The 2015 IRC code contains a new Section R602.7.5 and Table R602.7.5 supported by the concern that wind pressure on the wall containing a header to support the vertical load transfer may transfer significant loads to the end of the header normal to the wall face. A similar concern over wind pressure on the face of windows and possible glass breakage is of great concern to the window manufacturing industry as the pressure can cause moisture leakage at the window edge connections and of course the resistance of the glass to breakage. A great deal of research has been done in that area and can be found in a simple search of the internet. Most of them include an analysis of what pressures are developed from wind pressure loads at various velocities. A central theme is the inclusion of the “Ensewiler Formula”, which determines the wind induced force on the surface of the wall at various wind velocities. FEMA calculations include some mitigating factors such as wind direction vector factors and altitude variations (all less than 1.00) that all reduce the load from the original Ensewiler results. ( P=0.00256 V^2\*K\*K\*K). See links below:

<http://www.fema.gov/media-library-data/20130726-1501-20490-9906/fema_p85_apndx_f.pdf>

<http://richardson.eng.ua.edu/Former_Courses/DWRS_fa11/Notes/ASCE_7_05_Chapter_6.pdf>