

BRING IN THE LIGHT

Skylights and carefully arranged program elements provide daylight where it is least expected.

"WHERE THERE IS LIGHT, KEEP IT GOING," SAYS ALASTAIR STANDING. MORE THAN A MOTTO, IT is a methodology that this sole-practitioner architect has been refining through a series of light-challenged Manhattan residential projects over the past several years. First, there was a loft on Broome Street. Once a photography darkroom, it required that Standing use an angled piece of reflective one-sided glass to direct light, entering through a skylight, deep into the darkest extremity of the space. Then there was the Rosser Studio, where Standing rendered the surfaces—windows, tabletops, and walls—that fell into the path of minimal daylight, translucent. And finally there is the Lederman Loft, where Standing's innovative lighting techniques have realized their fullest application to date.

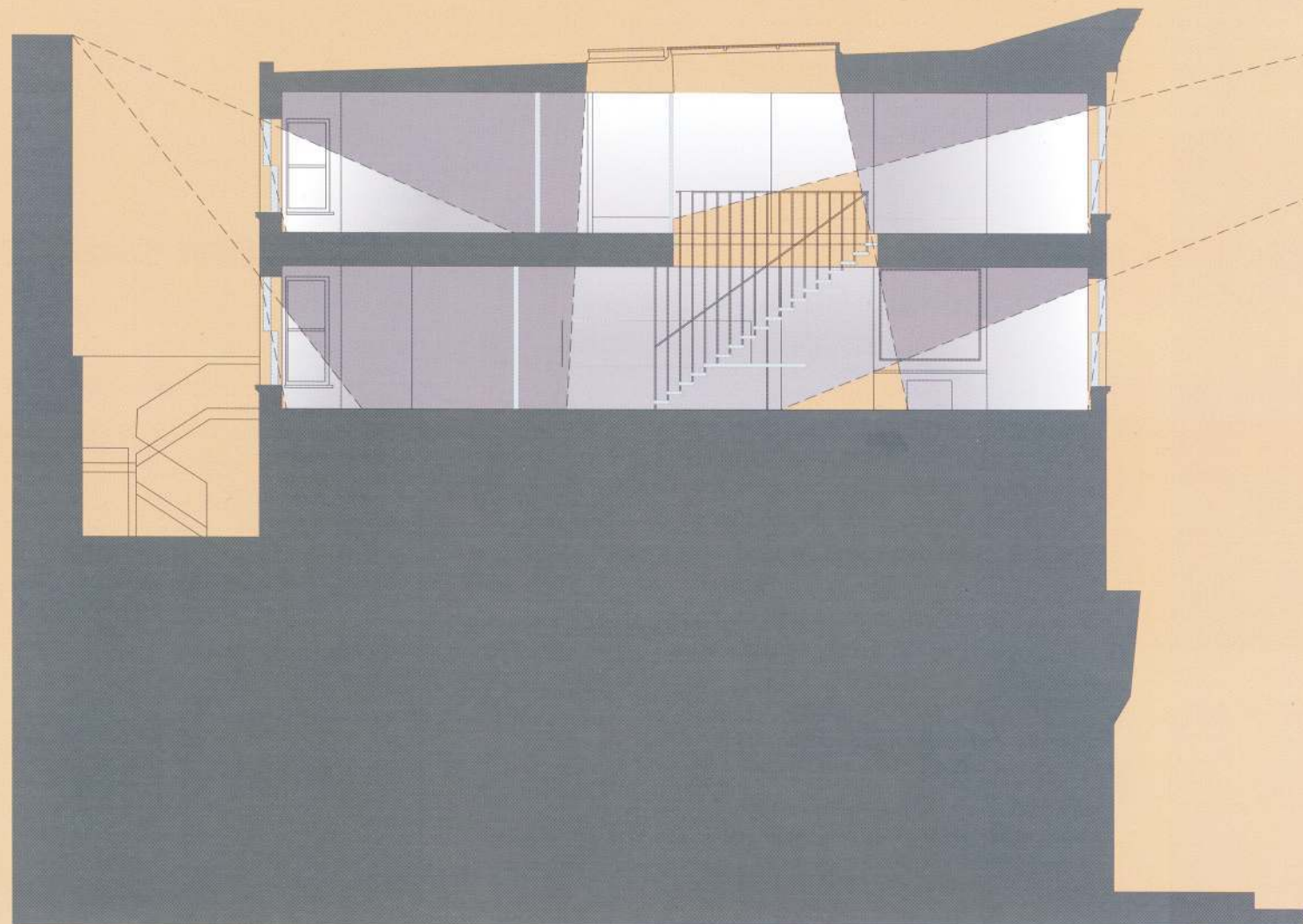
Situated on the top two floors of a Madison Avenue brownstone, the Lederman Loft presented very specific natural lighting concerns. "The problem with any of these row houses," says Standing, "is that they are dark in the center. You get usable space in the front and back, but the middle is completely dead." Standing solved this problem by inserting skylights above the center section of the space, both in the roof and between the two floors of the loft. Strong enough to walk on, the skylights were fabricated from a triple lamination of 1/2-inch annealed glass, one layer of which was frosted, topped by a 1/4-inch wearing surface. The same glass was used for the treads of a staircase that descends through the center of this space from the study to the kitchen. When light pours through the skylights and hits the treads, they transform into glowing bars, glistening and throwing light in all directions. Hanging the staircase from the floor opening by stainless-steel rods also minimized its structure and kept light obstruction to a minimum.

The second part of Standing's plan was to create an even distribution of

light throughout the loft, which involved allowing light from the east- and west-facing windows to flow freely toward the center of the space. "All the program elements had to be moved out of the way of the light," says Standing. "They're all pushed against the wall." The ceiling was kept clean and unobstructed by hanging fixtures that would create shadows during the day, with the exception of two 80W RT6 direct/indirect luminaires in the painting studio, and a 75W A19-lamped pendant above the dining table. The kitchen utilities are illuminated with recessed 20W lamps, and 150W to 300W baffled floodlights are placed in all daylight openings to maintain an even illumination into the night. "They're a substitution for daylight," explains Standing. "Once the sun goes down, you turn these on and there's always a sense that the light is coming from the same place."

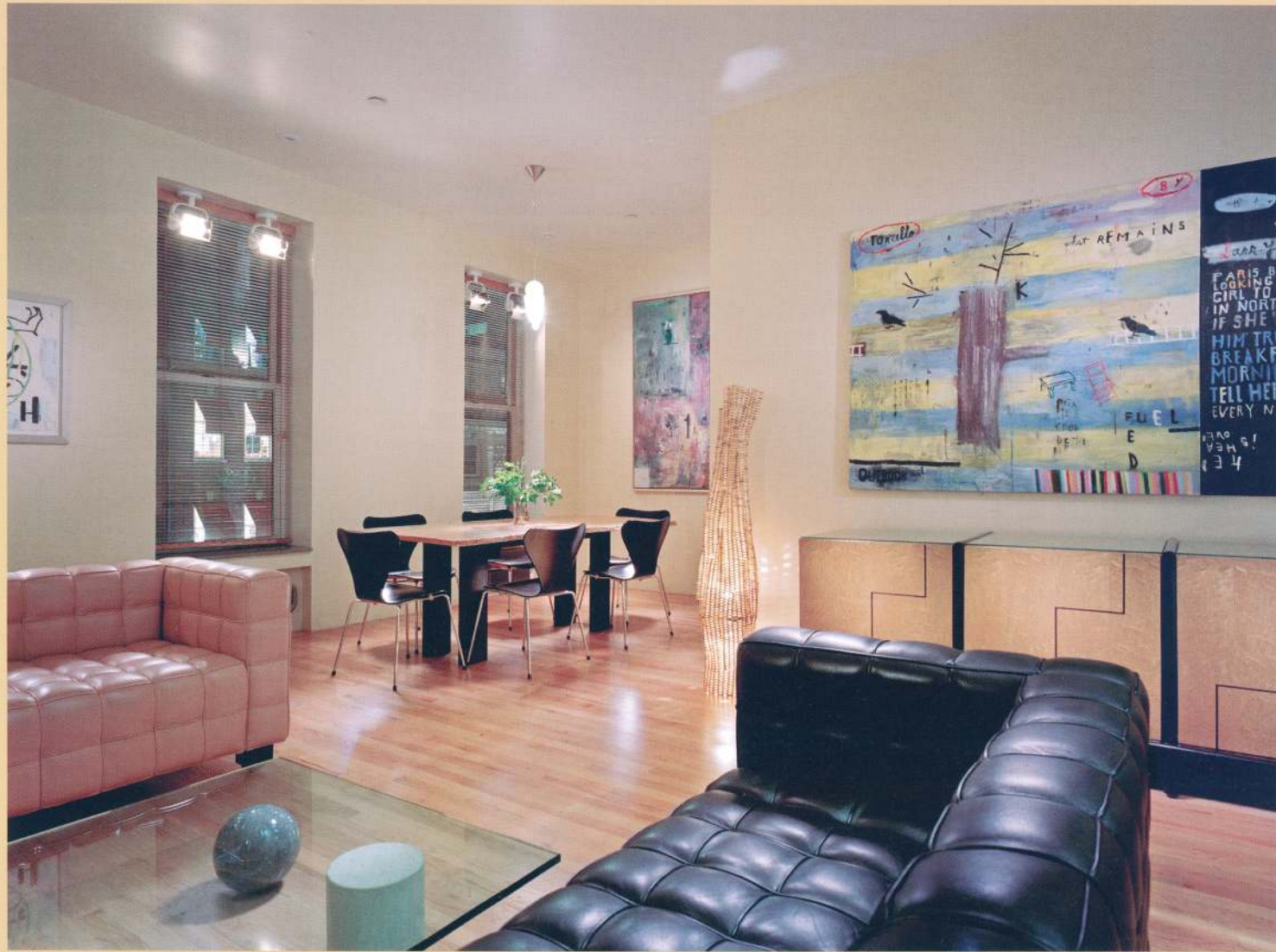
The choice of materials also keeps the light moving: Wood floors in the front and back of the lower level give way to white polished-porcelain tile in the kitchen that reflects light upward. Sliding frosted-glass screens were used wherever privacy was desired, such as between the bedroom and bathroom on the upper floor, and the studio and kitchen downstairs. The bedroom and bathroom screen is outfitted with two layers of perforated metal that can be shifted to create a completely opaque surface or pulled apart to allow light through.

Standing is methodical about working out his lighting solutions. He uses a combination of vector modeling, the program Lightscape, and other software packages to study the way light falls in a space, taking into account both the prevailing natural conditions and the restrictions of the built environment. What can result from this type of careful planning and scrutiny, as is evidenced by the Lederman Loft, is a surprisingly light-filled space where you would least expect to find one. **AARON SEWARD**

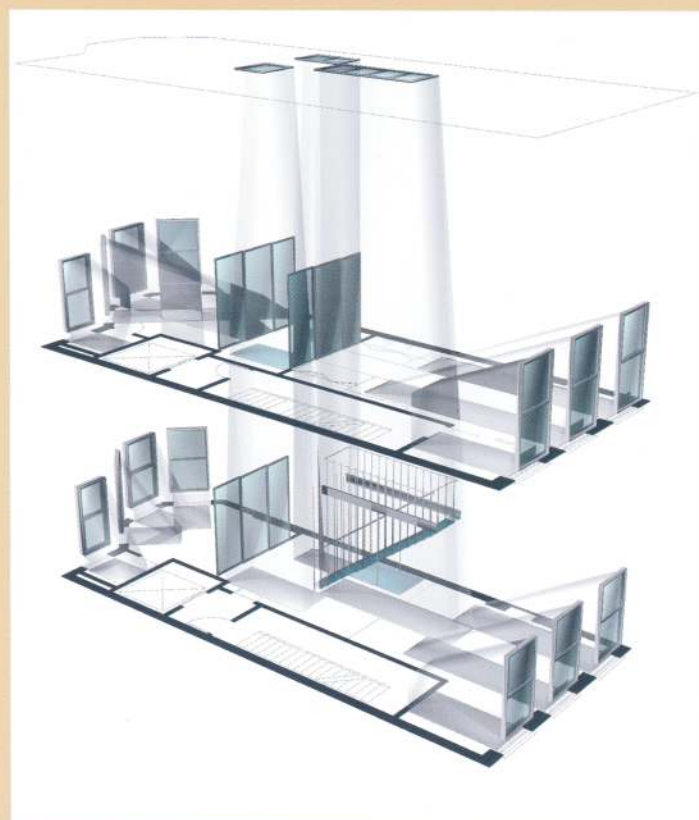


Plan diagrams (below) and an east-west longitudinal section (facing page) highlight the loft's glazed openings and the path and intensity of daylight that enters the apartment. The loft's focal point—an open-tread glass stair—allows light from a skylight above to fill the lower level and provides a unique backdrop for the kitchen eating area (above).





An unexpected detail, T3 floodlights are mounted in the window frame opening. Positioned to mimic the angle of the sun, they provide a continuous feeling of natural light throughout the apartment, even on overcast or days. A decorative pendant over the dining table provides additional illumination. An axonometric diagram (left) breaks down the loft's essential luminous planes that provide different levels of light transmission.

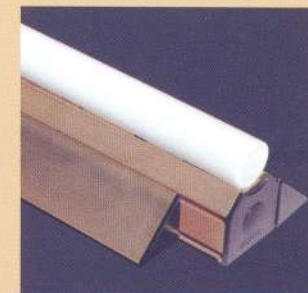


DETAILS

PROJECT Lederman Loft, New York City
ARCHITECT AND LIGHTING DESIGNER Standing Architecture, New York City
PHOTOGRAPHER Peter Mauss/Esto

MANUFACTURERS	APPLICATIONS
Alkco	60W L20 Lincandescents in bathroom
LeKlint	Decorative fixture with 75W A19 lamp in powder room
Leucos	75W A19 Goccia pendant in dining room
Lightolier	Lytetube with T8 80W fluorescent lamps in studio
Lutron	Maestro controls throughout the project
Reggiani	Papillon floodlight with T3 150W to 300W baffled lamp in all daylight openings
Sea Gull Lighting	Ambiance recessed luminaire with MRC11 20W lamp in kitchen

REGGIANI | PAPILLON | REGGIANI.NET
 This track-mounted projector uses a halogen lamp. The power supply cable is located in a concealed adjustment device that allows 350-degree rotation on the horizontal axis and 184-degree rotation on the vertical axis. The light beam can be adjusted by rotating the reflector around the fixed lamp. Available in three finishes—white, black, and metallized grey, the housing is fabricated from die-cast aluminum. The fixture measures approximately 8 inches wide by 10 inches high. **CIRCLE 230**



ALKCO | LINCANDESCENTS | ALKCO.COM
 These linear incandescent lamps are available in three lengths: 12, 20, or 40 inches. The lamps sit atop an extruded aluminum housing available in five finishes. Two keyhole mounting slots and a knockout for electrical connections are located in the backplate. Slide-in triangular reflectors are available for each side depending on the installation. The fixtures can be used as a single element or mounted end-to-end for continuous illumination. The fixture takes three lamp types: 25W L12, 60W L20 or 150W L40. **CIRCLE 231**

LEUCOS | GOCCIA | LEUCOS.COM
 A hand-blown glass pendant, Goccia is available in two lengths: 11 3/4 or 17 5/8 inches. Incandescent light sources—a 60W G16 or a 100W A19—provide illumination through a smoked white and clear crystal glass diffuser. The canopy is finished in brushed aluminum and mounts to a 4-inch junction box. A 10-foot cord comes standard with the fixture, and additional lengths are available. The luminaire is also available in wall, ceiling, table, and floor options. **CIRCLE 232**



LUTRON | MAESTRO CONTROLS | LUTRON.COM
 This family of high-tech "smart dimmers" comes equipped with microprocessor technology and fits in any standard wallplate opening. Two taps on the switch bring lights to full brightness and a press and hold on the switch slowly fades lights to "off" over 10 seconds. LEDs indicate light level and act as a locator in the dark. The system allows multi-location dimming from up to 10 locations. There are several receptacle options, accessories, and wallplate configurations available. **CIRCLE 235**



SEA GULL LIGHTING | AMBIANCE | SEAGULLLIGHTING.COM
 This miniature-recessed luminaire uses a 20W MRC11 lamp, and provides a high-intensity, focused light. The housing finish is available in black, and measures 2 3/4 inches in diameter, 3 1/4 inches high, with an extend of 1/4 inch. **CIRCLE 233**



LIGHTOLIER | LYTETUBE | LIGHTOLIER.COM
 This 6-inch-diameter cylindrical-shaped direct/indirect luminaire uses four T8 lamps. The housing is fabricated from extruded aluminum with 1/8-inch-end-caps and comes standard with a baked powder-coat white enamel finish. The lens is comprised of an extruded clear acrylic linear ribbed lens on top and a prismatic lens on the bottom. Two mounting options are available: cable suspension or stem. **CIRCLE 236**



LEKLINT | HANGING LIGHT 172 | LEKLINT.COM
 Designed in 1971 by architect Poul Christiansen, Hanging Light 172 is constructed from color-stable PVC. The hand-folded plastic sheeting is washable and antistatic. It measures 16 inches high by 17 1/2 inches in diameter and has a cord length of 60 inches. The luminaire uses one, 75W incandescent bulb that provides a clean white light diffused by the curved form of the housing. **CIRCLE 234**