

**STANDARD
FOR
HURRICANE RESISTANT
RESIDENTIAL CONSTRUCTION**

SSTD 10-99



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PREFACE

Most regions in the United States face windstorm threats. Hurricanes strike the Gulf and Atlantic coastal states on the average of one or more times per year, with a single storm capable of producing billions of dollars in damage. An average of 900 tornadoes is reported in the United States annually. Currently, wind damage to constructed facilities exceeds \$3 billion yearly and this figure is expected to rise with accelerated coastal development and the migration of people to the hurricane prone coastlines. Much of this damage can be attributed to the inadequate resistance of nonengineered buildings to high winds.

In 1983, two of the world's prominent wind researchers, G. R. Walker (Australia) and K. J. Eaton (United Kingdom) expressed their frustration concerning the inadequate performance of residential construction on a global scale:

“Basically, society has considered that housing does not warrant engineering analysis and design.”

While this may overstate the problem in the United States, experience clearly shows that the wealth of information now available on wind effects has not been put to good advantage. If property damage is to be mitigated in the high wind regions of this country, increased engineering attention must be given to residential construction.

It is the express purpose of this document to provide design and construction details for improving the structural performance of single and multifamily dwellings. The prescriptive requirements contained herein are based on the latest engineering knowledge reflected in Section 1606 of the Standard Building Code and are intended to provide minimum requirements to ensure structural integrity within the limitations in building geometry, materials and wind climate specified.

It is recognized that a large number of alternatives are available to a designer or builder for providing wind resistance. The provisions given are not intended to prevent the use of such alternate materials or methods permitted by Section 103.7 of the 1999 Standard Building Code.

The SBCCI Board of Directors voted unanimously at its July 7, 1990, meeting to approve publication of the Deemed-to-Comply document as an SBCCI standard. This new Standard for Hurricane Resistant Residential Construction is an approved, reformatted and revised edition of that 1990 standard.

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