



Topographics, a new way to make 3-D models, page 3.

Architecture Canada

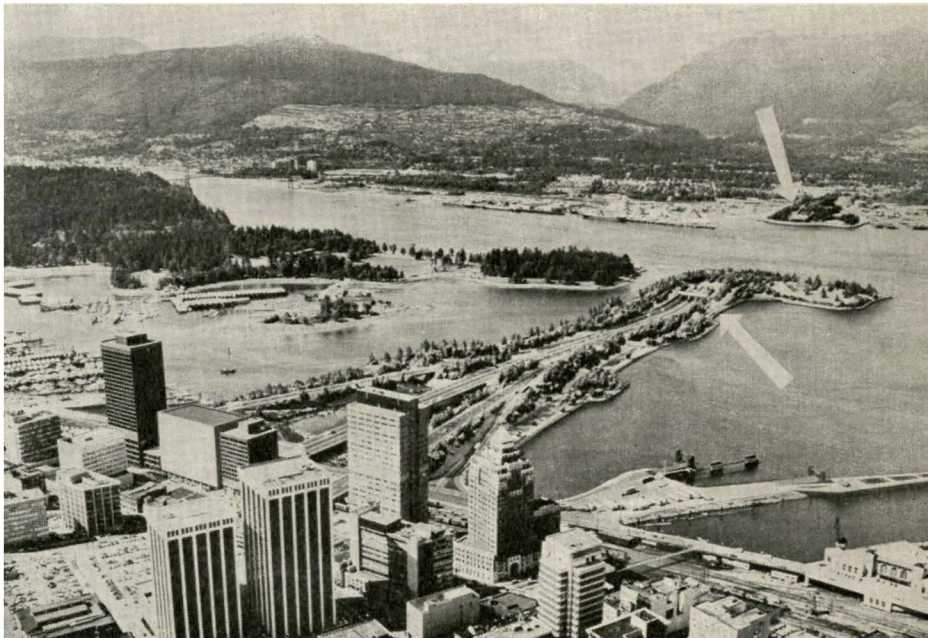
NEWSMAGAZINE

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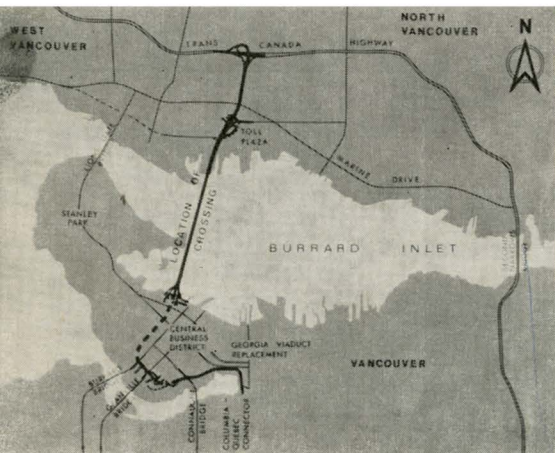
A Burrard Inlet crossing for Vancouver?

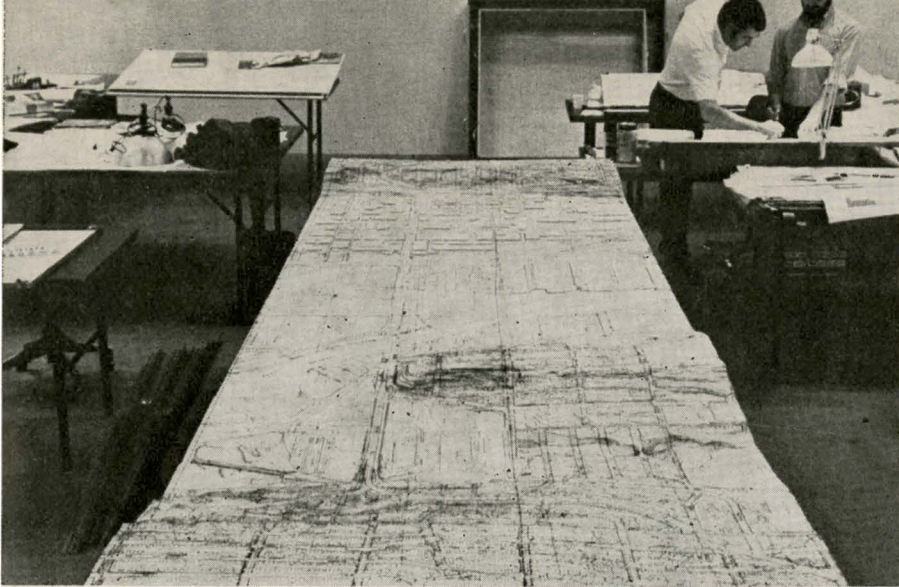
A new crossing over Vancouver's Burrard Inlet would take 70,000 cars a day off the city's downtown streets. These cars with eventual destinations beyond the downtown core would be whisked under the city in a bypass tunnel or bypass it via a waterfront distributor highway. This is the forecast from Vancouver architect-planner Warnett Kennedy after two years of coordinating a study of the crossing and its approaches for Swan Wooster-CBA Engineers. Commissioned by the National Harbour Board the report was released last month.

Its principal criteria, says Kennedy were "the retention of the aesthetics [of the crossing area] . . . and the least possible interference to the environment". A bridge and tunnel were the alternatives: both would have six lanes for traffic and a corridor for rapid transit. Bridge would cost \$116 million, the tunnel \$123 million. Critics mindful of the success of San Francisco citizens' action groups in stopping a freeway there (and sympathetic to the never-say-die "stop Spadina" campaign in Toronto (*A/C*, 1/2/61)), are already sharpening their knives. But Kennedy argues that they fail to note how the crossing provides "three new lanes travelling *out* of the city".



Above, the tunnel in its setting. Its park-like peninsula would be ringed by beaches, and viewpoints along a scenic drive. Below, the cable-stayed bridge. The line of its deck "has been accepted as the most important single aesthetic factor".





The contour model as a working tool in Erickson Massey's office in Vancouver. It is 15' long, 6' wide, and weighs 40 lb.



Data is printed onto the light sensitive surface photographically (see also x's on head, page 1).

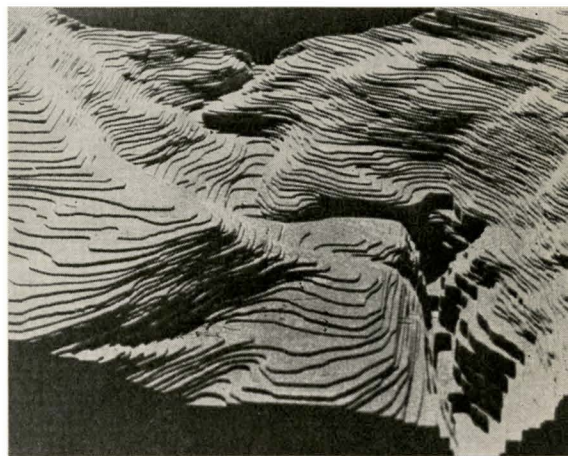
Streamlined models in 3-D

A group of former architectural students has devised new ways to make contour models faster to build at lower cost. They achieve this by a new manufacturing process to replace traditional hand laminating. (It's eight times faster and a quarter the cost.) In addition they have found a way of photo-printing such data as plot plans onto a model's surface. The idea has been so well received in Vancouver that their company, Topographics, is expanding into Toronto. (Partners are Rollo Myers, Ronald Pears, Philip Aldrich and Manfred Humphries.)

"The whole idea," says Myers, is to "make a model into a working tool rather than something reserved for presentation." As a job proceeds Topographics can rework grades, produce "drop in" alternatives for development models and reprint up-to-date plans.



Contour models can be converted to presentation models.



Contours are cut out of plastic foam with a pantograph-like device.

and New Westminster last fall to provide instant campuses there. Installation of 62 units was completed less than two months after the start of factory production. Cost per 10' x 60' unit was \$15 a foot.

The advantage, says college principal George Wotton: "As our present campus sites may not be permanent, wherever Douglas College goes, the relocatable buildings will go, too."

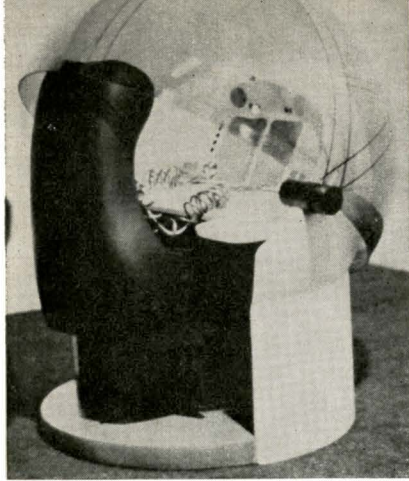
Below, an appreciation by Montreal professor of architecture Peter Collins:

With the death of Sibyl Moholy-Nagy, North American architecture is bereaved of one of the most powerful and eloquent voices which stimulated its intellectual development during the last two decades. She was author of several influential

"untrained". Indeed, it was precisely because she was deprived of the uniform art-historical training provided by American universities that she shone so brightly in an academic milieu. But it would also be foolish to pretend that she could have achieved such eminence without her remarkable intellectual gifts and immense vitality. It was always a pleasure to listen to her. It was an

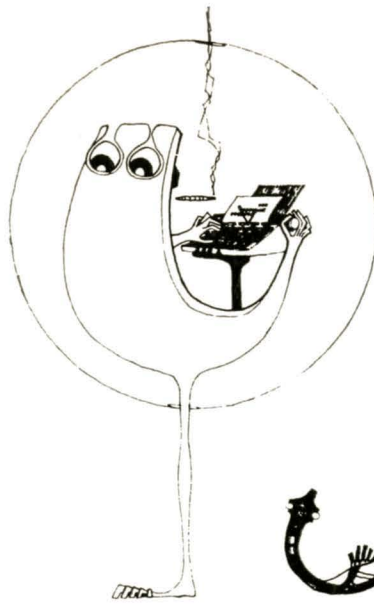
lated aspects on the application of systems building will be presented at the same time. Lecturers will include Colin Davidson, Université de Montréal, W. F. Dawson of Descon-Concordia and Albert Dietz of MIT.

Dates are April 22-24; location, Faculté de l'Aménagement, Université de Montréal. Registration, on a first come, first served basis.

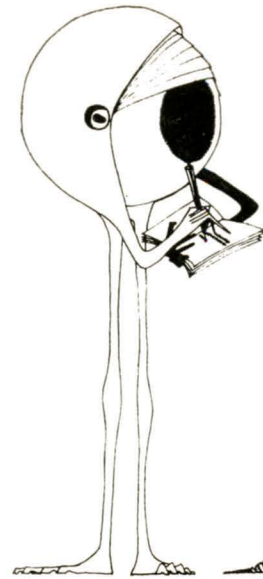


Splendid efficiency monsters

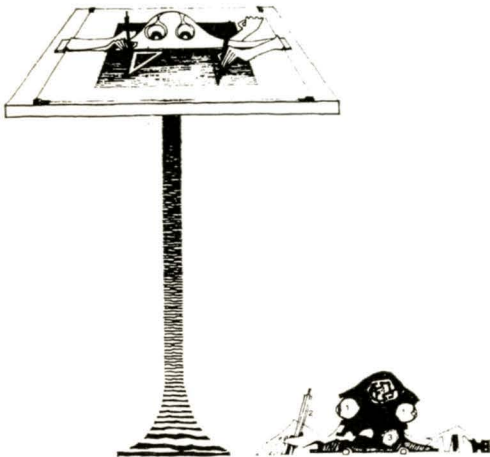
St. Lambert architect Henri Brillion spotting a story in *A/C 1/2/71* on Cellule, a decision-making module for increasing efficiency at work, was inspired to explore its brave new world implications. "I'm sure," he says, its use "will bring unexpected achievement and create for the benefit of society splendid efficiency monsters." Here, his ideas for some types of candidates to architecture the machine might produce.



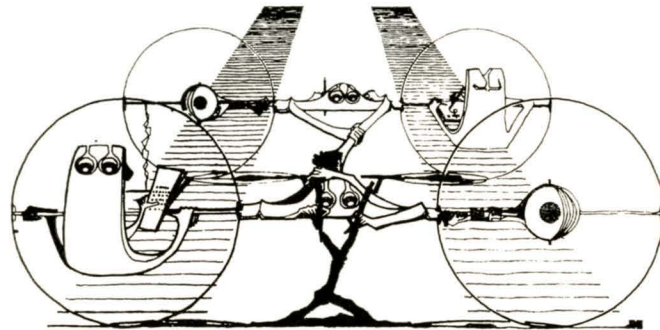
The executive architect "boss," working in a modified "Cellule II."



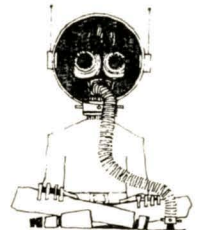
The job watcher architect. His ocular organ has been immoderately expanded to insure an extremely sharp vision. He spies, investigates, and reveals mistakes with a disconcerting rapidity.



The draftsman architect. He's a portable architect of the hardware type, directly subdued to the executive architect. With four hands and four eyes, he draws, erases, and redraws with a disquieting velocity.



An architect kit. Mobile unit including four spherical "cellular decision-making modules," one "boss," one designer, two draftsmen, and two watchers. This unit can easily bowl over projects of several billions.



Mini cellular decision making-module. Portable, plug-in plug-out type, pollution free.

different views. Both the original papers and replies will be distributed to participants before the opening date.

The report of discussions at the congress itself will be published later.

For more information, write: G. Hierholtz, Centre Scientifique et Technique du Bâtiment, 4, avenue du Recteur Poincaré, 75 - Paris 16, France.

Noise control

Noise and Vibration Control in Buildings, a three-day seminar for architects and engineers, sponsored

by Bolt Beranek Newman Inc., will be held in Montreal and Toronto this September. Cost is \$200 per person with a reduced rate for company groups. The syllabus includes noise level data and vibration isolation details for electrical and mechanical equipment, transmission loss data for wall and floor-ceiling structures, and noise control in ducted ventilation systems. Dates: Montreal, Sept. 8-10; Toronto, Sept. 22-24. Write BBN, 50 Moulton St., Cambridge, Mass. 02138.

Transportation

A world-wide exchange of information on urban problems especially

transportation is the aim of a conference to be held September 6-10 in Tokyo.

To be limited to 500 participants from outside Japan, the conference will feature an international roster of speakers including transportation and planning experts, government and political leaders, businessmen and academics, Buckminster Fuller among them. The city of Tokyo itself will be the workshop and the conference intends to create a model for urban transportation with emphasis on government participation and the role of business. Cost is \$385 plus transportation, hotel and non-sched-

uled meals. For information write The Secretariat, Urban Research Corp., 5464 South Shore Drive, Chicago, Illinois 60615.

PEOPLE

Toronto architect Ron Thom will be one of four persons to receive an honorary degree at Trent University's May 28 convocation. Thom, who includes the Metro Toronto zoo as one of his current projects, was hired as master planning architect for the Peterborough university in 1963. He has won a number of design awards in the past few years for his buildings on the campus.



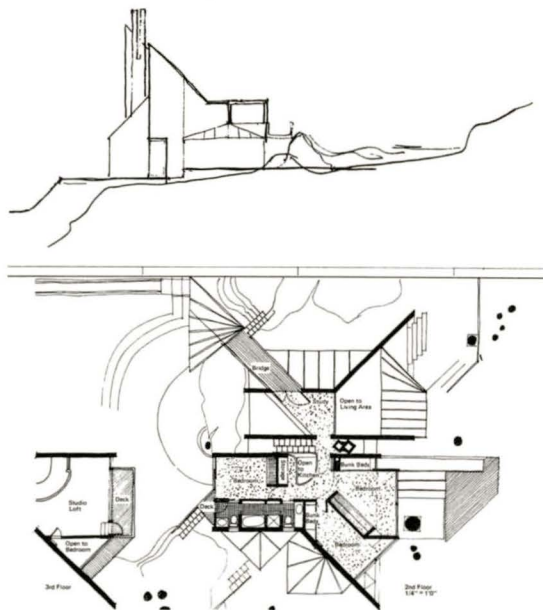
Left "shell" from sea side



A deliberately unconventional house

This twin-celled house was Vancouver architect Bruno Freschi's answer to a request for an unconventional home. The clients were Sid and Beverly Simon, a lawyer and a playwright respectively. His cedar and glass structure provides "umbrellas for inner privacy and familial communion." Situated on a steeply sloping waterfront property in West Vancouver, the house was perched on the edge of a cliff to leave a maximum level ground for a courtyard. Skylights and windows "integrate inside and outside, shelter and site, image and fantasy," western windows look onto Georgia Strait. The house was completed last summer. Still to be finished is an outdoor escalator to carry people from the roadway down to the house, and additional decks and studio space.

Natural rock in a reflecting pool becomes a piece of sculpture



TRANSPORTATION

Aerospace takes to the ground

The US government is giving the aerospace industry a big chance to help unsnarl ground transportation problems.

Says the Administrator of the Department of Transportation's Urban Mass Transportation Administration (UMTA) Carlos C. Villarreal, the government has allotted a billion dollars a year for the next 12 to solve transportation problems and much of that will go to aerospace industries for research.

The wealth of aerospace technology, says Villarreal (who comes from that field himself), can be successfully transferred to solve problems on the ground. Already, he says, there are illustrations of how this can be done: Grumman's aero-



Rapid transit for Columbia, Md.

space subsidiary has developed a series of mini-buses using a standard GM chassis; Goodyear's aerospace division has designed a series of wheelless cars that travel on a conveyor belt (Carveyor, A/C 25/-5/70); Sperry Management Systems has developed a system of gaiting access and egress on cloverleaves; and the Stratos division of Fairchild Hiller has come up with an air conditioning system for subway cars.

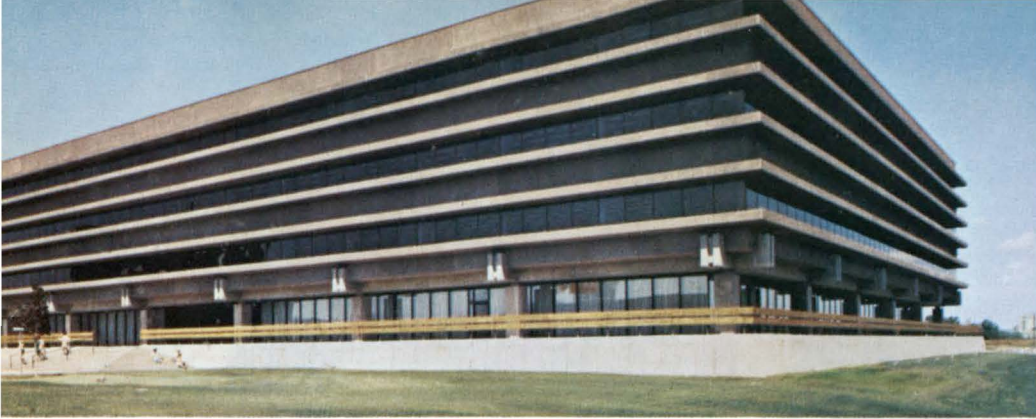
Newer work being aided by UMTA includes the development of: a diesel emission control exhaust system for buses; steam

powered engines (test vehicles should be running this summer in San Francisco) and tracked air cushion vehicles (TAVRC) which could be fully operational in six to ten years. One of these TAVRC systems, says Villarreal, could be running along a 16.3 mile track at 150 mph to and from the Los Angeles International Airport by 1972.

INTERIOR DESIGN

Deadening the sound

First it was open landscaped offices, now it's sheet lead barriers "to assure complete conversational privacy".



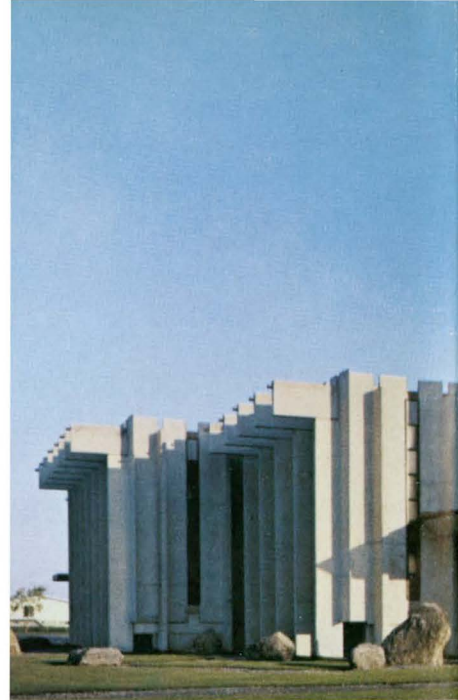
Bell Canada Data Centre, Don Mills, Ont., features precast and cast-in-place concrete construction.



Precast concrete panels lend elegance to the Hudson's Bay Company department store at Regina, Sask.



The Regional Polyvalent School, Huntingdon, Que., was built of concrete for economy and fire safety.



St. Richard's Church, Montreal, Que., an award-

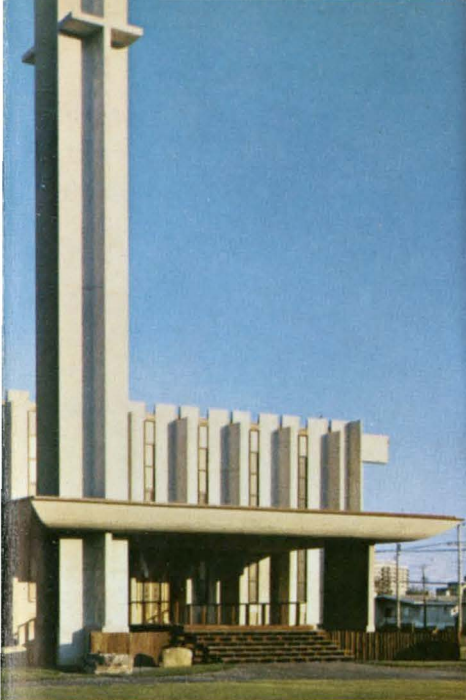


The all-concrete elevated roads of the north

THE GROWING WORLD OF

As we enter a new decade, Canada is on the move and building programs everywhere are contributing to the rapid growth of our nation. From coast to coast, thousands of concrete structures of every size and shape are rising — huge dams are being built to hold back the waters and change the flow of our mighty rivers to produce much needed electric power for industries and homes — functional and esthetic elevated expressways are providing a solution to urban traffic problems — new communities are being built and the tempo of urban renewal is accelerating. The future holds even greater promise, with the opening of the northern regions where natural resources abound. Developments such as the proposed Mid-Canada Corridor will promote a high level of construction for the years ahead.

CANADA CEMENT LAFARGE LTD.



ing structure built entirely of prestressed concrete.



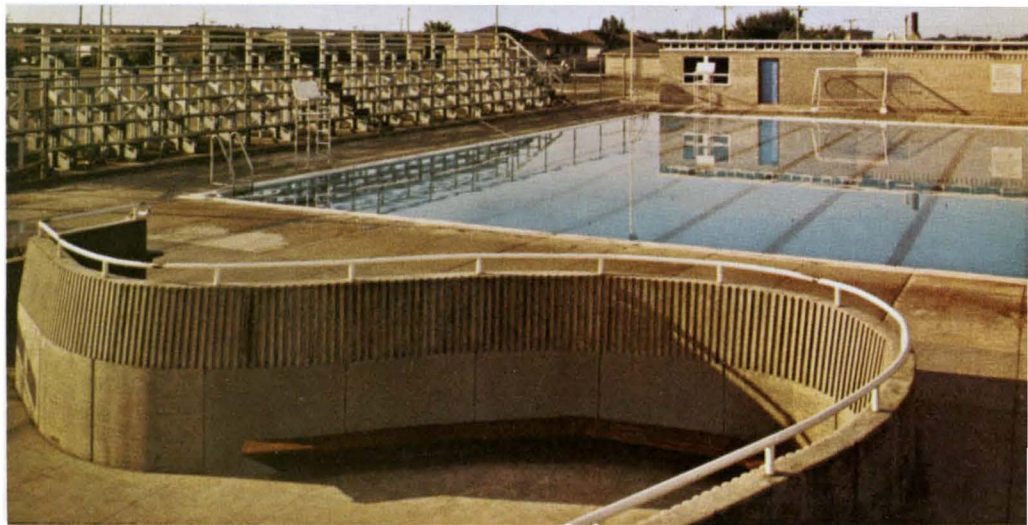
ach to the Harbour Bridge at Saint John, N.B.



The graceful concrete No. 3 Headframe of International Nickel Company at Thompson, Man.



The new high-rise section of the Inn on the Park, Toronto, Ont., built with lightweight aggregate concrete.



The Fred Broadstock Public Swimming Pool of the Department of Parks and Recreation, City of Edmonton, Alta.

CONCRETE ACROSS CANADA

Concrete, the versatile, strong, durable and economical building material, will continue to play a major role in this new phase of expansion in Canada. The architect can adapt it to his ideas, the engineer can tailor it to his needs, and the contractor can mold it into attractive, firesafe and permanent structures boasting low maintenance cost. Modern designers and builders, constantly searching for new ideas, are intrigued with the freedom of form and shape that can be achieved only with concrete. Let Canada Cement Lafarge make your imagination a reality; write or visit our nearest sales office for the most up-to-date information on concrete design and construction.

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Or so the American Lead Industries Association would have it. This is what they say about a recent New York interior design job on the forty-fifth floor of the General Motors Building at Fifth and 59th:

"Entering the . . . reception area is like coming into a secluded forest glade . . . the enveloping quiet is only intruded by the sound of flowing water [a fountain] . . . sheet lead over-the-ceiling sound insulation barriers assure complete conversational privacy . . . sheet lead plenum barriers located between the ceiling slab and the top of partitions effectively block this flanking path to the intrusion of noise."

BOOKS

Out of step

Town and Country Planning, by A. J. Brown and H. M. Sherrard, American Elsevier Publishing Co., New York, 1969, \$25.00, 392 pp.

This is a comprehensive work on the traditional approach to Town and Country Planning. The book was first published in 1951 and the second "completely revised" edition in 1969. But, I still found the style of writing and illustrations out of date, and felt overwhelmed by the amount of information and small print in a book which only purports to be an introduction to the subject. Part of the chapter on housing is almost Victorian in the way the authors refer to "the working classes".

It is paradoxical that although the book deals with the planning of roads and subdivisions in some depth, many important aspects of planning are oversimplified and do not encourage the reader to explore important human and environmental relationships. Having made us aware of our past heritage, it is useful to know how present planning is being organized and administered. But much of the book is still hung up on zoning, road layouts and garden cities and does not give sufficient stress to the important problems of our changing society, ecology and urban living related to the population explosion.

The following illuminating information may be found in the chapters which deal with aesthetics and landscaping: "Formal planting in avenues is also appropriate on country roads in the immediate outskirts of towns thereby creating a feeling of dignity and expectancy as the town is approached." . . . "Two rows of trees are better than one." . . . "Until the buildings are erected the street system has no significance, because the primary purpose of the street is to give access to buildings."

It is with regret that I have felt it necessary to make these adverse comments, because much painstaking work has obviously gone into the production of this book. However, some of this information needs to be used with discretion and the final results do not appear to be in step with today's needs for town and country planning.

Conrad Loban, Calgary



1 BOBRICK UNIT SERVES 2 TOILET COMPARTMENTS

Save equipment costs. Bobrick partition mounted washroom units combine several accessories.

Save installation costs. One mounting through the partition replaces multiple accessory installations in two toilet compartments.

One servicing reduces custodial time. Filled and emptied from one side only.

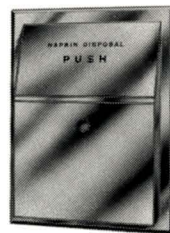
Lifetime stainless steel throughout, with satin finish exposed surfaces. Always looks new, can't corrode, easy to clean.

A complete selection of partition mounted units is included in Bobrick's Catalog of 500 matching washroom accessories. Send for your copy. Bobrick Washroom Equipment of Canada, Ltd., P.O. Box 5745, Terminal A, Toronto 1, Ontario.

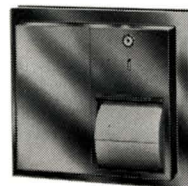


Since 1906 Designers and Manufacturers
of Washroom Equipment

B-357 (above) replaces 6 accessories. Dispenses 1000 toilet seat covers and 4 rolls of toilet tissues, half from each side of partition. Self-closing disposal on each side for feminine napkins.



B-354 provides self-closing feminine napkin disposal on each side of partition. Receptacle removed from one side only for easy servicing.



B-386 holds and dispenses 4 rolls of standard size toilet tissues, 2 from each side of partition. Spare rolls automatically placed in use by patrons after first rolls are used up.



Vancouver's easy-come, easy-go ice surface.

Hockey tonight, exhibition next morning. It's Styrofoam* FR that makes the floor of the Pacific Coliseum what it is. A quick change artist. The ice can be removed in two hours, refrozen in six. Only an unusual floor system can take thermal cycling like this. Why Styrofoam FR? Turn the page and find out.



DOW CHEMICAL OF CANADA, LIMITED



Consulting Engineer: Phillips Barratt-Hillier Jones & Partners, Vancouver, B.C. Architect: W. K. Noppe, Vancouver, B.C.
 General Contractor: Cana Construction Co. Ltd., Richmond, B.C. formerly: Burns & Dutton Construction (1962) Ltd.
 Roofing Contractor: Campbell & Grill Ltd., Vancouver, B.C. Owners: Pacific National Exhibition—City of Vancouver.

Styrofoam* FR helped make Vancouver's Pacific Coliseum the most versatile and most economical in the N.H.L.

Walk into the immense Pacific Coliseum, and you'll be impressed by a number of things. First, its overall design. Clean. Modern. Tasteful. What's more, there are no columns to obstruct any of the 15,040 seats. And the way whole seating sections hydraulically telescope to provide a total of 120,000 square feet of exhibition area is most impressive, too. But when you're told that this project was completed within a 6 million dollar budget, that will seem almost too good to be true. Yet, it is true. The Pacific Coliseum is the most economical arena of its kind recently completed in North America.

The Problem:

To create a floor system that could be converted from ice to non-ice in less than 24 hours—that would withstand the punishment of successive rapid freeze-thaw cycles—that could take unusually heavy point loads when used as an exhibition area—that would perform without control joints marring the ice surface.

The solution was a "sandwich" of concrete and Styrofoam FR insulation, with certain design additions to the basic system. (Illustrated below).

Styrofoam was chosen for its low "k" factor, high compressive strength and its moisture impermeability. That these characteristics would remain *permanently* constant, was of vital importance.

Here is how the floor was constructed. Two layers of Styrofoam FR were laid in bitumen on the first concrete pour. Two plies of asbestos paper followed—dry, to provide an effective "slip sheet" between the upper and lower concrete slabs during freeze-thaw cycles. Hydro-T sheet followed, (0.02", joints lapped), to provide a base for the refrigerant pipe chairs. Before placement of the chairs, 6-mil polyethylene was laid with laps sealed to prevent moisture from the final concrete pour penetrating to the insulation surface. With chairs and ten miles of 1 1/4" pipe in place, the final 5" wet screed pour was placed with no control joints. A special hard surface topping was applied as the final operation. A perimeter expansion joint surrounds the ice surface. The floor is permanent. So is the insulation.

This rink floor system differs slightly from the widely used Dow specifications. (See Sweet's Canadian Catalogue, Section 13fs), in that a more elaborate "slip sheet" design was specified because of the extremely rapid thermal cycling conditions. In most conventional rink floors prevention of frost heaving is the primary consideration. Simpler

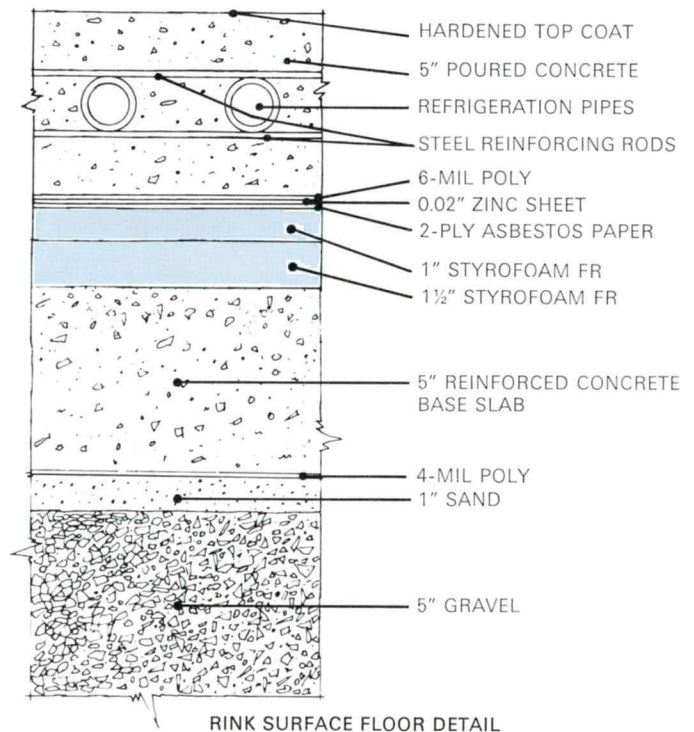
floor design is possible under continuous or seasonal service conditions. No matter what the problem, Styrofoam has proven itself in dozens of rink floors all across Canada.

Roofmate* on the Steel Truss Roof System

Since the 360 foot in diameter roof enclosed 12 million cubic feet of heated and ventilated interior space, the choice of insulation was very important. Once again, the designers turned to Dow insulation for the solution: Roofmate FR extruded plastic foam.

Like Styrofoam, Roofmate is a unique insulation material. Neither can ever absorb moisture. Both are good moisture vapour barriers. Their thermal efficiency remains permanently high in the presence of moisture and high humidity. As well as being flame retardant (self-extinguishing), they will not support mould growth or provide food for vermin.

For more information on these unique insulations consult Sweet's Canadian Catalogue, contact a Dow Construction Materials distributor, or write: Construction Material Sales, Dow Chemical of Canada, Limited, Sarnia, Ontario.



DOW CHEMICAL OF CANADA, LIMITED



Above, looking south on Toronto's Yonge St. from King, 1860. Below, Yonge and Queen in 1915. From *Toronto Album*.



OPINION

Preservation: a desperate necessity

Despite the crash of falling masonry in our cities . . . or perhaps just because of the demolition . . . the situation has never looked better for the preservation of the best of our heritage. Government authorities, local boards and municipal councils have in the past contented themselves with the reconstruction of forts on the frontier or "make believe" pioneer settlements in the exurbs. These efforts at historic reconstruction make nifty sets for TV spectacles and are just great for the kiddies but they have little to do with redevelopment and renovation problems downtown. The brawls which have broken loose over the disposition of old railroad stations, city halls and other holdovers from a more spacious age point to a revived concern for the quality of urban life. From the vernacular architecture of the residential street to the mannerisms and motifs of monumental architecture the physical "stuff" of the historic record is assuming a new importance, ensuring that we are not always caught in the narrow economy of "now".

Critical studies and historical essays are reflecting this changed emphasis. Where before, the typical architectural text was a breathless potpourri of aphorisms culled from the drawing board asides of the

Great Man, today it is fashionable to at least make the attempt to codify and analyse what actually is there in the town before tearing it down. The critiques of the past are quite as subjective as the rosy dreams of the future, but at the very least they are subject to factual check, if anyone has the time or energy. Three books recently published in Canada show the remarkably catholic and wide ranging spread of enquiry into matters historical and Canadian this last year or so.

Eric Hounsom's *Toronto in 1810*, published by Ryerson in 1970 is an example of the summary of bygone times. As an architect turned historian, his historic reconstructions in drawings are the core of the book, presenting clear, precise renditions of the tiny frontier town just before the American invasion. Perhaps they are too tidy, because the inevitable confusions of the frontier, the warped planks and split rail fences, the wasteland of stumpage and cut, and the enveloping sea of mud in the winters are overlooked in the architects' careful presentation of proper Regency houses. Yet this prim and careful delineation has advantages in that it suggests the snug and smug self righteous colonial town which was to become a stronghold for the boys of the Family Compact. The text goes far to correct this suggestion of a neat and tidy museum piece by dwelling upon the daily life of the Canadian

settler. It comes as a shock to read, "Salmon were so plentiful in the Humber River in the spawning season that they were caught by hand and thrown into wagons driven into the shallow water." Our Humber? and a nice note on the grape. "Whiskey could also be made by amateurs with homemade equipment. North American drinking habits may be said to be based on this one factor." Mr. Hounsom has read widely and to some effect to dig out this material. Unfortunately there is no general bibliography or index, so that it is impossible to follow up the intriguing snippets of information.

Fifty years later in 1860 we can actually look at the city. The photographer with his tripod and hood caught those marvellously evocative glimpses in which bewhiskered and mustachioed blades and pert and padded ladies paused in a smoky wisp for the camera eye. Michael Filey's *A Toronto Album, Glimpses of the City that Was*, published by University of Toronto Press captures this later Toronto, all bustle and smoke, clattering wagons and clanging streetcars. And in it we can see the last stand of the Georgian terraces against the onrush of warehouse and shop. No attempt is made at learned analysis, the photographs tell the story of a city in a frenzy of growth. It is this Toronto, the Toronto of late Victorian and Edwardian opulence which is rapidly vanishing today. For a time it appeared that because all of pioneer Toronto had been overbuilt there was no need for any historic preservation in the city whatsoever. Yet, so devastatingly horrid have been the results of mixing concrete, greenery and slabs in a pre-mixed post-tensioned amalgam of the worst of Wright and leCorbusier that the preservation of the past has become, not a pleasant exercise for middle class aesthetes, but a desperate necessity to ensure sanity and safety in the city core.

For quite a different approach to historical writing, Harold Kalman did a thorough study of *The Railway Hotels and the Development of the Chateau Style in Canada* in 1968. Published by the University of Victoria Maltwood Museum as the first of a series of historical monographs this is a tough, systematic and careful study of a specific aspect of architecture in Canada. Creative juxtaposition of the right examples, solid study of what actually happened in the board rooms and drawing offices (as best as can be known) and an intelligent use of relevant information make this a brief classic of the art historians discipline. With Windsor Station threatened by its creators, the Canadian Pacific Railway, Kalman's emphasis upon the seminal role of the station as the single most important contribution to a peculiarly Canadian style is very much to the point in 1971. Most arguments in favor of retention of the station have

emphasized the symbolic role of the station in the movement of immigrants to the West or have stressed the Romanesque Revival massive solidity of the fabric, as a foil to the brittle trivia of the twentieth century curtain wall. But Kalman points out the sources of a heritage and the derivation of a style; one which was to effect markedly the profile and pattern of our cities and capitals. God forbid that our cities should become sterile museums, but this does not preclude the re-use and renovation of buildings and structures which can give a depth and scale to the pattern of the town . . . and it is full well time that the large companies became aware of this responsibility.

James Acland, *Toronto*

Toronto in 1810, by Eric Wilfred Hounsom, Ryerson Press, Toronto, 1970, \$8.95, 188 pp.

A Toronto Album: Glimpses of the City That Was, by Michael Filey, University of Toronto Press, Toronto, 1970, \$7.95, 109 pp.

The Railway Hotels: And the Development of the Chateau Style in Canada, by Harold D. Kalman, University of Victoria, Maltwood Museum, 1968, \$3.00 paper, 37 pp.

TECHNOLOGY

Steel bible

The Canadian Institute of Steel Construction has recently released a new version of its handbook on steel structures.

At \$11, this second edition of *Handbook of Steel Construction*, first published in 1967, gives up-to-date information on design standards, codes, steels, products and fabrication procedures used in Canada. Order from CISC, 1815 Yonge Street, Toronto 7.

COMPETITIONS

Tangiers Bay

The Moroccan National Company for the Development of Tangiers Bay is considering an international competition for the construction of a commercial and recreational centre. The company has prepared a plan of touristic development in the Bay area and expects to announce the competition shortly.

INTERNATIONAL

Registration

While RAIC continues to work towards uniform registration requirements, hence reciprocity between provincial associations, two other members of the Commonwealth Association of Architects have been making some unique changes to their registration procedures. The two are The Bahamas and South Africa. CCA says both "will be worth watching".

The Bahamas' 'unusual ideas about architectural registration' are set forth in a Bill now before local parliament. The Association has proposed a registration board representative of all members of the

float

FLOAT: another product of seeing further ahead.

Three years ago, we introduced revolutionary new Float glass to Canada. Almost all production has been going to the automotive industry. Now we're building a second Float plant. A \$25,000,000 automated marvel, it will turn out Float at the rate of 120 feet per minute. Up till now, we've talked of Float as the symbol of our product superiority and engineering expertise. Now you'll be able to specify Float for many more projects. Float is one element of Pilkington Total Service. Our Contract Division can assist you from the design stage right through to the finished job. For more details on Total Service, Float and our above-ground revolution, contact the Pilkington Contract Division. Ask for Norman Hadji or Gord Sanderson.



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building team: architects, planners, quantity surveyors, valuation surveyors and engineers. If the Bill passes, no one will be allowed to practice any of these professions unless registered by the joint Construction Professional Registration Board.

South African architects have taken quite a different approach again. Their new Act, just produced, switches the responsibility for registration from the South African Institute of Architects to a government Minister advised by a special Board formed in consultation with the Institute.

Two of the most interesting provisions of this new Act are: that the Minister is given powers to lay down minimum fees which means statutory official sanctions for mandatory fee scales; and, that he can restrict certain classes of work to registered architects. He would be able, for example, to issue an order that nobody but a registered architect could design, say, hospitals, schools or other buildings in certain localities.

THE PROFESSION

Strength and cohesiveness

The Nova Scotia Association of Architects is patting itself on the back for the large turnout at its annual assembly last month in Halifax.

It reports that over 80% of the membership was on deck for business sessions and the luncheon, and over 100 people attended evening social events. The Association makes a direct comparison between its attendance figures and those of some of the larger associations, citing that Quebec, for example, "did not muster more than 5%" for its annual meeting (*A/C 15/2/77*). NSAA feels the person-to-person relationship enjoyed by its membership "must be a valuable source of strength and cohesiveness".

Former councillor and vice-president George Rogers was elected association president. Mr. Rogers, a partner in MacFawn and Rogers, Halifax, has been active on *A/C*'s editorial board. Aza Avramovitch was elected vice-president, Bob Ojolic was re-elected secretary-treasurer and Don MacLeod was elected registrar.

FELLOWSHIPS

A year in Japan

Graduate architects from the University of Manitoba are being offered the opportunity next year of a year's experience in Japan. The Shimizu Construction Company will give the trainee-fellowship to the successful applicant. He will receive a monthly salary equivalent to his Japanese counterpart and will be associated with Waseda University with the opportunity of participating in some architectural programs there.

For application and details write: Professor K-C Lye; Head, Department of Architecture; University of Manitoba;

Winnipeg 19, Manitoba, Canada. *Deadline for application is April 1, 1971.*

Besides being architects for a number of significant buildings in Japan, Shimizu Construction Company was also the contractor for Kenzo Tange's Olympic Swimming Pool and LeCorbusier Museum in Tokyo.

GRAPHIC DESIGN

The science of signage

Bolt Beranek Newman Inc., known primarily for work in acoustics, noise control and illumination, has recently developed a system for evaluating the effectiveness of signage design.

The new system is an outgrowth of several recent studies by BBN including one for the US Department of Transportation ("An Investigation of the Design and Performance of Traffic Control Devices"). The purpose is to help architects avoid making subjective decisions about signage. By testing alternative designs submitted by graphic designers against data collected from potential users, BBN can accurately evaluate user reaction.

The system, although initially designed to be of value in selection of signage for the environment i.e., new towns, airports, campuses, could, in the future, be used in other areas such as assisting package designers in developing labels or instruction panels.

Some of BBN's work done for the Dept. of Transportation included testing directional arrows, pictograph symbols, and color and shape of signs. Some of the findings:

— the most effective directional arrow is one which carries directional information in the shaft as well as the head;

— recognizability of a square sign improves with the addition of a color, particularly red. A triangular sign functions well with a yellow background, but red is better. Bar-shaped signs work best with blue, red or green backgrounds;



— the most recognizable of the pictographs tested was of falling rocks. Poorly recognized pictographs included a gas pump, children crossing and a telephone.

HOUSING

Florida cubes

One of the latest entrants into the modular "cube" type factory housing field is the Aluminum Company of America. It will construct modular concrete and aluminum units as part of the US government's turnkey housing program in the Miami area.

The Housing Corporation of

America, a subsidiary of Alcoa and an affiliate of Alcoa Building Industries, was selected by the Dade County Department of Housing and Urban Development to design and build 328 low-income townhouses, at a cost of \$7.2 million.

Features of the project, Alcoa says, will be a series of design variations, balconies, covered breezeways and porches. Each self-contained unit will have a living room, dining room, first floor kitchen, and two to five bedrooms. Floor-to-ceiling aluminum and glass living room areas open onto a landscaped patio. Parking will be on the outer perimeter of the development. Average unit price will be \$21,225. Down payment \$300.

Coordinated exterior lighting, pedestrian and vehicular graphics, and children's playground equipment complete the planned neighborhood.

Alcoa's recently developed Alumiframe, a lightweight system of aluminum framing members, will replace conventional wood studs for interior partitions. Drywall will be fastened directly to the aluminum studs with adhesives or self-tapping screws.

Blueprint for government housing policy in the '70s

The basic question of how far governments should go in planning economic growth is posed by a report just made public by federal housing minister Robert Andras.

The 235-page report was prepared by former economics professor Harvey Lithwick of Carleton University in Ottawa. It has been a major factor in shaping the role of the new federal Department of Urban Affairs and Housing.

Lithwick is one of a small elite of academics who have been advising Andras which way to go with his new department, which is expected to become operational this spring.

The report argues that a single policy to deal with a problem such as a housing shortage may not be successful because it may not be aimed at the force that is really causing the problem.

One such force is the steady population drift to the big cities, which will lead to 50% of the population living in either Montreal, Toronto or Vancouver by the end of the century, and 80% in only 12 major urban centers.

To combat this, Lithwick advocates the creation of several new towns. He would also stimulate the growth of some smaller existing cities, while controlling expansion of such cities as Toronto. Municipal politicians in the big cities have predictably been unenthusiastic at this idea. "Smaller cities don't have the same attraction for people or industry," says chairman Ab. Campbell of Metro Toronto. "People come to Metro because they can find higher wages, wider job opportunities and more forms of recreation."

karelia
news



Karelia International is proud to announce its association with Danese of Milano. The Danese collection consists of a great variety of items for the home and office designed by three internationally established artists — Bruno Mangiarotti, Enzo Mari and Angelo Munari. Their works are included in the permanent collections of a number of museums throughout the world.

Illustrated is a perpetual calendar designed by Enzo Mari with moveable cards, available in English and French.

The Danese collection is available from a number of exclusive dealers throughout Canada. Address contract and wholesale enquiries to Karelia International, 67 Front Street East, Toronto, 368-2188.

CLASSIFIED

\$2 per line for RAIC members
All others, \$3 a line.

Position Wanted

Japanese registered architect seeks a position with a planning-oriented firm in Canada from September. B.Arch., five years' experience as a housing estate planner of the Japan Housing Corporation. Rimpei Sako, 1-13-3 Tanashi, Tokyo, Japan.

Practice Notes

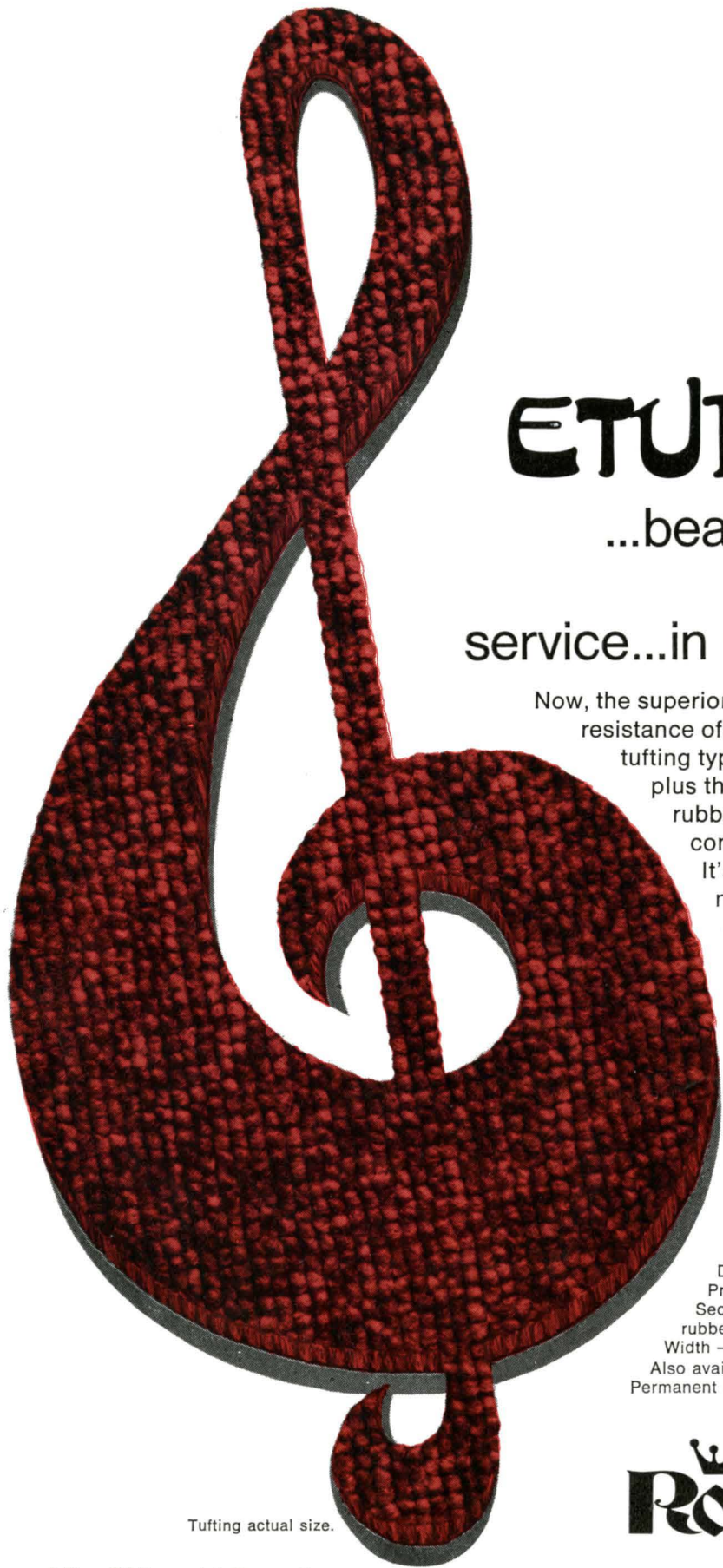
G. Kerby Garden, formerly with the Division of Building Research of the National Research Council of Canada, announces the opening of an office at 1740 Cayuga Drive N.W., Calgary 48, Alberta, phone (403) 282-7591. From this office Mr. Garden is providing Building Science Consulting and Investigation services throughout Canada.

Book Service

Books reviewed in *Architecture Canada* (and most other architectural books published in Europe or North America) can be ordered through the Architecture Canada Book Service, 56 Esplanade, Toronto 215.

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