Chan's Chair

Look simple? It was done with mirrors.

Sometimes the straightforwardness of a photograph belies the ingenuity of its making. And it took some ingenuity when New York's Donovan and Green design agency asked commercial photographer Amos Chan to shoot one of Brickel Associates' cane chairs for an ad—with only two days' notice and a limited budget.

The art director wanted the chair to be seen in an environment that would offer a contrast to its burnished elegance, but there wasn't enough time to fabricate a suitable studio set. Instead, Chan scouted Manhattan's Second Avenue for a building with "low rent" interiors and set up shop in a fourth-floor room in an abandoned tenement.

The chair was to be highlighted with a sunbeam, but it was winter and very little natural light made its way into the chosen room. Artificial light was required, as was a generator. But the main problem was the eight-foot height of the room's ceiling-far less than a typical photographer's studio. Chan planned to define the beam of light by having it rake across the impasto of the heavily plastered wall, so he needed to include the wall's full height in the picture. Even if there had been enough clearance to place a light above the picture area, the beam from a focusing spot—the logical source-would have been too narrow and widened too quickly as it approached the chair. It would also have been much brighter at the top, where it first struck the wall. Chan wanted to approximate the straight shafts of light typically cast by the sun through windows-which remain narrow and even in intensity over long "throws" because of the sun's great distance.

Chan's trick was to bounce his light off a mirror attached to the ceiling. He

placed a strobe head on the floor off the left side of the subject area, aiming it at the mirror with a deep reflector so that it would angle sharply back down to the chair. The surface of the mirror was masked so the exposed area formed a trapezoid that tapered at the side nearest the chair. Because the portion of the beam closest to the chair reflected off the narrowest part of the trapezoid, the beam was prevented from getting substantially wider as it approached the chair. "The art director wanted it a little wider at the bottom, so we masked the mirror accordingly," says Chan. "But anybody who knows natural light should realize it's faked."

The other problem—the falloff in the light's intensity as it traveled farther from its source—was solved in an equally ingenious way. On the wide portion of the mirror's trapezoid, Chan taped strips of neutral density film, spacing them so that they thinned out toward the narrower end. This graduated the reflected light's intensity: It was reduced in the upper part and gradually became full strength at the bottom. Chan also ran a wide piece of tape lengthwise across the middle of the mirror to simulate the effect of a window lattice dividing the beam of light.

Shadow areas were filled by three strobes bounced off the ceiling, all filtered with blue gels to duplicate the cool quality of window light. "It's not a difficult shot, as studio work goes," says Chan. "It was only difficult because of the physical circumstances." If anything, the hardest part of the shoot was contending with the cold weather and short day. "It was dark and freezing by the time we left," Chan says. "We had to find our way out with flashlights."

—RUSSELL HART



