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The University of Melbourne, Parkville, Melbourne, Victoria 3052, Australia. *Directed Compact  
Percolation near a damp wall and lattice paths.*

The percolation probability for directed, compact percolation near a damp wall, which interpolates between the previously examined cases, is derived. The solution is found via a mapping to a particular model of directed walks. We evaluate the exact generating function for this walk model which is also related to the ASEP model of traffic flow. We compare the underlying mathematical structure of the various cases previously considered and this one by reviewing the common framework of solution via the mapping to different directed walk models. (Received July 20, 2008)