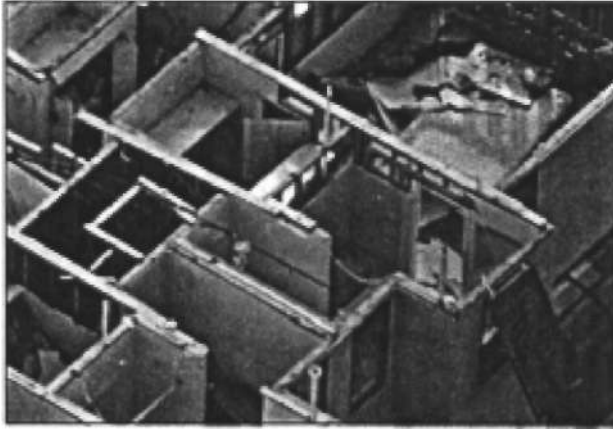


The New Wind Effects on Roofs Task Force *Appointed After Hugo*

by Patricia Kelsey



When Hurricane Hugo's 120-mph winds hit the coast of South Carolina last year, roofs went flying through the air

They were unable to withstand the fierce wind-power and the roofing industry wants to know why

Meeting that challenge is a task force appointed by the Roofing Industry Committee on Wind Issues, coordinated by the Department of Energy's Oak Ridge National Laboratory in Oak Ridge, Tennessee.

Chairing the 22-member task force is Charles Goldsmith, a Largo architect who specializes in roof design and "forensic" architecture.

"I'm to dead buildings what Quincy is to bodies," Goldsmith says. "I do autopsies on dead buildings to see what went wrong."

Now he and his colleagues are ready to investigate the whys and wherefores of wind effects on roofing.

According to Goldsmith, "It will be an on-going, search, with no specific termination date." Three goals have been dis-

cerned: see how roof construction can be improved; set standards so roof materials will be able to withstand hurricane-force winds; and evaluate roofing company testing methods.

The task force is represented by every segment of the industry, Goldsmith said, including single ply, built-up, wood-shake, shingle, red-cedar, tile, asphalt shingle, and the sheet metal industry.

"We want to revise old details, bring in new ideas and systems to prevent wind loss of roofing, starting with edge detailing and continuing through air barriers and the like," he said. To Goldsmith, it is the wind edge that represents the major problem.

"Once the wind edge goes, the roof goes," he explains, "no matter how good

Continued on next page

HUGO, from previous page

the roof membrane is." Goldsmith feels that little testing has gone into roof edges, except by some manufacturers of proprietary goods. "When it comes to sheet metal, there has been very little testing," Goldsmith claims.

The wind edge is that point at the edge of roof where the roofing material ends and the metal begins. This will be a major focus of the task force's work, he said. Other factors will include looking at how contractors pay attention to edge details. Too many times, he added, fastening is not properly accomplished.

"When it comes to sheet metal, there has been very little testing," Goldsmith claims.

"This is the most vulnerable location, especially at the corners of a building where the wind has a chance to effect the most force," Goldsmith pointed out.

Setting industry standards will be another focus of the group, Goldsmith said. Few current standards are in existence, at least on an industry-wide basis, he noted. Factory Mutual, for instance, has standards for edge detailing based on a rationale of testing. Most other edge details have evolved as state-of-the-art experience, Goldsmith said. "It's operated on a philosophy of if it works, do it that way again," he explained.

The task force will be meeting on a regular basis as called, Goldsmith said. hopefully, its investigation and study will bring about ways and means to better withstand hurricane-force winds.

•