

Fabric **ARCHITECTURE**

THE ARCHITECTURAL RESOURCE FOR DESIGNING WITH FABRIC



THE RESIDENTIAL MIND

Desert song—urban oasis

Santa Barbara's architect of civility

Future house: wrap it in fabric?

Beautifying the refugee camp

Inspiration

Desert song—urban oasis

Arizona fabric structure designer-fabricator G. H. Bruce enhances a residence with sculptural shade elements that render a space more livable, whether it is city skyline or desert plane

Scottsdale, Arizona is the winter base for Frank Lloyd Wright's enclave called Taliesin West, a tantalizing mix of natural materials and utopian-like settings for the famous 20th-century American architect's school and design office established in the 1930s. Not far from the Wrightian campus is a contemporary enclave of a different sort where fabric structure designer-artist Geoffrey Bruce concocts his own version of innovative designs. Bruce, an admirer of Wright's architecture, claims a primary source of inspiration from the town's connection with the work of tensile tent designer Bill Moss. Moss, inventor of the first exoskeleton camping tents back in the 1950s, had settled into Taliesin West as artist-in-residence in the early 1990s when Bruce met him. At the time, Moss was creating a line of tensile fabric sculptures that pushed the concepts of shading and shelter further than ever before. Soon, in a manner that Wright would have approved, Bruce was apprenticing to Moss by building his models, writing his proposals and absorbing the nature of tensile fabrics.

Moss passed away October 1994 after a long illness that began in 1993, and Bruce stayed to finish up any existing Moss projects before starting his own tensile sculpture firm, G. H. Bruce LLC, in Scottsdale in 1994. Now, with more than 10 years of successful work behind him, Bruce continues producing unique fabric sculptures that are at once functional shading elements and works of art in their own right. His work can be found in cultural institutions and corporate campuses (his first big multi-canopy shade structure was for an electronics firm in Phoenix), as well as at homes and in public settings (his firm was selected to design and install several shade canopies for bus stops in Mesa). He is especially sensitive to residential projects having been commissioned to design and install shade sculptures for numerous private homes in the Southwest.

Two recent residential projects express the range of Bruce's designs, one in Arizona, the other at a New York City penthouse, both integrated smoothly into their settings.

The Kennedy Residence in Cave Creek, Ariz., is a three-part composition, stationed on three sides of the home, all covering patios with different desert vistas. Bruce was charged with providing shade for the three patios that were strategically located around the perimeter of the home. Each patio—northeast, west and south—has its own unique, expansive view. The owners enjoyed frequenting all of the patios at different times of the day, often when sun protection was most required. Bruce used the same fabric for all three canopies: slate-colored knitted polyethylene SolarFab shade fabric with gray Sunbrella webbing and Gore Tenara thread for sewn seams. The front entry canopy (northeast) has two building connections and one massive 76.2mm thick, 762mm wide, 4.88m high plate steel support and one roof mast. The south patio has two four-point 65m² canopies with a common support point provided by a 50.8mm thick, 610mm wide, 3.66m high steel plate. The two over-

The front entry shade sculpture (opposite) of the Kennedy Residence in Cave Creek, Arizona, provides solar protection at critical peak sun hours.

DURABLE

FIRE RESISTANT

MAINTAINABLE

AFFORDABLE

SUSTAINABLE

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G. H. BRUCE / NOAH SMITH

lapping canopies are attached to the house at six alternating high and low points to provide for natural thermal venting.

For the New York penthouse, Bruce provided a simple, five point canopy that gives the owner basic sun protection, and some visual privacy from surrounding high rises. Designed for three-season use in spring, summer and fall, the canopy uses the same knitted polyethylene shade fabric and webbing as with the Arizona residence, but in porcelain white. Poles are stainless steel tube with sheaves on the tops to direct connecting cables down the backside of the poles to "althread" adjustment hardware for fine tune tensioning.

Both shade projects insinuate themselves into their residential settings as if organically grown there, as natural as one could wish. Moss, and Wright, would be pleased. —BNW

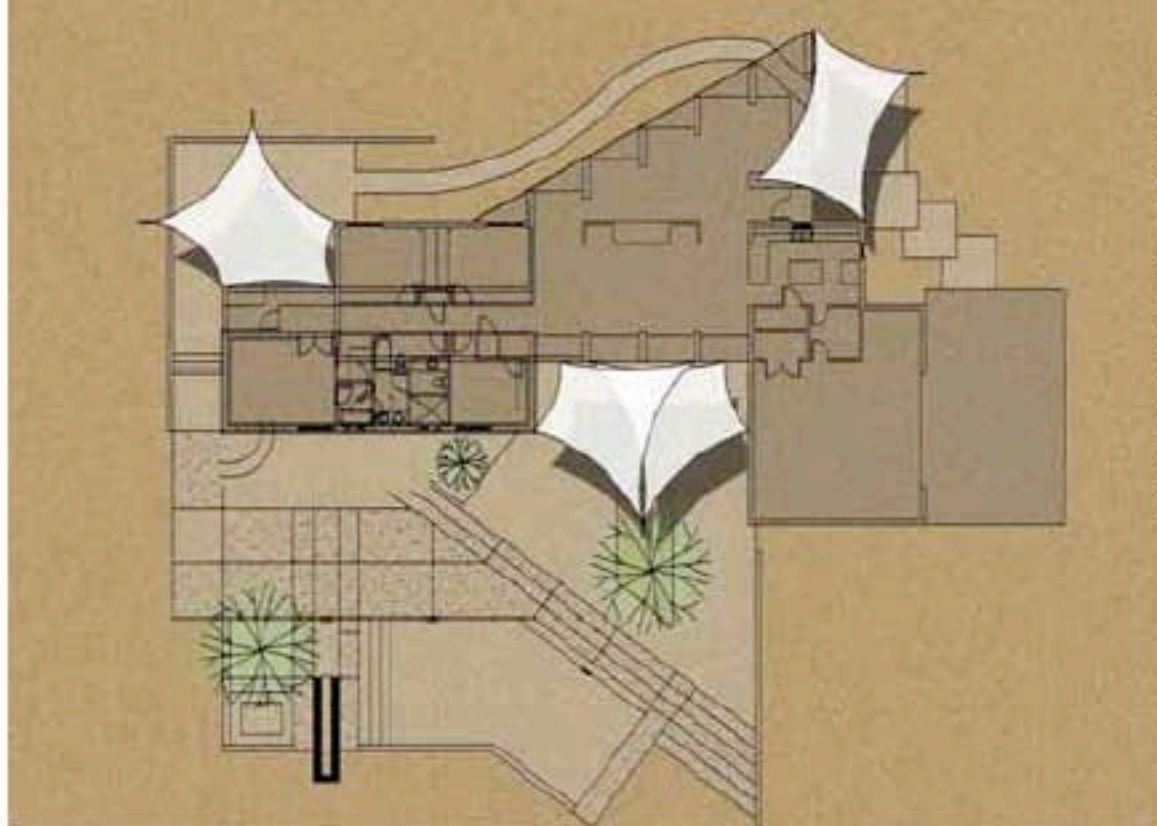
PROJECT DATA

Kennedy residence

Fabrics: SolarFab Comtex 320, slate;
Sunbrella webbing, gray; Gore Tenara thread sewn seams

New York penthouse

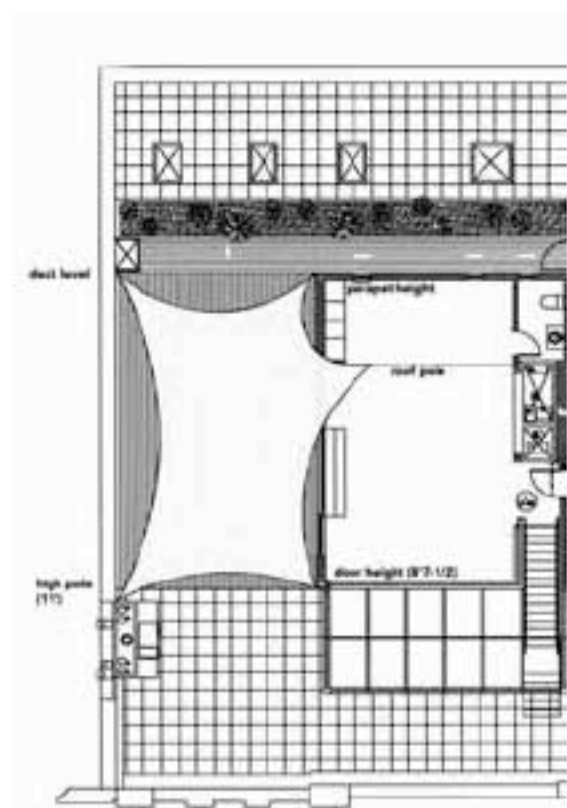
Fabrics: SolarFab Comtex 320, porcelain;
Sunbrella webbing, white; Gore Tenara thread sewn seams



Site plan for the Kennedy Residence showing the three shade sculptures strategically distributed around the house perimeter.



The South patio has two four-point shade canopies that attach to the house at six alternating high and low points to create natural stack venting.



Roof plan, showing the five-point canopy and attachment points.



Rooftop living for this New York penthouse is made pleasant by grace of a shade canopy.