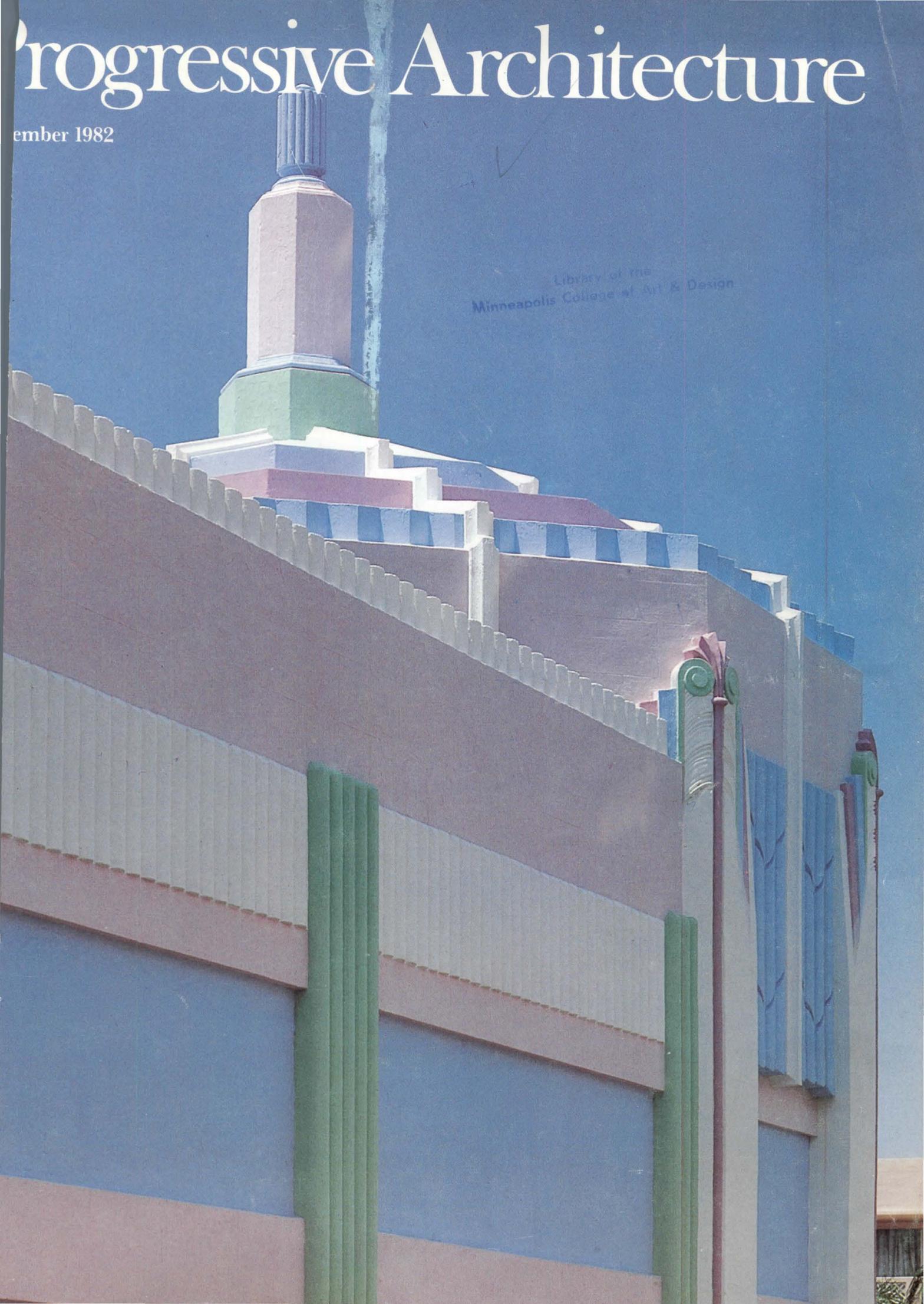
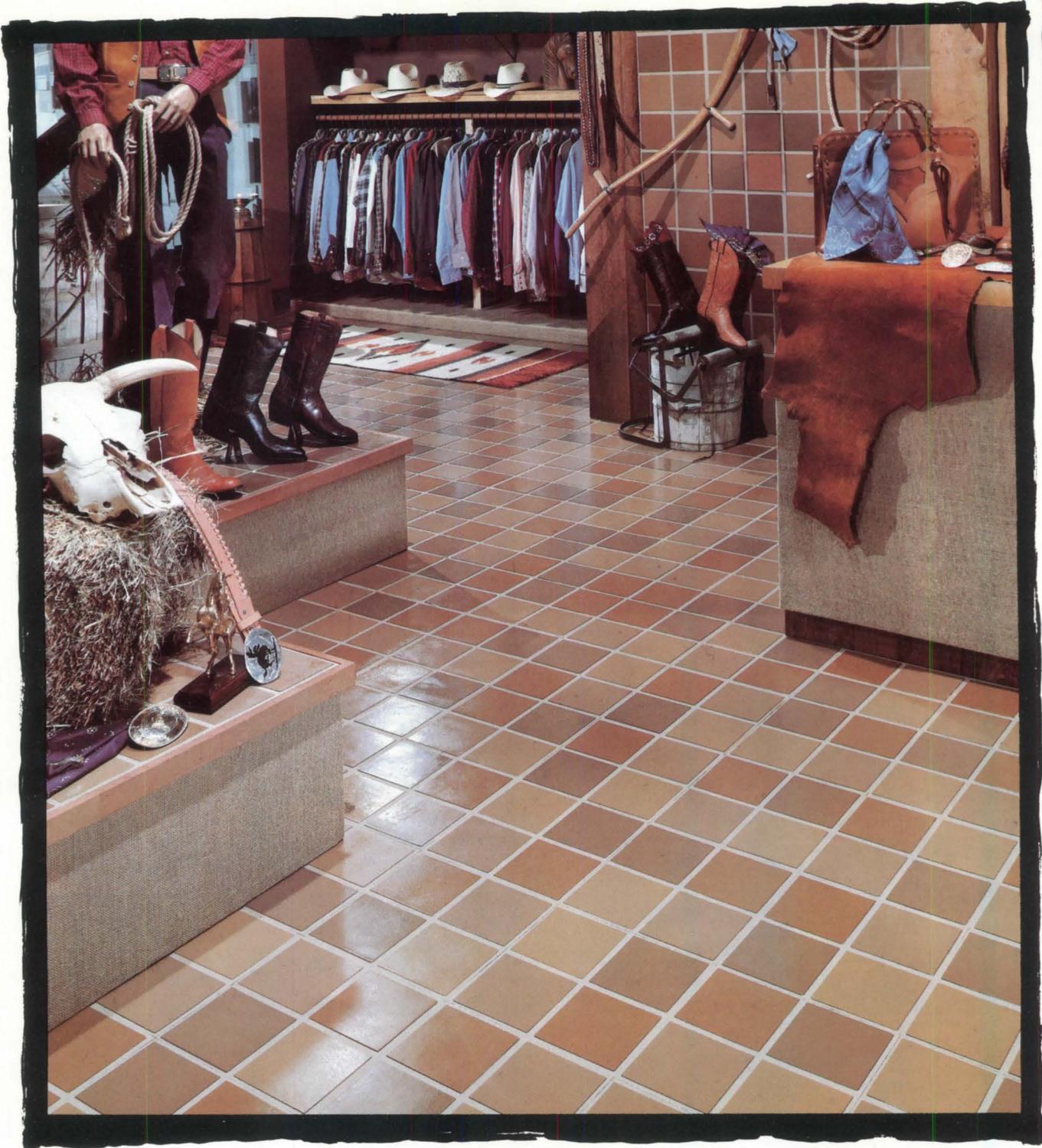


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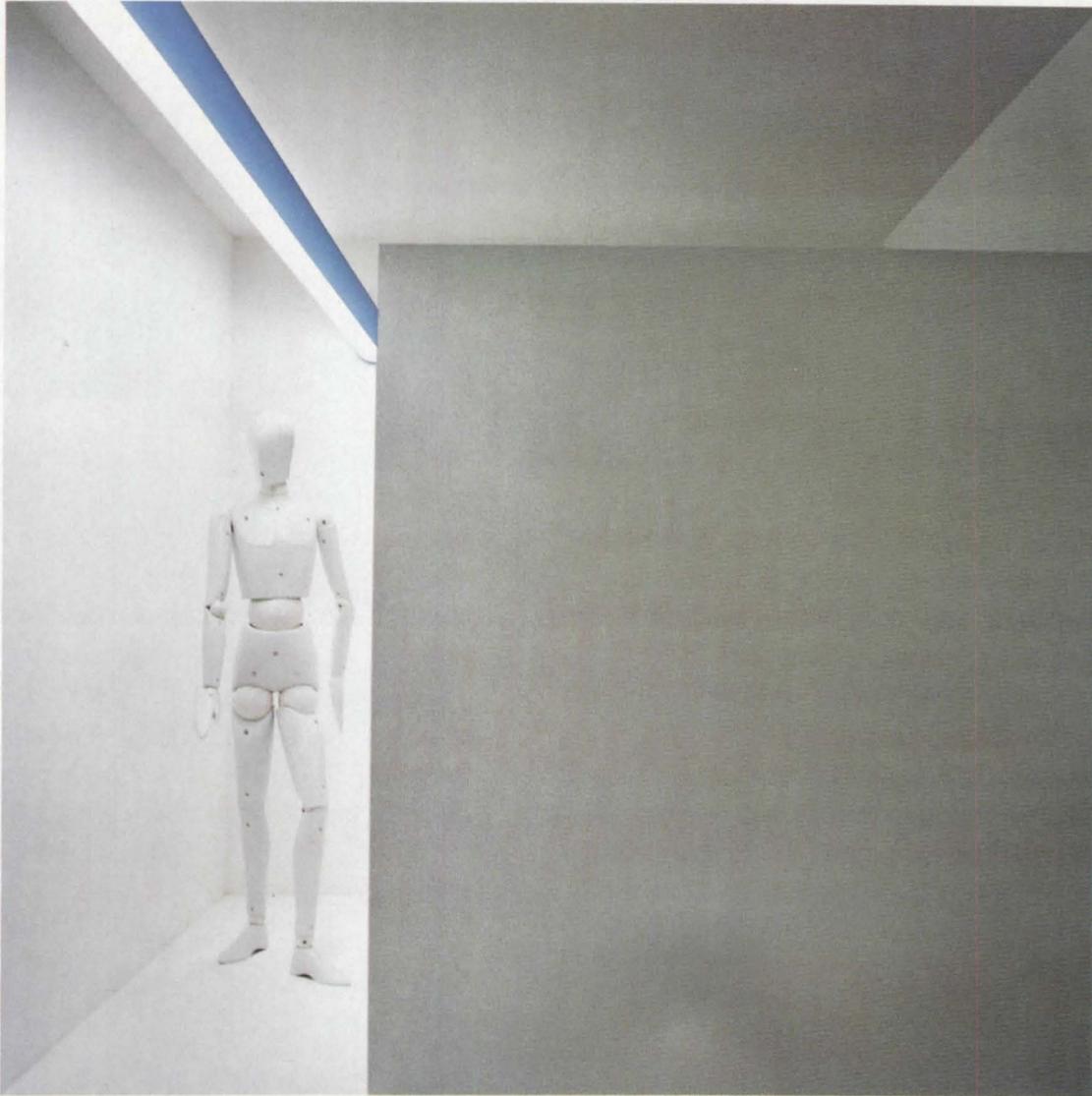
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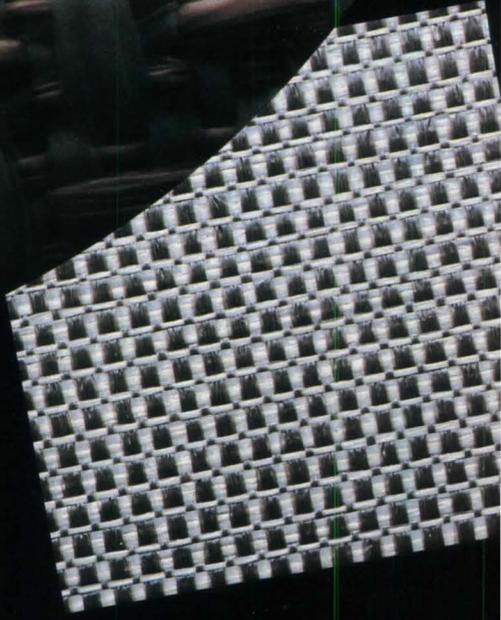
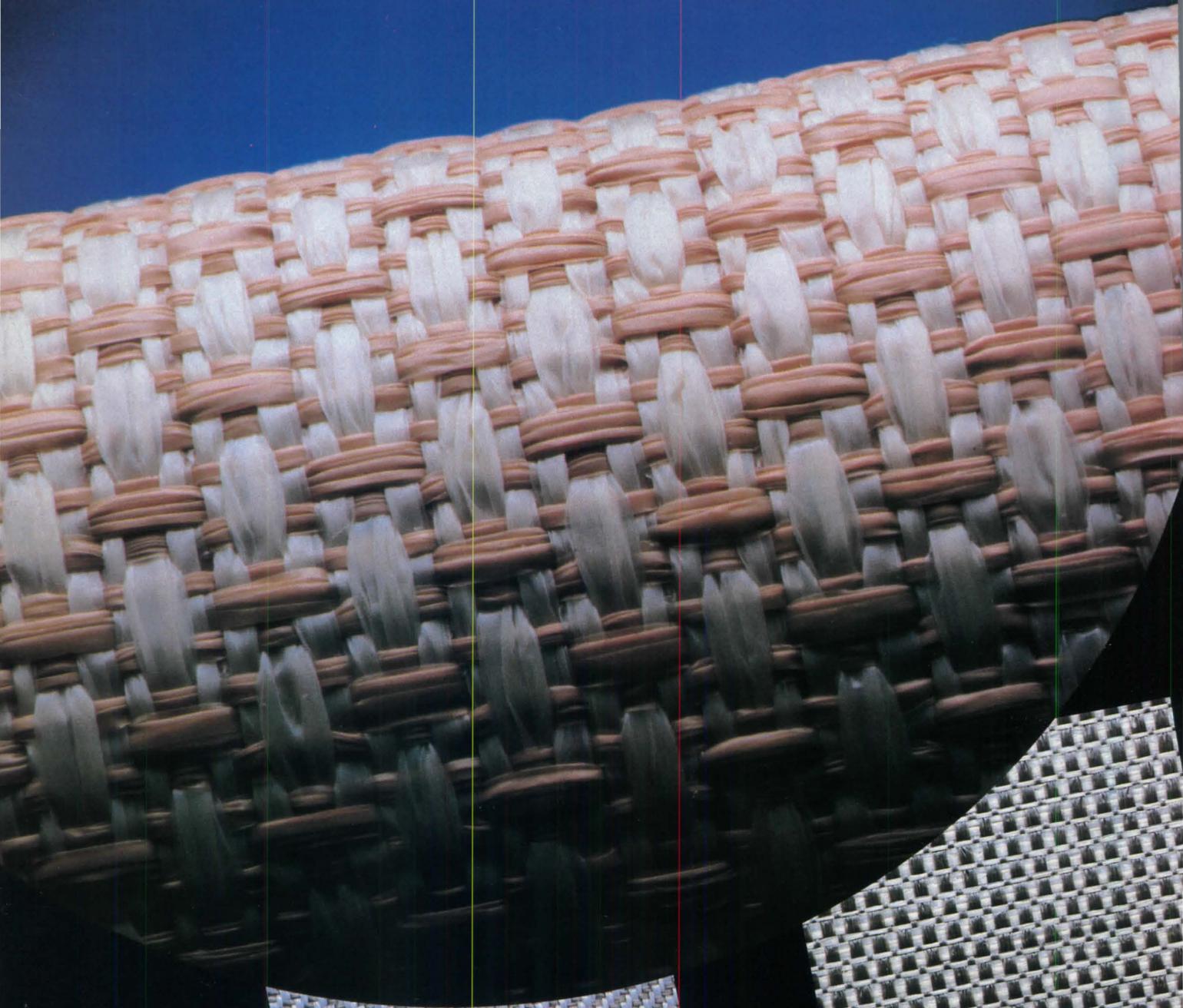
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Cover: Friedman's Bakery, Miami Beach, Fl (p. 90), part of Washington Avenue project. Photo: Steven Brooke.

Greg Henriquez



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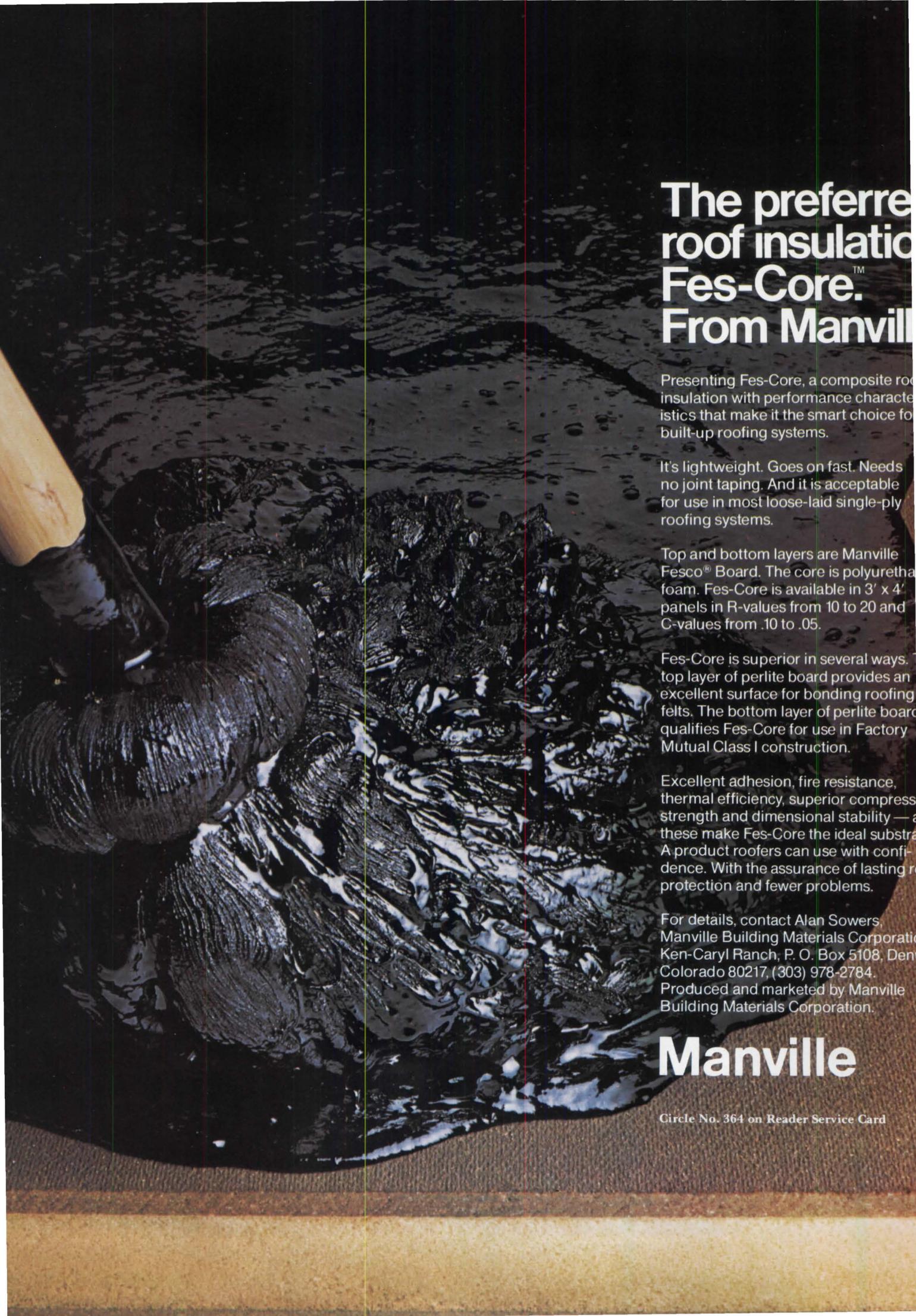
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are not foremost considerations for an owner seeking short-term returns on an investment.

Buildings within historic districts and individual landmark buildings are better protected from a de-ornamented fate. The landmarks preservation local law directs that the exterior portions of landmark buildings, or buildings within historic districts, shall be kept in "good repair," and shall not be allowed to "deteriorate, decay or become damaged or otherwise to fall into a state of disrepair."

The Landmarks Preservation Commission requires the stabilization and restoration of a building's deteriorated exterior features, as nearly as may be practicable.

Often, of course, faithful restoration is neither the most expedient nor economical. On the Upper East Side, for example, the 1902 Beaux-Arts Hotel Fourteen, now an office building, recently complied with the Local Law 10's façade inspection requirement. Of six terra cotta balconies, four were declared unsafe and were removed, and the bare façade was stuccoed over. The owner is subject to a violation and fine. In a similar case on the Upper East Side, the owner of a Second Renaissance Revival apartment building was directed to uphold a preservation philosophy and to absorb the cost of repair and stabilization of deteriorated wrought iron balconies considered by the Landmark Commission to be a significant architectural feature in the design of the building, which itself contributes to the overall quality of the Upper East Side Historic District.

The spirit and intent of the landmarks preservation local law and the Local Law No. 10 provide for the safety of the people and the protection and regular maintenance of the architectural landscape. While there are problems inherent in required programs of preservation, inspection, and maintenance, both laws can be mutually supportive. Regular maintenance of historic buildings is probably the best and most cost effective method of preserving the city's built environment.

[Rita Caviglia]

Rita Caviglia has a graduate degree in architectural preservation from Columbia University, and works for the New York City Landmarks Preservation Commission.

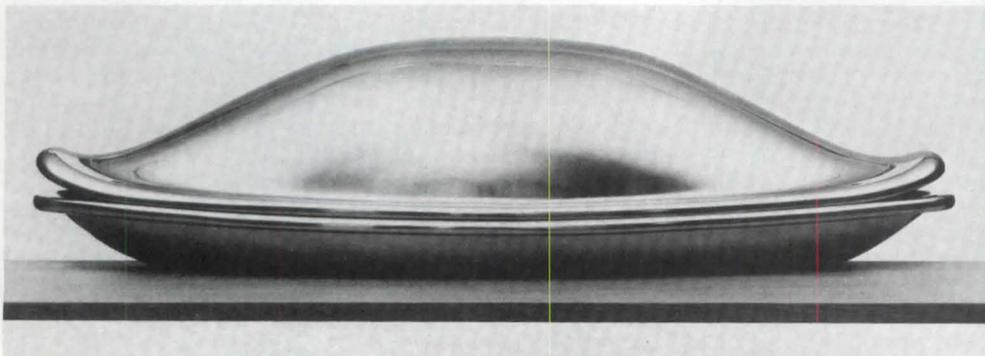
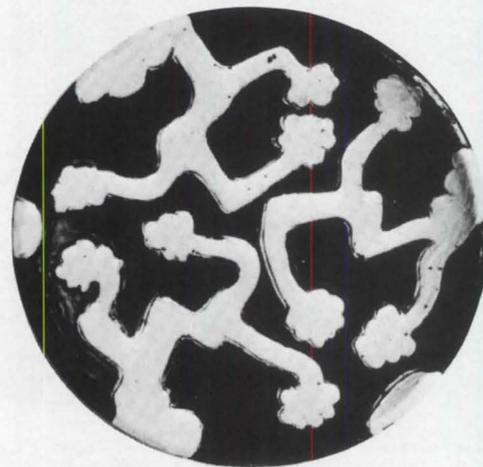
Scandinavian design, yesterday and today

Embracing over 300 objects, the exhibition "Scandinavian Modern: 1880-1980" is the major design exhibition the Scandinavia Today program, which is bringing scores of events in the visit and performing arts to America this fall. On view at the Cooper-Hewitt Museum in New York through Jan. 2, the show will move on to the Minnesota Museum of Art, St. Paul (Feb. 27-April 24, 1983) and the Renwick Gallery in Washington (July 8-Oct. 10, 1983).

Furniture, pottery, glass, silver, fabrics, lighting, jewelry—the Scandinavians have made widely recognized contributions to Modern design in all areas represented in this show. One has only to think of Hans Wegner's chairs, Geert Jensen's silver and jewelry, Tapio Wirkkala's glassware. Architects whose designs for furniture and other objects enrich this show include Gunnar Asplund, Alvar Aalto, and Arne Jacobsen.

Clearly David McFadden, Curator of Decorative Arts at the Cooper-Hewitt, had a hard time selecting key works of a century of extraordinary production in five countries. (Don't forget Iceland.) There is a fairly clear line of development from the promise of 1880s Arts and Crafts design through the classic, understated Modern of the 1950s. The story line is somewhat confused, however, at both ends—by a weakness for vestigially ornate pieces from the late 19th Century and by a predilection for either the coldly industrial or the mudpie naturalistic—too much like schizoid counterparts the world over at the 1970s end. But clustered mainly in the middle decades of this design saga are some really inspired objects. Through them one sees the Scandinavians' design evolving from National Romanticism to 1920s Classicism to Modernism—as did their architecture—without abrupt dislocations.

The design of this show itself shouldn't happen to a show about design. The installation starts by walling off a corner of the museum's main hall, with utter disrespect for its design—so that visitors can be herded along a rigid chronological path. Text panels in black type on natural-grained birch parody the popular conception of Scandinavian Modern. Labels in dense small type mounted inside display cases to one side, call for a new kind of magnifying periscope. (My irritation was all the greater because I had only recently seen a display of Finnish design for the same period, impeccably chosen and installed at the Museum of Applied Arts in Helsinki.) Maybe something can be learned from installation problems here, so that viewers in St. Paul and in Washington can concentrate comfortably on the superb objects that make up the bulk of this show. [JMD]



Scandinavia Modern: 1 armchair, 1925, Gunnar Asplund; 2 plate, 1901, Thorvald Bindesboll; 3 chair, 1914, Kaare Klint and Carl Petersen; 4 fish platter and cover, 1954, Henning Koppel.

Other manifestations of Scandinavia Today

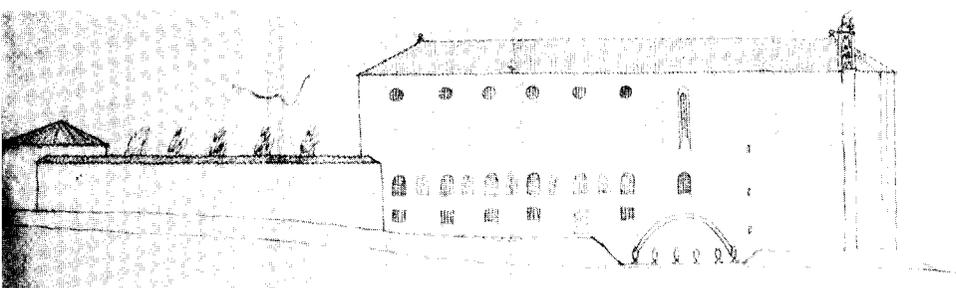
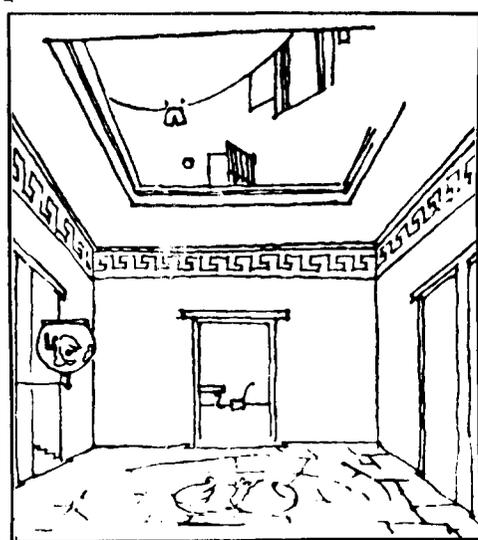
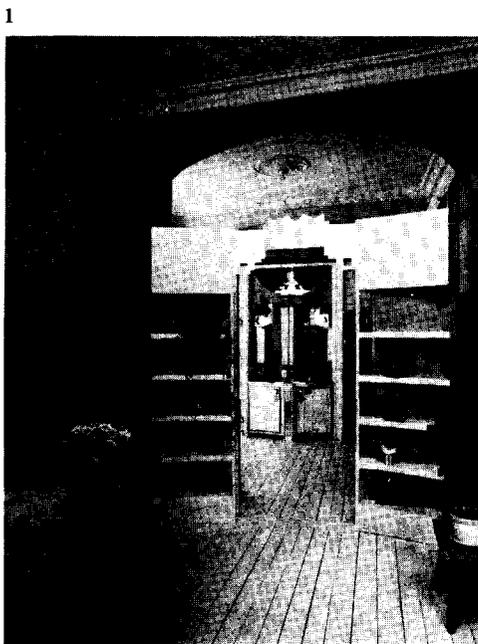
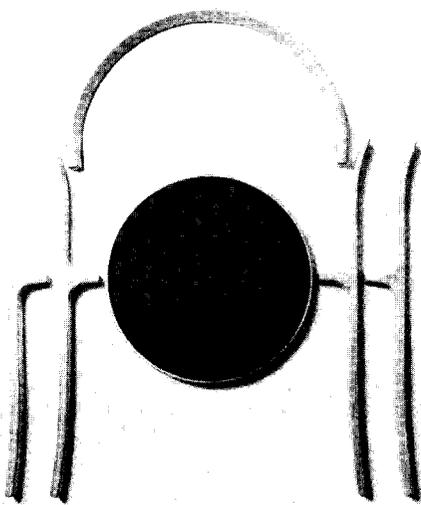
In addition to the main event at the Cooper-Hewitt (article above), Scandinavian design was shown in New York this fall at several other locations. Of particular interest to architects was the exhibit "New Dimensions in Scandinavian Architecture" at the galleries of the American-Scandinavian Foundation (Sept. 17–Oct. 16)—tentatively scheduled to travel to Philadelphia's Swedish Historical Museum, then to Seattle.

More properly titled "New Directions in Scandinavia," this show focuses on the region's new deviations from the paths of vernacular and Modernism: the artful Charles-Moorish works of Norway's Jan Digerud & Jon Lundberg, the stylish high-tech of Denmark's Claus Bonstrup & Torsten Thorup, the cautious classicism of Finland's Pekka Helin & Juho Siitonen, the Expressionist revival of Sweden's Eric Asmussen and Jan Sjözelius (these last two working separately). Many are young, and most turn out lush, polychrome drawings.

A pleasing show on Aalto's *oeuvre*, considered element by element rather than building by building, already seen elsewhere in America, opened at Columbia University's School of Architecture to herald Scandinavia Today. An opening-day lecture by Finnish architect Pekka Helin made connections between Aalto's work and some of his favorite places—Finnish farmsteads, Italian hill towns—as well as the Classical revival period in which his career began.

An exhibit of Danish industrial design, shown at the Houghton Gallery of Cooper Union (Sept. 13–Oct. 2) will be seen at Chicago's Museum of Science and Industry (Oct. 20–Jan. 6) and at AIA Headquarters in Washington in June 1983. Ranging in subject from bicycles to laboratory equipment, the show includes some architectural projects—lighting by Poul Henningsen, a chair by Thygesen & Sorensen, a neat outdoor lamp/sign by architects Friis & Holtke, and such ubiquitous items as the flux roof window and the Kevi chair. Subtitled "the problem comes first," the exhibit documents the cause and effect of design with lively graphics. But one sees, looking at these suave objects, that form has a will of its own, even for dedicated functionalists. [JMD]

Scandinavian design: 1 chair parts, 1981, R. Thygesen and J. Sorensen; 2 Jan's apartment, Oslo, J. Digerud and J. Lundberg; Nordic classicism: 3 Villa Väinölä interior sketch, 1926, A. Aalto; crematorium design, 1933, S. Lewerentz.



Nordic Classicism shown in Finland

Revived interest in the Classical architecture of Scandinavia between the World Wars has already inspired a number of magazine articles (including P/A's feature on Asplund, Feb. 1980). Now the exhibition "Nordic Classicism, 1910–1930" has been organized by the Museum of Finnish Architecture, with the cooperation of institutions in the other countries. Shown first in Jyväskylä this August, at the second international Alvar Aalto Symposium, on the subject "Classicism and Modernism," the show has since been installed in the museum's Helsinki galleries.

A fastidious and graceful exhibit, like the period it represents, Nordic Classicism consists primarily of fine original drawings of the time, rendered in clear pastel colors and sober grays. With them are small photographs of the works as realized and a few tantalizing pieces of period furniture. The portable panels of the exhibition, designed by Simo Paavilainen, are framed in favored interior colors of the period, which have a surprising but effective sharpness compared to the drawings.

The handsome catalog, in Finnish and English, contains over 50 capsule biographies and 500 illustrations, with an introduction by museum director Juhani Pallasmaa, with Paavilainen, and a concluding essay on the broader European picture by Kenneth Frampton. (The British-American Frampton and the Finnish-American Stuart Wrede are thanked for suggesting the whole project.) The sponsors hope to bring the show to the U.S. eventually, where it will be a revelation to many. [JMD]

Feet can be seen

So goes the press release for City Center, New York's midtown theater for dance, which just finished an \$800,000 renovation of its former Shriner's temple to improve sitelines (from orchestra seats) and spiff up appearances.

With funding largely from the Department of Commerce, the 55th Street Dance Theater Foundation, which operates the theater, raised the floor of the orchestra ten inches in the front and increased the rake from three to eight percent. Seats are staggered, and particularly awkward seats at sides and back have been removed. The whole has been repainted, replastered, and reupholstered in beige and burgundy. A second phase, to revamp the two balconies, is scheduled soon.

Patrons of the Joffrey and Alvin Ailey ballets, as well as the many visiting companies, have long awaited such a renovation. While those of the short persuasion may still have reason to grumble if the couple in front shows up, sitelines have on the whole been improved. (The low balcony would seem to have prevented a steeper rake.) From a more purely [News report continued on page 35]

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thetic point of view, the biggest disappointment is the decision to refurbish the palette of a pleasantly appointed director's office (oddly juxtaposed to the bold highlights) instead of the bold borish blues, greens, and reds that could have (and once did) set off the massive Arabic domes and ornament brilliantly.

Renovation architects were Fred Pensold of Arcop Associates in Toronto and Bernard Rothzeid of Rothzeid Kaiserman & Thompson of New York. [NM]

all papers Protetch

The recent exhibition of drawings and projects by Venturi, Rauch & Scott Brown at New York's Max Protetch Gallery offered viewers a refreshingly unusual installation, as well as an illuminating look at the firm's designs through 67 drawings and sketches. The installation, designed by the architects, transformed a standard (i.e., anonymous) gallery into something pleasantly reminiscent of a 19th-Century *salon*. Walls painted a light, warm gray were given both depth and life with stenciled abstract patterns, *à la* Best, in three pale pastels. A horizontal datum line painted 77 in. above the floor separated the larger drawings and studies below from the smaller, magic-marker-on-trace sketches above, arranged in a frieze around the rooms. The combination of patterned walls and an almost crowded installation was appropriately Venturian yet low-keyed enough to give the works on display their own voice. And they did, for the most part, speak eloquently. While the exhibition focused mainly on recent projects, and documented only a few projects in any depth, it nonetheless provided ample insight into VRSB's design process. There was a satisfying balance between detailed studies and presentation drawings, and Venturi's own sketches, whose emphatic black strokes make much of today's fashionable drawing look precious and overwrought. Many of the firm's well-known projects are there—the Oberlin art museum, the Atlantic City Marlborough-Henning project, the Institute for Scientific Information—as well as newer or lesser-known works, such as the building for Baghdad, the Butler College dining hall at Princeton, and the beautiful, apparently doomed Hubbard House in Nantucket. The showier presentation drawings—for Atlantic City, Franklin Parkway, and Hennepin Avenue—tellingly exhibit VRSB's far-reaching, yet vaguely clinical, curiosity toward both the banalities and excesses of pop culture. [PV]



Ron Manville

Sympathy for a teahouse

In 1912, architects Richard H. and Joseph H. Hunt, successors to their father Richard M. Hunt, were commissioned to design one of Newport, RI's most unusual structures. In a town filled with palatial million-dollar "cottages," they would add a small Chinese teahouse.

This "Oriental concoction," as architectural historian Antoinette F. Downing has called it, was installed on the grounds of Marble House, at the edge of the cliff overlooking the Atlantic Ocean. Marble House had been built in 1892 for Mr. and Mrs. William K. Vanderbilt, whose subsequent divorce granted Alva Vanderbilt the mansion, and when she later became Mrs. O.H.P. Belmont, she commissioned the teahouse.

At the onset of World War I in 1917, she closed Marble House and never reopened it. The estate was sold to new owners 16 years later, and then acquired by the Preservation Society of Newport County in 1963, which opened it to the public with its other house museums. The teahouse was another story, however. Heavily vandalized and deteriorated from the ocean air, it would take many years to raise the necessary funds (more than \$400,000) as well as 18 months of restoration work to reopen the Chinese jewel.

That effort was completed Sept. 2, with a ribbon-cutting by Chai Zemin, ambassador from the People's Republic of China to the U.S. He pronounced the teahouse "authentic Southern Chinese" in style, adding that it was the first example of Chinese architecture he had seen since coming to this country in 1979.

The authentic look is actually a pastiche of Chinese building types seen by the Hunt Brothers when they visited



Collection: John Hopf

The Teahouse today (top) and 1912 rendering (above).

China to research the commission. Their design combined Chinese embellishment with Western practicality. According to restoration architect Donal Simpson of Newport, the building is actually a simple post-and-beam structure, "the state of the art in 1913." Steel beams support the base, and tie rods, hidden in the chords of a series of magnificent stepped tube trusses that are solely decorative, hold the upper walls. A partial hip roof tops the structure.

The restoration was a challenge, according to Mark Weber, an architectural historian commissioned by the society to research the teahouse. "The hardest part was trying to fill in the gaps," he said. "It required both intuitive and subjective decisions." The main problem was determining the variety of colors on the polychromed building; the actual colors had faded and the only other information came from a few black-and-white photographs and some pale drawings by the Hunt brothers found in the AIA archives. The glorious solution—

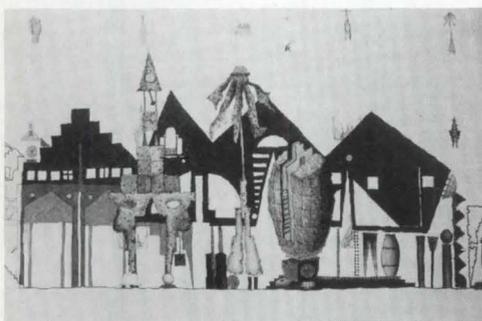
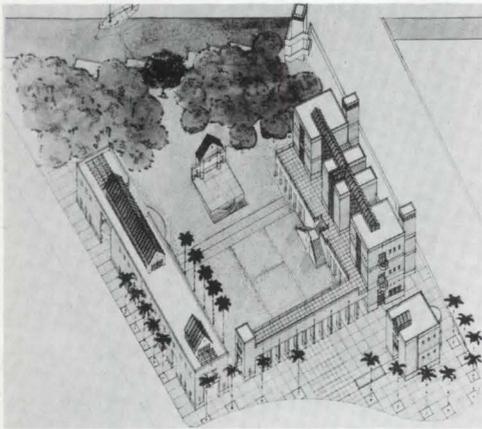
[News report continued on page 36]

with Chinese red enamel columns, flat-black doors, and green, yellow, blue, and white trim—is a delight to any eye.

A number of craftsmen, under the overall direction of Arthur Marshall Restorations, Inc., of Newport, were employed to recreate the extensive copper metalwork trim, reinstall the ceramic tiles on the roof, and recast 24 Chinese Foo dogs that sit on the transoms above the glass doors.

One of the biggest tasks was the restoration of the delicately painted Ming Dynasty scenes on the interior wall panels. In order to cut costs, Mrs. Belmont had these paintings done on plywood, which over the years had buckled. In addition, the panels were badly defaced with graffiti and scratches. The completed work by Christy Cunningham, a fresco restorer, is a major accomplishment and a testimony to her ability.

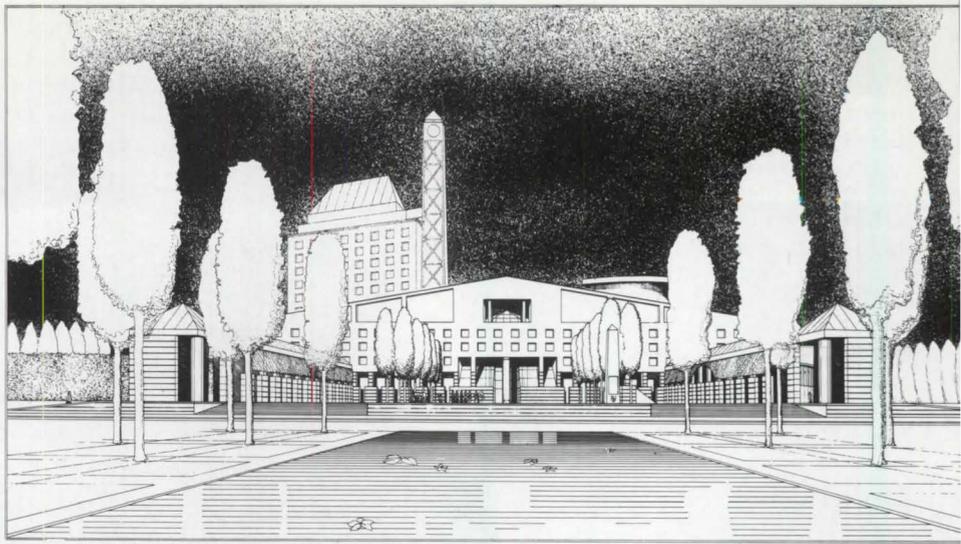
There was one melancholy note at the dedication, however. Paul E. Molitor, Jr., the preservation society's director who had devoted much of his time in recent years to the teahouse restoration, died several days earlier, a suicide, according to police reports. [Carleton Knight, III]



Fort Lauderdale: winner (top) and second prize (above).

Riverfront Plaza design selected

A team headed by James Ames Steffian of Aragon Associated Architects, Coral Gables, Fl, has won first place in the Fort Lauderdale Riverfront Plaza design competition, sponsored by the city's Downtown Development Authority (DDA).



Winning Mississauga City Hall scheme.

The winning scheme features several two-story buildings with food service, office space, and crafts exhibition areas, set around a grassy plaza. A grand colonnade marks the entrance to the plaza and leads up to an outdoor stage and arena. A visitor information center and presentation space for the DDA and other organizations is housed in a smaller building at the edge of the site, along the New River.

Jurors Mario Botta, James Stewart Polshek, and William Turnbull, Jr., selected the winning design from 195 entries and cited it as a "good, central idea that should add a lot to the heart of downtown." Second place went to B. Mack Scogin, Jr., of Heery & Heery, Atlanta; Thomas and Marleen Davis of Cortland, NY, placed third. Donald Singer served as professional advisor for the competition.

Riverfront Plaza is part of an intensive redevelopment program planned by the DDA which includes a library by Marcel Breuer Associates, a museum by Edward Larrabee Barnes Associates, and restoration of the historic Stranahan House. Construction of the \$1.7 million Riverfront Plaza is expected to begin in late 1983, with a 1984 completion date. [BMC]

Rave reviews for Canadian competition

Competitions for public buildings in Canada have a nasty habit of turning into political scandals. Last May, for example, Arthur Erickson, a personal friend of Prime Minister Trudeau, was appointed architect of the \$30 million Canadian Embassy in Washington, despite the fact that his name was conspicuously absent from the short list. With the announcement on Sept. 29 that the architecture firm of J. Michael Kirkland had won the national design competition for the \$30 million Mississauga City Hall and Civic Square, Canadian architects had at last found a precedent to cheer about.

Two precedents, actually. On Sept. 29, Post-Modernism arrived in Mississauga (population 312,000). Incorporated in 1974, the city has always been considered a dormitory of Toronto, its powerful neighbor to the northeast. Its origins are rural, its character, suburban. The City Hall designed by Kirkland and British architect Edward Jones, with its multivalent allusions to vernacular, civic, rural, domestic, and monumental architecture, was set the tone for all future development in its vicinity. Jury member James Seligman gave it a rave, announcing the design was of high quality by world standards and would inevitably receive international praise upon publication.

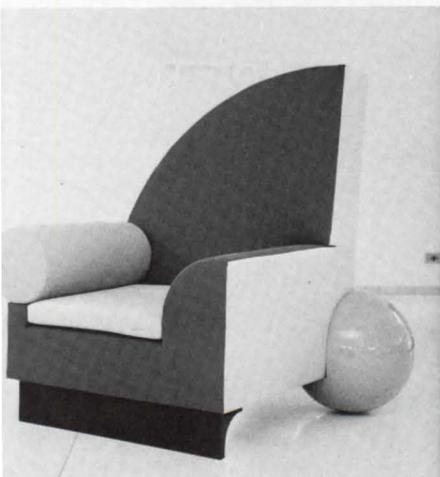
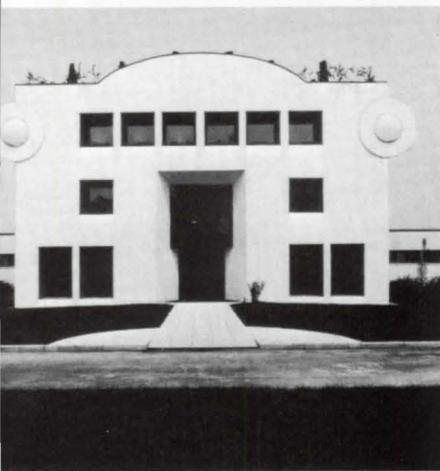
"If you go to the site and someone said 'city square,' you'd think it was a joke," said Jones. "It is not auspicious but it's very typical of the North American plight—you begin with nothing and make something out of it." Kirkland and Jones opted for simple primary forms, the most important being a long, limestone office block stretched across the center of the site with a gently sloping, symmetrical roof—"almost reminiscent of a farm building and a suburban house," in Jones's view.

The competition was organized by George Baird, lecturer, writer, and partner in Baird/Sampson Associates. As Professional Adviser to the City of Mississauga, Baird set the guidelines in a 93-page document detailing everything from the history of Mississauga (1789 to the present) to the geological formation of the site (fine-textured shale and limestone till). He insisted on 25 percent coverage and a maximum height of 10 stories. The winner would receive \$150,000 as an advance on fees, and a matching sum if the design were realized. Second, third, and fourth awards were set at \$75,000, \$37,500, and \$18,750, respectively. In addition, the jury could distribute three medals, totaling \$33,750, at its discretion.

Baird also selected the jury, composed of two representatives of the City Council and three architects—Phyllis La [News report continued on page 43]

t of Montreal, Toronto architect
ome Markson, and Stirling. The
ice of Stirling was a stroke of genius.
ver has an architect of his stature sat
a Canadian jury. Stirling's presence
punts in great measure for the
mber of entries received—246—and
Post-Modernist tendencies of the
missions. At the competition's end
jury's remarks were published and
the entries went on public display for
week. "It was a coincidence of an in-
genitly written brief and assessors
rly not looking for normative work"
t in Jones's opinion made the compe-
on a success. It was the absence of
tical interference that pleased the
al Architectural Institute of Canada.
sident Macy DuBois has issued a
ss release encouraging other public
anizations to follow Mississauga's
mple. [Adele Freedman]

le Freedman is Architectural Critic of the
nto Globe and Mail.



Domus Academy by Studio Nizzoli (top);
Memphis chair by Peter Shire (above).

et me
Milano

Salone del Mobile (September 17-
Milan's annual furniture fair, of-
d little in the way of innovative fur-
re design this year, but no one
ned to mind. At the vast Milan fair-
ands, hundreds of furniture man-

ufacturers displayed their newest
designs, and it was clear that the move-
ment the Italians call Neo-Modernism
was firmly entrenched only a year after
the introductions at Memphis and
Studio Alchimia caused such a stir in the
industry. There seemed to be a prepon-
derance of what one editor succinctly
termed "fat furniture on skinny legs,"
mismatched patterns, multicolored
laminates, zooty silhouettes, and an ac-
companying load of ideological bag-
gage.

On the social circuit, however, there
was enough action to please the most
energetic gadfly. The denizens of the
acknowledged style capital of Italy man-
aged to turn out by the hundreds for the
fair and its attendant events. On Friday
the 17th, an office manufacturer called
MiMs unveiled an installation designed
by Alessandro Mendini. "The Sentimen-
tal Robot," a "rational spectacle in the
office jungle," seemed to consist mainly
of pink office-system components popu-
lated by masked mannequins stationed
at disembodied computer terminals. In
true Italian fashion, Studio Alchimia
failed to open its doors after sending out
hundreds of invitations to a reception;
crowds were turned away and advised to
"come back tomorrow." Undaunted,
they pressed on, to the Centro Domus
for the introduction of new laminates
designed for Abet Print by Bellini, Cas-
tiglioni, Magistretti, Mendini, Portog-
hesi, and others. Later, everyone mi-
grated to a party thrown by *Abitare* at
Luna Park, the local amusement park.
On Saturday, the new Memphis collec-
tion appeared (see fat chair on fat legs),
and *Domus* unveiled its new Academy,
which will conduct one-year programs
in design under the direction of Andrea
Branzi. At the Pavilion of Modern Art,
fabric manufacturer Alcantara spon-
sored "Materialidea," an exhibition
featuring installations designed by
Michael Graves, Aldo Rossi, Ettore
Sottsass, Mendini, and Emilio Ambasz,
using the sponsor's synthetic suede. You
didn't need a catalog to guess who did
what. [PV]

Art Deco renewed in London

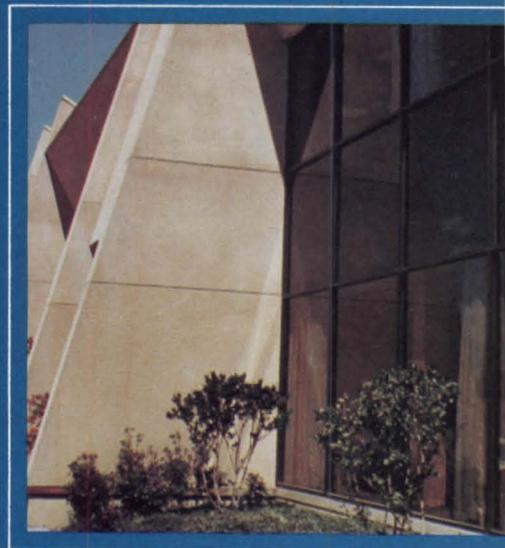
One of London's landmarks, the great
curved 1930 Unilever building facing
the north end of Blackfriars Bridge, is
undergoing a phased transformation
designed by Theo Crosby of Pentagram.

The building, originally built in one
year during the Depression by the archi-
tects Burnet Tait & Lorne, was never
properly completed, and very little of
the interior finishes remained. But the
elaborate stone-clad exterior with sculp-
tures by Reid Dick inspired Crosby "to
make something more out of the build-
ing."

He has called for considerable struc-
tural alterations. The main access has
been changed from the east to the north
river-facing façade. A new eighth floor
replaces the former blank windowless
attic, and where before there was a
[News report continued on page 45]

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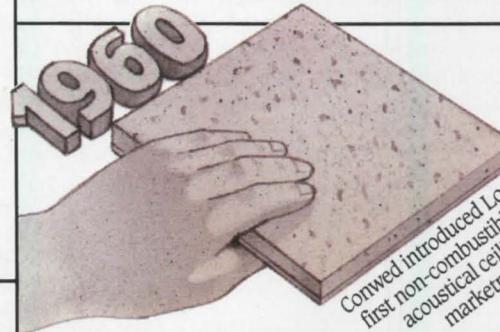
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Kawneer
the designer's element

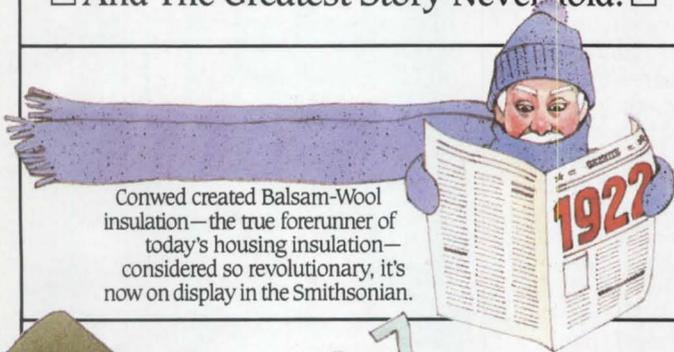
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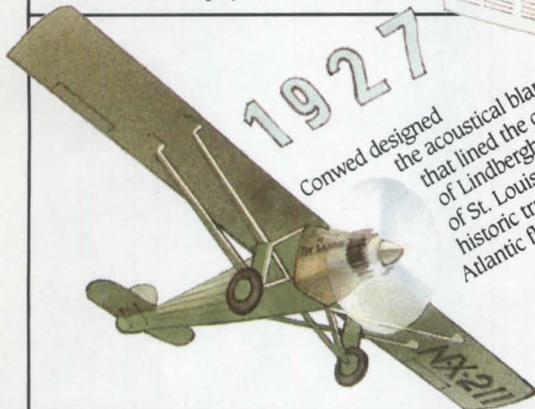
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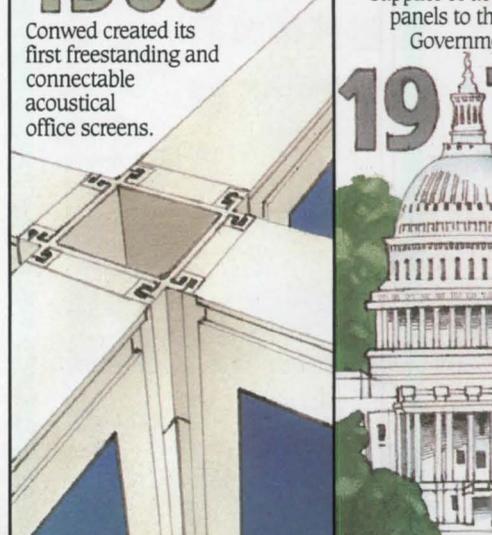
Conwed designed the acoustical blanket that lined the cockpit of Lindbergh's Spirit of St. Louis on his historic trans-Atlantic flight.



Conwed manufactured the acoustical insulation that was installed in Hollywood's first "talkie" sound stages.

1968

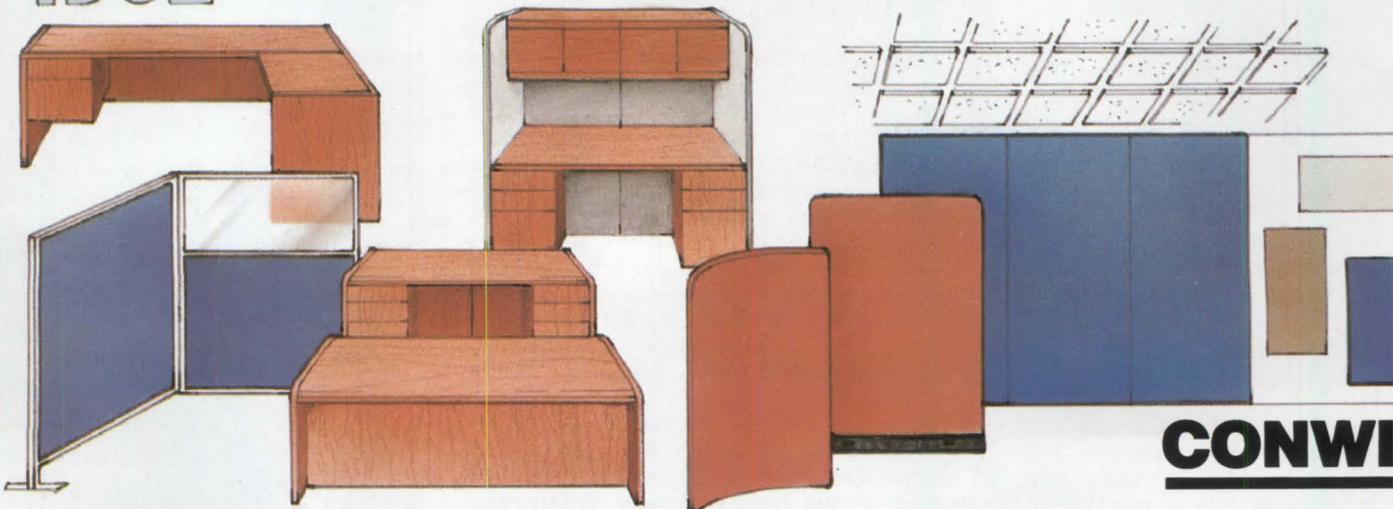
Conwed created its first freestanding and connectable acoustical office screens.



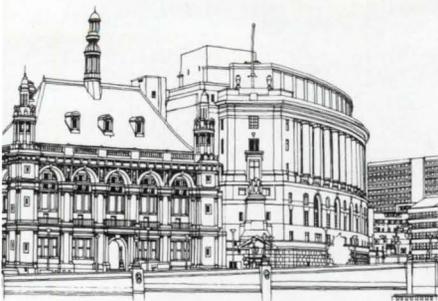
Conwed became the still remains, the supplier of acoustical panels to the Government.

1982

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heavy parapet concealing the seventh floor, there is to be a row of 16-ft-high fiberglass sculptures by Nicholas Monroe creating a screen in front of the seventh and eighth floors, now linked and glazed. A new shallow pitched roof in gray metal encloses mechanical facilities and elevator heads. The stone-vaulted north entrance has gates taken from the south front, and sprayed-bronze revolving doors are placed beneath a decorated glass panel and a flamboyant gilt sculpture by Bernard Sindall.

The exterior additions prepare the visitor for the splendors of Art Deco as reconstituted by Crosby for the interior. "The Art Deco origins," says Crosby, "were helpful . . . an ambitious contemporary variation could be attempted. The entrance hall . . . is intended to be an integrated decoration, exploring new territory. Unilever wanted to change the building, but they wanted to use the existing characteristics of the interior and extend them to make the whole richer." Punctuating the entrance hall are three tall angular pillars, existing columns now encased in travertine with bronzed steel triangular uplighters illuminating complex ceiling moldings. A steel and acrylic multilevel lighting fixture zigzags across the ceiling with points of color made bright by concealed fluorescent tubes. That it doesn't match the other decorative elements, says Crosby, is the whole idea. "It's meant to be as wild as possible." Colored marble patterns on the floor are based on those found elsewhere in the building, but are more complex, and colorful staircase railings are cranked bronze verticals connected by vermilion enameled discs.

Diane Radford designed the mirror wall, its decorative themes being an extrapolation of elements found elsewhere in the building. She also designed a number of other features such as the ceilings of the new elevators and the mirror trellis around the conference concourse. The new elevators are lined with mirror and a chromed-steel grille with dark green enameled sections.

For carpets, lights, and general fittings throughout the building, Crosby says, "There are several basic motifs we have developed. For example, there are swastikas along a wall panel in one area and there are some designs that are repeated, like squares within squares and diamond shapes."

Unilever, the tenth largest multinational in the world with the biggest range of products, pressed its constituent companies into making gifts to the revamped building. The Benin wall carving in the entrance hall came from Africa, as did woven fabrics, and art works poured in from many other countries. It was for Crosby to find a way of [News report continued on page 47]

- 1 Unilever House before alteration;
- 2 Sundall sculpture above entrance;
- 3 New ceiling fixture, and 4 railing and column/uplighter in entrance hall.

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orporating them into his overall de-
n scheme. The execution of the com-
x, of which only the first phase has as
been completed, is being managed
Unilever's chief architect Roy Ash-
rth. [Monica Pidgeon]

documenta 7: anarchic; rbana: reassuring

nce every five years, a small German
y, Kassel, sponsors a summer-long art
hibition, *documenta*, which transforms
into an international center of con-
emporary art. Founded in 1955 with a
rospective show of "Modern Art since
00" (the first in Germany since 1927),
documenta subsequently introduced
merican, Pop, and Media art to ever-
rowing crowds, predicting, often with
icanny accuracy, the trends to come.

This year's *documenta*, the seventh,
uly lives up to the name it bears in ar-
tic circles: "the Olympics"—180 par-
icipants from 21 countries, simultane-
s shows in three exhibit halls (two
stored for the occasion), official
uvenirs, and posters all create a mid-
y atmosphere. *Documenta 7* has
oven controversial because it has no
ganizing themes and has even re-
ved in its disorganization, in a most
-German fashion. The results of this
proach include the dispersion of
orks by the same artist in different
ildings and a catalog partially written
the artists themselves. To some this
ears healthy anarchy, to others, a
hetic reflection of a stagnating, direc-
nless art market. Trend-spotters were
vertheless able to note the recrudesc-
ence of Pop and Media art, the rel-
ely weak showing of photography, the
appearance of genres of Modernism,
d the return of figurative art. There
re "comers" like New York's Joel
napiro and Germany's new Fauve,
omé, as well as the inevitable Olden-
rg, Twombly, Le Witt, Judd, and
o-hum) Warhol. Germany's man of
e hour, Joseph Beuys, had been given
e central square for his monumental
y wall construction and a stand at its
se to sell Beuys' T shirts.

Documenta 7 includes works by archi-
ts and about architecture: two care-
s collages by Frank Gehry combining
ter-stained working drawings and yel-
ved articles about him, two sound
oms by Bernhard Leitner, photo-
aphs of industrial architecture by
rnd and Hilla Becher, and perspec-
al analyses by Jan Dibbets. There was
o a building within the gallery itself,
ich consisted of Michael Asher's
nsposition of a Mies Van der Rohe
use.

Architecture was, however, the sub-
t of a separate show called *documenta*
ana, the result of an invitational
mpetition" for the replanning of 15
uble spots in Kassel. The 100 answers
the challenge *sichtbar machen* (make
ble) were exhibited at the Rathaus

and collected in a catalog which, it is
hoped, will continue to awaken local
interest in the gaps and leaks in the
urban tissue. *Documenta urbana* will also
make a permanent contribution to Kas-
sel's landscape on a site outside the city
center, where 211 units of public hous-
ing have been built by nine different
teams. It is conceived as a modest exper-
iment, closer to Stuttgart's Weissenhof
than to Berlin's gigantic International
Building Exhibit. The new settlement
Schöne Aussicht-Dönche, has succeeded
in inspiring confidence among Kassel's
leadership in the role of urban experi-
mentation in the vast and expensive en-
terprises of future *documenta*.
[Hélène Lipstadt]

*Hélène Lipstadt, who holds a doctorate from
the Ecole Pratique des Hautes Etudes en
Sciences Sociales in Paris is trained as a so-
cial historian and anthropologist.*

Back to terra cotta

This year has brought a refired interest
in terra cotta. The Friends of Terra
Cotta, a nonprofit group founded in
1981 to promote both the preservation
and new use of the material, have kind-
led that interest with a series of tech-
nical seminars held this year in San
Francisco, Chicago, and New York, at-
tracting large and enthusiastic audi-
ences.

The seminars began with a history of
terra cotta from its development in
Renaissance Italy to its decline during
the Depression, when the handmade
material proved too expensive and too
ornate for modern tastes. Sessions fol-
lowed on terra cotta production, which
still uses clay models and plaster of paris
molds; its deterioration, usually from
water spalling the glazed surface or cor-
roding the iron strap supports; its analy-
sis, employing everything from metal
detectors to moisture meters and strain
gauges; its repair, using epoxies and
stainless steel pins; and its replacement
with substitute materials such as
fiberglass, polyester, or concrete. The
seminars ended with preservation case
studies of the Marquette Building in
Chicago and the Woolworth Building in
New York.

Funded in part by the National Trust,
the seminars showed the spirit of coop-
eration that exists in the architectural
conservation community among gov-
ernment, industry, and the architectural
and engineering professions. Repre-
sentatives of the National Park Service,
major terra cotta producers such as
Gladding, McBean & Co., and firms
such as Holabird & Root and The
Ehrenkrantz Group openly discussed
both their good and bad experiences
with the material, a valuable exchange
that doesn't occur often enough in many
areas of building technology. The semi-
nars are worth repeating for their in-
formation and as a model for other
technical conferences. [TF]

[News report continued on page 50]

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Color: Cedar

Designer: Designer Group
Bankers Trust Company

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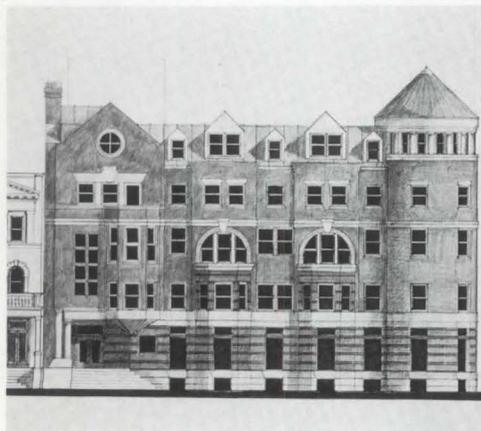
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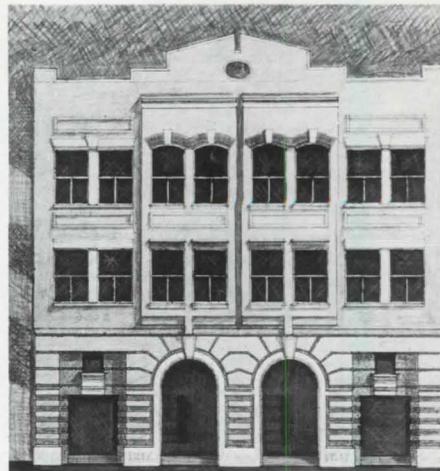
In progress



1 The Corcoran residential/office building, Washington, DC. Architects: KressCox Associates, Washington. This five-story, 32,000-sq-ft new structure, inserted on a corner lot in the Dupont Circle Historic District, is designed to fit comfortably into its turn-of-



The Corcoran residential office building (left). 1217 E Street Office building before (above) and future (right).



the-century Classical Revival setting. It is faced in dark red brick with limestone rustication, keystone lintels, and trim, and has a varied roof treatment, with peaks, dormers, and a turret. Office space totaling 22,000 sq ft, with ten-foot ceiling heights on the ground floor, is entered from the grand New Hampshire Avenue side. The 12 residential units, 10,000 sq ft in all, are entered through a private landscaped courtyard off the residentially scaled Corcoran Avenue.

2 1217 E Street Office Building, Washington, DC. Architects: KressCox Associates, Washington, DC. This no-nonsense 1930s com-

mercial warehouse, just off Pennsylvania Avenue downtown, is getting a novel look—a renovation now underway. Appropriately, the image of the new tenants, a law firm, architects are transforming the doorway façade into a Neo-Classical one. Limestone-trimmed archways and keystone lintels combined with two colors of brick and stone to complete the exterior, which now includes a stylish parapet. Inside the main archway—retail space is at each side—are niches in the foyer, designed to hold busts of the law firm's founding partners immortalized, apparently, as they are paying for the façade's limestone. The 22,000-sq-ft concrete-frame building will be able to support two additional floors for future expansion of the three-story building. [News report continued on page 56]

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- Categories:** A. Single-family detached.
B. Multi-family, up to six dwelling units.

Registration: A non-refundable \$50 registration fee must be submitted by January 31, 1983 for each design to be entered. Design submission deadline is February 28, 1983.

Awards: Winners in each category will receive the following awards:

- First prize—\$4,000.
- Second prize—\$2,000.



- Honorable Mentions—\$1,000.
- National publicity in professional trade journals.
- Publication in a book of competition highlights to be distributed nationally.

Judging Criteria:

- Economic viability in local housing market.
- Suitability of design to urban mass housing market.
- Adaptation to surrounding environment.
- Optimum use of gas energy for backup and appliances.
- Architectural style.
- Overall energy efficiency.
- Marketability of design.

Jurors: Samuel J. Cunningham, Manager of Research, Southern California Gas, Los Angeles, CA; James Leach, Downing-Leach, Boulder, CO; Richard G. Stein, FAIA, The Stein Partnership, New York, NY; Donald Watson, FAIA, Guilford, CT; Steven Winter, Steven Winter Assoc., New York, NY.

Competition Director: Albert J. Ream, American Gas Association, Arlington, VA (703) 841-8575.

*Cosponsored by Solar Age Magazine.

To receive a copy of the registration booklet which contains detailed instructions concerning design submissions, please complete this form and return to: Passive Solar Design Awards Competition, Room 1002, American Gas Association, 1515 Wilson Boulevard, Arlington, VA 22209.

Do not send design entry with this form.

PA-11

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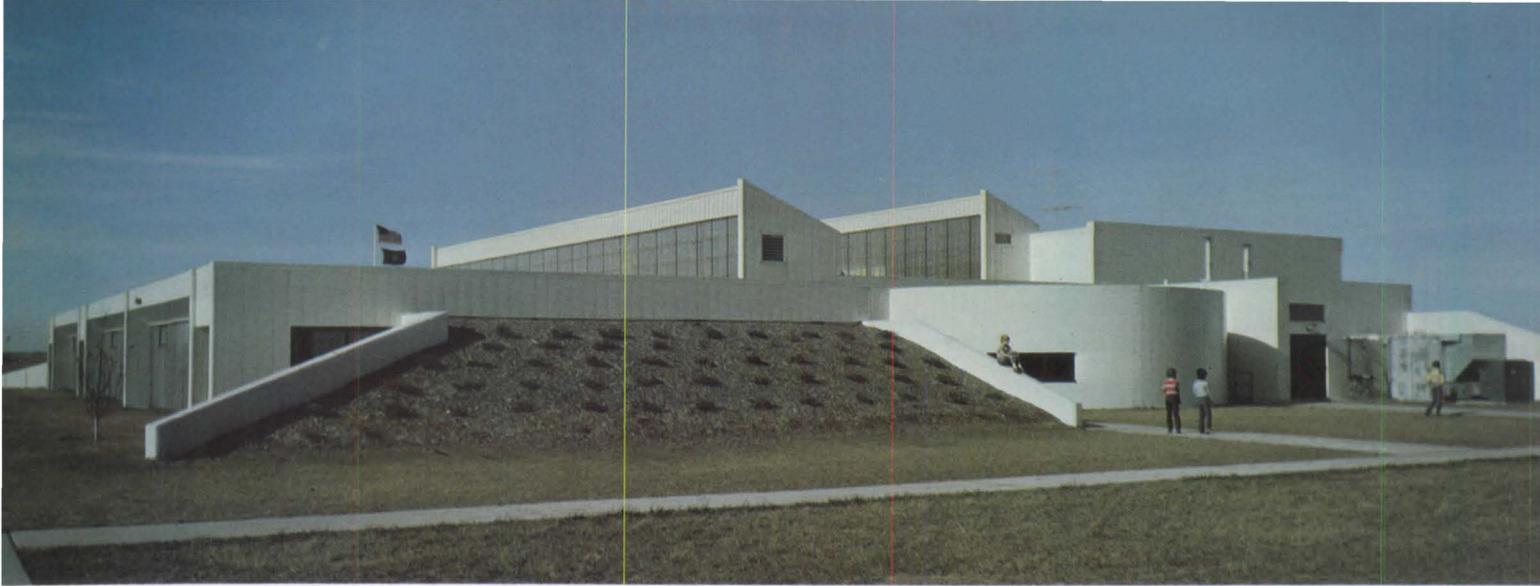
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Photographer: Huffman Studio, Richmond, Virginia



An overall view of the school from the southeast, showing the earth berming, the long Trombe wall and clerestory windows used in combination with two long interior concrete masonry thermal storage walls.

WINDY HILLS ELEMENTARY SCHOOL
KEARNEY, NEBRASKA

ARCHITECT/LYNN BONGE

Concrete masonry passive solar school in Nebraska, designed to cut energy costs by one third.

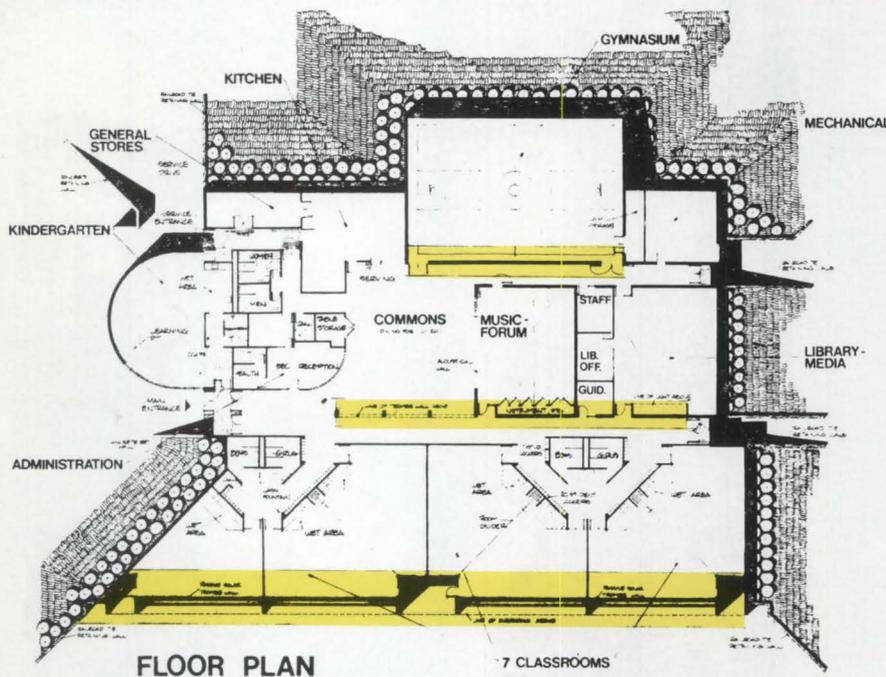
Energy saving concrete block walls at work throughout.

Earth berming part of design.

"I believe that a designer can observe and respect some fundamental principles of nature and then enjoy a new direction in architecture..."

This statement from Architect Bonge comes to full reality in his Windy Hills School in Kearney, Nebraska, aptly named by its students for its high, windswept location.

The design combines loadbearing concrete masonry construction, earth berming, and passive solar heating with a Trombe wall and clerestory windows.

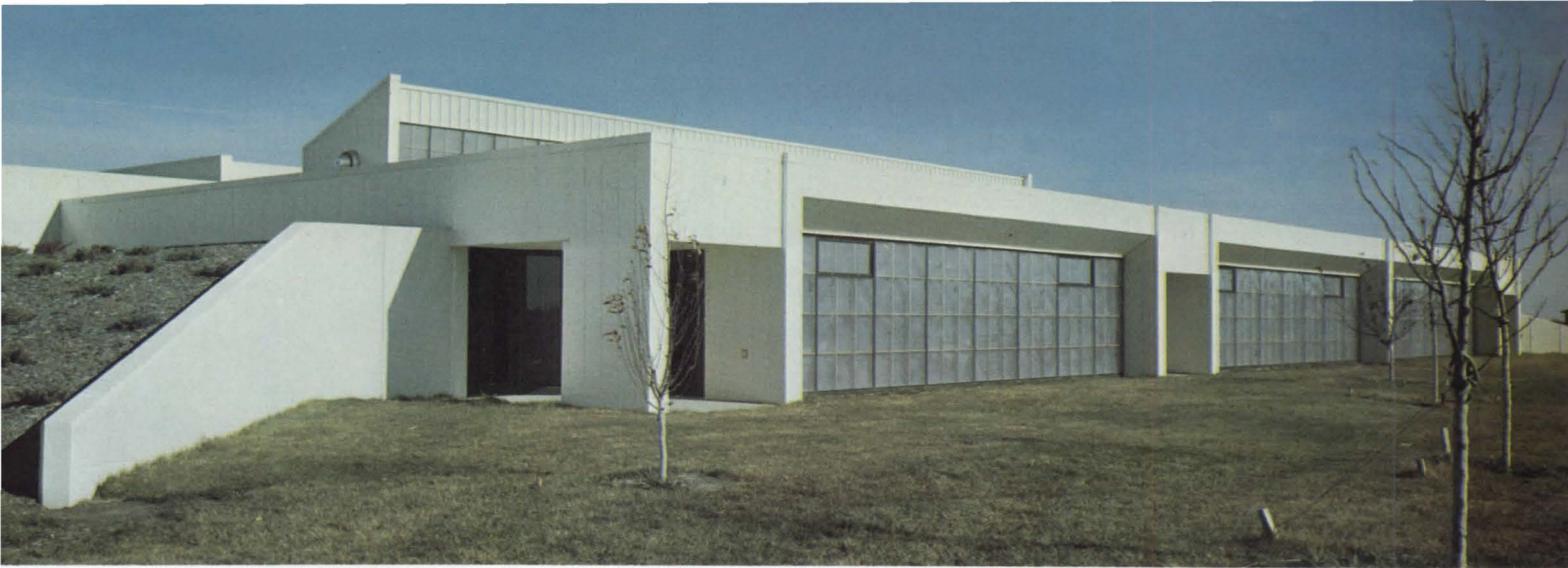


A floor plan of the school. Colored areas indicate the location of the concrete masonry thermal storage walls.

A view along one of the axial corridors showing the clerestory windows and the solid concrete masonry heat storage wall.



Lynn Bonge, Architect



View of the school from the south showing the 160' Trombe wall.

Classrooms are located directly adjacent to this wall.



Load-bearing concrete masonry is employed throughout the structure.



The classroom side of the Trombe wall, showing vents, through which solar heated air enters the room.

A concrete masonry Trombe wall on the south face running approximately 160' forms the primary passive solar heating system. This long wall is built with 18" fully grouted concrete masonry. Other concrete masonry walls in the axial corridors of the school store heat gained through restroly windows.

It is expected that solar energy will provide about one third of heating needed for this 23,000 sq. ft. structure.



Detail of the Trombe wall from the outside. Manually operated windows can be opened if necessary. This picture shows the class room ventilators which are opened or closed automatically by thermostats, and the black painted concrete masonry Trombe wall.



National Concrete Masonry Association

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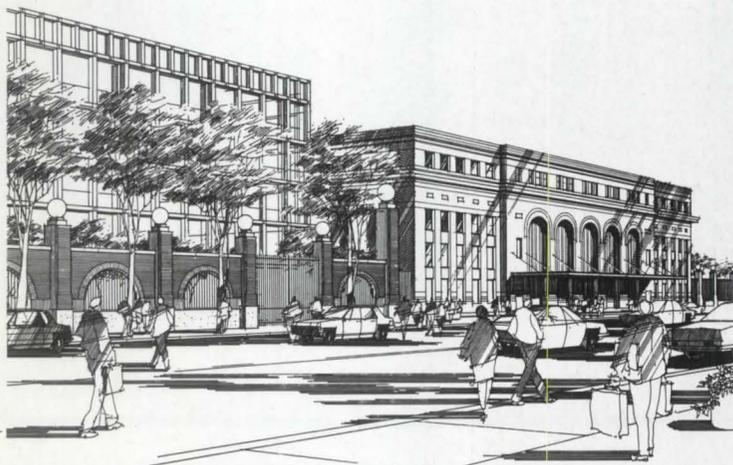
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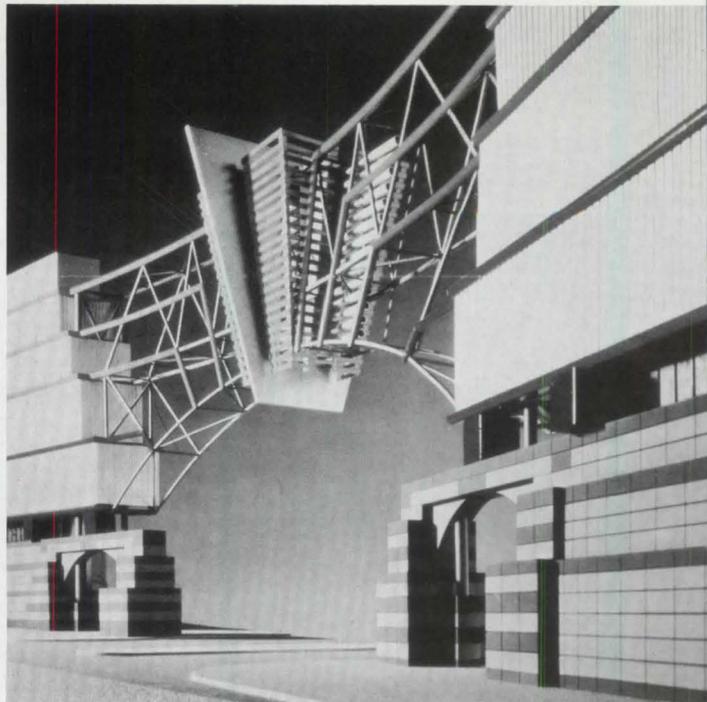
City _____ State _____ Zip _____



3 New Haven Railroad Station Renovation, New Haven, Ct. Architects: DeLew Cather Parsons, and Skidmore, Owings & Merrill and Herbert S. Newman Associates. By 1985, the voluminous and currently empty Cass Gilbert railroad station will be renovated at a cost of \$28 million, to be used as a mass transit hub for Southern New England. The interior will receive "respectful attention," while metal-clad tubes will take passengers to platforms. The complex, which will include a 900-car

garage, will be unified on the street through the use of giant brick pylons between a screen wall, combining Lutyens-esque civic imagery with metalwork meant to evoke railroad ornaments.

4 Breakfast Television Center, London, England. Architects: Terry Farrell Partnership, London. A large block of studio space for use by England's version of the "Today" show is wedged into a narrow site on the side of an



industrial canal. An undulating screen wall will front this addition to an older brick building and allow entrance underneath a giant arch whose steel truss work is painted to resemble the rising sun. Inside, public areas are highly articulated through the use of several temple- and aediculae-forms, including a Texas desert garden with mirrored walls. Completion is scheduled for summer 1983.

[News report continued on page 68]

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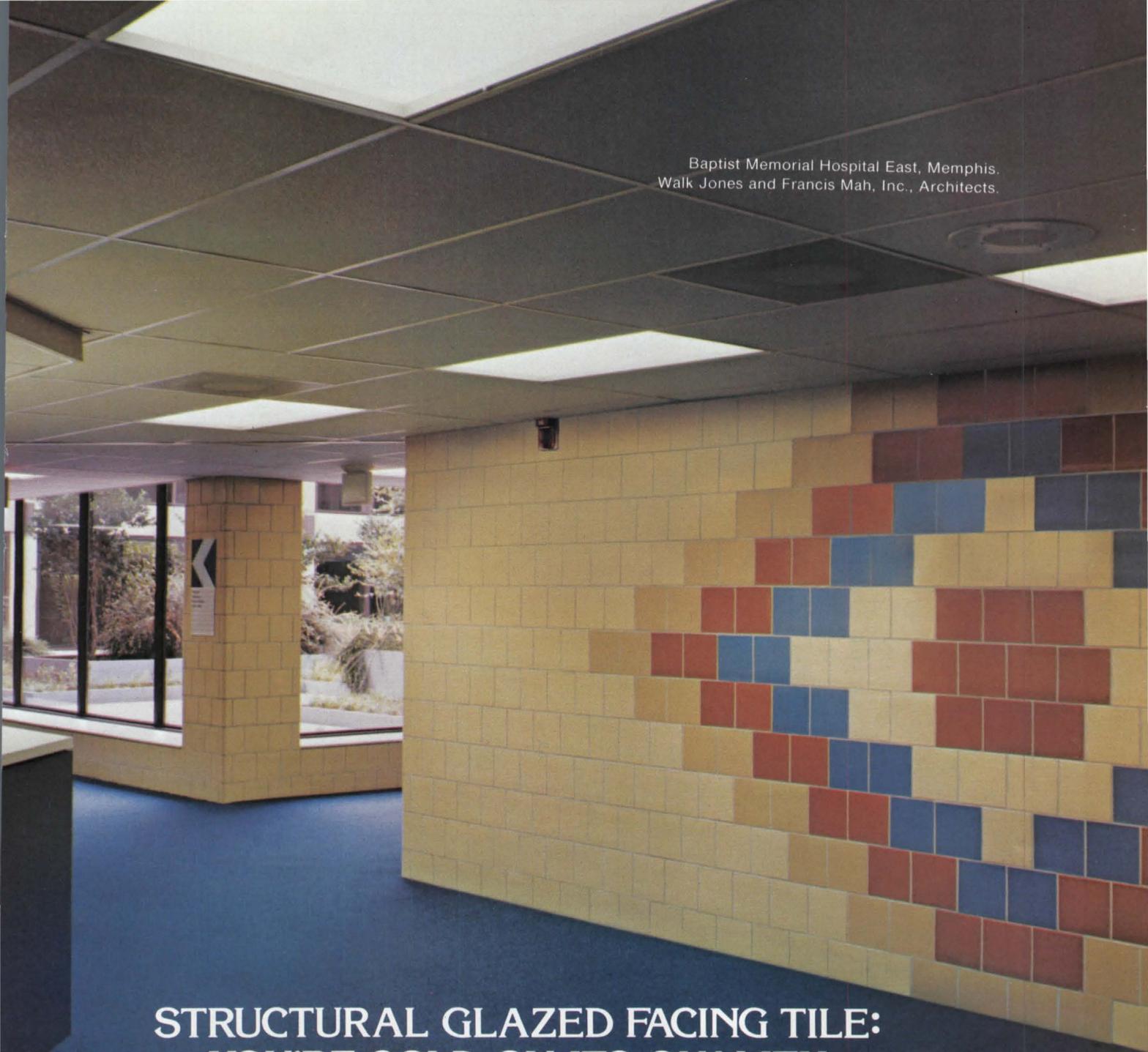
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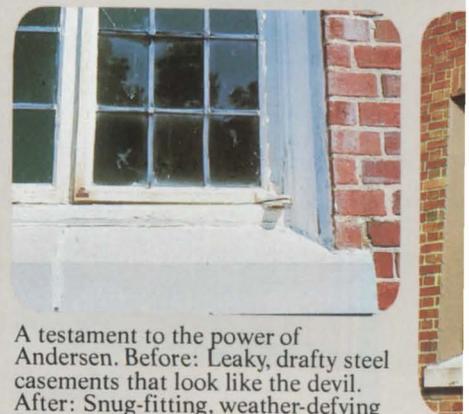
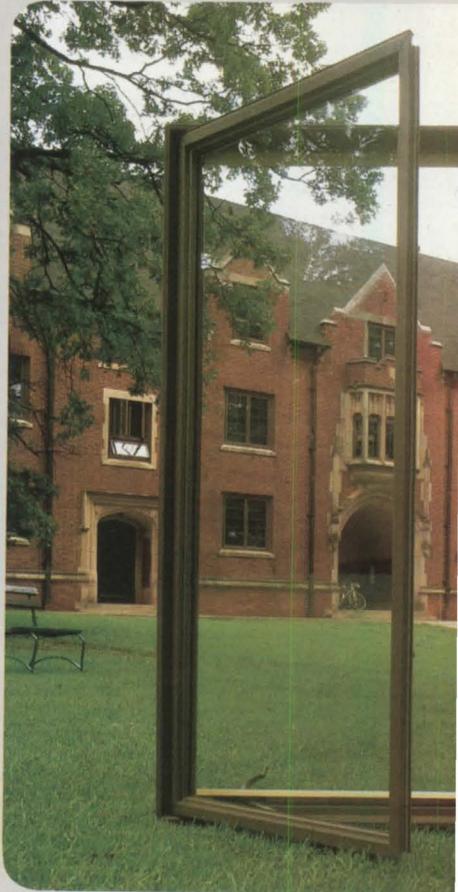
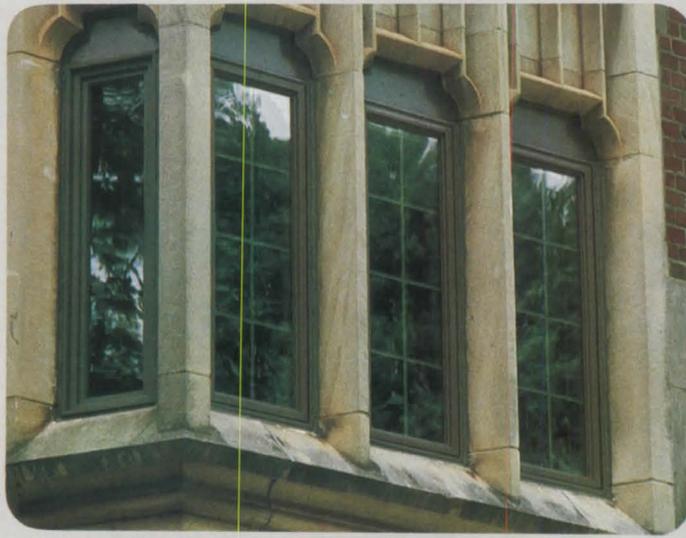
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*Per square foot in-the-wall cost for a 4" wall. This information is copyrighted by Robert Snow Means Co., Inc. It is reproduced from *Building Construction Cost Data 1982* with permission. SGFT cost is for the functional color group, 8" x 16" units.

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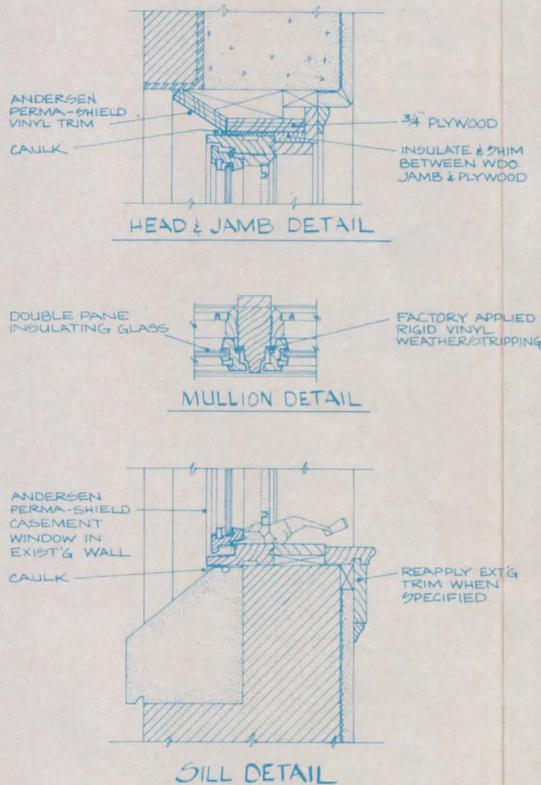
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Decatur, Georgia

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Competition in Paris

France is holding an international competition (registration deadline was October 23) for the design and construction of an International Communications Centre and two Ministries in La Défense region of Paris.

¶ The 13-person jury includes Oriol Bohigas, Kisho Kurakawa, Richard Meier, and Ada Louise Huxtable.

Victoriana among Rochester winners

A brand new "Victorian Refreshment Stand" for Genesee Country Museum by architects Handler/Grosso took one of the Awards in the annual Rochester (NY) AIA honors program. Awards also went to:

¶ the Chautauqua Institute Amphitheater renovations by Lawson-Knapp & Pulver

—which maintain its Victorian character; ¶ the United Cerebral Palsy Group Residence by Macon/Chaintreuil Associates; ¶ the O'Neill Residence by Charles F. Lewis.

¶ Citations went to: the Academy Office Building—Victoriana reworked—by Handler/Grosso;

¶ a beverage distribution center by Starks Wurzer Patterson Romeo;

¶ a vacation house and an office building by Macon/Chaintreuil.

¶ Jurors were Osyp Martynuik of Kent State University, John Shaw of Cornell, and John Morris Dixon of P/A.

Rochester Arts in Architecture

In a new competition for arts in architecture, cosponsored by Arts for Greater Rochester and the local AIA chapter, the top prize went to metal craftsman Albert Paley's gates for the State Capitol Senate

Chamber in Albany, NY (p. 116).

¶ Jurors were Robert Johnston, Dean Fine & Applied Arts at Rochester Institute of Technology, Rodger Mack, Director of the School of Art at Syracuse University, and P/A Editor John Morris Dixon.



Murphy/Jahn design.

Star of Texas

Murphy/Jahn's design of a 1400-ft-tower in Downtown Houston for South Bancshares and Century Development Corporation (P/A, Aug. 1982, p. 21) has been revealed.

¶ The steel, granite, and glass skyscraper with 82 floors (including a ten-story arc at street level) and two million rentable sq ft of office and retail space, is rotated 45 degrees on the site and tapers to a peaked top.

¶ The commission was awarded in a competition, with SOM/Houston and Kohn Pederson Fox & Associates also submitting proposals. (More next month.)

Wolf Trap redesign

The Wolf Trap Foundation has hired Dewberry & Davis (not Edward Knowles, one of the original architects of Wolf Trap Farm Park) to redesign its theater which burned down last spring (P/A, June 1982, p. 4).

¶ D & D had offered its services to assist in locating and installing the temporary structure on the site, and has promised to complete working drawings in time to begin construction by December 1. The ceremonial opening will be next August. It's that's a fast track.

¶ Congress has approved a \$9 million grant and an \$8 million loan for the structure which will use the CADD/CAM system.

Fairfax

Arthur Erickson with Dewberry & Davis, Fairfax, Va., have won the competition to design the new \$50-70 million Fairfax County Government Center (P/A, June 1982, p. 39).

¶ The Board of Supervisors has voted to pay \$50,000 to the joint venture architect but is worried that the voters, who will now decide on the center, may be opposed to backing such an expensive venture.

¶ The winning design is a 350,000-sq-ft multitiered structure overlooking a lake [Pencil points continued on page 64]



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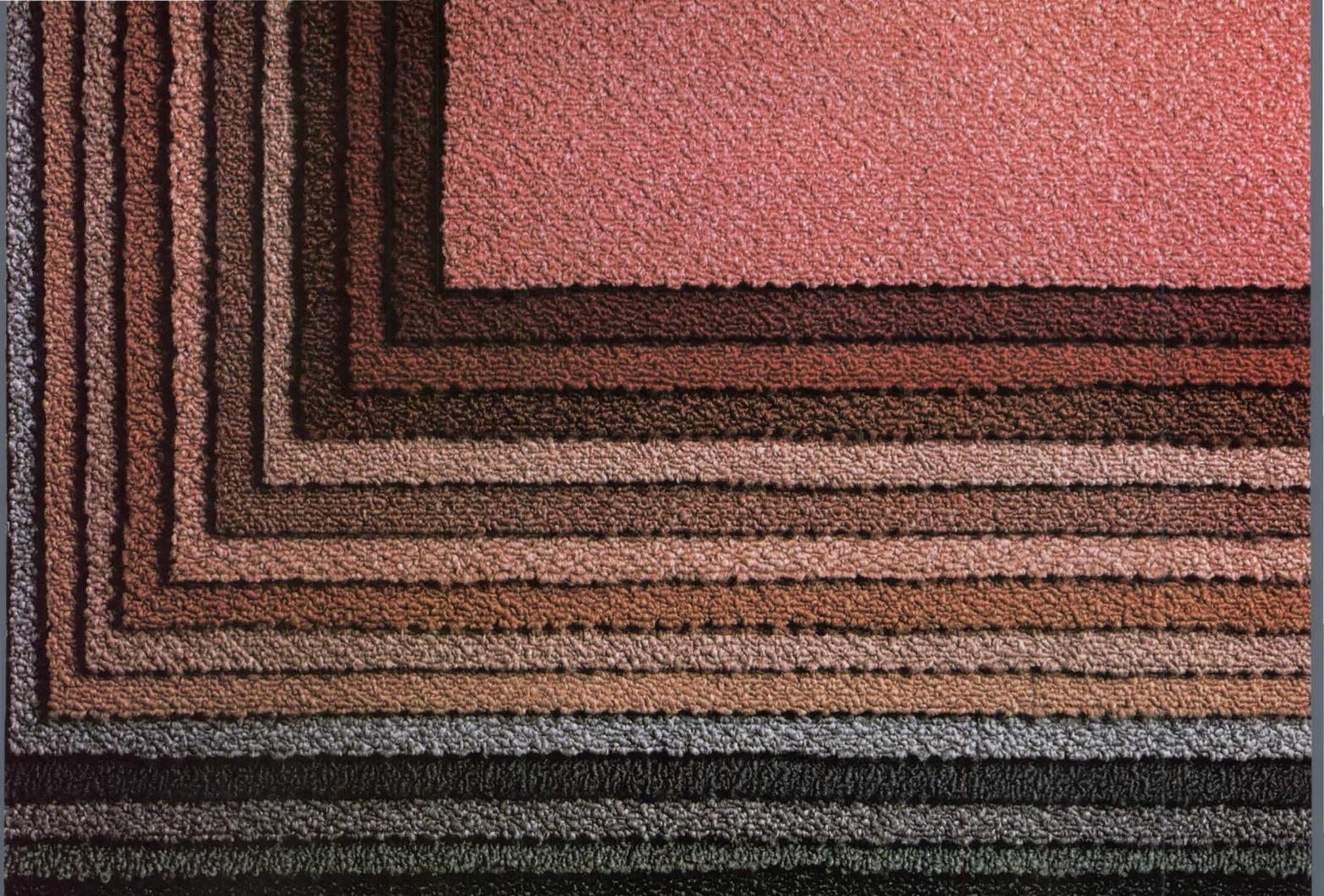
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¶ *There have been some grumblings that the competition "was wired from the start." The Washington Post described D & D as "locally influential."*

Memphis in New York

Furniture by the design group Memphis is now being sold in New York at the Showroom Furniture of the Twentieth Century in Chelsea.

Botta doings

Mario Botta has designed his first chair, called Prima. A version without arms is called, of course, Seconda. Manufacture is apparently underway.

Jencks takes to film

The ubiquitous Charles is now working on

a series of films that will contrast pre- and post-modernists.

¶ *Contrasting pairs are said to include Frank Lloyd Wright and Michael Graves; and Gaudí and Ricardo Bofill.*

Little House at the Met

December 3 will see the opening at New York's Metropolitan Museum of the living room from the house that Frank Lloyd Wright designed for Francis Little in Wayzata, Mn. The room, which will be installed with much of its original Wright-designed furniture, was acquired by the Metropolitan when the house was demolished in 1972.

Son of Skyline

Tabloids are definitely an idea whose time has come. Apparently New York may be topped out but other markets beckon.

¶ *In DC now there is Design Action, edited*

by Richard Etlin and underwritten by NEA grant and varied institutional support (no ads).

¶ *The emphasis is heavily regional with eye on a larger than architectural audience. The first issue focuses on DC architecture as a thing in itself, supplies nitty-gritty technical dope on legislation, and rediscovers DC and Baltimore gems. What it lacks in hot, it makes up in enterprising.*

And again

The Texas rangers, ranging out of Rice time, have started a Lone Star table called Cite (with news section Citelines, those slow to grasp filial relationships).

¶ *Edited by Gordon Wittenberg, teacher and energy specialist, it will be published "on a regular basis" says its laid-back editor.*

¶ *In the first issue: Graves's aborted St. Antonio theater scheme, Piano's museum, an interview with Pelli, a review of Goldberger's book, and—finally!—so addressing of things specifically Texan.*

¶ *The calendar is Texan.*

Catalog dry, with a twist

¶ *The Chicago Architectural Club has leased its second journal, this year edited by Deborah Doyle.*

¶ *The juicy center is "Work by Members"—all new and all juried by Messrs. Peter Eisenman, James Stirling, Dan Libeskind, Evans Woollen and Frank Y. Gancioglu.*

¶ *All entries are published but projects selected were shown at the Art Institute of Chicago.*

¶ *Mischievous excerpts from jury comments, however, are included in the book.*

S.F. guide and other events

John Woodbridge and P/A correspondent Sally Woodbridge have completed a 200-page guide to San Francisco architecture, one of the accomplishments planned as part of the 100th anniversary celebration of the Northern California AIA chapter.

¶ *Other events: an exhibit at the San Francisco Museum of Modern Art, which opened at the end of October and will be shown through January; and a convention held November 4-7.*

Eames memorial program

Furniture manufacturer Herman Miller Inc., is donating a series of lectures and films of the Eameses' to ten institutions: Art Institute of Chicago, Cooper Union, Cranbrook Academy of Art, Harvard University, National Building Museum, Rhode Island School of Design, University of California at Los Angeles, University of Cincinnati, University of Michigan, and Washington University (St. Louis).

DC's new D.C.

Washington's new Design Center—an old warehouse remodeled and enlarged as Keyes Condon Florance (P/A, Nov. 1981, 66)—is scheduled to open early in 1983.

¶ *Robert Stern is designing the Shaheen Walker showroom. Michael Graves is designing the Sunar showroom.*

Portal Site may go begging

The Portal Site, one of DC's largest remaining [Pencil points continued on page 68]



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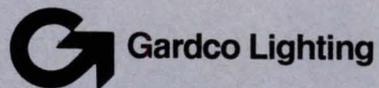
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ing parcels of land, was awarded last winter to developers **Banneker Associates** with **Vlastimil Koubek**, architect (P/A, Apr. 1981, p. 49).

¶ The developers missed the deadline for purchase of the property, and have lost the two major tenants—**Cosat** and the **Urban Institute**—expected to take a major portion of the office space in the \$355 million mixed-use complex.

¶ DC is rapidly becoming overbuilt with office space. The **Redevelopment Land Agency**, Washington's urban renewal agency, has awarded rights to redevelop four major parcels in the past four years, and not one has yet started construction.

Kahn lecture room
The **Louis Kahn Lecture Room** at the

Samuel S. Fleisher Art Memorial in **Philadelphia** opened recently to the public. Designed by artist **Siah Armajani**, the room has unadorned, factory-finished lumber used in the bench seating and lectern, and a poem by **Walt Whitman** inlaid in the floor.

Colonial Williamsburg
Nicholas A. Pappas, a partner in the **Washington, DC**, firm **Yerkes, Pappas & Parker**, is replacing **Roy E. Graham** as resident architect of **Colonial Williamsburg**. **Graham** is now teaching and doing consultation work.

Public Library renovation
The renovation of the **Dewitt Wallace Periodical Room** was recently completed, part of the four-phase restoration, scheduled for completion in 1987, of **Carrère and Hastings' 1911 New York Public Library** in midtown Manhattan.

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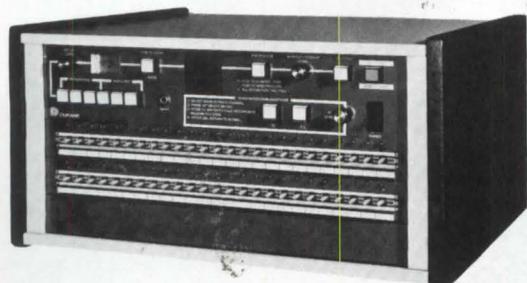
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Calendar

Exhibits

Through Nov. 28. "H.H. Richardson Residential Projects, 1879-1886." Far Gallery, Rice University, Houston.

Through Nov. 30. The Work of Atg Old Paris. Museum of Modern Art, New York.

Through Nov. 30. Louisville Past a Present: The Architect's Hand. Louisville Art Gallery, Louisville, Ky.

Through Dec. 6. La Photographie Comme Modele. Chapelle des Petits Augustins, 14, rue Bonaparte, Paris.

Through Dec. 12. Santa Barbara: The Creation of a New Spain in America. University of California at Santa Barbara.

Through Dec. 18. "Precursors of Post-Modernism: Milano 1920s/30s." Architectural League, Villard House, 4 Madison Ave., New York.

Through Jan. 2. Scandinavian Modern 1880-1980. Cooper-Hewitt Museum, New York.

Through Jan. 3. "Buildings on Paper." Rhode Island Architectural Drawing, 1825-1945." The Octagon, Washington, D.C.

Nov. 8-Dec. 31. Quaint and Secular Places: Philadelphia 1682-1982. Art Gallery, 117 South 17th St., Philadelphia.

Nov. 13-Jan. 2. The California Connection. La Jolla Museum of Contemporary Art, La Jolla, Ca.

Nov. 17-Dec. 31. Ernst Lohse, drawing of imaginary architecture and 3D models. Philippe Bonnafont Gallery, San Francisco.

Nov. 17-Jan. 9. Josef Hoffmann: Design Classics. Fort Worth Art Museum, Fort Worth, Tx.

Nov. 23-Feb. 27. "American Picture Palaces." Cooper-Hewitt Museum, New York.

Dec. 5. Permanent exhibition, Living Room from the Francis Little House. Frank Lloyd Wright. Metropolitan Museum of Art, New York.

Competitions

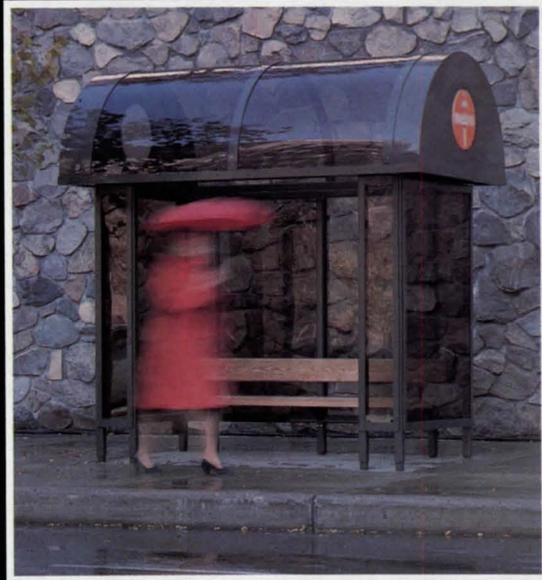
Dec. 1. Entry deadline, 1983 Tuck Architectural Awards (incorporating the use of natural stone). Contact Building Stone Institute, 420 Lexington Ave., New York, NY 10170 (212) 490-2530.

Dec. 29. Entry deadline, International Open Competition for the Creation of a New Office Furniture. Contact Concours Mobilier, Commissariat General des Concours, Pavillon de Marsan, 1 rue de Rivoli, 75001 Paris, France.

Dec. 31. Proposal deadline, General Electric Lighting Design Competition for Architecture and Interior Design Students. Contact Daniel Hayes, C/Nela Park #4635, Cleveland, Oh 44115.

Jan. 7. Application request deadline, Rotch Travelling Scholarship. Contact Norman C. Fletcher, Secretary, Rotch Travelling Scholarship, 46 Brattle St., Cambridge, Ma 02138.

Jan. 26. Entry deadline, P/A Third Annual International Furniture Competition (see ad, page 176).



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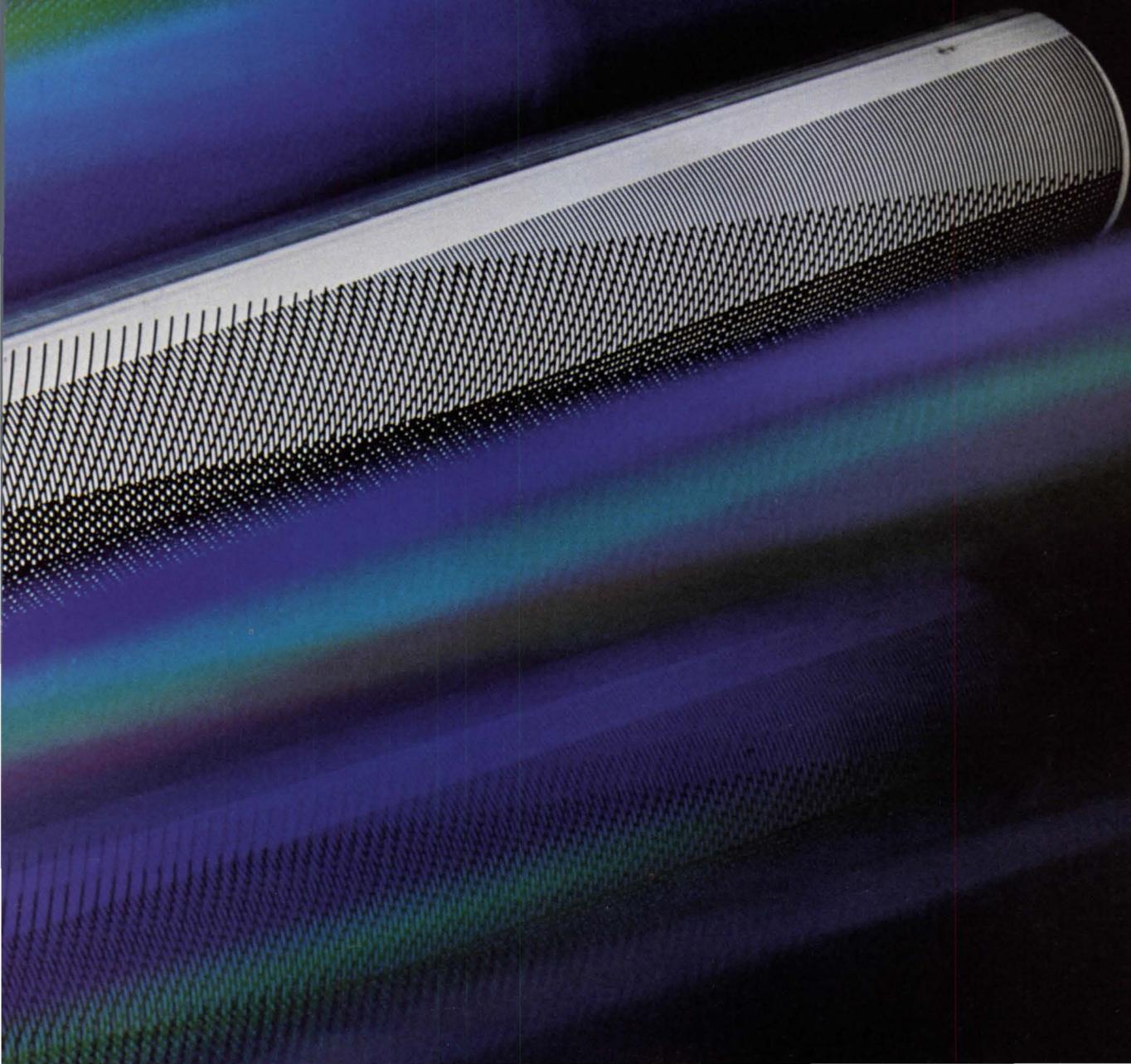
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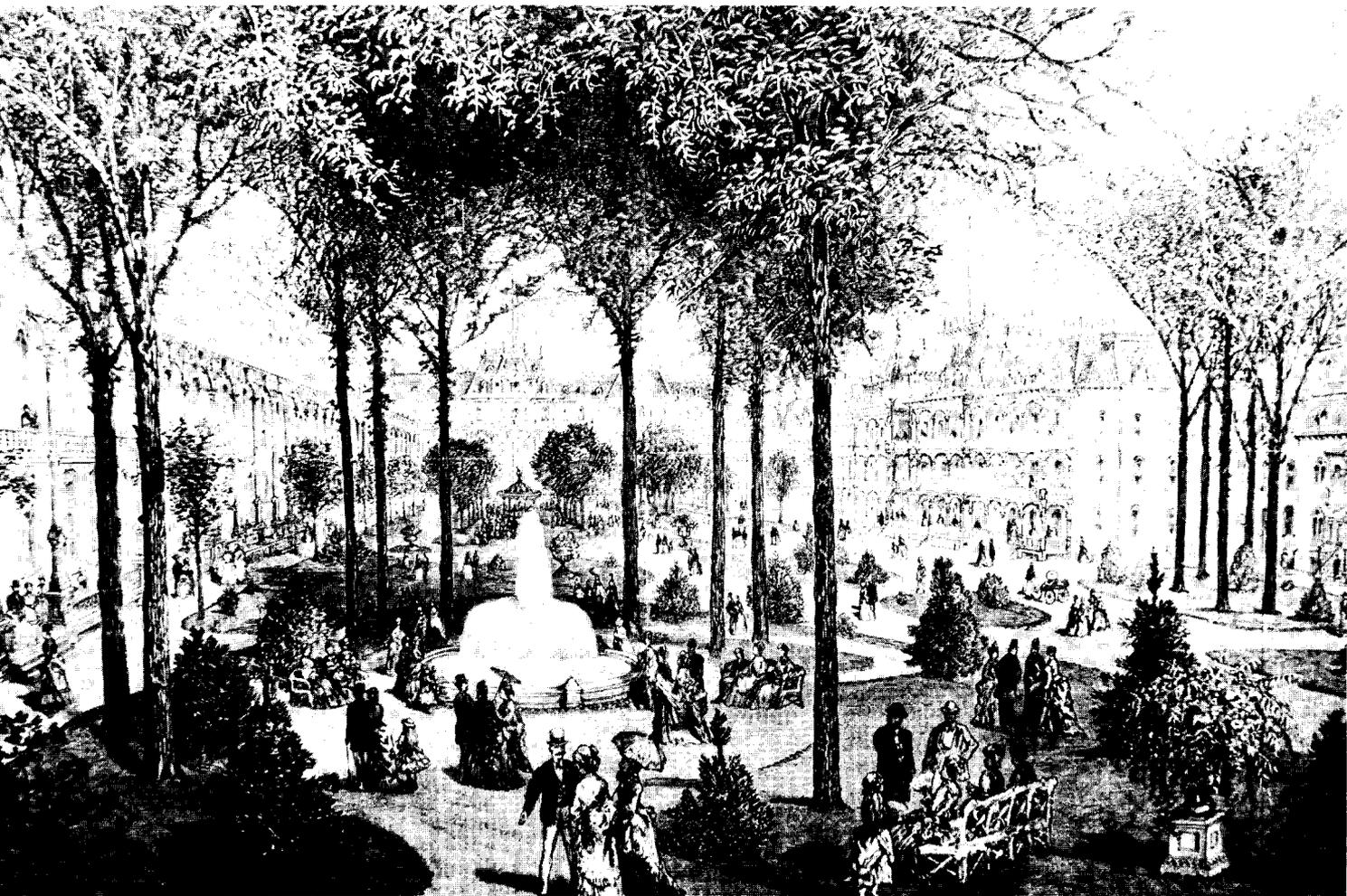
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Historic districts



Courtesy Saratoga Springs Preservation Foundation

Historic districts and a reused industrial site are major issues on the following pages.

At the turn of the century, an afternoon promenade was de rigueur in the courtyard of the United States Hotel at Saratoga Springs, NY, as depicted in a sketch by Harry Ogden (above).

Although there are 2700 historic districts in the country today, ranging from places such as Virginia City, Nv, to Manhattan's upper east side, it was not too long ago that there were none. Only 51 years ago was legislation first passed by a city to protect historical structures, but not long after that 1931 ordinance for Old and Historic Charleston, SC, other pioneering efforts followed and the movement continued to grow.

The interest in historic districts today, however, differs greatly from that of 50 or even 20 years ago, when efforts were largely directed toward preserving, often in as pristine condition as possible, only areas of great historical or architectural importance. Although one of the areas discussed on the following pages is neither a historic district nor in the U.S., the three were selected, in part, as illustrative of current attitudes.

In Miami Beach, the nation's first 20th-Century historic district, preservationists are

struggling to preserve 800 buildings that would have been considered unworthy of attention a few years ago, but which comprise the world's largest concentration of Streamlined Moderne architecture. In Saratoga Springs, NY, a pragmatic group sees fast food outlets and motels as part of their natural heritage. And in Vancouver, B.C., an old industrial site has become an extraordinarily successful place for shopping, recreation, cultural activities, and dining, while retaining its remaining industrial activities.

To help guide others in such efforts, the new federal investment tax credits are outlined in a following article; and to treat the eye, the section closes with a look at two recently restored architectural gems.

[David Morton]

Deco rating

In Miami Beach, the nation's only 20th-Century historic district is still not out of the economic woods. But it's getting there.



For many resort towns on the east coast of Florida, the last decade has been nothing but fun in the sun. For most of Miami Beach, however, it has been heavy sledding. The seven-mile-long island community that was once a glamorous vacation spot (and which still boasts miles of sundrenched beaches) has suffered for many years from shifting demographics, economic decline, and apathy. Political squabbles, a dwindling tax base, and poor planning have exacerbated the problems.

The last ten years have seen a succession of false starts at revitalization. The ill-fated South Shore redevelopment scheme (P/A, Nov. 1979) would have leveled the southern tip of the island to make way for a huge resort community, but the economic uncertainties of the last few years killed the plan (of the original group of investors, only First Boston Corp. has resurfaced, having recently introduced a scheme to develop South Shore with the Rouse Company). A project to rehabilitate Lincoln Road, once the city's most elegant shopping district, met with a similar fate. The comprehensive city plan developed by the architectural firm of Anderson Notter Finegold (P/A, Jan. 1982), that was submitted to the city well over a year ago, has yet to be

reviewed. Only one project—Venturi, Rauch & Scott Brown's plan for Washington Avenue—has been implemented at all (photos on these and following pages).

Furthermore, the last few years have seen a never-ending feud between preservationists on one hand, and developers and city fathers on the other, over the fate of the 800 Art Deco and Streamlined Moderne buildings concentrated in a one-square-mile area of South Beach—the nation's first and only 20th-Century historic district. The fact that the district boasts what is arguably the largest and most cohesive concentration of these buildings in the world may have guaranteed frequent headlines, but has done little to guarantee its future. Few developers have considered the buildings worth saving, economically or aesthetically, and there were times when it seemed they pulled down buildings as a simple show of force, as in the case of the New Yorker Hotel (P/A, Feb. 1981), f



Steven Brooke

which the Miami firm of Bouterse, Fabregas and Perez had designed a striking mixed-use scheme that would have saved a notable building while attracting new tourists and residents. Meanwhile, the Miami Design Preservation League, led by the indefatigable Barbara Baer Capitman, had fought for and secured historic designation for the Deco district in May 1979. Designation, however, cannot guarantee a building's survival; it simply qualifies owners for tax credits and incentives that encourage preservation (and few small businesses can afford the investment of 100+ percent of a building's original price, necessary to receive *those* tax breaks). On a local level, the Miami Beach preservation ordinance that required 100 percent owner approval for historic designation (51 percent is standard)—effectively blocking any designation at all—was struck down in September. The Dade County Attorney declared the ordinance “an improper delegation of authority by a public agency” to private persons; the Metro Dade Preservation Commission now holds jurisdiction over Miami Beach until a new ordinance is approved. This marks a victory for preservationists, who can now attempt to block, for example, construction of a

33-story tower on the site of the White House, a beachfront hotel destroyed last summer by a fire of suspicious origin.

It would seem that the only hope for revitalizing the city—especially the Deco district—would be a joint effort between public and private sectors to attract new investment while preserving the fragile tissue of the urban fabric. So far, this remains an arduous task, thanks to a chronic lack of zoning or local tax incentives and the intransigence of local businessmen, who see the preservation issue as one of property rights versus government coercion. Preservationists, of course, urge businessmen to look beyond short-term profit to long-term urban improvement. Obviously, there must be a balance between the two. In this light, it is interesting to examine the two major preservation projects in the city—Washington Avenue and the beachfront hotels, examples of largely public and largely private investment, respectively—the better to read which way the winds are actually blowing in Miami Beach.

On Washington Avenue at 10th Street, the offices and warehouse of the Washington Storage Company (facing page), built in 1927, boast rich Spanish Renaissance ornament. On the opposite side of the avenue, the Kenmore and Taft Hotels, recently repainted, can be glimpsed through the widened median, with its plantings of tropical vegetation (above), part of the revitalization program for the street.

Miami Beach

On the avenue

Washington Avenue, South Beach's 12-block-long commercial strip, while in the heart of the Deco district, itself boasts few architectural notables. It is lined with one-story stucco shop buildings on the east side, and taller hotel and bank structures on the west. The merchants of this varied and colorful neighborhood have long catered to an elderly Jewish population that is rapidly giving way to increasing numbers of Haitian and second-wave Cuban refugees. The city, looking for a way to revive the fast-fading street, commissioned Venturi, Rauch & Scott Brown (with David Jay Feinberg, AIA, associate architect and Richard Rose, consulting architect) to develop a plan for the area. The Washington Avenue Revitalization Plan, submitted in 1979 (P/A, Aug. 1980), is a comprehensive planning, design, and economic guide for the Washington Avenue Corridor Area that stretches from 5th Street North to 17th Street (see map). It calls for extending the old pink sidewalks, widening and landscaping the median strip, creating bus stops and mini-parks, and extensive re-landscaping. It also establishes design guidelines for signage, street furniture, exterior paint colors, and for preservation and restoration. Design review procedures and short- and long-range development guidelines are aimed at upgrading the neighborhood without destroying its unique character. Thus far, however, only the public works parts of the plan have been implemented; VRSB's other suggestions have yet to be taken up. Partner in charge of the project, Denise Scott Brown, who has not seen the street since the first phase of work was begun, believes that the landscaping was not as extensive as had been recommended, but she was quick to point out that most of the planting is still too immature to warrant a final judgment. When asked about the issue of gentrification of the area in the face of a rapidly dwindling elderly population (90 percent in 1970 to 50 percent in 1980), Scott Brown said she would not object to a slow "boutiquefying" of the street as long as the change was gradual and subtle. David Feinberg regrets that neither he nor VRSB was retained as consultants on the implementation of their plan, which thus far has encompassed approximately \$2 million in road improvements, according to Monte S. Lee, AIA, director of the city's Office of Planning.

Along this new and improved road, however, the streetscape is slower to change, although two (literally) bright spots do exist. On the east side of the avenue from 6th to 7th Streets, and on the west side at 10th Street (the Kenmore and Taft Hotels), buildings now sport multicolored exteriors, the result of a program funded by the Dade County Community Economic Development Office. Designer Leonard Horowitz, IDSA, carrying out a plan originally developed along with architect Charles H. Pawley, drew up a program of 40 colors to be chosen in cooperation with local owners and merchants. The colors



Steven Br...



Friedman's Bakery (top photo), at Washington and 7th, wears combination of new and old signage, aimed at both pedestrian and vehicular traffic. It was repainted (cover photo) as part of the project for the 600 block of Washington Avenue (see map, left, for scope of Washington Avenue development plan). A "before" photo (above) illustrates the general neglect of storefronts in the area. The Venturi, Rauch & Scott Brown plan gave guidelines for exterior improvements such as paint, signage, window display, and awnings. All painting was done by CRF, a firm owned by Carlos Colazo, a young Argentinian.



Steven Brooke

Mark and Eric's variety store at 6th and Washington (left) got a mauve, pink, and aqua color scheme with new signage and window display. Near the other end of the block, the Famous Restaurant (middle photo) can be seen near one of many medical clinics that now occupy ground floor space intended for retail use—a result of the area's depressed economic state. A drawing (below) illustrates part of Venturi, Rauch & Scott Brown's plan for Washington Avenue.



Steven Brooke

ed seem quite strident compared with those originally envisioned in the VRSB plan (see drawing), although the program received VRSB's blessing. On the other hand, for the one being, the almost candy-box palette may be better suited to the area than the subdued range of whites and pale pastels favored by VRSB. Elsewhere on the avenue, the 1927 Cinema Theater by Thomas Lamb is soon to become a mini-mall, and "upscale" shops are starting to move into the area. The locals are holding their collective breath, hoping that improvement, if not prosperity, is just around the corner.



Venturi, Rauch & Scott Brown



Alex Azarchs



Martin Heller



Walter Smalling

Ocean Drive (top) is lined with small hotels and apartments, six of which are now owned by Art Deco Hotels: shown here are the Victor (middle left) and the Cardozo (bottom left). In the Victor's lobby (middle right), balconies were reopened, new color schemes developed, and the original Earl Le Pan mural was preserved. The lighting fixtures, many of which are of museum quality, were either restored or reproduced. The Cafe Cardozo (right) sports light fixtures salvaged from the demolished New Yorker hotel.



Dan Forer



Dan Forer

There's a small hotel

In fact, there are seven on or near the beach along Ocean Drive, that comprise what is the far the most successful example of preservation-oriented private enterprise in the District. Art Deco Hotels, a limited partnership led by Robert Beuret, Andrew Capitman (Barbara's son), and Mark Shantzis, recently secured the necessary financing on a \$6 million beachfront hotel package (P/A, See 1982). The Victor, Leslie, Carlyle, Cardozo and Cavalier Hotels, as well as the Senator Collins Avenue) and the Ocean Front (apartments) will eventually offer a total of 452 rooms to a rapidly growing market that the partners have identified as 25-to-40-year-old urban professionals in design and visual-arts-related fields (who are, the partners feel, trendsetters for the rest of the under-40 set). The historic nature of the neighborhood and the architecture is the point of departure for the hotels' marketing as well as design schemes.

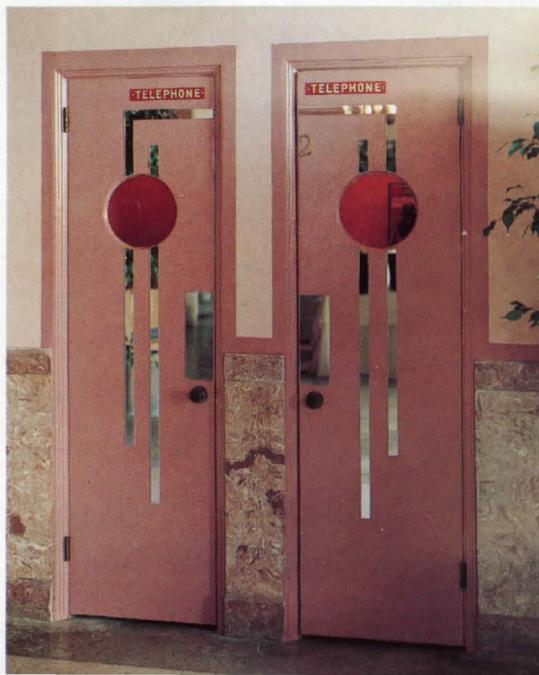
Thus far, only the 103-room Victor (Murray Dixon, 1937) and the 70-room Cardozo (Henry Hohausser, 1939) have been renovated. They were the first hotels purchased (in 1979), and represent the corporation's flagship effort at making historic properties viable economically. While a structural restoration was neither possible nor desirable in either case, the task of purging these hotels of their accumulated seediness and restoring their original glamour was arduous. It was supervised by Margaret Doyle, the wife of Andrew Capitman, who holds a degree in historic preservation from Columbia University and who teaches at the University of Miami. Doyle was faced with the prospect of removing 30 years' worth of paint, plastic laminate and shag carpeting, to name but a few of the transformations made in the name of modernization. She developed color schemes for the lobbies of both hotels (with Leonard Horowitz at the Cardozo) that were derived from the elegant terrazzo patterns in the floors. Light fixtures were restored or replicated, and furniture was either restored or custom-fabricated to approximate period styles. At the Cardozo, the former card room and coffee shop was transformed into a tiny restaurant—the Cafe Cardozo—which turned a net profit of \$70,000 in its first year. A similar effort is now underway at the 70-room Carlyle (Kiehnell & Elliot, 1941), which closed this summer for a total renovation, and which will reopen in December with its own restaurant, one that will have a more ambitious menu and a dressier setting than the Cardozo's. The renovation efforts so far have been commendable; both the Victor and the Cardozo appear merely to have been unscathed by the ravages of time, rather than tricked out in some contemporary version of Art Deco. However, both hotels suffer from lack of maintenance, and will need great infusions of money if they hope to be truly competitive for the vacation dollars of affluent young sun worshippers.

Nonetheless, the project makes a great deal of sense economically. These hotels, obtained by developers as being too small to



Dan Forer

competitive, have been purchased as a group to make an eventual "resort village." And since it costs roughly five times as much to build a new oceanfront hotel room as it does to buy and refurbish an old one, the Art Deco Hotels partners stress that more money can be funneled into improving service. Their successful financing effort was seen as a triumph by preservationists, and even the most cynical developers admitted to being impressed. But whether or not this shining example of civic-minded free enterprise can be emulated elsewhere in Miami Beach, alas, the question on which the district's future rests. [Pilar Viladas]



Walter Smalling

In the lobby of the Victor (above), carpet was removed to reveal six different terrazzo colors; original furnishings were salvaged where possible. Pink doors enclose the telephone booths at the Cardozo (left).

Low gloss

In the upstate New York town of Saratoga Springs, community involvement and energetic work by the city's preservation foundation have produced admirable results that lack pretension but still are somewhat short on style.

Victorian Saratoga was known far and wide for its glamour. Especially in the late 19th Century but even well into the 20th Century, the wealthy and the socially aspiring came to sample its springs, to attend the races, to gamble in its casinos, and surely not least, to promenade along the hotel-lined, colonnaded Broadway: to see and be seen, to appear beautiful, fashionable, and, perhaps, marriageable, to conduct flamboyant business deals in an aura of grandeur. One did not have to be blue-blooded to buy into the glamour: one only had to be able to pay one's way, and to assume a temporary gloss.

The baths are still there, magnificently sited if somewhat neglected and tarnished. The racetrack remains and flourishes, attracting the social set and the horse-mad every August. Of the casinos, few remain, and these do not operate for gambling, but the 1966 Performing Arts Center now draws July crowds to attend performances by the New York City Ballet and the Philadelphia Orchestra. Of the large Victorian mansions built by the wealthy, most still exist and many have been refurbished, providing a living history of American domestic architecture. But the grandeur that was Broadway is no longer. Decimated by fire and failing hotel enterprises, it remains gap-toothed, its various rather fine buildings punctuated by parking

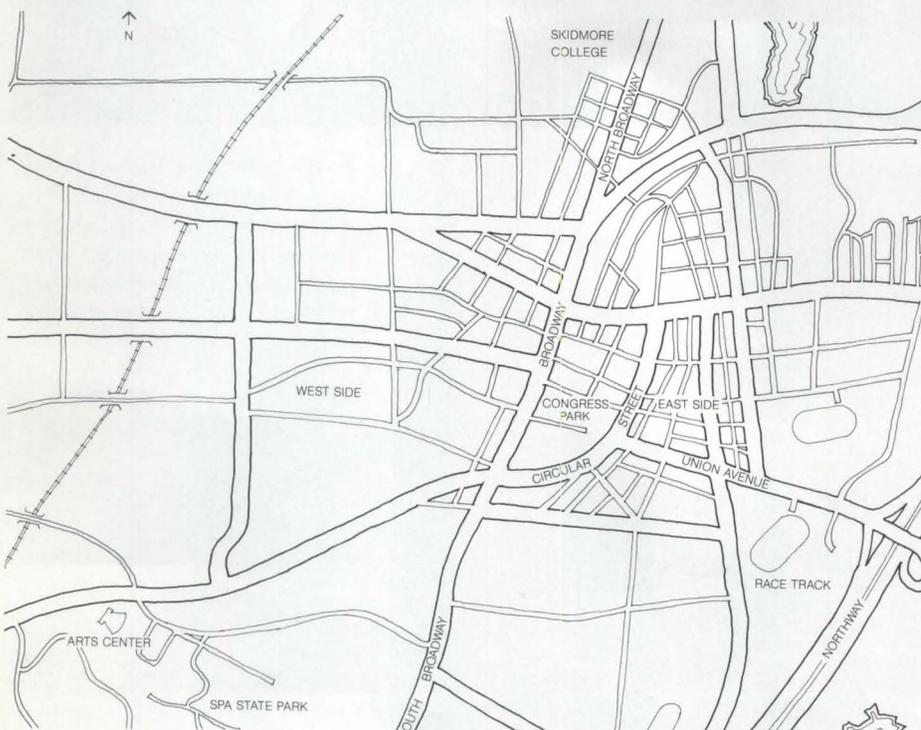
lots, by the cheapest of unadorned brick veneered façades, and by a suburban-type shopping center, fast food barns, and a motel all sited in individual asphalt fields. Even in the quality buildings that remain, storefronts lean heavily towards barnwood-style design or non-design. Yet in its way, Saratoga downtown is a preservation success story. Certainly it is a story of heartwarming community participation, rewarded by commercial success. While it no longer possesses the Parisian chic it is reputed to have had at the turn of the century, it has become the "smart" restaurant and shopping town for a 100-mile radius, and its stores do not close when the summer season is over. Furthermore, it demonstrates the value of pragmatic preservation: It is neither precious, pretentious, nor frozen in a single era.

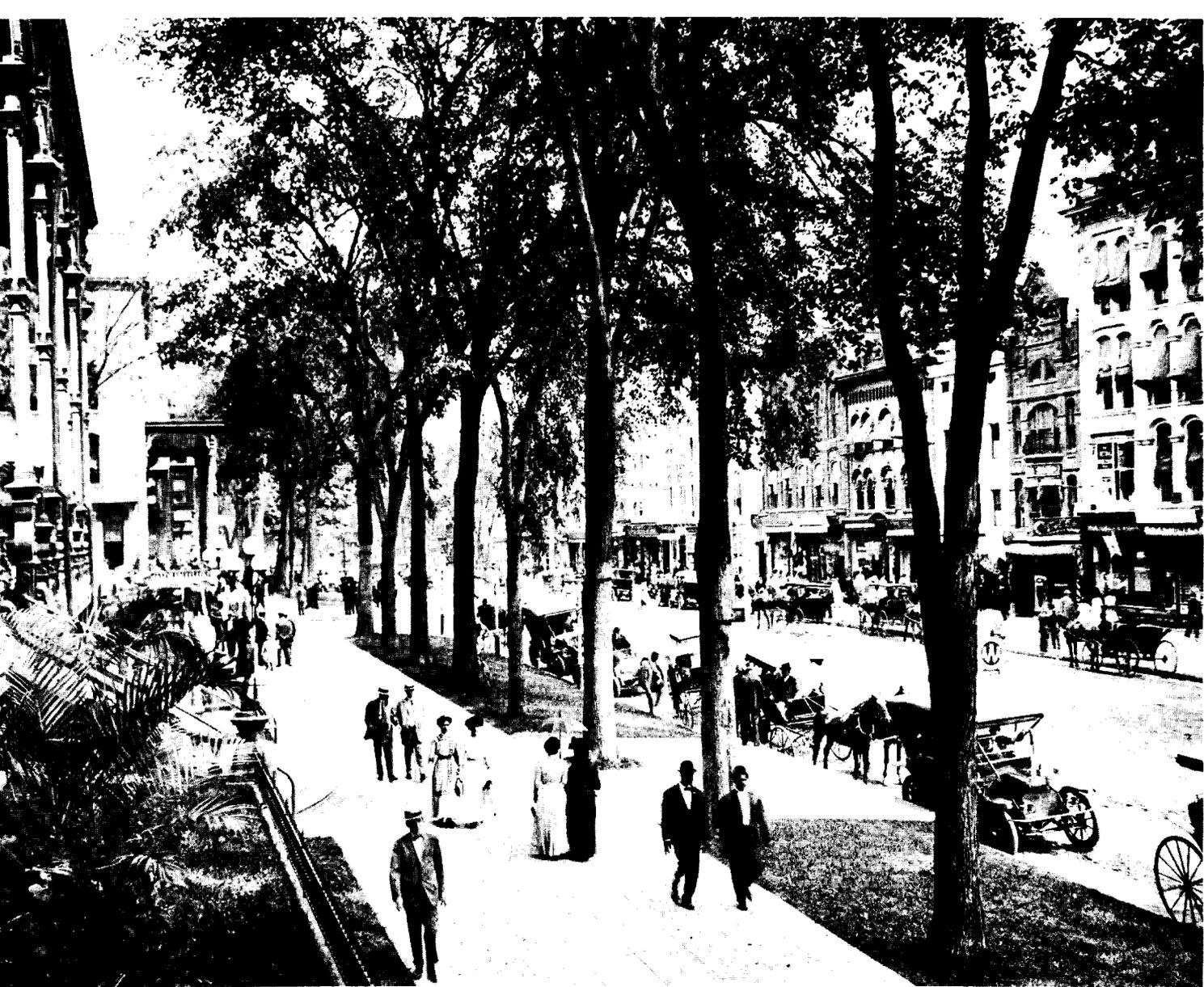
The town's attitude is undoubtedly healthier, treating preservation as just one of various development techniques. But in the case of its convention center plans, only time will tell whether the town's priorities are correct. To capitalize on the high morale of the downtown business people who are providing the funding base, the town plans to build a pleasant but unremarkable new convention building/hotel at the northern end of the commercial center, while to the south in the lush state park languishes, understaffed and underused, one of Saratoga's finest resources: the 1930s Roosevelt and Lincoln Baths, serviced only by the recently refurbished Gideon Putnam Hotel. The town is considering encouraging the state to bring about the bath renaissance by adding a convention hotel or executive retreat nearby. But meanwhile Saratoga will have its new convention center at its commercial heart.

A brief history of the town

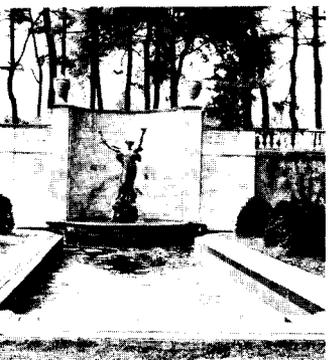
The reputedly healthful qualities of the mineral springs that well from the geological fault in Saratoga's valley first drew white settlers to the area in the 1770s. By the early 1800s, the waters had become a minor industry: the first hotels were built and a bottling plant was established.

In 1832, the opening of the Saratoga and Schenectady railroad truly swelled the throngs. More hotels were built in town, and lakehouses, carnivals, and steamboat enterprises were set up on nearby Saratoga Lake. In 1842, the first gambling parlors were established, and in 1863, the Saratoga Racing Association was founded.



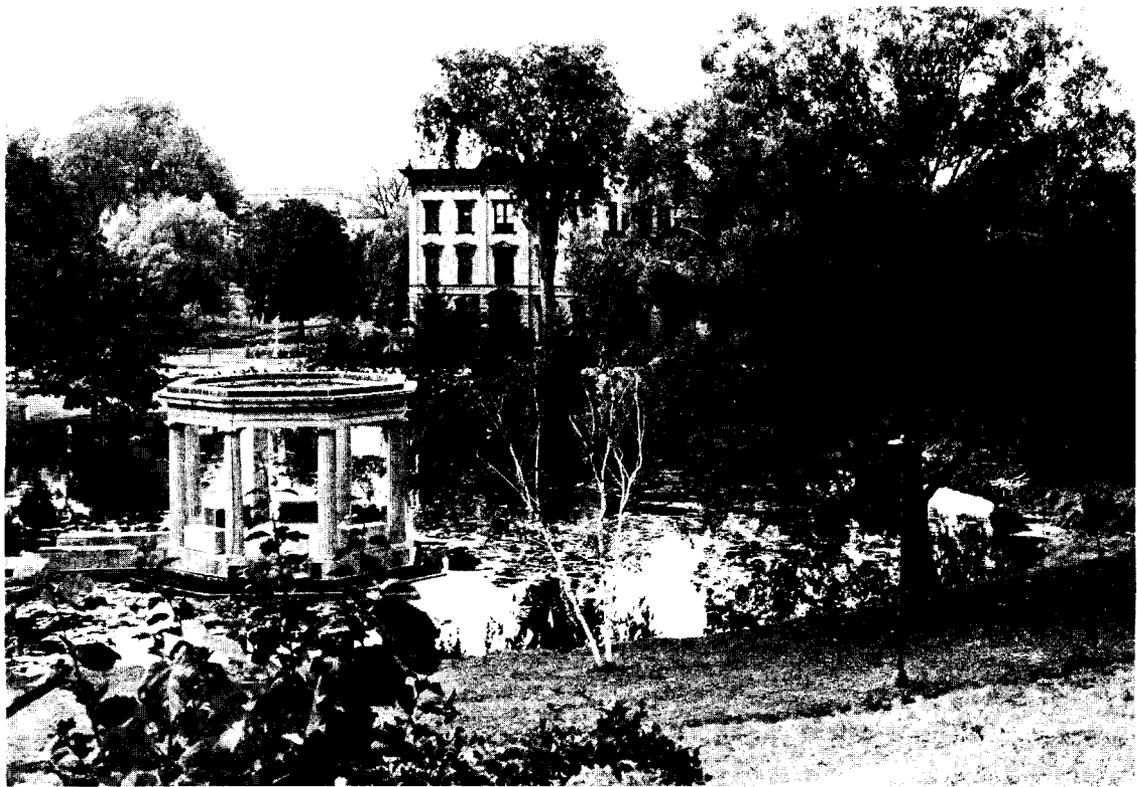


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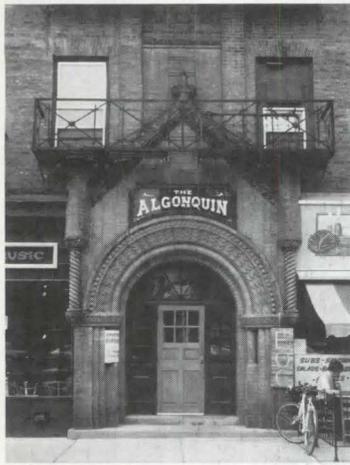


Saratoga Springs Preservation Foundation

1907 photograph of Broadway (top) shows the glamour that was Saratoga, while a present-day view of Congress Park (right) illustrates an oasis of calm that still exists. The Casino, built in 1870 and enlarged in 1902, is visible in the background at the top right. In the park stands the Spirit of Life (above) by sculptor Daniel Chester French, with its walkway and fountain by architect Henry Bacon.



E.H. Smith



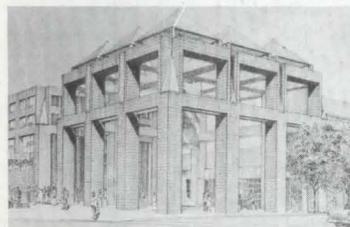
S. Doubilet



Betsy Hamilton



Saratoga Springs Preservation Foundation



Rendering by Jeffrey George

The present and future Broadway, above, top to bottom: doorway of the brick Richardsonian Algonquin Building; the masonry Queen Anne Moriarta House; the Collamer Building, which contains some of downtown's oldest storefronts; and the proposed hotel/city center (convention center) by architects Kroin/Narva.

Fires (a chronic Saratoga problem to this day) razed several of the hotels just as the Civil War was diminishing the numbers of visitors, but the post-War years saw the most dramatic growth of the resort industry: the grandest hotels were built, transforming Broadway into a piazza-lined avenue. The United States Hotel and the Grand Union Hotel, both of which opened in 1874, presented elaborately colonnaded brick façades to Broadway and enclosed elm-shaded courtyards behind. At the same time, public buildings were being erected, and fashionable Victorian residences appeared along North Broadway and Union Avenue.

The mood, however, altered in the 20th Century. Social reform did not totally stifle gambling in the area, but certainly cramped its style, both in the casinos and at the racetracks, and hotels began to fail. Other industries, such as textile manufacturing, mustered slightly, and gentler activities were established: Skidmore College was incorporated in 1922; Yaddo, an artists' retreat, received its first participants in 1926; and between 1915 and 1933, the state took control of the mineral springs, conserving them, bottling their waters, and, under Governor Roosevelt, opening a new and elaborate Saratoga Spa.

The Depression, the three-year closing of the racetrack during World War II, and the Kefauver Committee's crackdown on gambling in the 1950s dealt the final blow to the luxurious resort activities: The United States Hotel was demolished in 1946, and a supermarket and shopping center replaced the Grand Union Hotel by 1960.

The Saratoga of today, 42 square miles in area, possesses not only shopping centers, but residential sprawl as well, yet there are still backwoods and farms within the city limits. Industries have been established since the war, older industries have rallied (including an employee takeover of a textile mill), and the population has increased by a third, to 24,000, in the last decade. Of the working population, 80 percent is employed within Saratoga county.

The center city rebounds

The 1960s saw the construction of the Adirondacks Northway, the opening of the Saratoga Performing Arts Center, and the building by local investors of a Holiday Inn, a modest building but an inspiring sign of community initiative. The downtown, however, was dying, and the proposal by outsiders to locate a shopping center at a highway exit further threatened the center city's vitality and fired up the Chamber of Commerce. In 1972, a Plan of Action was established to revitalize the downtown. Property owners were solicited for contributions, volunteers planted trees, and students built a model of downtown so that citizens could act out their dreams for the area. When a \$3.6 million HUD grant application for funding façade and sidewalk improvements was rejected, the town turned to its own resources. A Special Assessment District was established in 1978, so that the downtown property owners, who would ultimately benefit from the im-

provements, would pay through increased property taxes. Money was also raised through community development funds and from allocated sales taxes. Throughout, the local Adirondack Trust Company has been most active in the revitalization effort, loaning several million dollars for downtown improvements over the last decade.

Meanwhile, preservation fever was raised in 1974 when the United States Government planned to "improve" its Post Office by moving the leaded skylight and tearing up the marble floor. The newly elected mayor sued the U.S. Government, a compromise was reached, and by 1977 the city established a not-for-profit preservation foundation and strengthened the zoning ordinance governing architectural review to cover all repairs to downtown façades. A façade easement program was set up in which federal money was made available for exterior repair and painting if the owners of the buildings agreed to correct code violations within the building and to maintain exterior improvements for 25 years. In 1979, the Saratoga Springs Preservation Foundation and its energetic executive director Julie Stokes earned downtown place on the National Register of Historic Places, making available additional grant and tax advantages. While grant money is now drying up, the impetus and incentives (property values rise) for private preservation have been established.

The façade easement program, having limited funds, does not cover storefronts, and while the Historic Review Commission, established in 1979, controls signage, its prescriptions are loose: keep it simple and not flashy. Control of colors was rescinded, a pragmatic action which resulted within days in an outrageous fuchsia color appearing on a storefront beside the dignified brick city hall. Even more disturbing is the general lack of sophistication in overall design and detailing of the storefronts and interior malls that have been refurbished and newly created in several of the existing buildings. Barnwood is a favorite siding material, and the results are shabby.

Pragmatism, too, dictates the attitude that sees all existing buildings, from fast-food joints and motels to cheap brick-veneer commercial buildings, as part of the town's natural heritage. The results are inevitably somewhat disappointing, though occasional quaint new façades would not be an improvement, as the local preservationists point out. Nevertheless, the decision to locate parking lots directly on Broadway, on sites where buildings demolished by fires, seems questionable. Rather than leaving the sites available for future development that will fill the gaping holes, a fair amount of money has been spent to gussy up one of the lots with brick piers, steel railings, and flower pots.



Saratoga Springs Preservation Foundation



S. Doubilet

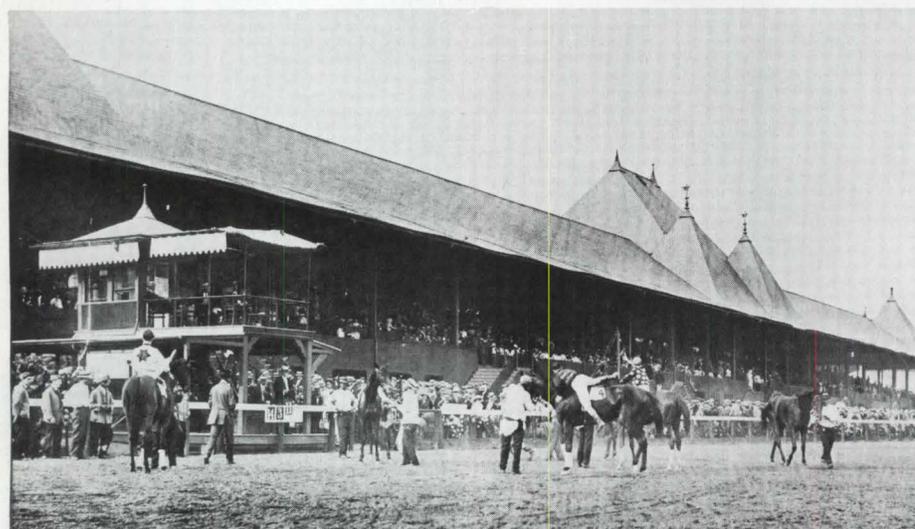
The Adelphi Hotel (right and top, center) was the smallest of the grand 1870s hotels, and is the only one that still exists. It has been restored on a shoestring, and while the restoration has great charm, its seams are showing. The Rip Van Dam Hotel (top left), built in 1840 with a 1923 porch addition, has become quite seedy. The Van Voast & Leonard storefront (above) is one of the few fine old storefronts that remain.



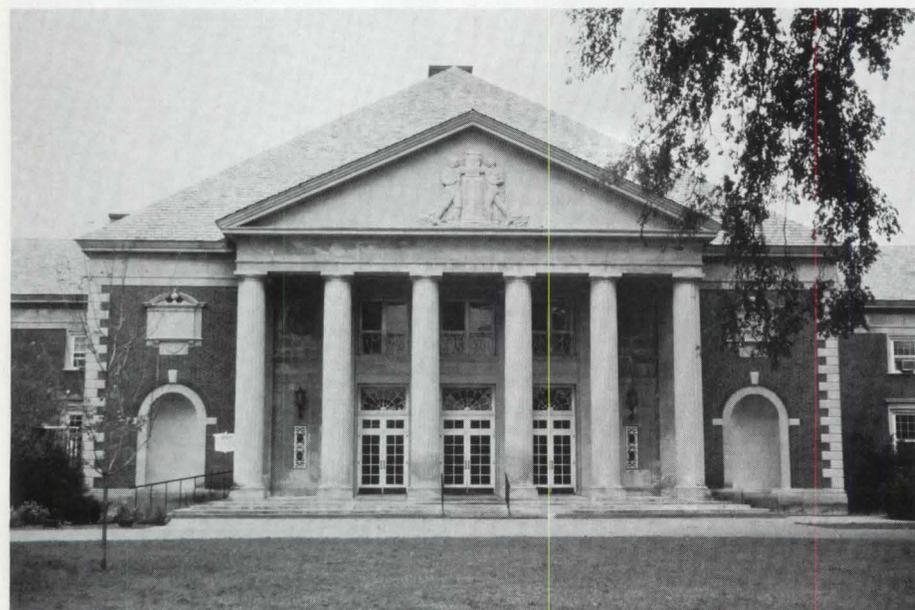
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George Bolton Collection



S. Doubilet

This page: The Batchellor House, 1873 (top). A 1913 photograph of the Saratoga racetrack (middle). One of Roosevelt Spa buildings (above). Opposite: Greek Revival house at Franklin Square (top). House on North Broadway (bottom).

East side, west side, all around the town

The downtown is not the only area where preservation activity is occurring. Over 80 buildings, notably on North Broadway, where many large late Victorian mansions still stand and on the West and East Sides of town, are about to be listed in the National Register of Historic Places.

The West Side has been a National Register Historic District since 1972. It possesses some fine early 19th-Century houses near the site of the town's original railway station, such as the 1820s Greek Revival houses on Franklin Square. It also possesses smaller 19th-Century houses and row houses, mostly wood but some brick, many with porches, built for the servants working in the large hotels. Most of the houses are neat and well painted, and there are cases of very extensive preservation work in the area. The West Side is the area of the greatest racial tensions and violence (especially during the racing season), and the tension was certainly not relieved by urban renewal in the 1960s which destroyed several blocks of buildings and compressed the population into a smaller zone.

Many proud Victorian mansions line Union Avenue and Circular Street on the East Side—so many, in fact, that the East Side is one of the densest districts, in terms of historic buildings, in the state. Most of the mansions have remained fairly intact due to fortunate circumstances. As the yearly immigration of wealthy visitors dwindled between the World Wars, Skidmore College took over the large houses, using them for classrooms and dormitories. And within a few years after the college deserted these houses to move in 1967 to a new campus at the north end of town, federal funding became available for the preservation of several of the properties. Private individuals began to buy many of the houses and to restore them; property values have increased enormously, and Union Avenue is now a joy to behold.

Doing it their way

Property values have soared, retail sales profits have multiplied exceptionally, and the community has been justifiably proud of accomplishing a great deal through its own initiative, relying minimally on outside grants. Part of its independent spirit is also reflected in the use of architects: They'd rather not thank you. The city hires architects to advise on the restoration of the upper façades for the easement program, but in general, the people would rather do it their way: The houses were often built by contractors without architects, they point out, and they would rather renovate them that way.

Saratoga, one might say, has always been down-to-earth. The wealthy came to town, be sure, but they did not stand on ceremony as in Newport, and the pleasures were never limited to blue-bloods. Brashness, individuality, and the entrepreneurial spirit lay close to the surface, with only a stylish gloss to provide glamour and romance. Today, the naturalness is much to be preferred over pretentiousness and pretension, but one could still hope for a bit more style. [Susan Doubilet]



Saratoga Springs Preservation Foundation

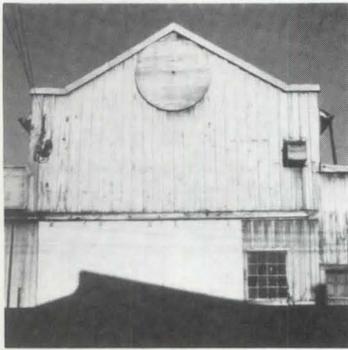


Saratoga Springs Preservation Foundation

New goods in old tins

Sally Woodbridge

A wide variety of retail and cultural uses now fill the volumes of abandoned factories on an island in Vancouver—and industries remain in their midst.



Part of façade of Public Market (opposite), before.

Granville Island is a place of destination, literally and symbolically. Only one road admits cars to this island under the Granville Bridge. But the people who take it—and often wait patiently in bumper-to-bumper traffic—are not on their way to anywhere else. Whether they come from downtown, from the suburbs, or from many miles away, they intend to spend their time on the island. Why? In the best promotional copy style, the answer would be: Granville Island offers a unique shopping, dining, and entertainment experience in a rejuvenated industrial setting closely tied to Vancouver's historical development. This banal statement masks a planning and urban design program that merits both study and emulation.

By now we are all familiar with the nostalgic appeal of recycled industrial areas. We have advanced from the puritanical position that such places have to be denatured to be appealing to what might be called the romance of reality, as represented by the Granville Island plan. One of its imperatives was to keep the existing industries in operation. Whether the increasing need for reality is a simple swinging of the pendulum away from Disneyland or a genuine appreciation of diversity is as yet hard to determine. In any case, being on Granville Island and seeing the trucks in the yard of the cement company or the piles of hand-forged chains in the factory yard feels good. It feels even better to survey this gritty reality while savoring a warm croissant.

Originally a sand bar in the saltwater inlet called False Creek, the site was made into an island in 1913 and slated for industrial development—as was the whole False Creek basin, much of which is being retrieved for residential development (P/A, Aug. 1980, pp. 78–82). By 1920, it was home to heavy industries, which valued the extensive waterfront accessible to barges carrying heavy cargo and equipment, but by the 1960s, this industrial sink had sunk to a level of economic stagnation that made it ripe for redevelopment. In 1973, the Canada Mortgage and Housing Corporation, the Canadian equivalent of HUD, was empowered to redevelop the island as a public place and assume its management. CMHC commissioned a planning study of the island from Thompson, Berwick, Pratt & Partners which set the guidelines for redevelopment and outlined the administrative structure necessary for the task. In 1976, following this report, the five-member Gran-

ville Island Trust was created to direct the redevelopment process; then Norman Hotson Architects prepared an urban design plan, while Urbanics Consultants, Ltd., prepared an economic program for the island redevelopment. The architects continue to act as coordinators for the plan and, with CMHC and the Granville Island Trust, to review new projects.

Allan Hammond, project manager for the Trust, recalls "We wanted the island to be a free zone where things could happen that couldn't happen elsewhere in the city—the mix of industry and culture and the creation of a precinct which accommodated cars but gave pedestrians first priority on the circulation space." Hammond, along with architect Norman Hotson and his associate Joost Bakker, affirms that encouragement of tourism was not a primary goal. Those in charge wisely chose to assess the quality of each proposed use and its potential contribution to an interlocking pattern of uses. Of course it helped immeasurably to have the island under a single, government ownership. This has meant that no private funds had to be solicited for the \$19.5 million spent on capital improvements such as a new sea wall, the improvement and undergrounding of utilities and new street hardware and paving. It has also meant that the economic model could incorporate nonmarket considerations and provide the environmental amenities of parks and playgrounds as well as cultural uses such as artisan studios, which require low rents and subsidies.

Since the opening of the Public Market in 1979 and its phenomenal success, a number of structures have been rehabilitated. The guidelines have helped to maintain the buildings' industrial character by retaining the typical heavy-timber and wood-frame structural elements, exposing ductwork, using multipaned industrial windows and doors and wired glass skylights, and cladding exterior with corrugated steel, painted in the original color if known. Since most of the structures had to be substantially rebuilt to bring them up to code, very few even retain their old envelope. Still, it was mandatory to conform to the original footprint of the building if not the exact form. Hotson and Bakker consid-

Sally Woodbridge, an architectural historian, lecturer, and coauthor of several books on West Coast architecture, is a contributing editor to P/A.



Simon Scott



Simon Scott



John Fulker

The "streetworks" system of steel pipe on cedar posts defines circulation areas, outside and in (above and left). Large glazed doors open market to outdoors. A wharflike plaza links rear of complex (above) to boat landing.

Granville Island

ered that the serendipitous charm of the island depended in no small measure on the random siting of buildings which in turn created spaces that matched their motley. The absence of sidewalks, curbs, gutters, and other standard boundary markers permitted streets to have the appearance of pedestrian spaces into which cars were allowed to intrude. The feeling of a free circulation zone was reinforced by the use of a continuous surface material, interlocking concrete blocks set in sand.

The need for structuring devices to define driving edges and parking spaces was met by planting trees and designing new elements the architects called "streetworks." The most conspicuous of these is a linear system of cedar poles bearing brightly colored steel-pipe lintels that carry wiring for lights and also provide support for signs and awnings. Three-foot-high wood bollards with lights concealed behind steel mantels provide night lighting for parking areas. The pole-and-pipe system is most effective where it performs all the functions it was designed for, as it does in front of the market and the Emily Carr College of art. Where it simply suggests an edge it seems arbitrary and merely decorative.

At this writing, the regeneration of Granville Island is about at the halfway point. It seems like much more. Already the carefully nurtured mix of uses has made the island an urban microcosm, the success of which has exceeded all predictions. Indeed it may be choking on success. Because the island's offerings are not duplicated elsewhere in the city, monumental traffic jams afflict it on weekends. The "free zone" consecrated to the pedestrian becomes the zone of the would-be pedestrian who can't get free of the car. There is no way to augment significantly the parking. A parking garage originally proposed for a site just off the island was never implemented and is not likely to be now. A variety of remedies, including elevators from the Granville Bridge and other means of moving people on and off the island, are being considered along with charging a car fee. It is ironic that traffic pollution has replaced industrial pollution. Also ironic is the fact that, either as a result of the current economic slump or some other long-term process, the industries that were thought to be so indispensable to the island's image are shutting down. Soon only the cement plant will be left. Yet there is hope that other, more compatible industries, such as a brewery, will take their place.

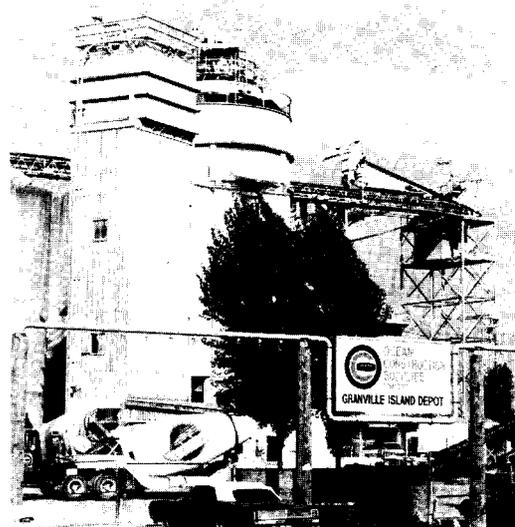
There are other reasons for mourning the passing of the old scene. For although the harmony created by the carefully orchestrated recycling process deserves high marks, there is a level of good taste that is foreign to the place. In the self-conscious process of design it could hardly be otherwise. Though it might be wrong to preserve the tattered and tasteless old pieces, it would be comforting if they could be left to time's own recycling process. □



Simon Scott



Courtesy architects

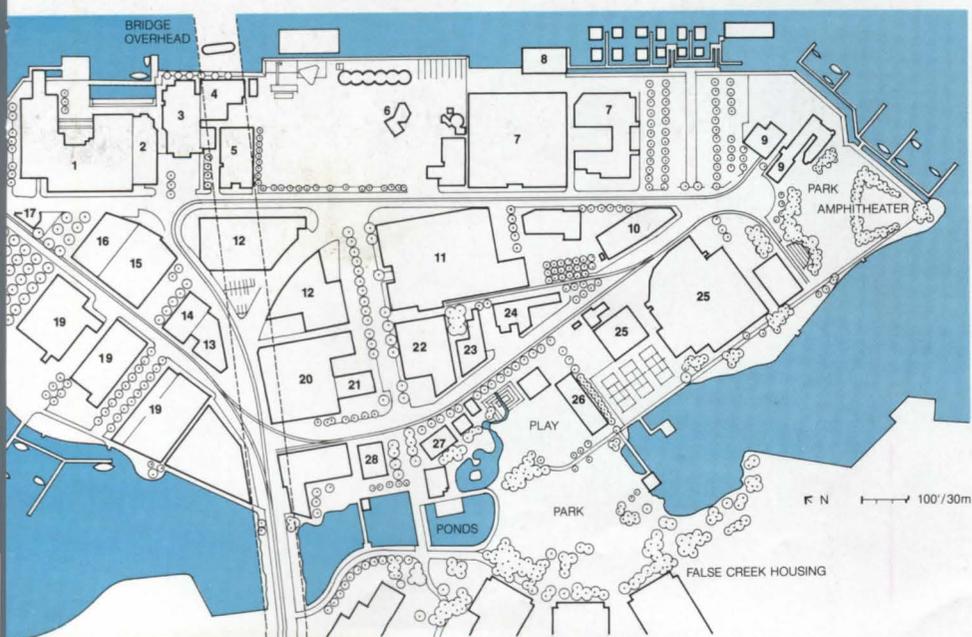


Bird's-eye view of island c. 1960 (above) contrasts with recent view (opposite) from bridge that overshoots island. Creek House office/retail complex under the bridge, with brookside garden leading to Mulvaney's waterfront restaurant (two photos above), established business potential of island after completion in 1973 by Norman Hotson Architects. Concrete supply plant (above right), coexisting with new commerce, is bounded by same continuous fence and gateway system of pipe and poles that runs along parking lots (right) and building fronts.

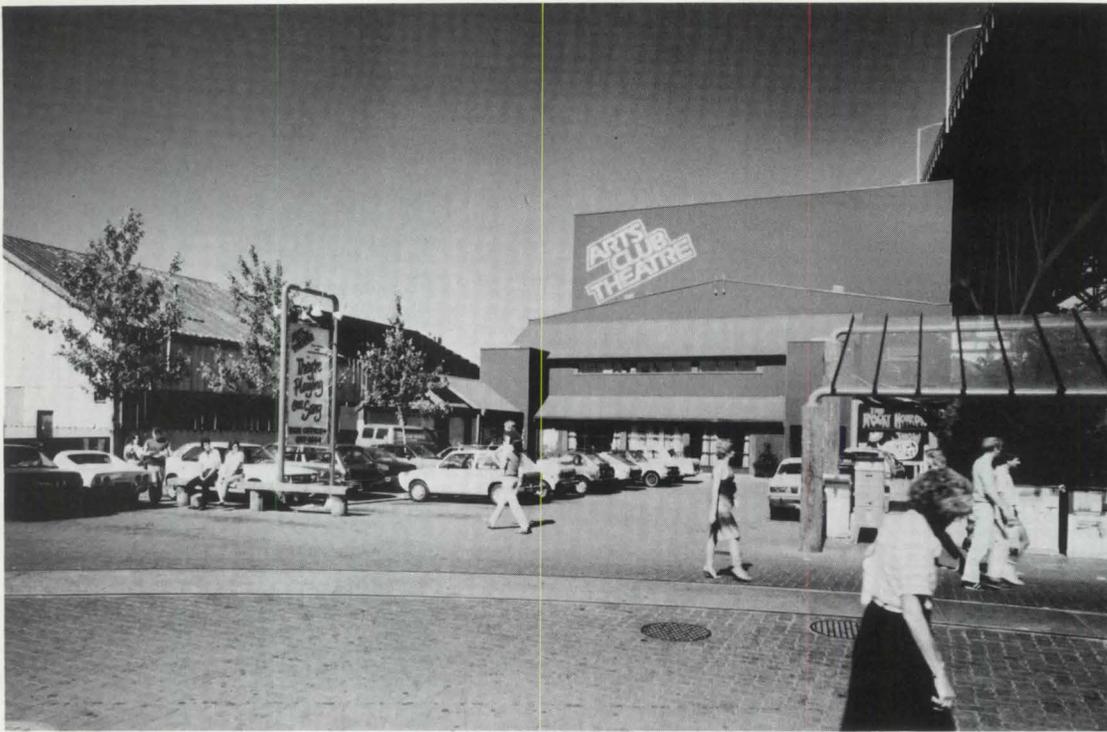




Simon Scott

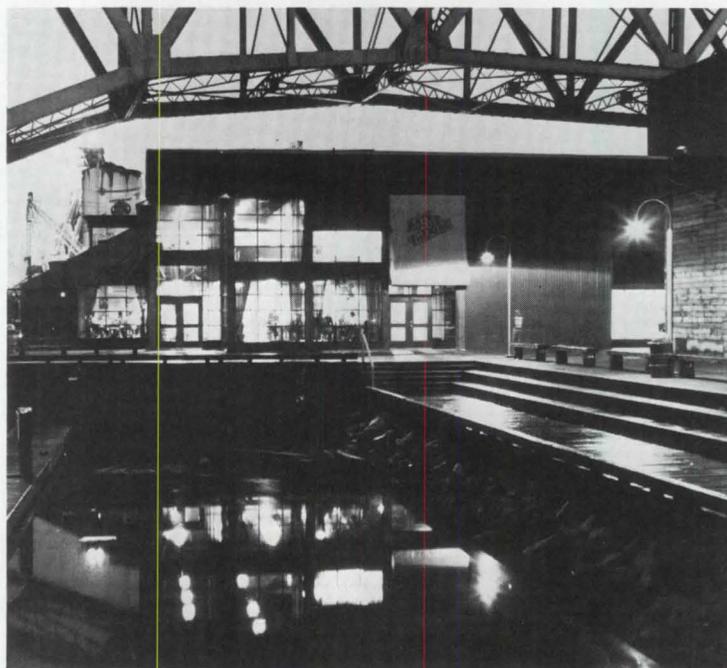


- 1 Public Market
- 2 Arts Club Cabaret
- 3 Arts Club Theater
- 4 Mulvaney's Restaurant
- 5 Creekhouse offices
- 6 Ocean Construction Supplies (concrete)
- 7 Emily Carr College of Art
- 8 Pier 32, offices and Jonathan's Restaurant
- 9 Boatel
- 10 Industrial
- 11 Artists' workshops and parking
- 12 Canada Chain and Forge
- 13 Restaurant
- 14 Building 38, artists' workshops
- 15 Building 39-40, artists' workshops and offices
- 16 Building 41, retail, offices
- 17 Gourmet takeout
- 18 Bridges Restaurant
- 19 Maritime Market
- 20 Lecky Paper
- 21 Gallery, studios
- 22 Theater scene shops
- 23 Pottery studios
- 24 Micon Drill Bits
- 25 Morrison Steel & Wire plant
- 26 False Creek Community Center
- 27 Columbia Bitulithic
- 28 Waterfront Theater

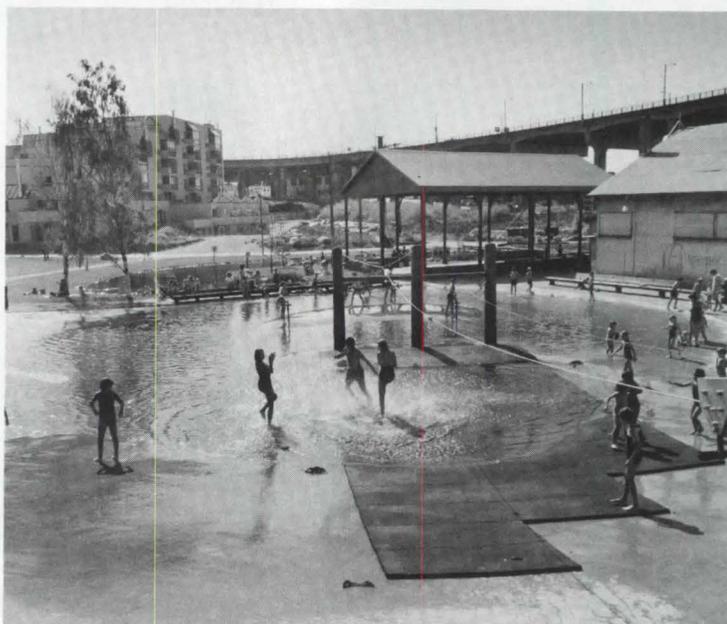


John Fulker

The Arts Club Theatre (above) occupies a converted industrial building in the shadow of the bridge. Dark gray corrugated cladding is a foil for white graphics, red pipe “streetworks,” and bright night lights. A glazed lobby lounge (right) overlooks boat landing and Public Market plaza. The playground along the south edge of the island includes a dished water playground (below right), where kids can maneuver brass ship’s hose nozzles; also here is an adventure playground where they can assemble used building parts, and at the east end of the island is a different park, with a viewing mound and an informal amphitheater sloping down to the water’s edge.



John Fulker



Simon Scott

Three buildings clustered near the west end of the island (facing page) exhibit the bright colors based on original ones, as interpreted under island’s design guidelines. The Bridges restaurant (far right) with its commanding view of parked cars and boats, is an emphatic yellow landmark. Its interior designers were unsympathetic to the architectural cues, filling the dining room with period French chairs and painting exposed ducts rose. The steel-blue-painted Building 41 (near right) follows original volume and surface character faithfully, with a façade recesses emphasize stair tower. Lower—and bluer—abutting structure part of the Building 39 and 40 complex, with solar demonstration array on its roof. On the opposite, south, front of this complex (bottom photo) an existing gabled false front is dramatized with red paint, contrasting with carved out stairwell and walks vivid blue. The “peeling” termination of this false front (middle right) plays on the layering, but a singularly self-conscious device in this context.



Photos: John Fulkner



Granville Island

Data

Project: Granville Island Renovation, Vancouver, BC.

Architects: Norman Hotson and Joost Bakker of Norman Hotson Architects, Vancouver (urban design and coordinating architects).

Client: Canadian Mortgage & Housing Corp.

Consultants: Urbanics, economic program; Don Vaughn & Associates, landscaping; Swan Wooster Engineering Co., civil engineering.

Data below on buildings cited in this article includes architects, not consultants. Structure and materials generally include: existing timber framing, new timber and glulam for replacement, extensions, and inserted floors; metal siding and industrial sash, new and reused; added insulation; new mechanical systems, exposed inside.

Project: Public Market.

Architects: Norman Hotson Architects.

Program: market floor, small mezzanine shops, outdoor sales area; 46,500 sq ft enclosed.

Cost: \$1,200,000 (1978).

Project: Arts Club Theatre.

Architects: Ron Walkey & Downs/Archambault (Richard B. Archambault, partner in charge; Ron Walkey, associated architect; Barry V. Downs, design architect).

Program: 450-seat theater, with auxiliary spaces; 15,800 sq ft.

Cost: \$1,025,000 (1980).

Project: Buildings 39 and 40.

Architects: William McCreery Architects (Edward J. deGrey, project architect).

Program: arts-crafts shop, offices.

Cost: \$629,215.

Project: Building 41.

Architects: Barbara Dalrymple, Architects.

Program: offices above shops; 15,000 sq ft.

Project: Bridges restaurant.

Architects: Henriquez & Partners.

Program: restaurant, pub.

Project: Emily Carr College of Art.

Architects: Howard/Yano

(Ronald Howard, partner in charge; John Bingham, project architect).

Program: studios, classrooms, offices; 114,600 sq ft.

Cost: \$5,500,000 (1979).

Project: Building 38.

Architects: Roger Hughes Architects.

Program: artisan workshops.

Project: False Creek Community Center.

Architects: Davidson/Johnston (Ian Davidson and Tom Staniszkis, design team).

Program: multipurpose hall, changing rooms, crafts, and classrooms; 10,000 sq ft.

Cost: \$562,000 (1980).

Project: Maritime Market.

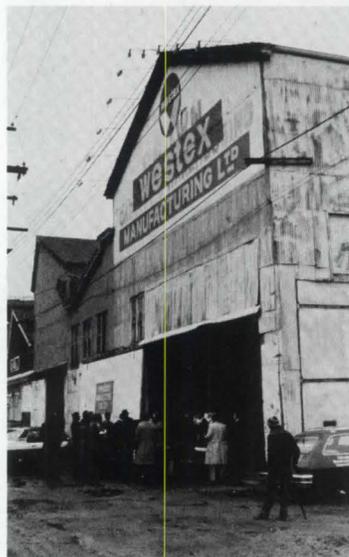
Architects: John Keith-King Architects.

Program: marine retail.

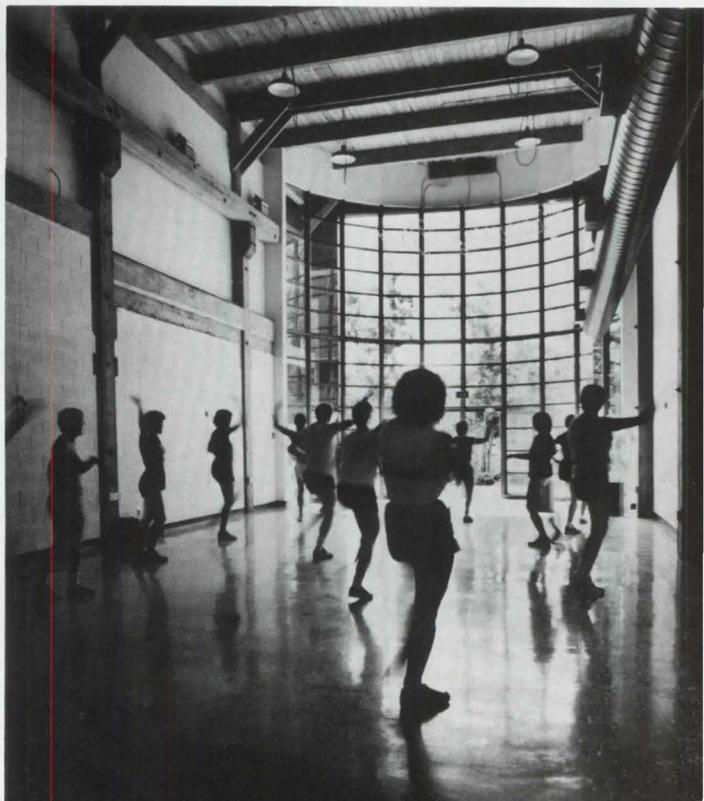
Project: Building 42.

Architects: Boak Alexander Architects.

Program: gourmet take-out.



Emily Carr College (above right and facing page, top) was assembled from three existing structures (above); additions and inserted floors doubled the original 57,000 sq ft to accommodate 400 students. Straightforward treatment of existing timber frame and sawtooth roofs is effective, but complex is not as open and visible to public as planners envisioned. A foursquare structure with openings reworked became False Creek Community Center (right and facing page, right). Recladding of Building 38 (facing page, left) for artisan shops yields the most high-tech image on the island.





John Fulker



Simon Scott



John Fulker

The rewards of preservation

Sally G. Oldham

The Economic Recovery Tax Act of 1981 includes incentives for preservation that can be used as a powerful tool for attracting investors to a project, and that can also be a major key to a project's financial success. Architects familiar with the benefits will be in an advantageous position when selling their services to developers.

Taxes and tax laws are subjects that hold little fascination for most architects. Disparate tax and design issues become intertwined, however, in the federal government's historic preservation tax incentives program, inaugurated in 1976. Over 4350 projects involving construction worth \$2.2 billion have qualified for these rehabilitation tax incentives over the past six years.

Rehabilitation projects involving historic buildings are not the only ones that qualify for special tax benefits. In the tax incentives for preservation passed as part of the Economic Recovery Tax Act of 1981, buildings at least 30 years old qualify for a 15 percent investment tax credit (ITC), and buildings at least 40 years old can receive a 20 percent ITC, but they need meet fewer requirements to receive these benefits, which can be used only in connection with rehabilitation of depreciable (income-producing) buildings. Historic buildings, however, can receive a 25 percent ITC for qualified rehabilitation expenditures, and it can apply to residential as well as commercial and industrial buildings. In addition, substantial tax benefits are available due to the provisions of the Accelerated Cost Recovery System, in which owners are allowed to depreciate their acquisition and rehabilitation costs over 15 years. Again, historic buildings receive an advantage because the depreciable base is reduced by only half the amount of the credit prior to figuring depreciation, rather than reduced by the entire amount of the credit, as is the case with nonhistoric rehabilitations that claim ITC benefits.

Rehabilitation credits work like energy credits in that they are deductions from the actual amount of taxes owed, not deductions from gross income before calculating tax liability. This means that the rehabilitation tax credit is actually a dollar-for-dollar tax saving, and a very significant factor in the planning for any rehabilitation project. The tax credit will have a tremendous impact on the cash-flow projections of a project for the year it is placed in service. As a powerful tool to attract investors to a project, it is generally a major key to the project's financial success. Substantial amounts of equity capital can be raised for

larger projects through syndication, bringing a number of investors into the project who receive a major portion of the tax benefits in the early years of the development and a lesser share of the cash flow and appreciation in later years.

General requirements

There are two important requirements that a rehabilitation project must meet to receive any of these credits. First, the money spent on rehabilitation must exceed the adjusted basis of the building (cost of the building less the value of the land, plus capital improvements less any depreciation) or \$5000 within a 24-month period. Alternatively, an owner has 12 months to meet this monetary test if the rehabilitation is completed in phases set forth in architectural plans and specifications completed before the work begins. Second, 75 percent of the walls external to the structure before rehabilitation must remain so after rehabilitation. This sounds easy to achieve, but many situations arise that pose problems in meeting this test. If a developer wanted to add an addition covering the existing side and rear walls, the rehabilitation could not qualify. Or, to really complicate the situation, a structural engineer may determine that the walls of an older structure are unsound, requiring that they be dismantled and rebuilt. It's possible the project may qualify for the credit if the walls are rebuilt using the original building materials, but that determination is up to the Internal Revenue Service. At the moment, second guessing their determinations is very difficult because no regulations have been published to provide guidance.

If a developer wants a project to qualify for the 15 percent or 20 percent ITC, the Internal Revenue Service is the only Federal agency generally concerned, and the constraints on the architect's design prerogative will be relatively small. If the developer aims to qualify the project for the 25 percent credit for historic buildings, however, another federal agency enters the picture and the architect's role increases in importance.

Requirements for historic buildings

The National Park Service (NPS) of the Department of the Interior must approve a project before an owner/developer can be assured of receiving a 25 percent tax credit. NPS gets involved in two respects: first, identifying which buildings qualify as historic, and second, in approving rehabilitation

Sally G. Oldham, former acting Chief of Registration at the National Register of Historic Places, is now executive vice president of Langelier Historic Properties, Inc., a Washington, DC, firm that provides equity syndication and specialized consultation for properties qualifying for rehabilitation investment tax credits.

ns as being consistent with the historic character of the building. Buildings that qualify include those listed on the National Register of Historic Places (a list the NPS maintains) or ones located within historic districts, whether a National Register historic district or a district designated by a local government authority if NPS has approved it as substantially meeting National Register criteria.

To qualify for the 25 percent ITC, a short two-part application form is filled out by the owner, the architect, or by a consultant who specializes in such work. Part 1 is required for buildings in historic districts to determine if they contribute to the district (the large majority of them generally do). Part 2, required for all projects, asks for a description of the proposed or completed rehabilitation work. The application is sent first to the appropriate State Historic Preservation Office for review and recommendation and then to the National Park Service regional office where a final decision is made. Judgments on both parts are made on the basis of standards set forth in regulations available from the Department of the Interior. These are broadly worded to cover a wide variety of building types, and basically look to the retention of existing significant characteristics and features of the structure. The question as to what is significant is a key one and is one that could already have been answered by the time the application is filled out—through either an architect's or consultant's analysis based upon information provided in the National Register nomination form for an individually listed building, or in the Part 1 application for a district building.

Confusion can arise, however, when the preservationist's viewpoint of what elements a building contribute to its historic character differs from the architect's and the developer's. The latter most often wants to "improve" the building, to make it look new to create a marketable image. The architect may want to make the design of the rehabilitated building reflect its new use, to standardize window openings, or to add a contemporary design element such as an atrium or arcade. The preservationist wants to enhance the historic qualities of the building as they exist immediately prior to rehabilitation and to see retained the features of a building that identify its historic appearance and role in its community.

There are valid reasons for each point of view, and at times the three viewpoints will naturally converge. Where the 25 percent ITC is at stake, however, NPS approval is needed, and it is the preservationist's viewpoint that must prevail. This is not to say that NPS will not entertain compromises in the review process, but it is a good idea to submit the Part 2 application before rehabilitation

work commences so that if elements of the design are unacceptable to the NPS they can be modified to gain approval. For guidance, a variety of material is available from the NPS, including a series of "Preservation Briefs" on technical problems, and "Interpreting the Standards" bulletins on various preservation issues.

There are several problem areas in applying the Standards for Rehabilitation that reoccur frequently in architects' good faith efforts to design projects that will qualify for the 25 percent ITC. Myra Harrison, who supervises NPS reviews in the Philadelphia regional office for projects in the Northeast and much of the Midwest points out, "Some developers and architects, usually those unaccustomed to working with historic architecture, are uncertain as to what comprises 'historic character.' For instance, in designing exterior treatments they tend to ignore the significant contribution that windows often make to a building's historic appearance, and windows are prime candidates for change." The NPS prefers to see original windows retained and repaired, but often allows replacement sash so long as it is compatible with what it replaces in size, type, color, and reflective qualities.

Related to the window issue is the question of handling storefronts on commercial buildings. A historic photo of a building is invaluable in deciding on an appropriate design when recent alterations have obscured the original design. Restoration of the storefront is not necessary, but to meet NPS standards, the new design should reflect the historic storefront character of the building even if the new use for the first floor is not retail.

If a historic photo is not available, an architect may be tempted to base infill design on neighboring buildings. Such design decisions must be made judiciously. It's not appropriate to add a brick veneer to a frame building just because the building next door is brick. Nor is it appropriate to extend architectural features from the upper stories of a building to the first-story level when the design of the street level historically differed from that of the upper floors, in part to reflect its different use and function. As a basis for the new design elements, it's necessary to find a building of a similar type, located close by and constructed at about the same time as the project building.

Development opportunities

Talk of standards, regulations, and tax law may not sound inviting, but the 15, 20, and 25 percent tax credits are compelling enough to have developers and syndicators scouring the countryside for old and historic buildings to rehabilitate. Nearly a million structures are included in National Register listings (about 24,300 individual listings and 2700 historic districts). These buildings are generally found in central locations and can have great appeal in the marketplace. The potential for development opportunities is tremendous. Moreover, the denial rate for NPS review of historic rehabilitation projects is currently only 5 percent. □

While almost half of the projects receiving benefits of the new Investment Tax Credits have been for housing, many other building types have also benefited. Two recent projects include the \$17.9 million rehabilitation by The Ehrenkrantz Group of Daniel Burnham's Pittsburgh Union Station (below and p. 133) for office and retail use, and the second reuse of Knoxville's Old School Building (bottom), which was last the City Hall, but will be converted by Anderson Notter Finegold for new office space.



Kaishian



Anderson Notter Finegold Inc.

Opulence on Olive

Barbara Goldstein

Although basically intact, a landmark building on South Olive Street in Downtown Los Angeles is returned to its original splendor.

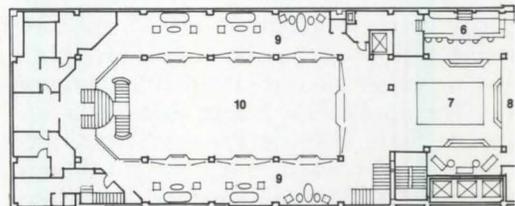


It is impossible to visit the James Oviatt Building in Downtown Los Angeles without falling into reveries about its previous glories. This was an archetypal romantic building, a glamorous combination of exclusive clothing store, offices and penthouse in one of the most ornate skyscrapers of its day. From its rooftop garden the owner could sip drinks and gaze at the Pacific Ocean, while downstairs movie stars like Adolph Menjou and Clark Gable came to buy their clothes.

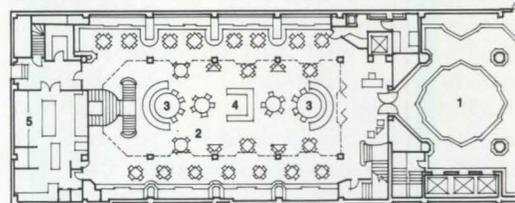
The "gothic deco" skyscraper was built in 1928 by James Oviatt, co-owner of the clothing store Alexander and Oviatt. The owner had an overriding interest in quality, and the building was to be a monument to his taste. Designed by architects Walker and Eisen, the Oviatt was embellished on the outside with embossed silvery metal panels, and inside with what was reputedly the largest collection of Lalique glass lamps, panels, and chandeliers ever assembled. Once, during his frequent travels, Oviatt visited the 1925 Paris World's Fair, and it influenced his decision to build an Art Deco masterpiece. At the time it was built, the Oviatt was as tall as the Los Angeles height limit allowed.

When Wayne Ratkovitch bought the building in 1977, it was rundown but fundamentally intact, although most of the Lalique glass had been removed from the ceiling of the lobby. James Oviatt and his wife had died in the 1970s, and the Alexander and Oviatt haberdashery had been closed for some years. The penthouse was empty, and only one-third of the offices were occupied, commanding an average rental of only \$3 per square foot per annum. Today it is fully occupied and office rents run as high as \$24 per square foot.

By renovating the Oviatt, Ratkovitch became a pioneer in the revitalization of Downtown Los Angeles. Although the importance of such restoration is now apparent, at the time this project was started, the Biltmore and the Bradbury buildings were the only real precedents. Ratkovitch saw the potential of the building, and decided to adapt it to contemporary needs, maintaining its external features while converting the offices to more modern standards. He commissioned architects Kaplan/McLaughlin/Diaz of San Francisco to carry out initial feasibility studies and base building remodeling, to establish standards and design strategies, and to make recommendations about the use of the public spaces. Later, Group Arcon was to take over



MEZZANINE



GROUND FLOOR

- | | |
|----------------|--------------------|
| 1 Lobby | 6 Bar |
| 2 Dining Room | 7 Dance Floor |
| 3 Banquettes | 8 Lounge |
| 4 Food Display | 9 Lounge/Promenade |
| 5 Kitchen | 10 Open |

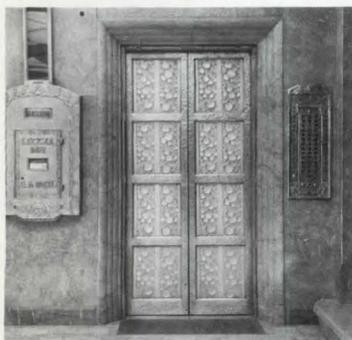


Barbara Goldstein is a Los Angeles correspondent for P/A and editor of Arts + Architecture.



Original Lalique glass ceiling in the lobby (opposite page) was only partly intact when renovation began. New cast iron gates (above) define a planned outdoorpresso bar.

Oviatt Building



Offices within the building, such as those for its owner (top) are not tied to the Deco richness exemplified by the elevator lobby (above). Opposite page: The elegant doors (center left) announce the Rex restaurant (top), a conversion of the previous haberdashery. Beautifully detailed living and bathing areas (bottom) distinguish the 10-room penthouse.

Data

Project: The James Oviatt Building, Los Angeles.

Architect: Kaplan/McLaughlin/Diaz, San Francisco, Herbert P. McLaughlin, head designer; Group Arcon, finished interiors and space planning.

Original architect: Walker and Eisen, 1928.

Client: Ratkovitch, Bowers, Inc.

Site: downtown Los Angeles, 86,000 sq ft.

Program: renovate existing building to upgrade space to current standards for office space and new restaurant.

Major materials: reused marble, slate, Lalique glass.

Consultants: electrical, Berg Electric; landscape, Ennet Whipple.

Cost: \$4 million (1981).

Photography: Bruce Boehner, AIA, except opposite page, top, Russell Abraham.

the job, finishing the building and creating the individual tenant spaces. Brenda Levin, project architect for Group Arcon, completed the restoration and today acts as building architect, with her offices in the Oviatt.

The building is clever in both plan and elaboration. A long narrow building, its lobby was recessed to create a sheltered forecourt for the office elevators and a ceremonial entrance to the shop. Originally, the lobby was entirely opened to the street, with a large display case in the middle. Above the lobby, there are three stories of bay windows surrounded by an elaborate metal frame. These windows were part of the shop and Oviatt offices. The building steps back at the thirteenth floor, creating a garden for the penthouse. A clock tower with neon numerals sits at the top of the building, and reportedly rang the "Chimes of Normandy" and other pieces when the building was first erected.

Fundamentally, there were few major design changes involved in the renovation. In order to make office rentals profitable, it was necessary to bring the space up to contemporary standards, to provide new wiring, air-conditioning, and a sprinkler system. The haberdashery was to be made into an elegant Italian restaurant, and the penthouse, which needed little, was to be restored for an unspecified use.

The offices were originally arranged in small increments along the marble-lined hallways. The architects and the developers decided to maintain the hallways but to create larger office suites. Converting the building floor by floor, they offered new tenants a basic spec office consisting of gypsum board partitions and acoustical tile ceilings. For a larger amount of money, the tenants could have whatever they wished.

In order to accommodate air conditioning, the office floors were gutted. Fortunately, the building had a concrete frame and the floor-to-ceiling height allowed enough space for ducts. Only in some of the service areas are the ceilings less than eight feet in order to accommodate mechanical additions. The architects were sensitive to the original fenestration, and retained the double-hung windows so the building's exterior appearance would not change. On the inside, however, neither the subdivision into offices nor the design of the offices themselves acknowledges the original layout of the building. And, although the hallways were left intact, most of the original strip lighting fixtures were replaced by unattractive panel lights.

The lobby of the building and the Rex restaurant are the most successful part of the renovation. In the restaurant, Brenda Levin and interior designer Luciano De Nardi joined forces to create an elegant environment with minimal disturbance to the original space.

In changing the haberdashery into the Rex restaurant, the designers decided to make as few alterations as possible. The space was of two levels, with a double height central space

overlooked by a mezzanine. It was fitted out in dark carved oak and decorated with Lalique panels and light fixtures. The part mezzanine overlooking Olive Street was called the California Palm Room and featured bay windows where customers could look at their clothing in natural light. In the renovation, display cases that lined the edges of the mezzanine were removed and replaced with balustrades; cases lining the ground floor walls were changed into wine cellar and the California Palm Room became a piano bar complete with a small dance floor. An Art Deco bar was designed for this area using old display cases as a liquor cabinet. Other display cases were recycled as line trolleys.

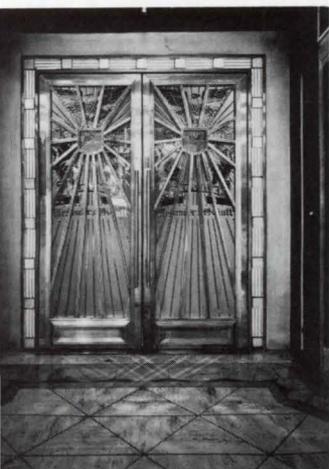
The store originally had a very dark, masculine color scheme featuring red carpet with oriental rugs as overlays. The new colors are lavenders, pinks, and purple, giving the space a lighter, more contemporary appearance. In order to create a cozy dining atmosphere, small triangular tables are arranged around the edges of the ground floor space, encouraging intimate dinners *a deux*. The mezzanine area was transformed into a lounge with banquettes, low tables, and a continuously changing art exhibition.

The architect was very careful in organizing the wiring and sprinklers in the restaurant to do minimum damage to the ceiling and woodwork. The only place in the Rex where the design seems awkward is the ceiling over the dance floor which, now lowered to create an intimate atmosphere, seems rather claustrophobic.

The ceiling in the lobby was more problematic. Much of the Lalique glass used to illuminate the original lobby was missing, and a previous ceiling of faceted plexiglass had been installed. Since this looked incongruous with the existing decoration, Brenda Levin designed a new ceiling pattern, using existing Lalique panels and reproductions. The new ceiling is a faceted composition echoing the pattern in the floor where the original display case was located. While still rather meager compared to the original ornamentation, it is a vast improvement over the earlier attempt. In addition, a Deco cast iron gate was added giving more privacy to the planned outdoor espresso bar.

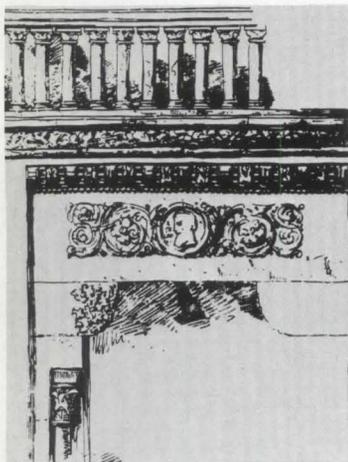
The penthouse is not yet restored, although Ratkovitch plans to bring it back to its former splendor. The apartment is very formal, with wood paneling in several rooms and an enormous bathroom featuring carved maroon plaster walls depicting jungle scenes. As the building was always zoned to have an apartment on the roof, it would be desirable to see it restored as residential space, so it could continue in its original use. This would mean guaranteed preservation of the suite.

Wayne Ratkovitch is currently involved in the adaptive reuse of another splendid Art Deco building, the Pellisier on Wilshire Boulevard. Again he is working with Brenda Levin, and with careful reconstruction and the respect shown to the Oviatt, Wilshire Boulevard may also have a "contemporary Deco skyscraper." □



Richardson restored

After long neglect, H.H. Richardson's New York State Senate Chambers have been meticulously restored. The project's success comes from the architects' careful documentation as much as from the craftsmen's skill.



Richardson's sketch (above) served as the model for the late Carrado Parducci's relief sculpture over the senate doors (opposite, bottom left). The other views of the restored senate chamber interior (opposite) show the reproduction carpet and lighting fixtures, the cleaned and polished stone, the repaired stained-glass windows, and the rebuilt senate desk and settees.

Henry Hobson Richardson might not have understood the care architects Mendel, Mesick, Cohen, Waite have taken in their restoration of his senate chambers in New York's capitol. As partner-in-charge John Mesick put it, "We conducted ourselves as building conservators rather than renovators or decorators," respecting "the intentions of the original architect," and establishing "a restoration discipline to which personal and contemporary aesthetic tastes have been subordinated." Richardson might not have understood because most 19th-Century architects viewed preservation much differently. Working within an existing building provided, for them, an opportunity to update it, a chance to leave their personal stylistic mark, as Richardson himself did in New York's capitol.

The English architect Thomas W. Fuller, best known for his design of the Canadian capitol in Ottawa, prepared the first design for New York's capitol in 1867. Fuller dressed the capitol in Italian Renaissance detail although, in response to public objections, he later added mansard roofs and ornate towers in the then popular Second French Empire style. The state legislature approved that design, apportioning \$4 million for its construction. Work began in 1869, and for reasons not entirely clear, construction proceeded slowly, so that by 1875, \$5 million had been spent with only the first two floors complete. The legislature, angered by the delays and the expense, appointed Lieutenant Governor Dorsheimer chairman of a new building committee; he in turn hired an advisory board comprised of Richardson, Leopold Eidlitz, and Frederick Law Olmsted to recommend ways of quickly completing the building.

In 1876, the board presented a list of defects in Fuller's design, along with drawings of their own, showing Richardson's Romanesque top to the capitol. The presentation brought a flood of criticism, mainly from the architectural community. The New York Chapter of the AIA thought that the advisory board should have consulted with Fuller in the revisions and that they erred in changing the style of the building halfway up. The criticism had little effect. The lieutenant governor fired Fuller, while the legislature commissioned the advisory board to proceed with its plans in June 1877.

Richardson and Eidlitz split the design responsibilities, with Richardson taking, among

other things, the senate chamber. Thinking the 60' x 100' space Fuller had allocated too large, Richardson turned the room into a cube by enclosing lobbies at either end, with visitor galleries above. A colossal round-arched arcade separates the galleries from the senate chamber.

While we usually think of Richardson as proto-Modernist, an influence on Sullivan and Wright, the senate chamber shows his Victorian taste for complex pattern, deep colors, and rich materials. The furniture, mahogany and red leather, stands against lower walls of white Knoxville granite. Above that runs a 12-ft-high grid of Mexican onyx framed in yellow Siena marble, a band of gilded embossed leather, and a beamed ceiling supported by granite corbels. The round Scottish granite columns in the arcade, with their white marble capitals, provide a contrast to the chamber's golden hue. Two tiers of stained-glass windows, along with chandeliers and wall sconces, light the space.

Out of funds and out of patience, the senate moved into the unfinished chamber on March 10, 1881. As John Mesick describes, "The stone carvers just picked up their tools and left without ever completing the room. The carpet and the light fixtures underwent frequent replacement, while the senate chamber Richardson had designed slowly disappeared as senators retired. The room also suffered smoke damage in 1911 and major redecoration in 1912, 1914, and in the 1940s. By 1970 when the senate decided to restore the chamber, the stone had become encrusted with grime, the gilded leather covered with gaudy fabric, the electrical system overloaded, the ceiling damaged by water, the carpet threadbare, and the galleries enclosed with bullet-proof glass screens. In the words of Roger Thompson, Secretary of the Senate: "The place appear(ed) little better than a third-rate hotel."

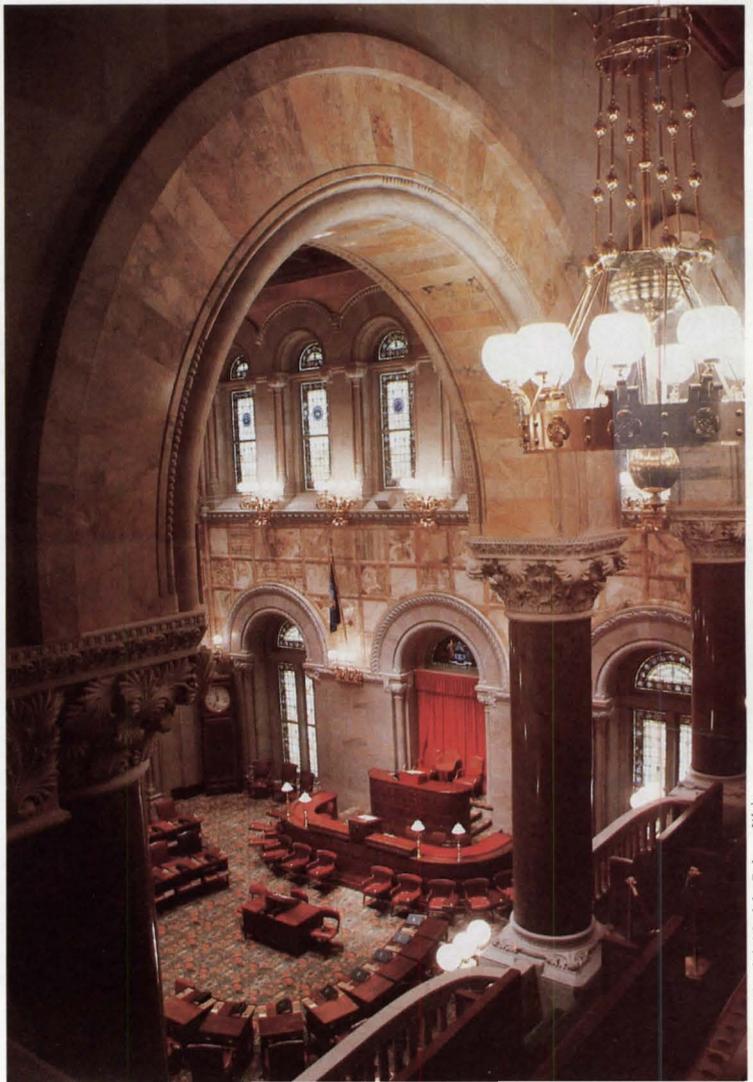
Those sentiments led the senate to retain the Albany firm of Mendel, Mesick, Cohen, and Waite, well known for their restoration experience. In the first four months of 1970 the firm prepared a historic structures report documenting the history and existing conditions of both the senate chamber and the lobby. The completed report is Richardsonian in scale, measuring over 2 in. thick. It contains a narrative history and description of the chambers, recommended restoration



er Smalling, Jr.



Walter Smalling, Jr.



Mendel, Mesick, Cohen, Waite

Senate chambers

procedures for every architectural element, an engineering analysis and plan, and measured drawings of both the existing and the proposed spaces.

That document became part of a much larger effort by the state to establish a preservation plan for the entire capitol, hiring the Ehrenkrantz Group to prepare a historic structures report. Running 10,000 pages in 25 volumes, the Ehrenkrantz study records the location, material, finish, style, and date of virtually every architectural and engineering item in the building's 800 rooms. The amount of data required the use of a computerized data management system. Coded survey forms allowed easy entry of the information into a computer as well as its rapid retrieval when preparing maintenance schedules, when locating items for repair or replacement, or when planning future preservation projects.

Meanwhile, construction began on the senate chambers after a six-week contract document phase. The masonry cleaning contractor used a poultice on the marble and soap and water everywhere else to remove surface dirt, polishing the cleaned stone with wax to bring out its veining. A sculptor reproduced the embossed leather wallcovering in a fiberglass-reinforced polyester to provide a longer lasting substrate for the gold leaf. A lighting manufacturer reproduced the original brass fixtures based on drawings made from old photographs, while a stained-glass studio removed, cleaned, and releaded the stained-glass windows.

Examining photographs under a microscope, the architects reconstructed the original carpet's design, a stylized Persian pattern of variously colored flowers on a blue-gray ground. The oak ceiling also required careful reconstruction where diffusers and lights had been added. Rather than using oak, the architects decided on a resin that could be easily modeled to reproduce moldings, and painted and grained to match the oak. From the floor 50 ft below, the repairs are imperceptible. Carpenters rebuilt the senate desk, as well as the settees that once lined the chamber. These received embossed leather cushions studded with brass upholstery nails made to match the original.

The integration of new electrical and mechanical systems proved the most taxing. Rather than disturb the original fabric with a ducted HVAC system, the architects decided upon a hot and chilled water system with fan coil units replacing the radiators in cabinets under the windows. Electrical conduits were installed beneath the floor and threaded through wall cavities and ceiling spaces without removing the original finishes.

The restoration of the senate lobby presented a different set of problems. The vaulted gothic space, designed by Leopold Eidlitz, wraps around three sides of the senate chamber, its walls and ceiling constructed

of brown and gray sandstone and its floor covered originally in encaustic tile. By 1977, the state had not only removed the original light fixtures, windows, and floor, but had partitioned the lobby into a maze of offices, leaving a twisted, narrow passage for both the senators and the public to navigate. The architects removed all of the partitioned spaces. They then hung the reproduction brass chandeliers and installed carpeting that would remain until funds become available to reproduce the colorful Minton encaustic tile. San Francisco artist Hilda Sachs designed new clear glass windows with a cascading leaded pattern enframing rectangular lights to replace the existing lobby windows, while a Detroit sculptor, the late Corrado Parducci, working with Richardson's sketches, developed busts of the various architects involved in the capitol as well as various representational scenes for the uncut stone over the senate doors.

Not every decision in the restoration rested on precedent. To create private conversation areas for the senators, the architects had to close off the side lobbies at places where no gate or doorway ever existed. A similar problem occurred at the staircase and elevator portals, where the air-conditioned lobby had to be separated from the rest of the building. The architects' solution differed in each case. At the side lobbies, John Mesick decided to commission modern gates that sympathized, without mimicking, the room's Gothic style. Artist Albert Paley, who had recently completed gates for the Renwick Gallery, designed two pairs of gates with a curvilinear structure supporting a flamelike brass and bronze centerpiece, a design that captures both the pointed linear quality of Eidlitz's Gothic lobby and the generous scale of Richardson's round-arched senate chamber. At the portals leading to the rest of the building, Mesick decided upon a more temporary solution, since the whole capitol may be air conditioned at some point in the future. The architects designed tempered glass doors and sidelights with minimal bronze fittings to provide the least visual intrusion. That those changes almost go unnoticed testifies to their appropriateness.

Mendel, Mesick, Cohen, Waite have made the restoration of the senate chamber look effortless. The reason for that lies in the procedures they followed as much as in their restoration skills. Too few preservation projects budget enough time or money to prepare a historic structures report as thorough as that documenting the senate chamber, even though the accurate reconstruction of missing features and the unobtrusive insertion of new elements could not have occurred without it. As John Mesick put it, "the preparation of a historic structures report is an act of discipline," applying, "investigative techniques to the process of building restoration. Once this has been accomplished, the plans for preservation and restoration can be formulated without whim, fancy, or conjecture." If Richardson might not have understood that approach, he certainly would have been pleased with its results. [Thomas Fisher]

Albert Paley's gates at the side lobbies of the senate chamber (right).

Data

Project: State Capitol Senate Chambers, Albany, NY.

Original architects: Thomas Fuller, Frederick Law Olmsted, Henry Hobson Richardson, Leopold Eidlitz, Isaac Perry.

Restoration architects: Mendel, Mesick, Cohen, Waite Architects, Albany, NY; John I.

Mesick, partner in charge; A. Craig Morrison, James Johnson, Robert Pierpont, assistants.

Client: New York State Senate
Program: restoration of furnishings and interiors and replacement of mechanical and electrical systems in Senate Chamber and related spaces in New York State Capitol.

Structural system: load-bearing masonry walls with brick jack vaults between iron floor beams over timber and stone vaulted ceilings.

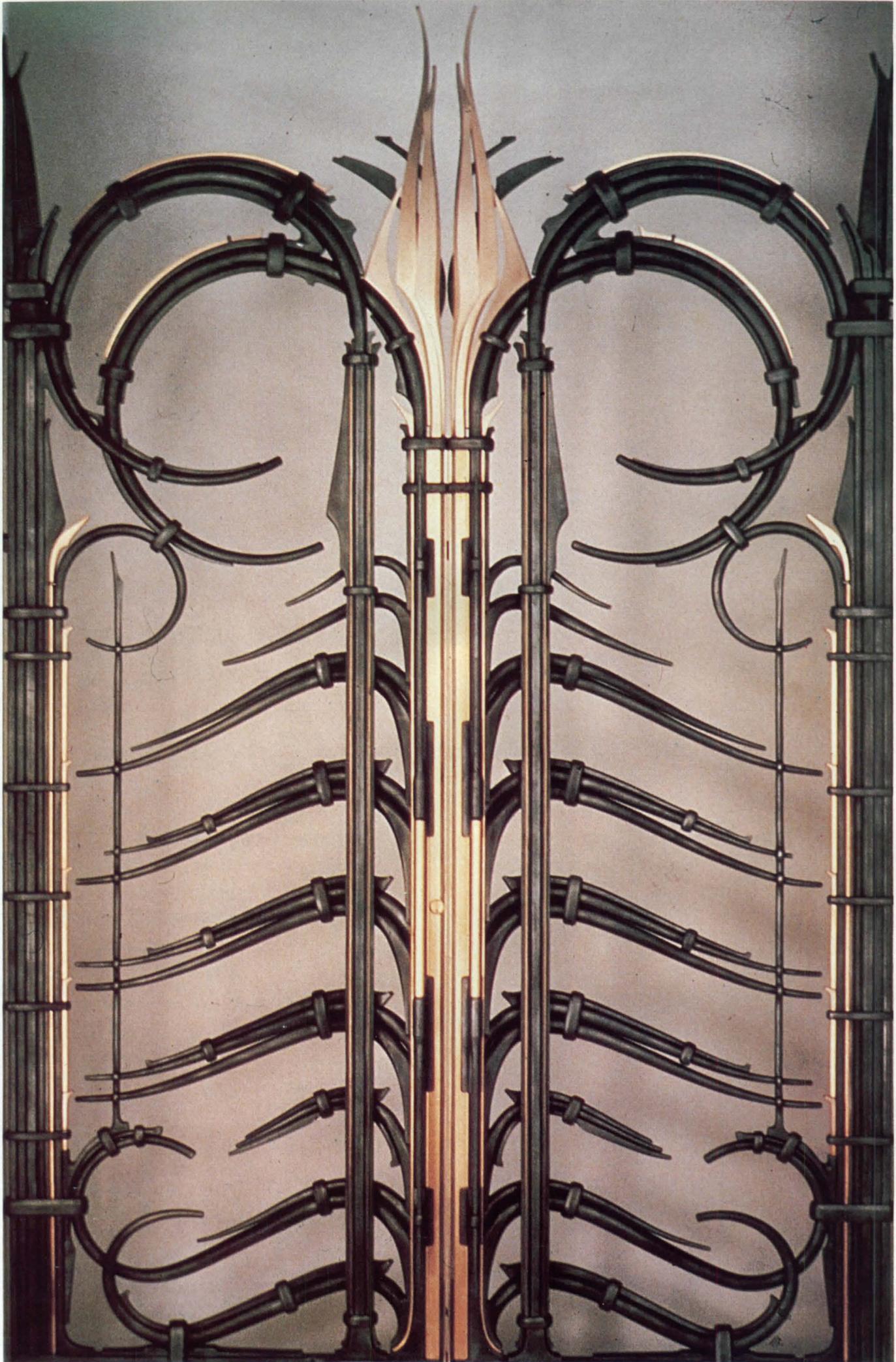
Mechanical system: hot and chilled water HVAC system.

Major materials (custom work): Gene Mundell, wallcoverings; C.M. Goodrich & Son, Shay's Upholstery, millwork; E.F. Thresh, revedos, settees; Donald S. Dales, sofas, chairs; Smith & Watson, chairs, settee; Albert Paley, metal gates; Cummings Studio, decorative glass windows; Vincent Leggiadro, stone carving; New York State Museum Workshop, rostrum, including desks; The Willet Stained Glass Studio, stained glass repair.

Consultants: Syska & Hennessy, electrical, HVAC; Edwin S. Bishop, acoustics; Eugene Torrent, furniture reproduction design; Samuel J. Dornsife, ASID, research; David Zdunczyk, historian; David Coughtry, renderings.

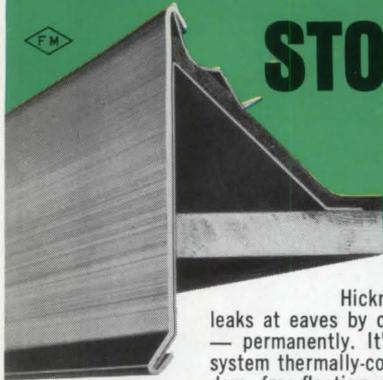
Artists: Corrado J. Parducci, lintels and corbels; Hilda Sachs, contemporary windows; Albert Paley, sculptural metal gates.

Contractors: There was no general contractor. Because of a fast-track schedule, separate contracts were let to individual subcontractors.



William Rowley

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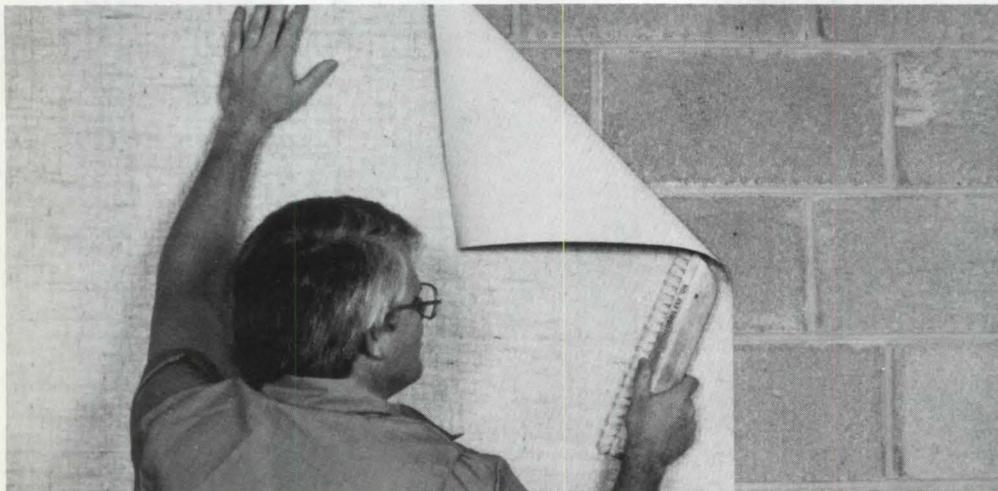
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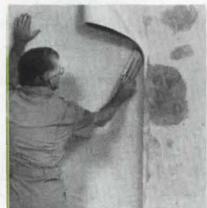
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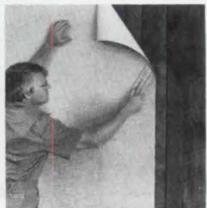
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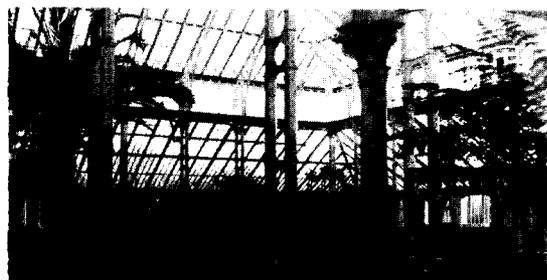
Let there be light, again

borah Dietsch

he recovery and
restoration of turn-of-the-
century skylights poses
problems of modern function
as well as of preservation.

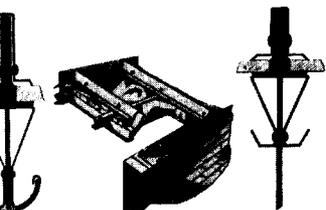


1 Charing Cross Station, London, 1864-66.

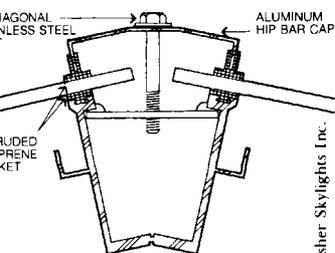


2 Kew Gardens, palmhouse, 1845.

Photos: G.S. Wyatt



Early steel glazing bars.



Modern aluminum glazing

Fisher Skylights Inc.

The recent resurgence of the use of skylights in contemporary architecture, providing energy-efficient, naturally lit spaces, has contributed to renewed interest in the restoration of their precursors. As increasing numbers of public structures such as courthouses, museums, statehouses, banks, and office buildings built between 1870 and 1920 are preserved, the problems involved with skylight restoration have become a growing concern for architects and conservators. They are discovering that restoration of these glass and frame constructions is not merely confined to mending leaky joints. Consideration must be given to not only a vast range of possible cleaning, repair, and replacement methods, but to how the skylight will be incorporated into the building's present lighting, mechanical, and structural system.

Skylights have been used throughout the history of architecture as a means of lighting and ventilation. The positive effects of admitting part of the outdoors to the dark recesses of a building were recognized by Greek and Roman architects, whose skylights, such as the oculus in the dome of the Pantheon, were literally open to the sky. The vaulted spaces of Renaissance and Baroque churches were toplit by means of lanterns above their domes. In the 18th Century with the rise of public building types—libraries, museums and banks—skylighting was used to illuminate assembly areas and provide task lighting.

Early skylights were limited by glass size and framing methods. By the mid-19th Century, innovations in plate glass and cast iron framing techniques made possible the development of large areas of glazing for greenhouses and exhibition halls in England and France. Their prefabricated iron and glass components were rapidly adopted for other building types such as markets, department stores, arcades, and train stations, beginning an era of "glass mania" in the second half of the 19th Century (1, 2).

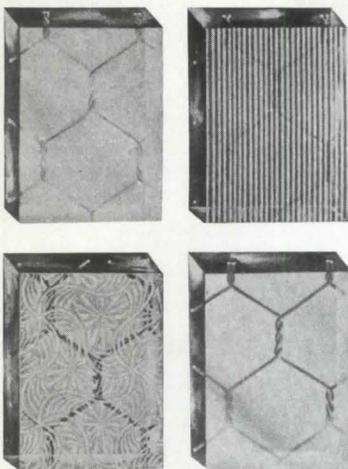
Glazing methods of the 19th Century consisted of wood or iron framing bars with insertion of lead putty to hold the glass in place. Lead comes, H-profiled extruded strips, were also used as joining members in stained glass. Experiments in the early 1890s led to the development of patent glazing, a method aimed at eliminating the use of putty, which continually had to be replaced. Steel "T" bars began to be substituted for wood frames, protected from corrosion by lead strips or caps with curved flanges to support the glass. By the turn of the century, these caps were covered with copper or galvanized with zinc. Both steel bar and cap were ridged to allow for water drainage (3). The eventual mid-20th Century manufacture of extruded aluminum framing supports with internal guttering systems ameliorated the persistent problem of leakage (4). In the 1950s, the development of neoprene gaskets that produced a watertight seamless joint, along with the invention of synthetic caulking, eliminated the need for lead putty altogether.

Glass manufacture

Improvements in the manufacture of glass also enabled skylights to span greater distances. From the late 17th Century, plate glass, developed from the need for perfectly parallel surfaces, was produced by casting. This type of glass was available in the U.S. after 1830. (Plate, as well as other types of window glass, was largely imported in this country throughout the 19th Century, although production of American-made glass steadily increased after 1850.) In the first decade of the 20th Century, the process of making flat sheets of glass, without blowing or flattening characteristic of cylinder or crown

borah Dietsch is a free-
lance writer and architect
who is based in New York.

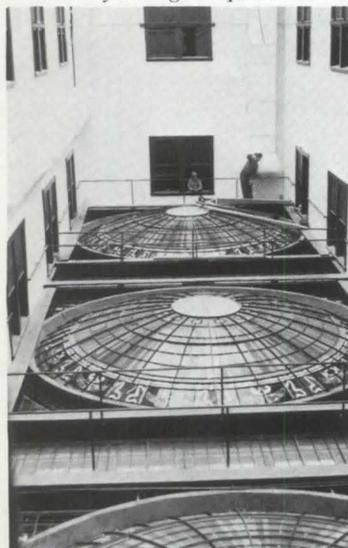
Skylights



5 Early versions of safety glass.



6 "Ondoyant" glass patterns.



7 Pennsylvania RR Station, Baltimore.

glass, was invented in Belgium. Subsequent manufacturing methods, developed by Libbey-Owens and Pittsburgh Plate Glass Co., improved this flat drawing process by streamlining extrusion methods.

First introduced as "armoured glass" in 1855, safety glass was made by insertion of wire mesh into molten, rolled glass. Chicken wire was originally used in its early manufacture, but later abandoned at the turn of the century for finer, electrically welded netting, because of the internal breakage caused by the coefficient of expansion difference between wire and glass. Wire glass was produced in many versions, including wavy or "lenticular," ribbed, and patterned (5).

Decorative glass manufacture was also improved by the late 19th Century. A process of extruding figured and cathedral glass between two rollers resulted in various degrees of transparency and texture by varying the surfaces of the rollers. Many late 19th- and early 20th-Century skylights, gracing the interiors of mansions and statehouses alike, were composed of leaded lights of Tiffany-style opaque, opalescent, rolled cathedral, and etched colored glass. This stained glass derived its colors from metal oxides added while in its molten state: cobalt and copper for blue, manganese and copper for red, chrome and nickel for green, and carbon and sulphur for yellow. Also characteristic of ornamental skylights from the turn of the century was pressed patterned glass, generically referred to as "ondoyant," which was also produced in wire glass versions (6). Still another skylight invention, patented in 1856, was the setting of small glass prisms into perforated iron plates, placed on sidewalks and floors to illuminate rooms below.

With increasing sophistication of electrical and mechanical systems at the turn of the century, skylights were often installed more as decorative ceilings than as sources of light or ventilation. During the early 20th Century, the availability of inexpensive fuels, coupled with advances in engineering and manufacturing, led to the dominance of complete environmental control systems. As these systems were increasingly relied upon to supply electric lighting, heating, and cooling, the use of skylights decreased considerably after 1920.

Skylights characteristic of turn-of-the-century American Beaux-Arts public buildings were composed of two parts. A roof skylight, referred to as a "monitor" when transmitting light from its sides (from the 19th-Century monitor shed roof) or "penthouse" (a 20th-Century term to indicate a large attic space), was usually composed of clear or translucent wire glass set into lead-covered steel frames. Placed below a roof skylight were laylights, interior skylights composed of leaded, stained, or patterned glass set into panels. An interior skylight called a diffuser was provided to filter the bright sunlight and to prevent glare, as the size of roof skylights increased. Historic skylights were also energy-efficient systems, incorporating air spaces between the diffuser and the plenum to allow for flow of air from the room and to prevent buildup of condensation under the roof.

Restoration objectives

As part of an overall objective for preserving a historic structure, skylight restoration requires careful evaluation of extant documentation, functional requirements, and budgetary considerations. The removal or obstruction of a skylight may mean not only loss of a building's natural illumination, but also diminishment of its architectural integrity. The pursuit of authenticity in replacing a skylight should be weighed against functional requirements. As an actual light source, the level of illumination compatible with the current use of the room should be provided. If a skylight is to serve as a purely decorative artifact, availability of original or sympathetic materials, to simulate its original appearance, should be determined.

Historical replication versus functional replacement as a preservation approach is illustrated by the proposals for the restoration of skylights in the Tweed Courthouse in New York and in the New York State Capitol in Albany. Designed by John Kellum in 1872, the Tweed Courthouse originally featured painted and etched glass diffuser over the main rotunda, which, as part of the daylighting system for the building, also supplied light to the glass block skylights in the balcony floors. The skylight was demolished, but the plan for the reconstruction of its surviving panels was designed by architect Frank S. Schuch of the New York City Landmarks Preservation Commission. Recreation of the pattern of glass panels was accomplished through calculation and comparison of the surviving fragments to the diffuser's existing frame. Evidence of the positioning of lead came that held the glass in place also aided in the design of their reconstruction. Dependent on replication of new panels to match the original glass, the proposed restoration of the diffuser would reinstate the quality of light that defined the rotunda.

In contrast, the restoration proposed by the Ehrenkrantz Group for the skylights in the New York State Capitol (see p. 118), calls for replacement with new glass and frames. The skylights, which originally provided illumination for the lavishly carved Great Western Senate, and Assembly staircases, were blocked out, removed, or covered in the 1940s. While some documentation exists, the architects feel that what is more important is the preservation of the Capitol is their replacement as natural light sources for the staircases, which serve as major orientation points within the building. Architect Theodore Prudon explains that while "the existing skylights will be conserved and period examples studied, the most important consideration is the restoration of the character of the space itself."

Conservation methods

Once an overall approach to restoring a skylighting system has been formulated, actual cleaning and repairing techniques must

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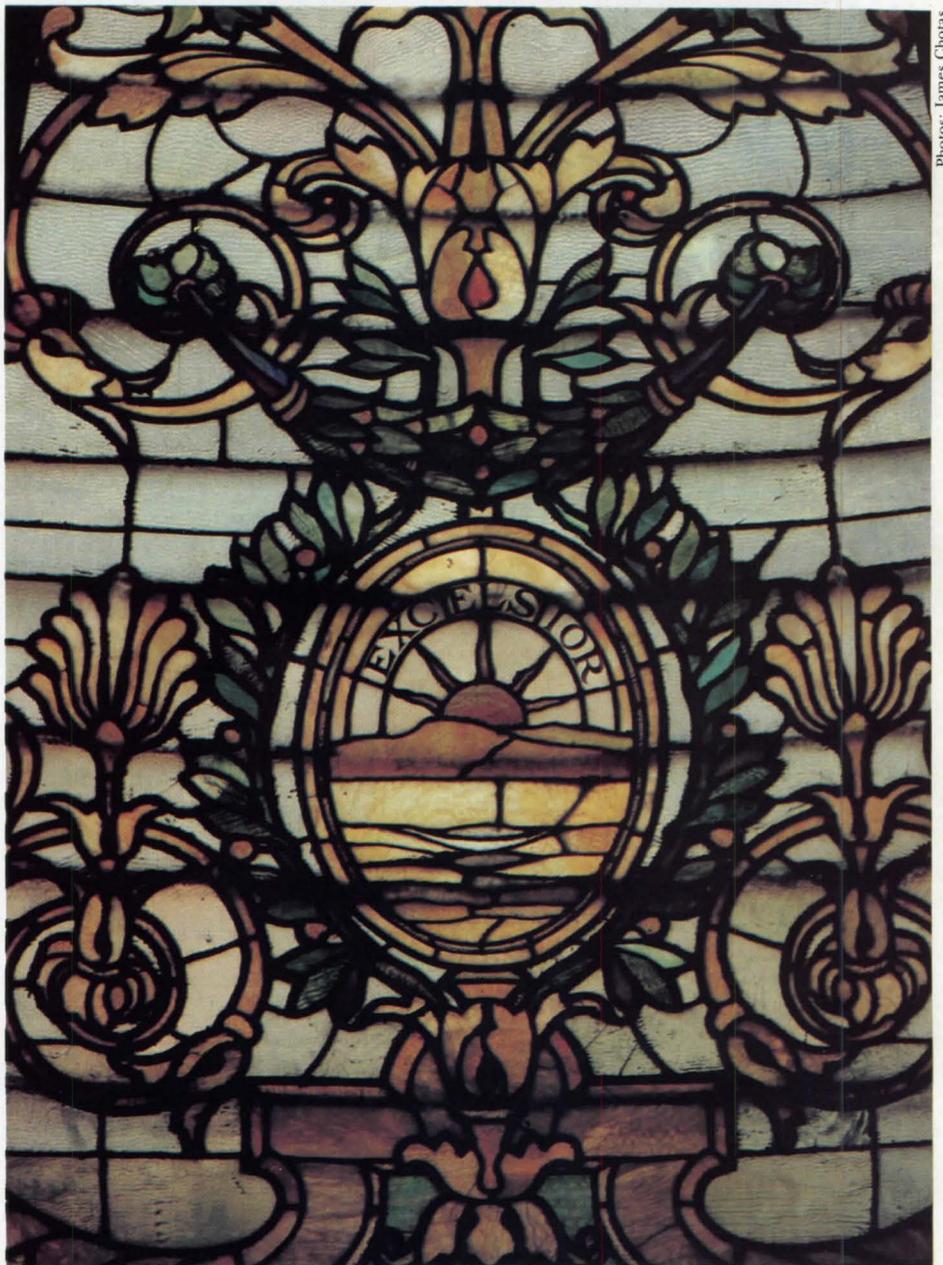


8 Appellate Division, New York State Supreme Court.

...e determined. One of the most commonly encountered problems is how to uncover skylights coated with an accumulation of lime, putty, asphalt, tar, or paint. While the blocked glass of a roof skylight can generally be replaced without loss of historical integrity or valuable materials, the cleaning of an intricately patterned skylight demands more conservative measures, since its appearance is important to the definition of an interior.

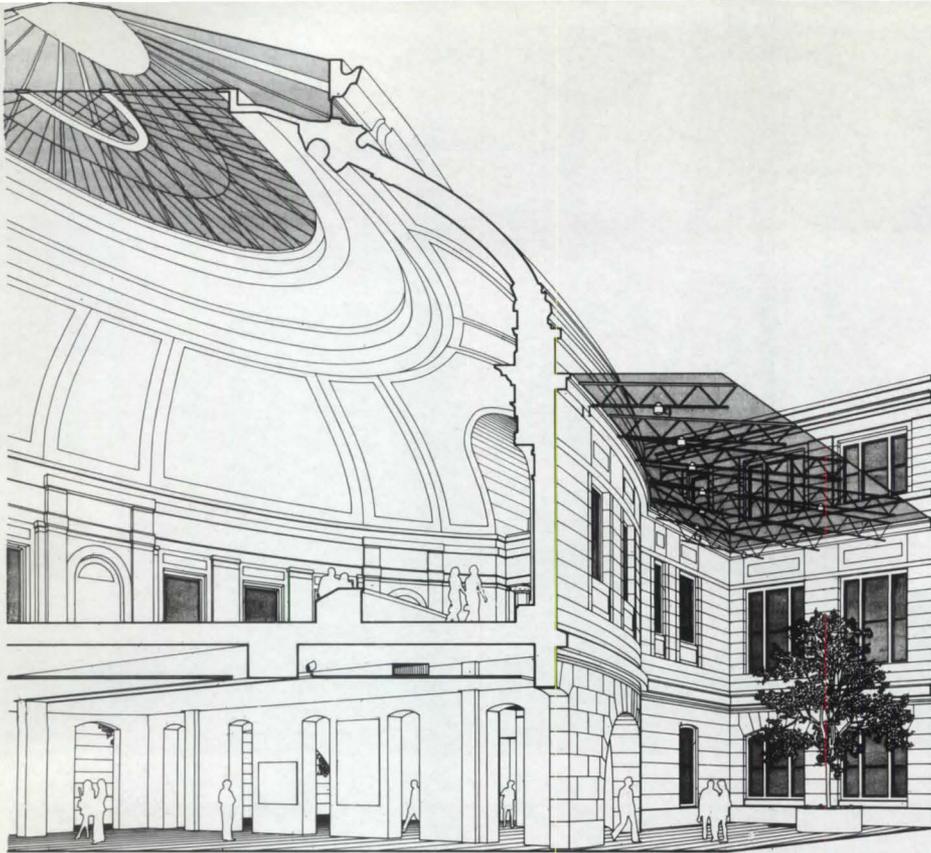
In preserving the monitor above the dome of the 1904 headquarters of a Baltimore investment banking firm, The Rambusch Company, a crafts and lighting firm that specializes in stained glass restoration, replaced leaded-over glass with Lexan plastic. However, restoration of several other stained glass domes required more stringent methods. The three 24-ft domed skylights, positioned 10 ft below the skylit interior courtyard of Baltimore's Pennsylvania Railroad Station's concourse, had been painted and covered with debris (7). Removed in over 200 sections, the leaded glass panels were soaked in a mild solution to remove the paint and surface grime from the glass and corrosion from the lead came. The opalescent and cathedral glass in the dome of the Appellate Division of the New York State Supreme Court, a beaux-Arts structure designed by James Brown Lord in 1900, was similarly removed for cleaning and repair. Buckling of the leaded glass panels was corrected by reinforcement with additional saddle bars, attached by copper wires to provide bracing and support (8, 9).

In recommending cleaning methods for leaded glass, Rambusch president Viggo Tech Rambusch advises using a mild (1–5 percent) solution of ammonia and water, applied with soft-bristle brushes, rinsed with clean water, and polished with a soft cloth. He adds that “certain solutions (such as tannic, hydrochloric, hydrofluoric, acetic, formic, and nitric acids) cause some chemical damage to lead came.” Rambusch stained glass



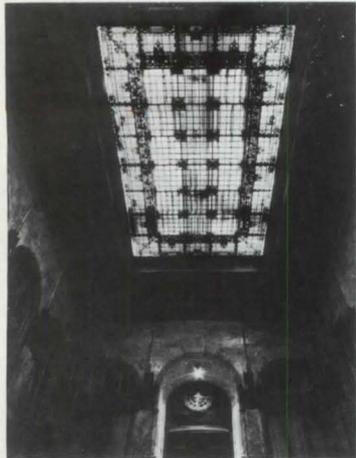
9 Appellate Court, glass panel.

Photos: James Chotas



10 U.S. Custom House, New York.

James Stewart Polshek & Associates



11 Woolworth Building, New York.

James Chotas



12 South Dakota Senate Chamber, new reflective ceiling.

The Rambusch Co.



13 South Dakota Senate Chamber, backlit skylight.

The Rambusch Co.

restorer Michael Love states categorically that “acids should never be used to clean stained glass,” and that “as a precaution, samples should be tested first with any cleaning solution, starting with the mildest cleaning agent.” Strong basic solutions such as caustic soda (lye) can also be harmful to metal framing and glass if their application is not closely supervised.

Replacing original glass to restore the decorative integrity of a stained glass or patterned laylight could prove difficult because of the unavailability of certain 19th-Century glass types. Historic glass may be supplied from stained glass studios or suppliers who maintain “libraries” of old glass. Glass that is used to replace a roof skylight, while less critical to the appearance of a historic interior, must be chosen with an eye both to controlling the quality and amount of light to be emitted and to factors of safety. Most building codes still require that skylights use wired glass, although the Building Officials and Code Administrators (BOCA) recognize use of laminated glass—which, along with plastics, is often used to replace wire glass, because of its translucency, strength, and insulating properties. Architect Jared Edwards, a partner in the firm Smith/Edwards, which is now restoring the skylights of the Wadsworth Athenaeum in Hartford, Ct, prefers tempered glass over laminated glass and plastic since “plastic will yellow, scratch, and deform with age. Glass also has reflective qualities—a certain sparkle—not found in plastics.” One drawback to using tempered glass is that it can break spontaneously because of its nickel sulfide content, which causes internal stresses to build up under extreme temperatures.

Lighting design

While skylights can be restored to emit natural light, this alone may not be sufficient

to provide an adequate source of illumination for the building’s current use. Furthermore, it may not be even historically accurate. Skylights of the late 19th and early 20th Centuries were designed as part of lighting systems that incorporated sources of artificial illumination, installed to augment the skylight when sunlight was unavailable—at night or during inclement weather—and to highlight the skylight itself. One of the skylights over a staircase in the New York State Capitol, for instance, included incandescent bulbs as part of the original design. Other turn-of-the-century buildings, such as Pittsburgh’s Union Station and the U.S. Custom House, NY, also incorporated incandescent lamps encircling their skylight domes (10).

Electric lighting was also inserted in the plenum below a roof skylight to backlight the laylight—an approach used in restoration projects when a source of natural light is no longer possible or a higher level of illumination is required. During the construction of the Woolworth Building, for example, several floors were inserted above the lobby, requiring the skylight over the grand staircase to be artificially backlit (11). Restoration by the Rambusch Company included cleaning and repair of its 24’ x 40’ stained glass surface, as well as a new program for its lighting. A similar environment was provided for the South Dakota State Capitol’s Senate Chamber skylight, originally installed in 1910 (12, 13).

In both cases, the plenum between the laylight and the floor above was covered with a highly-reflective paint and supplied with new fixtures. “We used a mixture of high-pressure sodium and metal halide lamps,” explains Rambusch, “because of their long life and color veracity.” Mock-ups were used to study how certain fixtures and their light intensity would affect each space. Simulating daylight by means of artificial lighting requires consideration about the balance of light. First, shadows from the roof skylight or ductwork in the plenum should not be cast on the glass of the laylight below, thus requiring an evenly coated reflective surface from which the light will bounce. The mix of lamps should generate a color temperature to approximate the appearance of daylight, and highlights on the glass should be provided by spotlighting. “A good skylight,” concludes Viggo Rambusch, “should have some sparkle and halation.” It should be kept in mind, however, that artificial backlighting will never produce the gradual shift in light intensity that is characteristic of a naturally lit skylight. Insertion of heat-producing lamps must also be accompanied by adequate ventilation.

Energy efficiency

In addition to the benefits of low-cost illumination, skylights offer other advantages of energy efficiency: passive solar heat gain in winter, supplementing fuel-consuming heating systems, and reduction of lighting heat loads on cooling systems in the summer. But as with other windows, the environmental problems associated with them include exfiltration, radiant heat gain, and conductive

at loss. These considerations are especially critical in a building such as a museum, where environmental conditions must be closely regulated and may require the use of reflective and insulated glass skylights (14, 15). For insulated units, Joseph Stein of EPI Architectural Systems recommends use of a ¼-in. clear or tinted heat-strengthened or tempered glass on the outside with a ½-in. air space and an inner light of laminated glass.

Although voluntary standards, such as the Architectural Aluminum Manufacturers Association's method for calculating a skylight's annual energy balance of heat gain and loss, can be used for an older building with skylights, determination of actual energy-saving benefits may prove impossible because of construction and complicated interior layout. Nevertheless, some restoration efforts have capitalized on the use of skylights to provide passive solar heat gain. Such a project at the Philadelphia Bourse, an 1895 stock exchange rehabilitated into a shopping mall and office building by H2L2 Architects. The skylight over the building's atrium was raised from the third to the tenth floor, creating a much larger interior space (16, 17). While this "buffer zone" may have clear advantages in terms of energy savings (P/A, July 1982), repositioning of the skylight at the top of the building not only required extensive structural bracing, but more fundamentally, changed the architectural character of the space below. As a result, a high level of glare, incompatible with the building's original provision of diffuse light, is produced from sunlight directly striking the skylight at the top of the atrium and reflecting off the new curtainwall above the third floor.

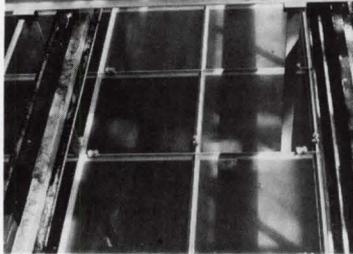
For such reasons, skylights in a building of similar type, Union Station in Pittsburgh, will be maintained in their original configurations. Restoration of the Beaux-Arts station's complex of train sheds, cab stand, and office tower, designed by Daniel Burnham 1900-1902, will begin next year under the supervision of the Ehrenkrantz Group (18). Preservation of the skylights requires replacing missing glass in its steel-framed mullion and cleaning the etched and ondoyant mass of the laylight over the main waiting room, now covered by a suspended ceiling. Theodore Prudon points out that buildings designed for "sunlight and air" from the early 19th Century, such as Union Station's office tower and the Woolworth Building, "were originally designed with extremely logical systems of daylighting. The courtyard of the Woolworth Building, for example, was clad in lighter color terra cotta to reflect sunlight into its surrounding offices."

As logical systems providing light, air, and pleasing decorations, and as contributors to the spatial articulation of a building, skylights are not simple architectural elements to restore. Understanding their formal and functional roles within the broader scope of preservation is essential to ensuring the design integrity of a historic structure. By successfully combining these factors, skylight restoration can mean a bright future for many of this country's older public buildings. □



14 Brooklyn Museum, skylight exterior.

Deborah Dietsch



15 Brooklyn Museum, renovated laylight.

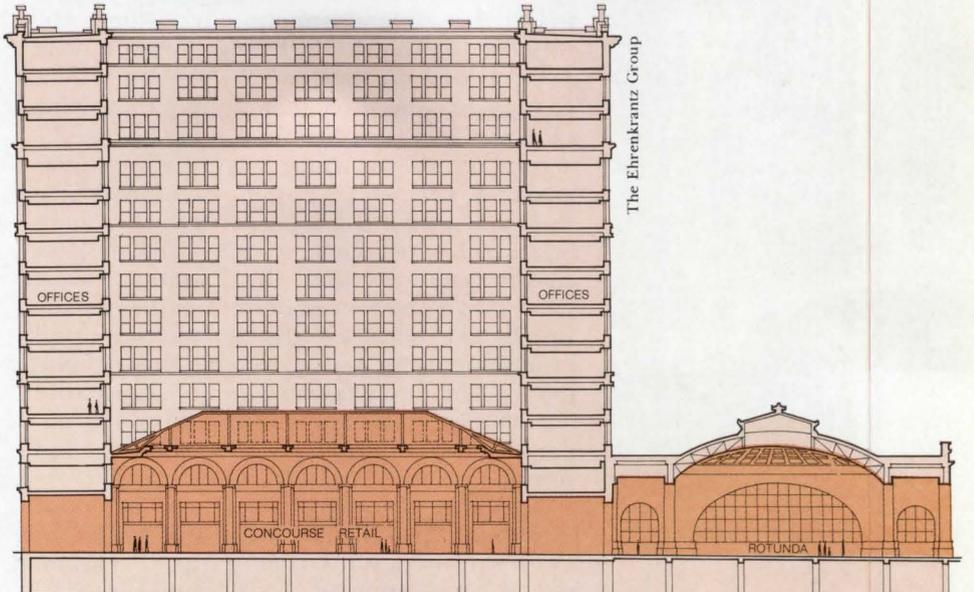


Theodore Prudon



Theodore Prudon

16 Bourse, Philadelphia, exterior. 17 Bourse, Philadelphia, interior.



18 Union Station, Pittsburgh.

Cold calculations

The arctic's extremes require a rethinking of design issues. This holds true especially for the relationship of a building to its site, the continuity of thermal and moisture protection, and the effect of design on human behavior.

The Alyeska Permanent Housing by CCC architects and planners (right) employs several design features common to the arctic, including raised pile foundations, beveled edges, colored metal skins, entry vestibules, and shallow roofs with no eaves.

We learn from extremes, if only to better understand moderation. While few architects will ever build in the arctic, the problems encountered there—infiltration, condensation, construction delays—occur in more moderate climates as well. The arctic merely exaggerates their severity.

Unfortunately, we have only begun to deal with the problems of arctic construction. As one Fairbanks architect put it, "We're at the lower end of the learning curve." Apart from the research going on at facilities such as the Army Corps of Engineers Cold Regions Research and Engineering Laboratory (CRREL) in Hanover, NH, much of what we know comes from the painful experience of watching buildings sink into the permafrost, insulation freeze in a wall, or snow drift over an entrance. That experience deserves the attention not just of architects who work in the arctic, but of anyone who has questioned the value of contextual design, for we neglect the arctic's physical or social context at our own peril.

The arctic winters last from seven to ten months, with frozen permafrost as deep as 1000 feet, sparse tundra vegetation with only occasional shrubs, low solar angles with some areas in darkness for two months, constant winds often from a E-NE direction, and average snow depths of 4 to 5 ft. Those conditions vary, however, depending upon a site's location and latitude. Settlements near the ocean often have warmer winters (-20 to -30F) and cooler summers (40 to 50F) with stronger winds than inland communities, where the winters can reach -60F and the summers 100F. In the northern arctic, the continuous permafrost might have an annual thaw zone of a few feet deep, while Fairbanks, on the arctic's southern fringe, has discontinuous areas of permafrost, often along northern slopes. Similar differences occur in sky conditions. The northern coasts usually have cloudy summers and clear winters, while Fairbanks experiences dense ice fogs in the winter because of air inversions exacerbated by automobile and wind-blown industrial pollution. The design process in the arctic, as in any climate, must begin with a thorough understanding of local weather and ground conditions.

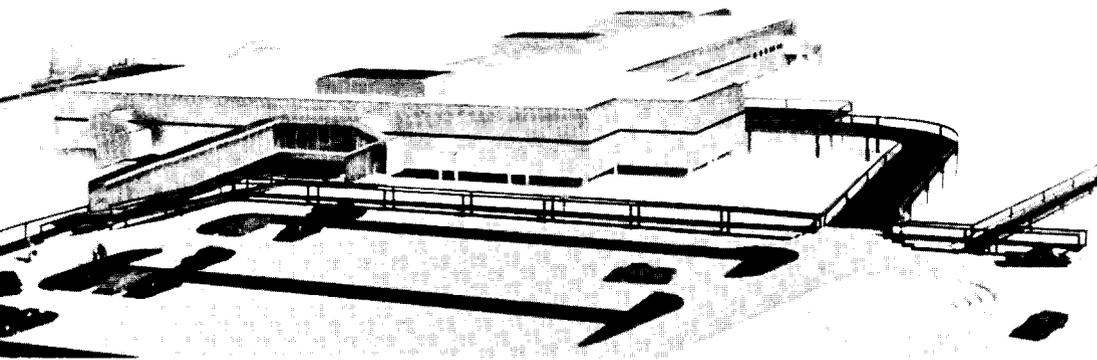
An understanding of social and economic conditions also helps. With the influx of southern immigrants over the past century, the Eskimo's nomadic, communal society, based upon a barter system, has largely dis-



Steve G

appeared as the desire for permanent dwellings, consumer goods, and a cash economy has grown. That contrast is no more evident than in the Eskimo's housing. Cold arctic dwellings, often poorly constructed frame dwellings mimicking the suburban house, have replaced a building tradition well suited to the arctic environment.

The indigenous architecture ranged from the ice block igloos of northern Canada to the sod-covered timber structures of northern Alaska. Most igloos faced into the wind to prevent snow drifts from blocking entrance



CRS's Bethel Hospital (left) unites arctic design strategies with high-tech imagery. The rounded, streamlined forms reduce drifting, the entrance tunnels reduce snow and wind infiltration, and the slit windows reduce glare.

Moshe Safdie's housing prototype for Frobisher Bay, NWT (below), has a partially heated first floor which traps warm air above as in an igloo. The second-floor living room, with its symbolic translucent dome, has service and sleeping areas opening off of it, again like an igloo.

William R. Campbell

drifting was further reduced by the structures' domed configuration, which minimized surface area, eased construction, and increased air movement. The long entrance tunnels, used for the storage of outerwear and perishable goods, had their vaulted roofs below the igloo's floor level to prevent drafts and to trap warm air inside. Sod or packed snow provided insulation, while oil lamps provided sufficient heat. Animal skins, which lined the floors and walls, produced a soft, colorful interior as a necessary contrast to the arctic's visual monotony.

If the materials and construction of the Eskimo's architecture hold little that is useful to modern needs, the design principles behind that architecture hold a great deal, for they force a reexamination of forms and details generated in more temperate climates. As Colin Bent, a Toronto architect, said, "The exciting thing about the arctic is that the rules haven't been written. We can rethink architectural problems without the usual baggage."

Community planning

Physically, arctic communities fall generally into two types. The complexes built by companies for their workers usually consist of dormitory-like rooms around central community and recreational spaces within a large, self-sufficient megastructure. In contrast, the native and immigrant communities usually contain a scattering of conventionally-framed single-family houses which, although expressive of the inhabitants' independence, are expensive to build, heat, and service.

The major planning issue in the arctic lies in achieving the efficiency of the megastructure without negating the independence associated with the detached house. Moshe Safdie addressed that issue in his unbuilt scheme for housing in Frobisher Bay, Northwest Territories (NWT), by grouping structurally dependent two-story hexagonal units into tight clusters. While individual units retain a visual identity, their clustering saves on utility connections and shortens distances to community facilities.

Another effort to combine attached and detached housing arose in Ralph Erskine's plan for Resolute Bay, NWT. The community and commercial facilities stand at the head of two curved apartment blocks which turn their back to the prevailing winds and open out to the south, embracing detached housing within their arms. Erskine conducted

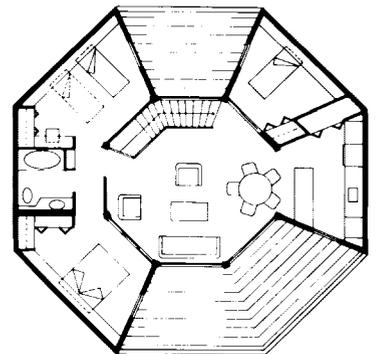
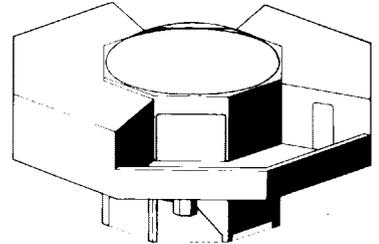
snow drift studies of the project to prevent unwanted drifting and to insure adequate wind scouring of the roads and outdoor recreational areas.

Snow drifting

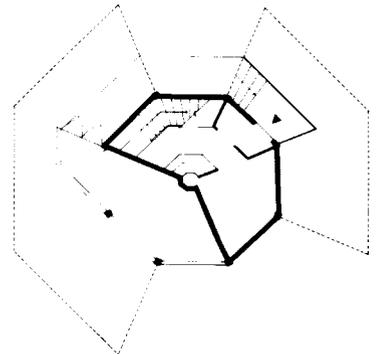
The arctic's constant winds and fine snow make drifting a major problem. It usually occurs on both the windward and leeward sides of an obstruction, be it a hill, a snow fence, or a building projection. It can work to an architect's advantage, as in Wainwright, Ak, where CSM architects and MHTR engineers have proposed the construction of 10-ft and 15-ft-high snow fences several hundred feet to the windward side of town to alleviate the drifting problems around buildings. The fences should cut the 12- to 15-ft-high drifts in half.

Drifting around a building is a problem mainly on the roof, where drifts behind a projection such as a clerestory can greatly increase snow loads; and at entrances, where drifts behind a wall projection can completely block a means of egress. To prevent that, a building's form should be compact and streamlined. Entrances should be on elevations perpendicular to the prevailing winds or on a windward elevation if protected by a vestibule. At the recently completed hospital in Bethel, Ak, by Caudill, Rowlett & Scott, the building's smooth, rounded skin reduces drifting, while the entrances, not unlike those in an igloo, have long sloping drift tunnels to keep out snow and drafts and to trap warm air.

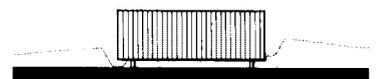
The BP/Sohio complex at Prudhoe Bay, Ak, shows how much a building's form can affect drifting. Its architects, Wallace Floyd Associates, Inc., conducted a series of snow tests with the idea of keeping drifts as far away from the building as possible. They found that by elevating the building 7 ft, maintaining a rectangular form perpendicular to the prevailing winds, and rounding especially the bottom edge of the building, they could induce a strong enough Venturi effect under the structure to keep drifts 20 ft away, clearing an adjacent service road. The raising of buildings on piles and the rounding of their edges has become a ubiquitous design feature in the arctic.



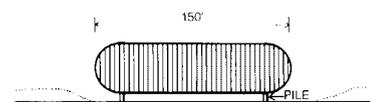
UPPER LEVEL



LOWER LEVEL



RECTANGULAR-SECTION



SECTION (LEADING EDGE ROUNDED TO HALF CYLINDER)

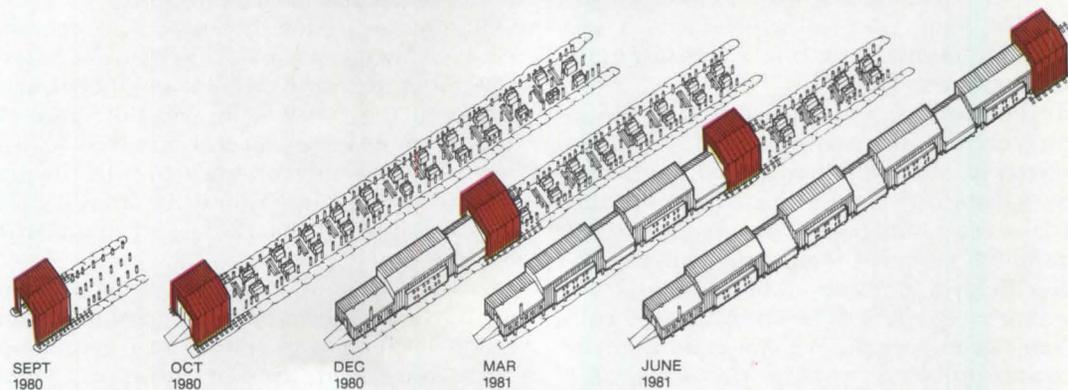
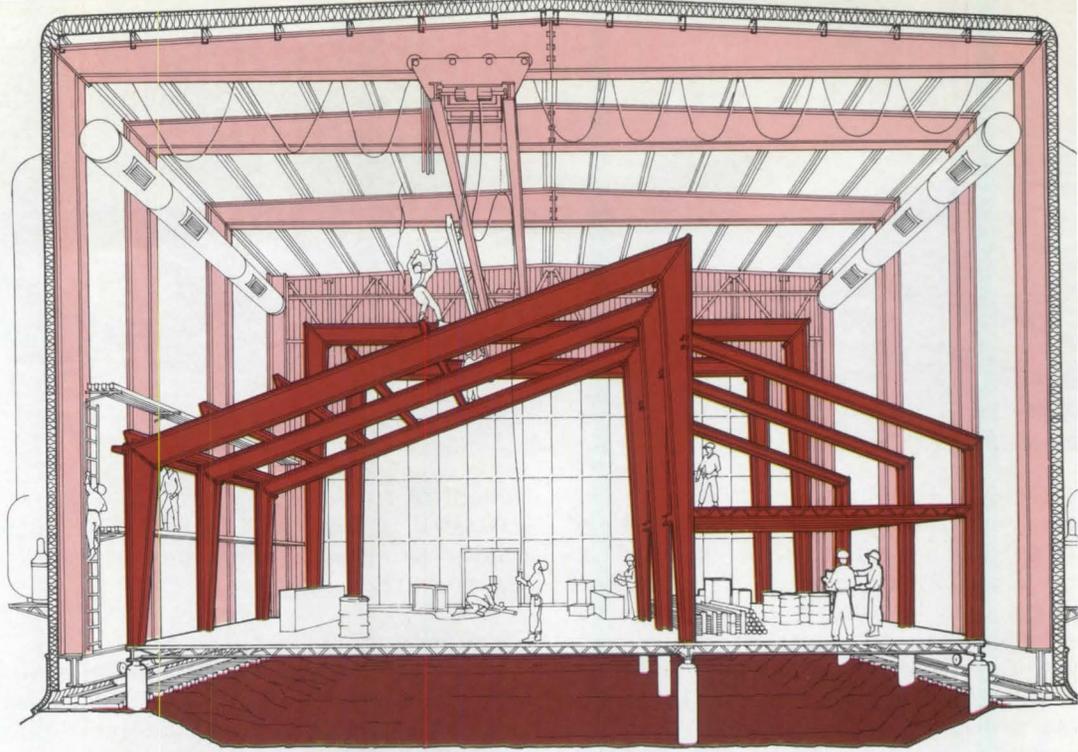


FINAL BUILDING FORM

Schematic sections of the BP/Sohio project at Prudhoe Bay, AK.

Design for cold climates

Colin Bent's *Polaris Mine Housing* (right) was to have its pre-engineered sections erected within the mobile rail-mounted enclosure that eventually became the gym. The three-story sections contain housing, interspersed with two-story community and recreational functions.



Construction methods

The choice of a construction method in the arctic depends upon the remoteness of the site, the availability of local labor, and the project's schedule and budget. Factory-built modules have the advantage of good quality control and rapid on-site completion, although they can be expensive to build because of their necessary structural rigidity, and expensive to ship because of their high volume-to-weight ratio. Arco's Prudhoe Bay Operations Center by CCC/HOK Architects and Anderson, Bjornstad, Kane, Jacobs, structural engineers, consists of a series of long, two-story modules that were fabricated in Seattle, sea-lifted through 65 mph winds, and hauled by a transport crawler to the building site. The modules' rigidity came from longitudinal steel trusses and transverse rigid frames in the walls, acting in conjunction with concrete and steel deck floors. The engineers used computers in analyzing the modules to insure that, in addition to the normal seismic and wind forces, the units could withstand the listing at sea (50% greater than the seismic load) and the racking forces of the crawler. Despite all of that, the architects claim "a minimum 30% saving over conventional stick-built construction."

Stick-built construction, nevertheless, remains popular, especially in publicly funded projects, because it can employ semiskilled native labor and has lower shipping costs.

The drawbacks are in quality control and with wood construction, in shrinkage due to the arctic's low humidity. Wallace Floyd Associates, Inc., switched from wood sheathing and framing to steel studs with polyurethane steel-faced sandwich panels in their arctic projects when, in the words of principal Peter Floyd, "measures to control the moisture content of the wood, especially during the construction phase when high humidity ambient conditions were expensive to control, proved too onerous."

Pre-engineered, panelized buildings offer a middle ground. They allow rapid on-site enclosure without the high shipping costs of modules, and they can use local labor without the quality control problems of stick-built construction. Colin Bent, at the Polaris Mine Housing on Little Cornwallis Island, NWT, devised the ingenious method of mounting the facility on wheels and moving it along rails as an all-weather enclosure for the crews erecting in increments, the pre-engineered housing. The Polaris project still required such cold climate techniques as heated tents for curing concrete and electrified gloves for people

working outside. Given those precautions, it comes as no surprise that arctic construction ranges from 2 to 4 times the cost of building in temperate climates, with \$300 to \$400 per sq ft not uncommon.

Foundations

An arctic building must preserve the thermal regime of the permafrost beneath it. Heat, either from the building or from solar radiation, once the protective layer of tundra has been removed, can turn the ice-laden soil into quagmire, eventually undermining the structure's foundations. For that reason, most arctic buildings are elevated on piles, with insulated floors, an open crawl space, and a protective gravel pad over the permafrost.

The most common pile setting involves augering a hole, backfilling around the pile with a water-sand slurry, and allowing that to freeze solid. Another method involves thawing the permafrost with steam jets to allow the driving of steel piles. Preventing the pile from acting as a thermal bridge necessitates choosing a nonconductive material such as wood, providing a thermal break at the pile cap, or installing heat extraction devices within the piles to keep them refrigerated.

The heaving of piles occurs as the permafrost's active layer freezes and thaws, gripping the piles as it moves. Ways of preventing this include connecting an anchor plate to the pile below the active zone, coating the pile with a thick oil/wax mixture, wrapping the pile with a steel or plastic sleeve, or backfilling with a freeze-resistant material. Nevertheless, many pile foundations will creep due to soil deformation. Pile caps that allow periodic jacking and shimming of the building can minimize that problem.

For buildings carrying heavy floor loads, a ventilated pad foundation is often used. Beneath a building's insulated floor, a thick gravel pad will contain open-ended pipes or

culverts for cold air circulation. The system has several vulnerable features, however. The ventilation pipes, if too small, can become clogged with debris; their intakes and outlets can become covered with snow drifts if not adequately elevated; or the cold air can become stagnant if the pipe is too long, requiring expensive mechanical ventilation.

In the arctic, even a bedrock foundation presents problems. Arctic bedrock often contains embedded ice which, if allowed to melt, will cause severe settlement. In Nanasivik, NWT, the melting of bedrock ice under the new community center required mining under the building and installing structural supports within the ice cavity.

Building envelope

The building envelope must serve as an extremely efficient environmental filter. For example, condensation in a wall or roof, which usually has enough drying time in a temperate climate, will progressively wet a substrate over a few seasons because of the arctic's short summers, ruining the insulation and occasionally creating enough ice pressure to rip apart the building's skin.

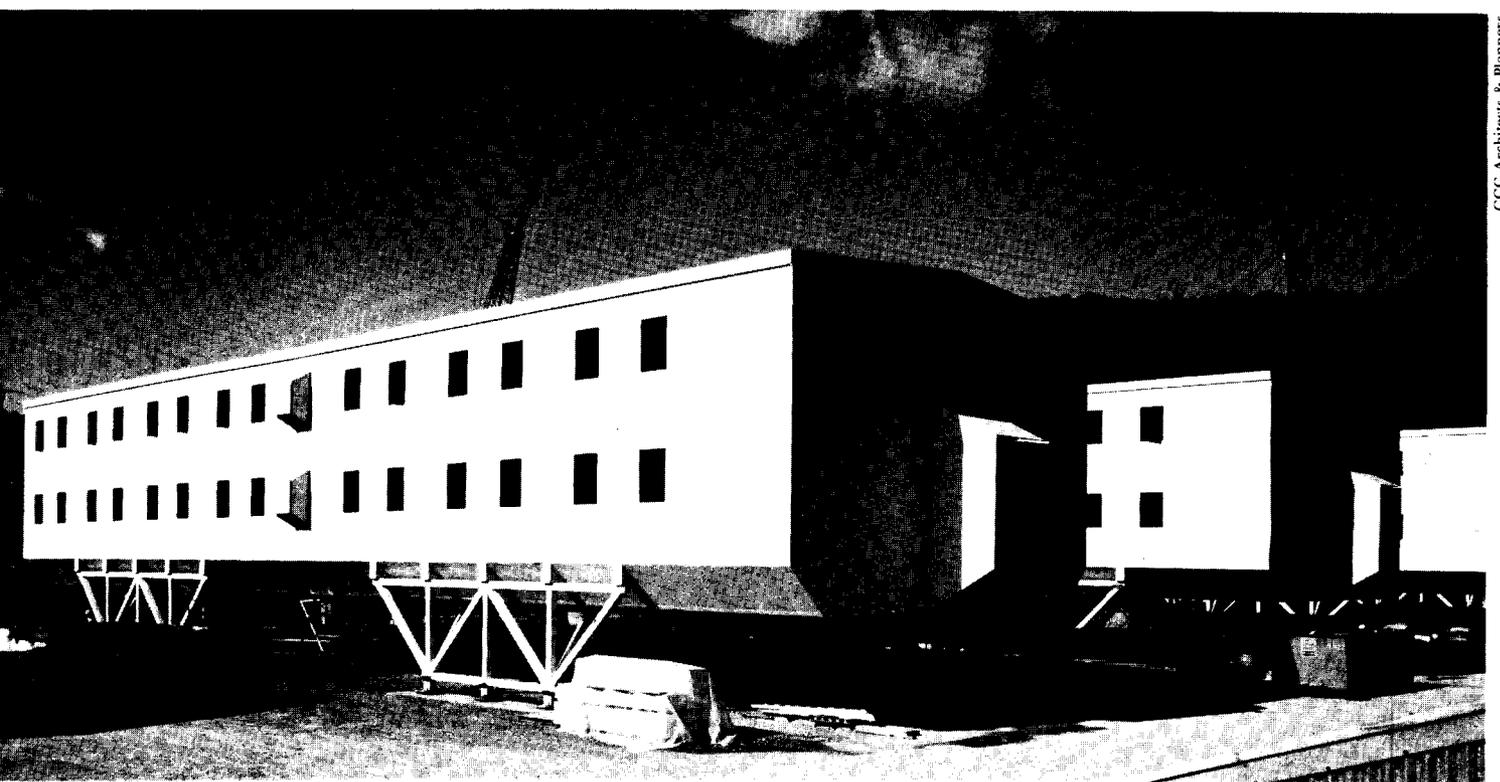
Maintaining the integrity of the vapor retarder requires holding it back a few inches from the interior wall surface to minimize the penetrations of electrical systems or the damage of fasteners. In the Polaris project, the vapor retarder runs 3 in. behind the interior metal liner panels, protected by pads as it passes over structural connections.

While some architects prefer foil as a vapor retarder because of its durability under windy conditions, and others prefer six-mil polyethylene because of its fewer seams, all recommend a thorough inspection of the installed material to insure a tight vapor seal. The same should occur with the insulation. If the insulation does not completely fill all vertical cavities, the temperature differentials in

Arctic, Inc.



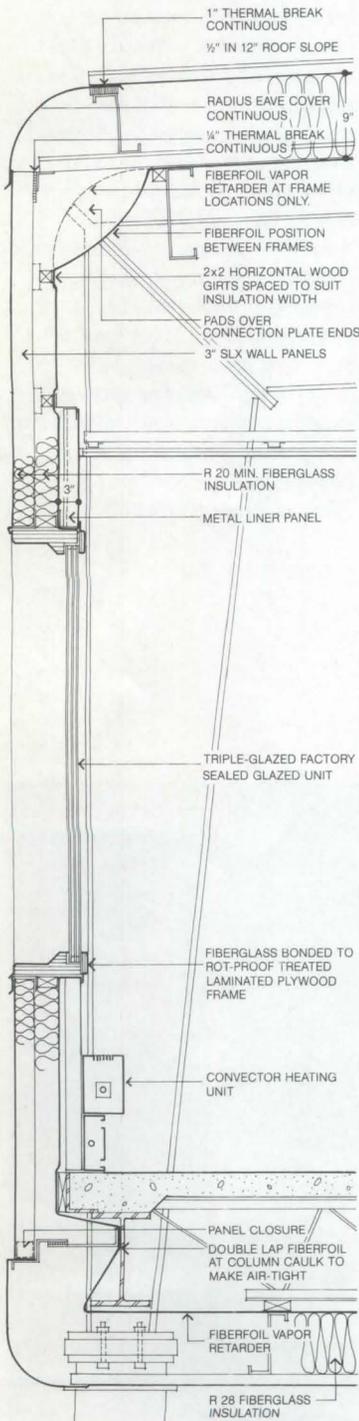
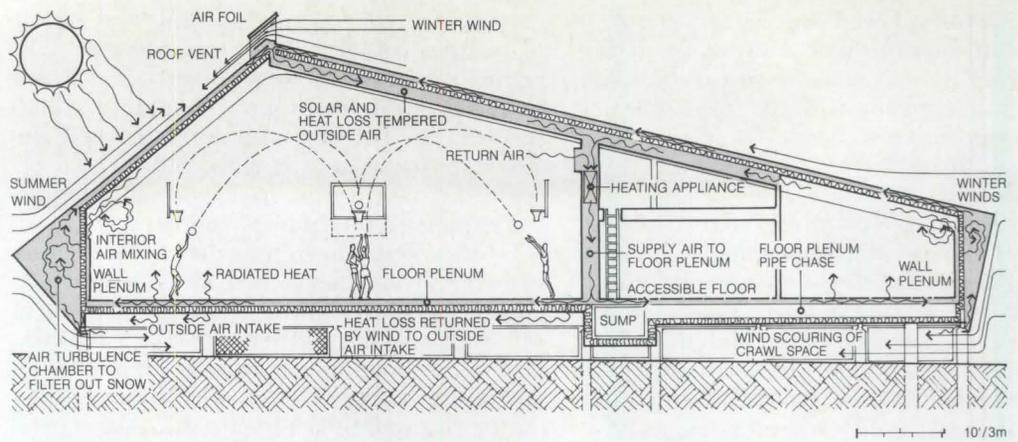
The air-supported structure for the Echo Bay Mines' Lupin Gold Project in Contwoyto Lake, NWT (above), provided a year-round construction enclosure. Ideal for construction purposes, air-supported structures or geodesic domes, when used as permanent climate-controlled enclosures in the arctic, can degrade the permafrost. The prefabricated modules for the Arco Operations Center at Prudhoe Bay by CCC/HOK and Anderson-Bjornstad-Kane-Jacobs, Inc. (below) have steel sponson supports attached to the superstructure, which was designed as a horizontal beam for flexural rigidity. The sponson supports minimize air turbulence and piling connections. The hoods over the doors and exhaust vents reduce infiltration.



CCC Architects & Planners

Design for cold climates

The wood-framed *Kuchpu Secondary School* by CSM architects and planners (right) draws outside air through angled fascia panels, which filter out the snow. The cold air moves under the metal roof, picking up heat from the sun and the building, before entering a heating unit and passing into a floor plenum, where it warms the plumbing prior to its exhaust into the rooms. A ridge air foil keeps the roof free of snow.



This wall section at the *Polaris Mine Housing* (above) shows the foil vapor retarder threading through the structure.

the arctic can create convective currents that will greatly reduce the insulation's effectiveness.

Packing insulation tight against the roof surface only works in the arctic if the site provides enough wind scouring to keep the roof free of snow. Otherwise, thermally isolating the insulated envelope and the exterior membrane is the safer course to insure against icing. Problems with cold roofs in the arctic occur at their vents, easily clogged with snow, and at the inside surface of the roof, where condensation often occurs. Solutions to those problems include deep soffit vents with narrow intakes to prevent clogging, and secondary roofs over the insulation to shed condensate.

For flat roofs, many architects advocate an inverted membrane system. The single-ply membrane can be installed easily, while the rigid insulation and ballast above protect it from thermal extremes. The common solutions to the splitting of roof membranes, such as substrate vents or frequent expansion joints, address the wrong problems in the arctic. The research of Wayne Tobiasson and others at CRREL shows that most roof failures in extremely cold climates occur not from excessive moisture or thermal movement, but from a combination of poor substrate adhesion and the deflection and settlement of the structure itself. If nothing else, that research shows how much of the arctic learning curve lies ahead.

Utilities

Most arctic settlements face high utility costs with a rudimentary and often unreliable utility infrastructure. This requires that separate water and power sources be installed for larger scale projects. Utilities inside buildings usually run through heated, insulated chases under access floors or in interior walls, with heat tapes tracing the most crucial lines. On the exterior of buildings, because of the permafrost, utilities run above ground in insulated tubes called arctic pipes, or in larger insulated chases called utilidors. Flexible pipe connections at the building accommodate differential movement.

Despite the arctic's abundant snow, water remains a scarce commodity. Most lakes and

ivers are shallow and, under their ice covering, brackish. That leaves most communities with the expensive alternatives of drilling deep wells below the permafrost, desalinating sea water, melting ice, or collecting run-off.

The same holds true for power sources. Despite the arctic's abundant oil, coal, and gas reserves, refined fuels remain expensive. Most buildings use heat exchangers, heat pumps, or exhaust filters to conserve as much of their heated air as possible. Passive solar techniques can add little heat, given the low solar angles and dark arctic winters, although the constant winds make wind generation promising. For the Kaktovick Community Center, CSM architects have proposed two kw interface wind generators to provide much of the building's electrical needs. With the town's average annual wind speed of 14 mph, the generator's initial cost of \$50,000 would be amortized in 6.7 years at current rates.

Waste disposal underscores the arctic's utility problems. Since few communities have a central water or waste treatment facility, most buildings discharge wastewater into nearby waterways and discharge solid waste into large "honey bags," which are trucked to remote landfills and buried during the summer thaw. Apart from the health hazards, those procedures greatly limit further arctic development. Both the U.S. and Canadian governments have set as a priority the construction of treatment facilities in the arctic over the next decade.

Interiors

Living in the arctic demands psychological well as physical stamina. A sense of isolation, disorientation, and lethargy plagues newcomers to the extreme climate, the vast distances, and the visual uniformity of the landscape. Buildings can play an important role in countering that response.

A brightly colored exterior can provide visual interest to the landscape. On the interior, planted atriums, accent colors on furniture and finishes, spatial variety, and glazing activity areas have all proven helpful antidotes to cabin fever. So have bedrooms with good sound insulation, where individual thermostats and movable furniture help create a sense of personal space. Dispersed activity areas with a variety of travel routes and small meeting places, also help to reduce the sense of isolation and confinement.



Colin Bent Architect

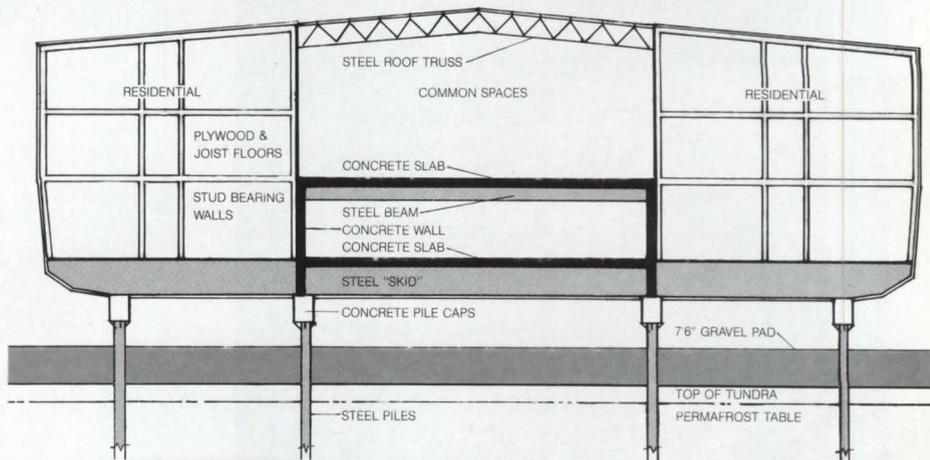
The size and location of windows greatly affect well-being. Large, south-facing windows allow the sun to counteract the sense of pervasive cold and unending winter. Placing the windows flush with the inside wall enables convective air currents to keep the surface generally frost-free, while a semireflective glass will reduce glare.

The size of a facility itself has psychological applications. Studies conducted by CRREL reinforce the theory of R.G. Baker and others that an undermanned community requires greater participation and responsibility from each individual and results in greater satisfaction. The research showed that smaller army facilities in the arctic contained a much higher percentage of contented people than larger installations.

Unfortunately, little research has occurred in building codes in the arctic. Alaska enforces the Uniform Building Code even though, in -50F, direct egress from a building can be as hazardous as any smoke, and the sprinkling of a building with water as damaging as any fire. Many arctic communities have developed their own life safety measures. Residents are trained to fight fires in safe places of refuge, either in a separate building or behind a fire wall, are often supplied with their own utilities and food stocks. In the BP/Sohio Operations Center, Wallace Floyd Associates, Inc., designed the building's central bay in concrete as a place of refuge and a barrier to fire. With building costs so high and fire fighting so difficult, the arctic desperately needs a code that deals effectively with its unique conditions.

Conclusion

In a world of extremes, the architecture of the arctic is anything but extreme in its form or function. By responding to the physical and psychological needs of its inhabitants, by minimizing the impact on its immediate environment, and by conserving such scarce commodities as water and energy, arctic buildings set a goal worthy of architecture in any climate. With their elevated, streamlined forms sheathed in taut metal skins, these buildings also show that practical constraints need not preclude a powerful architectural imagery. They remind us that adversity needs strength. [Thomas Fisher]



Wallace, Floyd, Associates Inc.

The Polaris Mine Housing (top) uses bright exterior colors to identify community spaces within the building and to identify the building in the landscape. This section through the BP/Sohio building (middle) shows how the central concrete bay provides a fire break and an area of refuge between the two conventionally framed outer bays. Several arctic projects share the BP/Sohio building's use (left) of primary colors on walls and furniture, a central recreation area, and a planted skylit atrium.

Acknowledgments

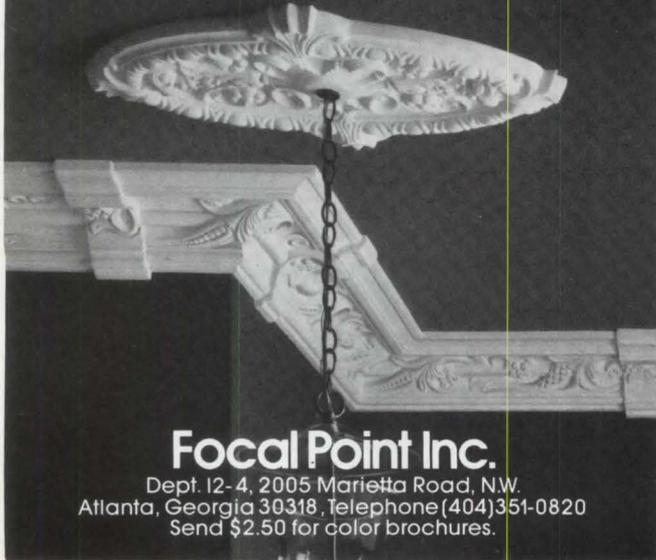
We want to thank the following people and organizations for their ideas and time: Gary Sullivan, Armco, Inc.; Bruce Batten, Army Corps of Engineers; Colin Bent; Edwin Crittenden, Kate Gillespie, CCC; Wayne Tobiasson, Charles Korhonen, Barry Coutermarsh, Alan Greatorex, Frederick Cory, Sherwood Reed, Steven Flanders, CRREL; Randle Pollack, CRS; Donald Newman, Thomas Livingston, CSM; Charles Morgan, Ellerbe Inc.; William Remington, HOK; William Lane, KTM; John McCool, McCool MacDonald; Moshe Safdie & Associates; Guy Gérin-Lajoie, PGL; Peter Floyd, Wallace Floyd Associates, Inc.; Eberhard Zeidler, Zeidler, Roberts Partnership.

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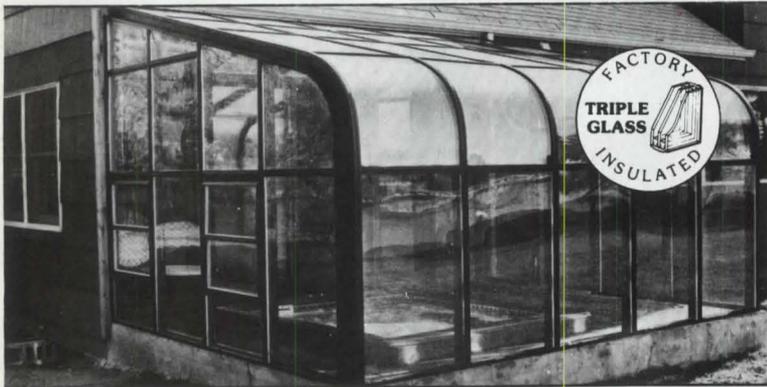


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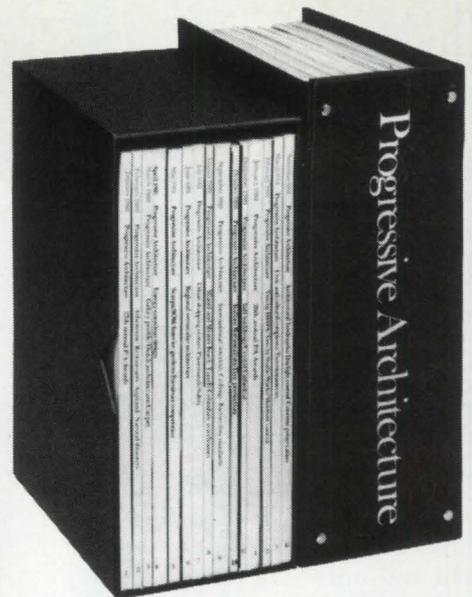
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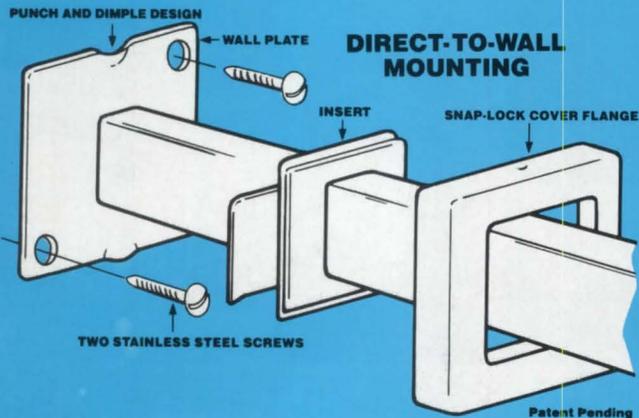


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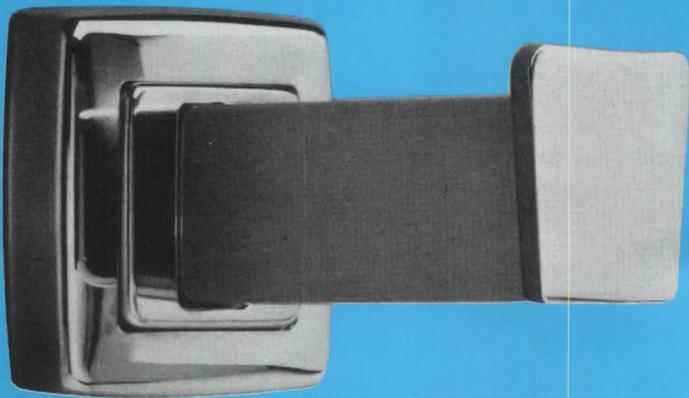
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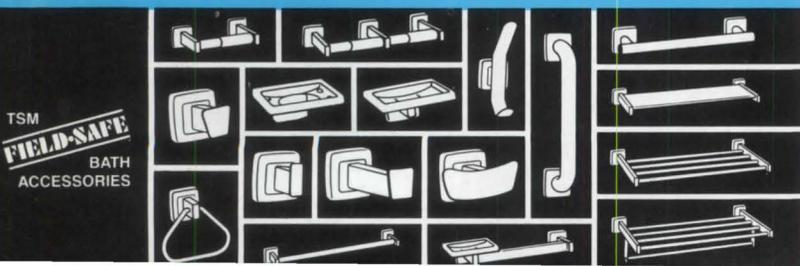
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Books continued from page 152

a straightforward manner. Although there were turbulent moments, it was the unself-conscious revolution of a man active in many facets of life, not only as goldsmith, architect and engineer, but also as politician and supervisor of quarries. Battisti uses material from social and political histories for specific purposes, such as delineating the social and functional factors in Brunelleschi's involvement with the Foundling Hospital. At the same time, he examines the issue of perception by focusing on the Corinthian capitals of the hospital, and analyzes them in relation to the perception of archaeologically "correct" standards.

Battisti succeeds in making new material accessible—his chapter captured my interest in his chapter on the dome of Santa Maria dei Fiori—as well as making familiar material more lively. The Santa Maria dei Fiori chapter is an antidote to the high-tech analyses of recent years. The chapters on the Old Sacristy at San Lorenzo and the Pazzi Chapel, which I had turned to first to relive the enjoyment of seeing archetypes become perfection, contradicted my previous view of Brunelleschi, and the masterful description and analysis increased my perception of the buildings.

This book is well illustrated with new photographs and extensive drawings. The captions are descriptive and the translation is natural and readable. It is disappointing not to have more treatment of Brunelleschi's precursors, and it would be satisfying to have had a survey of Brunelleschi's immediate legacy, that is, beyond the many of "his" buildings which were completed and altered after his death.

It is difficult to present a bewildering subject like the churches of Rome well; recent attempts have been either dry compendiums or anecdotal accounts. *Churches of Rome* by Roloff Beny and Peter Gunn falls into the latter category, in that neverland between coffee table books and guides. As a guide, the Gazetteer and maps are the only valuable portions. The often interesting tidbits presented in the text are architectural and historical name-dropping that would be useless for touring. If *Churches of Rome* is primarily a coffee table book, its photographs, described on the jacket as "mystical" should be redubbed *mystifying*. There is no excuse for obtuse photographs, such as the one which isolates Santa Susanna from its context.

The book is organized chronologically and ends in the Eighteenth Century. There are no Nineteenth Century or modern works considered. This may be an indictment of the Church's recent lack of support for high quality ecclesiastical art and architecture; nevertheless, there certainly are examples to choose from in Rome; Brasini's haunting and near derelict Buon Pastore or the 1930s Chapel of the Holy Cross at Santa Croce in Gerusalemme, at least.

The Vatican is treated as a unit at the end of the book. The authors may not have wanted the Vatican to dominate, but since Vatican City illustrates the development of architectural styles in Rome in microcosm, it might have provided an appropriate preface to the chronological treatment of the rest of the book.

Worst of all, the book makes no more than a superficial account of the spiritual reasons for the concentration of churches in the center of Catholic Christendom.

Art fabrics

The Art Fabric: Mainstream by Mildred Constantine and Jan Lenor Larsen. New York, Van Nostrand Reinhold, 1981. 272 pp. \$39.95.

This volume is the authors' sequel to their *Beyond Craft: The Art Fabric*, an international collection of the major fabric artists of the 1960s. The new volume represents the 1970s and coincides with a traveling exhibit selected by the authors and organized by the American Federation of Arts. Included is an introductory essay by the authors tracing fabric art from William Morris to Christo. Miss Constantine teaches at Parsons School of Design and is a former associate curator of architecture and design at the Museum of Modern Art, New York. Mr. Larsen is a well-known fabric designer. □

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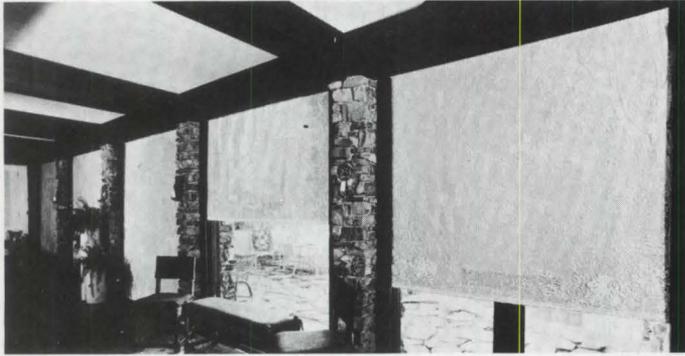
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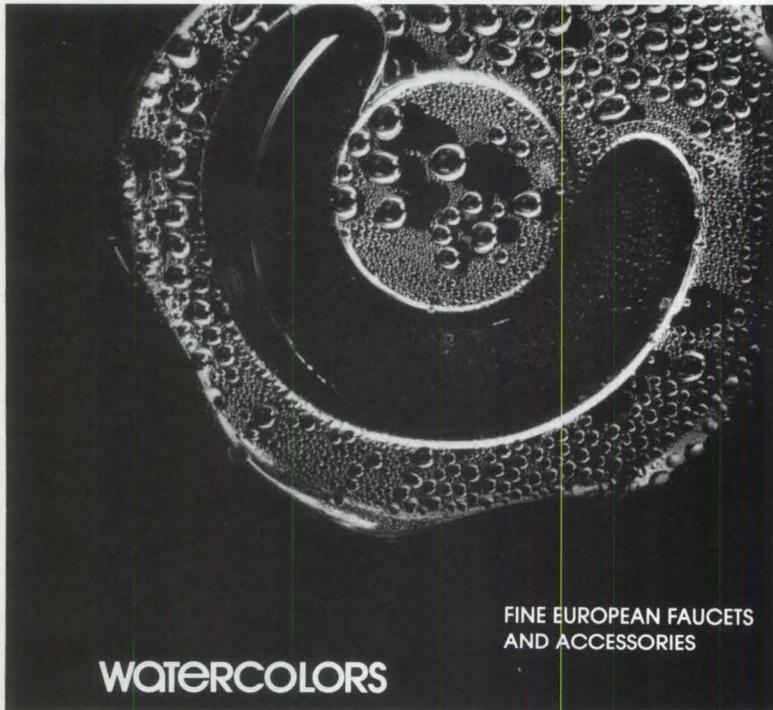
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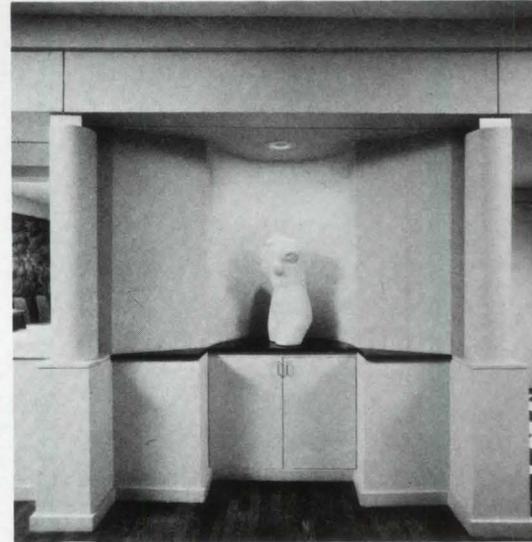
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Money is essential to architecture—to either building or maintaining a practice. You can't buy good design, and good designers don't always make the best money. This series of articles in the December P/A will explore some aspects of the exasperating relationship between money and design. There will be some light shed on that chronic question: how can architects make more money?

Interior design will be the subject of two features on New York interiors by young firms—one residential, one commercial.

P/A's Energy Design series this month will take up hotels, motels, and nursing homes.

Other articles in the December issue will feature promising new buildings in the U.S. and abroad.

P/A in January will bring you the results of the 30th P/A Awards program. See the winners P/A's distinguished jury chose from among 1040 submissions.

P/A in December: Money and design



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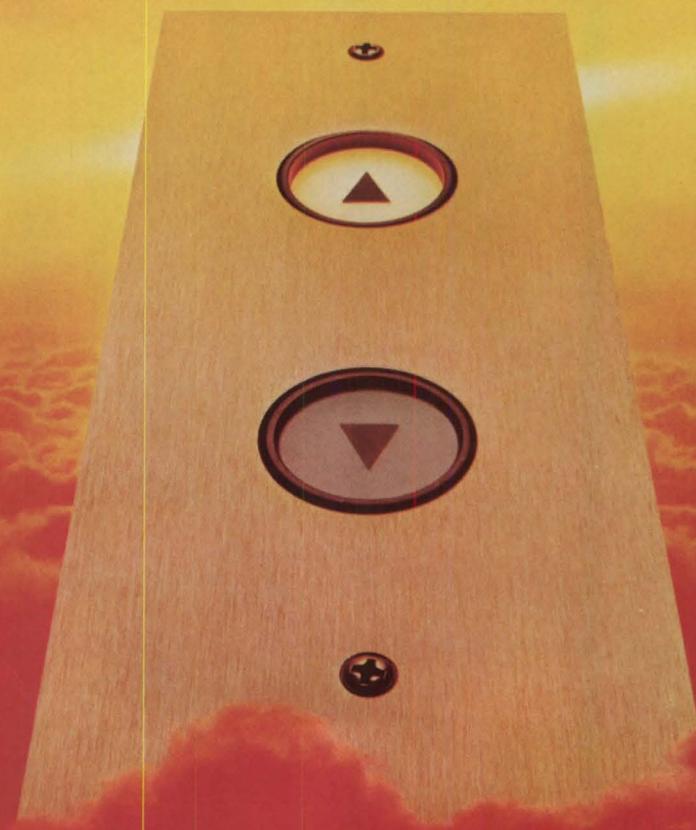
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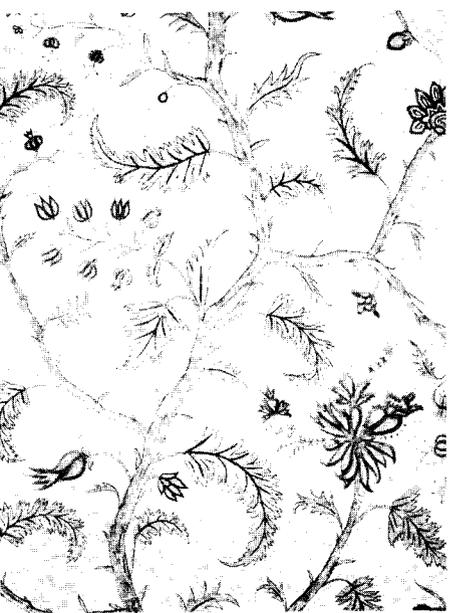
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Products and Literature

The following items are related to the general theme of this issue, preservation and restoration.

Products



A wallcovering collection of 17 authentic 18th-Century designs and an eighteenth-century scenic is being offered in the original colors, as well as in four to six other colorways. Documented from the Winterthur Museum archives, the collection also includes four companion borders for use at ceiling, baseboard, or dado.

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Acoustic ceiling panels in over 75 designs to complement contemporary, Art Deco, or classic interiors are available in standard colors and 2' x 2' or 2' x 4' panels. They can accommodate air-circulating diffusers, lighting, sound, and sprinkler systems. Panels are non-rated, but can be ordered at extra cost in non-combustible versions for Class A installations. Entol Industries, Inc.

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Wooddepox-1 two-component light-weight structural adhesive paste bonds almost anything, hardens without shrinking and can be used indoors or outdoors. According to the manufacturer, worn, pitted, cracked, or corroded areas of wood, concrete, metal, or fiberglass can be filled, rebuilt, and resurfaced. The white material takes

any stain or pigment. Wooddepox-1 is also available in black, buff, brown, red, yellow, green, and custom colors. Abatron. Circle 102 on reader service card

All-wood moldings and ornaments in traditional and contemporary designs can be used for architectural details or furniture accents. Unfinished and unpainted, they are suitable for contract or residential applications. Bendix Mouldings, Inc., Subs. of Lightron Corp. Circle 103 on reader service card

Fabrics and wallcoverings made from print, woven, and wallcovering designs researched at the Shelburne Museum in Vermont consist of 12 fabrics with 14 related and companion wallpapers, 4 woven textiles, and 12 additional wallpaper designs. The fabrics are printed on 100 percent cotton in Eng-

land, and with the exception of one design, the fabrics are 56 in. wide. Greeff Fabrics, Inc.

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Antique longleaf heart pine, retrieved and remilled, is available as flooring, paneling, millwork, cabinetry, and furniture. The company offers turnkey service or fabrication to order, with installation and finishing by others, or installation by others and finishing by their staff. Legacy Pine Limited, Inc. Circle 105 on reader service card

Textiles from the 18th and 19th Centuries are reproductions of six designs from the archives at Winterthur Museum. There are two florals, two stripes, a damask, and a velvet in a total of 41 colorways. Also offered are up-

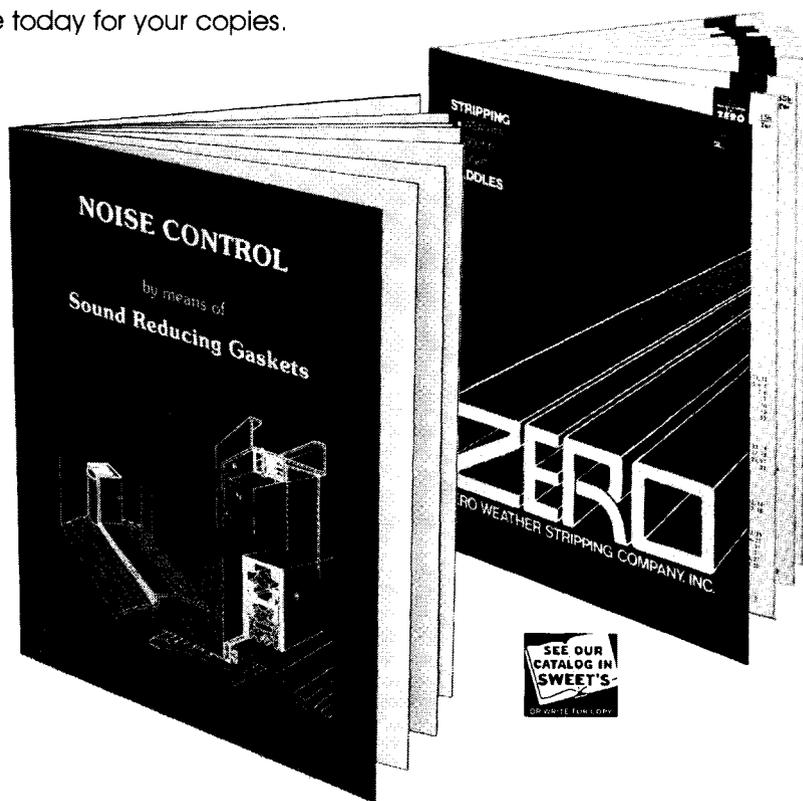
[Products continued on page 164]

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Old-house restorers' catalog offers reproductions of Victorian hardware, gas light fixtures, etched glass shades, porcelain bath handles, and fancy-cut red cedar shingles new to this edition. Also available are reproductions of Colonial hardware, marble fireplace mantels, a kit to restore rotted wood, and over sixty reference books. The 36-page catalog is \$1.50 and can be ordered from Crawford's Old House Store, Room 902, 301 McCall St., Waukesha, WI 53186.

Other products

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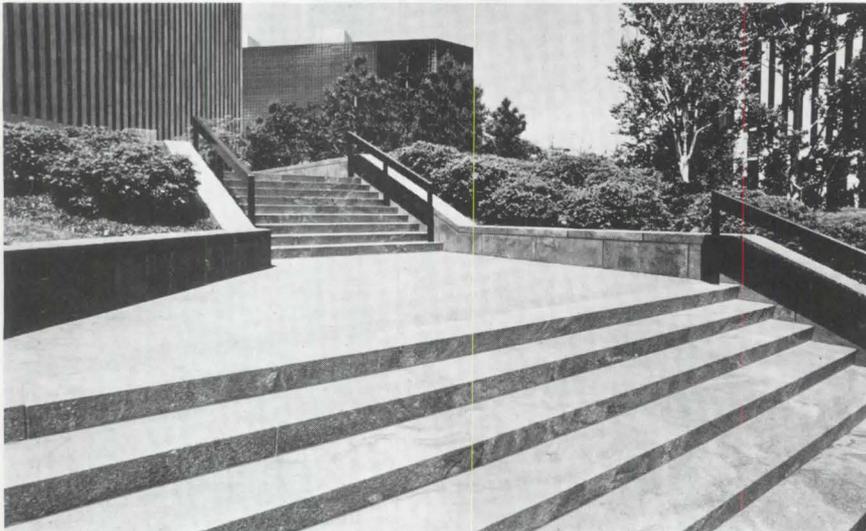


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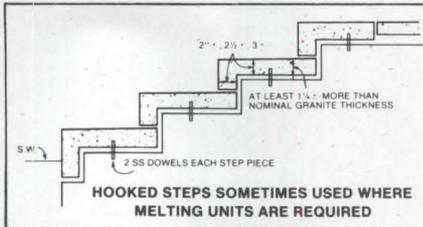
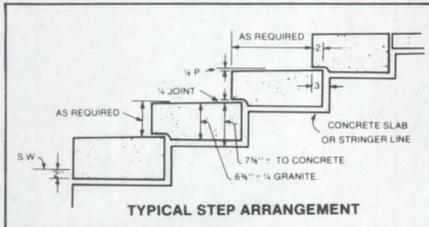
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[Products continued on page 167]



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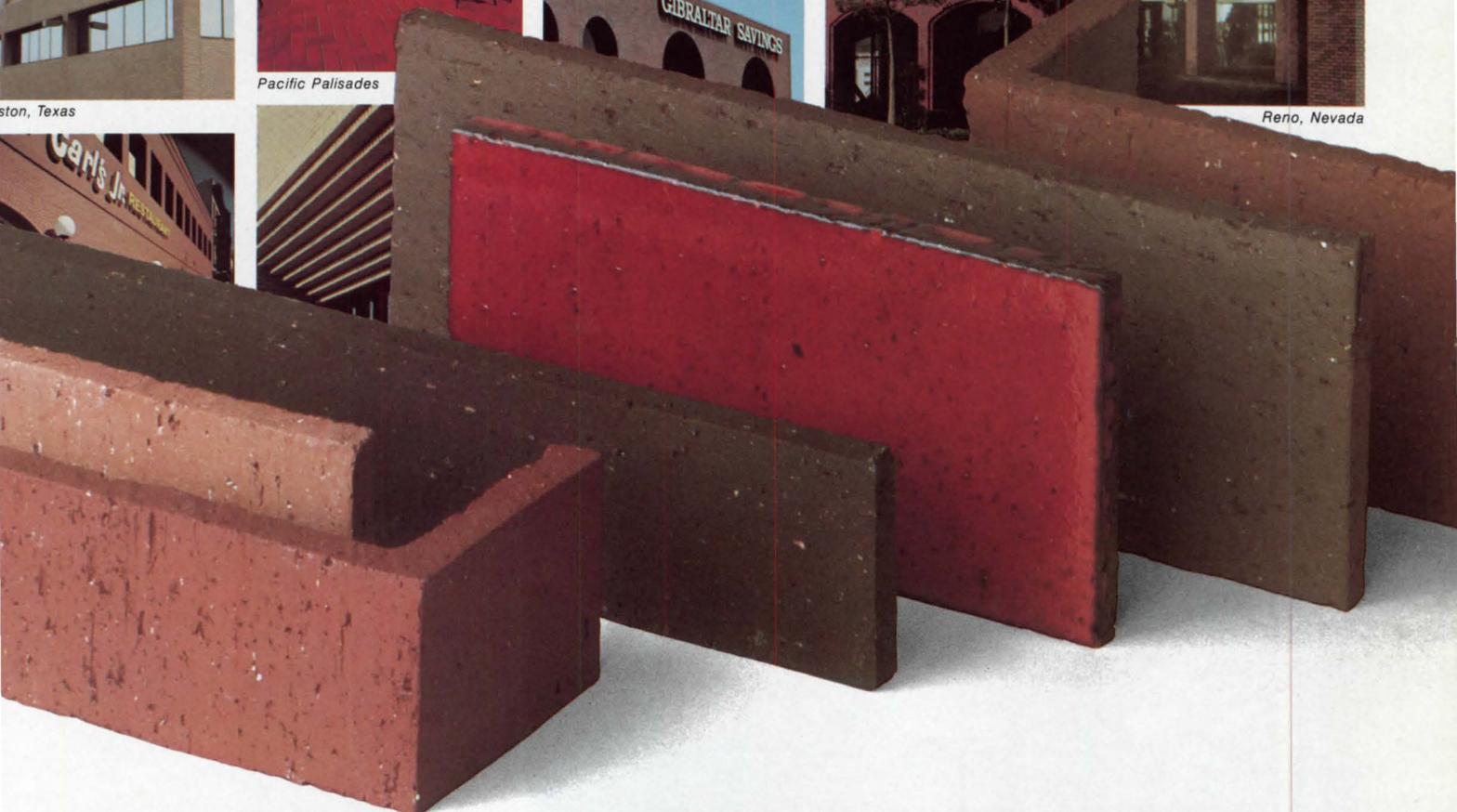
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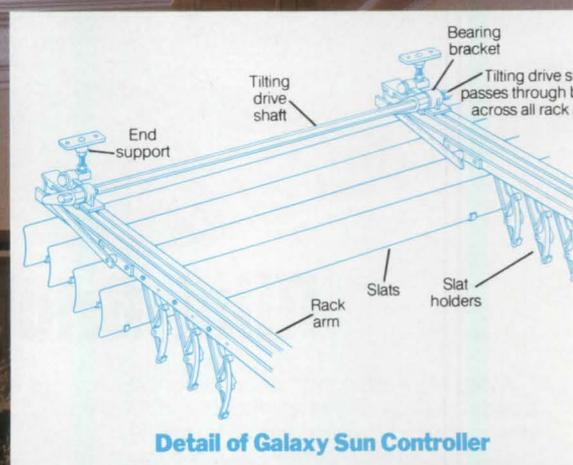
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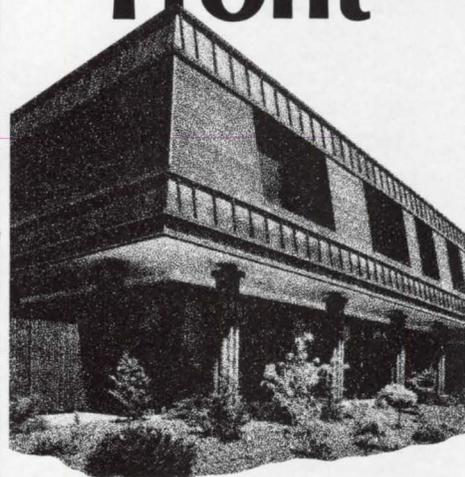


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Circle No. 368 on Reader Service Card

Products continued from page 164

executive returns, and a 65-in.-high hutch. The group is available in oak or walnut veneers or mahogany finish on walnut. Davis Furniture Industries.
Circle 111 on reader service card



The Anthropom Chair has resilient foam cushions over a contoured, double-shell construction. Wood arms and base caps are steel-reinforced. Controls include synchrotilt tension, back lumbar support, and pneumatic lift. Wood options are oak or walnut in a variety of finishes, and upholstery is fabric, leather, or vinyl. Executive Office Concepts.

Circle 112 on reader service card

The Defender® window insulator consists of a snap-in or magnetic frame and an acrylic pane that attaches to the frame. Used on the inside of a window, the frame can be mounted on jamb or window frame. Since acrylic is less conductive than glass, radiant heat loss is reduced. According to the manufacturer, the seal also blocks as much as 95 percent of air infiltration. General Energy Systems.

Circle 113 on reader service card

Fully automatic conveyor systems for continuous batch washers feature electronic weighing to ensure proper load sizes suitable for any of 16 wash classifications. A data sheet describes the conveyors, their controls, and loading and unloading systems. Pellerin Milnor Corp.

Circle 114 on reader service card

Gibraltar Office Organizers furniture group are all 48 in. wide, 60 or 72 in. high, and 22 or 28 in. deep. Each has a 12-in.-deep upper display section. Base units have legs or plinth bases and are equipped with drawers, doors, or a combination of the two. Fleetwood.

Circle 115 on reader service card
[Products continued on page 169]

Telephone 617 492-4000
Telex 951650

14 Story Street
Cambridge, Massachusetts 02138

Kroin Architectural Complements

Sitting is Believing

Kroin

your seat and back. Even the tubular steel frame is designed curve for curve. Plus, the thick sintered synthetic coating that protects our seating from the ravages of time and weather acts as a protective layer for you as well.

So, the next time you specify outdoor furniture, choose Kroin. The seating with a softness that's hard to believe.

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At first glance it's hard to imagine that steel and wire outdoor furniture could be anything other than uncomfortable.

In fact, unless that seating is from the Kroin Series of Park and Garden Furniture, your first impression would be accurate.

But, unlike our competition, we've added some soft touches to an otherwise hard metal. Like anatomically contoured wire mesh in our seat and backs to better fit



EPS (expanded polystyrene) insulation is combustible and should not be exposed to flame or other ignition sources.

Since 1978, the use of EPS insulation in roofs has increased threefold. Why? Because the survivors in this business have been switching from their old standbys to more cost-effective alternatives ... like EPS insulation.

EPS offers more Rs per dollar than any other product on the

market. It's highly water resistant. And it performs equally well in built-up or single-ply roofs.

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integral thermal barrier and/or an overlayment to accept adhesives or hot bitumen.

Best of all, EPS in your next roof will make a survivor out of your client ... with lower heating and cooling bills.

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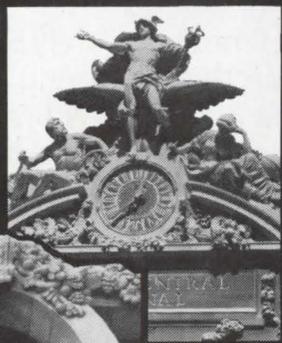
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Circle No. 378 on Reader Service Card



Series 9000 work environment includes a 63-in.-high credenza with overhead storage, task lighting, and lateral file drawers. The "L" table/desk surface is available with octagonal base or legs. The work station is made from a choice of woods with oil or lacquer finishes. Edges are hand-cut and chamfered.

Modern Mode, Inc.
Circle 116 on reader service card

Contract linen wallcoverings from Belgium are offered in 25 patterns, with bouclé effects, small square geometrics, chevron, twill, and ribbed looks. The 42 colors range from oatmeal and oyster to beiges and grays. They are suitable for commercial buildings, retail stores, hotels, restaurants, and other public areas. The wallcoverings pass ASTM E84-80 "Standard Method of Test for Surface Burning Characteristics of Building Materials." OJVM Linen Wallcoverings.

Circle 117 on reader service card

The CeramicronTM pen, a ceramic-tipped refillable pen is suitable for template work, ruling, graphics, and lettering. It produces a sharp, clean, .3mm line, does not clog, and needs no cleaning.

Pentel of America, Ltd.
Circle 118 on reader service card

The Sabobend[®] lounge group, designed by Irving Sabo, is constructed of solid oak or mahogany frames. They have upholstered front, side, and back panels and upholstered attached cushions with shirred detailing. There are coordinated oak- or mahogany-framed tables with oak veneer, mahogany veneer, or plastic laminate tops.

Thonet Industries.
Circle 119 on reader service card

Task-Light-Round (TLR) lighting consists of cylinders of extruded aluminum, with acrylic diffusers, that use economical fluorescent lamps. Standard finish is polyurethane paint in four colors or polished aluminum or brass. TLR can be mounted to wall or ceiling.

[Products continued on page 171]

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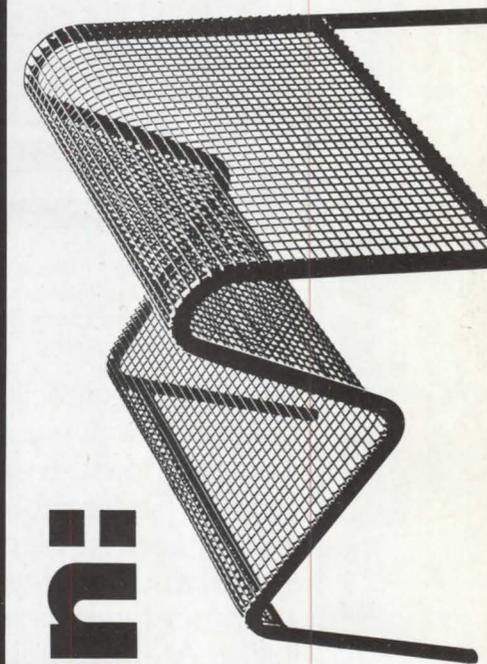
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Anchors and ganging clamps insure configuration integrity and deter vandalism when moveable seating is grouped in sequence.

Mobil is part of a series of Park and Garden Furniture, manufactured in synthetic coated tubular steel and wire mesh, available exclusively from Kroin.

Circle No. 352 on Reader Service Card

Mobil stationary and moveable outdoor seating is unique in its ability to conform to sharp angles and uneven topography. Unlimited seating arrangements facing inside or out are possible by altering the sequence of the three modules offered in this system. Simultaneous back-to-back seating is possible through the use of 2-sided Seat Bowls.

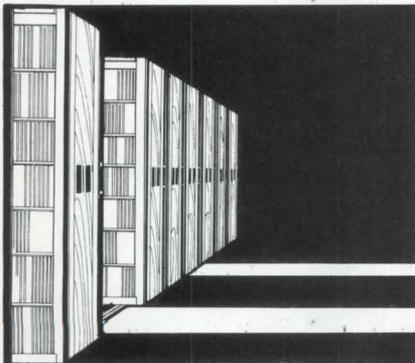


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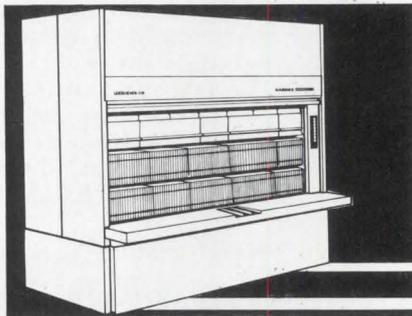


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office space. Specify Kardex and give your clients up to 80% space savings. Faster more convenient access. Electronic control and security. Even computer interface capability. And our full line of products will blend with any interior you create.

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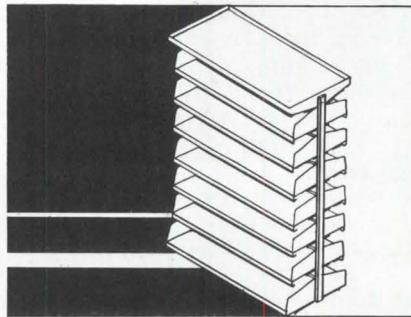
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- 1983 Sweet's catalog specification information.
- Kompakt Architect's Brochure specifically for architects and space planners.



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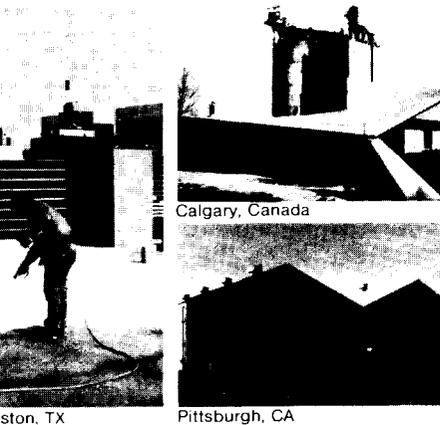
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Circle No. 400 on Reader Service Card

Products continued from page 169

to-wall, under cabinets, or on a stand as a table or desk lamp. There is a choice of diffusers, and cylinders rotate 180 degrees to direct light where it is needed. Several connectors permit design flexibility. Custom & Architectural Lighting. *Circle 120 on reader service card*

Ballastar III™ electronic ballast costs about \$30 for a three-lamp fluorescent fixture compared with \$50 for a four-lamp fixture. The three-lamp fixture produces about 90 percent as much light and offers a 30 percent reduction in power consumption. Based on a rate of 6¢/kwh, payback according to the manufacturer is approximately five years, and 20-year savings on a typical 1000-ballast installation operating 3000 hours annually would be \$115,000. Ballastar is UL-listed and has a Class P thermal protection rating. Triad-Utrad Div., Litton Industries.

Circle 121 on reader service card

A system for protection against graffiti consists of two base coats of GraffitiBase, either clear or colored, and a protective coating of GraffitiCatcher. Marks can be removed by washing with GraffitiRaser, which can be applied by spray can, hudson sprayer, roller, or brush. GraffitiCatcher can then be reapplied. It is said to be effective even against primer spray paints and those with metallic bases. Rainproof Technical Coating Systems.

Circle 122 on reader service card

Wood play system Environment 2000 for playgrounds is guaranteed against rot and insect damage for ten years, according to the manufacturer. It uses 4" x 4" construction and has easy-to-assemble modular components: swings, slides, horizontal ladder with rope, tower, ladder, and platform. Wooden Environments, Inc.

Circle 123 on reader service card

Other literature

'The Office Planning Guide' shows axonometric drawings, model numbers, and dimensions for Marcatré contract furnishings designed by Mario Bellini. Also included in the 10-page fold-out brochure are casegoods, seating, and lighting. The guide discusses the system, its construction, wood and laminate finishes, and colors. Atelier International Ltd.

Circle 201 on reader service card

Automatic sliding and swinging door assemblies for commercial applications are the subject of a 16-page catalog. Details and specifications are included for each type. Also shown and described are electric and pneumatic operators, activating devices, accessories, and components for retrofit. Horton Automatics, A division of Overhead Door Corp.

Circle 202 on reader service card
[Literature continued on page 172]

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Can you afford a cheap imitation?

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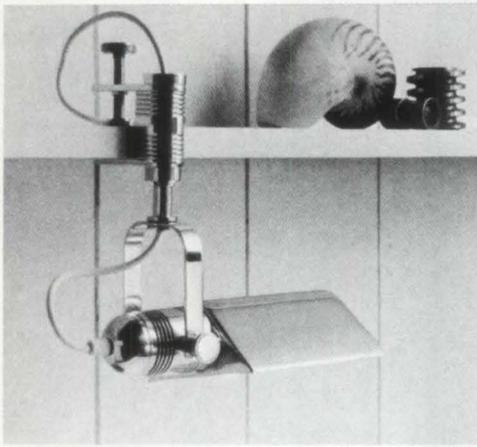
That takes reinforced welds at every joint, drawn steel wire mesh in every seat and back, plus a heavy tubular steel frame specially prepared to accept a sintered synthetic coating that actually becomes fused to the surface.

So the next time you specify outdoor furniture choose Kroin. After all, can you afford not to?

Choosing the right outdoor seating could mean the difference between a sound investment and a costly mistake.

Because, while companies may try to imitate the way our furniture looks, they can't match the way it lasts. And what makes Kroin Park and Garden Furniture stand out is the way it stands up: to the elements, abrasion and even the severest abuse.

Circle No. 353 on Reader Service Card



The Nessen/Augusti lighting line from Spain features lamps with a choice of six reflectors for each design, five of solid brass and one of matte glass. All metal parts are solid brass. The group, shown in a 24-page catalog, includes floor lamps, wall-mounted lamps with either cord and plug or outlet box mounting, and table or desk lamps. Nessen Lamps. *Circle 203 on reader service card*

'Toward a Thoughtful Working Environment,' an 18-page brochure, shows in full color more than 25 open office arrangements and product options. It introduces the radius-edge design, which is said to be physically more comfortable and visually pleasing. Free-

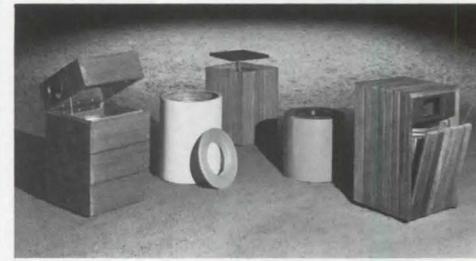
standing furniture, accessories, revolving tops for shared CRT units, and dual height EDP worksurfaces are included in the planning ideas. All-Steel Inc. *Circle 204 on reader service card*

'Added Dimensions,' a four-page color brochure, describes the Software™ open office and Midline raceway. Components of the open office system include work surfaces, drawer pedestals, and enclosed shelf units. The raceway provides power and communication capabilities at work surface level. Panel Concepts, Inc. *Circle 205 on reader service card*

Surface-mounted ceiling and wall lighting products use the Westinghouse Double Fold Fluorescent lamp. Compared with incandescent lamps, they save 60-75 percent of watt consumption for the same light levels. The entire line is shown in a 32-page color catalog that includes descriptions and specifications. Lightolier, Inc. *Circle 206 on reader service card*

Operable walls for room division have L, T, and X track intersections that allow a room to be divided many ways. Descriptions of the components, illustrations, and dimensional drawings are included in Catalog F-320, which also describes how the hardware allows 90-degree turns. The panels can be stored outside the room or along the walls, as well as in other ways. Panel options include pass doors, chalkboards, tack-

boards, and projection screen surfaces. Richards-Wilcox Manufacturing Co. *Circle 207 on reader service card*



A litter receptacle group is available in top- or side-opening models. Lids lift or fronts open for easy removal of liners. Containers are oak, redwood, or fiberglass in a choice of 12 standard colors. Landscape Forms, Inc. *Circle 208 on reader service card*

Performance Pattern carpet tiles for open offices, executive suites, hotels, restaurants, and hospitals are available in 8 designs and 52 color combinations. The series is illustrated and described in a color brochure. Interface Flooring Systems, Carpets International Georgia. *Circle 209 on reader service card*

Sprinklers in the Micromatic™ and Decor® lines and for special applications are described and illustrated in an eight-page color brochure. Micromatic sprinklers are available in matte or bright chrome, natural or polished brass. [Literature continued on page 175]

NEW PRODUCT GUIDE ON Life/Safety Door Controls

Yours FREE! From Reading-Dorma 20-page illustrated product guide on the failsafe Dorma F Series and the Reading Protector Series. Covers both electro-mechanical and electro-pneumatic door closers. Includes a Typical Application Chart to simplify correct product selection for specific applications. Contains a Cross Reference Guide to competitive products; also a Function and Size Selector Chart. Get your copy now.



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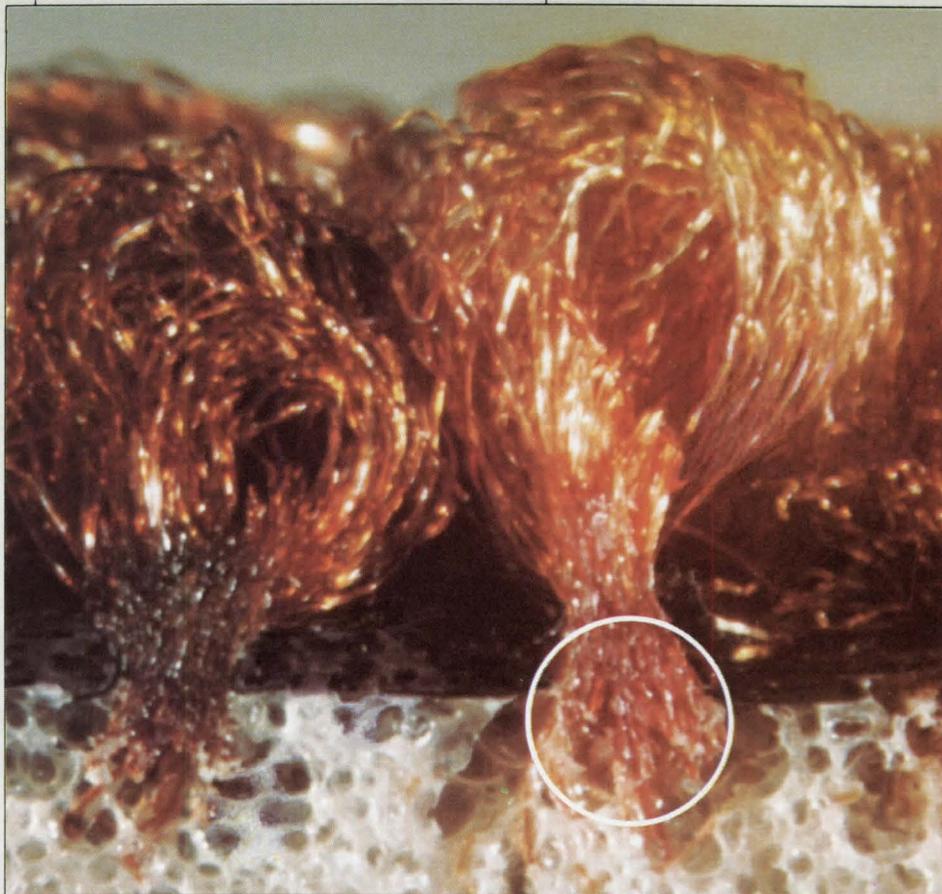
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Now you can get a carpet backing that actually helps improve carpet life. VORACEL* urethane carpet backing, from Dow Chemical U.S.A.

VORACEL backing penetrates deeply into the base of carpet fiber bundles, locking individual fibers into the backing to form a totally integrated carpet.

The result is vastly superior tuft lock, which effectively eliminates carpet delamination and fiber pilling or fuzzing. And makes edge ravel and fraying virtually nonexistent.

nonexistent.

Tests prove VORACEL backing superior to other backings, too. In the standard roll stool test, a weighted chair was rolled for 7,500 cycles over carpet samples with four different backings. After the carpet with other backings had shown significant wear, carpet with

VORACEL backing withstood 30% more testing. And *still* didn't show any perceptible sign of wear.

If you'd like a copy of actual test results and more information about VORACEL backing, write Dow Chemical U.S.A., Organic Chemicals Department, Midland, Michigan 48640. Or call toll-free (800) 248-9160.

If you would like details on Dow's new installation support program, call the VORACEL Information Center toll-free at (800) 847-4212. In New York, (212) 847-6675.

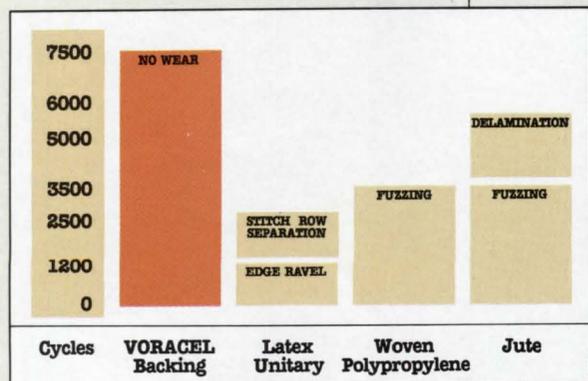
Or, if you'd like to discuss the specifics of carpet with VORACEL backing, contact any of the carpet mills listed below.

Before you specify carpeting, consider VORACEL backing. Because without it, even the best fiber in the world may not be enough.



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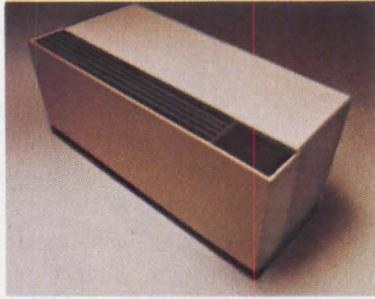
Custom Coating Inc. (404) 227-3778 • Galaxy Carpet Mills (312) 593-0555
Shaw Industries (404) 278-3812 • Wunda Weve Carpets (803) 298-9116

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GE introduces the Zoneline[®] heat pump that isn't afraid of heights.

Most everyone knows that you get outstanding comfort and economy from a heat pump. And that heat pumps are available in package terminal units for room-by-room comfort control. Which would seem to make them ideal for high rises—except for one little thing. Winter condensation. Which can be a big problem when it's leaking down twenty stories. And a big expense if you have to install a drain system to stop it.

That's why General Electric introduces a zonal heat pump designed specifically for multi-story construction.



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You see, the new Zoneline[®] heat pump has I.C.R....an Internal Condensate Removal system that cuts winter condensation to a minimum. Instead of dripping down the sides of your building, it's redirected into the room air for a more comfortable inside and a much drier outside.

So now your high rise can reap all the benefits of heat-pump heating and cooling without adding to your installation costs.

For further information, write J.A. Michelsen, Mgr. Cont. Mkt., General Electric, AP-6-104, Louisville, KY40225.

Circle No. 335

n upright, pendant, conventional, and sidewall styles. The Decor line uses color-coded glass bulbs for different temperature ranges. Among special application models are dry pendant sprinklers for areas subject to freezing. The Viking Corp.

Circle 210 on reader service card

Master Index of Government Guide Specifications for Construction is divided into two parts. The first lists the guide specifications of major federal contracting agencies, such as the Corps of Engineers, Department of Defence, and General Services Administration, and includes the interagency Federal Construction Guide Specifications developed under the auspices of the Federal Construction Council. The second part consists of a cross reference of all guides indexed by the five-digit numbering system of the CSI Masterformat. The index is in looseleaf form, punched for standard three-ring binders. Copies are \$9.95 plus \$1.55 postage and handling and can be ordered from the District of Columbia Metropolitan Chapter, CSI, % Every Water Guard Company, 67 Southlawn Lane, Rockville, Md 0850.

Modular travertine architectural elements can be assembled in any number of arrangements. Based on a nominal 0' x 20" module, they include wall or

floor tiles, planters, smoking urns, litter receptacles, and various slabs that can be assembled into tables, benches, and dividers. An illustrated four-page brochure shows axonometric drawings of individual and assembled pieces and provides dimensions. Forms & Surfaces. Circle 211 on reader service card

'Permalite® Roof Insulations' catalog provides information and specification data about the company's perlite and urethane roof insulation boards. It discusses physical properties, including heat transmission and resistance values. Advantages of each type are listed, along with suggested applications. Grefco, Inc., Building Products Div. Circle 212 on reader service card

Abodia slide storage systems are illustrated and described in a 16-page catalog. Slides on metal racks pull out in front of a viewing screen. Racks hold 100 or 200 slides, with some storage systems having a capacity of 12,400 slides. Slide duplicate bases for bulk storage hold a maximum of 65,000. Separate Acculite™ viewers are also shown. Elden Enterprises, Inc. Circle 213 on reader service card

Javelin II tabletop whiteprinter brochure describes its components and operational features. The four-page booklet includes specifications and recommended diazo print materials. Dietzgen Corp. Circle 214 on reader service card

The Epo-Lux 100 polyamide epoxy system consists of ten major products. For application to steel, nonferrous metals, concrete, masonry, polyester, fiberglass, porcelain, glass, wood, and glazed tile, the products offer resistance to harsh environments and have tolerance for contaminated surfaces. A four-page brochure provides two charts: one compares Epo-Lux with other coating systems; the other is a primer selection guide. Steelcote Manufacturing Co. Circle 215 on reader service card

Building materials

Major materials suppliers for a building that is featured this month as they were furnished to P/A by the architects.

Senate Chambers, State Capitol, Albany, NY (p. 116). Architects: Mendel, Mesick, Cohen, Waite Architects, Albany, N.Y. Tempered glass and bronze entrances: Ellison Bronze Co. Carpet: Firth Carpet, Mohasco Corp. Lighting reproductions: Louis Baldinger & Sons. Upholstery leather: Middletown Leather Co. Cast bronze grilles: Wheeler Bros. Brass Founders. Upholstery nails: The Turner & Seymour Mfg. Co. Steel windows: Hope's Windows, Roblin Architectural Products Co. Hardware: Ball & Ball. Sofa: Knoll International. Tables: Intrex. Bentwood chairs: Stendig. Upholstery velour: Knoll Fabrics.

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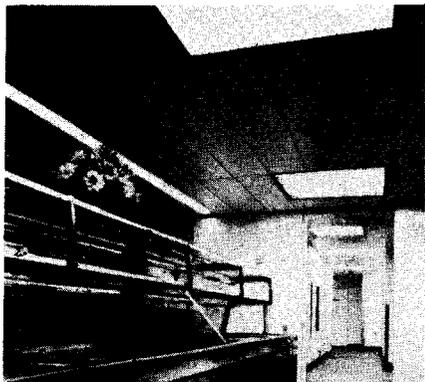
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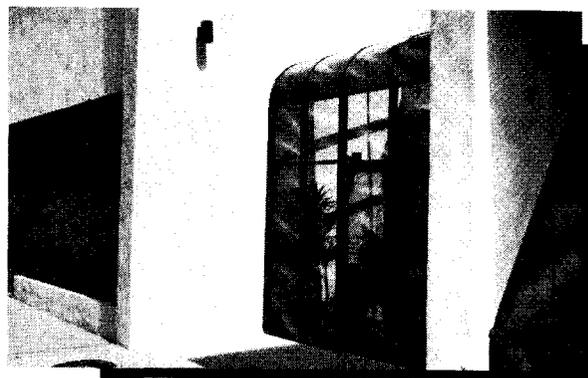
(Standard finish is baked white enamel face and mill finish on reverse.)

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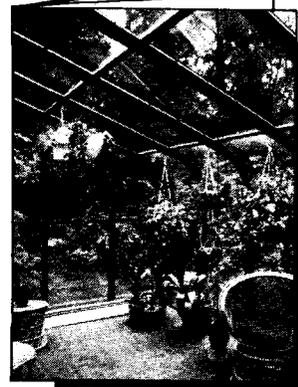


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The Third Annual
**International
Furniture
Competition**

sponsored by

**Progressive
Architecture**

with winning projects to be
displayed at

NEOCON 15

June 1983

The Merchandise Mart
Chicago

Progressive Architecture announces the third annual competition recognizing outstanding furniture and lighting design proposals, not yet being marketed by any manufacturer as of entry deadline, January 26, 1983. The competition is intended to give the design professions a forum to express ideas about the next generation of furniture design, at a time when architects and designers are increasingly custom-designing furniture for their projects and manufacturers are increasingly open to fresh ideas. The competition is specifically aimed at furniture intended for use, but the design need not be constrained by existing production or marketing practices. Entries may be based on either fabricated pieces or project drawings. Designers are encouraged to consider the aesthetic and ideological implications for furniture design implied by the current concerns within architecture and other design disciplines.

Winning projects will be published in the May 1983 P/A, and they will be displayed at NEOCON 15, the National Exposition of Contract Interior Furnishings, at Chicago's Merchandise Mart, June 1983. Awards will be presented to the winners in an evening program in early March attended by press, designers, and NEOCON manufacturers.

In addition to the exposure afforded the submissions, the competition will encourage further discourse between the entrants and respected furniture producers. Any ongoing discussions will, of course, be up to the individual designers and manufacturers, but benefit to both is anticipated.

Submissions are invited in all categories including chairs, seating systems, sofas, tables, desks, work stations, storage systems, lighting, beds, and miscellaneous furniture pieces. Designations of **award** and **citation** may be made by the invited jury, based on overall excellence and advances in the art.

Entry deadline is January 26, 1983.

The jury for this competition:

Kenneth Frampton, Professor of Architecture, Columbia University; Fellow of the Institute for Architecture and Urban Studies; an editor of *Oppositions*; and author of *Modern Architecture: A Critical History*.

Frank Gehry, FAIA, president, Frank O. Gehry & Associates, Venice, California; furniture designer.

Arata Isozaki, principal, Arata Isozaki & Associates, Tokyo; furniture designer.

Rodolfo Machado, Partner, Machado-Silvetti Architects, Boston; Head of Department of Architecture, Rhode Island School of Design; furniture designer.

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MANAGEMENT PERSONAL TIME

MONTHLY SECTION ON TRAVEL AND PERSONAL INTERESTS

Whoa! Before taking cover under the nearest tax shelter, take caution first.

The new tax laws not only have focused great attention on tax shelters; they also have made what traditionally has been a complex investment into one that today is trickier than ever.

Investment is the key word. A tax shelter is an investment that just happens to have tax advantages. It must be examined as an investment first.

The idea of a tax shelter—"sheltering" an investment so as to reduce or defer income for tax purposes—is to use part or all of the tax dollars to obtain growth and, ultimately, capital gains.

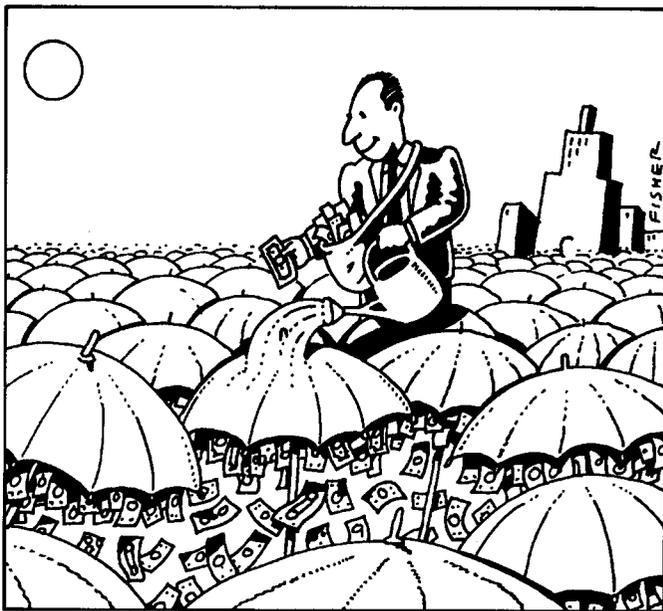
The fact that you are using so-called tax dollars to make this investment won't make you feel better if you lose it. Nor will you be ahead if the Internal Revenue Service (IRS) disallows it—and you wind up paying the tax *and* losing the money.

Even more alarming is the prospect that an investor can end up owing money. Some tax-sheltered investments involve signing a promissory note or letter of credit.

Investors who have undergone this triple-whammy wish they had paid the tax in the first place. Normally, these "triple-whammies" are marketed amid a grand flourish toward the end of the year.

In limited partnerships—the most common format for tax-sheltered investments—most business operating expenses can be claimed as deductions. One major exception is the "at risk" rule. Tax laws now prohibit individuals from deducting losses from an activity in excess of the amount they have "at risk."

Under this rule you are legally responsible for every dollar you write off—except in solar projects and real estate. And few investment-quality



TAX SHELTERS ARE INVESTMENTS, TOO

BY CAROL LEFCOURT

real estate transactions have multiple writeoffs.

The multiple writeoff (more than \$1 taken off taxable income for every \$1 invested) provides extra tax benefits. It also carries extra risk.

The "at risk" rule was designed to stop taxpayers from investing \$1, saving \$2 in taxes (that's a 4-to-1 writeoff), and not caring whether the deal succeeded or failed. The "at risk" rule states that if \$1 is invested and \$4 are written off, the taxpayer really owes the other \$3.

If you are told that the tax-sheltered investment you're considering involves no risk or that any specific shelter is an exception to the IRS rule, check out that advice most carefully. If a bank letter of credit is required, you can count on being at risk. Promoters have frequently assigned in-

vestor letters of credit as bank collateral for their own loans—meaning you owe the bank regardless of the result of your investment.

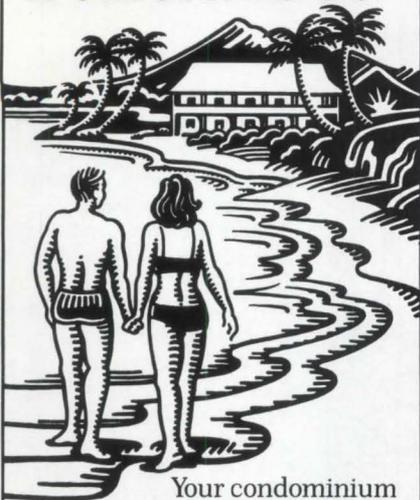
Here are some more tips to consider before plunging into any tax shelter:

- As with any investment, study the offering memorandum or prospectus. If you don't have the time, patience, or background, hire someone to read it for you.
- Look for experienced management, an impressive and verified track record, and considerable confirmable assets in the promoter's name.
- Answer these questions: Where is your money going? How much is being taken off the top for promotion and sales? What does your tax adviser warn you about? What is the quality of the legal firm giving this tax opinion?
- If you receive a tax-shelter-investment offer from a stranger over the telephone or through the mail, avoid it. You should have an adviser who understands your total tax position, your current financial situation, your goals and your dreams.

- If the tax-shelter promoter is offering only one product which seems to be his solution to everyone's problems, walk away.
- What is the background of your tax adviser? Is he affluent enough himself to help if there is a problem?
- Is he pressuring you to make a decision because the deal is "closing" tomorrow? Although deals *do* close, there should be a reasonable amount of time for you to do your homework and make up your mind.
- In any case, you should never feel rushed during your get-acquainted interview with a financial planner you have decided to employ. By the end of that meeting the planner should know as much about your financial situation as you do.
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MANAGEMENT PERSONAL TIME

whom you've given the offering for review, you should expect an evaluation of the tax benefits geared to your individual situation—and it should be in agreement with that in the offering memorandum.

- It's your money and the final decision must be yours. What is the absolute bottom line . . . the worst thing that can happen if you invest? Can you live with that?
- Take away all the tax advantages. If you didn't need shelter and the money was available, would you invest in this deal anyway? Why not?

Opportunities. Our firm feels that the best tax-advantage investments now are apartment houses and venture-capital research-and-development partnerships with equity. These seldom have writeoffs exceeding 100% of the dollars invested.

Use common sense. Weigh the deal yourself at the most elementary level. Is someone suggesting you buy a piece

of income-producing property with 10% down and an income that can't possibly support the expenses and the loan?

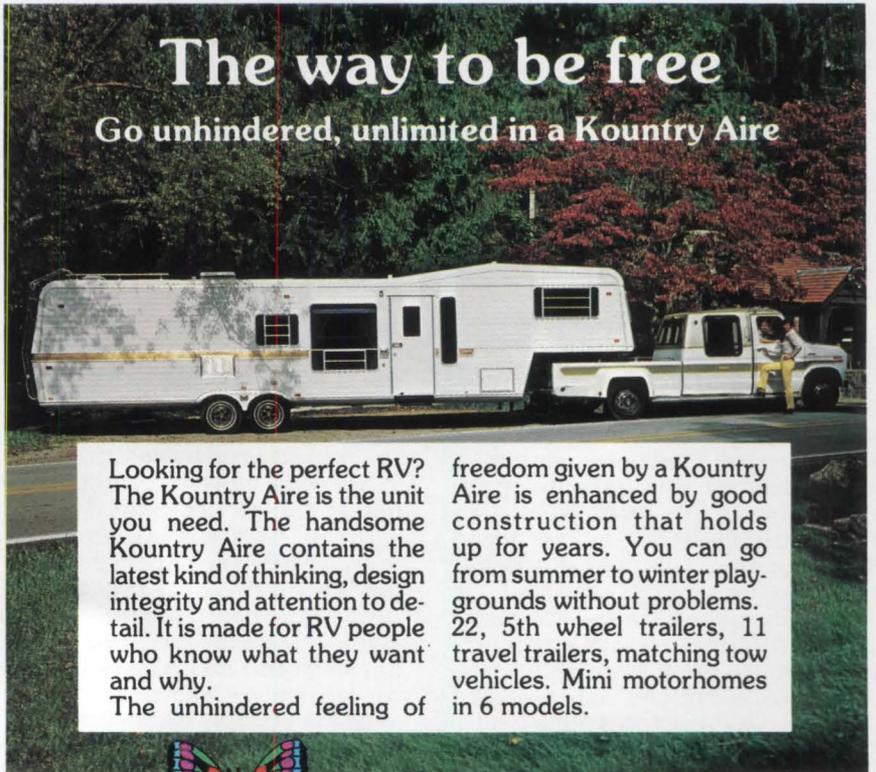
Research-and-development tax shelters are plentiful now and are most difficult for an individual to judge. Is the product marketable? Who are the people involved and what have they done before?

Equipment leasing is the best way to achieve a multiple writeoff; deals are arranged to comply with IRS rulings and emphasize safety. But few understand the complexity of this type of investment. It is paramount that your adviser explain the full tax ramifications, not just the first year's writeoff.

Whatever your tax-sheltered investment needs, look before you leap for shelter. ■

Carol Lefcourt is president and founder of Lefcourt-Golub-Baer-Moneypenny Inc., a Palo Alto, Calif., financial consulting firm.

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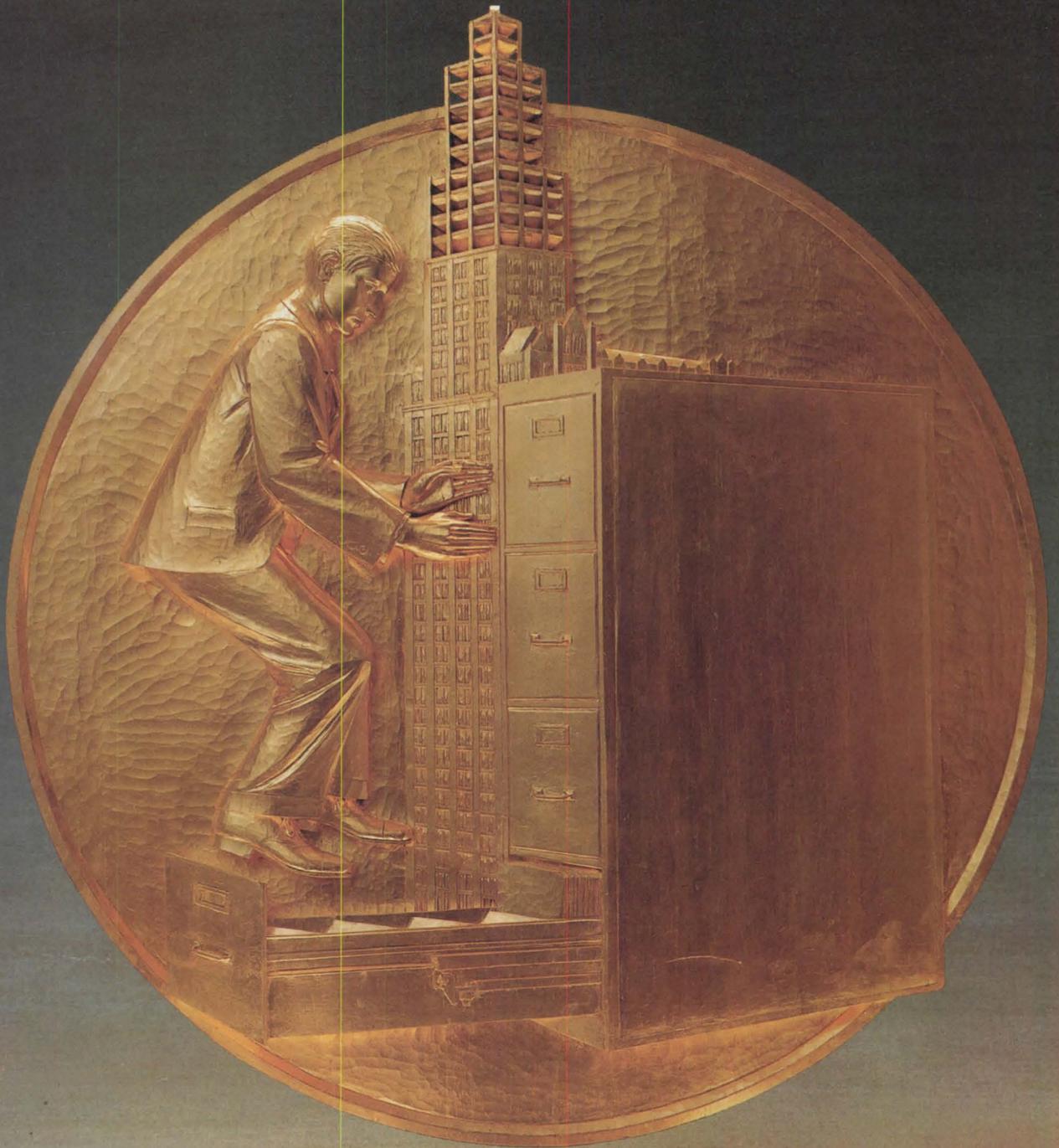


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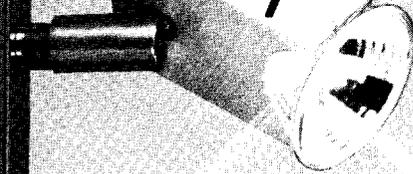
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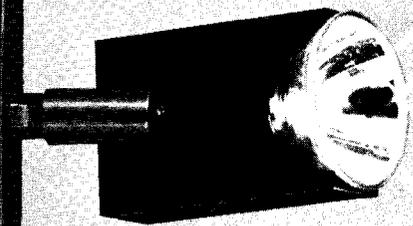
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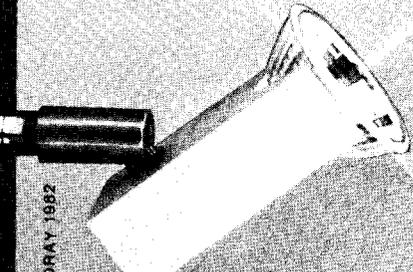


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**Independent laboratory tests using 2x4 frame wall with 3 1/2" R-11 insulation in 15 mph wind.



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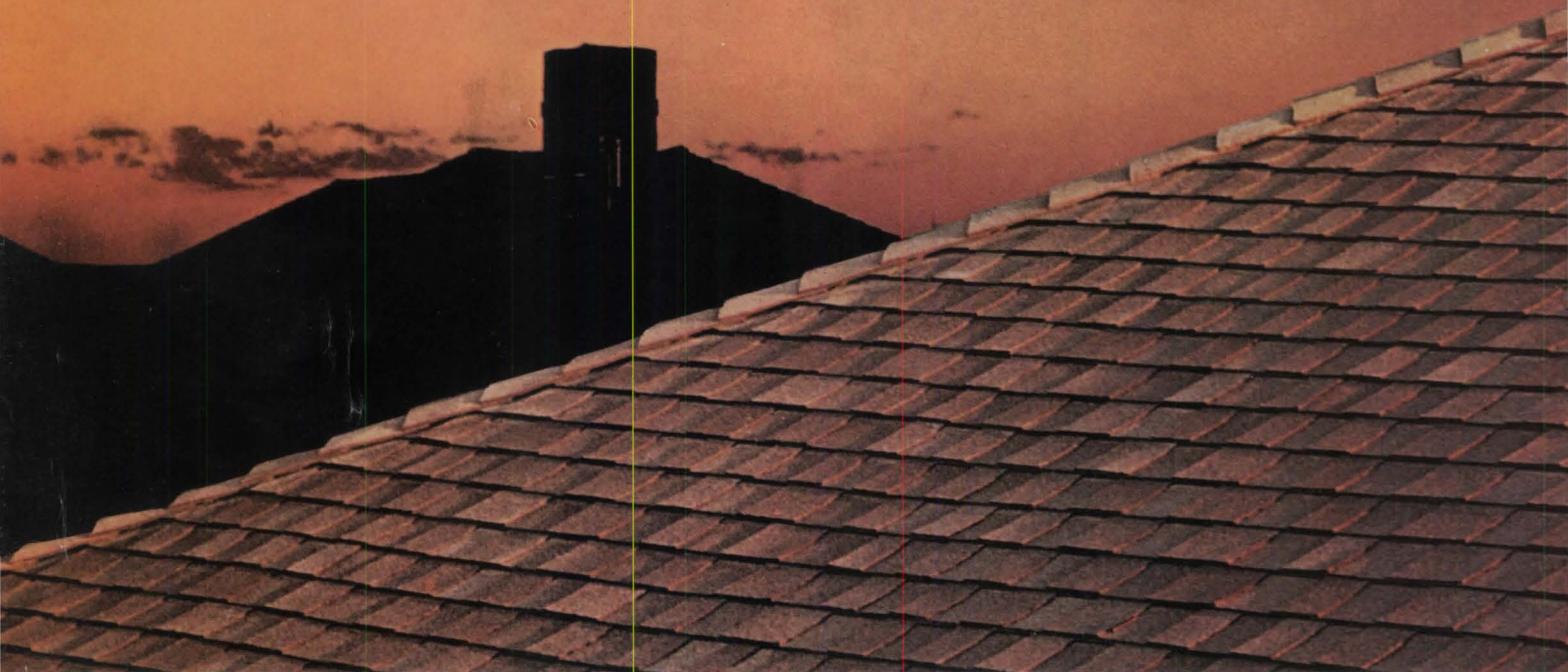
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TIMBERLINE® LOOKS SO MUCH LIKE WOOD, OUR COMPETITION'S TRYING TO LOOK LIKE TIMBERLINE.



In 1968, we captured the beauty of wood in an asphalt shingle. We did it so well that since then just about every one of our competitors have come out with something like Timberline.®

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But the fact of the matter is, for all their originality Timberline shingles don't really cost any more than most of our competitor's imitations.

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After all, they're number one because they're easier to sell than their imitations.



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