. Aug. 1998.

Turner, M. A., Plaut, R. H., Dillard, D. A., Loferski, J., & Caudill, R. "Tests of adhesives to augment nails in wind uplift resistance of roofs," *Journal of Structural Engineering*, Vol. 135, No. 1, pp. 88-93. Jan 2009.

Ueda, H., Hagura, H., Hamada, H. "Characteristics of fluctuating wind forces acting on canopies attached to low-rise buildings with flat-roof," *Journal of Structural and Construction Engineering*, no. 548, pp. 15-20. Oct. 2001.

Vickery, P. J. "Component and cladding wind loads for soffits," *Journal of Structural Engineering* , no. 5, pp. 846-853. May 2008.

Vickery, P. J., Lin, J., Skerlj, P. F., Twisdale Jr, L. A., & Huang, K. "HAZUS-MH Hurricane Model methodology. I: Hurricane hazard, terrain, and wind Load modeling," *Natural Hazards Review*. Vol. 7, no. 2, pp. 82-93. May 2006.

Vickery, P. J., *et al.* "HAZUS-MH Hurricane Model methodology. II: Damage and loss estimation," *Natural Hazards Review*. Vol. 7, no. 2, pp. 94-103. May 2006.

Vitiello, R. "Impact of hail on rubber & plastic roofing systems," *Construction Specifier*. Vol. 57, no. 4, pp. 42-44, 46-48, 50. Apr. 2004.

"Wind research on metal roofs," *Roofing/Siding/Insulation*. Vol. 67, no. 7, pp. 47-48. July 1990.

Xu, Y. L. "Fatigue damage estimation of metal roof cladding subject to wind loading" *Journal of Wind Engineering and Industrial Aerodynamics*. Vol. 72, no. 1-3, pp. 379-388. 1 Nov. 1997.

Xu, Y. L. "Wind-induced fatigue loading and damage to hip and gable roof claddings," *Journal of Structural Engineering*. Vol. 122, no. 12, pp. 1475-1483. Dec. 1996.

Xu, Y. L. "Determination of wind-induced fatigue loading on roof cladding" *Journal of Engineering Mechanics*. Vol. 121, no. 9, pp. 956-963. 1995.

Yazdani, N., Green, P., & Haroon, S. "Large wind missile impact capacity of residential and light commercial buildings," *Practice Periodical on Structural Design and Construction*, Vol. 11, no. 4, pp. 206-217. Nov. 2006.

Young, M. A., Vickery, B. J. "The influence of small open fields on wind loads on low buildings," *Journal of Wind Engineering and Industrial Aerodynamics*. Volumes 77-78, Pages 233-244. 1 Sept ` 1998.