

Case Study:

**Hurricane Resistant Glass Technology Honored at
Federal Courthouse in Miami**

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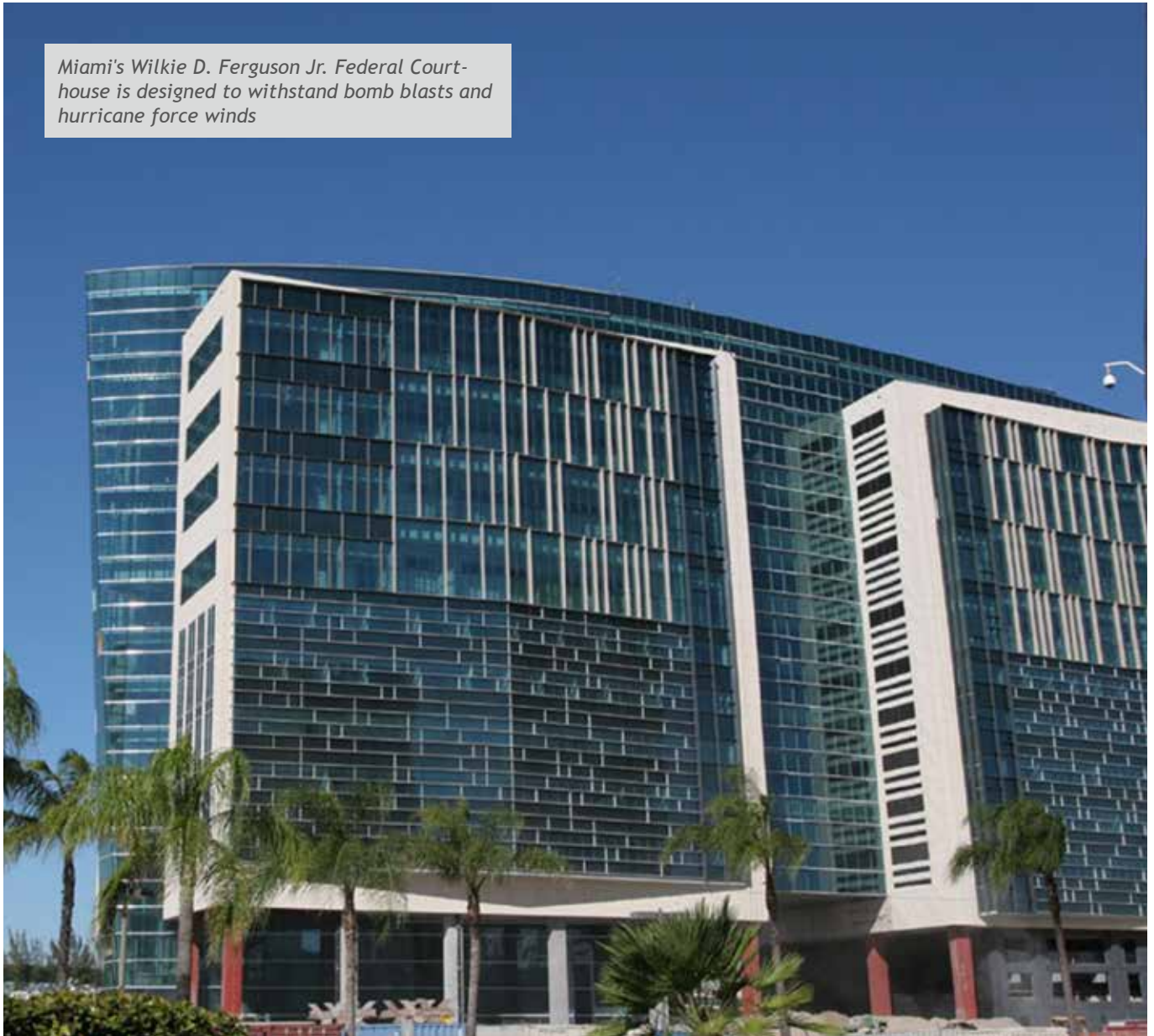
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to improve the design and quality of federal buildings. Miami's Wilkie D. Ferguson Jr. Federal Courthouse is designed to withstand bomb blasts and hurricane force winds "We take very seriously our responsibility to construct government buildings and facilities that provide a safe environment for employees, as well as the public," said Edwin E. Fielder, Jr., regional administrator of GSA's Southeast Sunbelt Regional Office.

Butacite® and SentryGlas® interlayers are integral to the courthouse design in windows supplied by glass fabricator Viracon Inc.

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Lighter façade panels enable more subtle supporting structures

For decades, interlayers made of polyvinyl butyral (PVB) have been the industry standard when producing laminated safety glass. Architects are well aware of the possibilities and limitations of such glass when used extensively in façade engineering, for roofing and window panels. In contrast, SentryGlas® enables an entirely new approach because the interlayer is over 100 times stiffer and five times stronger than PVB. As a consequence, there is an almost perfect

transmission of load between two laminated sheets of glass, even at high temperatures, leading to the excellent flexural behavior of the glass when under load - also under direct sunlight in high summer. Accordingly, laminates with SentryGlas® show less than half the rate of deflection when compared to laminates with PVB, when under the same load, and thus almost the same behavior as monolithic glass of the same thickness.

The Miami Courthouse is a good example of how the Kuraray Glass Laminating Solutions materials can be applied to meet very specific needs in an area that is vulnerable to severe weather.

Founded in 2000 in the wake of the 1995 Murrah Federal Building bombing in Oklahoma City, the Protecting People First Foundation has advocated the use of new technologies to make buildings safer. Its mission is to raise awareness of the technologies to protect people and property from the hazards of flying glass associated with natural and man-made disasters.



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As well as improved strength and stiffness, other benefits of SentryGlas® include:

- **Safety:** In the event of breakage, glass fragments remain firmly bonded to the interlayer, reducing the chance for injury
- **Security:** SentryGlas® can be used in glazing that withstands bullets, hurricane force winds and even bomb blasts
- **Durability:** SentryGlas® is extremely durable and resistant to clouding, even after years of exposure
- **Design Versatility:** SentryGlas® can be used in glass manufactured flat or curved, including annealed, toughened, heat-strengthened, spandrel, wired, patterned and color tinted glass
- **UV control:** SentryGlas® is available with or without UV transmittance

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