

**Bird collisions with glass surfaces – Test report *birdpen*®.  
Test according to ONR 191040 and WIN-Test in the Flight Tunnel II of the  
Biological Station Hohenau-Ringelsdorf.**

**April 2015**

Martin Rössler by order of the Wiener Umweltanwaltschaft (Ombuds Office for Environmental Protection of the City of Vienna, Austria)

german version (934 KB pdf)

<http://wua-wien.at/images/stories/publikationen/pruefbericht-birdpen-2015.pdf>

„Vogelanprall an Glasflächen - Prüfbericht *birdpen*®“  
Prüfung nach ONR 191040 und WIN-Versuch im Flugtunnel II der Biologischen  
Station Hohenau-Ringelsdorf.

*Martin Rössler im Auftrag der Wiener Umweltanwaltschaft  
April 2015*

By order of the Wiener Umweltanwaltschaft (Ombuds Office for Environmental Protection of the City of Vienna, Austria) a *birdpen*®-marked float glass pane has been tested in the Flight Tunnel II of the Biological Station Hohenau-Ringelsdorf according to the Austrian Standard ONR 191040 (transparency without reflection) from August 9<sup>th</sup> to September 2<sup>nd</sup> in 2013 and including specular reflections (“WIN-test”, reflections according to windowpanes) from August 1<sup>st</sup> to September 15<sup>th</sup> in 2014. The ONR-test did not lead to a positive result. The birds did not recognize the marked pane and did not approach it less than an unmarked reference glass in an at least significant extent. Three series of tests including reflections showed numbers of approach, which stand for notable but very low efficacy (WIN 2014, reference test mirror versus float glass pane, reference test *birdpen*® versus unmarked float glass pane). Although the manufacturer promises recognizability, because birds are UV-sensitive organisms, the product is not easier to recognize in ultraviolet light than in visible light. Optical measurements revealed very weak contrasts in UV between 350 and 400nm. Because the contrasts are minimal in the spectrum visible for humans, *birdpen*® is – as indicated by the manufacturer - more or less invisible. Due to the results there is no cause of expecting a reduction of bird collisions in a desirable extent. Thus there are no reasons for recommending the product.



54.3% of the birds flew towards the pane marked with *birdpen*® in the test according to ONR 191040.