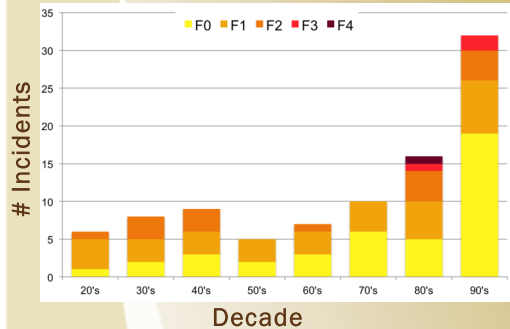


Times are Changing

Climate change is in no doubt affecting Dufferin County, particularly in the increase of occurrences of severe weather.

The graph below illustrates newspaper accounts of damaging wind storms from 1920-1999, rated using the Fujita scale, which measures storm intensity based upon inflicted damage on structures and vegetation.

**Damaging Winds & Tornadoes
In Dufferin County 1920-1999**



Damaging winds and tornadoes are occurring more often and causing more damage than ever before.

In addition to storms that are more numerous and more severe, trends in insurance claims across southern Ontario suggest that critical wind damage is now occurring at lower wind speeds than it has in the past.

By off-setting the cost of hurricane clips and construction projects Dufferin County and the Institute for Catastrophic Loss Reduction are mitigating this issue, protecting home owners and reducing the impact of severe weather.

The rebate program

This rebate program will provide you with \$4.50 for each installed and inspected hurricane clip used to secure the roof rafters or trusses to the top plate of the wall on your new construction project.

During the framing inspection, the Building Inspector will record the number of hurricane clips installed in accordance with the clip manufacturers specifications. Following the framing inspection the County of Dufferin will forward a cheque for the appropriate dollar amount to the holder of the building permit.

Dufferin County Building Department

55 Zina Street, Orangeville ON L9W1E5
Phone: 519-941-2362
E-mail: cbo@dufferincounty.ca
www.dufferincounty.ca

Institute for Catastrophic Loss Reduction

www.iclr.org

Dufferin County would like to extend our sincere appreciation for the assistance that Greg Kopp Ph.D. of the University Western Ontario and R. Glen McGillvary, M.A. of the Institute for Catastrophic Loss Reduction who have provided valuable advice in the development and implementation of this program.

MAG/2017



**DUFFERIN
COUNTY**

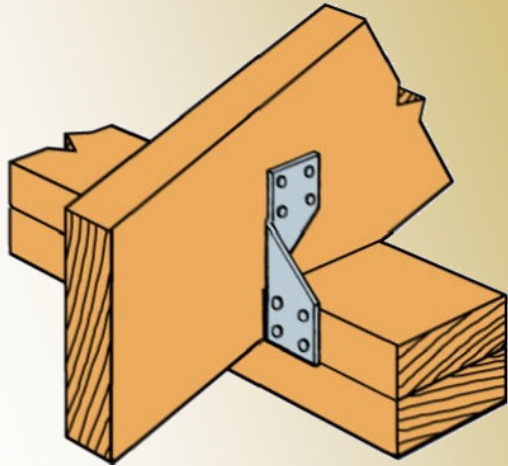
Building Inspection Department

Hurricane Clip Rebate Program



Hurricane Clip Rebate Program

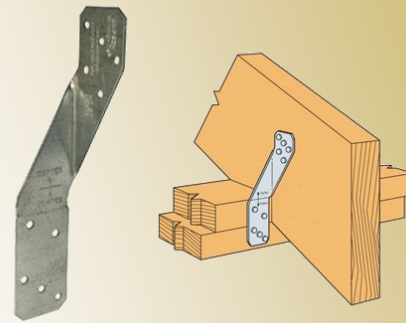
In partnership with the Institute for Catastrophic Loss Reduction, Dufferin County is offering a rebate incentive to property owners or builders who install hurricane clips during construction on all new buildings, additions or renovations.



These small pieces of metal, widely used in the United States, are a low-cost system that can prevent and reduce the damage caused by roof structures being torn from buildings and becoming airborne debris during severe storms such as downbursts, hurricanes and tornadoes.

What are they?

Hurricane clips, straps or ties are small pieces of metal that have been engineered to bind the roof rafters or trusses to the top plate of a wall, effectively ensuring that the roof and wall are securely fastened.



What are the costs?

Hurricane clips cost about \$1 each and are installed at each connection between the roof rafters or trusses and the top of the wall.

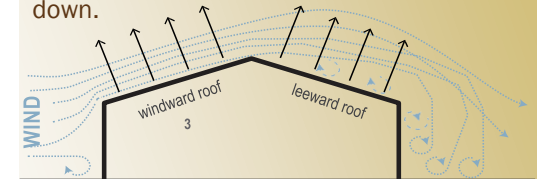


Damage from the Angus Ontario Tornado 2014

Photo credit: Jeremy Cohn, Global News

Why?

Strong winds during severe storms, hurricanes and tornadoes can have a devastating effect on a building. Research shows that violent winds blowing over peaked roofs act like air flowing over the curved wings of an airplane, exerting an upward lift on the structure. Typically people think of walls as holding the roof up, however in a windstorm we need to consider how the walls will hold the roof down.



In a storm, the loss of a roof structure leaves a home and its occupants more vulnerable to collapsing walls, falling debris and further damage. Hurricane clips can significantly enhance the structural integrity of a building that is subjected to high winds, reducing the risk of injuries and the cost of damage.

Damage from the Angus Ontario Tornado 2014



Photo credit: Gregory Kopp