Progressive Architecture

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ABP C MPA

AUSTRALIAN PARLIAMENT HOUSE

Editor in charge: Thomas Fisher

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Rising like the summit of Canberra's focal hill, the Parliament House by Mitchell/Giurgola & Thorp takes its place as one of the great government buildings of the 20th Century. John Morris Dixon and Jim Murphy

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Conceived as an integral part of Walter Burley Griffin's plan of Canberra, the complex also shows affinities with earlier work of Mitchell/Giurgola. John Morris Dixon

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The axial layout and functional divisions of Parliament House respond to the plan of Canberra. Jim Murphy

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The architects' interior design contract included many items of custom-designed furniture.

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Cover

The Great Verandah, Parliament House, Canberra, by Mitchell/Giurgola & Thorpe (page 76). Photo: John Gollings.



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The Australian Scene

The trip to the Australian Parliament House prompts a few observations on the architecture scene Down Under. TRAVELING from the East Coast of the United States, Australia is just about as far away as you can go on earth, so it is striking to the first-time visitor how little seems to be different. Sure, they drive on the left and there are small differences in language, starting with the greeting "G'dye," but these and other cultural differences seem little more pronounced than those between, say, New York and Texas.

Anyway, I am not prepared to make momentous cultural judgments here. These observations are based on the trips of two P/A editors, Jim Murphy and me, to Australia, primarily to see and learn about the new Parliament House. Between the two of us we logged about 20 days there, talking with people involved in the Parliament effort, plus a number of other architects, and seeing the architectural sights—both of us in Sydney and Canberra, Jim in Melbourne as well.

Physically, these three cities present three radically different forms. Sydney's erratic street network meanders around all the seemingly endless convolutions of its great bay, across which numerous ferry boats make efficient and charming links; Utzon's Opera House rises by the bay like an exotic natural outcropping. Melbourne has a flat grid, like that of an inland U.S. city, with few memorable recent buildings. Canberra's extraordinary pattern of malls and boulevards, though inadequately filled in with generally mediocre buildings, has visual power.

Development trends of the U.S. and Europe seem to show up in Australia sooner or later. The Darling Harbor redevelopment now being completed in Sydney follows the familiar scenario of replacing old wharfs with public amenities, in this case a festival marketplace that is just like Harborplace in Baltimore but bigger—and already more crowded—plus vast structures for conventions and exhibitions, museums, and an aquarium. At the same time, Sydney and Melbourne can now show extensive renovations of fine Victorian structures, mainly for the chic boutiques, bistros, and lofts we know so well.

Australian architects, like Australians generally, seem to combine national pride with a certain awe of the accomplishments of distant centers. This proficient body of professionals could obviously be self-sufficient—and the great distances involved discourage foreign involvement—but there is an occasional urge to import an architect to participate in the international scene. There is an I.M. Pei tower in Melbourne, and Kohn Pedersen Fox is designing an office building for Sydney (announced while we were visiting).

If the KPF tower includes any historicist devices in its response to its central Sydney site, it will be one of the few large-scale appearances of Post-Modernism down there; up to now any sign of Post-Modernism has been limited mainly to some lighthearted embellishment of small buildings. One new Sydney tower has an overscaled pattern in blue and red panels, looking like a caricature of a Helmut Jahn motif, but that doesn't seem likely to set off a trend. If Australia opts for any of the world's current design trends, it is likely to pursue a kind of Neo-Modernism—having largely skipped the Post-Modern phase.

Foreign architects have been responsible for the two biggest landmarks of recent decades, the Sydney Opera House and the Canberra Parliament House. Surely the public affection for Jørn Utzon's Opera House, once the agonies of its realization (from 1957 to 1973) were past, gave encouragement to the idea of an international design competition for the Parliament House as well; there was, of course, also the precedent of the 1912 competition-winning plan for Canberra by the American Walter Burley Griffin.

This Parliament House is thus in part a legacy of the Griffin plan and the Utzon Opera House. What is likely to be the legacy of the Parliament House itself? Some updating of Australia's generally up-to-theminute building industry, with the introduction of such North American staples as insulating glass and inverted membrane roofing; improving the nation's production of some products, such as furniture and granite; expanding recognition—and possibly the market—for Australian artists and craftsmen. One legacy of the project is the continuation of the firm of Mitchell/Giurgola & Thorp, which is remaining in Canberra, where it already has one other commission, and opening a Sydney office to handle anticipated work. (Landscape architect Peter Rolland, based in New York, will also maintain a Canberra office.)

The image of Parliament House is already etched on the minds of Australians, representing Canberra and national government. Time will tell whether the Parliament House flagmast will take its place with the Sydney Opera House and Ayers Rock as an internationally recognized symbol of Australia.

John Maris Dife

Progressive Architecture 8:88 9

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announces its 36th annual P/A Awards program. The purpose of this competition is to recognize and encourage outstanding work in Architecture and related environmental design fields before it is executed. Submissions are invited in the three general categories of architectural design, urban design and planning, and applied architectural research. Designations of first award, award, and citation may be made by the invited jury, based on overall excellence and advances in the art.

JURY FOR THE 36TH P/A Awards

Architectural Design: Anthony Ames, Anthony Ames Architect, Atlanta: Terry Farrell, Terry Farrell Partnership, London; Adrian Smith, Partner, Skidmore, Owings & Merrill, Chicago; Bernard Tschumi, Bernard Tschumi Architects, New York, Dean, Columbia University Graduate School of Architecture, Planning and Preservation, New York.

Urban Design and Planning:

Alexander Cooper, Alexander Cooper + Partners, New York; Donn Logan, ELS/Elbasani & Logan Architects, Berkeley, Calif.

Research: Donald Prowler, Assistant Professor, University of Pennsylvania Department of Architecture, Philadelphia; Polly Welch, Welch & Epp Associates, Arlington, Mass. Judging will take place during October 1988. Winners will be notified, confidentially, before October 31. Public announcement of winners will be made at a ceremony in New York on January 20, 1989, and winning entries will be featured in the January 1989 P/A. Clients, as well as professionals responsible, will be recognized. P/A will arrange for coverage of winning entries in national and local media.

Turn page for rules and entry forms.

DEADLINE FOR SUBMISSIONS: SEPTEMBER 6, 1988

Entry form: 36th P/A Awards Program

Please fill out all parts and submit, intact, with each entry (see paragraph 14 of instructions). Copies of this form may be used.

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I certify that the submitted work was done by the parties credited and meets all Eligibility Requirements (1–7). All parties responsible for the work submitted accept the terms of the Publication Agreement (8–9). I understand that any entry that fails to meet Submission Requirements (10–18) may be disqualified. Signer must be authorized to represent those credited.

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1 Architects and other environmental design professionals practicing in the U.S. or Canada may enter one or more submissions. Proposals may be for any location, but work must have been directed and substantially executed in U.S. and/or Canadian offices.

2 All entries must have been commissioned, for compensation, by clients with the authority and the intention to carry out the proposal submitted. Schemes developed for design competitions must meet the same qualifications; the submitted design must be the one the client intends to execute. (For special provision in Research category only, see Item 6.)
3 Prior publication does not affect

3 Prior publication does not affect eligibility.
4 Architectural design entries may

include only buildings and complexes, new or remodeled, that are scheduled to be in any phase of construction in 1989. Indicate schedule on synopsis page (Item 12). 5 Urban design and planning entries must have been accepted by the client, who intends to base actions on them in 1989. Explain implementation *plans* on synopsis page (Item 12). 6 Research entries may include only reports accepted by the client for implementation in 1989 or research studies undertaken by entrant with intention to publish or market results. Explain basis of eligibility on synopsis page (Item 12). 7 The jury's decision to premiate any submission will be contingent on verification by P/A that it meets all eligibility requirements. For this purpose, clients of all entries selected for recognition will be contacted by P/A. P/A reserves final decision on eligibility and accepts no liability in that regard. Please be certain entry meets above rules before submitting.

Publication agreement

8 If the submission should win, the entrant agrees to make available further graphic material as needed by P/A.

9 In the case of architectural design entries, P/A must be granted the first opportunity among architectural magazines for feature publication of any winning project upon completion.

Submission requirements

10 Entries must consist of legibly reproduced graphic material and text adequate to explain proposal, firmly bound in binders no larger than 17" in either dimension (9" x 11" preferred). No fold-out sheets; avoid fragile spiral or ring bindings. 11 No models, slides, films, or videotapes will be accepted. Original drawings are not required, and P/A will accept no liability for them. 12 Each submission must include a one-page synopsis, in English, on the first page inside the binder, identifying the project and location, clarifying eligibility (see Item 4, 5 or 6), and summarizing principal features that merit recognition in this program.

13 To maintain anonymity, no names of entrants or collaborating parties may appear on any part of submission, except on entry forms. Credits may be concealed by any simple means. Do *not* conceal identity and location of projects.

14 Each submission must be accompanied by a signed entry form, to be found on this page. Reproductions of this form are acceptable. All four sections of the form must be filled out, legibly. Insert entire form, intact into unsealed envelope attached inside back cover of submission. 15 For purposes of jury procedure only, please identify each entry as one of the following: Education, Houses (Single-family), Housing (Multiple-unit), Commercial, Industrial, Governmental, Cultural, Recreational, Religious, Health, Planning and/or Urban Design, Applied Research. Mixed-use entries should be classified by the larger function. If unable to classify, enter Miscellaneous. 16 Entry fee of \$75 must accompany each submission, inserted into unsealed envelope containing entry form (see 14 above). Make check or money order (no cash, please) payable to Progressive Architecture. 17 P/A intends to return entries intact, but can assume no liability for loss or damage. 18 Deadline for sending entries is September 6, 1988. Any prompt method of delivery is acceptable. Entries must show postmark or other evidence of being en route by midnight, September 6. Hand-delivered

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Rossi's winning design for the German History Museum.

Berlin Win for Aldo Rossi

Italian architect wins first prize for a museum of German history to be located in West Berlin? This was the surprising news early in June when a 21-member jury awarded the \$80,000 first prize to Milan-based Aldo Rossi.

This competition has been controversial since its inception last winter. The museum's ceremoniously laid cornerstone had to be guarded to avoid vandalism. Many architects in West Berlin felt uncomfortable participating in a competition that memorialized the German nation, while their country is di-(continued on page 28)

Walker Picks Future Six

Six architectural firms have been selected by the Walker Art Center for solo shows in a series called "Architecture Tomorrow." The three-year exhibition program, which starts this fall, will feature the work of Frank Israel, Thom Mayne and Michael Rotondi of Morphosis, Billie Tsien and Tod Williams, Stanley Saitowitz, Liz Diller and Ricardo Scofidio, and Steven Holl, in that order.

The selections were made by design curator Mildred Friedman, based on suggestions from: architect Frank Gehry; Rosalie (continued on page 28)



Apartment Building in Rotterdam by Rem Koolhaas.

The Decon Seven: Dismantling a "Movement"

In the rush to record this season's architectural fashion before it passes, "preview reviews" of "Deconstructivist Architecture" appeared in fashion magazines, newspapers, and even some architectural journals weeks or months before the show opened in June at the Museum (continued on page 27)

An outpatient center at UCLA (above) is one of several projects by architects Mitchell/Giurgola shown in the In Progress section, page 43.



Mark Mack's Formica "Water Table."

NEOCON 20: Good Taste Plus

The biggest news for the 50,000 architects and designers who made the trip to Chicago's Merchandise Mart for this year's NEOCON® was not the furniture, but the Mart itself. A muchneeded renovation program (partly prompted, some said, by the increasing popularity of rival trade shows West Week and Designer's Saturday) was unveiled in time for the market's 20th anniversary. A pedestrian bridge, designed by architects Murphy/Jahn, now links the Mart's second floor to the Apparel Mart and Holiday Inn across Orleans Street. The installation of new high-speed elevators made the trips between floors faster, but seemed to have (continued on page 32)

Pencil Points

The AIA is opposing legislation that would authorize the addition of a memorial honoring women veterans to the Vietnam Memorial in Washington, D.C. While supporting such recognition in principle, the AIA feels the proposed statue would compromise the integrity of the existing Memorial and undermine the process by which it was selected.

Norman Foster has won the commission to design a master plan for the \$2.8 billion King's Cross mixed-use development in London, defeating SOM. The two firms had started as a joint venture but split over design differences.

Governor Thompson of Wisconsin has established a commission to plan for the preservation of Taliesin, Frank Lloyd Wright's Wisconsin compound. The commission is also charged with preparing a public access program and recommending an administrative organization to assist the FLW Foundation in managing the property.

Wright's 1923 textile block Freeman House in Los Angeles has received a \$25,000 matching grant for emergency restoration from Domino's Pizza.

The National Center for the Study of Frank Lloyd Wright at Domino's Farms has acquired a collection of over 200 photographs of Wright's work from the Chicago Architectural Photographing Company.

Three engineering firms have each won \$70,000 for their designs for a bridge that would replace the Williamsburg Bridge in New York (P/A, June 1988, p. 28). None of the three, however, will get to build, as the City has opted for a plan to rehabilitate the existing bridge.

The controversial Times Square redevelopment plan is moving ahead, following the signing of an agreement between the New York State Urban Development Corporation and private developers. Several lawsuits notwithstanding, construction of the first of four towers designed by John Burgee Architects with Philip Johnson will begin next year.



One of five neighborhoods in The Kentlands plan.

A New Town In Seven Days

The toughest test to date of town planning principles espoused by architects Andres Duany and Elizabeth Plater-Zyberk of Miami took place the first week in June in the town of Gaithersburg, Maryland. Hired by local developer Joseph Alfandre to design a 352-acre new town 13 miles northwest of Washington, D.C., the architects spent seven days touring nearby Georgetown and Annapolis, talking with local leaders and imported consultants, walking the site, and plugging information into a computer that converts design ideas into the urban and architectural codes that will control developKentlands and the most difficult design problem in this otherwise traditional town plan.

The mall, which seems on the surface to be just the kind of surburban reality these architects would reject, is nevertheless viewed by them as crucial to their plan, for it gives Kentlands a mix lacking in most of the nine town plans produced by this team over the past thirteen months (see P/A, Oct. 1987, pp. 33-34). The Kentlands is no glorified bedroom suburb, but combines its 1600 residential units with 900,000 square feet of commercial space, 1.2 million square feet of retail, and assorted cultural or civic facilities, including an elementary school, a cultural center housed in the 1850s Kent



Sample Kentlands streetscapes (above and below) echo nearby Georgetown and Annapolis.

ment long after the planners have left.

That computer program ensures that The Kentlands will look like traditional American small towns, leavened with specifically local details. "We like family mansion, and a craft center staffed by local artists.

As such the \$200 million development will require special zoning permits from a municipality that has been burned by developers before. A second



to think that we invented nothing here," said Duany. "It is the fact that we know the past that allows us to say yes, this will be a beautiful place, or this street is the right width." But he continued, "these streets are for modern people"—as is the mall to be developed by Melvin Simon & Associates of Indianapolis, which has proved to be the most controversial component of The purpose of this charrette was therefore to involve local citizens and officials in the process so that they would not only understand the plan but take a proprietary interest in it. The extent to which this goal was achieved was evident at a gala outdoor dinner held on site at week's end and attended, it seemed, by the entire town, which packed a lengthy presentation of the plan by Duany and Alfandre.

One City Council member was later seen giving friends and constituents a guided tour of a wall of drawings depicting the future development. Mayor W. Boyner, however, took a more cautious line in his speech accepting Alfandre's gift of the Kent mansion to the city of Gaithersburg. He urged those officials entrusted with the project's approval to employ the President's motto: "Trust but verify."

But nice guys can play tough too. "Make no mistake about it." said Alfandre. "We could have taken a 'cookie cutter' approach to development. We could have built what has come to be known as 20th Century planned urban developments or PUDs." And, assuming he succeeds over the next six months in gaining the necessary approvals, Alfandre must still convince local builders. more accustomed to PUDs, that The Kentlands' codes (he prefers to call them standards) are not onerous. That will be the ultimate "reality check" for this ambitious plan. Daralice D. Boles

Short List for San Fran Museum

The San Francisco Museum of Modern Art has announced a short list of six architectural firms competing to design the museum's new home in the redevelopment district south of Market Street.

Tadao Ando & Associates of Osaka; Mario Botta, Lugano, Switzerland; Frank O. Gehry & Associates, Santa Monica, California; Hammond Beeby & Babka, Chicago; Arata Isozaki & Associates, Tokyo; and Charles Moore, William Turnbull & Associates, San Francisco and Austin. Texas, were selected from an initial 15 firms by an Advisory Committee whose members include: P/A editor John Morris Dixon; architect Joseph Esherick of Esherick Homsey Dodge & Davis, San Francisco; and James N. Wood, Director of The Art Institute of Chicago.

The museum's future site is a parking lot across the street from the proposed Yerba Buena Gardens Cultural Center. The 150,000- to 175,000-square-foot facility will double exhibition space for the SFMMA.

The Advisory Committee will narrow their list to two or three finalists this summer, with the final selection to be announced by the SFMMA trustees' Architect Selection Committee before the end of the year.



Gehry House in Santa Monica.

Decon (continued from page 25) of Modern Art in New York, where it runs through August 30. Those who waited may now wonder, in the disingenuous words of its curator Philip Johnson, "What is all the fuss about?'

Well he should ask. Curated by any other individual, including the several architects and journalists who claim to have discovered Decon before Johnson and MoMA took it up. this modest show of ten projects by seven architects would have as little impact as, say, the other installments in the ongoing Gerald Hines series of architectural exhibits at MoMA.

The show is significant, however, if only in suggesting an alternative to the kind of debased Post-Modernism that Johnson himself introduced into corporate America. And it's great to see the seven, who have received plenty of attention in the professional press but little public exposure, enjoy their moment in the sun. But in seeking a movement where they admit none exists, Johnson and associate curator Mark Wigley have reduced to the least common formal denominator the work of their subjects-Coop Himmelblau of Vienna, Peter Eisenman of New York, Frank Gehry of Los Angeles, Zaha Hadid of London, Rem Koolhaas of Rotterdam, Daniel Libeskind, now of Milan but formerly of Bloomfield Hills, Michigan, and Bernard Tschumi of New York.

What can be said about all of them is that they employ skewed lines and irregular angles, or, in Wigley's definition, "an unstable, restless geometry, the kind that relies on the diagonal overlapping of rectilinear or trapezoidal bars." Is that it? For the purposes begin, and that's where they end.

We have here what Wigley calls an "uneasy alliance. The architects will proceed in different directions." In fact, they already have. Several of the projects in the show are now built or under construction; indeed, Wigley cites "buildability" as one key factor separating Deconstructivists from the Russian Constructivists of the 1920s, whose art provided formal if not philosophical inspiration for these architects. (A room of representative Constructivist works from MoMA's collection accompanies the show.) To document the built work of the seven, however, would be to highlight their differences. These distinctions have been played down still further in the show by the use of blown-up stats representing plans, elevations, and sections for all but Zaha Hadid, who made the use of original drawings a condition for her participation (too bad the other six did not strike such a deal).

Of the several architects in the show who have a large body of built work to their credit, Frank Gehry is most poorly served by the two 10-year-old house projects shown. Indeed, it is clear why MoMA needed Gehry, whose presence gives Decon the starting date of 1978, when Gehry began "deconstructing"



Eisenman's Biology Center in Frankfurt.

his Santa Monica home. But does Gehry, who is the subject of a one-man show that has toured the country for two years (P/A, Nov. 1986, p. 26) need MoMA?

Does he, or any of the others, care to be called a Deconstructivist? Some seem more eager to disclaim the label than to embrace it. "I'm not a Deconstructivist," says Hadid, who might otherwise seem to be the classic example. "The show raises a lot of questions, but that's better than giving answers," says the diplomatic Wolf Prix of Coop Himmelblau.

The curators themselves are all disclaimer. Johnson confounds those who would see in Decon another "Modern Architecture," the show that codified Modernism for America, which Johnson curated at MoMA with Henry-Russell Hitchcock in 1932. "However delicious it would be to declare again a new style, that is not the case today,' writes Johnson in his catalog preface. "Deconstructivist architecture represents no movement, it is not a creed."

Installed in haste (the show was conceived and executed in under 11 months, a remarkably short time for MoMA), the exhibit assumes too much of its audience, and yet not enough. Words on the walls are limited to a vague introductory panel and an identification tag for each work listing only the architect's name, project title, date, and drawing type-no history or program. That's not sufficient data to guide a perplexed public through images whose very purpose is to question the conventions of contemporary architecture.

These architects have important things to say about Modern architecture, questioning its structural and spatial conventions (Coop Himmelblau and Hadid), its urban implications (Koolhaas and Tschumi), its sculptural possibilities (Gehry), or its connections to literature and philosophy (Eisenman and Libeskind). We see attempts to answer questions that we are not invited to consider. The assumption that MoMA's public does not care to look beyond formthat its audience cannot absorb more than the fact that here are seven architects whose work looks more or less alike-makes "Deconstructivist Architecture" elitist and yet dangerous. It aids and abets architects anxious to copy the style without comprehending the substance, doing to Decon in effect what "Modern Architecture" did to Modernism 50 years ago. Daralice D. Boles

Case Study Redux

The Museum of Contemporary Art in Los Angeles, which is planning an exhibition of the Case Study Houses program for October 1989, has invited five architects from the U.S. and Japan to design prototypes for what it calls "New Case Study Housing," in conjunction with the show "Blueprint for Modern Living: The History and Legacy of the Case Study Houses.'

Adele Naudé Santos, former Chairman of the School of Architecture at the University of Pennsylvania, won a competition sponsored jointly by MOCA and the L.A. Community Development Agency to design 40 units of affordable housing to be built in Hollywood. Also competing were Craig Hodgetts, who is designing the installation of the Case Study exhibition, and Eric Owen Moss, both of Los Angeles.

The L.A. firm Morphosis has been commissioned by MOCA and the L.A. County Development Commission to design a mixed-use complex combining multifamily housing with commercial space and a day care center which MOCA hopes to build. Finally, Itsuko Hasegawa and Toyo Ito of Japan and Robert Mangurian of Los Angeles will design prototypical senior citizens units.

MOCA's new program calls for multifamily housing, rather than the single-family dwellings of the original Case Study program. The architects, who have varying levels of experience in the design and building of affordable housing, were chosen on the basis of both "the quality of previous work done . . . and on the level of creative thinking and social commitment expressed in their proposals to the museum." Their designs will be shown in the exhibit, along with archival material on the original Case Study program. MOCA will also build full-scale reconstructions of two houses--an unbuilt 1945 design by Ralph Rapson and a 1958 house by Pierre Koenig.



Rapson house, to be reconstructed.

Rossi (continued from page 28) Schultes/Bangert, Jansen, Scholz, Schultes, West Berlin, have received more positive reactions in the press. Nor is it certain that Rossi will be commissioned to build his design.

But if he is, this undertaking will undoubtedly have great personal significance. In his book, The Architecture of the City, Rossi notes that the two most important parts of a city are the resi-



Third prize design by Schultes et al.

dential areas and the "primary elements." As Rossi has already built two residential buildings (sponsored by the International Building Exhibition-IBA) in West Berlin, the German History Museum will represent a "primary element," whose form and presence will make a lasting impact on the life of the city. Mary Pepchinski

The author is a New York architect now working in West Berlin.

Top Choice for Hartford Annex

Time finally caught up with Hartford, Connecticut, whose city fathers recently acknowledged that their elegant 72-yearold city hall was inadequate for the needs of 1980s style government. To solicit designs for a new facility, the city devised a competition for a 350,000square-foot city hall annex. Proposals were requested from design/development teams and, after much back-room politicking and a change of heart by city council, there emerged a winner: architects Tai Soo Kim Associates, teamed with developers Bronson & Hutensky, both of Hartford

Kim's typically understated design focused on an expression of the annex's unusual site, which entails the air space above a four-lane highway and two small parcels of land to either side of it. Kim placed simply-detailed limestone towers on opposite sides of the highway and spanned between them with office floors sheathed in glass and shaded by aluminum louvers. A large steel truss crowns the building, recalling the appropriate image of a bridge while



Winning Hartford Annex design by Tai Soo Kim.

providing the support from which the office floors hang.

Also in the final round were schemes from Ellerbe Becket. New York, and a design team composed of Herbert S. Newman Associates, New Haven, Connecticut, and Smith Edwards Architects, Hartford. Ellerbe Becket (in conjunction with developers O&G Industries, of Torrington, Connecticut) brought forth the most daring design, a highly sculptural form that combined a slender stonefaced wall and glass-enclosed offices cantilevered from it in a sweeping curve. The Newman project (submitted with Century Development Corp., of Hartford) offered a more formal (continued on page 32)



Annex design by Ellerbe Becket.

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WORKING FLOORS FOR THE WORKING ENVIRONMENT.

Hartford (continued from page 30) composition with base, tower, and inscrutable dish on top.

The original field of eleven invited firms was eventually narrowed to three by a committee of seven city officials, most of them heads of municipal departments, and one outside architect appointed from among designers actively involved in a city project. Hartford City Manager Alfred A. Gatta recommended Kim's proposal following interviews with the finalists. Final selection, however, required a vote by the city council, which had initially rejected Gatta's recommendation in favor of the Newman/ Century proposal and later relented. Kim and Bronson & Hutensky are now at work with the city to develop specific program and space requirements. Vernon Mays



Annex design by Herbert Newman.



Piretti Collection for Krueger.

Neocon (continued from page 25) little effect on the agonizing waits to get into them. But the best feature of the Mart's spruceup turned out to be the renovated third floor, newly installed with contract furniture tenants such as Herman Miller (a rather unsatisfying showroom by Skidmore, Owings & Merrill), Helikon (an elegant design by Eva Maddox & Associates), and Vecta (a refreshing image change by designer Lee Stout). The floor itself, designed by Booth/Hansen Associates, is a pleasant, long-overdue departure from the traditionally gloomy, claustrophobic Mart norm. Barrel-vaulted corridors, cleverly illuminated to hint at

daylight, are laid out at angles to counter the vastness of the Mart's floor grids, and intersect at rotundas meant to orient the visitor.

While showrooms were turned out in high style, the furnishings scene was tame by comparison with recent years. The only really major new product introduction was Giancarlo Piretti's ergonomic seating collection for Krueger International; Piretti showed an astonishing 47 different models of the chair (all of which were prototypes), running the gamut of office, stacking, classroom, and even airport seating.

Repositioning strategies aimed at the office market were in evidence this year among manufacturers such as Stendig, which unveiled the American Business Sofa (smaller, neater, and less loungelike than typical executive leather sofas) in new models by Raul de Armas and Edward F. Weller III of SOM, and Massimo Vignelli and David Law of Vignelli Associates.

ICF's introduction of a modular trading table, a clear departure from its specialized, high-design image, was another example. And, in a move to beef up their design image, Interface (carpet tiles) and Guilford (fabrics) commissioned six highprofile design firms (Krueck & Olsen, Roger Ferri, Anthony Ames, Arquitectonica, A2Z, and Nob + Non) to design coordinated products for an exhibition, "In Context."

Leather furniture was everywhere; some of the most elegant was seen in Metropolitan's two new collections, by Brian Kane and by Robert Arko (the young designer's first).

Formica's exhibition, "From Table to Tablescape," held across the river from the Mart, showed off the results of the company's latest round of open and invited competitions for the design of objects, this group made with Formica's new building product, 2000X[®]. Among the best of the invited entries was Mark Mack's Water Table. A specially commissioned fountain, made of 2000X® and a monumental pileup of sinks and bathtubs, was A2Z's witty contribution to the exhibit.

The usual complement of seminars, held this year in Chicago architectural landmarks, featured speakers ranging from architect Helmut Jahn to NBC anchorman Tom Brokaw. *Pilar Viladas*



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Perspectives

The renovations of and additions to three cultural institutions in Chicago demonstrate the extent to which contextualism has caught on in that city.



Above and right: addition to Chicago Historical Society.





Addition to the Art Institute of Chicago.

Remaking Museums in Chicago

Very quietly, almost surreptitiously, major additions to the Art Insitute of Chicago and the Chicago Historical Society have slipped into a city usually known for dramatic and often unsettling architectural debuts. A third, equally understated addition is under construction at another venerable institution, the John G. Shedd Aquarium.

Together they represent 363,000 square feet of new space, at a cost of \$90 million. In Chicago, these projects also serve as a barometer of current thinking among some of its preeminent architects. Each addition is a masonry building that bows to the style of the preexisting structures—Beaux-Arts in the case of the Art Institute and Shedd Aquarium and Georgian for the Historical Society. The deferential attitude of these additions, accompanied in the first two cases by extensive interior renovation, suggests the extent to which contextualism has taken root in Chicago.

The addition to the Historical Society, completed in early April, is not only an addition to, but a reconstitution and repudiation of an earlier 1971 addition to the original museum designed by Graham Anderson Probst & White. The addition, designed by Gerald Horn of Holabird &

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Root in Chicago, completely wraps around the 1971 addition, obliterating architect Alfred Shaw & Associates' stark, windowless white limestone façade and reconfiguring and enlarging the interior space.

Like the 1932 original, the new building is red brick. But its ornament, in the best Modernist tradition, emanates from the structure itself: steel set into masonry, chrome-plated bolts, and an entrance pediment rendered, bridgelike, in white painted steel.

The original building program called for an expansion of storage space only, to be built underground. Holabird & Root (continued on page 36)

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Pflow



The International City Design Competition is an open competition sanctioned by the International Union of Architects (UIA) with no eligibility requirements for professional licensure or residency. Registrations with the fee of US\$75 must be postmarked no later than <u>November 30, 1988</u>. Cash will not be accepted. Checks, money orders, or bank drafts must be made payable in US dollars to: SARUP/UWM FOUNDATION/ICDC, and sent to:

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Submissions, limited to 3 boards, will be due May 1989. The winners will be announced in July. Requests for information and a free videotape should be sent to the address above, or telephone USA 414-229-4014, and ask for the ICDC Staff.



Grand stair of Art Institute, renovated by John Vinci.



View of Art Institute's European galleries, renovated by SOM, from grand stair.

Chicago (continued from page 36) mission and information, a restored ceiling with decorative plaster coffering, and a new skylight over the grand stair harmonize with the turn-of-thecentury design of the rest of the museum. In the lobby, Louis Sullivan balusters designed for Carson Pirie Scott and installed in the museum in the 1960s were replaced with reproductions of the original Beaux-Arts balusters

One of few departures from the 1893 scheme is a new series of lighting fixtures. The original galleries featured a series of hanging fixtures that functioned almost as chandeliers, calling a great deal of attention to themselves. Architect Adrian Smith of SOM chose instead to mount lights on the original coffered ceiling.

While the Art Insitute and Historical Society have undergone the most far-reaching changes, other Chicago museums are also undergoing expansion and a general sprucingup. The Museum of Science and Industry added a new wing, housing the Henry Crown Space Center and Omnimax Theater, two summers ago, and the Field Museum of Natural History completed a \$12.6 million exterior restoration project last December. The Adler Planetarium is reportedly planning a major underground expansion in the near future, also to be designed by Lohan & Associates. Lisa Goff

The author is associate editor of Crain's Chicago Business.



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In Progress

Four works illustrate current U.S. work of Mitchell/Giurgola, whose Australian affiliate, Mitchell/Giurgola & Thorp, designed the Parliament House in Canberra, subject of this month's feature pages. Jessica Elin





1 Project: The Fine and Performing Arts Center, University of West Florida, Pensacola, Fla. Architects: Mitchell/Giurgola Architects, New York. This complex brings together three related academic departments that had been housed separately. Two theaters seating 450 and 90, a 300-seat recital hall, and eight studios and gallery space for the arts department are articulated as separate elements connected by courtyards. Programmatic distinctions are reinforced by color, form, and material. Pitched metal roofs painted sky blue, for example, are used for the main performance spaces, gallery, and studios, with flat roofs on all other elements. White masonry walls with punched openings alternate at special locations with glass and stucco façades. The 80,000square-foot, \$7.5 million complex will be completed next year.

2 Project: Center West Office Building, Los Angeles. Architects: Mitchell/Giurgola Architects, New York. This competition-winning tower incorporates 360,000 square feet of office space, 17,000 square feet of retail space, and five levels of belowgrade parking. The tower will mark a pivotal shift in scale from the high density of Wilshire Boulevard to the smaller-scale neighborhood of West Hollywood. Clear, heat-absorbing glass is used to enhance the transparency of windows punched in the rose-colored, thermal-cut granite façades which are separated from one another by strips of vertical glazing. Estimated costs are \$39 million; a 1989 completion is planned.

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3 Project: IBM Office/Parking Complex, Phase I of Solana Master Plan, Westlake/Southlake, Texas. Architect: Mitchell/ Giurgola Architects, New York. This office complex is part of an 840acre mixed-use development, planned by the Office of Peter Walker and Martha Schwartz of San Francisco, Mitchell/Giurgola, Ricardo Legorreta of Mexico City, and Barton Myers of Los Angeles, which includes 6 million square feet of office space, a 400-room hotel, and a retail Village Center. The six office buildings for IBM in Phase I, totaling 1.14 million square feet, are arranged to either side of an outdoor pedestrian spine. Also under construction for Phase I are a dining building marked by a circular pavilion and two L-shaped parking buildings. Circulation along the perimeter of each office building occurs in the form of a precast concrete lattice "porch" facing



4 Project: Outpatient Care Center, University of California, Los Angeles. Architects: Mitchell/Giurgola Architects, New York. Part of a major expansion of the university's medical center (May P/A, p. 89), this 380,000square-foot clinic is seven stories tall. On a typical floor, waiting rooms and patient seating are located in five large bay windows along the main corridor, across from which are the examination rooms and doctors' offices. Each of the seven floors follows the same organization to promote patient comfort and an understandable layout. The center is scheduled for completion in early 1990 at a cost of \$5 million.

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Jack Corgan is a principal of Corgan Associates Architects, a 65-person firm based in Dallas, Texas. He is also a former Assistant Professor of Architecture at Oklahoma State University. We value our relationship with his firm, and thank him for his willingness to talk to you about us.

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P/A Practice

Computers: Eric Teicholz examines the state of software integration. **Law:** Norman Coplan discusses a case affecting site observation. **Products Industry:** Michael Chusid looks at how architects and manufacturers use video.



NOTE: LOW NUMBER MEANS "LOW", "EASY", OR "FEW" HIGH NUMBER MEANS "HIGH", "DIFFICULT", OR "MANY"

Computers: Heading Toward Integration

In the world of computers, it is no longer satisfactory for a machine just to draw or for a spreadsheet program just to manipulate numbers. With the advent of more powerful personal computers and workstations, users are demanding various levels of integration, and hardware and software compatibility. Industry, in order to remain competitive, is responding by building various links between hardware, software, and database products.

Before exploring this integration, let's look at what applications architects currently automate. This spring, McGraw-Hill's Sweets/Dodge Division surveyed architects, architect/engineers, engineers, and the top 6000 general contracting firms who have computers and came up with the following computer usage as a percent of the respondents: Word processing (90.6%); Spreadsheet (73.9%); Specification writing (68.5%); Cost estimating (56.0%); CADD (51.5%); Accounting and payroll (continued on page 53)

Law: Breaches in Site Observation

Architects seek to immunize themselves from responsibility for the defective work of contractors by contractual disclaimers. The owner-architect agreement issued by the American Institute of Architects, for example, expressly provides that ar-(continued on page 55)

Products Industry: Videos

Although still relatively new tools in the architectural office, videotape presentations are nevertheless changing the way design teams explore and evaluate building products. To be sure, the number of VCRs in architectural offices has not yet approached the 70 percent penetration some experts estimate the video medium has achieved among America's households. Yet, when viewed in the context of today's "electronic office," videotape is making significant gains.

A recent study of design industry professionals showed (continued on page 58)

Practice Points

Interior designers will be licensed in Florida. A new state law creates a licensing board of interior designers and architects that will restrict the use of the title "interior designer" to those meeting specific requirements for education, examination, and experience. Florida is the fourth state to enact such a law; the AIA opposes licensing design professionals other than architects or engineers.

Prime lending rates are likely to remain somewhere between nine and ten percent over the next year, reports *ENR*. The Federal Reserve Board raised the prime rate to nine percent in May as a hedge against inflation; forecasters don't think another big jump will be necessary during the next year.

The Los Angeles City Council is considering an ordinance requiring all buildings over 75 feet in height to be retrofitted with sprinklers. A fire that gutted five floors of a high-rise inspired the proposed law. Only Massachusetts currently has a similar law, requiring sprinkler retrofits in buildings over 70 feet.

The renovation of existing buildings should keep the nonresidential construction market afloat through this year, says Cahners Economics. The reconstruction market should remain particularly strong in older cities where land is expensive and new construction costs are high.

A bill now before Congress would increase the responsibility of architects and engineers for construction safety. HR 4856 requires the presence of an architect or engineer on all construction sites and states that their liability shall be equal to that of a construction supervisor.



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Computers (continued from page 51) (50.7%); Project management (47.1%); Engineering design calculations (39.1%); Database management (36.8%); and Space planning (17.0%). The applications software listed above can be ranked using variables developed by Ray Davey, a facility management consultant in Massachusetts, to obtain the matrix above.

Although the values inserted in these matrices are somewhat subjective, it is still possible to conclude that the automation of word processing is significantly easier, for example, than that of CADD or desktop publishing. It should also be mentioned that even if one is automating word processing one should also keep integration and compatibility issues in mind.

The computer applications above can be linked with each other and with various types of hardware through hard or soft integration. Hard integration occurs when two or more products directly communicate with each other without the use of neutral data file formats or translator programs. Soft integration usually involves the support of some data or hardware standard. Hard integration by definition results in a stronger link between two products than does soft integration.

Some Technical Issues

Just how does software integration take place? What are the degrees of compatibility that can occur? Basically, primary or hard integration takes place when the manufacturer or a third party writes an application program using the programming language provided by the vendor. This results in a very tight fit between the application and the original program—provided the original program is "open" and contains a programming language that enables this customization to take place. Secondary or soft integration takes place when a standard database exchange format is used for the integration.

Let's use Autodesk's AutoCAD program as an example to illustrate these two methods of integration. In its applications catalog, Autodesk lists dozens of third-party A/E/C software products that "run with" or are "integrated" with Autodesk's popular CADD product.

Most of AutoCAD's thirdparty products are integrated in a soft manner in that they support bidirectional file transfer. AutoCAD provides the ability, through its Drawing Exchange Format (DXF), to access graphic file data. This standard file format allows third-party developers to use a consistent, unchanging format in program development for applications that need to read drawing file information.

Using DXF files, unfortunately, has several drawbacks in terms of integration. The creation of the DXF file, for example, requires bringing up the file in AutoCAD, issuing the output (DXFOUT) command, quitting the drawing, and having to repeat the process once for each drawing to be processed. Also, DXF files are very large (approximately twice the size of the original drawing), which means that a great deal of disk space is required and imposes a speed penalty on programs that have to process the data.

There is another form of integration with AutoCAD that doesn't involve the use of DXF and results in a much tighter or hard integration. But it means that whenever Autodesk releases a new version of its software, the integration software must also be updated.

Networking

Of all of the different hardware and software solutions to integration, networking is perhaps the ultimate answer to this problem. Until recently, networking hardware has not been stable, which has inhibited software development, but this is no longer the case.

Networking is a method by which people in different locations can share software, databases, and computer hardware resources such as disks and plotters. Computers are connected to each other using a variety of different means (e.g., telephone lines, coaxial cables, or fiber optic connections). Other network components consist of: Workstations, such as PCs or mainframe computers; Networking software to move data on the network, to control data access, to manage security, and often to provide drawing management capabilities; A File Server (often a separate computer) to store networking software and data files; Network interface cards that are placed in each component to be connected to the network media.

A LAN (Local Area Network) is used for networking machines up to ten miles and a WAN (Wide Area Network) for distances greater than this. Topology is the term used to refer to the way pieces hook up on the network; the major topologies (continued on page 55)



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Ceremonial main entries into the new Parliament center on all four quadrants. Although the Great Verandah (below) is the public entrance and hence the most elaborate, the House Wing has its own entry, through a formal portal marble-trimmed subtly in the green representing that body (bottom left). The Senate entrance bears the appropriate reddish accents (bottom right).







Possibly the most elegant and impressive entrance is also the most understated. At the inner façade of the Prime Minister's courtyard (page 88), the entry of the Ministerial Suite (right) is a front door for greeting the most important dignitaries who visit Australia. Entering via the courtyard gates, a visitor may be transported directly to the door by automobile to be formally received.

Throughout the complex, the care taken with stonework and detailing is remarkable (page 91). Precise tolerances and deeply recessed sealant at the joints are just one indication of the level of craftsmanship and painstaking design attention common to all parts of the building.

Different teams, organized within the Mitchell/Giurgola & Thorp office, were set up to carry out each section of the huge project, with a constant overview by Romaldo Giurgola. If there are differences in the design expression, as in these entries, it may be a result of this necessity.



The Foyer (right) is the first space the public enters; with its bold geometric pattern in black and white marble, the floor is in sharp contrast with otherwise more subtle room colors. Densely-spaced concrete columns, clad in light green Cipollino marble to approximately two thirds of their height, are intended to create separate areas in which groups can gather.



Paneling in the Foyer is the beginning of the skillful use of wood throughout. Here the timber is jarrah and coachwood. Wood marquetry over each door and carved stone newel posts at stair ends (page 98) bring the art/craft element into the space. Giurgola points to the planar surface of the outsides of the stair and curvilinear surfaces where people touch as similar in intent to the outer skin of the building with its punched openings and softer interior finishes. The Foyer is more highly formal, active, and Continental than any other space in the building.





Beyond the Foyer, the main axis passes through the Great Hall (bottom left). The huge skylighted space normally will be seen by the public from galleries on the second level. Finishes—especially the jarrah and ebony parquet floor and jarrah, brush box, and white birch walls—and the large tapestry by Arthur Boyd (page 99) are the focus of this space.









In the Members' Hall, the very center of the building, both the north-south and east-west axes meet (right) under a huge skylight. The flagmast directly overhead can be seen from this dramatic perspective; below it at Members' level is a silent spilling fountain, the stone for which is just over 13 feet (4m) square, cut in Adelaide from a block weighing 33 tons. The pool is surrounded by a border of travertine, then by a richly patterned wood floor (left). The timber columns are of turpentine wood, a species not widely used in building joinery previously. Other wood used in the Hall are gray box, white birch, and light silver ash (ceilings).

On the public level, broad galleries surround the Hall, featuring artwork and crafted benches (above). Recalling the building's entry façade, the screen walls regain prominence in this central element, and the resulting layering is highly effective, spatially. A slot appears between paired corner piers and columns, and this effect recurs in the Chambers.



The Senate Chamber (right) most prominently displays the red derived from the ochre of native soils that denotes that house. Smaller than the green-toned House of Representatives (bottom), the Senate is also more intense in its color, employing reds that grow progressively paler toward the back of the galleries. Both chambers have their own adjacent lobby/lounge areas and courtyards for Members.

(continued from page 76)

The Great Hall and the Members' Hall

While the Great Hall has the enormous proportions of a major hotel ballroom, those proportions do it little justice; the fine wood panel detailing, the floor craftsmanship, and the skylight above it seem to be hopeful gestures to relieve it from an ennui that can be relieved only partially by the major artworks in the space. It is designed to receive up to 1500 guests at major serious and festive occasions.

Public and legislative paths diverge to either the Senate or the House when they reach the Members' Hall, which is the central space in the building. While it is difficult to assess the Members' Hall, an apparently contemplative space, with Parliament not yet in session (it convenes in mid-August), it seems safe to say that the courtyard with its screen walls, timber details, and minimal black fountain will fulfill its function as a meeting place for representatives of the two houses.

The Legislative Chambers and Support Facilities

Dressed in a modified version of the traditional British red and green, the Senate and the House of Representatives are the next, and probably last, large-scale spaces in the procession. After a three-year controversy, the bright red of England's House of Lords was changed to more of a reddish ochre for the Senate; the green of the House of Commons was brought closer to the typical gray/green of Australia's ubiquitous eucalyptus for the House. These color families are used as accents in subtle ways to identify those portions of the building related to each house.

Normally seating 88, the floor of the Senate Chamber can ultimately accommodate 120, allowing for a joint sitting of both Houses. The House of Representatives seats 170 Members normally, 240 ultimate.

Member seating in these chambers was affected by a decision during construction that the number of Parliament Members would be increased. This action, in turn, increased the need for office space, and required a programmatic and design change. Corridors that were on the perimeter of the House and Senate office wings became double loaded, and added considerably to the previous budget. Because expansion options had been considered in the design process, the solution was easily accommodated in the overall plan, however.

It is no real trick to align the major spaces in such a project with a strong geometric relationship to each other and the axial relationships. It is in these supporting office blocks that the real test of the parti came; it passed. The admittedly numerous offices are easily contained within the space the earlier diagrams assigned to them. Offices and the corridors linking them are not ostentatious, but they are well thought out and cleanly designed. All offices were required to be within 1½ minutes walking time of the Chambers to allow Members to return quickly in case an important vote is being taken. Courtyards are a crucial part of the total plan, in bringing an unusual amount of light to what could be a maze of offices.

Perhaps an even more traditional English carryover than the colors is the group who actually record the Parliamentary action. They continue to be accorded the name Hansard, and special provisions are made for them, both in the Chambers and in their own area, where there are writing areas and their own library. Spacious press areas could be used in the future by legislators.

The Ministerial Area

Through the inclusion of the Prime Minister's Suite, this project becomes almost analogous to combining the U.S. Capitol and the White House. At the south end of the main building axis, the suite is a private section; its own elegant courtyard and entrance allow the Prime Minister to receive guests as if at home, without the need for them to pass through the rest of the building. Like the Members' offices, these facilities required a 1½-minute walk distance to the Chambers. Also, by pulling the ministerial offices further within the building, they have less exterior perimeter, are more secure and more resistant to intrusion in any form. Finishes and furnishings in the suite maintain and, if possible, surpass the standards of craft involvement shown throughout the building. *Jim Murphy*





Skylights in the two chambers are similar (pages 92–93), but the roof forms are different. The hung speakers, stem-mounted as in other spaces, are a constant visual disturbance. In each chamber, the Australian coat of arms is interpreted by artist-craftsman teams. The special furnishings, architecturally designed, were commissioned: in the House, the Speaker's chair, by craftsman David Upfill-Brown of Canberra, and the gray box main and Hansard tables by Bernie Koker of South Australia augment the custom desks; in the Senate, the central and Hansard tables, President's desk, and the adjacent wood screen are by Tasmanians **Robert and Phillip Blacklow.**



The Prime Minister's entryway features bronze and wood doors and a specially designed carpet (below, left). All of the wood finishes in that suite were by a Tasmanian craftsman, Kevin Perkins. The wall panels in the Prime Minister's office (below) are huan pine; they were cut by a collector years ago, not for this use, and recently were offered to the Australian government.









Some panels are thought by the artist to have been as much as 1500 years old when cut. Note the natural edges left to form the opening of the convex wall niche (right foreground), and the concave niche farther back in that wall, for which an oval table was built by the same craftsman. The Prime Minister's desk is of inlaid jarrah wood, and is finished flush on the underside as well, with brass-edged enclosed compartments for communications and power runs.

Casework on the wall behind the desk (far left) has no door pulls, but corners at the top of each pair of doors are gently folded out at the center, and the top is notched to form a subtle hand space.

In the main Cabinet Meeting Room (left), a marquetry panel runs the length of ceiling over the table, created by the same craftsmen who did the panels in the Foyer (page 98); similar rich treatment is given the tops of panels around the walls in one of the primary reception rooms of the Cabinet Suite.

Some of the myriad other spaces in the new Parliament include the Members' swimming pool (top, left)—a cool, restrained and elegantly detailed facility, it virtually eliminates the expected edge on the pool—and the Parliamentary Library at ground level (center left); it again integrates art and craft into the space in its use of a woven carpet (page 99).











Corridors may be grand, like those that line the main curved walls (above, at the Members' Hall). In the more restrained office block (left), the hall carpeting is edged by a wooden border to protect walls during floor cleaning. Coved ceiling corners lead the walls gently into plaster tile ceilings. Entry doors into the Members' suites are marked by surrounds showing the importance of this, rather than the exit, door. An individual Member's office (far left) has furniture designed by M/G & T (page 97).

Courtyards and terraces in and on the building bring valuable daylight to what could be dark interiors in such a large mass. Some courtyards flanking the Senate and the House near the center of the building (right) are closed at both ends by the glass links tying the wings to the central hub. Visitors may be allowed into these for some receptions; otherwise, courts are for Members and employees.







Other courtyards closer to the outer perimeter (top, left) do not have a closing link at the outer end. The court inside the Ministerial Wing (left) is a paved surface incised with waterways fed by a fountain in the curved niche. A perhaps odd note, the wooden pergolas of salvaged timber are repeated at one edge of the more spartan second level Public Terrace (center, above). The Members' and Guests' Terrace (top) on the upper level offers spectacular views of Canberra. A more intimate courtyard off the Senate President's office (above) reveals an unusual "eyebrow" opening at the second level.

Peter G. Rolland & Associates was the landscape architect.







Although the New Parliament's countless details are each the result of full study leading to skillful resolution, the composite building is still technically straightforward.

IT was stated in the earliest program that, since the project was to be built in a small city, the New Parliament House should not try to be a technologically demanding structure. It is not. There are few aspects that are unusual, and those that are do not break new technical ground. While there are hundreds of detailed points of interest in the building, those shown on the following pages seemed most pertinent and typical of the rest in terms of the attention paid to each aspect. Some important elements are not included, such as the inverted membrane roof, because even though it was a relatively unheard of system in Australia, it is common in the U.S. A separate piece could be written on the finely-finished precast concrete, and another on the successful use of stucco lustro, a revived technique applied prominently in several major spaces. Technical and aesthetic landscaping details would take another long essay. These, then, are just some among the hundreds. *Jim Murphy*

The architects paid much attention to the detail work in wood and stone, shown on these pages. A few of the wood species used here were not commonly thought viable for fine carpentry. By encouraging research into special drying procedures to overcome splitting and warping, the project has possibly led to an expansion of a whole industry.

Paneling in all major areas was designed to be modular units, and each unit normally comprises two or three species of wood. Aesthetically, this allows for an ordering of the different combinations of woods in concert with the evolution of the color system in the building, and it develops possibilities for subtle refinements in each space—to get a sense of progression desired by the architects.

Stonework plays its most conspicuous role in the great curved walls. Appearing solid, each wall is actually a pair, with mechanical runs and exhaust ducts between. Carmina granite from Eugowra, New South Wales, was selected, and the 2-inch-thick slabs are individually mounted on stainless steel pins. Because of the curve, very few stones were alike, and at the openings each corner was cut at a different angle.







90 Progressive Architecture 8:88





Along with courtyard and terrace glazing, skylights play a major role in the illumination of the interior of the building. Two of the most striking are in the House of Representatives (below) and the Senate (right). Although their configuration and details are the same, the effect they are able to bring to their respective spaces is quite different, because of variation in roof design.







The flagmast was implicit in the architects' original statements: "the hilltop should be left clear of visible constructions. Only the flag should be present as a permanent rallying point or symbol for the citizens." The celebration of the flag as a symbol for the new facility and for Australia was clear from that point on, even though the flag has not played the important role in Australia that it has in America.

Following what the Melbourne engineers Irwin Johnson and Partners considered a "simple" computer computation program, the stainless steel mast legs were laid out in a rail yard, and aerial photos were taken to check for the correct profile. The triangular tube legs of the mast are the only structural support, with the intervening attached clusters to support flagpole sections (right, below).

Leg base details (left) are an indication of the anchoring and stiffening measures employed to secure and strengthen the 265' mast. Fabricated in Sydney, it weighs 242 tons. Installation was begun in July 1986, using a temporary scaffolding to hold it in place until the final welds were completed on the segments.

A three-person electrically operated cage is designed to climb the southeast leg of the mast on stainless steel tracks for routine maintenance. Flag hoisting methods were devised by Australian yacht designer Alan Payne, employing cables operated on the northeast leg by means of a winch atop the main curved wall; both the cage and the cables are stored out of sight in compartments in the wall when not in use. The cost of the flagmast is estimated at less than ½ percent of the total.





Parliament House Furniture



Furniture

Parliament House required some 34,000 pieces of furniture, at a cost of about \$32 million, Australian (about \$24 million U.S.) all specified by Mitchell/Giurgola & Thorp and much of it custom designed by the firm. (The interior design contract was not awarded automatically, but demanded much demonstration of capability by the firm and staunch support from the Parliament House Con-











struction Authority.) There was a requirement to use products manufactured in Australia wherever possible, and in 1980 little highquality furniture was made there; importing finer items was the norm. By establishing very demanding specifications and acting as go-betweens in licensing agreements, Mitchell/Giurgola was able to meet program needs with 98 percent of the furniture made in Australia. A secondary, long-term effect was to raise the national standard of furniture production.

While Parliament House was under way, Mitchell/Giurgola's design and construction of the Volvo headquarters in Sweden, including its interiors (P/A, March 1985, p. 65) served as a testing ground and helped to identify some choices. Among the items translated from Swedish sources are large numbers of cafeteria chairs and lounge sofas (photos, top right) originally by Gärsnäs, produced under license by Parker in Sydney, which proposed refinements that have since been adopted back in Sweden.

Furniture custom designed by the architects includes: the Norman lounge (single and double width, top left) for high status lobbies; the dress lounge, with switchable back rest (two views, middle left) for larger lobbies; and the Parliamentary Series chairs (three views, far right), used highbacked, with national coat of arms on black leather, in corridors and ceremonial rooms, mediumbacked (not shown), and lowbacked with fabric in the members' and guests' dining rooms and as extra chairs in the chambers.



urniture photos courtesy architects



A modular conference table (prototype and detail bottom left) permits many configurations and has top details that express the quarter-circle plan of its legs. The standard members' office desk (prototype and detail, bottom right) shows some of the half- and quarter-circle details that recur in the pieces designed by the firm and in interior trim as well. The desk is coordinated with other custom furniture in the members' offices (p. 87).

Singular custom furniture includes seating in the parliamentary library (large photo, left page) and a modular seat-screen for groups of children (large photo, right page) that forms a horseshoe in the public orientation area.

Custom furniture commissioned from individual craftsmen includes the series of benches, in various woods, for public spaces (used, for instance, in the Foyer, p. 81), by Leon Sabudin of Sydney. In the Prime Minister's office (p. 86), furniture by the craftsman Kevin Perkins of Tasmania is used along with barrel chairs designed by the architects, with quilted fabric inside a rawhide-covered shell.











The Art and Craft Program The creation of the Parliament House included over 60 major commissions for art and craft works, plus acquisition of about 3000 other pieces. Work began in 1981 and required close collaboration between the Parliament **House Construction Authority's** Art Advisory Group, the Parliament's Curatorial Section, and Mitchell/Giurgola & Thorp's Art and Craft Coordination Group. The budget for the entire program, which fluctuated over the years, was finally about \$13 million (\$9.75 million U.S.).

Promising artists were sought all over the nation, not just in prominent galleries; craftsmen were awarded contracts that included advances for new equipment; artist/craftsman teams were established.

The choice of an aboriginal work as the first to be encountered in the Forecourt (top left) was made early, and work on the 14-metersquare (about 46-foot-square) mosaic at its center was begun in 1983. Michael Nelson Tjakamarra won a competition among artists of the Papunya district with a composition representing a gathering for a ceremony. The Papunya pointillist technique for ground paintings (which are meant to be trod on) was translated into some 85,000 granite setts, laid in black mortar by Sydney stonemasons.

In the Foyer are 20 marquetry panels (far left and page 81) integrated into the room's woodwork, representing native Australian botanical species, designed by South Australian sculptor Tony Bishop and made by Sydney craftsman Michael Retter. The same team also did marquetry for the cabinet suite (page 86).

Also in the Foyer are marble finials for the railings of the two main stairs (near left), created by Sydney sculptor Anne Ferguson in collaboration with the architects.

A major outdoor piece is "Fossilized Architectural Landscape" by Tasmanian sculptor Ewa Pachucka (bottom left). The 12meter-long (about 40-foot) sandstone piece is surrounded by a Tasmanian alpine plant chosen by the sculptor.

Another major outdoor work is a set of bronze sculptures by Sydney artist Marea Gazzard (top, far right) in the Ministerial Court (page 88), representing the Little Olgas, landmark formations of the Australian desert.

A suspended light fixture made of stainless steel and hand-cut glass (top, near right) in the House entry stairwell is a collaboration between Sydney designer and metal craftsman Helge Larsen and glass craftsman Maureen Cahill. One of the most ambitious commissioned works is the huge tapestry—20m x 9m, about 65' x 30'—in the Reception Hall (middle, near right). Based on a painting of a coastal forest by Arthur Boyd, it was executed by the Victorian Tapestry Workshop of Melbourne, which had to re-engineer looms for work of this scale.

A rug in the parliamentary library (middle, far right) was designed and executed by Liz Nettleton of Melbourne, whose workshop also wove carpets designed by others for the complex.

On the public level of the Members' Hall (bottom, far right, and page 82) are six ceramic panels done collaboratively by painter Michael Ramsden of the Blue Mountains area and Sydney ceramist Graham Oldroyd. Abstractly representing rivers in six Australian environments, the relief panels were of a new concrete-and-glass-based tile.







One exceptional old work, installed in the lobby of the main Hearing Room (bottom, near right) is the depiction—5.6 meters (about 18 feet) wide—of the opening of the first Australian Parliament, by Tom Roberts (1856—1931).

Among other commissioned art works are the Australian coats of arms at key locations: in stainless steel by silversmith Robin Blau at the center of the Great Verandah (page 100), in glass and wood by Tasmanian artist Peter Taylor in the Senate chamber (page 85), and in white porcelain tile relief by designer Gordon Andrews in the House chamber. A statue of Queen Elizabeth II, larger than life in bronze, stands on the public terrace (page 88).







An Australian observer assesses Parliament House in relation to the aspirations and character of the Australian people.

AS Ehrman Mitchell walked towards the forecourt of Parliament House, up the axis between coupled rows of fluttering flags, he remarked, "I always thought that we, that is Aldo, should design the ultimate palace for democratic government in our time." A tall order indeed, but the building had to do more than that: It had to speak for Australia.

How does one build for democracy and national aspiration? The Parliament House is a highly literary work set out like a great book that can be read on many levels moving concentrically from its outside perimeter in towards the central flagpole or progressively along its major axes. The consistent messages have been inherent in the design since its inception. They permeate the building from its overriding geometry to the color of the carpet in the most minor of its more than 4000 rooms. That such a building with a projected life span of 200 years was built and paid for at great expense with scarcely a dissenting murmur from the Australian people must say something about the country's faith in its future and that of democracy.

Democracy and the Constitution

The symbolic framework of the site was inherited from Griffin's plan for Canberra. The federation of the states is represented by the concentric rings of the city plan slashed by the radial avenues that stretch out in the directions of the state capital cities. The central ring contains the inner precinct of the Parliamentary Triangle, the zone reserved for buildings of national importance. At the apex of the triangle stands Capital Hill, the symbolically central pivot of the system, the site Griffin chose for the people's archival building. Since the founding of Canberra the flag has flown from the top of the hill. The 1974 decision to place Parliament House on this focus of the nation, rather that below it, as Griffin had proposed, caused concern in that it projected the erroneous message that the people are the servants, rather that the converse, and the raised location separated the parliamentarians from the people.

This was the delicate situation facing the 1979 entrants for the competition for the new Parliament House. Australia's constitution is based on the Westminster system with Upper and Lower Houses; the Senate and the House of Representatives parallelling the Lords and the Commons in England. The inspired stroke in the Mitchell/Giurgola & Thorp design was to place the Houses on either side of the crown of the hill, leaving its peak free for only the flag, a moving thing, responsive to the winds that sweep across the land. This anti-totalitarian image is the major statement of the architecture.

The second democratic concept was to avoid dominant architectural forms. For Giurgola the way the building rises from the Austra-



Australian coat of arms by Sydney artist Robin Blau crowning the Great Verandah.

lian landscape is in accord with Rousseau's concept of the growth of true democracy from the natural state of things. He chose to lower the top of the hill, build a low-rise structure, and reconstitute the hill by means of sweeping grassed ramps. The flag would then continue to fly on the hill as before. This aspect of the design has not won universal acclaim, with some critics of the opinion that the building should have been more upstanding, daring and outward looking.

A further aim was to relate the people to the Parliament. The low design with the open strutted flagpole allowed the great land axis that stretches from the War Memorial (sacrifice) to the Parliament House (responsibility) to pass uninterrupted over the building to the suburban areas beyond, directly linking the average citizen with the decision-makers on the hill. Similarly, the Parliament House does not have a "back" and a "front." Thanks to Griffin's plan, the main thoroughfares of Canberra, carrying the citizens around the city, converge on the site. The building is unavoidably "there" and its face is as well presented to the suburban commuter as to the visitor in the Parliamentary Triangle. Before the building of Parliament House the focus of Canberra was on the Parliamentary Triangle, with the suburban areas to the south of Capital Hill being behind the "back blocks." Now, to a marked extent this has been redressed with the presence of the building serving as a point of connection.

One of the major achievements of the design is the remarkably clear reading in plan and section of the structure of government, as Giurgola likes to say, "elucidating the checks and balances in decisionmaking." Within the building the theme of the balance of the House of Representatives and Senate, as established in the site plan, is reinforced. The two Houses and their supporting micro-cities are arranged at either end of the east-west constitutional axis. The locations of the houses are clearly marked by the building's highest elements (besides the flagpole), the pitched roofs protecting their skylights.

The traditional nature of the Upper and Lower Houses is also embodied in the architecture. The forms of the Lower House, where terms of election are only three years and debate is terse, are angular and sharp, whilst those of the Upper House, with elections in terms of six years and more leisurely hours for discussion, are curvilinear and more opulent. The red of the color scheme of the Senate is richer and the furnishings more plush than those of the green House. The Members Hall, where all parliamentarians come together, is given pride of place under the flag at the crossing of the ceremonial and executive axes. On the floor of the hall, beneath the flag, is a black reflecting pool defying other occupation of the position of centrality. The placement of the Executive on the major axis, as well, is contentious primarily on the grounds of the expressed hierarchy.

Objections in principle to the design solution are that splendid surroundings may breed ideas of grandeur and that democracy is intimate while this building is vast and, with its clear divisions and separate entrances for the public, the House, the Senate, and the Executive, it tends to divorce the various sections of government, the press, and the public. This view is tinged by nostalgia for the old, homely Parliament House where crowded conditions enforced close association.

The scale and grandeur have also been seen as possibly intimidating to the constituent who wishes to see his elected representative. Yes, it is monumental in its own self-effacing way and Giurgola has intentionally used historically proven compositional devices such as symmetry and the Classical strength of trabeated architecture to give his buildings a presence. But how does one assess the importance of a sense of occasion against familiarity and ease?

Australia: the Place and the People

The democratic principle was spelled out in the simple geometry of the site plan, but how was the building to speak for Australia? To the Italian-born, American-based architect this was the most difficult challenge. He sought to do this in the overall ambiance of the design, through the telling of the nation's history along the ceremonial axis, and by the use of Australian materials and artists. He immersed himself in Australian literature and scoured the country for quality materials and creative talent. The architects set the standards and the country responded. For Giurgola the special definitive aspect of the land is the clear, sharp light creating an intensity of contrast that is unique. Given this view it is surprising that the building is so inward looking, contained by the great outstretching arms of the granite-clad walls to the north and south and the stern banks of offices to the east and west. It is by means of the sunlight through the dramatic roof monitors of the Great Hall, the Members Hall, and the two chambers that the spaces are modulated and the light celebrated.

Australia also is a land of seeming limitless expanses of space, and the building reflects this and the vast dimensions of the Canberra plan. The uninterrupted axes of the diagonal avenues that sweep over the ramps and through the open flagpole structure seem particularly attuned to the Australian consciousness. Within the building there is the same sense of unrestrained generosity in the use of space and the openness in the planning.

Central Canberra is a vast garden with buildings placed within it, and from a distance the huge flagpole of the Parliament, somewhat disconcertingly, appears to rise directly out of the landscape. When the wide belts of eucalyptus trees have grown on the lower slopes of the hill the image of the building as a hilltop will be intensified. A great triumph of this building is its seeming inevitability. It has effortlessly emerged from the land and the urban geometry.

"I believe that people will feel at home in this place," Giurgola has said, "I hope they will say 'This is my home. It fits like a glove.' " The interiors are designed to inspire and delight with rich materials and impressive spaces certain to awe a public too long deprived of enjoyment of architecture by the austerity of the Modern movement. With its masterly planning that separates the public but does not inhibit their participation, the building welcomes visitors.

The history of the people unfolds along the ceremonial axis, commencing with the stark open forecourt with its ceremonial pool and central island inlaid with the mosaic by the Papunya artist, Michael Tjakamarra, which is based on an aboriginal sand painting describing the gathering of the tribe. Its central location in this vast empty space under the open sky seems an appropriate memorial to man's presence in the land extending back at least 40,000 years. On the crest of the forecourt façade is the stainless steel Australian coat of arms with the emu and the kangaroo depicted with the open x-ray technique, as in aboriginal drawings. Standing between the forecourt, celebrating the aboriginal culture, and the stainless steel flagpole of the white settlers, it subtly creates a marriage of the two.

On entering the building the axis proceeds as a series of discrete spaces. The foyer with its rich materials and elegant details represents old Europe and marks the arrival of the Western culture. This patterned marble hypostyle hall is alien to Australian experience and expectation. Australians like to view themselves as down-to-earth people, suspect of opulence, but if they accept this hall it may be a mark of an increasing worldliness and maturity.

The Great Hall follows, telling of the working of the land. Here the wall and floor finishes are of Australian timbers and the art works have been commissioned to reinforce the theme. Spatially it is uneventful and the hope for its Australian character is based on Giurgola's questionable contention that space is universal and the way its container is fabricated and finished makes it particular to a place.

The final act in this scenario is the Members Hall—the place of the here and the now and the future, the place of aspiration. It is a severe and ordered room of imposing dimensions, and through its massive skylight the huge flag can be clearly seen overhead. Floodlighted at night, it waves brilliant blue against the black sky. Flags have never held an important place in Australian culture, but this massive flag viewed from afar or from sudden unexpected vantage points from within the complex is memorable.

Those hoping for an all-Australian building will be disappointed. The strongest reading of the architecture derives from its genesis in the European Classical tradition. The ultra-refinement of its details and the lavishness of its finishes seem at odds with the Australia of the past and of 1988, but this is a building for two future centuries times when the sun and the space and the land will be the same, but the culture, for better or worse, will be different.

Achievement

The building was seen to offer the potential to establish new benchmarks for the construction industry and to raise the standard and finish in production of goods from furnishings to construction elements. The quality of materials and workmanship demanded by the design team has encouraged Australians to reach peaks of excellence, and the building is seen as an archive for artistic production in design and craft. These endeavors have affected not only economic return and export avenues but national self-esteem.

Like the Sydney Opera House before it, the new Parliament will raise aspirations for future architectural performance. Broader is architect Richard Thorp's contention that the most important achievement is the testimony to what the country can do: "There must be something very positive about a place where you can build such an enormous complex to this level of quality within the confines of the public tendering system, for a bureaucracy, on time and within financial limits. The architecture will become an example of achievement in the country, affecting everything."

But the aims were greater than this. What of democracy? As the Leader of the Opposition, Mr. Howard, said at the opening of Parliament House, it was an occasion to "celebrate our membership of a wider being and existence . . . the great worldwide institution of parliamentary democracy." The crowning reward will be if the very act of building such a symbol to the democracy of a nation amidst the dissent and disillusionment of the last decades of the 20th Century—even if misplaced Utopianism—serves as an inspiration for the free world. *Jennifer Taylor*

The author is an associate professor of architecture at the University of Sydney. She is the author of Australian Architecture since 1960 (Sydney, 1986) and has written previously for P/A.
The visitor to Parliament House can now climb to the man-made summit of Capital Hill, between the converging curves of the granite-clad walls to either side. Windowlike apertures frame long views out along Canberra's radial avenues to its rim of hills.

Monumental yet self-effacing, vast yet replete with varied details—how do the balanced qualities of this remarkable mini-city add up?

THE timing of the Parliament House project was fortunate. If the decision had to be made in today's economic climate, says Gordon Peatey, head of the Parliament House Construction Authority, it would be to expand once again the provisional facility from 1927. And if a Parliament House design competition were somehow held today, the winning scheme would mostly likely hew more strongly to some polemical position.

The great strength of this scheme, affirmed in the completed complex, is its combination of unabashedly Modernist devices such as the flagmast and the bold curved walls, with traditional symmetry, surface patterns, and roomlike interiors. This combination—along with the then timely strategy of earth-sheltered construction—could hardly have been formulated a few years earlier, or won favor a few years later. Parliament House is not pure anything: it is an elegant hybrid, developed at a particular moment for a particular site.

Of all the building's parts, the best is undoubtedly the Forecourt. The sloping plane of its floor—with a surface pattern of water, stone, and gravel—its bounding surfaces canted out (so that they cast no shadows, notes Giurgola), and its Minimalist-archaic colonnade, give the Forecourt qualities of both terrain and architecture—vividly suggesting the primitive space of the Australian continent and the great plazas of European capitals. Almost as fine is the Members' Hall, with its tiers of fine joinery and its abstract planes of burnished plaster rising toward the skylight, through which the flagmast can be seen.

More problematic is the Foyer, in which our expectation of a welcoming room is met with parades of columns and panoplies of competing materials, amid which two stairs beckon the visitor toward the second level—assigned to the public—but in two opposite directions; the architects see the Foyer as a place of orientation, but for many of us it looks disorienting. The reception room beyond, perhaps for programmatic reasons, offers a hangarlike space that fine detailing does not redeem.

Beyond these public areas, the interior spaces, courtyards, and terraces vary from very good to truly wonderful. The two main chambers are vigorous in form and lighting, a little timid in materials and details. Surprisingly successful are the corridors that line the great curved walls; no mere residual spaces, they are dynamic spaces in which the coherence and urban scale of the whole complex is powerfully felt.

From outside, the whole brilliant concept reads so clearly that it seems mean to quibble. But it must be said that the office blocks for the two houses press a bit too far beyond the sheltering curves (partly as a result of additions to the program) so that their bulk dominates the side views; and their intentionally subdued precast walls look somewhat too businesslike, despite their careful detailing. The flagmast, while elegantly sculpted, can look too much like a utilitarian appendage from certain angles, resting lightly as it does on the granite-clad walls; and seen from miles away along Canberra's axes, it can virtually disappear in certain lights (a quality that Giurgola calls "evanescence").

In sum, however, Parliament House is an amazingly rich achievement—a monument to thoughtful, patient collaboration, a triumph of the non-doctrinaire architecture that Giurgola champions. And it shows the clients of this world, who always need this lesson, the effectiveness of finding the very best design talent and making sure the execution is flawless. *John Morris Dixon and Jim Murphy*



Project: New Parliament House, Canberra (A.C.T.), Australia. Architects: Mitchell/Giurgola & Thorp Architects, Canberra (Partners: Romaldo Giurgola, design architect; Richard G. Thorp, project architect; Harold S. Guida. design coordination; Rollin La France, furniture and interiors coordination. Associates: Pamille Berg, art/craft coordinator; Tim Halden Brown, site architect; Michael Adams, Christopher Alcock, John Kurtz, Andrew McKenna, John McNabb, Steve Moseley, Robert Pearce, David Stafford, and Philip Walker, project team). Client: Parliament House Construction Authority.

Site: Capital Circle, Canberra, a site 2100 feet in diameter on Capital Hill encompassing approximately 79 acres.

Program: parliamentary complex of legislative and executive houses, and full office accommodation and support facilities comprising a gross area of 2,690,000 sq ft. The design was to be capable of being expanded in the future (an expansion was decided upon before design was completed), to be able to adapt to internal rearrangement, and to be completed in time for the Bicentenary celebrations of 1988.

Structural system: cast-in-place reinforced concrete frame with "spiral" formed columns, wall piers, waffle slabs, and rib slabs; precast concrete structural elements at the Queen's Terrace pergola; external "H" frame at the House chamber, long-span arch at the Senate chamber. Structural steel lightweight frames at House and Senate for tiled roof sections; steel girders over the Great (Reception) Hall approximately 95 ft long and 10 ft deep. Flagmast is constructed of fully welded stainless steel plates. Major materials: (exterior) granite, marble, sandblasted precast concrete panels, exposed aggregate precast concrete panels, crushed gravel set in a bituminous matrix (forecourt), double-glazing, inverted membrane roofing system; (interior) Australian hardwoods, wool fabrics and carpet, gypsum board on steel studs, cast plaster panels, column covers, and ceilings, and alkyd, automobile acrylic, and fluorocarbon-based baints.

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Consultants: Irwin Johnston & Partners, Melbourne, structural; Joseph R. Loring & Associates, New York, Norman Disney & Young, Sydney, W.E. Basett & Partners, Sydney, Associated Consulting Engineers for the Parliament House (ACEPH); Peter G. Rolland & Associates, New York and Canberra, landscape; McLachlan Group, Canberra, project planner; Rawlinson Roberts & Associates, Canberra, cost planner; Donald Cant, Wats, Hawes & Lee, Canberra, quantity surveyor; Maunsell & Partners, civil engineering; George Sexton Associates, Washington, D.C., lighting; Rolf Jensen & Associates, Springfield, Va., life safety; ARMM Consultants, Inc., Gloucester City, N.J., roofing; Robert Woodward, Northwood, New South Wales, forecourt fountain; Louis A. Challis & Associates, Sydney, acoustical engineering. General contractor and construction manager: Concrete-Holland Joint Venture.

Costs: last authorized Australian government budget to May 1977, as issued December 1977: \$1026.9 million (Aus.)/\$770.18 million (U.S.), including all sitework, furnishings, fees, services, and equipment, artwork and graphics. **Photos:** John Gollings except as noted.

Drawings: Garry Harley.







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Circle No. 308

Progressive Architecture 8:88 107

"Restructuring Architectural Theory" in this decidedly Deconstructivist journal.

into English until 1948 and then from a French edition. After the turn of the century, (continued on next page) historic forms can have connotations that are inappropriate to changing public values. *Thomas Fisher* Project: Headquarters, Real Estate and Construction Division, IBM, Stamford CT Interior Architect: HOK, Dallas Lighting Design: Ralph Savarese, IBM, Stamford

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BOOKS

(continued from page 109)

when rationalism was held in high regard, the book was considered to be an emotional, romantic, even reactionary work-a return to Medievalism. Sigfried Giedion, writing in 1940 in Space, Time and Architecture, acknowledged Sitte's criticisms of the developing cities but felt that his corrective solutions were no match for the scale of the problems, that they were no more than palliatives. He describes Sitte as a "medieval troubadour." At the turn of the century, America, particularly following the Chicago Exposition of 1893, was in a Classicizing phase. The grand gesture, largescale view of the City Beautiful Movement was in another world from the small-scale, densely built, picturesque world of Sitte.

In today's terminology, we would not describe Sitte as a city planner; the title of his book more properly translates to "City Building according to Artistic Principles." We would call him an urban designer. His scale was that of the block, the plaza, the small precinct, not the city as a whole. As an urban designer, he was the first to articulate the value of the picturesque, the romantic, and the humane. That strain of thought reemerged in the 1960s in the English Town-



Salzburg Plaza.

scape movement, particularly in the book *Townscape* by Gordon Cullen in 1961, and reemerged again in the 1970s and 1980s in the writings and practice of Christopher Alexander. There are particular parallels with Alexander in that Sitte was looking at the ancient cities for recurring pattern and timeless principles that could be applied to his own time. Parts of his book read like an Alexander design manual.

Sitte's stated intent was to provide a practical guide for city building. His Vienna and other cities in Europe were expanding quickly—the Ringstrasse of Vienna being perhaps the most conspicuous example—and were being developed without the cohesiveness, attractiveness, and livable qualities of older cities. Given this chaos, Sitte thought it "appropriate to examine a number of lovely old plazas and urban layouts—seeking out the bases of their beauty, in the hope that if properly understood these would constitute a sum total of principles which, when followed, would lead to similar admirable effects."

Having established some principles in the first part of the book. principles that all practicing designers would do well to absorb, Sitte goes on, in a second section, to lash out at the poor quality of recent city building. This section has little relevance for us today other than to give us a context for his work and thinking. The third section applies his principles to particular areas and particular development schemes in Vienna. This part is very interesting and shows Sitte (who was a practicing architect as well as a writer, theorist, and teacher) to be more flexible in the application of his principles than the two previous sections, particularly the polemic of the second, would suggest. Sitte's vision of the city is one of city places and plazas as outdoor public living rooms. The collective life of the city takes place in those spaces and the self-awareness of the city is formed there. His plazas are spaces for people, not for fulfilling a romantic revival dream.

The portion of the book by the Collinses wraps around

Sitte's book and is of equal length. The part preceding Sitte is particularly clear, informative, comprehensive, and relevant. The authors place Sitte in context, not only of his time but in our own. Having originally published the book in 1965, they have in this new edition reexamined some of their conclusions of 20 years ago and emerged with new insights about Sitte's ideas and their relevance for us now. They argue that Sitte's ideas represent "perhaps the only hope of making the individual at home in the urban environment." While a bit hyperbolic and ignoring the social component of design, their comment is not far off the mark.

If our current interest in "contextualism" is to be meaningful, if it is to be anything more profound than, as James Ackerman has put it, "reaching into the grab bag of history," we must look for the patterns and the principles that make special buildings and special places speak to us and to all time. That is the importance of this book. *Brett Donham*

The author is an architect with Donham & Sweeney Architects in Boston.

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by Duo Dickinson, 196pp., illus. (\$34.95)

This handsome work features houses representing all regions of the U.S. and includes examples of primary and vacation or second homes. The designs prove small houses can be built to accommodate a variety of sites, budgets, family size and aesthetic sensibilities.

Circle B616 under Books

10 Italian Gardens of the Renaissance

by J.C. Shepherd & G.A. Jellicoe, 144pp., illus. (\$45.00) Originally written in 1925, this book still stands today as the classic work. It traces the evolution and development of Italian garden design from the early Renaissance work of Michellozzi, Bramante and Rossellino. Twenty-six of the finest and most important Italian villas are featured, each with plans and principal elevations. **Circle B617 under Books** **11 Frank Lloyd Wright to 1910** by Grant Carpenter Manson, 238pp., illus. (\$22.95) A guide to Frank Lloyd Wright's

life up to 1910—the decisive turning point in his career. Depicts his childhood and family influences, his scanty formal training, and the beginnings of his architectural work under Lyman Silsbee and Louis Sullivan. Photographs, drawings and plans included. **Circle B618 under Books**

12 The New Atrium

by Michael J. Bednar, AIA, 238pp., illus. (\$40.00) This book covers the new atrium thoroughly and in detail—from its historic and contemporary evolution to its role in urban planning, architectural design, and historic preservation. An authoritative reference guide and an invaluable source of inspiration, it provides timely information to help to conceptualize, design and execute a successful atrium building. **Circle B619 under Books**

13 Perspective For Interior Designers

by John Pile, 160pp., illus. (\$24.95) Learn to draw interior perspectives through the use of a basic formula. The author offers an easily accessible and quickly learned method that will serve every designer's drawing needs. Step-by-step demonstrations, analyses of constructed layouts, and illustrations of completed works make this book a complete and accurate guide. **Circle B620 under Books ALL ORDERS MUST BE PREPAID**

14 Architectural Rendering Techniques: A Color Reference by Mike W. Lin, AIA, 253pp., illus,

(\$43.95)

All major types of architectural drawings fill this comprehensive guide to rendering media, styles and execution times. Examples displayed can be traced or studied to improve technique and generate new ideas. Architects and designers at all levels of expertise can improve their graphic and architectural rendering by following the presented methods.

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New Products and Literature

118 Products and Literature continued





A folding armchair called Equity, designed by Jacques Harold Pollard, consists of a coach hide seat and tubular steel base. The forms result from the stress patterns created when the seat is opened. Unfolded, Equity flattens for easy storage. Matteograssi USA.

Circle 100 on reader service card



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Friendly Ceilings, part of the Taxi Ceilings product line, combine aesthetics with acoustic efficiency. The 2' x 2' panels have a Class A flame spread, and feature easy installation in a narrow %16" Suprafine grid. Eight colors and four interchangeable modular designs compose the line. Armstrong/Forms + Surfaces. Circle 102 on reader service card

Designer Robert Arko's Arena Collection, introduced at NEOCON®, consists of a fully upholstered lounge, a loveseat, and a pull-up chair with exposed hardwood legs. Leather upholstery may be specified in a range of colors. Metropolitan. Circle 103 on reader service card



A steel wardrobe cabinet to be introduced at the Milan Furniture Fair, Tau is constructed of hot-rolled steel with polished brass runners. The unit stands 80 inches tall, measures 40 inches wide, and 16 inches deep. Alexis Mundi.

Circle 104 on reader service card

Museum lighting solutions are illustrated in a 16-page color catalog. Track lighting, low-voltage spotlights, and cylinder lights with integral dimmers are a few of the products demonstrated in actual installations. Lighting Services, Inc. Circle 200 on reader service card

Awnings are described in a 10page brochure. Fabrics, frames, styles, and energy issues are discussed along with manufacturing data and a variety of architectural applications. Industrial Fabrics Association International.

Circle 201 on reader service card



Designing with Dryvit is a twovolume encyclopedia of design resources that contains technical information to facilitate the selection, design, detailing, and specification of exterior insulation and finish systems. The information is also available on a disk for use with AutoCAD. Circle 202 on reader service card

Half-round vaulted skylights with custom vertical glazing create naturally lighted, energyefficient entranceways. Low-rise, half-round, and quarter-round profiles can incorporate acrylic or polycarbonate glazing options. Sunglo Skylight Products. Circle 105 on reader service card

Engineered metal framing connectors are illustrated in a 52page catalog, which depicts line drawings of each product. Code acceptances, specification/loading charts, four new products, and suggested applications are also discussed. LumberLok. Circle 203 on reader service card



High gloss lacquers, called Flip and Rock, are new pattern additions to the Design Concepts® Collection 2. They change tonality through the reflection of light. Flip is a series of small oval-shaped patterns arranged diagonally while Rock presents asymmetrical forms. Formica. Circle 106 on reader service card

An electric locking system called Intellis is a cost-effective key control device that is now available for commercial and industrial applications. Key cards can be configured to open specific doors, to function during set hours, or to record entrances into a room, providing an additional security element. Schlage Lock Co.

Circle 107 on reader service card

Resource Efficient Housing Guide contains reviews of over 100 books, magazines, and newsletters devoted to home resource efficiency. State-by-state listings of helpful agencies are also included in the \$15 book. Write Rocky Mountain Institute, 1739 Snowmass Creek Rd., Snowmass, Co. 81645.

A new color selection guide for imprinted concrete paving shows actual color chips for 25 standard colors. The palette incorporates several new pastel colors. Bomanite Corp. Circle 204 on reader service card

Energy-saving glazing systems are detailed in a new full-color brochure. Because of their combination of light transmission and high insulation, the systems can be used for exterior walls, roofs, and skylights. A window replacement system for building rehabilitation is also discussed. Kalwall Corp.

Circle 205 on reader service card

The Certified Products Directory lists the latest windows and doors that meet the program's standards. More than 2000 products and place of manufacture are included. American Architectural Manufacturers Association.

Circle 206 on reader service card

The Garden Gazebo contains detailed, illustrated step-by-step instructions on how to build a gazebo from the foundation up. Plans, tool and materials lists, specifications for using treated lumber, lumber grade requirements, and other necessary information is included. Western Wood Products Association. Circle 207 on reader service card

One-component silicone sealants are described in a new architectural application guide. The four-page booklet discusses specifications, standard and custom colors, joint design and backup material, mildew resistance, and other related information. Mobay Corp.

Circle 208 on reader service card



A "back-to-basics" sink called Pump 952 consists of a terra cotta basin supported by a black metal band. A tap support pole holds the faucet. The washbasin is also available in white enamel and the tap pole may be specified in white, black, red, yellow, gray, and light blue. Watercolors, Inc. Circle 108 on reader service card

The Retro Patio door is constructed of solid Ponderosa Pine, has weatherstripping on all four sides, and the option of Low E

glass with argon for added energy savings. Designed to fit openings created for aluminum doors, the patio door provides an alternative to aluminum. Marvin Windows

Circle 109 on reader service card



Door hardware and controls are detailed in a 12-page color brochure. A variety of design options are discussed, and interior and exterior door installations are demonstrated. Rixson-Firemark.

Circle 209 on reader service card

A textured "orange peel" finish is now standard for all fiberglass products in the Fibremart Designs[™] line of site accessories. Designed for lobbies, parks, sports facilities, and malls, the finish helps hide dirt, fingerprints, smudges, and other marks resulting from constant use. Kadee Industries, Inc. Circle 110 on reader service card

Fiberglass structures suitable for use in corrosive environment are detailed in a new eight-page brochure. Products discussed range from channels, beams, tubes, grid flooring, and siding to handrail systems, stairs, and ladders. IKG Industries. Circle 210 on reader service card

Exit devices, their major features and options, are summarized in an eight-page brochure. Electrical and security accessories are also included. Von Duprin. Circle 211 on reader service card

The Merns lighting collection,

composed of table, wall, and hanging lamp models, is fabricated from frosted glass panels with brushed steel details. Designed by The Tamarkin Techler Group, all hanging fixtures include a 41/2-inch-square canopy and a 10-foot adjustable cable and wire. George Kovacs Lighting.

Circle 111 on reader service card



Release 10 by AutoCAD[®] features complete 3-D wireframe construction and surface modeling capabilities. Advanced drawing, viewing, and database features are also part of the new package designed for the Macintosh II. Autodesk, Inc. Circle 112 on reader service card

Low-cost electrostatic plotters are profiled in an eight-page brochure. A performance table, colorful product shots, and multiple block drawings detailing system connectivity provide information on the 8500 series. Versatec.

Circle 212 on reader service card



The Suspended Radial Arm Workstation reclaims usable desk space by suspending the monitor and processor above the desk or work area. The freestanding workstation with hydraulic arm provides 20-degree tilt and 360-degree swivel. The system supports monitors weighing 17-65 pounds. Ergotron. Circle 113 on reader service card



Thermal transfer plotters can print out on either ANSI A/ISO A4- or ANSI B/ISO A3-size media. A video controller connects to workstations to capture a screen image in less than a second. CalComp. Circle 114 on reader service card

Concrete design software, called PCACOL, analyzes and designs reinforced concrete columns for buildings and bridges. A column section's interaction diagram is displayed and evaluated against building code requirements for the United States and Canada. The program handles round or rectangular column sections as well as slender or short columns. Portland Cement Association. Circle 115 on reader service card



CD ROM readers from the Intersectline product collection come with four interface kits and two CD ROM software discs and are compatible with today's leading personal computers. The software packages offer graphic and video imaging capabilities. NEC Home Electronics. Circle 116 on reader service card

The CCS Designer software handles such applications as architectural design, floor plans, flow charts, landscaping, mechanical design, and schematics. The program supports over 180 printers, 52 input devices, 77 plotters, and a wide variety of display cards and is compatible with AutoCAD files. Complete Computer Services. Circle 117 on reader service card

Drafting and design software called Facilities Design + allows major changes to be made at any stage of a project. Entire window walls can be created with a single command, for example. Over 700 industry standard symbols are part of the integrated program. Prime.

Circle 118 on reader service card

The IBM Architecture and Engineering Series is an integrated three-dimensional system consisting of eight discipline-specific applications, including rendering, structural, energy, power, piping, lighting, and others. Graphic elements can be isolated quickly for review or revision, using the system's powerful graphic selection capabilities. IBM.

Circle 119 on reader service card

Workstation-based CADD products, 13 in all, operate under the UNIX system on CLIPPER-

based workstations. The integrated programs are compatible with the VAX-based software. Facility planning; design presentation; and mechanical, electrical, and plumbing design systems are part of the new program. Intergraph.

Circle 120 on reader service card

Electrostatic printers from the HP 7600 series produce architectural/engineering/construction drawings in less than one minute. The monochrome plotters offer high resolution-Model 240D features 406-dpi line resolution-and are compatible with existing software packages. Hewlett-Packard.

Circle 121 on reader service card



Software packages by Arris allow architects and designers to create 3-D models and renderings and to do 2-D production drafting very quickly. Available programs include Site Design and Drafting; Furniture, Fixtures, and Equipment; Piping and Electrical Drafting; Space Design; and others. Sigma Designs. Circle 122 on reader service card



Residential music system called The Acoustimass includes the Bose 102[®] background speakers. Each unobtrusive, paintable design features built-in amplification and equalization and high fidelity sound reproduction. A weatherproof version for indoor/outdoor use is also available. Bose.

Circle 123 on reader service card

The Europa Series lounge collection consists of a lounge chair, settee, and sofa. Stitching detail options include a top-stitch, a double-needle, and the alpine seam, a combination of a narrow contrasting strip of color between double rows of stitching. Phil Cooper designed the series. Mueller.

Circle 124 on reader service card



Hand-painted glazed tiles from Spain have a unique copper sheen. Architects and specifiers may select from many different colors and patterns or work with a design team to customize the tiles for specific projects. Brastile, Inc.

Circle 125 on reader service card

A formable, lightweight mate-

rial called Sintra® is an expanded plastic panel specifically developed for designing displays, exhibits, signage, and for photomounting. It can be fabricated by several methods; cut, trim and die cut, saw, drill, laminate, and others. Alucobond Technologies, Inc.

Circle 126 on reader service card

A wide beam floodlight, the lightweight PF-154 Powerflood is suitable for low to medium wattage high intensity discharge applications. Three easy installation options-tunnion, knuckle slipfitter, or knuckle wall mounting-in addition to complete front access via a hinged and removable door simplify installation and maintenance. GE Lighting Systems.

Circle 127 on reader service card

Durock[®] exterior finish system is fade-, weather-, and freezethaw resistant. A stuccolike texture finish is applied over Durock[®] exterior cement board which is covered with Durock exterior basecoat. The system can be installed over wood or nonloadbearing steel framing. It can also be used as a substrate under ceramic tile, thin brick, or epoxy matrix stone aggregate. USG.

Circle 128 on reader service card

(continued on page 120)



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(continued from page 119)



Worsted wool upholstery textiles called Network[®] combine rich colorings with small-scale design to create depth and dimension. Available in 13 colorways, the 54-inch British material exceeds 15,000 double rubs. Brayton Textiles.

Circle 129 on reader service card

A white body flat-back tile part of the Florida Series is singlefired, skid-proof, and resistant to heavy-duty traffic. Color options include black, white, ivory, and sienna colors in 18" x 18" formats. Porcelanosa, USA. *Circle 130 on reader service card*



A double or large single bed with the name Cilia was designed by John Hejduk for Pallucco. The perimetric frame and square section jambs are solid beech. A pyramidal shape, with a square base, surmounted by a radial sphere or a simple spheric shape decorates the jambs-tops. All of the metal parts are matte chrome-plated. di-zīn.' *Circle 131 on reader service card*

Precast concrete stair treads can be color matched to concrete roof tiles through the use of finish options, which include exposed aggregate and stamped tile with broom finish. The boltonto-wood tread attaches easily to wood stringers. Stepstone. *Circle 132 on reader service card*

The Bleriot suspension lamp designed by M. Ferrari features a sand-blasted glass diffuser. A 500-watt halogen bulb illuminates the lamp, which comes with a full-range dimmer and an adjustable height feature. The metal parts are finished in black. Multiworld, Inc.

Circle 133 on reader service card

Wood beams called Parallam[®] are produced from thin strands of veneer bonded with waterproof glue and cured by a continuous microwave process that adds uniformity and strength. This increased strength allows for more latitude in design, longer spans, and more open spaces. MacMillan Bloedel Ltd. *Circle 134 on reader service card*



A hand-carved clock collection called Monticello is offered in four styles and five natural stones and woods. Bonnel Design Associates designed the silver chrome clock faces with black hands and dots for easy reading. The quartz mechanism comes with a three-year guarantee. Koch + Lowy. *Circle 135 on reader service card*

A new fabric treatment allows material to be vinylized with a low-gloss matte finish for use on upholstery. The clear vinyl layer of protection provides an almost invisible barrier to guard fabrics against stains and abrasions. SR Wood, Inc.

Circle 136 on reader service card



Greenhouse additions are constructed of heavy-gauge extruded aluminum framework and a variety of glazing systems for residential and commercial applications. An exclusive nylon clip-on assembly system provides an energy-efficient thermally broken frame which is easy to assemble. Florian Greenhouse. *Circle 137 on reader service card*



This 20-inch-high end table rests on painted steel legs, brushed stainless steel ankles, and brushed brass feet. Designed by Bentley-LaRosa-Salasky, the table has a solid cherry face and edge with anegré veneer centers and a polished brass drawer pull. Brickel. *Circle 138 on reader service card*

Managerial office furniture called Hombre, and designed by Burkhard Vogtherr, offers upholstered chairs, writing desks, computer tables, sideboards, and complete conference ensembles. Runnerlike profiles characterize the solid ash system. Rosenthal mach Mobel. *Circle 139 on reader service card*

Access flooring systems, including ConCore® steel-encased concrete panel and the new Series 1000 aluminum panel, are discussed in a 12-page brochure. Architectural short-form specification is also included for each system. Tate Access Floors, Inc. *Circle 213 on reader service card*

Ispotex®textured interior wall finishes provide a durable, seamless, and cost-competitive option to textured vinyl wall coverings. A color brochure describes the integrally pigmented and trowel-applied systems, which are offered in six finish options ranging from fine to coarse, matte or radiant, and natural quartz aggregate. Ispo. *Circle 140 on reader service card*

The second edition of the Plotter and Media Supplies catalog describes a new line of business graphics films designed for use with plotters and nonimpact printers. A pen/media compatibility chart as well as a plotter pen trouble-shooting chart are contained in the literature. Teledyne Post.

Circle 214 on reader service card

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P/A in September



Shiro Kuramata's Issey Miyake Men's Boutique in Tokyo.

Interior Design

How designers employ ideas at various scales, from the design of interiors to that of furniture and products, is a question addressed in the profiles in the September issue. Among the designers featured will be: Shiro Kuramata; Antonio Citterio; Michael Graves; Jed Johnson, Alan Wanzenberg & Associates; and 1100 Architects. Shorter profiles will discuss early careers and first completed work of Michele Saee, Thomas Leeser, and Holt Hinshaw Pfau Jones.

Also in September

Technics in September will discuss the basis upon which decisions about flooring are made and the options in flooring that are available to designers. A Designer's Saturday supplement will provide information about the newest ideas in contract furnishings.

Future Issues

The October issue will take up the subject of housing, with a precursor article on the restoration of a well-known housing complex.

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Selected Details



Pilaster Capitals Richmond Riverside London

Inventiveness with the Classical language of architecture has made Quinlan Terry one of the more controversial architects practicing in England today (see P/A, July 1988, pp. 94-101). These details, taken from his recently completed mixed-use project Richmond Riverside, indicate the nature of Terry's invention. While the pilasters framing the north gate into the complex (1,2) have severe, Neo-Classical capitals with an unornamented Echinus molding between the Ionic volutes, the entablature, with its pulvinated frieze, has a more exuberant, Baroque character. Another variation on a Classical theme occurs in the capitals on the façade of the castle offices (3,4). The usually highly ornamented Corinthian order is simplified somewhat with flattened acanthus leaves and a plain abacus. And the whole is capped by a bit of humor: the fleuron at the center of the capital has a pistil that looks more like a worm about to crawl up the façade.

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Thermospan 100



Thermospan 100 actually costs less than comparable steel doors with polystyrene insulation. Yet it offers superior foamed-in-place performance.

Call or write immediately for complete information (because there's nothing worse than discovering too late that you've paid too much for too little).



Wayne-Dalton Corp. P.O. Box 67 / Mt. Hope, OH 44660 (216) 674-7015



Thermospan 150



This competitively priced premium door provides more insulating value than any conventional door on the market, making it an efficient system for commercial and industrial applications. Thermospan 150 offers an independently tested installed "U" value of 0.125. This outstanding energy efficiency is combined with an attractive pebble grain finish and quiet, smooth operation.



Thermospan 200



Independent tests prove that Wayne-Dalton's top-of-the-line door permits less heat transfer (installed "U" value of 0.11) than competitive doors nearly twice as thick. Available up to 40' wide, the Thermospan 200 is designed for heavy-duty applications and is built from foamed-in-place prepainted steel/polyurethane/steel sections 2" thick

Thermospan quality features:

High tensile steel skin with roll-formed integral struts sections bound together by foamed-in-place polyurethane insulation for increased rigidity **a** acomplete thermal break along joints and endcaps to reduce heat transfer between steel skins **a** rubber bulb joint seals and factory-installed top seal to minimize air filtration **b** U-shaped bottom seal that won't ice up and seals against uneven floors.