


JOURNAL RAIC-L'IRAC

Handwritten text on a torn paper strip: DANIEL ROSE DA-MARQUE



L'ARCHITECTURE FANTASTIQUE

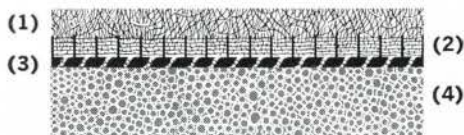
RAIC 58th Annual Assembly, June 9-12 MONTREAL juin 9-12 l'IRAC 58 ième Assemblée Annuelle



more
deadly
than
the
male

To ordinary carpeting, yes! But not to Texama. Texama easily takes the daily stabbing punishment of "her stride" in fashion salons, beauty parlours, hotel, theatre and hospital foyers, motels, retail stores — wherever public traffic is heaviest. Commercial installations of Texama made five to seven years ago still show little sign of wear. Many thankful user-letters in our files testify to this. Over 30 solid colours and patterns are available. You are invited to send today for details and a sample. **Texama**

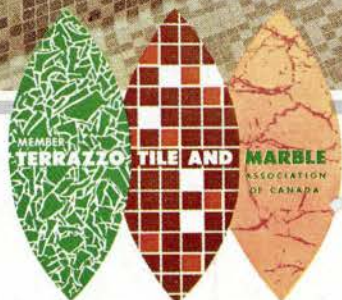
TEXAMA'S UNIQUE FOUR ELEMENT
CONSTRUCTION GIVES LONG LIFE



(1) Dense 100% nylon pile resists dirt and stain penetration. (2) Tight-knitted, stitch locked, 100% nylon body for strength. (3) Tough interknitted natural fibre and nylon backing for stability. (4) Heavy foam rubber base is welded to both natural fibre backing and nylon body. Complete structure permits evaporation — no vapour-resistant adhesives are used.

 NEWLANDS CARPET DIVISION OF
DOBBIE INDUSTRIES LIMITED
GALT, ONTARIO

TEXAMA DISTRIBUTORS: Quebec Province Norentide Limited, St. Laurent.
Ontario Imperial Carpet Distributors Ltd., Toronto, Edandale Carpets Company, Toronto.
Western Canada W.G. McMahon Limited, Winnipeg, also Brandon, Regina, Saskatoon,
Calgary, Edmonton, Vancouver, Port Arthur.



FOR THE LIFE OF YOUR BUILDING
SPECIFY TERRAZZO TILE AND MARBLE

HOSPITAL THERAPEUTIC POOL

ARCHITECTS — Chester C. Woods & Donald
A. McCuaig Associate
Architects

Walls — Glazed Ceramic Wall Tile

Pool — Ceramic Mosaic Tile — Non Slip

TERRAZZO TILE AND MARBLE ASSOCIATION OF CANADA
L'ASSOCIATION CANADIENNE DE TERRAZZO TUILE ET MARBRE
1727A Bayview Ave., Toronto 17 • Telephone 483-8747



DAIRY FILLING ROOM

- * MODULAR DIMENSIONS
- * WARM UNGLAZED COLOURS
- * DRAMATIC GLAZED COLOURS
- * FROST PROOF
- * LOCK KEY DESIGN FOR SECURE ATTACHMENT
- * ACID AND ALKALI RESISTANT



GAIL INTERNATIONAL
CANADA

JOURNAL

RAIC - L'IRAC

May 1965 mai 476 Vol 42 No 5

Annual Assembly Assemblée Annuelle

- 40 Program, 58th Annual Assembly, RAIC, Queen Elizabeth Hotel, Montreal, June 9-12
Programme, 58ième Assemblée Annuelle l'IRAC, Hôtel Reine Elizabeth, Montréal,
9-12 juin
- 41 "Fantastic Architecture/Architectures Fantastiques", by Stuart Wilson, MRAIC
- 42 André Bloc, Assembly Keynote Speaker/Orateur du thème de l'Assemblée
- 43 "L'Architecture Fantastique", by/par Jean Louis Lalonde, MIRAC
- 46 Jordi Bonet, 1965 RAIC Allied Arts Medalist, by/par Jacques Folch-Ribas, MIRAC
- 48 "Montreal — to see or not to see", by/par André Blouin, MIRAC
- 55 Introduction of an Urban Concept in the Planning of the Exhibition
Introduction d'un concept Urbain dans la Planification de l'Exposition
Expo 67 by/par Edouard Fiset, FIRAC
- 91 Manufacturers' Exhibit at the Assembly

Survey on the Profession Relevé sur la Profession

- 63 Part I: Introduction and Summary of Findings; RAIC Committee on the Profession
Partie I: Introduction et Sommaire; Comité sur la Profession
- 79 How to Assess a Survey, by P. M. Keenleyside, MRAIC

Allied Arts

- 16 Canadian Handcrafts and the Architect, by Anita Aarons, ASTC (Sculp)

Technical Section

- 75 Mineral Aggregate Roof Surfacing, by D. C. Tibbetts and M. C. Baker/May Building
Digest Supplement, Division of Building Research/NRC/Ottawa

Departments

- 9 News — Executive Committee Meeting
- 87 Book Reviews
- 105 Index to Advertisers
- 105 Reader Service Reply Cards

- Cover** Sculpture Habitude 1964, Interior, by André Bloc
Photograph by Len Iselin

EDITOR/RÉDACTEUR Walter B. Bowker • ASSISTANT TO THE EDITOR/AIDE AU RÉDACTEUR C. Annabel Gerald • ASSOCIATE EDITOR/
RÉDACTEUR ASSOCIÉ P. M. Keenleyside, MRAIC • ASSISTANT EDITORS/RÉDACTEURS ADJOINTS Anita Aarons, ASTC, (Allied Arts Dept) •
TECHNICAL EDITOR/RÉDACTEUR SCIENTIFIQUE Douglas H. Lee, B. Arch, M Sc, MRAIC, ARIBA • LEGAL EDITOR/RÉDACTEUR JURIDIQUE
N. J. P. Melnick, B A, LI B • REGIONAL ASSISTANT EDITORS/RÉDACTEURS ADJOINTS RÉGIONAUX Atlantic Provinces/provinces de l'Atlantic
Yvon LeBlanc, B Arch, MRAIC, Moncton • ADVERTISING MANAGER/GÉRANT DE PUBLICITÉ Lloyd Sawyer • ADVERTISING CONSULTANT/
CONSEIL DE PUBLICITÉ J. F. Sullivan • ADVERTISING REPRESENTATIVES/REPRÉSENTANTS DE PUBLICITÉ A. Sevink, T. J. Johannsen, J. Ferrie,
G. Crichton, George Leslie, Toronto; J. A. Bryden, Vancouver; Colin Turner, London, England • JOURNAL COMMITTEE/COMITÉ DU
JOURNAL Chairman/Président L. A. Oxley (F), F. Bruce Brown (F), H. D. Buck, Earle C. Morgan (F), Toronto; James W. Strutt (F),
Ottawa; André Blouin, Montréal • EDITORIAL BOARD/COMITÉ DE RÉDACTION Chairman/Président H. D. R. Buck; Vice-Chairman/Vice-
président W. N. Greer, Toronto • Alton M. Bowers, Calgary • K. E. R. Kerr, Vancouver; H. Claire Mott (F), Saint John; Wm. J. Ryan,
St. John's; J. A. Langford, Ottawa; Peter F. Tillman, London; Boyle Schaeffer, Winnipeg; Douglas B. Brown, W. E. Carruthers, R. G.
Cripps, F. E. Fletcher, P. M. Keenleyside, Alexander B. Leman, L. A. Oxley (F), M. Clifford, J. G. Spence, Toronto; Peter Collins,
Montréal; Denis Tremblay (A), Sherbrooke; W. F. Kelly, Regina; G. A. Lambros, Halifax; Jacques de Blois, Québec.

Journal of The Royal Architectural Institute of Canada/Journal de l'Institut Royal d'Architecture du Canada, 160 Eglinton Avenue East,
Toronto 12, Ont • Editorial/rédaction 487-4714 • Advertising/publicité 485-6561 Toronto; Vancouver, 165 W. 40th Ave, FA 7-3388;
London, England, 122 Shaftesbury Ave, W.1, GERard 7459 • Subscription/abonnement \$7.00; Foreign/étranger \$8.00 • The Journal
is not responsible for opinions expressed by contributors/Les opinions exprimées dans le Journal ne sont pas nécessairement celles de
l'Institut • Authorized second class mail P.O. Dept Ottawa and for payment of postage in cash.

The Royal Architectural Institute of Canada L'Institut Royal d'Architecture du Canada

Founded in 1907 • Patron: Her Majesty the Queen



Fondé en 1907 • Sous le patronnage de Sa Majesté la Reine

OFFICERS 1964/65 DIRECTION

PRESIDENT Dr. F. Bruce Brown (F) Toronto PRÉSIDENT
PAST PRESIDENT John L. Davies (F) Vancouver PRÉSIDENT SORTANT DE CHARGE
VICE-PRESIDENT Gérard Venne (A) Québec VICE PRÉSIDENT
HONORARY SECRETARY C. A. E. Fowler (F) Halifax SECRÉTAIRE HONORAIRE
HONORARY TREASURER James W. Strutt (F) Ottawa TRÉSORIER HONORAIRE

COLLEGE OF FELLOWS/COLLEGE DES AGREGES

CHANCELLOR Harland Steele (F) Toronto CHANCELIER
DEAN Earle C. Morgan (F) Toronto DOYEN
REGISTRAR Gérard Venne (A) Québec SECRÉTAIRE-ARCHIVISTE

REPRESENTATIVES TO COUNCIL/REPRESENTANTS AU CONSEIL

ALBERTA ASSOCIATION OF ARCHITECTS
R. F. Bouey, H. W. Seton, D. L. Sinclair

ARCHITECTURAL INSTITUTE OF BRITISH COLUMBIA
John L. Davies (F), William G. Leithead (F), R. W. Siddall (F), John H. Wade (F)

MANITOBA ASSOCIATION OF ARCHITECTS
Dennis H. Carter (F), James E. Searle, J. E. Whenham

ARCHITECTS' ASSOCIATION OF NEW BRUNSWICK
John R. Myles, Neil M. Stewart (F)

NEWFOUNDLAND ASSOCIATION OF ARCHITECTS
W. B. Guihan, Frank Noseworthy

NOVA SCOTIA ASSOCIATION OF ARCHITECTS
T. W. Bauld, C. A. E. Fowler (F)

ONTARIO ASSOCIATION OF ARCHITECTS
Donald M. Blenkhorne, F. Bruce Brown (F), Frank H. Burcher, Arthur W. Davison, Jerome Markson, Norman H. McMurrich (F),
Earle C. Morgan (F), W. G. Raymore (F), C. F. T. Rounthwaite, Harland Steele (F), James W. Strutt (F), Peter F. Tillman

L'ASSOCIATION DES ARCHITECTES DE LA PROVINCE DE QUÉBEC
Randolf C. Betts (F), Francis J. Nobbs (F), Gilles Marchand (A), Edouard W. Tremblay, Gérard Venne (A)

SASKATCHEWAN ASSOCIATION OF ARCHITECTS
Gordon Arnott, W. E. Marvin

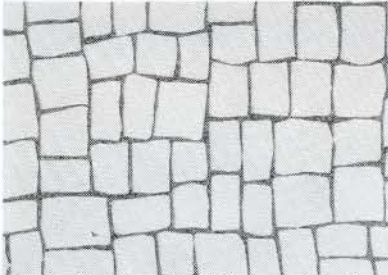
HEADQUARTERS/SIÈGE

75 Albert Street, Ottawa 4, Ontario

EXECUTIVE DIRECTOR/DIRECTEUR GÉNÉRAL
Fred W. Price

EXECUTIVE SECRETARY/SECRÉTAIRE ADMINISTRATIF
Maurice G. Holdham, MBE

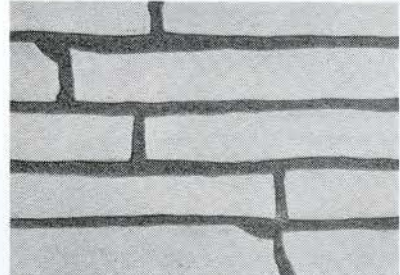
there are three good reasons why Amtico flooring is the pace-setter of the season.



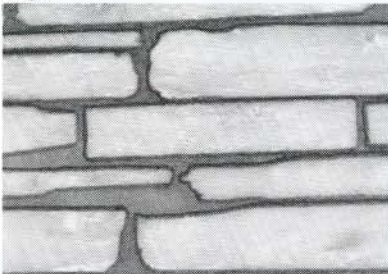
Texturette: 12 x 12 x .080 gauge only. Pure Vinyl.
Colors: Ivory, Beige, Brick, Marigold and Sage.



Travertine: 12 x 12 x .080 gauge only. Vinyl Asbestos.
Colors: White, Natural, Terra Cotta and Sagebrush.



Arcade: 12 x 12 x 1/16 gauge only. Vinyl Asbestos.
Colors: White and Grey, Terra Cotta, Beige, Black, Sage, White and Green.



Appian: 12 x 12 x 1/8 gauge only. Pure Vinyl.
Colors: Renaissance Beige, Renaissance White, Terra Cotta, Renaissance Black, Plain White and Eggshell.



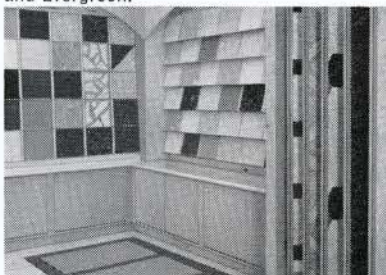
Strata: 12 x 12 x 1/16 gauge only. Vinyl Asbestos.
Colors: Beige, Gold, Stone, Saddle, Marigold and Evergreen.



Silhouette: 12 x 12 x .055 gauge only. A care-free vinyl tile. Colors: White/Gold, White/Beige, Eggshell, White/Pink, White/Olive and White/Turquoise.



Riviera: 12 x 12 x .080 gauge only. A solid vinyl chip suspended in clear vinyl.
Colors: White, White and Gold, Eggshell and White, Eggshell/White/Gold, Beige and Brown, Taupe/White, White/Green, Moss/Gold, Turquoise/Gold.



A section of one of Amtico's modern new show rooms. One visit will convince you that Amtico has tile to suit every budget and taste.



Amtico's multi-million dollar Vinyl Asbestos plant in Sherbrooke, Que.

Amtico has 7 excitingly new designs in tile. Amtico has a brand new plant now operating at full tilt. Amtico has two newly opened showrooms.

Pace-setting! Revolutionary! Different! This is Amtico tile.

From our selection of 7,000 combinations of textures, colours, gauges and sizes, we've featured the 7 latest designs in tile. Everyone a sure-fire sales catcher! We can't show you the 42 fabulous colours. But, we can tell you they're great. We can't show you the beauty of our textured tile. We can only tell you they're outstandingly original. We can do all

this because, now with our new Vinyl Asbestos plant operating at full tilt, three shifts a day, we can produce the full range in tile. Pure Vinyl and Rubber. In addition we have two showrooms. One in Montreal. The other in Toronto. Come see our complete range and bring your customers too. Our interior decorators can offer them helpful advice. You'll find out why we're the pace-setters in tile. *All year round.*



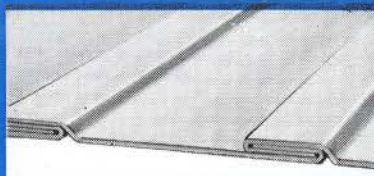
LEAD ROOF VENT



LEAD FLASHING



SHEET LEAD ROOF



LEAD SHOWER PAN



LEAD ROOF DRAIN



LEAD BEND



LEAD JOINT



LEAD STUB



Lead . . . all through the house. Why Canada Metal lead for the plumbing system? Canada Metal lead is durable, flexible, low in cost—accepted by all plumbing ordinances and required by many. Canada Metal makes lead roof flanges, lead pipes, traps, stubs and bends, pans and lead for all caulking purposes. From roof to basement specify Canada Metal plumbers lead goods. Consult our Technical Service Department for help in solving your lead plumbing problems.

**CANADA
METAL**

TORONTO
MONTREAL
SCARBOROUGH
WINNIPEG
CALGARY
VANCOUVER

Executive Meets at New RAIC Headquarters/Première réunion de l'Exécutif au nouveau siège

All 15 members came together, from St John's to Vancouver, for this first meeting in our new Headquarters. To mark the occasion, a number of guests were invited from government and architectural circles in Ottawa to a reception on April 2, when the President declared the premises officially open.

Chief item on the agenda concerned the interim report of the Committee on the Profession, embodying the results of its survey of all members in 1964. It was decided to withhold publication of this report until its completion. Meanwhile, findings will be presented to the members at the Annual Assembly in June, and a good part of the meeting will be devoted to this discussion. The Executive expressed confidence in and strong appreciation of the work of this committee to date.

John L. Davies, Chairman of the Standing Committee on Architectural Education, announced plans of his committee to consider pertinent recommendations of the profession report prior to the Annual Assembly. Messrs Rounthwaite, Côté, Moody and Thornton will constitute a committee to visit the School of Architecture, Laval University, Quebec, in conjunction with the Canadian Conference of University Schools of Architecture there, June 7-8. This official visit has been arranged at the request of the Rector of the University, Mgr. Vachon, and the Director of the School, Prof. Noël Mainguy. The Competitions Committee, under Edouard Tremblay, is requesting all members to keep RAIC Headquarters informed of architectural competitions, local and national, so that a complete register may be kept for our information.

The Public Information Committee is not yet in a position to make a full report on the script for the proposed RAIC film. This will be received and discussed at the Assembly.

Arthur W. Davison was invited to participate in a discussion of his report as chairman of the Special Committee on Salaried Architects. Studies of this committee to date have centered on matters concerning architects in Federal Government employ, and authority was given for action in concert with the Professional Institute of the Public Service. Recent Quebec legislation is involving architects in collective bargaining, and proposed federal legislation will involve architects in government employ. There will be further discussion of this question. William G. Leithead reported on plans for publication this summer of the "Manual of Street Decoration".

The Executive Director reported on plans for the architectural exhibit in the Canadian Pavilion at EXPO 67. Dean John A. Russell has agreed to accept nomination as selector and arranger of this exhibition, which is to include photographs, drawings and models of significant new buildings across Canada.

James E. Searle, vice-chairman of the National Joint Architect-Engineer Committee told of their work toward formulating *Interprofessional Principles of Practice* as a national policy.

Les quinze membres de l'Exécutif, venus de toutes les régions du pays depuis Saint-Jean (T.-N.) jusqu'à Vancouver, ont assisté à cette première réunion tenue au nouveau siège de l'Institut. A l'occasion de l'inauguration officielle par le président, le 2 avril, nous avons invité à une réception un certain nombre de représentants des cercles gouvernementaux et architecturaux d'Ottawa.

Le principal numéro de l'ordre du jour visait le rapport provisoire du Comité sur la profession, contenant les résultats de l'enquête faite auprès de tous les membres en 1964. Il a été décidé de retarder la publication de ce rapport en attendant sa version définitive. Entre-temps, les conclusions seront soumises aux membres à l'assemblée annuelle, en juin, et une forte partie de l'assemblée sera consacrée à cette discussion. L'Exécutif a exprimé sa confiance au Comité et l'a chaleureusement félicité du travail accompli.

M. John L. Davies, président du Comité permanent sur la formation des architectes, a annoncé l'intention de son comité d'étudier les recommandations pertinentes formulées dans le rapport sur la profession avant l'assemblée annuelle. MM. Rounthwaite, Côté, Moody et Thornton formeront un comité qui ira visiter l'École d'architecture de l'Université Laval, à Québec, à l'occasion de la Conférence canadienne des écoles universitaires d'architecture qui aura lieu dans la capitale québécoise les 7 et 8 juin. Cette visite officielle a été organisée à la demande du recteur de l'Université, Mgr Vachon, et du directeur de l'école, le professeur Noël Mainguy.

Le Comité des concours, dirigé par M. Edouard Tremblay, demande à tous les membres de signaler à l'Institut tous les concours, locaux et nationaux, de façon que celui-ci puisse tenir un dossier complet à des fins de renseignement.

Le Comité de l'information publique n'est pas encore en mesure de présenter un rapport complet sur le texte du film projeté de l'Institut. Ce texte sera présenté et discuté à l'assemblée annuelle.

M. Arthur W. Davison a été invité à participer à une discussion de son rapport en sa qualité de président du Comité spécial sur les architectes salariés. Ce Comité a concentré ses études sur les questions visant les architectes à l'emploi du gouvernement fédéral et autorisation lui a été donnée d'agir de concert avec l'Institut professionnel du service public. Une loi récente de la province de Québec engage les architectes dans la négociation collective et une loi fédérale projetée placera dans la même situation les architectes au service du gouvernement. La question sera plus amplement discutée.

M. William G. Leithead a fait part de ses projets en vue de la publication cet été du "Manuel sur la décoration des rues".

Le directeur général a exposé les projets visant une exposition d'architecture dans le pavillon canadien à l'EXPO 67. M. John A. Russell a accepté de diriger le choix et la disposition des pièces à cette exposition qui comprendra des photographies, des



Top, left to right: F. J. Nobbs (F), W. G. Leithead, J. W. Strutt (F), M. G. Holdham, F. W. Price, Dr F. B. Brown (F), G. Venne (F), C. A. E. Fowler (F), John L. Davies (F).



Centre, left to right: John L. Davies (F), Gordon Arnott, W. B. Guihan, H. W. Seton, N. McMurrich (F), G. Marchand, J. R. Myles, F. J. Nobbs (F).

Lower left, left to right: Maj. Gen. Maurice Brennan, Director, Community Planning Association of Canada; Lt. Gen. Findlay Clark, Chairman, National Capital Commission; Francis J. Nobbs (F), President, PQAA; Dr F. Bruce Brown (F), President, RAIC.

Lower right, left to right: Miss Terry Coburn, Miss Judy Street, Miss Joan Rondeau, and sculpture "Femme Debout" by Miss Sylvia Daoust, Allied Arts Medallist 1961.

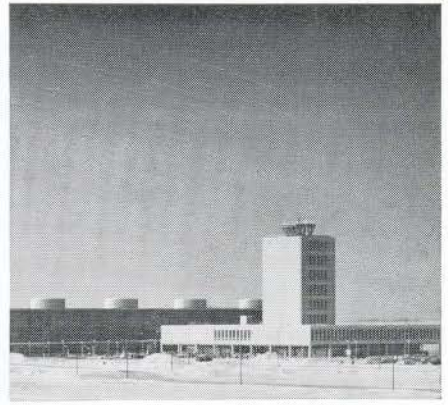




EDMONTON



TORONTO



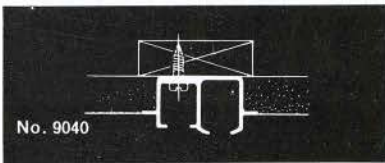
WINNIPEG

Where There's a Window, There's a Way
with
ARCHITRAC

Where there's a window treatment or light control problem there's a way to the answer in the 8 styles of Architrac® Drapery Hardware, our high alloy natural anodized aluminum tracks and parts for commercial and institutional buildings.

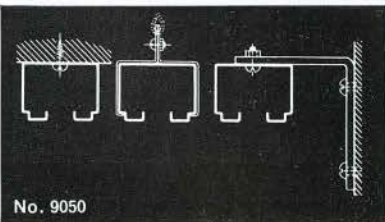
CORD OPERATED ARCHITRAC

Cord traverse dual channel Architrac has ball bearing carriers in front channel to pack back closer, help hold headings up. Ball bearing master carriers and cords slide drag-free in back. Masters tip in after plastering or mounting. With auditorium track, drapery carriers have unlimited overlap.



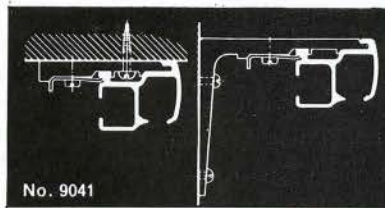
No. 9040

Recessed Plaster or Acoustical Tile Installation: No. 9040—A true recess track with its own plaster ground. Pre-drilled for direct mounting. Eliminates expensive sub-channels. Full 1/4" of track below head minimizes light leak.



No. 9050

Ceiling, Overhead or Wall Installation: No. 9050—For heavy draperies, tall or wide windows and medium-weight stage curtains, 9050 conceals moving parts and cord. Can be spliced to span 50-ft. openings, cord operated.

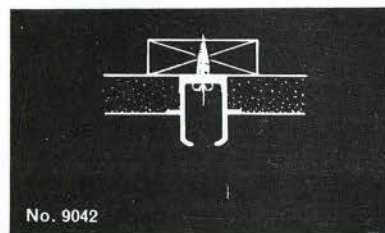


No. 9041

Ceiling or Wall Installation: No. 9041—Designed to present a handsome face, 9041 Architrac doesn't need recessing. Mounts directly to ceiling, or on wall, with concealed extruded aluminum brackets.

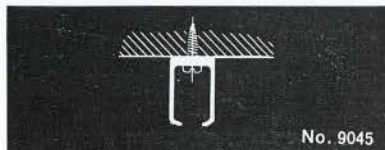
CORDLESS ARCHITRAC

Reasonable in cost, hand-drawn Architrac has smooth, quiet ball bearing carriers. Panels pack back easily; can be moved to any position.



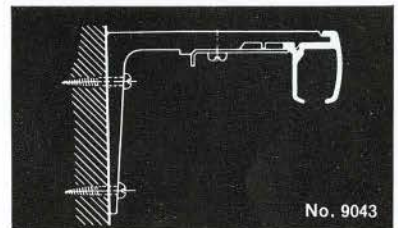
No. 9042

Recessed Plaster or Acoustical Tile Installation: No. 9042—A recess track with its own plaster ground 9042 needs no sub-channel. Mounts directly through pre-drilled holes; can be curved.



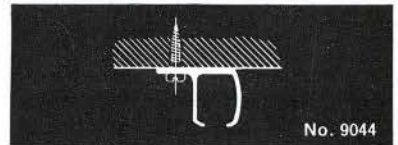
No. 9045

Ceiling or Doorway Installation: No. 9045—Perforated 8" O.C. for direct mounting, 9045 can be curved to a minimum radius of 12".



No. 9043

Wall or Casing Installation: No. 9043—Aluminum bracketed, mounting on wall or mullion, 9043 Architrac presents a handsome fascia unbroken by supports; can be curved.



No. 9044

Ceiling Installation: No. 9044—With its pre-drilled flange at back, 9044 mounts to ceiling quickly, easily. Cannot be curved.



No. 9046

Ceiling Installation: No. 9046—Basically a hospital cubicle track, 9046 is pre-drilled for direct mounting; can be curved. Also used for windows in low budget institutional or commercial projects, with nylon slides.

FREE CATALOGUE

For details and specifications of drapery hardware, send for our free Architrac® catalog. Kirsch of Canada, Limited, Woodstock, Ontario.

Kirsch
Drapery Hardware

This committee is now in direct communication with Joint Boards of Practice in five provinces, and encourages formation of such boards in the other provinces. It has recommended that "both professions in each provinces should give serious consideration to the establishment of a uniform standard of performance or services and uniform fees both for services to members of the other profession as well as services to the general public". The committee recommends also "that formal training in planning at Canadian universities should be under the control of the faculties of architecture and engineering".

Our Architectural Education Committee will be asked to study the current situation with regard to certification of building technicians.

James W. Strutt reported on the current work of the RAIC-CMHC Advisory Committee on Housing Design, including recent publication of REFLECTIONS ON ZONING.

John L. Davies led a discussion on our participation in the Commonwealth Association of Architects meeting in Malta, June 25-28, and in the International Union of Architects Congress in Paris, during the first part of July. A good Canadian delegation to the IUA Congress seems assured. We have also been invited to participate in the AIA-Pan American Federation Congress in Washington, July 14-18; official observers will be appointed shortly.

It was agreed that we should proceed toward terminating RAIC affiliation with RIBA, as was envisaged when the Commonwealth Association of Architects was formed.

The Scholarships and Awards Committee will be asked to draft revised Terms of Reference for the Allied Arts Medal, in order to conform with present procedures in this regard.

Eight new Fellows of the Institute were elected, in accordance with Article IV of the By-Laws.

The meeting also discussed numerous other items, including the *Journal*, the RAIC Foundation, Francou Legacy, 1965 Assembly plans, Competitions, Legal Documents, Professional Usage, Research, New Letterhead, and staff services to provincial associations. The auditors' financial statement and report for 1964 was received.

The Institute's endorsement was granted to Canadian Education Showplace 1966. The meeting also accepted an invitation to prepare an exhibition of architecture for the Construction and Public Works Show, December 1966, in Toronto.

Notice will be given to the National Gallery of Canada that we propose to present the Massey Medals for Architecture 1967 at the time of our Annual Assembly in Ottawa, May 1967.

Recognition of the 50th anniversary of AIBC and MAA and of the 75th anniversary of PQAA and OAA will be accorded through presentation of an illuminated scroll to each.

FRED W. PRICE
Executive Director

dessins et des maquettes de nouveaux bâtiments importants des diverses régions du Canada.

M. James E. Searle, vice-président du Comité national mixte des architectes et ingénieurs, a fait part à l'Exécutif du travail de son Comité du point de vue de la formulation de *principes interprofessionnels de pratique* comme partie d'une politique nationale. Ce Comité est actuellement en communications directes avec des commissions mixtes de pratique dans cinq provinces et encourage la formation de ces commissions dans les autres provinces. Il a recommandé que "les deux professions dans chaque province songent sérieusement à l'établissement de normes uniformes de services professionnels et à des taux uniformes pour les services rendus aux membres de l'autre profession et au grand public". Il a aussi recommandé que "l'enseignement formel de la planification dans les universités canadiennes relève des facultés d'architecture et de génie".

Notre Comité sur la formation des architectes sera invité à étudier la situation actuelle pour ce qui est de la reconnaissance des techniciens du bâtiment.

M. James W. Strutt a présenté un rapport sur le travail accompli par le Comité consultatif de l'IRAC et de la SCHL au sujet des plans d'habitations, y compris la récente publication des RÉFLEXIONS SUR LE ZÔNAGE.

M. John L. Davies a dirigé une discussions sur notre participation à la réunion de l'Association des architectes du Commonwealth à Malte du 25 au 28 juin et au congrès de l'Union internationale des architectes à Paris au début de juillet. Nous semblons assurés d'une bonne délégation canadienne au congrès de l'Union internationale. Nous avons également été invités à participer au congrès de la l'AIA et de la Fédération panaméricaine à Washington du 14 au 18 juillet; des observateurs officiels seront désignés prochainement.

Il a été convenu que nous devrions prendre des mesures afin de mettre fin à l'affiliation de l'Institut au RIBA, ainsi qu'il a été prévu lors de la formation de l'Association des architectes du Commonwealth.

Le Comité sur les bourses d'études et les prix sera invité à reviser les règles applicables à la Médailles des arts connexes afin de les rendre conformes avec la pratique actuelle.

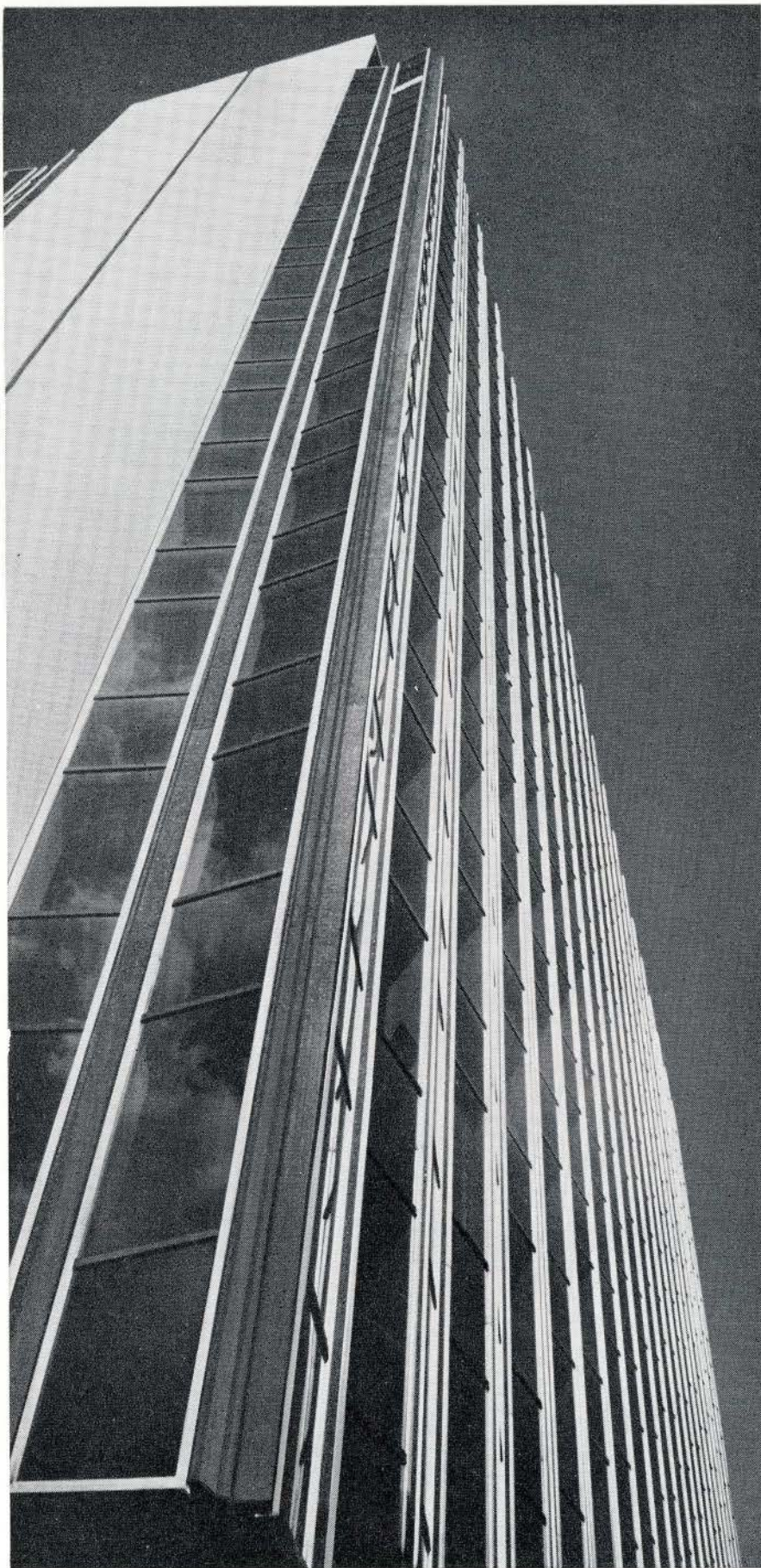
Huit nouveaux agrégés de l'Institut seront élus en conformité de l'article IV du Règlement.

La discussion a porté également sur divers autres sujets, y compris le *Journal* la Fondation de l'IRAC, le legs Francou, les plans de l'assemblée de 1965, les concours, les documents juridiques, l'usage professionnel, la recherche, une nouvelle en-tête de lettres, et la mise des services du personnel à la disposition des associations provinciales. Les états financiers et le rapport du vérificateur pour 1964 ont été reçus.

L'Exécutif a décidé de donner l'approbation de l'Institut au Canadian Education Showplace 1966. Il a aussi accepté l'invitation à préparer une exposition d'architecture pour l'Exposition de la construction et des travaux publics qui aura lieu à Toronto en décembre 1966.

Nous donnerons à la Galerie nationale du Canada avis de notre intention de décerner les Médailles Massey en architecture, 1967, au cours de notre assemblée annuelle de mai 1967 à Ottawa.

L'Institut marquera le 50e anniversaire de l'Institut des architectes de la Colombie-Britannique et de l'Association des architectes de l'Alberta et le 75e anniversaire des association de la province de Québec et de l'Ontario en présentant à chacun de ces organismes un parchemin enluminé.



COULD YOU HEAT THIS BUILDING FOR 5¢ A SQUARE FOOT?

Architect Dr. Eugene Janiss said "Yes!" He specified a unique heating system completely powered by electricity.

The Toronto Professional Building is heated by its own waste heat by means of an internal source heat pump. The method is called electric Bootstrap heating. It will heat this new building at an estimated cost of 4½ to 5¢ per square foot per year. Savings resulting from the elimination of such items as chimney and boiler room offset the cost of extra insulation and double glazing. Construction costs being equal, estimated operating cost with conventional methods averaged 10¢.

HOW ELECTRIC BOOTSTRAP HEATING WORKS

The first requirement is a properly sealed building. The heat produced by electric lighting, motors, sunlight and people is gathered by the ventilation and exhaust equipment, applied to a heat exchanger and pumped through the perimeter circuits to heat the building. When the building is not in use, the desired temperature is automatically maintained by supplementary electric elements.

DESIGN ADVANTAGES OF THE SYSTEM

There is no chimney to mar the building outline and become a design obstruction on every floor. There is more rentable space on every floor. There are no boilers to house in the basement or top level—and none of the problems associated with them. The one system heats *and* cools as required, giving year 'round climate control.

COST ADVANTAGES

Every watt-hour of lighting adds 3.4 B.T.U. to the electric Bootstrap system. Because the lighting load establishes the peak power load, the auxiliary electric heating can be used at a lower power rate. Another advantage is a great reduction in maintenance cost. For full information and assistance in applying electric Bootstrap heating to your designs, consult your hydro.

COMMERCIAL/INDUSTRIAL SALES

ONTARIO HYDRO

620 UNIVERSITY AVENUE, TORONTO

5/65 JOURNAL RAIC/L'IRAC 13

The Toronto Professional Building, 17 levels, 180,000 square feet.

Architects: Gilleland & Janiss, Dr. Eugene Janiss, partner in charge of design.

Consulting Engineers: R. T. Tamblin and Partners, Ltd., G. E. Mulvey and Company, Ltd.



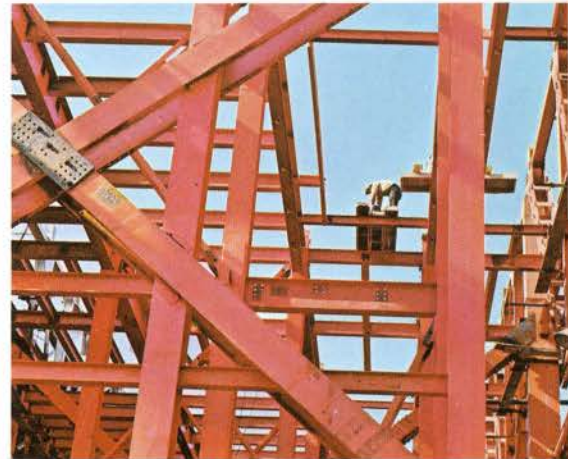
Piling for runout tables in foreground ; basement motor room in background. When completed, mill construction and equipment will be almost as extensive below ground as above.



Portion of truss to carry crane rail.



View over scale pit into slab furnace area.



New boiler house under construction.

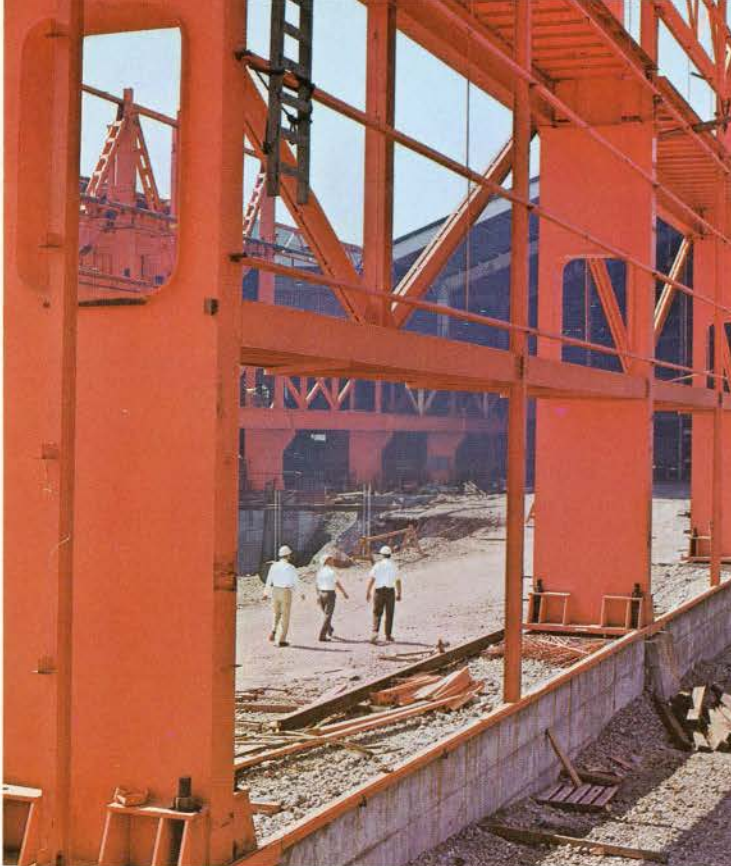
Building for Canada's widest steel plate!

Continuous demand from industry for more and more steel from Canadian sources is being met at Stelco by development and adoption of new technology in steel making and steel processing, and by investment of large sums of money in plant and equipment.

Stelco's new 148" Plate Mill is a key project in this major expansion program.

Above progress photographs give some idea of the magnitude and complexity of this vast undertaking which is itself only part of the largest expansion and modernization program ever

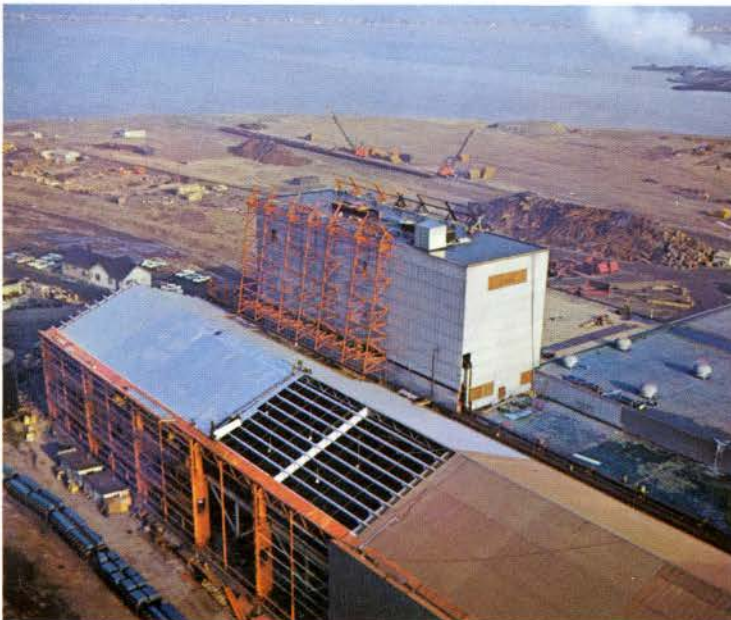
Think of the scope of steel...



Built-up box columns, with openings for service pipes and walkways.



Structural steel for building to house slab furnaces.



Aerial view of northeast corner, showing new boiler house above mill buildings.



Reinforcing steel and formwork for equipment foundations.

undertaken by Stelco. When this new mill—the widest in Canada—comes into production during 1965, it will offer new flexibility and economy in the techniques of design and manufacturing.

Stelco suggests that you begin now to consider ways of applying to your forthcoming design concepts the unique benefits of this new wide plate.

SOON TO BE IN PRODUCTION



148" PLATE MILL

Canadian Handcrafts and the Architect

by Anita Aarons, ASTC (Sculp)

Handcraft in the USA is big business. This is due to the indefatigable devotion of a dynamic entrepreneur, Mrs Vanderbilt Webb and her organization, the American Craftsmen's Council. With vision and untiring effort (plus the use of a personal fortune) she and her craftsmen supporters have elevated the handcrafts of America well above the sentimental preservation of amateur cottage craft, or the promotion of the indigenous native artifacts as perpetual souvenirs. A well organized body of contemporary, trained craftsmen is producing highly original, well crafted products in any media. They expect, and do, earn a good professional income disposing of their products to all branches of society, independent of the tourist industry.

America House, the co-operative warehouse for disposing of the products, has a high standard of values, set by the Museum of Contemporary Crafts, a nearby branch allied to the Craft movement. Here is housed a collection of the newest contemporary and original works, selected for viewing and as a yardstick of quality.

The latest and most successful activity of the crafts movement in the United States is a liaison office and officer to deal specifically with the requirements of architecture and architects. New architectural projects are independently and without request, "cased" by the liaison officer. Submissions and suggestions are offered to the architects in person. Then, on request are submitted photographs and information on just what the various craftsmen suited to the project are designing.

Ceramics, murals, wall dividers, furniture, stained glass, metal work, woven tapestries, rugs and all kinds of exciting, unique handcraft has become firmly integrated with architectural decor, liberating the final concept from the frantic, last minute "interior decorating" so prevalent elsewhere.

What of Canadian handcrafts? How do they fare? Why is there such a big cleav-

age between the artist and craftsmen locally? And why is handcraft of local origin so rarely seen in local decor.

The answers may be found in some of the facts revealed at the first World Council of The Crafts called by the American Craftsmen's Council last June at Columbia University, New York, under the chairmanship of Mrs Webb.

The Congress, her brainchild, at first opposed, became a triumphant success with nearly all nations sending representatives as guests of the Council. The result was formation of the interim World Craft Council.

The event afforded a unique opportunity to study and analyse the position of world handcrafts. Will they survive or perish with the machine, or will they persist as subsidized, public sentimentalities? Can they continue to function dynamically as a real and creative new force in contemporary society? These are the questions. With a slight warning, one should note that handcraft, in today's economic structure, holds the balance between art and industry, with commercialism as the fulcrum point upon which man can push the see-saw up or down. A good philosophy and integrity are the separate entities on opposite ends of the see-saw to keep it in motion.

The delegates provided the clinical materials to study the position of handcrafts. Mexico, India, and Africa have the uncomfortable problem of encouraging and keeping solvent the indigenous, largely impoverished, barely literate village craftsmen, with their background of traditional craft, the basis and philosophy of which is already foundering. Here craft has declined to the souvenir and tourist toy. Norway, Denmark and Sweden have taught their craftsmen to hold tight and affluent hands with industrial production.

The artist-craftsman of the United States clearly is emerging from his despised role by cleavage from the "pure" conceptual artist. A new and forcible creative spirit,

he insists on the right to earn a professional living along with architecture and other professional activities. He has developed a realistic attitude towards his education in contemporary philosophy and design. His technical ability to be energetically creative with materials and set a high standard is manifest. Now with new and lively exciting products, American business methods have been employed to set the crafts up as thoroughly as any other aspect of industry.

The American craftsman needs no "union" to protect his wage structure. His product is prized, priced and sold for equitable reward for his labor.

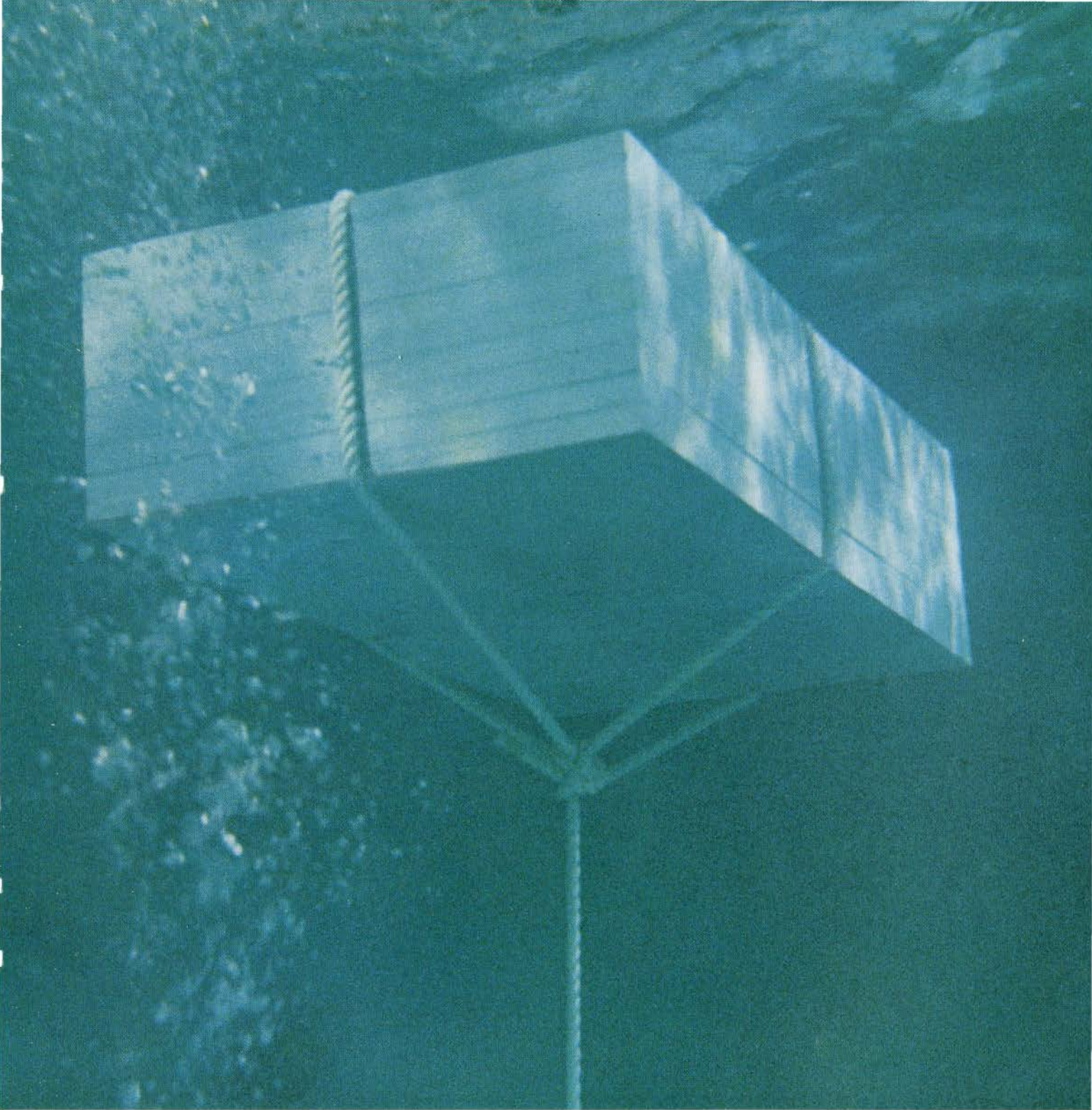
Through first class public relations work and sensible advertising the American public, as the Danish public, have been educated to realize the real worth and permanent value of good products. Low priced souvenirs — nationalistic symbols — have no part in the promotional scheme. A general philosophy of contemporary idiom, good color and exciting design are sufficient to brand the product "American Craft". Maple leaves, boom-crangs and fleur-de-lis are redundant.

There is an awareness that continuous, dynamic schools and teaching and seminars will be necessary, along with up to the minute publications, to keep the exciting professional attitude alive. No one can market his work or call himself craftsman or guild member, or would do so, without a long and dedicated apprenticeship. Commercial interests, of course, market the inept and inexpensive imitators, but the American public has the professional ideal well defined for them.

True education is not necessarily knowing good from bad but being aware of first rate and second rate. American House and The Museum of Contemporary Crafts see to it, in selection and management, that this is well understood. What of other countries? Apart from occasional small bodies in Australia, Canada, New Zealand, England and other places the survival of handicrafts lies mainly in the hands of peasants, primitives and souvenir makers. India's deep concern to wed the past philosophy with contemporary trends and avoid decay was very real.

Canada showed evidence, if somewhat confused and parochial, of the emergence of a real, contemporary craft movement as well as the protection of its past, disunity amongst the leaders forbade real examination, but on return home a true

(concluded on page 19)



Nobody stores insulation in water, but you could!

That is, if it's all-plastic Roofmate* FR. This foam roofing insulation stays so permanently dry, you could store it underwater for years without getting more than its face wet. Its closed-cell structure won't soak up water, won't let vapour through from below. Ends all those worries about soaked insulation losing original effectiveness. Keeps

*REGISTERED TRADEMARK

down heating and cooling bills, too. It's lightweight but tough, and cuts with ordinary tools. So easy to install, it cuts both labour and material costs. If specifying roofing insulation is part of your job, keep us in mind. Incidentally, Roofmate FR is coloured blue for easy identification. Made only by Dow Chemical of Canada, Limited





Secretaries
in the new
Arts Administration
Building (University of Windsor)
look up to

Wisper
Tone

(all 55,000 sq. ft. of it)

**New Arts Administration Building,
University of Windsor**

Consulting Engineers:
Giffels Associates Limited

General Contractor:
Woodall Construction Limited

Acoustical Contractor:
John M. M. Troup Limited



More people are looking up to WisperTone mineral acoustical tile because of its clean, decorative appearance.

More Architects are selecting WisperTone because of its dependability, fire-resistant qualities and effective sound control.

12" x 12" x 3/4" Fissured WisperTone was selected for the new Administration Building. This material is formulated to an optimum density, creating a balance between sound absorption and sound attenuation. WisperTone is manufactured by the superior wet-felted process.

*Trade Mark—WisperTone mineral acoustical products are available in: Ventilating — Fire-Rated — Vinyl-Coated — AF (attenuation factor) — Attractive Surface Designs.



For information and specifications write to:

INTERNATIONAL PANEL BOARDS LIMITED

A subsidiary of Canadian International Paper Company
SUN LIFE BUILDING, MONTREAL

resurgence and analysis could be seen and felt.

Canadian Craft is torn by three conflicting main purposes, of which the craft movement is not always clearly aware. (CANADIAN ART, Sept.-Oct., 1963).

1. The worthy, sentimental desire to preserve Canadiana or cottage craft, far removed by now from the cottage life of the pioneer to the hobby studio of the mechanized housewife.

2. The agitated Canadian conscience, concerned to preserve economic solvency by encouraging the indiginous art of Eskimo and Indian, who are sadly without reason for the artifacts they produce. Artificial respiration has only breathed hot air into a dying corpse. If all the Eskimo carvings stored in boxes were placed end to end, earth and moon would be bridged by the tallest totem ever.

3. Then emerges the genuine, contemporary craftsman, practising skills in new and old media without traditional shackles. These unfortunately fall into two clear categories. (a) The professional—a rare bird indeed—who exists mainly in the ceramic field which has been better organized for professionalism; (b) The leisure time amateur, sometimes talented enough but lacking true dedication and proper training to fit him for a professional role.

The leadership of these three main groups lies in a messy, loose liaison between government subsidy, voluntary support (often from non-practising members), and commercial enterprise, with sometimes a co-operative.

Guilds, boards, societies and conferences are forever meeting to support, encourage, discuss, promote or examine this that and the other thing in well-meaning confusion and tireless effort. What is needed is a great deal of professional clear thinking and constructive criticism to set the craft movement on the same level as in the United States. Attempts are currently being made by a series of national and local meetings.

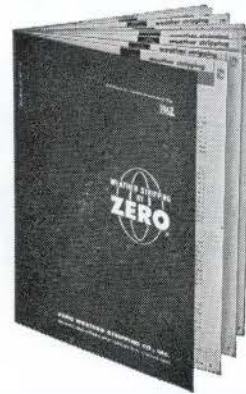
In the meantime the architectural world, can assist the best and most professional of the Canadian craftsmen along with his fellow artist (indeed he often plays the dual role) to live by the best product of his hands through intelligent incorporation in architectural projects.

How many architects are aware of, have used or indeed do use as decor for color the beautiful wall tapestries of Grace Svarre, or Micheline Beauchemin or Mariette Vermette or Krystyna Sadowska, who is equally well known as

a sculptor? All are equal to the best one sees in the USA. How many are familiar with the fenestrations created by Don Wallace; or the pots, planters and other ingenious devices of Merton Chambers? Gerald Tooke's stained glass; the subtle weaving of H. Riedl-Ursin; printed fabrics of Hoey; Gail LaMarche's colorful batiks—all are worthy of becoming part of architectural decor.

Files on artists and their work do exist with galleries, government bodies, etc., but how many busy architects have time to send for them or peruse and compile a list every time a new project offers? This department of the *Journal* is compiling a growing record of contemporary work. Would such information and help made directly available to architects, be useful and desirable? Let us have your opinion.

ZERO meets all your needs for



Write for ZERO's new catalog today.

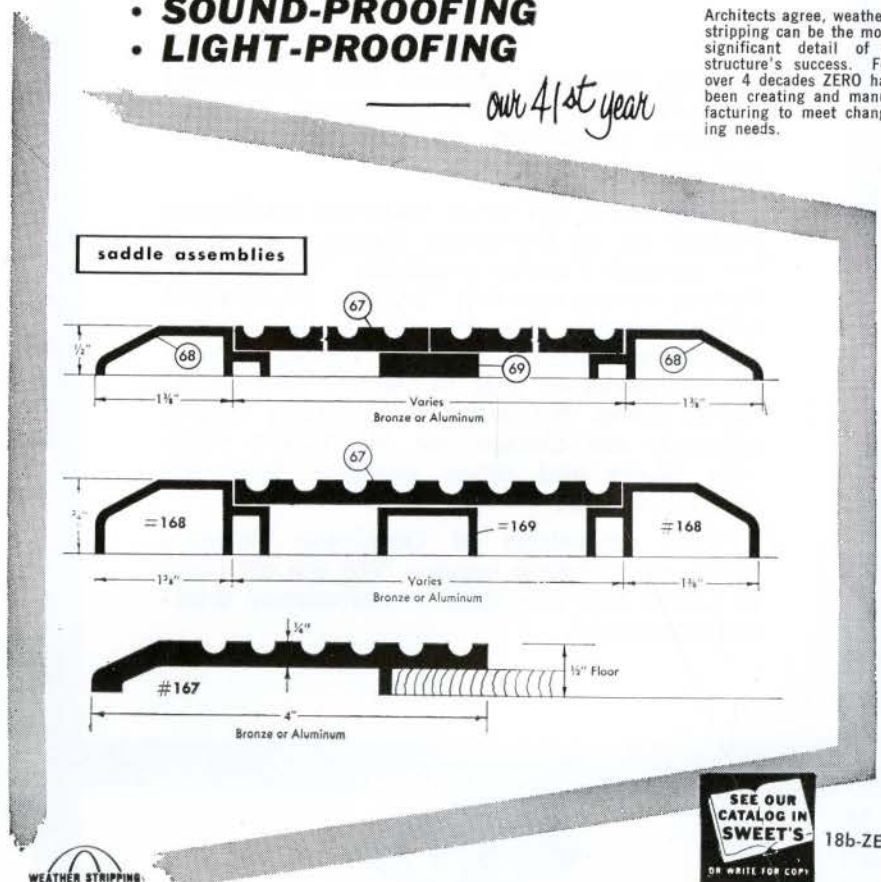
Contains full size details, 169 drawings of weather-stripping and related products, for

- doors
- sliding doors
- saddles
- windows
- expansion joints

- WEATHER STRIPPING
- SOUND-PROOFING
- LIGHT-PROOFING

Architects agree, weather-stripping can be the most significant detail of a structure's success. For over 4 decades ZERO has been creating and manufacturing to meet changing needs.

our 41st year



ZERO WEATHER STRIPPING CO., INC.

415 Concord Avenue, Bronx 55, New York • (212) LUdlow 5-3230



18b-ZER

THE WIDEST SELECTION OF CEILINGS COME FROM **DOMINION SOUND**

Ceilings carefully planned and engineered to provide maximum sound control, lighting, effective ventilation, partition flexibility — and good looks!

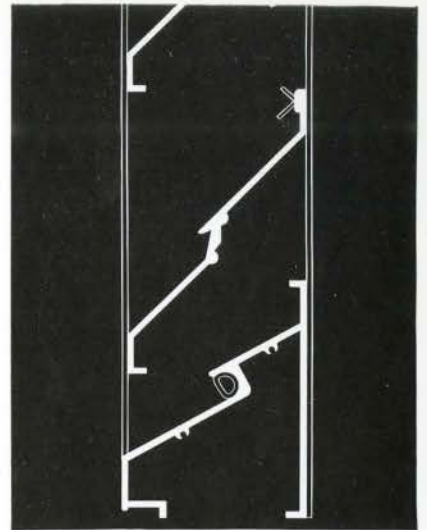
Included in the list of materials distributed exclusively by Dominion Sound are: — all the Acousti-Celotex products, "Soundlock" Panels, award winning "Cepeco" Translucent ceiling panels, "Geocoustic" Cellular Glass Acoustical Blocks, "Neslo" Movable Partition Systems — and numerous other speciality items. No wonder Dominion Sound products are chosen for Montreal's Place Ville Marie and other 'prestige' buildings across Canada!

Take advantage of Dominion Sound's FREE consultation service. We are on hand to advise you any time — completely without obligation.

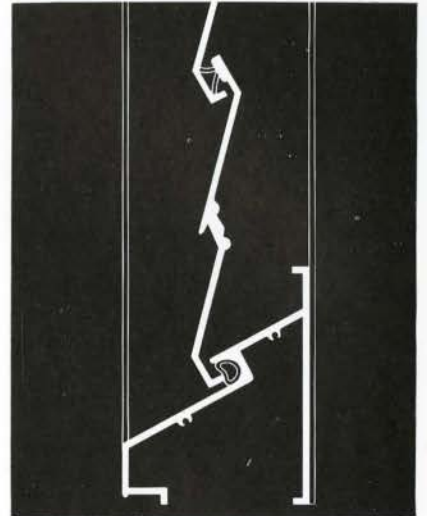


DOMINION SOUND EQUIPMENTS LIMITED

Halifax, Saint John, Montreal, Ottawa, Toronto, Hamilton, London, Winnipeg, Regina, Saskatoon, Calgary, Edmonton, Vancouver.



OPEN



CLOSED

(OR ANY POSITION IN-BETWEEN)

C/S OPERATING LOUVRES

IN EXTRUDED ALUMINUM

- INSTANT, FINGER-TIP CONTROL OF BANKS OF LOUVRES UP TO 200 SQ. FEET.
- ELECTRIC, MANUAL, OR PNEUMATIC OPERATION.
- ELECTRICAL (EX-110) MOTOR AND CONTROL ARE CSA LISTED. ALL MOTORS AND CONTROLS ARE UNCONDITIONALLY GUARANTEED FOR ONE YEAR.
- COMPETITIVELY PRICED.

WRITE FOR TECHNICAL DATA

**C/S CONSTRUCTION
SPECIALTIES, LTD**

895 THERMAL ROAD
PORT CREDIT (TORONTO), ONTARIO



EXPANSION JOINT COVERS • GRILLES • LOUVRES
• GRAVEL STOPS • DOOR LOUVRES • REFACINGS
• BRICK SIZE VENTS • FOOT GRIDS • SUN SHADES



Celastic System accepted by CMHC, Ref. No. 5318.

Weatherproof a wooden raingutter? Easy! **CELASTIC**® it!

You find the busiest rain gutters in Canada on our West Coast. But this B.C. gutter is made of wood covered with Celastic, and it shrugs off storms and salt-laden air. It's extra-big and takes more rainwater than ordinary gutters; it's rot-proof and requires a minimum of maintenance. This is just one example of the way Celastic helps architects add to the attractiveness of homes and commercial buildings.

Flexible, durable, versatile Celastic has a thousand and one uses. On verandas, balconies and sun decks, Celastic handsomely resists the full heat of summer sun, and the snow and extreme cold of winter. For roof surfacing it provides an economical means of covering flat areas and maintaining an undisturbed roof line.

A robust fabric impregnated with solvent-activatable resin, Celastic can

be moulded to any shape, and sets permanently. It is non-corrosive, resists fungus, and has a high abrasion factor. It is unaffected by temperature extremes from -50° F. to +200° F. Celastic bonds to a variety of substrates, such as wood, concrete, ferrous and non-ferrous metal and plastic, and is easily coated to your colour specification. It will pay you to find out more about Celastic. Mail the coupon today.

BB Chemical Company



OF CANADA LIMITED

a United Shoe Machinery affiliate

4545 HOCHELAGA ST., MONTREAL 4, QUEBEC

Sales Offices:

HALIFAX • MONTREAL • TORONTO • VANCOUVER

To: BB Chemical Company of Canada Limited,
P.O. Box 1445, Place d'Armes, Montreal 1, Quebec.
PLEASE SEND ME FULL DETAILS ON CELASTIC.

Name.....
Title.....
Company.....
Address.....
City.....Prov.....Tel.....



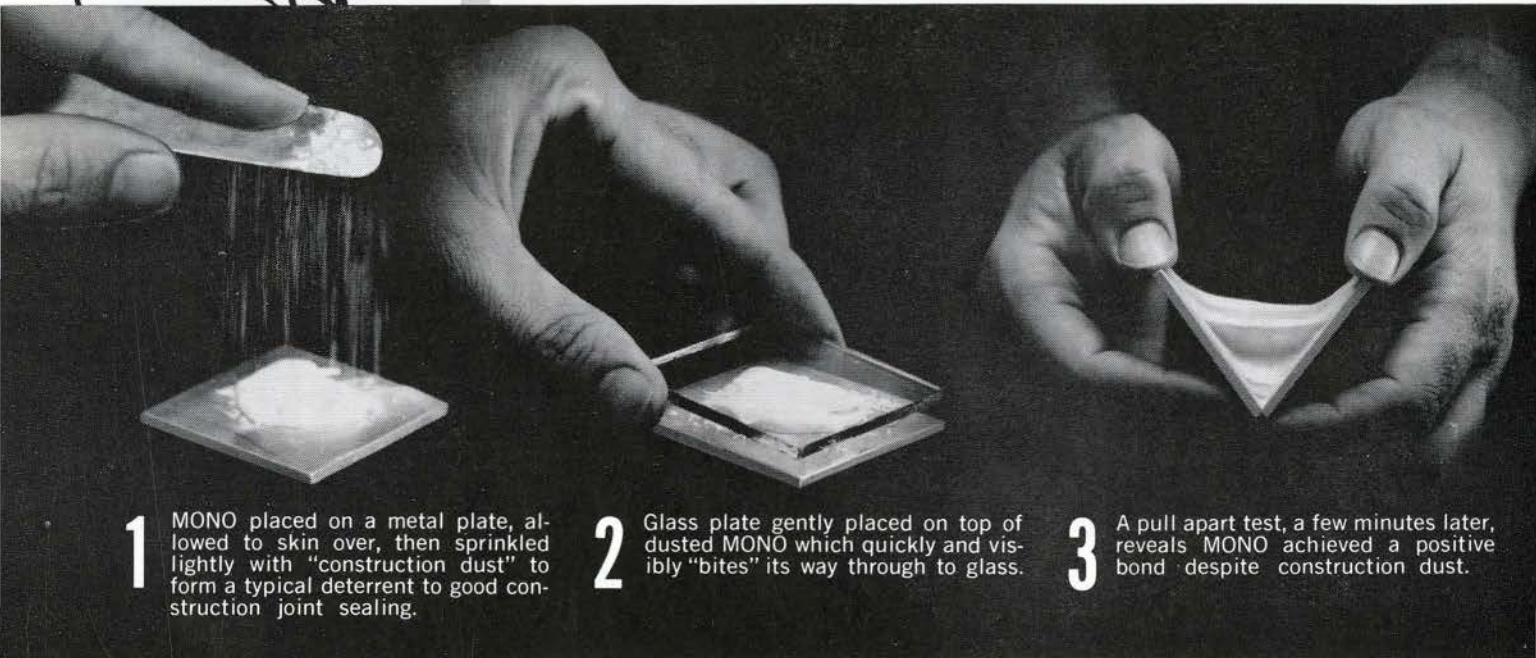
NO OTHER CONSTRUCTION JOINT SEALANT CAN PASS THIS TEST

MONO[®]

LASTO·MERIC

1-Part Acrylic Terpolymer Sealant

most powerfully-adhesive construction joint sealant known



1 MONO placed on a metal plate, allowed to skin over, then sprinkled lightly with "construction dust" to form a typical deterrent to good construction joint sealing.

2 Glass plate gently placed on top of dusted MONO which quickly and visibly "bites" its way through to glass.

3 A pull apart test, a few minutes later, reveals MONO achieved a positive bond despite construction dust.

"92% of sealant failures result from loss of adhesion"

TMC Survey

This "construction-dust" test proves that MONO eliminates many causes of sealant failure and provides a greater factor of safety on every construction job. All other quick-skinning type sealants fail in this critical test.

PRACTICALLY MECHANIC-PROOF. Exclusive re-sealing feature eliminates many factors of human error under adverse conditions, of dust, moisture and other deterrents to adhesion.

THE TREMCO MANUFACTURING COMPANY (CANADA) LTD.
220 Wicksteed, Toronto 17, Ontario

- economical and safe; 1-part factory mix eliminates hazards and high cost of job site mixing
- saves labor and materials; does not require primer or surface conditioner to secure adhesion
- non-staining
- high resistance to ultra-violet rays, moisture, oxygen, etc.
- 20 year minimum life expectancy
- 250% elongation at 20°F.; withstands cyclical movement
- will not sag in joints 1/2" x 1/2", or 3/4" wide x 1/4" deep
- wide range of fast colors; unlimited color matching
- meets government specifications U. S. TT-S-00230; Canadian 19-GP-5
- covered by U. S. Federal Stock Catalog No. 8030-965-2397

Some modern structures made weather-tight with MONO

4-PENN CENTER PLAZA, PHILADELPHIA, PENNSYLVANIA
Architect, Emery Roth & Son, New York City

GEORGIA MENTAL HEALTH CENTER, ATLANTA, GEORGIA
Architect, A. Thomas Bradbury, Atlanta, Georgia

LE CARTIER APARTMENT, MONTREAL, QUEBEC
Architect, Menkes & Webb, Montreal, Quebec

LIBERTY MUTUAL BUILDING, BOSTON, MASSACHUSETTS
Architect, Perry, Shaw, Hepburn & Dean, Boston, Massachusetts

MAYO CLINIC, ROCHESTER, MINNESOTA
Re-Sealed by Surety Waterproofing Co., Rochester, Minnesota

TORONTO CITY HALL, TORONTO, ONTARIO
Architect, Viljo Revell and John B. Parkin Assoc., Toronto, Ont.

EQUITABLE LIFE ASSURANCE SOCIETY BLDG., N. Y. C.
Architect, Skidmore, Owings & Merrill, New York City

FARMER'S & MECHANIC'S SAVINGS BANK, MINNEAPOLIS
Architect, McEnary & Krafft, Minneapolis, Minnesota



For additional data write us or check SWEET'S



DYNAC-250

DYNAC-250 is a new speed control system for elevators in the popular 200-250 feet per minute range*. Until **DYNAC-250** it was necessary to use a costly motor generator set to achieve smooth performance at these speeds. With **DYNAC-250**, Turnbull Research Engineering has developed a patented system of braking to insure complete speed control and accurate landings. The need for a motor generator set, and all its expensive ancillaries is thus eliminated. **DYNAC-250** lets you make an initial saving on the cost of the equipment, and the penthouse space in which you install it. You enjoy continued savings too, through reduced maintenance and service costs.

*The majority of all passenger installations are in this range.



Canada: Head Office: Toronto
United States: Head Office: New York City
Branches and representatives in principal cities.

“But why have famous A.C.Horn Products become Grace Construction Materials?”



A. C. Horn is now part of W. R. Grace & Co. of Canada Ltd.'s growing family of construction materials. Famous Horn products such as Hornseal, Hornflex, etc., enjoy broader distribution and greater reliability through the production and research facilities of Grace — one of America's largest chemical companies.

Grace Construction Materials brought together five of the most famous names in the construction specialties field:

DAREX CONSTRUCTION CHEMICALS, SERVICISED PRODUCTS, A. C. HORN, ZONOLITE PRODUCTS and ROCK PRODUCTS CHEMICALS. So when you say “Grace,” you're specifying the best in caulks and sealants, flooring conditioners, waterproofing or admixtures. It's one source — GRACE — for the best in construction specialties. A simple way to remember is: “Grace Construction Materials, the complete line of construction specialties.”

FOR DETAILS WRITE GRACE CONSTRUCTION MATERIALS, 66 HYMUS ROAD, SCARBOROUGH, ONTARIO

CAULKS & SEALANTS/PRE-MOLDED JOINT
FILLERS/FLOOR MATERIALS/ADMIXTURES
WATERPROOFING & ROOFING MATERIALS
WATERSTOPS/ADHESIVES & BONDING AGENTS
TECHNICAL COATINGS/SPECIALTY PRODUCTS



A. C. HORN PRODUCTS
DAREX CONSTRUCTION CHEMICALS
ROCK PRODUCTS CHEMICALS
SERVICISED PRODUCTS

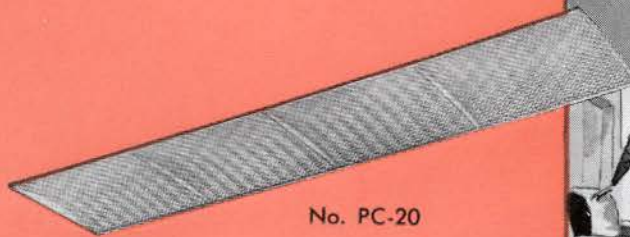
DEWEY AND ALMY CHEMICAL DIVISION, W. R. GRACE & CO. OF CANADA LTD., MONTREAL, SCARBOROUGH, CALGARY, VANCOUVER, WINNIPEG



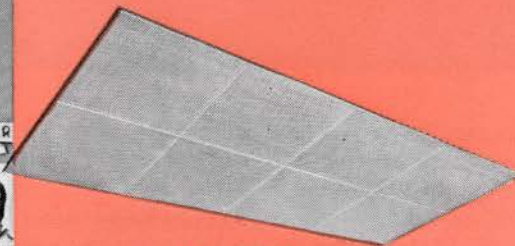
No. PC-40



No. PC-10



No. PC-20



No. PC-15

Retail volume can be vastly increased by installation of a modern lighting system — with HOLOPHANE CONTROLLENS® — specifically designed for the predetermined store use . . . For more than sixty-four years the HOLOPHANE engineering staff has concentrated on the development of effective, economical CONTROLLENS. Some of the newest, most advanced products are shown here. Their prismatic control provides the best point-

of-sale illumination — makes shopping easier, selection of wares faster, assures greatest visual comfort . . . Moreover, these lenses afford unusual flexibility of design — can be installed as single units — or in continuous runs — or grouped in panels.

Available through highly qualified, selected lighting fixture manufacturers.

Write for new brochure on Prismalume Controlens



The HOLOPHANE Co Ltd

418 Kipling Avenue S.

Toronto 18, Ont.

HIGH QUALITY "CANADA" MASONRY CEMENT FOR ALL TYPES OF MASONRY WORK



"Canada" Masonry Cement is now available in a distinctively new package. It has all the characteristics you want to produce a high quality mortar. Research tests and studies are constantly being done on "Canada" Masonry Cement to assure uniformity and accuracy of ingredients, plasticity, workability, water-tightness, strength and durability. It is adaptable to all types of masonry work. Mortar made with it resists

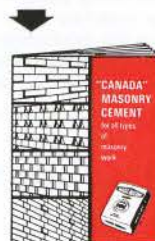
efflorescence and retains its good appearance: this is of special interest to architects and owners. At the same time, the superior qualities of "Canada" Masonry Cement give the mason the most value for his money. Make sure to get your copy of our new folder with complete details! Simply complete and mail the coupon!



Canada Cement Company, Limited

CANADA CEMENT BUILDING, PHILLIPS SQUARE, MONTREAL, P.Q.
SALES OFFICES: MONCTON • QUEBEC • MONTREAL • OTTAWA • TORONTO • WINNIPEG
REGINA • SASKATOON • CALGARY • EDMONTON

Canada Cement Company, Limited,
Phillips Square, Montreal, P.Q.



Please send your new booklet on
"Canada" Masonry Cement to:

Name _____

Address _____

Take advantage of Canadian Design '67

You can't
afford
to wait
another
100 years
!

Canadian Design '67 is a new program developed by the Department of Industry in association with the National Design Council and provincial governments. It's designed to help Canadian industry take the fullest advantage of the business and promotional opportunities generated by the Centennial Celebrations and Expo '67. What happens?

The product needs of the planners, architects, specifiers, purchasing agents and other buyers are brought to the direct attention of appropriate designers and manufacturers.

Designers and manufacturers are invited to submit information on suitable existing products and new designs for use in the construction and outfitting of building projects, as well as on souvenirs and giftware.

If eligible, these designs and products will be evaluated by the very people who need them for their '67 projects. The best entries will make up the Canadian Design '67 Catalogue.

Early this spring, catalogue information will be distributed to architects, engineers, specifiers, industrial designers and manufacturers in addition to potential buyers in Canada and abroad to give the products the widest possible exposure.

A Canadian Design '67 Mart will be held in January 1966. The best designed products from the catalogue as well as a selection of new product designs will be put on display. Manufacturers and designers of these products, along with potential









buyers and users, will be invited. At the same time products in the catalogue will be offered labelling and promotional privileges. In addition, outstanding products will receive special awards. Special grants will be awarded to deserving new products to help defray costs of prototype development. Beginning in 1966, displays will be held to focus national and international attention on the products. And a Canadian Design '67 Conference, to which the world's leading designers will be invited, will climax the program. For more information on Canadian Design '67, write to:
**Canadian Design '67
National Design Branch
Department of Industry
Ottawa.**



**Only
drapery fabrics
with excellent
report cards...**

**CERTIFIED ROVANA DRAPERY
FABRICS ARE TESTED FOR
SUPERIOR PERFORMANCE**

IN:

1. Flame resistance	
2. Maintenance of hand and appearance	
3. Washability	
4. Dry cleanability	
5. Colourfastness* to: Light, Crocking, Dry Cleaning, Washing	
6. Grab strength	
7. Yarn slippage	
8. Wash and hang rating	

Other requirements: sewability, abrasion resistance, and wet strength shall be considered special tests and will be conducted according to end use requirements.

*Synthetic fabrics only

**are allowed to display this
Dow certification mark**



Certified Rovana fabrics are perfect for drapery installation in hotels, motels, hospitals, theatres, restaurants, schools, and offices — for more than a dozen good reasons:

Safety

Fire Safe—built right into the fabric, not just treated

Workroom Safe—non-irritating to the skin, no gloves necessary

Static Safe—dissipates static charges rapidly

Durability

Abrasion Resistant—almost impossible to splinter or break

Sun-rot Resistant—withstands prolonged exposure to sun

Mildew Resistant—ideally suited to warm, humid climates

Hike Resistant—humidity may change, but shape does not

Weather Resistant—unaffected by harmful atmospheric gases and vapours

Economy

Low Maintenance Costs — the fabric stays fresh looking, resists soiling

Easy to Clean—can be easily washed or dry cleaned

Light, Heat, Accoustical Aids—controls glare, drafts, noise

Long Lasting—Dow's saran flat monofilament warp yarns in certified Rovana fabrics prolong the life of the drapery.

Beauty

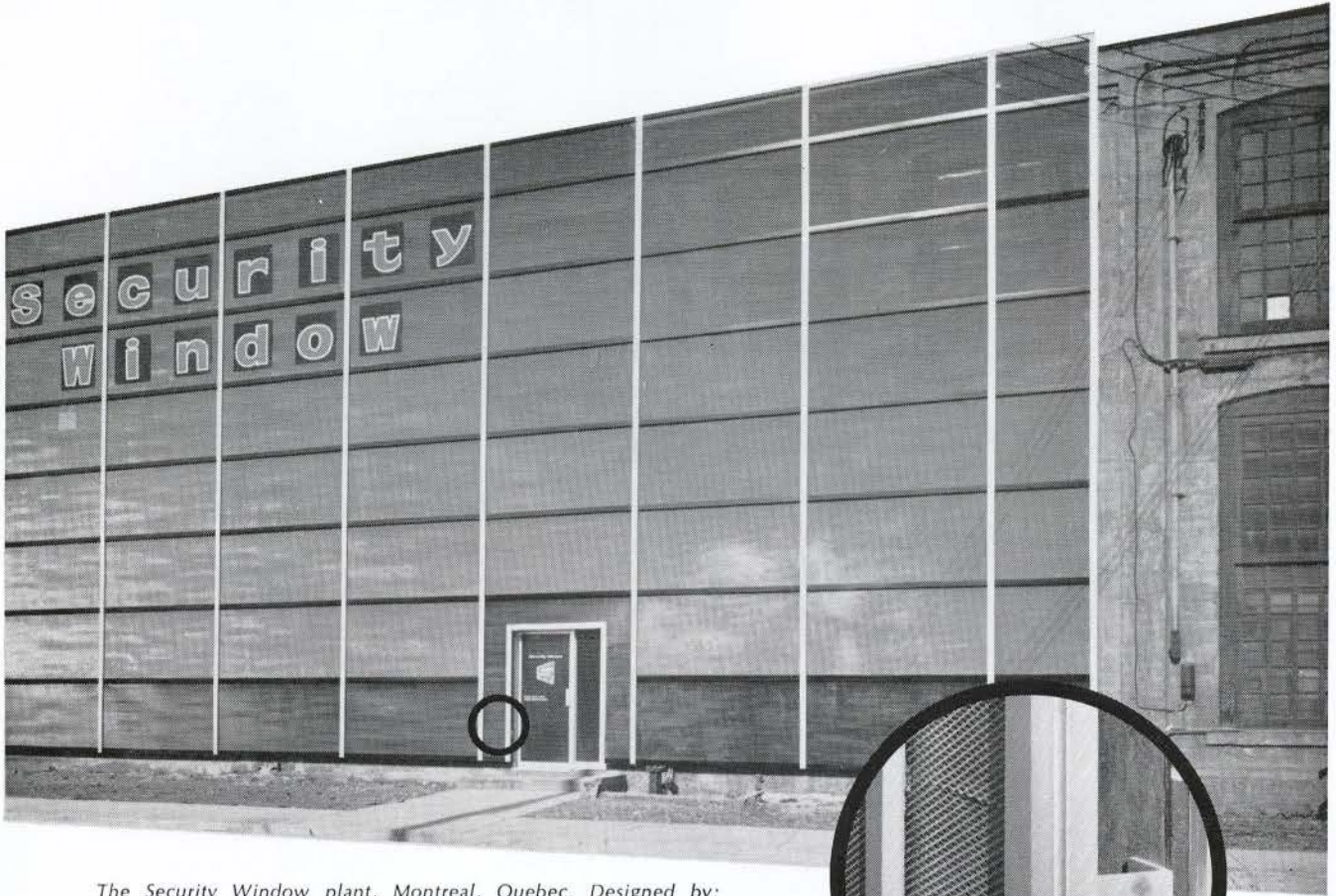
Certified Rovana drapery fabrics are available in a wide range of colours, patterns, and textures— all with the look and feel of a natural fabric, hanging in soft, supple, graceful folds.

Dow certification means confidence. Only first-quality fabrics that are constructed with Dow's unique saran flat monofilament in the warp and pass Dow's high standards of performance may display the Rovana certification mark. This mark is your assurance that the fabric will give a beautiful, longlasting performance.

DOW CHEMICAL OF CANADA, LIMITED



New form and function for REYNOLDS ALUMINUM



The Security Window plant, Montreal, Quebec. Designed by: Reynolds, and Security Window Co. Contractor: Security Window. Aluminum extrusions: Reynolds Extrusion Company Ltd. Expanded Aluminum Sheet: The Pedlar People, Oshawa, Ont.

A 3" x 6" angle with a 3/8" thick wall was bolted to the building. An extruded aluminum backer channel was bolted to this angle. The aluminum sheet, .051 inches thick, was cut and expanded to 4' x 8' and then applied by screwing it onto the backer channel. The extruded finishing snap-on mullion cap was then applied.

Design flexibility and unique utility have created thousands of forms and functions for aluminum in modern architecture. The latest: the aluminum facing used to renovate the front of the 50 year old Security Window plant.

An expanded aluminum sheet was screwed to an extruded aluminum frame, which had been bolted to the building. An extruded finishing strip was then snapped on.

The advantages of this type of renovation are the ease of application and the low cost. No windows are needed since you can easily see through from the inside.

A first of its kind in Canada, this new use for aluminum was designed by REYNOLDS, who also supply a broad spectrum of creative ideas on the architectural uses of aluminum.

REYNOLDS new easy-to-use catalogue lists thousands of extruded shapes. Use it when you specify aluminum. For a copy see your REYNOLDS representative or write:



REYNOLDS EXTRUSION COMPANY LIMITED
630 DORCHESTER BLVD., WEST, MONTREAL



...how to dress up a locker room!

It took the critical eye of the architect to perk up the "tired-looking" dressing room of yesterday. In today's smart, modern, country clubs, the locker room is as fashionable as the upstairs lounge . . . even to the locker. This architecturally-designed locker which can be fully recessed combines clean-line appearance to blend with any decor, and makes efficient use of space. But, handsome as they are, Pedlar Lockers are tough enough to handle anything . . . from spiked shoes to flying textbooks; from a little leaguer's enthusiasm to a fullback's pummeling. Dress up a locker room, you bet . . . that's Pedlar Lockers . . . seen in the nicest company. Call your Pedlar representative for pricing and layout help.



THE PEDLAR PEOPLE LIMITED

519 Simcoe St. South, Oshawa, Ontario

MONTREAL • OTTAWA • TORONTO • WINNIPEG • EDMONTON • CALGARY • VANCOUVER



L63-2C



The Architect's Intentions Achieved

Why was Porzite used in all the concrete for this fine building? Certainly not as an experiment.

Long experience and much evidence about the special characteristics of Porzite couple its name with concrete of the highest order. Porzite permits the architect and engineer to secure all the values of high quality concrete with economy and assurance of closely controlled results.

This water-reducing additive develops concrete required to meet the exacting requirements of modern building structures with such aids as:—

- Improved Workability
- Increased Strength
- Added Durability
- Reduced Segregation
- Low Water Cement Ratio
- Lessened Shrinkage
- Increased Air Entrainment

sternson
PORZITE

Developed in the Sternson Laboratory. Made in Canada.

Our competent technical personnel are available to you at any time.

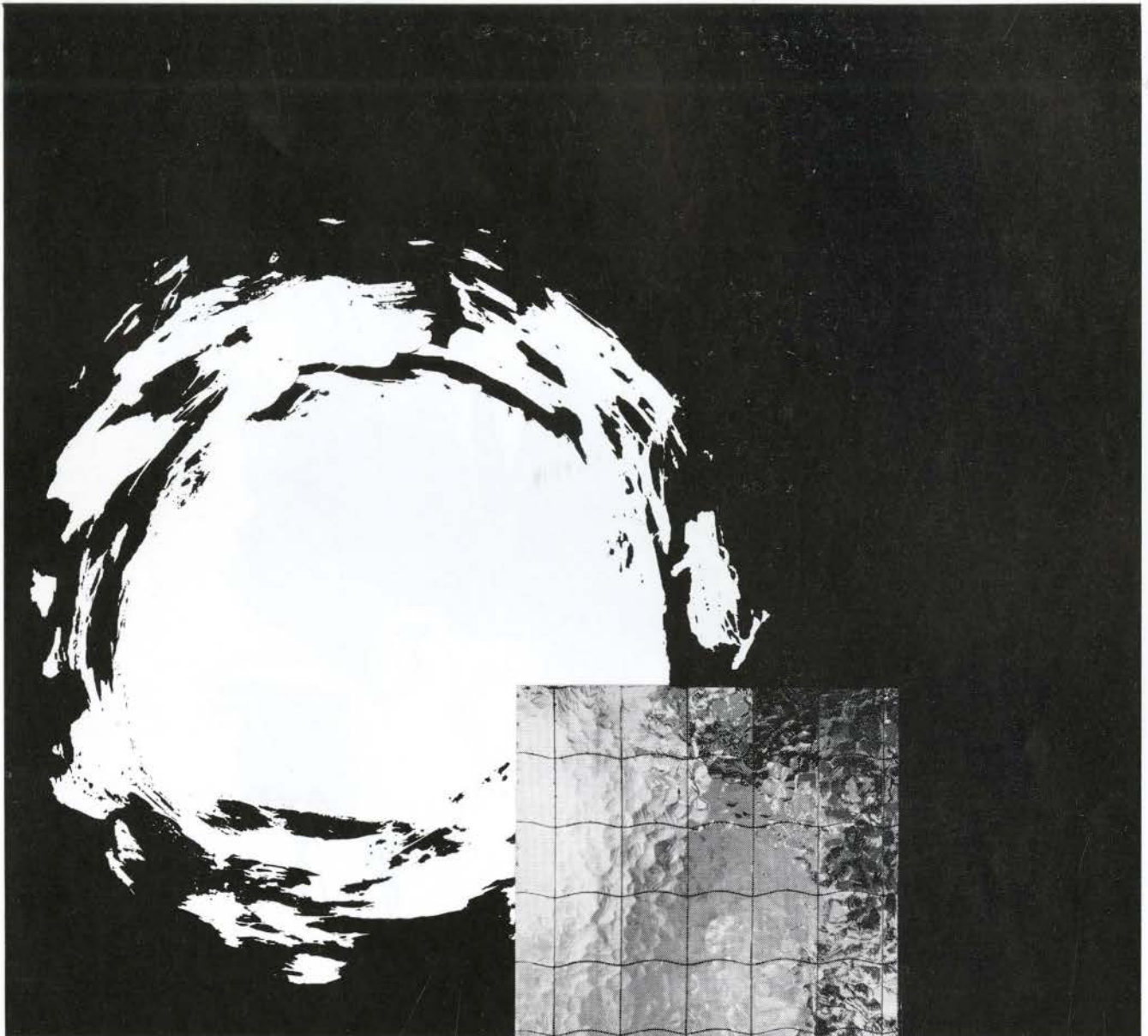
Shall we send you our special Porzite bulletin? R.A.I.C. and A.I.A. File No. 3.B.2

Brantford General Hospital Nurses' Home
Architect: Herbert Agnew Associates, Toronto
Consulting Engineer: C. D. Carruthers & Wallace Consultants Limited

General Contractor: W. A. McDougall Limited, London, Ontario

Supplier of Ready-mix concrete: Brant Transit Mix Limited

G. F. STERNE and SONS LIMITED, BRANTFORD, ONT.
Moncton, Montreal, Toronto, Winnipeg, Regina, Vancouver



The figured or wired anti-glare glass **FILTRAGREY** diffuses a very pleasant functional light.

USES: Glazing of factories, warehouses, garages, schools, hospitals, power-houses, etc... also in balconies, louvres, doors, partitions, etc...

On sale at all leading glass merchants.

filtragrey



Distributor: **CRYSTAL GLASS & PLASTICS Ltd** • 130, Queen's Quay East • TORONTO (Ontario)

GLACERIES DE SAINT-ROCH s.a.

DIVISION GLACERIES DE LA SAMBRE • AUVELAIS • BELGIUM



**Touch an elevator button.
The elevator's there.
Here's what you should know
about instant elevating. By Otis.**

Otis' new Autotronic* Unlimited system puts an elevator on your floor seconds after you've touched the button.

The heart of Autotronic Unlimited is a computer control system, integrating modules selected according to your building's traffic intensity and distribution. Sensing elements continuously flash traffic data to the computer which instantly adjusts elevator performance. Computer modules predict elevator workload and concentrate service where traffic is anticipated.

Your building is like no other. With the Otis selected-module approach, your elevator system can be custom-engineered.

A small building with light traffic requires relatively few modules.

Adding modules gives the tallest skyscraper precisely the same fast efficient elevator service.

Autotronic Unlimited is the latest of many elevating advances Otis has made over the years in developing the most modern vertical transportation equipment including electric and hydraulic passenger and freight elevators, escalators, and dumbwaiters.

For full information on Autotronic Unlimited speak to your local Otis representative.

If you're planning a small building, call Otis.

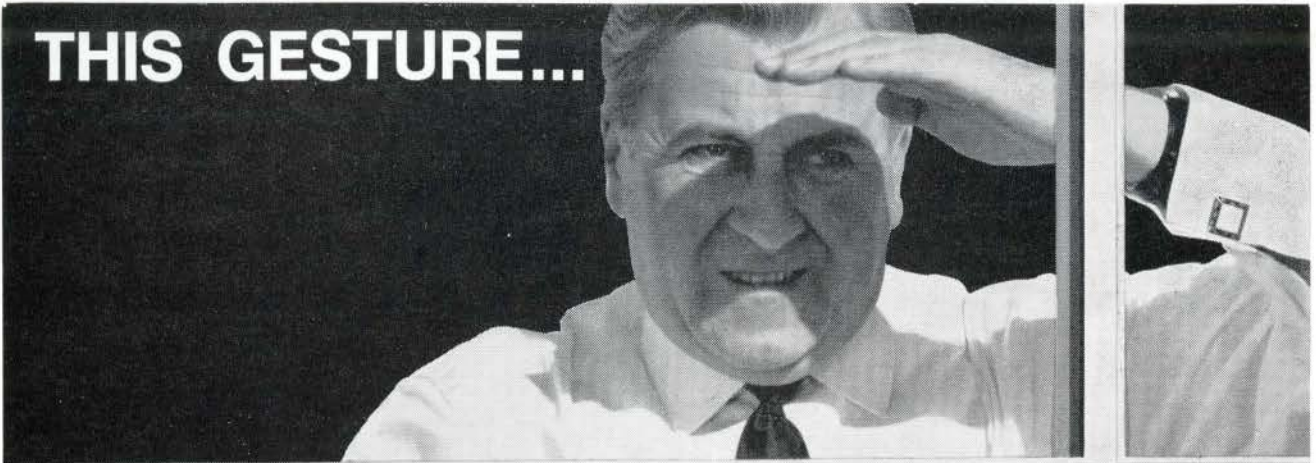
If you're planning a large building, call Otis.

If you're planning to replace elevators, call Otis.

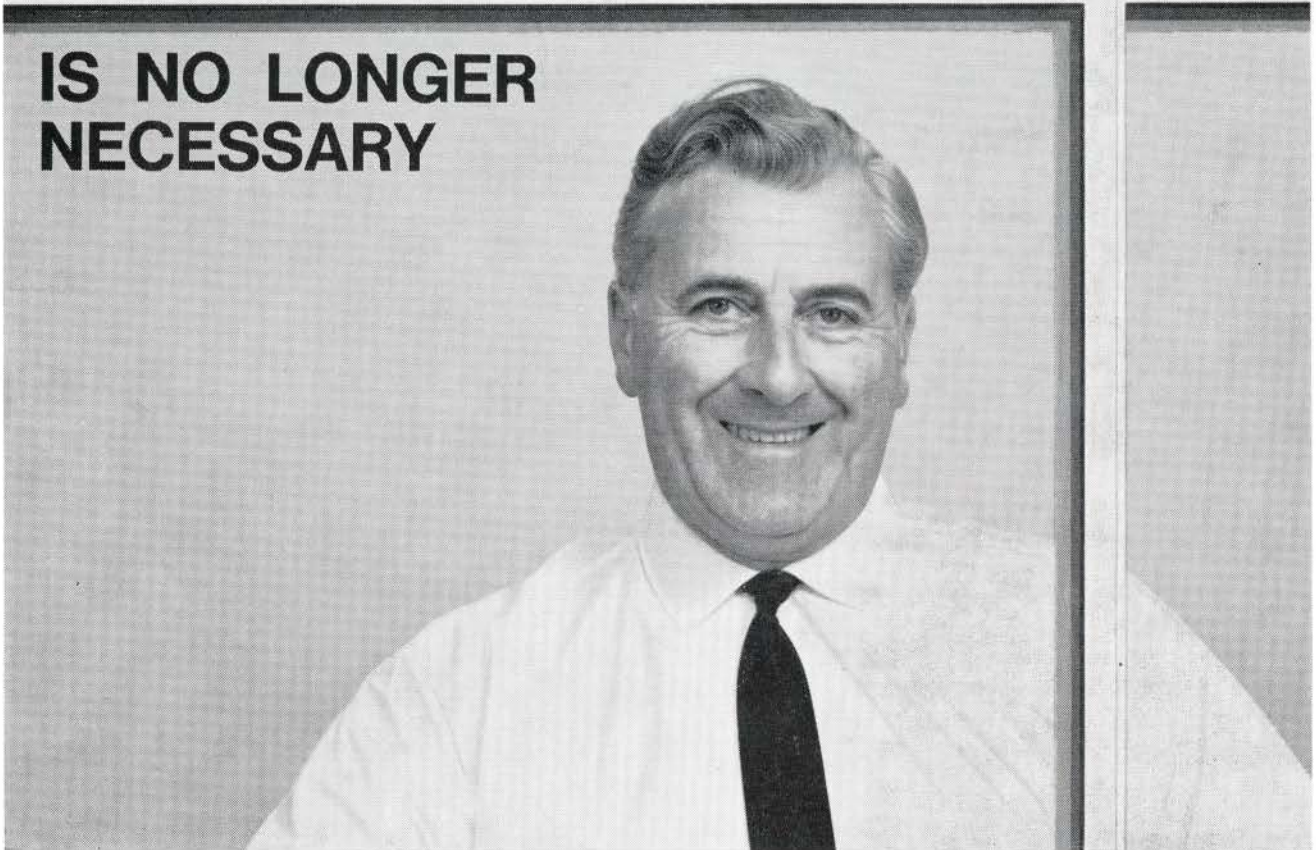
Otis

OTIS ELEVATOR COMPANY LIMITED
HAMILTON, ONTARIO

THIS GESTURE...



**IS NO LONGER
NECESSARY**



Glaverbel GREY SHEET GLASS

dechy

Glaverbel Grey Sheet Glass eliminates eye strain due to glare; it does away with excess solar heat. Its neutral tint does not change colours. Whenever schools, offices, workshops, hospitals or private homes (especially in mountainous country or at the seaside) are glazed with Grey Sheet Glass, there is more comfort.

GLAVERBEL S.A., Commercial Department, 71, rue de la Loi, Brussels 4
Manufactures Agent for Canada : BELCANA GLASS LIMITED - 3817 Jean Talon West - MONTREAL P.Q.

Progressive ideas in **STEEL...**
showcased in Dofasco's new office building



Insulated steel curtain wall provides exterior and interior walls and weighs only 12 lbs. per square foot

Steel curtain wall contributes much to the contemporary beauty of Dofasco's new office building, designed by Hamilton architects, Prack and Prack. The curtain wall treatment was developed after extensive research that led to a wall which includes thermal barriers and is double-glazed.

In-fill panels have porcelain enamelled steel on exterior surfaces, and baked enamel steel for interior walls. Two inches of insulation between the two layers are approximately equal to 10 inches of masonry. The comparatively thin wall, (only 3½ inches) provides additional useable interior space. And because the curtain wall weighs only 12 lbs. per square foot, it was possible to reduce the size of foundation and structural steel.

Vertical accent lines are formed from enamelling steel specially processed for this type of application. The concave pilasters are treated in contrasting tones to dramatize the upward sweep of the contemporary design.

The Dofasco building is proof indeed that steel is the ideal material for efficient, enduring beauty in curtain wall design. Contact your fabricator for more information.

DOFASCO
OF HAMILTON

Curtain wall panels are anchored to the structural steel with steel clip angles and steel fasteners. Insulated panels of this type provide a finished wall in minimum time.



Venetian blinds between two panes of glass substantially reduce the amount of solar radiation entering the building. Moreover, these blinds will seldom need cleaning.



- PERFORATED STEEL GIRDERS
- INSULATED STEEL CURTAIN WALL**
- STEEL CLAD CEMENT BLOCKS
- PROGRESSIVE IDEAS IN STEEL





CONTROLLED SECURITY



LARGEST HOTEL IN THE COMMONWEALTH, THE ROYAL YORK, TORONTO

Yale's flexible master key systems make possible the high degree of control essential to security in large, complex public buildings like the Royal York Hotel, with its 1,600 guest rooms and many other public rooms, lounges, restaurants, ballrooms, showrooms, convention rooms, shops and offices. More than 12,000 Yale* locks (keyed locks, thumb-latch locks, and high-security padlocks) protect the hotel and the people it serves. Since the Royal York opened its doors in 1929 it has served 8½ million registered guests, and many millions more who have used its myriad other facilities. No other system can match the unsurpassed flexibility and security of Yale's keying system with its 86 basic security sections. Talk to Yale* about controlled security for your building.



YALE &
TOWNE

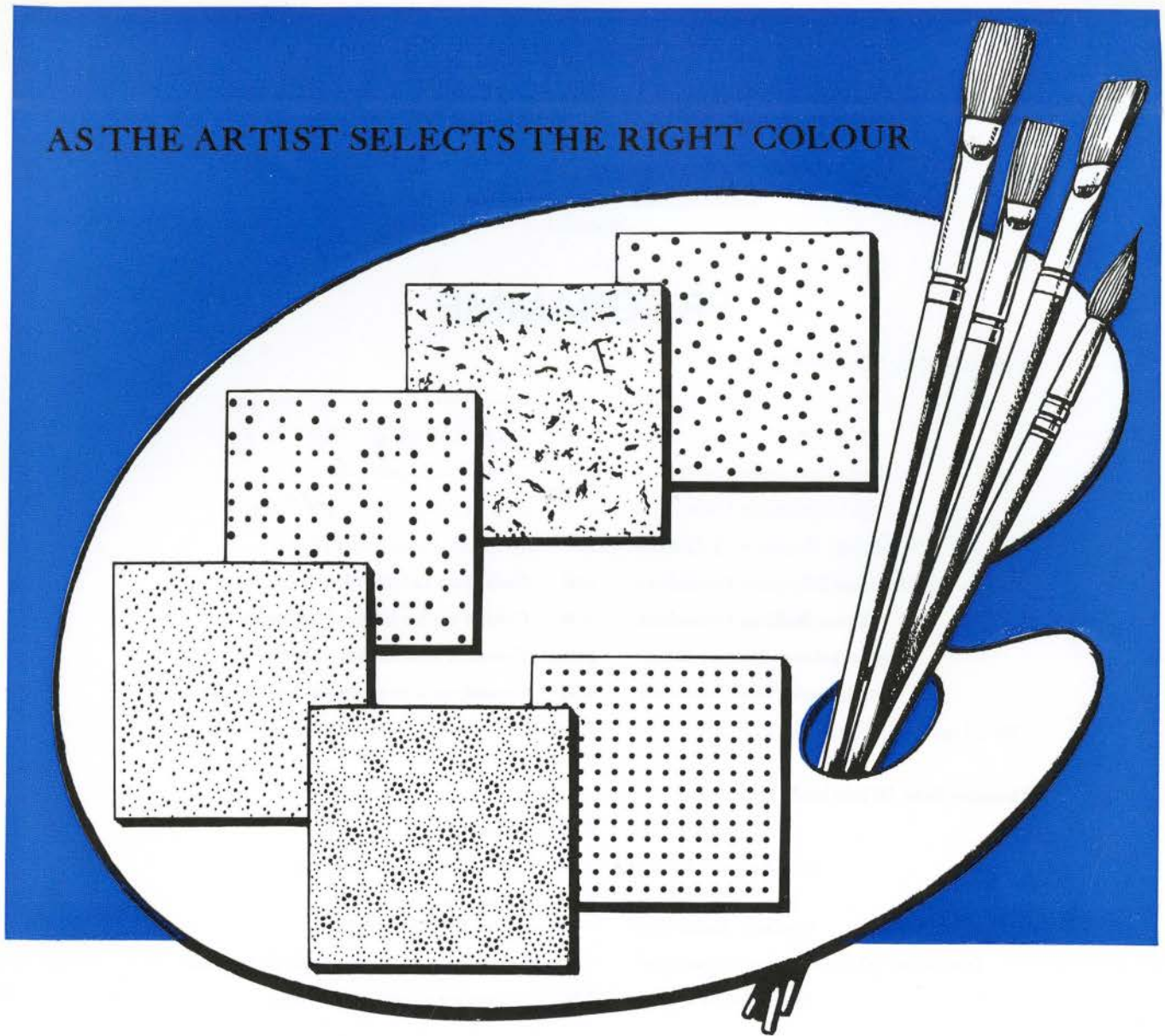
*Registered Trade Mark

YALE & TOWNE, INC.

CANADIAN DIVISION

P.O. BOX 667 • ST. CATHARINES, ONTARIO

AS THE ARTIST SELECTS THE RIGHT COLOUR



SO THE ARCHITECT SELECTS ACOUSTICAL PRODUCTS FOR BEAUTY AND SOUND CONDITIONING OF HIS CEILINGS

Canadian Celotex Cweco has learned through experience and research what is needed in ceiling tile assemblies to meet the requirements of Canada's architectural and building team. Acousti-Celotex Products not only meet specifications for ceiling materials in the functional aspects of sound conditioning and fire safety rating, but satisfy the aesthetic taste through their eye-appealing beauty.

If your next building calls for a fresh, decorative appearance with excellent light-reflecting qualities, then let Acousti-Celotex Products help you. Illustrated above are six of the many ceiling tiles manufactured in our Ajax, Ontario plant.

Standard . . . Fissuretone . . . Embassy . . .

Random . . . Spectone . . . Linear Random.

These and other Acousti-Celotex Products are fully detailed in our catalogue. Copy sent on request.

FOR SOUND/SOUND CONDITIONING



CANADIAN **CELOTEX CWECO** INDUSTRIES
LIMITED

100 Jutland Rd., Toronto 18, Ont./CL. 5-3407

ROYAL ARCHITECTURAL INSTITUTE OF CANADA
58TH ANNUAL ASSEMBLY / 58IÈME ASSEMBLÉE ANNUELLE
INSTITUT ROYAL D'ARCHITECTURE DU CANADA

Queen Elizabeth Hôtel Reine-Elizabeth
Montréal

PROGRAMME

Wednesday June 9 juin mercredi

Registration	8.30	Inscription
RAIC Executive Committee	9.00	Comité exécutif de l'IRAC
Committee on the Profession	9.00	Comité sur la profession
Legal Documents Committee	9.00	Comité des documents juridiques
RAIC Council — Luncheon	12.30	Déjeuner, Conseil de l'IRAC
Architectural Education Committee	2.00	Comité sur la formation des architectes
Historic Building Committee	2.00	Comité sur les édifices historiques
Public Information Committee	2.00	Comité d'information publique
Professional Usage Committee	4.00	Comité sur la pratique de la profession
Official opening of Manufacturers' Exhibition	8.30	Ouverture de l'exposition industrielle

Thursday June 10 juin jeudi

Registration	8.30	Inscription
58th Annual Meeting	9.00	58ième assemblée annuelle
Keynote Luncheon Speaker: André Bloc	12.45	Déjeuner-thème André Bloc: Orateur
Discussion: "L'architecture fantastique"	2.30	Discussion: "L'architecture fantastique"
Reception by PQAA	5.00	Réception offerte par l'AAPQ

Friday June 11 juin vendredi

58th Annual Meeting (cont'd)	9.00	58ième assemblée annuelle (suite)
RAIC Council	11.00	Conseil de l'IRAC
Product Literature Awards Luncheon	12.30	Déjeuner: remise des primes d'excellence en documentation publicitaire sur les produits du bâtiment
Keynote Discussion	2.00	Discussion sur le thème de l'assemblée
College of Fellows Meeting	4.30	Réunion du Collège des Agrégés
College of Fellows reception and dinner	7.00	Réception et dîner — Collège des Agrégés

Saturday June 12 juin samedi

Editorial Board breakfast	8.30	Petit déjeuner: Conseil de rédaction
RAIC Executive Committee	9.00	Comité exécutif de l'IRAC
College of Fellows Convocation	11.00	Assemblée officielle du Collège des Agrégés
EXPO 67: Luncheon	12.30	Déjeuner: EXPO 67
Visit to Site of EXPO 67	2.00	Visite de l'emplacement d'EXPO 67
Tour: Place des Arts, etc.	3.00	Tour: Place des Arts, etc.
58th Annual Dinner and Ball	7.30	58ième dîner annuel et bal

FANTASTIC ARCHITECTURE

Architectures Fantastiques

by Stuart Wilson, MRAIC

The reach of desire is as long as the arm of accomplishment. Overweening craving seems to make all things possible. In the realm of the improbable it is well to stand on the firm ground of platitude.

People who conceive of creating or making new and different objects or organizations by constructing large systematized whole things out of disparate and previously unrelated bits of knowledge, may be accused of being fantastic. They may be labelled as exponents of the impossible. Mere dreamers. In reality if their work is guided by information concerning natural physical behaviour, and their actions are controlled, in accordance with the reactions of the environment, they stand a good chance of success. This is the message of cybernetics.

In dreams, and within the depth of the mind, fantasy is boundless and unrestricted; but in the physical world constraints and limitations impede action. A careful and skilled redirection of existing forces may cause undreamt possibilities to emerge.

To the man on the street, fantasy in architecture appears as extravagant descriptions or images of an apparently real and existing built and controlled environment. The thrill is multiplied and amazement increases with the seeming reality of the vision, and the apparent difficulty of its implementation.

There is a resemblance between such wonders and the realm of science-fiction. Creators of projected new worlds construct a platform of possibilities, from which they select the more intriguing and exciting ideas, or even the most blood-curdling and horrible. The judgment as to the nature and direction of the narrative may be called forth as free or random choices or be evoked as a result of logical analysis and apparent plausibility. In either case, the nature of the development depends on the mind of the writer, and his ideals.

The fantastic in architecture is a loose classification. Within this mesh has been included the vision and the intoxicated delusion, as well as the genuine possibility. The fantastic may be tomorrow's actuality, which has been hidden from view or unknown up to now, or it may be a development, previously dimly foreseen, but too difficult of accomplishment heretofore.

In today's world, it is difficult to shock or astound the general public. Man, with the aid of applied science, shows the first signs of leaving "terra firma". While recent events in space have been given much publicity, less news is available on other interesting ventures into the unknown. Careful studies are underway to discover and develop means of adapting human

beings to the ocean depths. Soon one may have tea with the dolphins, while conversing politely with the aid of a small lightweight translator, in dolphinese. What a delightful thought. How Lewis Carrollish!

The conduction of friendly overtures is not the sole or principal reason which propels adventurous investigation. The sea, we are told, is a storehouse of boundless wealth; chemicals, foods, minerals.

Explanation and justification of the space race is more difficult; but being there, in space, first with the most, is the key to extended communications and control over human destiny. Already, today, we have space law, and space medicine. Tomorrow — space architecture? Some of the technical rudiments of extensible structure-generating elements already exist, and are being manufactured here in Canada for immediate use in space flights.

If a list was to be prepared of the most outlandish and extraordinary investigations now under way, together with hair-raising accomplishments already achieved, the word fantastic would pale into insignificance. Image and reality, formerly so distinct and separate, now fade into one another and intermingle. Reflection and counter-reflection are mirrored kaleidoscopically.

For the architect, traditionally close to the social, human resources, in the sense of the possible extent of the attributes of human beings, become a measure of the limits of the fantastic. The expression, "out of this world" may refer to a zombie, or merely be a slightly exaggerated phrase to salute something extraordinary, but compatible. It is well to know which. We have been told that architecture is for people. In the plunging into and the stretching out of the impossible into the possible, this memory of the justification of all possible architectures need not be forgotten.

The range is not narrow. People differ from one another. It is said that the nature and character of human beings is coextensive with a broader spectrum of possibilities than has yet been unfolded.

An architecture which would proliferate in rhythm with human generation, and keep in step with human aspirations, would be an architecture of growth, expansion and in today's terms, of fantasy. The architect, by the maintenance of his intellectual curiosity and by the extension of his participation into untrodden fields of new knowledge and activity, might assist in providing the framework within which may be conducted a life of fullness, freedom and achievement.

ANDRÉ BLOC

Assembly Keynote Speaker

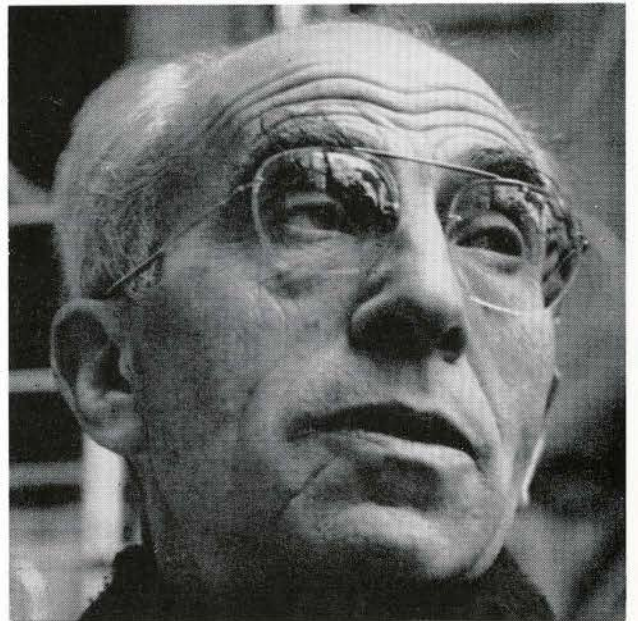
Orateur du thème de l'Assemblée

André Bloc is an engineer by profession but an artist and architectural researcher by inclination. In the fascinating Paris world of the 1920's, he was attracted to the architectural "cercle" of Le Corbusier, Jourdain, Sauvage, and Perret. With their encouragement and help, he founded (in 1930) L'ARCHITECTURE D'AUJOURD'HUI, the monthly review which has made him famous.

Its hardships were many. During World War II, the review lost all its files and library, but Bloc brought it back with the help of Pierre Vago, Alexandre Persitz, and other noted architects.

Bloc's sculptures and his architectural abstracts and research have brought him fame equal to that of his writing. "Knowing the international problems of town planning, architecture and art, I came to the conclusion that it is impossible to consider them separately; I understood the link".

His most recent preoccupation, modular prefabricated units, is expressed thus: "It is not sufficient nor just to conceive of prefabrication for purely economic reasons. There must be a creation and modeling in such a way that a new architecture will be realized through it".



M. Bloc est par profession un ingénieur, diplômé de l'Ecole centrale de Paris. Il s'est joint au cercle LeCorbusier qui l'a aidé et encouragé à lancer sa fameuse revue, L'ARCHITECTURE D'AUJOURD'HUI. Les difficultés n'ont pas manqué. Au cours de la deuxième Grande guerre, la revue a perdu tous ses dossiers et sa bibliothèque mais M. Bloc est parvenue à les reconstituer avec l'aide de Pierre Vago, Alexandre Persitz et d'autres architectes.

Par ses sculptures, son architecture abstraite et ses recherches, M. Bloc est devenu aussi fameux que ses écrits. "Connaissant les problèmes internationaux de l'urbanisme, de l'architecture et de l'art, je suis arrivé à la conclusion qu'il est impossible de les considérer séparément, et j'ai compris ce lien".

Quant à sa plus récente préoccupation, les unités modulaires préfabriquées, il l'exprime ainsi: "Il ne suffit pas de concevoir la préfabrication pour de simples raisons économiques. Il faut y ajouter une création et un modelage, de façon à la faire servir à la réalisation d'une architecture nouvelle".

L'ARCHITECTURE FANTASTIQUE by/par Jean-Louis Lalonde, MRAIC

The Annual Assembly of the Royal Architectural Institute of Canada provides the members with the opportunity of discussing a current problem in the exercise of our profession. The theme of the meeting to be held in Montreal, June 9-12, is "L'Architecture Fantastique", and this would seem to be outside the immediate preoccupations of our everyday life. However, if we agree that architecture has developed more in the last twenty-five years than it did during the preceding twenty-five centuries, we must allow that the majority of us over 40 have a feeling that events have passed us by. Any magazine that we open presents projects and achievements that seem difficult to explain or accept. All the canons, all the standards that we have mastered no longer seem to apply. Even the great leaders of past decades, from Le Corbusier to Mies van der Rohe, are now historical figures. Where is the world heading for?

We must take a stand. Must we rely on those values which depend on the sensibility of the creator and the competence of the technician to achieve the work of

good taste and quality? Or must we, on the other hand, look to pure research, to personal originality, or even mastery of electronic computers which now provide so many possibilities?

The discussions at the Assembly will certainly not provide a solution to this problem, but they will perhaps permit us to determine its importance. Analysis of an architectural philosophy which is non-conformist in spirit will provide us with an opportunity to discuss and understand a bit better the message of those revolutionary souls who work in a direction opposite to that of our daily tasks.

How to define "L'architecture Fantastique"? Is it only that which contradicts the established order of things? Or is it the unexpected, that which does not seem possible today?

Is it the search for an ideal free of all restraint, the evidence of a personal dream, a preview of things to come, a prophecy of the form of tomorrow?

One lone characteristic seems understood: Architecture is called "fantastique" only in relation to its time. We cannot tell whether or not it will become

the new order of things.

Four main aspects of the theme will be subjects of analysis at the Assembly. Each will be presented in the form of questions which the panelists are to deal with.

"L'Architecture Fantastique is a stimulating element of *research*", writes André Bloc, director of the magazine L'ARCHITECTURE D'AUJOURD'HUI and the guest of honor at the Assembly. Does that mean that all the reveries and utopias of dreamers must be remembered as important? Must we value those unreal bewildering structures which contradict all principles of gravity and of strength of materials? What are the contributions of the engineers, the artist, the plastician in development of modern architecture? Mr. Bloc will deal with as many of these questions as possible in the course of our discussions.

If "L'Architecture Fantastique" is a stimulating element of architectural research, should the *education* of future architects take it into account? Should we encourage it in our schools as a formal exercise, the study of space independent of material, sociological, and economic

Le Congrès annuel de l'Institut Royal d'Architecture du Canada est pour les membres l'occasion de soulever un problème d'actualité concernant l'exercice de la profession. Cette année, pour la réunion qui se tiendra à Montréal du 9 au 12 juin, le sujet proposé "l'Architecture Fantastique" semble cependant dépasser les préoccupations immédiates de notre vie de tous les jours. Pourtant, si nous acceptons que l'architecture a plus évolué dans les vingt-cinq dernières années que pendant les vingt-cinq siècles qui ont précédé, nous devons concéder qu'il existe pour la majorité des "plus de quarante ans" un fort sentiment d'inquiétude et une impression très nette d'être dépassés par les événements. La première revue que nous ouvrons nous présente des projets, ou même des réalisations, qu'il nous paraît difficile d'expliquer, d'accepter. Tous les canons, toutes les normes que nous avons réussi à maîtriser ne semblent plus s'appliquer. Même les grands meneurs de jeux des décades passées, depuis le Corbusier jusqu'à Mies van der Rohe, sont

maintenant dans l'histoire. Où va donc le monde?

Il est bien certain que nous devons prendre position. Faut-il réagir et rappeler les valeurs sûres qui comptent sur la sensibilité du créateur et la compétence du technicien pour obtenir l'oeuvre de bon goût, bien faite? Faut-il, au contraire, encourager la recherche formelle pure, l'originalité personnelle, ou même la maîtrise des machines calculatrices électroniques qui nous offrent tant de possibilités?

Les discussions du Congrès ne fourniront sans doute pas une réponse à cette inquiétude, mais elles permettront peut-être d'en déterminer l'importance. L'analyse d'une philosophie architecturale anti-conformiste dans son essence nous fournira l'occasion de discuter et de saisir un peu mieux le message de ces esprits révoltés qui font oeuvre dans une direction opposée à notre tâche quotidienne. Comment définir l'architecture fantastique? Est-ce uniquement ce qui dément l'ordre des choses établies, comme on l'a

proposé? — ou encore ce qu'on n'attendait pas, ce qui ne semble pas correspondre aux possibilités d'aujourd'hui? Est-ce la recherche d'un idéal, hors de toutes contraintes, le témoignage d'un rêve personnel, la prévision des choses à venir, le pressentiment des formes de demain?

Une seule caractéristique semble acquise: une architecture n'est dite fantastique qu'en relation avec son époque, et rien ne peut laisser prévoir qu'elle deviendra ou ne deviendra pas le nouvel ordre.

Quatre aspects particuliers du thème général sont proposés comme sujets d'analyse pour le Congrès, et chacun d'eux sera présenté sous la forme d'une série de questions que les panellistes invités soulèveront.

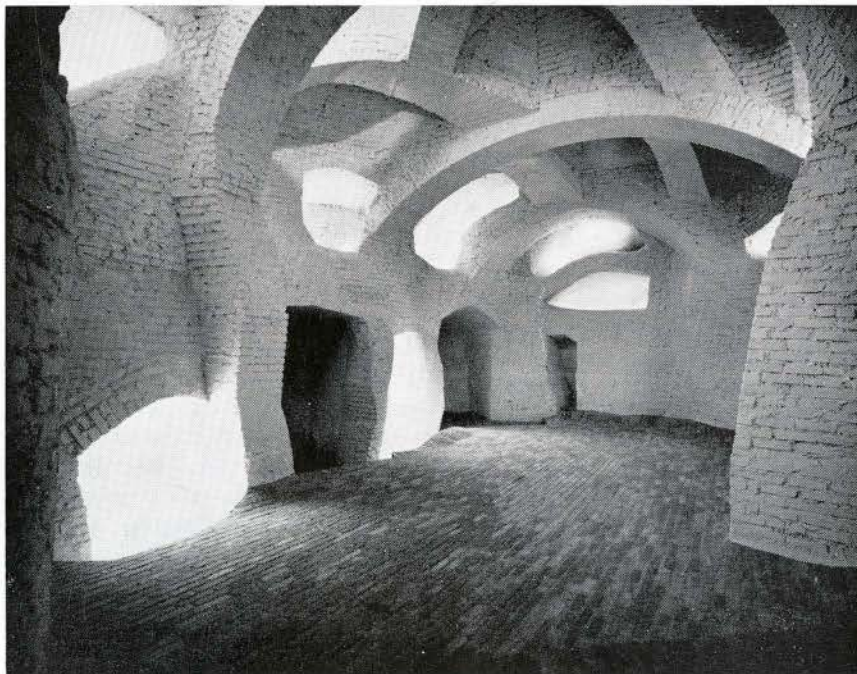
"L'architecture fantastique est un élément stimulant de la *recherche*" écrit André Bloc, directeur général de la revue "L'Architecture d'Aujourd'hui" et invité d'honneur du Congrès. Est-ce à dire que toutes les rêveries, toutes les utopies des visionnaires doivent être retenues? Doit-on considérer comme valables les écha-



Leon Iselin

restrictions? Along this line, what would be the result of education over-insistent on the appreciation of form, of texture, of color, of light, of movement? The theories of the Bauhaus of the nineteen twenties, then of the Institute of Design and of Moholy-Nagy, of the School of Ulm, and even those of "basic design" of our institutions today — are they responsible for this unusual architecture? Should we encourage students to pursue research along this road, or do we risk creating those who would make over the architectural vocabulary in order to shock their seniors by not respecting the accepted laws of physics.

"L'Architecture fantastique" in the *urban* context is another area that will provoke spirited discussion. Do the plastic arts have their place in the city today? How then to obtain this integration, so dear to most architects? Must we consider our cities as outdated, no longer offering appropriate surroundings to conditions today and not adaptable to the needs of tomorrow? We must therefore envisage solutions of great scope, even "fantastique", such as the space-city of Friedman, the tents of Frei Otto, the underground industrial city and the hairnets of Paul Maymont.



Leon Iselin

Then there is *EXPO* which will open its gates in less than two years. Tradition should mark a great step forward in maintains that these exhibit buildings architectural development. Should we suffer the "fantastique" Walt Disney-style, with underwater tours, camera spectacles? The Eiffel Tower was a monster in 1889; what will we think of the one that Paris-Montreal plan jointly to erect in 1967? Must an international exhibition lead us to study the "fantastique"? Is it possible that the "fantastique" may be the result of action in that direction?

All these questions do not constitute any viewpoint by the author of this article. On the contrary, they are intentionally disconnected and provoking, in order to stimulate discussion and to underline differences in views concerning "L'Architecture fantastique". It is Mr Bloc's task, enlisted for this purpose, to bring some order to these ideas. Perhaps each RAIC member will leave Montreal more disturbed than when he arrived. And disturbance is the beginning of wisdom.

André Bloc — Sculpture — Habitude 1964

faudages ahurissants de structures presque immatérielles en contradiction avec toutes nos notions de gravité et de résistance des matériaux? Quelle contribution l'ingénieur, l'artiste, le plasticien peuvent-ils apporter à l'évolution de l'architecture contemporaine? Autant de questions auxquelles M. Bloc proposera des réponses que nous pourrions analyser avec lui.

Si l'architecture fantastique est un élément stimulant de la recherche architecturale, est-ce à dire que l'éducation des futurs architectes devrait en tenir compte, et que dans nos écoles on devrait encourager l'exercice purement formel, l'étude de l'espace indépendamment des contraintes matérielles, sociologiques, économiques? Dans cet ordre d'idée, quel serait le fruit d'une formation trop axée sur l'appréciation des formes, de la texture, de la couleur, de la lumière, du mouvement? Les théories du Bauhaus des années vingt, puis de l'Institute of Design et de Moholy-Nagy, de l'école de Ulm, et même celles du "basic design" de nos institutions actuelles sont-elles les

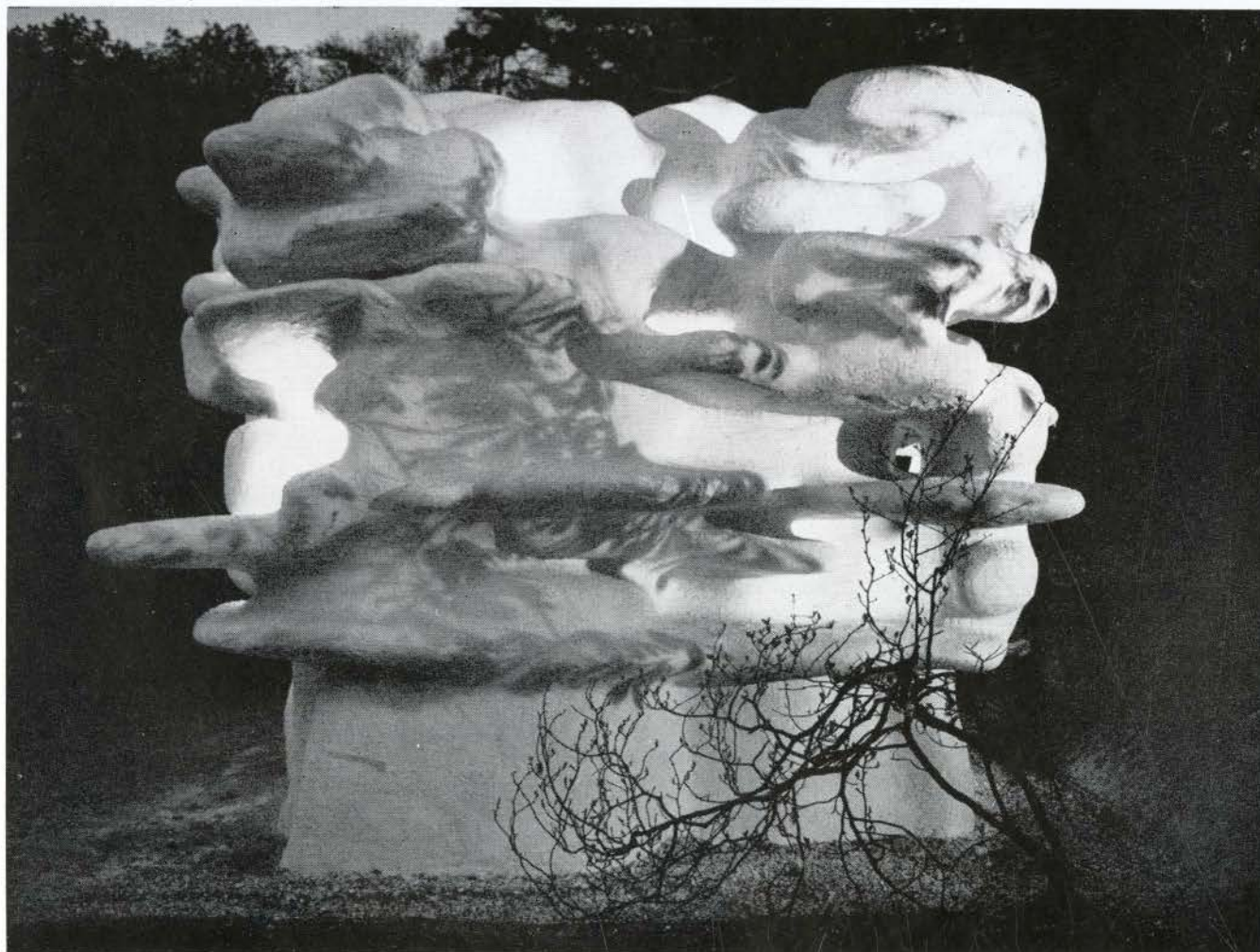
instigatrices de cette architecture dite insolite? Doit-on encourager les étudiants à poursuivre la recherche dans cette voie ou risque-t-on alors d'en faire des êtres qui croient réinventer le vocabulaire architectural alors qu'ils auront tout au plus choquer les "vieux" en ne respectant pas les lois acceptées de la physique? L'architecture fantastique dans le *contexte urbain* est un autre sujet qui provoquera des discussions animées. Les fantaisies plastiques ont-elles leur place dans la ville actuelle? comment alors obtenir cette intégration si chère à la plupart des architectes. Doit-on considérer que nos villes sont dépassées, qu'elles n'offrent plus un cadre approprié aux conditions d'aujourd'hui, et qu'elles ne sont pas adaptables aux besoins de demain? Nous devons alors envisager des solutions de grande envergure, fantastiques peut-être, telles que la ville spatiale de Friedman, les tentes de Frei Otto, la ville technique souterraine et les résilles tendues de Paul Maymont.

Enfin, il y a l'*Expo* qui ouvrira ses portes dans moins de deux ans, et la tradition

vent que ces manifestations soient l'occasion d'un grand pas en avant dans l'évolution architecturale. Devrons-nous alors subir le fantastique à la Walt Disney comme la baleine pour balades sous-marines et la caméra-salle de spectacle? La tour Eiffel était un "monstre" en 1889; que penser de celle que veulent ériger conjointement Paris et Montréal pour 1967? Une exposition internationale doit-elle nous inciter à rechercher le fantastique; est-il possible que le fantastique soit le résultat d'un acte conscient?

Toutes ces questions ne veulent pas être une prise de position de la part du signataire de ce texte; elles sont au contraire consciemment décousues et quelquefois provocantes afin de stimuler les discussions et de souligner les divergences de vue concernant l'architecture fantastique. C'est à Monsieur Bloc, homme engagé s'il en est, que reviendra la tâche de mettre de l'ordre dans ces idées. Et peut-être chaque membre de l'IRAC repartera-t-il de Montréal un peu plus inquiet qu'à son arrivée. L'inquiétude c'est le commencement de la sagesse.

André Bloc — Sculpture — Habitate 1962



Gilles Ehrmann

Allied Arts Medalist

Jordi Bonet



Jordi Bonet devant un de ses plus récents bas-reliefs, à Montréal.

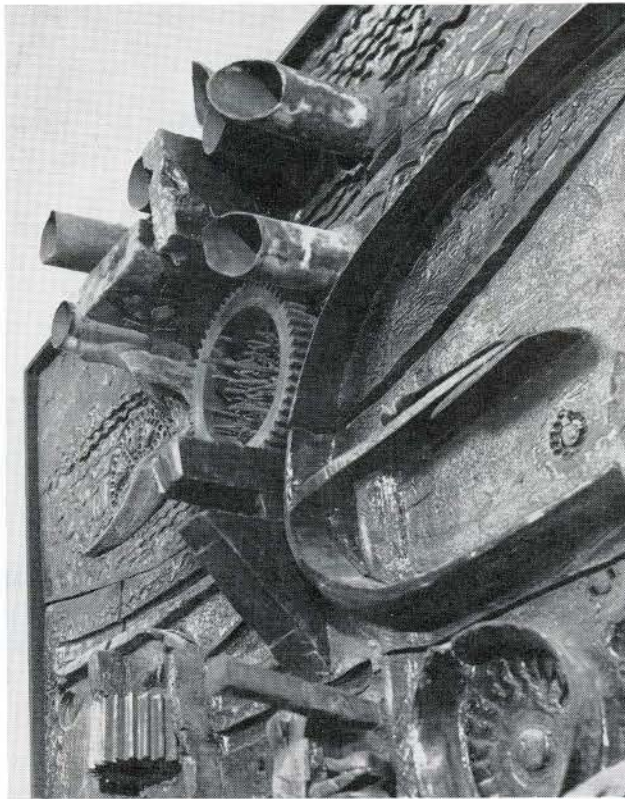
Jordi Bonet was born in Barcelona, Spain, in 1932. He is therefore still very young, a fact which should be brought to our notice, since the volume of his work is considerable and would lead us to believe that we have here a mature artist with a well-established style, in a fixed genre. On the contrary, in the short period (four years) that I have known him, Bonet has changed several times in interests, in materials, in styles. He now seems to have found a medium of expression (ceramic sculpture), but I believe that his "devil" will never be sure...

There are several distinct periods in his work during the 15 years from 1950 to 1965. Drawings first, which seem to me very important in understanding his feel-

ings. He is probably one of the best expressionists in this field, and this quality will be found in all the other media of expression which he uses. Painting next, with all its varieties: oil on cloth, on paper, on wood, gouache, ink. Ceramics on tiles, also, with a very individual palette, probably influenced by the deep tones which have always characterized artists of strong personality. Then sculptural bas-relief, which from the start provided a synthesis of all the media at Bonet's disposal. Finally, ceramic sculpture, either supported (wall, column, beam) or isolated, standing, as in certain curious and promising works, among them the "sarcophages" which mark a highly original stage in the development of plastics in Montreal.

In Canada since 1954, Jordi Bonet married a French-Canadian girl; they have two children. He has adapted in surprising fashion to his new country, and in his work has been in constant collaboration with Canadian and American architects. The architects in Québec esteem him for qualities which I believe quite true; modesty, the type that results in his never having received official recognition, except for a prize for drawing in 1959; a feeling for collaboration with architects, of which the list of his works is evidence; and great variety in his production. Let us hope that he will continue to create beauty combined with utility, and to make warm poetic symbols in the earth.

Jacques Folch-Ribas



Détail d'une porte de sarcophage — Exposition Jordi Bonet à La Galerie Camille Hébert, Montréal 1965.

*Détail d'un des hauts-reliefs de la Place des Arts de Montréal.
Architectes: Affleck, Desbarats, Dimakopoulos, Lebensold, Michaud, Sise.*

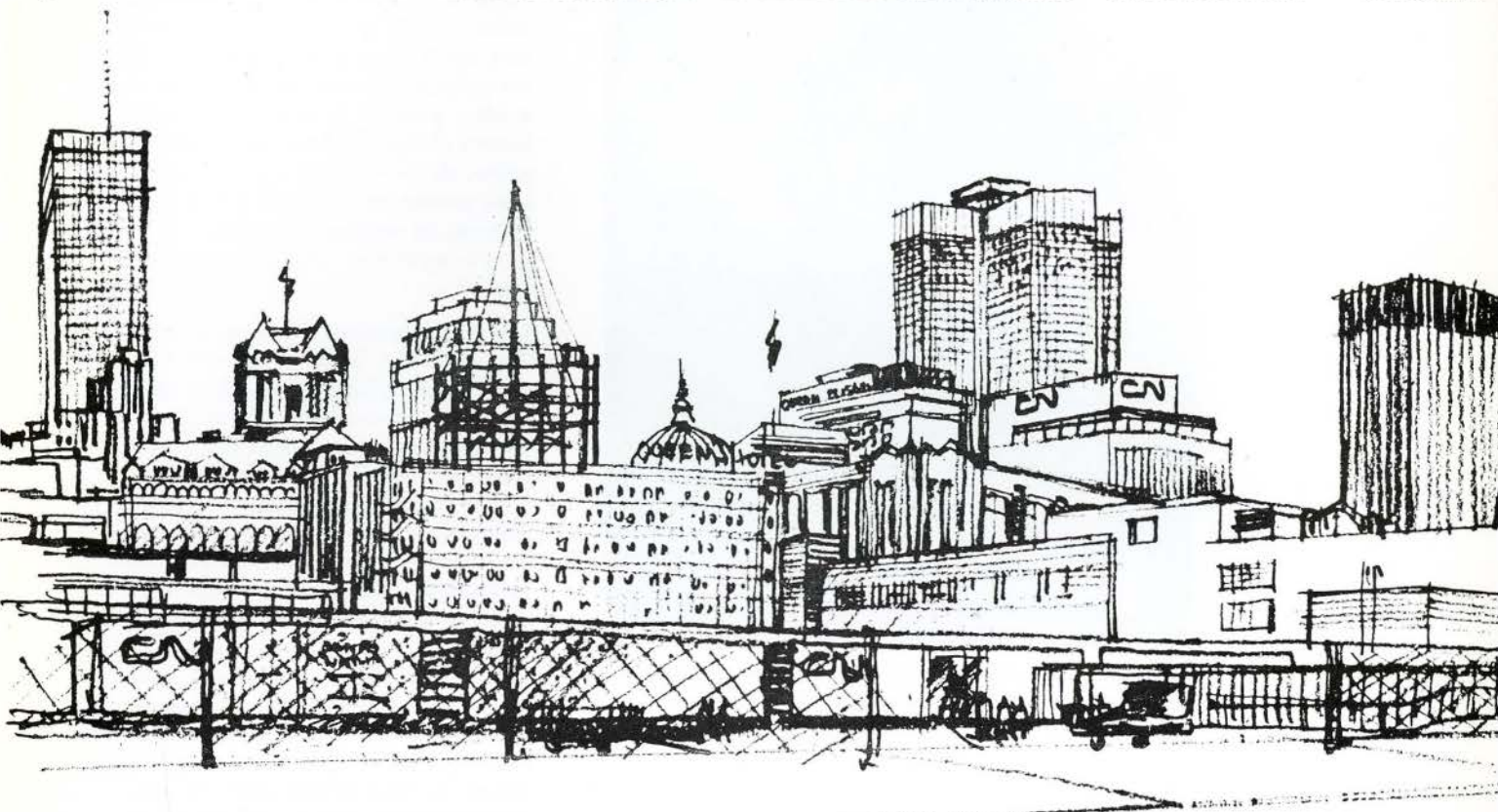


Jordi Bonet est né en Espagne, à Barcelone, en 1932. Il est donc très jeune encore, ce qu'il faut remarquer souvent, son oeuvre étant très considérable et risquant de nous faire croire que nous avons à faire à un artiste mûr, à un style bien établi, à un genre immuable. Au contraire, dans le petit laps de temps (4 années) pendant lequel je l'ai connu, Bonet a changé plusieurs fois de préoccupation, de matériau, de style. Il semble avoir maintenant trouvé un moyen d'expression (la sculpture céramique), mais je crois qu'avec un "diable" pareil, rien n'est sûr . . .

On peut distinguer plusieurs périodes dans son travail, périodes qui se chevauchent durant quinze ans, de 1950 à 1965. Les dessins d'abord, qui me paraissent très importants pour comprendre la sensibilité de l'homme. Il est probablement l'un de nos meilleurs dessinateurs expressionnistes, et cette qualité se retrouvera dans tous les autres moyens d'expression qu'il emploie. La peinture, ensuite, avec toutes ses variantes: huile sur toile, sur papier, sur bois, gouache, encre. La céramique en carreaux, également, avec une palette très personnelle, et influencée probablement par les tons sourds et profonds qui ont toujours caractérisé les artistes de forte personnalité. Le bas-relief sculptural, aussi, qui dès ses débuts faisait la synthèse de tous les moyens dont Bonet disposait. Et enfin, la sculpture céramique proprement dite, qu'elle soit attachée à un support (mur, cloison, colonne, poutre) ou isolée, debout, comme dans certaines oeuvres très curieuses et prometteuses parmi lesquelles les "sarcophages" qui ont été à Montréal un événement plastique très original.

Arrivé au Canada en 1954, Jordi Bonet a épousé une canadienne française dont il a eu deux enfants. Il s'est adapté d'une façon surprenante à son pays de maintenant, et son oeuvre a été une constante collaboration avec les architectes canadiens et américains. Les architectes du Québec l'ont distingué pour des qualités qui me paraissent être vraies: modestie (cette modestie timide qui fait qu'il n'avait jamais eu de récompense officielle — sauf un prix de dessin en 1959); sens de la collaboration avec les architectes (la liste de ses oeuvres en fait foi) et grande variété de sa production. Espérons qu'il continuera de créer des formes intégrées à l'utile, et à fixer dans la terre des signes chauds et poétiques.

Jacques Folch-Ribas



MONTREAL... to see or not to see

The first title suggested was "What to see in Montreal". It was felt important to speak neither of the past nor of the future, but of that which you see now.

And we must not repeat that which has already been said in the *Journal* numbers for May 1945 and November 1956. One significant difference, by the way, between these two numbers: that of 1956 was bilingual, that of 1945 was not.

The 1945 issue was prefaced by architect Percy E. Nobbs. Twenty years later his son Francis Nobbs is president of the Province of Quebec Association of Architects. One of the first Montreal topics not to be missed is our President.

In describing Montreal, there are fixed points that we find in both numbers:

1945 — The site, geography, geology, climate — all unchanged.

1956 — Foreword to this number was by Jean Drapeau, then Mayor of Montreal. In spite of a brief absence from the post, he is back again and his great plans for this city confirm what he said ten years ago: "Montreal is an urban complex undergoing great transformation. The present municipal administration has taken the initiative in important public works to improve the appearance of the city. The city authorities count on the fertile imagination of the architects to assist in achieving a harmonious ensemble of buildings suitable to the psychological character of the community and to the geographic situation. This hope depends

on the spirit of mutual assistance, since the renewal of a city, as required by factors of growth and transportation, is essentially a work of collaboration".

To understand and know Montreal, one must also re-read the article of Victor Morin on the founding of the metropolis; "Effect of Nineteenth Century manners on Montreal" by John Bland (unchanged); "Architecture in the Province of Quebec during the Early Years of the Twentieth Century" by Percy E. Nobbs; "Montreal of the future" by George E. Shortt; "Handicrafts" by A. T. Galt Durnford", "L'Université de Montréal" by Monseigneur Olivier Maurault; "Peintres et sculpteurs de Montréal" by Guy Viau.

SITE
2eme TOUR

1ere TOUR
PLACE VICTORIA



PAR ANDRÉ BLOUIN, MIRAC

On m'avait proposé comme titre "What to see in Montreal?" C'est à dire qu'il ne s'agissait de parler ni du passé, ni du futur, mais de ce que les yeux peuvent toucher.

Parler de Montréal, ce n'est pas rabâcher ce qui a déjà été dit, car il y eut les numéros de *Journal* Vol. 22 No 5 de Mai 1945 et celui de Novembre 1956. Une différence marquante cependant entre ces deux numéros, celui de 1956 était bilingue, alors que celui de 1945 ne l'était pas. Celui de 1945 était présenté par l'architecte P. E. Nobbs et vingt ans plus tard, son fils Francis Nobbs est le Président de l'Association des Architectes de la Province de Québec, c'est donc un des premiers sujets montréalais que vous ne

manquerez pas: Notre Président.

Décrivant Montréal, il y a des points fixes que nous retrouvons dans les numéros des années 1945 et 1956:

1945: The site, Geography, Geology, Climate — Inchangés.

1956: La présentation du numéro était faite par Jean Drapeau alors Maire de Montréal et s'il dut quitter la Mairie, il y est revenu et l'activité qu'il déploie pour sa ville ne fait que confirmer ce qu'il disait il y a dix ans et je cite: "Montréal est une collectivité urbaine en pleine transformation. On s'est rendu compte que l'administration municipale actuelle a pris l'initiative d'entreprendre des grands travaux publics destinés à stimuler l'embellissement de notre ville. Les auto-

rités municipales comptent sur l'imagination fertile des architectes pour les aider à réaliser un ensemble harmonieux de constructions conformes au caractère psychologique du milieu social ainsi qu'au relief topographique sur le plan géographique. Cet espoir repose sur l'esprit d'entraide qui règne sur place car la réflexion d'une ville nécessitée par l'ampleur des facteurs de croissance, en particulier des besoins de la locomotion est essentiellement une oeuvre de collaboration".

Il faudrait aussi pour bien comprendre et connaître Montréal, relire un article de Victor Morin sur la fondation de la métropole; "Effect of Nineteenth Century manners on Montréal" par John Bland, Inchangé; "Architecture in The

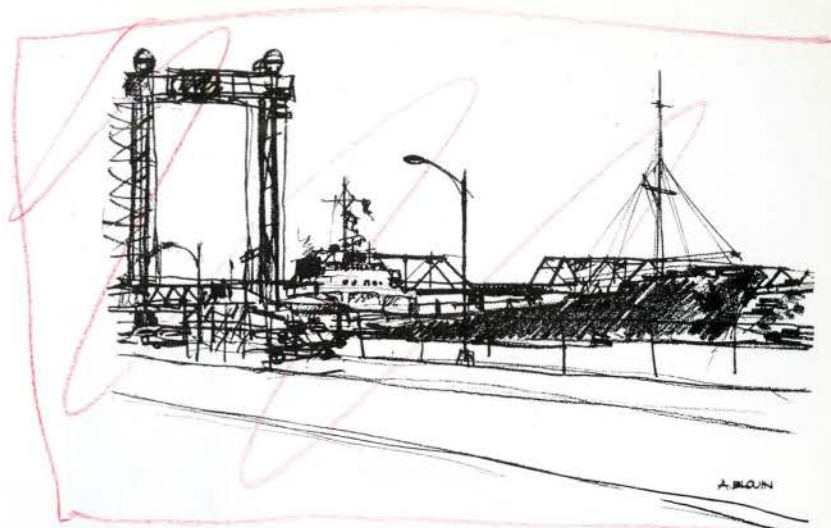
There was also, in this issue, an article entitled "Montréal au XX^{ème} siècle". I shall not repeat its contents, but I was unwise enough to end it with this sentence: "I would like to be on hand in ten years' time to do this article again. I would probably be able to speak again of the great things which are going to be done in Montreal — plans for new housing developments to replace slums, the development of a green belt, of a great theatre, stadium, swimming pools, parks, parking lots, etc., and of the development of access to the main boulevards through architectural control over the whole city". Well, what results? . . . As far as these hopes are concerned, we can say that Montreal is developing at a much faster pace than we had counted on. We can say that the Place Ville Marie skyscraper was the leaven of this great movement. One man, William Zeckendorf, believed in the future of Montreal. He had the courage to plant this tower, his cruciform structure seeming to stir initiative in every direction. The architecture and the location of this building, with its square and its shops, will remain for generations to come as the soaring evidence of the spirit of Montreal. I do not have to dwell longer on this building; it is there and no one coming to Montreal can find an excuse for not visiting it.

Many other buildings rise from the ground. We shall speak of them later.

As for my hopes of 1956, are they realized? . . . The slums are still there and much time has been lost, despite preparations and demolition. Only the Jeanne Mance project is finished, others are to follow. A pilot zone for renewal has been recently chosen by the City of Montreal — 265 acres in the St-Henri district with 17,000 inhabitants. The program would demolish the slums and save from deterioration those buildings that can be maintained.

There is nothing new on green belt, but we hope that this is still ahead.

We have the great theatre. It is called "Place des Arts", a strange name for a building, deriving from the fact that it has been alone on a site intended for two more buildings. This fine hall with 3,000 seats seems strangely lost in the open space, but the two other theatres of 1,300 and 500 seats will be ready for 1967. It will then really be "La Place des Arts". Large parking lots? . . . The tall buildings recently completed have, in part, provided a remedy. For the rest, the same thing is happening as in other large cities . . . many buildings have been demolished



Les Ecluses de la voie Maritime du St-Laurent: Spectacle captivant des écluses où les navires les plus gros semblent ne plus avoir de poids.



Pont des Peuples: Bientôt les deux parties du pont des Peuples vont se joindre reliant la jetée McKay (Ville de Montréal) à l'Île Ste-Hélène. Dans le lointain, la silhouette de Montréal.

and the area is covered with cars. We shall probably be able to say the same thing again in ten years. Perhaps the subway will have results, but a new policy for automobile traffic is necessary. Other cities that have subways have not yet resolved the parking problem.

New boulevards? . . . Improvements are beyond the planning stage, and they are tremendously important.

Architectural control over the development of the whole city? . . . A hope that we must cling firmly to.

In addition to the buildings we have mentioned, there are many things to see in Montreal. What? Where?

If Montreal, by 1967, is going to have a system of transportation to meet the enormous needs of the World Exhibition, it would take too long to describe all the complex plans. However, it is interesting

to review the work that one can now visit. The subway (Métro): Of the 15 miles in the initial plan, 10 miles of tunnel have actually been completed. The first passengers will use it in September 1966. The junction with the EXPO site and the South Shore is now under way.

The subway construction in the centre of the city by the open cut method is at present causing great disturbance to traffic. But the speed with which the work is progressing lends confidence that a year from now, Montreal will be preparing her face for EXPO.

Autoroutes: A network of turnpike routes converging on Montreal is under construction, and some are finished. For example, the Trans-Canada connecting the South Shore to Quebec; the Eastern Townships route to Sherbrooke and the USA; the Laurentian autoroute to the ski

Province of Quebec during the Early Years of the Twentieth Century" de Percy E. Nobbs; "Montreal of the future" de George E. Shortt; "Handicrafts" par A. T. Galt Durnford; "l'Université de Montréal" par Monseigneur Olivier Maurault; "Peintres et sculpteurs de Montréal" par Guy Viau.

Il y avait aussi un article intitulé "Montréal au XX^{ème} Siècle". Je ne le citerai pas pour son contenu, mais parce que j'eus l'imprudence de le terminer par cette phrase, et je cite "Je voudrais bien être à même dans dix ans de faire ce même article, je pourrais probablement parler des grandes réalisations qui vont se faire à Montréal. C'est à dire la reconstruction sur un grand nombre d'îlots actuellement insalubres (taudis) d'unités d'habitations, plantées dans les zones vertes d'un grand théâtre, d'un stade, de piscines, de parcs, de grands stationnements, etc. . . . de l'aménagement de grands accès pour les principales artères d'un contrôle architectural s'étendant sur la totalité de la Ville.

Et alors, le bilan? . . . En ce qui concerne ces souhaits, nous pouvons dire que Montréal s'est développée à un rythme de beaucoup supérieur à ce que nous aurions pu escompter et nous pouvons affirmer que le gratte-ciel de Place Ville-Marie fut le ferment de cette levée en masse. Un homme, William Zeckendorf, crut en l'avenir de Montréal, il eut l'audace d'y implanter cette tour, qui par sa structure cruciforme, semble chercher les prolongements des autres initiatives dans toutes les directions. L'architecture et la situation de cet édifice, avec sa place et ses boutiques, restera pour les générations à venir, le témoin-tremplin de l'essor de Montréal. Il n'est pas nécessaire d'insister davantage sur cet édifice, il est là et personne, venant à Montréal, ne peut trouver une excuse pour dire qu'il ne l'a pas visité. De nombreux autres édifices surgirent de terre, nous en reparlerons plus loin.

Quant à mes souhaits de l'an 1956, sont-ils réalisés? En ce qui concerne les îlots insalubres, beaucoup de temps perdu, mais aussi beaucoup de préparation et de démolitions. Seul l'ensemble Jeanne Mance est complété, d'autres doivent suivre. Une zone pilote de rénovation a été choisie récemment, par la Ville de Montréal, cette zone de 265 acres sera située dans le quartier St-Henri et comptait quelques 3,539 familles en 1961, soit 16,997 personnes. Le programme consiste à faire disparaître les taudis et à enrayer la détérioration des bâtiments pouvant être conservés.

Les zones vertes, rien de bien nouveau, mais nous avons l'espoir que les rénovations vont les faire surgir.

Un grand théâtre, nous l'avons. S'il a pour nom "Place des Arts", ce qui pour un édifice est peut être étrange, cela provient du fait qu'il était seul sur un site devant grouper deux autres salles. Actuellement, la splendide salle de trois mille places paraît étrangement perdue dans un terrain vague, mais dit-on les deux autres théâtres de mille trois cents et cinq cents places seront terminés pour 1967. Nous aurons alors vraiment la "place des Arts".

De grands stationnements? . . . Les hauts édifices récemment construits ont, en partie, remédié à cette carence, mais pour le reste, il se produit le même phénomène que dans les autres grandes villes. De nombreuses constructions ont été démolies et les terrains se couvrent de voitures. Nous pourrions peut-être en reparler dans dix ans . . . peut-être que le métro aura son efficacité, mais il faudrait qu'une autre politique de la circulation automobile s'instaure, car les autres villes qui possèdent le métro, n'ont pas encore pour autant résolu le problème de stationnement.

Grands accès? . . . L'amélioration est plus qu'ébauchée, elle sera très importante. Contrôle architectural sur la totalité de la Ville? . . . Un espoir qu'il faut garder tenace . . .

Outre les édifices que nous avons cités, il y a bien des choses à voir à Montréal, mais quoi? et où?

Si Montréal doit posséder pour 1967 un système de transport et d'autoroutes en harmonie avec les besoins énormes que l'Exposition Universelle va susciter, il serait trop long de décrire tout l'enchevêtrement complexe de cet ensemble, mais il est intéressant d'énumérer les ouvrages qu'il est possible actuellement de visiter.

Le métro: 10 milles de tunnel sont actuellement complétés sur les 15 milles de la première tranche et les premiers voyageurs devraient pouvoir l'utiliser vers le mois de septembre 1966. La jonction avec l'Exposition et la Rive Sud est actuellement en cours d'exécution.

La construction du métro dans le centre de la Ville, par la méthode à ciel ouvert crée momentanément de grandes perturbations dans le trafic, mais la rapidité avec laquelle les travaux avancent permet de penser que d'ici l'an prochain, Montréal pourra préparer le visage que l'on entend lui donner pour le temps de l'Exposition.

Autoroutes: Un réseau d'autoroutes convergeant vers Montréal est en construction et certaines sont complétées. Comme par exemple, la Trans-Canada reliant la Rive Sud à Québec; l'autoroute des Cantons de l'Est vers Sherbrooke et les Etats-Unis; celle des Laurentides vers les centres de ski et de villégiature. Une autre va relier Montréal à Québec par la Rive Nord du St-Laurent et dans le centre même de Montréal, on prépare la jonction entre ces grandes distributrices fermant le quadrilatère par le Boulevard Métropolitain, Bld Décarie, l'autoroute du bas de la ville et la jonction de la Transcanadienne par la Montée St-Léonard au Bld Métropolitain.

De nombreux carrefours, à la jonction de ces routes sont en construction et méritent d'être visités. L'ouvrage le plus spectaculaire et aussi le plus complexe est le pont-tunnel Louis Hyppolyte Lafontaine. A cet endroit la Trans-Canada traverse le St-Laurent — partie sur un pont de 1,500 pieds de longueur et partie sous le fleuve, par un tunnel passant sous le chenal (de 2,400 pieds) qu'empruntent les océaniques. Les problèmes que posèrent l'étude des sections à immerger, la ventilation du tunnel, les approches, etc, font de ce travail de génie, une grande réalisation.

Le budget de la voirie provinciale qui était de quatre millions de dollars en 1914, est passé à deux cent cinquante millions de dollars et de mille miles à quarante cinq mille miles.

Les transports par eau ne sont pas moins importants et la voie maritime se doit d'être visitée, le passage des écluses est toujours captivant à regarder et l'on retrouve à grande échelle des images qui, enfants, nous faisaient rêver. Il faut voir cette mécanique monumentale et bien réglée des ponts-levis qui distribuent la circulation des voitures et des trains suivant la position d'un bateau dans l'écluse. En amont du Pont Champlain se construit actuellement une digue sur toute la longueur du fleuve, elle contrôlera les embâcles des glaces, préservant ainsi les nouvelles îles créées pour l'Exposition Internationale de 1967. Des parties verticales mobiles coulissant dans des rainures chauffées, régulariseront l'impétuosité du fleuve en aval de cet ouvrage.

Le fleuve? . . . et bien lui a changé de visage et s'est laissé endiguer, fasse que ses flots contenus ne tentent pas de dépasser la cote maximum prévue, il est vrai que les îles auront davantage de difficultés pour partir à la dérive lorsqu'elles seront solidement épinglées au sol par la "Tour", j'étais pour dire de

and vacation hills. Another will connect Montreal to Quebec by the North Shore of the St Lawrence. In the centre of Montreal will be the junction of main distributing boulevards — the Metropolitan Boulevard, Decarie Blvd, the downtown autoroute, and the junction of the Trans-Canada and Montée St-Léonard.

Numerous traffic circles are under construction at the junction of these routes, and are worth visiting. The most spectacular and complex job is the tunnel and bridge called after Louis Hippolyte Lafontaine. At this point the Trans-Canada crosses the St Lawrence, partly by a bridge 1,500 feet long and partly under the river, by a tunnel 2,400 feet long under the deep-water channel. Problems which required study of the sections to be immersed, the ventilation of the tunnel, the approaches, etc., make this a great engineering achievement.

The budget of the provincial Department of Highways, \$4,000,000 in 1914, has now reached \$250,000,000 annually. 1,000 miles of highways have grown to 45,000 miles.

No less important is water transportation. The St Lawrence Waterway should be visited; the passage through the locks is always fascinating and one recaptures, on a grand scale, pictures of childhood dreams. Something that must be seen is the marvellous mechanism of bridges controlling the movement of automobiles and trains in line with the position of a boat in the locks.

Alongside the Champlain Bridge there has been constructed a dike right across the river to control the ice and thus protect the new islands created for the World Exhibition of 1967. Mobile vertical parts slide in heated grooves and will maintain the steady flow of the river downstream.

The river? . . . That has changed in appearance and is now diked up. As long as its islands do not try to outgrow the size planned for them — they will have more difficulty in leaving their moorings when they are solidly pinned down by "the Tower" . . . I was going to say of Babel, but let us say "of the People".

Nature in Montreal . . . If it is not growing very fast, it is not disappearing. The Parks Department is on the watch and the city has been able to limit the extension of buildings toward Mount Royal, preserving the mountain park. There have been numerous battles; some thought that the park should be preserved as a high dominating element, visible from the city. The park is valuable as a green area for

those able to enjoy it. From its summit, one can see the neighbouring mountains and even EXPO, since the highest buildings on Sherbrooke Street are far from the waterfront.

If it is true that laws are necessary to control density, height, step-backs, etc., it is also important to control the whole development and to establish a more human approach to civic design.

The city planning service of Montreal, a highly efficient one, is faced with a task of increasing difficulty. The vertical elements never cease to rise, multiplying the complexity. The master plan which was to be ready for the end of 1966 and which covers the region of Montreal within a radius of 35 miles, with an area of 2 million acres, predicts a population of 4,000,000 people by 1987. With the experience already developed on the EXPO site, perhaps we shall see more islands rising in the St Lawrence one day. The charm of Montreal women is known far and wide; happy the residents in the year 2000, since there will then be one and a half million more of them.

Before speaking of Montreal of today, let us make a detour into the lower town and see the old houses. They are much more alive than many modern ones. They are comfortable, and one has the impression that, crowded one against the other, they have many stories to tell. Their faces have seen many generations and we envy their serenity and calm. Let us enter this "Vieux Montréal", below Notre-Dame Street, between McGill and Berri. It is coming to life again and many private persons and firms (unhappily not enough yet) are moving in. It is to be hoped that soon this district, under protection from demolition and speculation, may be one where it is enjoyable to live, with shops and quiet streets, good restaurants, artisans, and residents happy to live in contact with the past.

Now let us climb back again to the skyscrapers.

The CIL Building with its sober line, fenestration in vertical line, sombre color in perfect keeping with its size — one of the finest designs in Montreal.

The Bank of Commerce Building on Dominion Square.

Place Victoria (the first tower, since there are to be two), the highest reinforced concrete building in the world, it is said! Be that as it may, it is there, strong in structure and in silhouette, its fenestration underlined by the four white corners. 47 floors, each 150' x 150', with protection against earthquake disturb-

ance located on the fifth, nineteenth and thirty-second floors.

On Sherbrooke Street, several large office and apartment buildings are under construction or completed.

Then there are the ones that are yet to come up out of the earth and which will again change the appearance of the city. For example —

On Dominion Square, the Chateau Champlain Hotel, 477 feet high, 38 stories, 620 rooms, constructed by CPR. Headquarters of the Provincial Police and Medical-Legal Institute — 13 stories. Place Bonaventure, on the south side of the Queen Elizabeth Hotel and above the tracks of the Canadian National, will occupy six acres, 12 stories, as a merchandise mart, exhibition and convention centre, etc. This building will be connected directly to the subway and the underground autoroute, as well as to other buildings in the vicinity and, via University Street, directly to EXPO.

On Dorchester Boulevard, several important buildings will soon be erected. At the end, near Jacques Cartier Bridge, will be the complex of studios and administration services of the CBC.

A "City of Justice" with its courthouse of 30 stories will soon go up between Craig and Notre-Dame Streets. Horizontal and vertical lines will be in strong contrast, but the vertical will dominate.

The Dow Planetarium has been begun. And the story can continue if you wish to visit all of them, such as the National Film Board, the Oil Refineries, the Harbour, etc., etc.

Church architecture is in full flight in the province. In Montreal and the district can be seen a number of churches where audacity has sometimes overcome good taste. But it is nevertheless true that architects have brought valuable attention to this field.

Then there are the old churches, such as Notre-Dame, in the centre of the city, built in 1829 and recently restored, with its ornamentation and color now showing in full splendor.

The Universities of Montreal and McGill are busy with construction. Numerous faculty buildings are going up.

The University of Montreal has a new development plan: stadium, student residences, new faculty buildings, access to the central building by covered mobile stairway, etc. The architectural control is fortunately now in good hands. Let us hope that they will be strong; since construction of the central building, there does not seem to have been any thought



La rue sainte-catherine: Les bâtiments hauts n'ont pas affecté son aspect, elle est comme il y a dix ans. Elle serait si agréable, si l'on y supprimait la circulation automobile . . .

Babel, disons plutôt des Peuples.

La nature à Montréal . . . Si elle ne s'accroît pas très vite, elle ne disparaît pas, le Service des Parcs y veille et la Ville a su limiter l'extension des constructions vers le Mont Royal. Ce parc est donc préservé. De nombreuses luttes ont eu lieu car certains pensaient que le parc devait être préservé en tant qu'élément élevé dominant, visible de Montréal. Ce parc a sa valeur comme espace vert, il y fait bon lorsque l'on y est et si l'on désire regarder au loin, on pourra toujours, de son sommet, contempler les monts environnants et même l'Exposition car les plus hauts immeubles construits en bordure de la rue Sherbrooke, laissent libre la rive du fleuve — plus que ne le font les installations portuaires elles-mêmes.

S'il est certain que les réglementations sont indispensables pour contrôler: densité, hauteurs, reculs, etc., il est aussi important de contrôler les ensembles et de rétablir la rigidité aveugle des équations par une notion plus humaine de dessin urbain (civic design).

Le service d'urbanisme de la Ville de Montréal dont l'efficacité s'affirme, se trouve devant une tâche de plus en plus lourde, les éléments verticaux ne cessant de surgir, multipliant la complexité des rapports dans la distribution des volumes. Le plan directeur d'Urbanisme de Montréal qui devait être prêt pour la fin de 1966 et qui couvrira la région de Montréal dans un rayon de 35 milles, avec une superficie de deux millions d'acres,

prévoit pour 1987, une population d'environ 4 millions de personnes. Avec la hardiesse déjà développée sur le site de l'Expo, peut-être verrons nous un jour d'autres îles surgir du St-Laurent. Le charme des montréalaises est reconnu, heureux les habitants de l'an 2,000 puisqu'il y en aura alors un million et demi de plus.

Avant de parler du Montréal d'aujourd'hui, faisons un détour par le bas de la ville et n'oublions pas d'y aller voir les vieilles pierres. Elles sont tellement plus vivantes que de nombreuses contemporaines. On y est bien, comme plus en sécurité, on a l'impression que ces maisons serrées les unes contre les autres ont tant de choses à nous conter; leurs façades ont vu assez de générations pour que nous envisions leur pérennité, leur calme. Allons dans ce "Vieux Montréal", au sud de la rue Notre-Dame, entre les rues McGill et Berri, nous y remarquerons que la vie y reprend et que bon nombre de particuliers ou de sociétés (pas assez encore malheureusement) s'y réinstallent et il est à espérer que bientôt ce quartier, qui doit être à l'abri de la pioche des démolisseurs et de l'avidité des spéculateurs — soit l'un de ceux où il fait bon vivre, avec ses boutiques et ses rues calmes, ses bons restaurants, ses artisans, sa population de citoyens que le contact du passé n'effraie pas mais au contraire rassure et reconforte.

Si nous remontons vers les stalagmites, il serait plus aisé de vous dire simplement allez et regardez.

L'édifice du CIL avec ses lignes très sobres, sa fenestration volontairement contenue dans la verticale, sa couleur sombre détachant parfaitement sa masse, tout cela en fait une des plus belles réalisations de Montréal

La tour de la Banque de Commerce sur le Carré Dominion.

La Place Victoria (première tour puisqu'il doit y en avoir deux), le plus haut édifice en béton armé du monde, dit-on! Mais qu'importe, il est là et il est fort de sa structure et de sa silhouette; sa fenestration soulignée par les quatre arêtes blanches; quarante sept étages (étage type 150' x 150'); des entretoises antisismiques ont été disposées au cinquième, dix neuvième et trente deuxième étages. Sur la rue Sherbrooke de nombreux édifices à bureaux et de grands immeubles à appartement sont construits ou en construction.

Que dire aussi de tout ce qui va sortir de terre et qui changera de nouveau le visage de la Ville et pour citer:

Sur le square Dominion, l'Hôtel Château Champlain, 477' de hauteur, 38 étages, 620 chambres, construit par le "Canadian Pacific Hotels Ltd" (en cours de construction).

Le quartier général de la Sûreté provinciale et Institut de médecine légale et de police scientifique; grand complexe de 13 étages (en construction).

La Place Bonaventure, au sud de l'hôtel Reine Elizabeth et au dessus des voies de chemin de fer du Canadien National, occupera six acres de terrain, sur une

of integration. The central building, dean in point of view of age and (some would say also) of style, is nevertheless a design which suits the site and should not be underestimated.

The computer centre of the University is now equipped with a CDC-3400 capable of 300,000 operations per second — and very interesting to visit.

New ideas are needed to make this campus a success. Let us hope for them.

For McGill University, the planning problem is somewhat different. With limited space, and desirous of not encroaching on the open space in the centre which gives it charm, the faculty buildings are going up on the perimeter, on neighbouring streets where the University had planned for this. It is a marvelous site — like the University of Montreal, on the slopes of the mountain, but on the other side facing the river.

In both universities, but particularly at McGill, concrete is apparent. Pre-stressed concrete is being used more on facades. This is also true throughout the city for office buildings and apartments.

The Canadian World Exhibition of 1967 . . . I would prefer to leave this subject to others, since it needs an article by itself. Let us say nevertheless that the effort is tremendous and extremely complex, that the preparatory works are not as spectacular to those we shall see in the coming months. As soon as the new bridges are completed, everything will begin to change.

You should visit the site and watch the work on the bridge, in order to understand that an enormous enterprise is under way. One gets the impression that the islands are being moored to the shore and then the hive will buzz for two years, day and night, till the green light of opening day.

What to see in Montreal? . . . Everything — it is one great building project, but isn't that most interesting to us as architects?

We are at present in something like an orchestra pit, and all the instruments are tuning up. Each element is taking its place and its tune, in anticipation of the curtain going up, beside the great stage of EXPO where the décor, we hope, will be a feature of the show.

But it will be only a preview. Montreal will continue to march steadily onward in expansion. Our rôle is to prepare logical plans for life in the year 2000 for 4,000,000 Montrealers.

douzaine d'étages, on y trouvera du commerce de gros (merchandise mart) des salles d'exposition et de congrès, hôtel, etc. Cet édifice sera relié directement au métro, à l'autoroute passant en souterrain, aux autres édifices de la périphérie et par la rue Université élargie, directement à l'Expo.

—Sur la rue Dorchester plusieurs édifices importants doivent bientôt s'ériger, et à l'extrémité, près du Pont Jacques Cartier, l'ensemble de tous les studios et services d'administration de Radio-Canada.

—Une cité judiciaire avec son Palais de Justice de trente étages sera bientôt érigée entre la rue Craig et la rue Notre-Dame. Horizontales et verticales seront fortement accusées, mais la verticale dominera.

—Le Planétarium Dow est commencé.

—Et l'énumération continuerait si l'on veut tout visiter, tel que: l'Office National du film, les raffineries, le port de Montréal, etc, etc . . .

—L'architecture religieuse est en plein essor dans la Province et l'on peut, dans Montréal et les environs, voir de nombreuses églises où l'audace a quelquefois dépassé le bon goût; mais il n'en reste pas moins que dans ce domaine les architectes ont apporté à l'étude de ces programmes, une attention toute particulière.

—Que de vieilles églises aussi, dont Notre-Dame, en plein centre de Montréal, construite en 1829 et que l'on vient de restaurer, avec son ornementation et sa polychromie, elle se montre à nous dans toute sa splendeur.

—L'Université de Montréal et l'Université McGill commencent en même temps un regain de constructions. De nombreuses facultés s'édifient.

L'Université de Montréal sur un nouveau plan d'Urbanisme se développe: stade, résidences pour étudiants, nouvelles facultés, accès au bâtiment central par un escalier mécanique abrité, etc, etc . . .

Le contrôle architectural est heureusement maintenant entre bonnes mains, espérons qu'elles seront fortes car depuis la construction du bâtiment central, il ne semblait guère que l'on ait eu un souci quelconque d'intégration. Le bâtiment central, doyen d'âge et certains disent aussi de style, n'en reste pas moins une architecture qui s'impose sur le site et ne peut être sousestimée.

Le centre de calcul de l'Université est maintenant équipé d'un ordinateur

CDC.3400 pouvant effectuer 300,000 opérations/seconde (intéressant à visiter).

Il faut malgré tout, d'autres cerveaux pour faire de ce campus une réussite, les espoirs sont permis.

—En ce qui concerne l'Université McGill le problème d'urbanisation se pose différemment, car édifiée sur un espace restreint et ne désirant pas trop empiéter sur l'espace libre central qui en fait le charme, les facultés se construisent au pour tour, au bord des rues avoisinantes sur des terrains que l'Université avait réservés à cet effet. Le site, par contre, est de choix, et comme l'Université de Montréal sur le flanc de la montagne, mais de l'autre côté et face au fleuve.

Nous remarquons dans les deux Universités, mais particulièrement à McGill que le béton apparent et plus encore les éléments de façade en béton prémoulé sont très employés; il en est de même dans le reste de la ville pour les édifices à bureaux et les maisons à appartements.

—Et l'Exposition Universelle et Internationale de 1967 . . . j'aimerais mieux laisser à d'autres le soin d'en parler car le sujet vaut un article à lui seul. Disons cependant que l'effort qui se fait est considérable et extrêmement complexe, que tous les travaux préparatoires n'ont pas le spectaculaire que nous pourrions voir dans les prochains mois. Dès que les nouveaux ponts seront terminés, alors tout va changer.

Il faut visiter le site et assister à la mise en place des travées de pont, pour comprendre que bientôt un énorme chantier va commencer. On a l'impression que l'on est en train d'amarrer les îles aux rives et qu'alors la ruche va bourdonner pendant deux ans jour et nuit jusqu'à la première fusée verte de l'ouverture.

Que voir à Montréal? . . . Tout, et mal car ce n'est qu'un vaste chantier, mais n'est-ce pas ce qui est le plus attrayant pour nous, architectes.

Nous sommes un peu actuellement comme dans une fosse d'orchestre, tous les instruments sont en train de s'accorder; chaque élément prend sa place et sa tonalité, dans l'attente du lever du rideau, au bord de la grande scène de l'Expo ou le décor, nous l'espérons, sera à la hauteur du spectacle.

Mais ce ne sera qu'une avant-première, car Montréal continuera sa marche vers le but critique de son expansion, notre rôle étant de préparer avec logique, la vie de l'an 2,000, des quatre millions de montréalais.

SURVEY OF THE PROFESSION

RELEVÉ DE LA PROFESSION

Part One

Introduction and Summary of Findings

Partie Une

Introduction et Sommaire

1964-65

COMMITTEE ON THE PROFESSION
ROYAL ARCHITECTURAL INSTITUTE OF CANADA

COMITÉ SUR LA PROFESSION
INSTITUT ROYAL D'ARCHITECTURE

Introduction

The 54th Annual Assembly of the RAIC at Quebec City in May 1961 adopted a resolution requesting that a Status Committee be established to:

- “1) Study and submit reports in respect to those areas of activity within the building community where the architect should be, and is not now, effective.
- 2) Recommend adjustments within the profession to give the profession maximum effectiveness.”

Later the name of the Committee appointed by the Executive was changed to “Committee on the Profession.” At the RAIC Assembly of 1964 in St Andrews, NB, the Committee was authorized to make a Survey of the Profession across Canada and appointed Professor W. G. Raymore to conduct the work, assisted by P. M. Keenleyside and Professor D. H. Lee. The study was commenced in July, 1964 and its analysis is continuing.

The Survey was undertaken through two media: interviews with architects and contractors in various centres; and by questionnaires sent to the 2431 RAIC members, and to Councils and Registration Boards of the provincial Associations and Institutes. The cities visited were 21 in number: Vancouver, Victoria, Calgary, Edmonton, Saskatoon, Regina, Winnipeg, Port Arthur, Windsor, London, Ottawa, St Catharines, Hamilton, Kitchener, Toronto, Montreal, Quebec City, Moncton, Saint John, Halifax and St John's, Newfoundland. Altogether, 50 meetings were held, employing a series of “Topics for Discussion” which were furnished for prior study, and which covered a wide range of professional problems.

It is the expectation of the Committee on the Profession, with the concurrence of the Executive Committee and Council to publish the Report of the Survey in two parts, of which the attached Summary of Findings is PART I. To follow at a later time are the detailed reports on the Topics discussed at the various meetings, the replies to the Questionnaires to members and to the provincial Associations, together with a statement of conclusion reached during the 17 meetings with contractors' organizations across Canada, and submissions by other special groups. And most important, Recommendations of the Committee on the Profession to the Executive, Council, and Members of the RAIC will be presented as a stimulus to present and future action.

Members' Questionnaire

The following table indicates by provinces the response to the members' Questionnaire:

En mai 1961, les membres de l'Institut réunis à Québec pour la 54e assemblée annuelle ont adopté une résolution demandant l'établissement d'un comité sur l'état de la profession chargé de:

- “1) Faire des études et soumettre des rapports au sujet des domaines d'activité dans le secteur du bâtiment où l'architecte devrait être, mais n'est pas actuellement, efficace;
- 2) Recommander les mesures à prendre au sein de la profession afin d'assurer à celle-ci un maximum d'efficacité.”

Le comité établi par le Comité exécutif a plus tard changé son nom en celui de “Comité sur la profession”. A l'assemblée annuelle de l'Institut de 1964, à St. Andrews, N-B, il a reçu l'autorisation de faire un relevé de la profession d'un littoral à l'autre du pays et le professeur W. G. Raymore a été choisi pour accomplir cette tâche avec le concours de M. P. M. Keenleyside et du professeur D. H. Lee. Les recherches ont commencé en juillet 1964 et on continue en ce moment l'analyse des données obtenues.

Pour l'enquête proprement dite, on a eu recours à deux moyens: des entretiens avec des architectes et des entrepreneurs en divers centres du Canada et un questionnaire qui a été envoyé aux 2,431 membres de l'Institut ainsi qu'aux conseils et aux commissions d'admission des associations et instituts provinciaux. Des entretiens ont eu lieu dans 21 villes, soit: Vancouver, Victoria, Calgary, Edmonton, Saskatoon, Regina, Winnipeg, Port Arthur, Windsor, London, Ottawa, St. Catharines, Hamilton, Kitchener, Toronto, Montréal, Québec, Moncton, Saint-Jean (N.-B.), Halifax et Saint-Jean (T.-N.). Les enquêteurs ont tenu au total 50 réunions. Les sujets de discussion avaient été envoyés d'avance aux intéressés qui avaient pu ainsi les étudier et ils visaient un grand nombre des problèmes qui se posent dans la profession.

Avec le concours du Conseil de l'Institut, le rapport du Relevé de la profession sera publié en deux parties, dont nous présentons ici la première. La PARTIE I comprend l'introduction et un sommaire des constatations. L'autre sera publiée plus tard, et présentera un compte rendu détaillé des renseignements recueillis au cours des réunions et par l'étude des réponses aux questionnaires, y compris celui qui a été adressé aux

RELEVÉ DE LA PROFESSION

PARTIE UNE

	A Questionnaires Received	B Membership (Journal List)	C Architects represented by replies	D % replies (C/B)
Alberta	82	159	114	71.6
British Columbia	116	272	145	53.3
Manitoba	79	145	120	82.7
New Brunswick	10	26	10	38.4
Newfoundland	2	16	3	18.7
Nova Scotia & PEI	26	63	29	46.1
Ontario	530	964	637	66.0
Quebec	245	719	324	45.0
Saskatchewan	36	67	47	70.1
	1126	2431	1429	58.7%

The Committee is gratified by the response to the Questionnaires and the attention given by members to the invitation to enlarge on the simple affirmative or negative replies.

As a result it has been possible to draw on a large body of opinion furnished by the members in the compilation of the Summary of Findings.

It was not the intention initially to include the problems of architectural education as a topic in the Committee's Survey, but this policy proved impossible to pursue because of the strong interest and evident importance attached to the subject by the members. The topic has been therefore touched upon, but not exhaustively, in anticipation of its consideration by the schools.

The Committee on the Profession is aware of the hazards attendant on the method employed in assembling and interpreting the opinions expressed by members of the profession and other groups. Both the short time available for conducting the Survey, and the number of areas of interest remaining to be explored, are recognized. Every effort has been made to present the findings as objectively as possible. It may be considered by some that it is fact that is needed, not opinion. But the opinions of members and others, based on the wide variety of experience in professional problems accumulated by those responding, are themselves important facts which point the way to decisive action, both collective and individual. It is confidently believed that the profession will respond vigorously to the indications of the Survey Report.

*Respectfully submitted on behalf of
the Committee on the Profession*

H. H. G. Moody,
Chairman

Members

Peter Dobush, P. M. Keenleyside, J. A. Langford,
H. Mercier, W. G. Raymore, Peter Thornton

associations provinciales, des conclusions intervenues au cours de 17 réunions tenues avec les associations d'entrepreneurs de tout le Canada ainsi que de mémoires soumis par d'autres groupes. Enfin, ce qui est le plus important, le Comité sur la profession présentera au Comité exécutif et aux membres de l'Institut ses recommandations afin de stimuler l'activité présente et future.

Questionnaire adressé aux membres

Le tableau ci-après indique, par province, le nombre et la proportion des membres qui ont répondu au questionnaire:

	A. Questionnaires reçu	B. Nombre de membres (Liste du Journal)	C. Architectes représentés par réponses	D. % des réponses (C/B)
Alberta	82	159	114	71.6
Colombie-Britannique	116	272	145	53.3
Manitoba	79	145	120	82.7
Nouveau-Brunswick	10	26	10	38.4
Terre-Neuve	2	16	3	18.7
Nouvelle-Ecosse et IPE	26	63	29	46.1
Ontario	530	964	637	66.0
Québec	245	719	324	45.0
Saskatchewan	36	67	47	70.1
	1126	2431	1429	58.7%

Le Comité est heureux de la réponse reçue à son questionnaire et de la mesure dans laquelle les membres ont profité de l'invitation qui leur était faite d'ajouter à leurs réponses par "oui" ou par "non" leurs commentaires. Ainsi, le présent rapport indique l'orientation générale de la pensée des membres.

Le Comité sur la profession se rend parfaitement compte des dangers que présente la méthode dont il s'est servi pour coordonner et interpréter les opinions exprimées par les membres de la profession et d'autres groupes. Il reconnaît aussi qu'il a eu peu de temps à sa disposition et qu'il reste encore beaucoup de domaines à explorer. Toutefois, il s'est efforcé de présenter des constatations aussi objectives que possible. D'aucuns diront peut-être qu'il nous faut des faits et non des opinions. Toutefois, les opinions, fondées sur une longue expérience des problèmes professionnels, des membres et des autres personnes qui ont répondu à nos questions sont bel et bien des faits dont il y a lieu de s'inspirer dans les décisions collectives et individuelles. Nous espérons que la profession répondra avec énergie aux indications fournies dans le rapport de ce relevé.

Summary

These Findings are derived from the members' replies to the questionnaire and from the taped record of the interviews held across Canada. They represent the combined opinions from these sources and are not given as the opinions of the interviewers or the Committee on the Profession.

Conditions of practice

- 1 The changing conditions in social organization, in building economics and technology demand a reassessment of the architect's areas of usefulness and competence in today's practice.
- 2 Prospects of continuing urban growth; a changing clientele and rise of the public authority to the position of our largest client; increased complexity of building technology and administration, indicate the need for the architect's enlarged competence and efficiency of office organization.
- 3 In spite of the rising volume of building construction, the lack of a corresponding increase in the architect's participation at the professional level is cause for profound concern. The architect has increasing competition in the field of building design.

Professional discipline

- 4 Members of the profession agree on the desire to maintain the highest traditions of integrity and competence in professional life. This is not considered to be incompatible with the wish to have the canons of conduct reviewed in the light of today's need.
- 5 The principal areas of disciplinary concern were those of solicitation of commissions, and fee-cutting. It was urged by many members that provincial Council action should be more vigorous in dealing with flagrant violations.
- 6 The architectural profession, unlike law or medicine, has heavy competition from outside the profession. The need to liberalize or re-interpret the Code of Professional Conduct

Sommaire

Ces constatations sont un résumé des réponses au questionnaire et des entretiens avec les membres. Elles ne représentent ni les opinions des interviewer ni du Comité sur la profession.

Conditions de pratique

- 1 L'évolution de l'organisation sociale, les changements dans l'économie du bâtiment et les progrès techniques exigent une nouvelle détermination des domaines où l'architecte est utile et compétent dans sa profession telle qu'elle se pratique aujourd'hui.
- 2 La perspective d'une croissance constante des villes, d'un changement de clientèle et de l'accession des pouvoirs public au rang de principal client, la complexité toujours plus grande de la technique du bâtiment et de l'administration signale la nécessité pour l'architecte d'organiser son bureau de façon à le rendre plus compétent et plus efficace.
- 3 L'architecte s'inquiète vivement de ce que, dans une période où il se fait de plus en plus de construction de bâtiments, sa participation sur le plan professionnel ne s'accroît pas dans une mesure correspondante. L'architecte est aux prises avec une concurrence toujours croissante dans le domaine de la composition architecturale.

Discipline professionnelle

- 4 Les membres de la profession ont tous le même désir de maintenir les plus hautes traditions d'intégrité et de compétence. Toutefois, ils estiment qu'il n'y a là rien d'incompatible avec le désir d'une adaptation de leurs règles de conduite aux besoins d'aujourd'hui.
- 5 Les deux principaux domaines où l'on sent le besoin de mesures disciplinaires sont ceux de la sollicitation de commissions et de la réduction des honoraires. Plusieurs membres ont demandé que les conseils provinciaux fassent preuve de plus de sévérité dans les cas de violation flagrante.
- 6 Contrairement au droit et à la médecine, l'architecture est en butte à une forte concurrence de l'extérieur de la profession. On insiste sur le besoin de libéraliser ou de réinterpréter

Relevé de la Profession

in order to permit members to serve society more effectively in these competitive areas was urged.

Professional competence

7 Competence and integrity are recognized as the basis of professional life. It was suggested by those within and without the profession that the defection of clients to others in the design field was an indication of lessening confidence in the architect's contribution.

8 The need and desire for increased competence is apparent from the interviews and the members' questionnaire. Improvement should be sought in the traditional field of the architect's operation, as well as in a broadening of knowledge to contiguous areas.

9 Analysis of Part "D" of the Members' Questionnaire (Professional Competence) indicates that in the opinion of the membership the architect's performance in his traditional role is in need of improvement in the following order of priority: 1) design; 2) estimates of project cost; 3) working drawings; 4) and 5) specifications; field inspection (equal priority); 6) project administration. Individual provinces vary from this national order of rating.

10 There is increasing need for, and interest in, the bringing back to the architectural profession of higher skills and knowledges in the field of structure, mechanical and electrical services.

Continuing education for members

11 Having decided that increased competence is required of the profession, it is but a short step to recognize that this can be accomplished only by regeneration through continuing professional education. Both the interviews and the questionnaire overwhelmingly confirm the desire of members in all Associations to have increased facilities for refresher courses.

12 Four agencies are recognized as being able to contribute substantially to a refresher program: (a) the provincial Association or Institute; (b) university Schools of Architecture; (c) the RAIC; (d) Division of Building Research, National Research Council.

le Code de conduite professionnelle de façon à permettre aux membres de mieux servir la société.

Compétence professionnelle

7 La compétence et l'intégrité sont reconnues comme les bases de la vie professionnelle. Selon des membres de la profession et d'autres, le fait que des clients s'adressent à des personnes en dehors de la profession pour des travaux de composition architecturale indique un fléchissement de la confiance dans la valeur du rôle de l'architecte.

8 Le besoin et le désir d'accroître la compétence ont été clairement exprimés au cours des entretiens et dans les réponses des membres au questionnaire. L'architecte doit accroître sa compétence dans les domaines où s'exerce traditionnellement son activité mais il doit aussi augmenter ses connaissances dans des domaines connexes.

9 Une analyse des réponses fournies à la partie "D" du questionnaire adressé aux membres (compétence professionnelle) indique que, de l'avis des membres, l'architecte doit tendre à améliorer ses services dans les domaines traditionnels de son activité selon l'ordre de priorité suivant: 1) composition; 2) estimé du coût des projets; 3) dessins d'exécution; 4 et 5 (sur un pied d'égalité) devis et surveillance des chantiers; 6) administration. Cet ordre, qui s'applique à l'ensemble du pays, varie selon les provinces.

10 Le besoin de redonner aux membres de la profession plus de compétence et plus de connaissances dans les domaines de la structure et des services mécaniques et électriques s'accroît et suscite de plus en plus d'intérêt.

Prolongement de l'enseignement de la profession

11 Lorsqu'on a établi le besoin d'un accroissement de la compétence au sein de l'industrie, on est bien près d'avoir reconnu que le seul moyen de répondre à ce besoin est de travailler au perfectionnement des membres par un prolongement des études professionnelles. Les entretiens et les réponses au questionnaire ont révélé chez les membres de toutes les associations un désir manifeste de pouvoir suivre plus facilement des cours de perfectionnement.

12 On estime que quatre organismes ou groupes d'organismes pourraient contribuer sensiblement à un programme de cours de perfectionnement: a) les associations ou instituts provinciaux; b) les écoles universitaires d'architecture; c) L'IRAC et d) la Division de la recherche en bâtiment du Conseil national de recherches.

13 Opinions on the desirable range and content of continuing education vary from the highest flights of aesthetic theory to the most business-like aspects of professional problems. There should be no difficulty in finding registrants for any type of program offered.

14 Assistance should be given to the smaller provincial Associations in preparing programs of continuing education for members. Wherever successful courses of study have been developed they should be shared with Associations desiring to present them.

The Provincial Architects Acts

15 Most frequent misconceptions of the Act were: (a) it is for the protection of the architect's field of operation (instead of for the protection of society); (b) the Act is for the benefit of those in private practice (instead of for the education, registration, regulation and discipline of the professional body). The principal benefit to the profession would appear to be the protection of the use of the name "architect".

16 The Acts are of varying quality due to the limitations placed on the local Association in handling the problems of education, registration and discipline with which it is charged.

17 Members hold divergent views on the value of the provincial Acts as a benefit to the public and the profession. Some members believe that both architects and public are satisfactorily protected; by others, the public interest is thought to be jeopardized by lack of restriction on who may engage in building design. The latter opinion is that of the majority.

Standards of Provincial Registration

18 The belief in the need for uniform registration laws across Canada is strongly held. They are considered to be the first line of defence against incompetence and unethical performance and should aim at the level of the present highest provincial requirement.

19 A national registration standard promotes ease of transference and control of membership, and would give importance to the national voice in matters relating to the profession.

20 While registration of candidates from outside Canada might be in some cases on a basis of reciprocity, a minimum requirement is felt to be the Professional Practice examination together with a specified number of years of Canadian practice. In all cases the most satisfactory manner of dealing with candidates is on an individual basis.

Experience Period Before Registration

21 The experience period before registration for graduates varies from one to three years, the majority of provinces having a two-year period. Where the Suggested Minimum Sylla-

13 Quant à l'étendue et à la matière de ces études prolongées, les opinions varient et comprennent toute la gamme depuis les plus hautes théories de l'esthétique jusqu'aux problèmes les plus pratiques de l'exercice de la profession. Il ne devrait pas être difficile d'obtenir des inscriptions à tous les genres de programmes offerts.

14 Il y aurait lieu de venir en aide aux petites associations provinciales dans l'organisation de programmes d'études prolongées à l'intention de leurs membres. Les associations ayant établi de bons cours d'études devraient rendre ceux-ci accessibles aux associations désireuses de les offrir.

Lois provinciales sur l'architecture

15 Voici quelques-unes des erreurs les plus répandues au sujet de ces lois: a) celles-ci auraient pour objet la protection du domaine d'activité de l'architecte (au lieu de la protection de la société); b) ces lois viseraient au bien des architectes en pratique privée (alors qu'elles ont pour objet la formation professionnelle et l'admission des membres ainsi que la réglementation et la discipline du corps professionnel). Il semble que le plus précieux avantage accordé à la profession consiste dans la protection de l'emploi du terme "architecte".

16 Les lois provinciales sont de valeur variable par suite des limites auxquelles les associations locales sont soumises dans l'acquiescement des fonctions dont elles sont chargées pour ce qui est de la formation, l'admission et la discipline des architectes.

17 Les membres ont des points de vue variables au sujet des lois provinciales. Quelques-uns croient que l'intérêt public et l'intérêt professionnels sont protégés; d'autres pensent que la manque de restriction est contre l'intérêt public, et ils sont dans la majorité.

Normes provinciales d'admission

18 On est très fermement convaincu du besoin de lois uniformes d'admission dans tout le Canada. Ces lois sont considérées comme le principal rempart contre l'incompétence et les pratiques indignes de la profession et l'on estime que ces normes devraient être fixées au niveau des plus exigeantes existant à l'heure actuelle.

19 Des normes nationales d'admission faciliteraient le transfert et la surveillance des membres et donneraient de l'importance à la voix nationale de la profession.

20 Bien que, dans certains cas, l'admission d'architectes de l'extérieur puisse se faire sur une base de réciprocité, on estime qu'il faudrait exiger comme minimum un examen sur la pratique professionnelle et un nombre déterminé d'années de pratique au Canada. La méthode la plus satisfaisante serait d'examiner le cas de chaque candidat sur une base individuelle.

Expérience requise avant l'admission

21 La période de cléricature requise des diplômés avant leur admission à la pratique de la profession varie de un à trois ans et elle est de deux ans dans la majorité des provinces. Lorsque le programme d'études minimum proposé par L'IRAC

bus of the RAIC was used in lieu of the university course, the suggested office experience was nine years.

22 Strong opinion was heard in all provinces that one or two years' experience for the graduate before registration is insufficient and that the Associations are thus condoning the entrance of the inexperienced and incompetent to practice.

23 There is general agreement that the length of the experience period is not the significant factor in its adequacy. Of paramount importance is the quality of the experience which should be organized for positive learning. The Experience Records authorized for this purpose have proved effective in Quebec and Ontario.

24 General approval of the Ontario program for the experience period was given by architects and Councils alike. The essential elements of the Ontario scheme are (a) three years' experience after graduation; (b) keeping the authorized experience record book; (c) Registration Course of study and examinations for those who have the equivalent of graduation from a Canadian university School of Architecture. The six subjects of the course are given in three two-week courses over the three years during May-June.

Architectural Education

25 The membership believes in the fundamental and urgent need for a better fusion of the objectives of the schools of architecture with those of the professional body. Increase in professional competence must start in the schools. Methods of selection of candidates for entrance to the schools should be improved.

26 The increasing complexity of architectural practice suggests that the architect of the future may be a team in the field of building design. Diversification of courses within the university school, all proceeding from a common beginning, would effect this aim, as well as developing individual aptitudes.

27 Due in part to the preoccupation of engineering faculties with other aspects of applied science and the curtailment of studies in building engineering, Schools of Architecture should consider the need to bring back relevant engineering skills into the profession.

28 The increasing interest of architects in the field of urban planning, landscape design and related disciplines should not blind educators or practitioners to the architect's historic concern with building design as the focus of his activity and competence. Architects who wish to become expert in related disciplines may pursue this aim at graduate level.

29 The university school should play an increasing role in the various aspects of architectural research. Both the profession and the schools should define the areas of need at the post-graduate level.

est employé au lieu du cours d'université, la durée recommandée de la cléricature est de neuf ans.

22 On semble fermement convaincu dans toutes les provinces qu'un stage de un ou deux ans avant l'admission est insuffisant et qu'en s'en contentant les associations approuvent l'admission à la pratique de candidats incompetents et inexpérimentés.

23 Toutefois, on s'accorde à reconnaître que la durée n'est pas le principal élément de la suffisance de la cléricature. Ce qui importe surtout c'est la qualité de la cléricature qui devrait être organisée de façon à devenir une véritable période de formation. Les dossiers de l'expérience acquise reconnus à cette fin ont donné de bons résultats dans le Québec et l'Ontario.

24 Pour ce qui est de la cléricature, les architectes et les conseils approuvent le programme de l'Ontario. Celui-ci comprend essentiellement a) trois années d'expérience après la fin des études universitaires; b) la tenue du dossier de l'expérience acquise; c) un régime de cours d'admission et d'examen pour les candidats qui offrent l'équivalent du cours dans une école universitaire canadienne d'architecture. Les six sujets au programme sont enseignés dans trois cours de deux semaines donnés en mai et juin et répartis sur les trois années.

Formation professionnelle

25 De l'avis des membres, il est indispensable et urgent de mieux coordonner les objets des écoles d'architecture et ceux du corps professionnel. L'accroissement de la compétence professionnelle doit commencer dans les écoles. Il y aurait lieu d'améliorer les méthodes de sélection des candidats à l'admission dans les écoles.

26 A cause de la complexité toujours croissante de la pratique de l'architecture, il est probable que l'architecte de demain devra travailler comme membre d'une équipe dans le domaine de la composition architecturale. Une diversification des cours, après de premières études communes, permettra d'atteindre ce but, en même temps qu'elle permettra de développer les aptitudes particulières de chacun.

27 Les facultés de génie étant surtout préoccupées par les autres aspects de la science appliquée et étant portée à restreindre les études en génie du bâtiment, les écoles d'architecture devraient songer au besoin de réintégrer dans la profession les secteurs pertinents du génie.

28 Même si les architectes s'intéressent de plus en plus à l'urbanisme, à l'architecture paysagiste et à certaines disciplines connexes, les enseignants et les praticiens ne doivent pas oublier que le domaine traditionnel de la composition doit demeurer le point central de l'activité et de la compétence de l'architecte. Les architectes désireux de se spécialiser dans des disciplines connexes pourront le faire après la fin de leurs études régulières.

29 L'école universitaire doit accroître son rôle dans les divers aspects de la recherche architecturale. La profession et les écoles devraient préciser les domaines où s'imposent des travaux postérieurs à l'obtention du diplôme.

Fees and Fee Schedules

30 Current fee schedules based on percentages of cost do not reflect the wide variety of commissions in which the profession may properly become engaged. Fees should be related to the cost of producing the architect's work, together with a reasonable profit.

31 An inadequate fee will inevitably result in less than adequate architectural services. It was generally agreed that abandonment of a stated fee scale would place the quality of architectural services in jeopardy.

32 The investigations now being conducted in Ontario and Quebec to determine the adequacy of the fee scale in relationship to other factors of firm size, type of work, cost of operation and profit is viewed with the greatest interest by the members in other provinces. It is felt that the results should be basic to an understanding of what is a realistic method of remuneration for architects.

Comprehensive Services

33 There is strong feeling in the profession that the architect must become knowledgeable in areas closely related to the existing architectural field if he is to compete successfully with others in the area of building design. This opinion is often acknowledged reluctantly, by some who desire to restrict their operation within manageable limits, and others who question its economic feasibility.

34 It is agreed that expanded services may be provided through an enlargement of staff, or by increased use of consultants, the latter most likely for an architectural firm undertaking to extend its activity into new areas of interest. Some of the expanded services usually mentioned — feasibility studies, financial analysis, site analysis—are now being undertaken by some firms. Such firms will not find it difficult to enlarge the scope of their activity.

Future Changes in Practice

35 Architectural firms will become larger and the architects within the team will tend to greater specialization of function.

36 Small offices will experience increasing difficulty in fulfilling the complex and widening requirements of practice unless they specialize.

37 Very large projects will be served by consortia of architectural offices, and by groupings to include all the design construction and finance elements required for a "package".

38 Greater emphasis must be placed on the technological and management aspects of the project by the architectural firm.

Public Relations

39 Interviews and comments from the questionnaire indicate a belief by many members that an intensified public relations programme is the solution to our professional prob-

Honoraires et tarifs

30 Les tarifs actuels d'honoraires fondés sur un certain pourcentage du coût ne reflètent pas les nombreux genres de commissions qui peuvent légitimement revenir à la profession. Les tarifs devraient être fondés sur ce qu'il en coûte à l'architecte pour produire son oeuvre et sur un profit raisonnable.

31 Des honoraires insuffisants conduiront inévitablement à des services qui laisseront à désirer. Il est généralement reconnu que l'abandon d'un tarif établi d'honoraires représenterait un grave danger pour la qualité des services architecturaux.

32 Les architectes des autres provinces suivent avec un très grand intérêt les études qui se font actuellement en Ontario et dans le Québec pour déterminer à quel point le tarif actuel est suffisant en rapport avec certains facteurs comme l'importance de la firme, le genre de travaux, le coût d'exploitation et le profit. On estime que les résultats de ces études devraient permettre de s'entendre sur une méthode objective de rémunération des architectes.

Services complets

33 On a fortement l'impression, au sein de la profession, que l'architecte doit augmenter ses connaissances dans les domaines étroitement rattachés à l'architecture s'il entend soutenir la concurrence dans le domaine de la composition architecturale. Dans bien des cas, cette opinion est exposée non sans regret par certains architectes qui désireraient maintenir leur activité dans des limites raisonnables et par d'autres qui se demandent si cet agrandissement du champ d'activité sera économiquement possible.

34 Il est généralement admis que ces nouveaux services pourront être assurés soit par une augmentation du personnel, soit par le recours à des experts-conseils. Cette dernière formule semble la plus probable dans le cas des bureaux cherchant à étendre leur activité à de nouveaux domaines. Certains des nouveaux services mentionnés — études de rentabilité, analyses financières, études des emplacements — sont déjà rendus par certains bureaux d'architectes. Pour ces derniers, il ne sera pas difficile d'élargir leur champ d'activité.

Evolution de la profession

35 Les bureaux d'architectes s'agrandiront et les membres de l'équipe tendront à se spécialiser toujours davantage.

36 Les petits bureaux auront de plus en plus de difficulté à répondre aux besoins toujours plus complexes et toujours grandissants, à moins de se spécialiser.

37 Les très grandes entreprises seront réalisées par des consortiums de bureaux d'architectes et par des groupements se chargeant des plans, de la construction, des dispositions financières et des autres éléments compris dans l'offre globale.

38 Les firmes d'architectes devraient accorder plus d'attention aux aspects techniques et administratifs des projets.

Relations publiques

39 D'après les entretiens et les réponses au questionnaire, une forte partie des membres ont tout bonnement l'impression qu'un programme de relations publiques mettrait fin à tous les

lems. This over-simplified appraisal is not generally held by many who have taken an active part in public relations work.

40 A public relations program must be two-pronged; one directed to the profession and the other to the public. The program must first develop within the profession a greater awareness of the importance of the individual member's performance, and move outward to public information and public service.

41 The public relations program must be at all times under the control and guidance of the appropriate Association committee or official. No policy or implementation of program should be carried out by a non-architectural person without the authorization of the professional representative.

Erosion of Areas of Practice

42 The inroads of others into the field of building design are a source of deep concern, as indicated in the interviews and questionnaires. These competitors include engineers, contractors, packagers, prefabricators, so-called "designers", and in some cases public authorities.

43 Believing in the superiority of the architectural profession to perform in the field of building design, many members have pressed for restriction of the right to prepare the building documents to qualified architects. At the other end of the scale it is suggested that the method of winning back these areas is by increased competence.

Official Architects

44 Those employed by government in the architectural field, where not presently registered with a provincial architectural Association, constitute a need for immediate enquiry. It should be the aim of the profession to bring such persons into the membership and provide them with the fullest support of the Institute.

45 So long as membership in an Association is felt by some to be of advantage only to the self-employed architect — instead of a means of supporting the Association in its primary functions of regulation, discipline, maintaining standards, and the protection of the public — little will be accomplished toward enlisting all such persons in a professional society.

46 Assistance should be offered to Civil Service Commissions in developing standards of competence within the respective departments of government employing architects. It is of prime importance that membership in an architectural Association should be recognized as the minimum standard for use of the designation of "architect".

Direction of Building Industry Development

47 The building industry will accelerate its mode of operation by increasing off-site operations. Standardization and prefabrication will grow apace to promote economy and speed

problèmes de la profession. En général, cette solution semble trop simplifiée à ceux qui ont l'expérience des relations publiques.

40 Un programme de relations publiques devrait être organisé sur deux plans, celui de la profession et celui du grand public. Il devrait commencer par convaincre les membres de la profession de l'importance de la conduite de chacun d'entre eux puis s'orienter vers le public pour l'informer et le servir.

41 Un programme de relations publiques doit en tout temps être sous la direction et le contrôle du comité ou du représentant approprié de l'association. Il faut qu'aucune personne en dehors de la profession ne puisse établir ou mettre en application un programme sans l'autorisation du représentant de la profession.

Invasion des domaines de la pratique

42 Les entretiens et les réponses au questionnaire ont révélé beaucoup d'inquiétude au sujet des empiétements dans le domaine du bâtiment. Les principaux concurrents sont les ingénieurs, les entrepreneurs, les maisons offrant des services globaux, les préfabricants, les soi-disant "dessinateurs" et, dans certains cas, les pouvoirs publics.

43 Plusieurs membres, convaincus de la supériorité des architectes dans le domaine de la composition architecturale, ont demandé que seuls des architectes qualifiés aient le droit de préparer les documents relatifs aux bâtiments. A l'autre extrémité se trouvent ceux pour qui le seul moyen de reprendre le terrain perdu est d'augmenter la compétence.

Architectes officiels

44 Une enquête immédiate s'impose au sujet des personnes employées par les pouvoirs publics dans le domaine de l'architecture et qui ne sont pas membres d'associations provinciales. La profession doit viser à faire de ces personnes des membres et à leur assurer l'entier appui de l'Institut.

45 Tant qu'on verra dans l'adhésion à une association un moyen d'aider seulement les architectes travaillant à leur propre compte, au lieu d'un moyen d'aider cette association dans l'accomplissement de ses tâches fondamentales, qui sont la réglementation, la discipline, le maintien des normes et la protection du public, il y aura peu d'espoir d'amener toutes ces personnes à faire partie d'une société professionnelle.

46 Il y aurait lieu d'aider les commissions du service civil à établir des normes de compétence dans les divers services gouvernementaux qui emploient des architectes. Il est de toute première importance que la qualité de membre d'une association d'architecture soit reconnue que le minimum à exiger pour la désignation d'une personne comme "architecte".

Orientation de l'évolution de l'industrie du bâtiment

47 L'industrie du bâtiment va accélérer la construction en augmentant ses travaux en dehors des chantiers. La standardisation et la préfabrication vont se développer afin

of construction. The architectural "designer" is in danger of becoming only a manipulator of parts in a jig-saw puzzle.

48 The profession must combine with its other skills a better knowledge of the processes and development of industrialization. Lack of knowledge and interest in this area will deprive the architect of further influence in the field of building construction.

49 Increasing industrialization and prefabrication of larger elements of building increase the competitive ability of those acting as building designers outside the profession of architecture. The profession cannot remain aloof from the drive of technology and industrialization.

Relationship to Consultants

50 The practice of retaining consultants, particularly in the field of structural, mechanical, and electrical engineering, continues to grow. In many building projects the proportion of the work exclusively the concern of the architect is now less than 50%. The profession is concerned with the diminishing architectural areas of projects. Recognition of the architect's co-ordinating function must be maintained.

51 In some parts of Canada the comment is made of the difficulty of obtaining competent and timely consulting service. Out-of-town service is cited as frequently unsatisfactory in the time lag of both design and inspection.

52 The co-ordination of the work of consultants, which is the architect's role, is said to be frequently meagre or entirely lacking, being reflected in conflict within the design documents and on the site. It is remarked by some within and without the profession that competence in this area of co-ordination can be achieved only by an adequate knowledge of these related fields.

53 A closer liaison and understanding should be sought with members of the engineering profession who are engaged in consulting services in building engineering design. They are in effect members of the architectural team.

Partial Services

54 While the profession believes that it is not in the best interest of a project to have architectural services fragmented and curtailed, it is recognized that there are occasions where the nature of the professional work required is less than the usual complete service.

55 The term "partial service" is lacking in clarity of definition and requires study by the RAIC and the provincial Associations to indicate the areas of acceptable activity under this heading and a statement of professional standards to be observed for each.

d'assurer une construction plus rapide et plus économique. Le "dessinateur" en architecture est menacé d'être réduit au rang de manipulateur de pièces d'un grand casse-tête chinois.

48 La profession doit ajouter à ses autres spécialisations une meilleure connaissance des procédés et des progrès de l'industrialisation. Une insuffisance de connaissances et d'intérêt dans ce domaine empêchera l'architecte d'accroître son influence dans le domaine de la construction de bâtiments.

49 La production industrielle et la préfabrication des grands éléments de bâtiments accroissent la capacité de concurrence des dessinateurs en dehors de la profession d'architecte. La profession ne peut pas rester étrangère au courant vers les progrès techniques et industriels.

Rapports avec les experts-conseils

50 La pratique qui consiste à retenir les services d'experts-conseils, surtout dans les domaines de la structure et du génie mécanique et électrique, continue de se généraliser. Dans plusieurs entreprises de construction, le travail qui est de la compétence exclusive de l'architecte n'atteint même pas la moitié de l'ensemble. Les membres de la profession s'inquiètent de cette diminution de la part revenant à l'architecture. Il est donc nécessaire de faire reconnaître le rôle de coordonnateur de l'architecte.

51 Dans certaines parties du Canada, on se plaint de la difficulté d'obtenir en temps opportun les services d'experts-conseils compétents. On dit que souvent, aussi bien pour les travaux de composition que ceux d'inspection, il n'est pas satisfaisant de s'adresser à des spécialistes d'autres localités à cause des retards inévitables.

52 On signale que la coordination des travaux des experts-conseils, qui est le rôle de l'architecte, laisse souvent à désirer ou même fait complètement défaut, ce qui aboutit à des incompatibilités dans les documents ou dans les travaux sur le chantier. Des membres de la profession et d'autres personnes soutiennent que pour mieux s'acquitter de son rôle de coordonnateur l'architecte devra posséder des connaissances dans les domaines connexes en cause.

53 Il faudrait s'efforcer d'établir de meilleures relations et de meilleures ententes avec les ingénieurs professionnels remplissant les fonctions d'experts-conseils pour l'établissement des plans de bâtiments. Ces spécialistes sont effectivement membre de l'équipe architecturale.

Services partiels

54 Tout en estimant qu'il n'est pas favorable à la bonne réalisation d'un projet de fragmenter ou de réduire les services architecturaux, la profession reconnaît que dans certains cas les services professionnels requis ne comprennent pas tous les services habituels.

55 L'expression "services partiels" n'est pas assez clairement définie. L'Institut royal et les associations provinciales devraient en faire une étude afin de préciser les services qui peuvent convenablement être rendus sous ce chef puis poser des normes que tous les membres de la profession devraient observer.

56 The form of partial service that is deprecated generally by the profession is that in which professional architectural services are curtailed, with a degree of fee reduction that inevitably leads to sub-standard service. Such individuals should be disciplined by the Association for incompetent performance.

The Role of the RAIC

57 While believing in the desirability of strengthening and increasing the usefulness of the RAIC, it should be done with no weakening of the provincial Associations in meeting the profession's problems at the local level.

58 The profession, through the RAIC and the provincial Associations, should play a more active role in architectural education, first during the university period and later in pre-registration preparation, in promoting a greater awareness of the total professional responsibilities of the architect.

The membership believes that the RAIC should:

59 act as a co-ordinating agency between provincial Associations to overcome the present lack of communication; the various Associations are at present too remote from one another and the RAIC from all;

60 speak frequently and effectively for the profession in fields relating to federal, national, and international architectural matters;

61 co-ordinate the study, and, where necessary, the redrafting of provincial Architects Acts to achieve greater benefit and protection to the public;

62 commence at once to work toward the raising and unifying of registration standards across Canada;

63 promote a program of continuing professional education for members, with special reference to assistance to the smaller Associations;

64 develop and disseminate a Special Projects program of member education, financed by supplementary dues from Canadian architectural firms (similar to that of the AIA), for presentation at seminars across the country;

65 give greater educational content to the RAIC *Journal* and to the Annual Assemblies;

66 assist architects in the federal Public Works and similar provincial departments, through the several Civil Service Commissions, to establish levels of competence, and the holding of membership in an architectural Association as a prerequisite to the use of the name "architect";

67 develop a Handbook of Architectural Practice for Canadian use, including all standard forms for project administration.

56 Les "services partiels" auxquels la profession s'en prend en général sont ces services restreints pour lesquels les honoraires sont réduits au point que la qualité en souffre inévitablement. Les architectes qui acceptent d'agir de la sorte devraient être l'objet de mesures disciplinaires de la part de leur association pour incompétence dans leur conduite.

Rôle de l'IRAC

57 Tout en reconnaissant l'à-propos de renforcer l'Institut royal et d'accroître son utilité, on estime qu'il faudrait arriver à ces fins sans réduire la capacité des associations provinciales de faire face aux problèmes de la profession sur le plan local.

58 La profession devrait, par l'entremise de l'Institut royal et des associations provinciales, jouer un plus grand rôle dans la formation des architectes, d'abord au plan universitaire et ensuite durant la période de préparation antérieure à l'admission, et travailler à faire mieux comprendre à l'architecte toutes ses responsabilités professionnelles.

Les membres estiment que l'IRAC devrait:

59 agir comme organisme de coordination entre les associations provinciales de façon à remédier au manque actuel de communications; à l'heure actuelle, les associations provinciales sont trop isolées les unes des autres et l'Institut royal est trop isolé de toutes ces associations;

60 se faire plus souvent et de façon plus efficace le porte-parole de la profession sur les plan fédéral, national et international;

61 coordonner l'étude et, au besoin, la révision des lois provinciales sur l'architecture de façon à assurer à la population plus d'avantages et de protection;

62 commencer immédiatement un travail en vue du relèvement et de l'uniformisation des normes d'admission d'un littoral à l'aturo du Canada;

63 travailler à l'établissement d'un programme tendant à prolonger la formation professionnelle des membres, en songeant tout particulièrement à accorder de l'aide aux petites associations;

64 établir et distribuer un programme de projets spéciaux de formation des membres devant être financé par des cotisations supplémentaires de la part des firmes canadiennes d'architectes (semblable à celui de l'AAA) et le faire étudier dans des séminaires dans tout le Canada;

65 accentuer le rôle éducatif du Journal et des assemblées annuelles;

66 aider, par l'entremise des commissions du service civil, les architectes au service du ministère fédéral des Travaux publics et des ministères provinciaux correspondants, à établir des normes de compétence et à faire reconnaître la qualité de membre d'une association d'architectes comme condition indispensable à l'emploi du titre d' "architecte";

67 préparer un manuel de la pratique de l'architecture au Canada, comprenant toutes les formules types nécessaires pour l'administration des travaux;

68 conduct, in conjunction with the provincial Associations, studies into professional problems such as the fee structure, the code of professional conduct, and standards of competent performance.

General

69 Offices in many areas of Canada indicated a need for capable assistants, at present unavailable. It was suggested that more graduates per year from Canadian Schools of Architecture are required.

70 The *Journal* is recognized generally as the principal medium presently available for uniting a widely scattered profession. Its enlarged usefulness in reporting professional problems and publishing scholarly and technical papers was urged.

71 The Division of Building Research, NRC, was commended for its educational role in recent seminars. The opinion was expressed that members should make more extensive use of its facilities for technical information.

72 The importance of a body of well-trained architectural assistants at the technician level below that of the graduate architect was emphasized. Such a group could be given recognition by the profession by a form of affiliate status with the Provincial Associations.

68 faire, avec le concours des associations provinciales, des études des problèmes de la profession, comme la structure des honoraires, le code de conduite professionnelle et les normes de services compétents.

Généralités

69 Dans plusieurs régions du Canada, les bureaux d'architectes signalent une insuffisance d'aides compétents. Il faudrait, dit-on, que les écoles d'architecture produisent chaque année un plus grand nombre de diplômés.

70 Le Journal de l'Institut est en général reconnu comme le principal trait d'union actuel entre les membres très dispersés de la profession. Certains architectes ont demandé qu'on en accroisse l'utilité en y publiant des rapports sur les problèmes professionnels ainsi que des documents savants et techniques.

71 On a loué la Division de la recherche en bâtiment du Conseil national de recherches de son rôle éducatif dans certains séminaires récents. On estime que les membres devraient profiter davantage de ses services de renseignements techniques.

72 On a signalé l'importance d'un groupe d'aides-architectes bien formés à un niveau technique au-dessous de celui de l'architecte diplômé. Un tel groupe pourrait être officiellement reconnu par la profession au moyen d'un statut d'affilié aux associations provinciales.



Mineral Aggregate Roof Surfacing

by D. C. Tibbetts and M. C. Baker

UDC 69.024.158

Roofs are often more exposed to climatic conditions than the other exterior elements of a building. With few exceptions, roof membranes are not protected by adjoining buildings and are generally fully exposed to wind, precipitation, temperature variations and sunlight. The final waterproof coating of a built-up roofing membrane is usually a comparatively thin layer of bitumen. To give it adequate waterproofing and wearing qualities some additional surface protection is necessary. A possible exception is clay-stabilized asphalt emulsion, but the weathering qualities of even this material are much improved by a surface treatment in the form of an applied reflective coating.

Suitable surfacing will protect bitumen from sunlight and prevent excessive surface temperatures. Paint treatments, aluminum foil, tile or concrete surfacing, and mineral aggregate have been used for this purpose. Paint treatments can provide good protection and reflection of solar radiation, but have a definite, usually short, life. Aluminum foil can give excellent protection, and has been successfully used as a surfacing for some proprietary felt roofings in other countries. Tile and concrete are often used when a traffic surface is required and give excellent protection to the membrane when proper allowance is made for structural and thermal movement and for drainage. Asphalt shingles and prepared roofing have a protective layer of fine mineral material, which is factory applied. Low pitched and flat roofs in Canada with bituminous built-up roof coverings are usually protected by a

layer of coarse mineral aggregate type of protective roof surfacing, commonly referred to as roofing gravel.

Function

Mineral aggregate surfacing is applied to built-up roofing to protect the top coating of bitumen from direct sunlight and to reflect solar radiation. It reduces the maximum surface temperature, the seasonal range of temperatures and the short-time fluctuations at the black surface. It thus inhibits weathering of the bitumen and bituminous felts of the roofing membrane.

A heavy layer of mineral aggregate will reduce fire hazard from flying brands and provide ballast for the membrane against wind uplift. It offers limited protection against abrasion from wind and weather, and helps to prevent flow of bitumen on slopes in hot weather. For industrial areas it gives some protection against the airborne waste products from industrial processes. Aggregate also protects the membrane against casual foot traffic. Some of these functions will be discussed in more detail.

Sunlight and Surface Temperatures

Many roofs are exposed to the sun's rays from sunrise to sunset and much of the sunlight strikes the roof surfaces at a steep angle. It was shown in CBD 47 that a dark roof with an unobstructed view of the sky can attain a surface temperature as high as 190°F in any part of Canada. Reflected radiation from adjacent surfaces can raise the surface temperature

above that attained by direct radiation. The maximum surface temperature of a dark horizontal roof situated close to the south wall of a very high building can be as high as 230°F near noon in midsummer.

Colour has a considerable effect on the fraction of solar irradiation absorbed by a surface. White absorbs about 40 per cent; dark green, brown or black surfaces absorb about 90 per cent. The maximum temperature of a white roof surface would be about 130°F, as compared with 190°F for a black roof, a difference of 60 F deg.

The disintegration of bituminous material under the action of sunlight is generally considered to be a type of photo-oxidation. Water-soluble and volatile products are formed during chemical changes brought about by the ultraviolet rays of the sun in the presence of oxygen. The actual chemical change may be an extremely complex reaction related to the nature and source of the bitumen. As it takes place more readily at higher temperatures, any treatment that will keep temperatures low is desirable.

Temperature Variations

The high surface temperatures on roofing membranes in summer can accelerate the degradation of the bitumen, but the range of temperatures from summer to winter and from day to night is also important. These temperature variations can contribute to the breakdown of the bitumens, and may also cause large thermal movements of the total membrane. CBD 47 indicated that the minimum surface temperature of the black surface of an insulated roof may be 10 deg colder than the ambient air temperature. The limits of surface temperatures on black insulated roofs in some areas of Canada can be as wide as -50 and 230°F.

The calculated values for outer surface temperatures of buildings have been corroborated by measurements made on buildings in Ottawa and elsewhere. As an example, temperature measurements for a one-month period on both black and white roof surfaces in Halifax indicated the following temperature ranges:

1. Air temperatures 46 to 80°F for a difference of 34 F deg.
2. White surface temperatures 42 to 124°F for a difference of 82 F deg.
3. Black surface temperatures 42 to 145°F for a difference of 103 F deg.

It might be noted that the month of July chosen for making the measurements was the coldest for Halifax in 74 years.

As expected, the black surface was warmer than the white at maximum daytime temperatures, and both were warmer than the air temperature. At night the black surface was colder than the white at minimum temperatures, and both were colder than the air temperature. It is interesting to note the 120 F deg range in air temperature in Halifax, from a maximum of 99°F in July 1912 to a minimum of -21°F in February 1922. This 10-year period is shorter than that for which built-up roofing membranes are expected to perform satisfactorily. Such a range of air temperatures over the expected life of a dark roof can produce a membrane surface temperature range of over 200°F, with an expected temperature of 25 to 60 F deg less for a white roof.

In addition to the seasonal variation described above, the short-time variations in temperature during both winter and summer may frequently be as much as 100 F deg in some parts of Canada, unless aggregate or other surfacing is used to reduce the fluctuations. Aggregate surfacing will reduce these fluctuations.

Fire Hazard

The resistances of roof structures and materials to internal fires are generally well known, as judged and determined by standard fire tests. It is necessary that the roof covering should not contribute fuel to such internal fires. As the structural roof will normally provide resistance to internal fires, the main function of the roof covering in relation to fire is to reduce the risk of spread from neighbouring buildings. It is also important that the covering should not spread flame rapidly or produce flying brands to endanger adjoining roofs. Control in Canada has been effected by using roofs that have proved satisfactory in use.

Test methods for the fire resistance of roof covering materials (UL.790) were prepared in the U.S. in 1958 by the Underwriters' Laboratories Inc., who tested, classified and listed a number of types of built-up roofing. The resistance of bituminous materials is generally poor, but a built-up roof with aggregate surface would be expected to receive Class A or Class B Underwriters' classification, designated by some building codes as fire-retardant roofs. Class A refers to roof coverings effective against severe fire exposures. Under such exposure, roof coverings of this class are not readily flammable and do not spread fire, afford a fairly high degree of fire protection to the deck, do not slip from position, possess no flying brand hazard, and do not require frequent repairs to maintain their fire resistive properties. Class B roofings are effective against moderate fire ex-

posures, and Class C roofings afford a slight degree of fire protection.

Wind Effects

Wind pressures on buildings were discussed in CBD 34, and it was noted that the roof is usually the critical area in the wind design of low buildings. Particular attention must be paid to anchorage details because of the suction condition that may prevail over most if not all of the roof. In addition, high local suctions can develop with certain shapes of buildings or roofs, and with certain wind angles. Local suctions are generally most serious for a wind at an angle of 45 deg to the side of the building. Model studies have indicated small areas of local uplift from two to five times the normal uplift, at or near corners projecting into the wind.

Some buildings may require parapets to reduce these uplift forces on the roof, and attention to flashing details is obviously always of great importance if roof blow-offs are to be avoided. Aggregate surfacing will provide additional weight to resist the uplift forces. The aggregate also protects the membrane from the abrasive effect of particles carried by the wind, either as fine grit or as larger particles from erosion or poor embedment of aggregate on adjacent roofs.

Corrosive Products

Roof membranes can be damaged by airborne waste products from industrial and domestic furnaces and industrial process equipment. Heavy dews are common on roofs, and pollutants deposited on the roof surfaces may form acids that can cause considerable damage to metal flashings and exposed organic felts. This process may continue until rain washes the wastes into the roof drains. Mineral aggregate surfacing provides some protection for the membrane.

Traffic

Where regular foot or other traffic may occur over roofs, adequate provision must be made for it. This can be accomplished by the use of wood, concrete or tile trafficways, or complete traffic surfacing where warranted. Mineral aggregate surfacing does give some protection for the membrane against casual foot traffic during and after construction of the building. It cannot be expected to give protection against workmen installing mechanical or other equipment over the roofing.

Properties Required

To perform satisfactorily an aggregate must be clean and dry, of sufficient size and weight to embed properly in the flood coat of bitumen and resist blow-off by high winds or wash-off by heavy rain. Aggregate must be so graded as to permit proper nesting and filling of voids between individual particles and to provide a complete and continuous covering of the bituminous membrane. Complete coverage must be maintained over all parts of the roof if satisfactory service is to be expected. An aggregate should be hard enough to resist abrasion and frost action, but not so brittle that it encourages fracture and disintegration.

The usual aggregates are crushed stone and gravel, or crushed air-cooled blast furnace slag. Slag aggregate is opaque and angular. Its alkaline surfaces have a greater affinity for bituminous material than for water, with resultant good adherence of the bitumens to the aggregate.

Aggregate should be uniformly graded in particle size, and a sieve analysis requirement is included in ASTM specification D1863-63, as is indicated in Table I. Other physical property requirements of this specification are shown in Table II. Methods of test to determine these physical properties are also specified by ASTM. The amount of moisture permitted is important in relation to the embedment of the bitumen. Weight is a factor in relation to roof load, and a minimum is specified to ensure that light gravel, which will easily blow off, is not used. Fine aggregate fractions (less than 200 mesh as indicated by sieve analysis) are undesirable even at 0.5 per cent, but 0.25 per cent is normally acceptable if it does not adhere to the surface of the aggregate. Hardness is of importance if the aggregate is susceptible to dusting.

TABLE I
SIEVE ANALYSIS REQUIREMENTS

Passing Sieve (Inch)	Retained on Sieve (Inch)	Percentage of Sample
—	1	—
1	3/4	0
3/4	3/8	0 to 10
3/8	3/8	20 to 60
3/8	1/4	25 to 70
1/4	3/8	0 to 15
3/8	—	0 to 5

Clay, loam, sand, organic matter, chemicals or other foreign substances, and frozen material should not be permitted in roofing aggregate. The practice of using what is available rather than what is suitable should be discontinued. Requirements in specifications should

be detailed, and such general references as "aggregate shall be $\frac{1}{4}$ to $\frac{5}{8}$ inch in size, clean and free from dust and foreign matter" should be avoided. Various interpretations can be made from such references.

TABLE II
PHYSICAL PROPERTY REQUIREMENTS

Moisture, maximum, per cent:	
Crushed stone and gravel	0.5
Crushed roofing slag	5.0
Unit Weight (loose), min lb/cu ft	60.0
Dust, maximum, per cent	0.5
Hardness, maximum, percentage passing a No. 6 (3.36 mm) sieve	20.0

It is generally agreed that aggregate should be opaque to ultraviolet light, although no standards-making body has set any limits of translucency, and there is little or no information to indicate the significance of ultraviolet light translucency. Dolomite and marble chips, which make attractive white aggregate for roofs, are claimed by some sources to be poor in this regard. It is thought that small individual pieces can be translucent, permitting light to penetrate to the bitumen and accelerate the weathering process. Oxidation of the bituminous coating in which aggregate is embedded causes hardening and cracking, and this weakens the bond between coating and aggregate, allowing the aggregate to be more easily blown or washed away. White aggregate is desirable in relation to surface temperatures, and a good compromise for its use might be a double surfacing procedure. The first surfacing could use harder and darker aggregate, and the final surfacing could be a softer and light coloured or white aggregate selected principally for its colour.

Application

As the finish layer of bitumen is the first barrier against moisture penetration of the roofing membrane it must be applied exceptionally carefully. The bitumen must be continuous and give complete coverage of the felts, with no laps penetrating the coating. This is its principal function and embedment of the aggregate is secondary. The aggregate is applied to protect and maintain the top coating and is a separate function from the waterproofing.

Job organization should include adequate protection of the aggregate against moisture and contaminants until it is ready for use on

the roof. The recommended method is to move dry aggregate from the ground storage to the roof for application at the rate at which it is being used, with no stockpiling on the roof. If piled on the roof at all, it should be in small piles or rows, and should never be left unused overnight or over a weekend. When saturated with water or snow it is useless for its intended purpose until properly dry; if it lies over roofing felts the moisture may penetrate the felts and ruin the membrane. There is less chance of skipped areas, which are fairly common with some methods of placing, if aggregate surfacing is applied in two separate operations. This is particularly true if loose gravel is swept back after the first application. It may even be convenient to withhold the second surfacing until other trades have finished working over the roof, when minor damage can be repaired before the final application.

The roof must be completely dry so that there is no danger of trapping moisture between the two applications. A heavy layer of properly graded aggregate is desirable; it can interlock so that it does not depend entirely upon adhesion to stay in place. Its temperature should not be less than 40°F during application, and in cold weather the need for heating it immediately before use should be considered. Emphasis should be given to embedment details at roof edges and corners where wind effects are usually most severe.

Conclusion

It should be noted that there are some disadvantages to the use of mineral aggregate surfacing. Apart from the added dead weight, which must be carried by the deck and structure, the principal difficulty relates to inspection and maintenance. The aggregate surfacing hides defects and breaks in the membrane and, of course, must be removed to make repairs. For most bituminous roofs a surfacing is essential if reasonable service is to be expected, and mineral aggregate, properly specified and applied, is economical and effective. A thin layer of small size aggregate will not give as good protection as a heavy layer of graded material, although the coverage may appear to be the same. By protecting the bitumens from the ultraviolet rays of the sun, abrasion from wind and rain, and casual light foot traffic, such surfacing can substantially extend the life of bituminous roofs.

This is one of a series of publications being produced by the Division of Building Research of the National Research Council. It may be reproduced without amendment if credit acknowledgement is made. Vinyl Binders (price \$2) and additional back issues of the Digest are available on request. The Division has issued many publications describing the work carried out in the several fields of research for which it is responsible. A list of these publications and additional copies of this Building Digest can be obtained by writing to the Publications Section, Division of Building Research, National Research Council, Ottawa, Canada.

How to Assess a Survey

by P. M. Keenleyside, MRAIC

Mr Keenleyside, of Toronto, a member of the Committee on the Profession accompanied Prof W. G. Raymore on the field survey from Ontario west, and assisted in the editing of the tape recordings and analysis of the questionnaires. The magnitude of the task undertaken by Prof Raymore, Mr Keenleyside and Prof D. H. Lee of preparing and conducting the Survey is well explained in the article that follows.

Several architects have asked us to explain the methods used in compiling and assessing the opinions expressed and the statistics presented on individual questionnaires and at the meetings with architects, contractors and owners across Canada.

The task of assessing 1126 questionnaires and the recordings of some 50 meetings proved to be much more formidable than was originally anticipated, due principally to the sheer quantity of material received. Much of it had to be done by an architect to assure that the comments from members were assessed in context with the variety of professional problems discussed.

Members were advised that the surveying architects guaranteed not to divulge the identity of any individual who cared to comment or write to us on any subject. We have strictly observed this promise. The very extensive tabulation of written and recorded comment has been compiled without the names of any of the contributors.

Recorded comments sometimes indicate the province or city of origin. The only reason for going this far was to pin-point locality for anyone who chose to give attention to the problem at a later date.

Very frank and open discussions took place. We are convinced that we obtained information by this method that could not have been obtained in any other way. The guarantee to delete the identity of the individual, however, posed a problem to the interviewing architects — it meant that the evaluation to a very large extent had to be carried out by the same architects.

We assessed the material in the following fashion:

The tape recordings of meetings were replayed by the interviewers and the main thoughts noted and transcribed either in written form or by stopping the tape to transcribe to dictaphone discs for typing. Each meeting lasted anywhere from 2 hours to 5 hours. There were 50 meetings. It is readily calculated that some 175 hours or more of replaying time was necessary. However, some of the tapes were replayed twice to permit the assessor to recapture the full spirit of the meeting and the context of the opinions expressed. This is not the sort of occupation that can be carried out for many hours at a time. It is probably fair to say that some 250 hours of time spread over a 6-month period was taken up in replaying and compiling notations and considerations of the meetings.

Fortunately there was a certain logic to the taping sessions. Before leaving Toronto on the tour a series of topics for discussion with architects and contractors were produced. Most of the meetings dealt with 5 or 6 of these topics — selection of topics was for the most part, by local option. As a result, the tapes from various centres cover specific subjects. The advance organization of a range of topics was of great help in compiling the opinions expressed.

It must be noted here that it was not the intention of the Survey on the Profession to enquire into architectural education. However, many sessions ultimately converged on this subject. Some tapes start on education and go on for most of their length covering university training, post-graduate training and continuing education for members. As a result, the Summary of Findings has included information on this topic gleaned from members. We considered that we could not ignore their comments despite the original terms of reference of the Committee.

The meat of the conversations was extracted and compiled under various subject headings, e.g., RAIC activities, Provincial Architects Acts, method of obtaining greater competence, partial services, comprehensive services, public relations, etc.

We believe the Summary of the tapes is an accurate objective reporting of the opinions expressed therein.

Individual Questionnaires

Assessing and recording information from individual questionnaires is done in these steps. You will recall that the questionnaire covered three general areas of fact and opinion:

"First, — (a) personal information and occupation — employed private practice, etc.; (b) Statistics of office size and organization;

"Second, — You were asked a number of questions that could be answered—YES, NO, NO OPINION or left blank, or if you chose to do so, you could qualify the yes-no answer.

"Thirdly, — Space was left for comment under each subject

heading. If the space was not sufficient you were advised that the committee would welcome letters or additional comments. As a result, a great many comments and letters were received. Comments from questionnaires alone involve well over a hundred legal-size pages."

It soon became apparent that the easiest way to record and tabulate information and comment was to handle each questionnaire three times.

The questionnaires dribbled back in the mail to 50 Park Road over a protracted period. As they were received they were sorted according to province and each was given a number, necessary to make sure that the recording of each questionnaire was done only once. Without the numbered sequence we would have been lost in compiling information. It requires months to cope with 1126 questionnaires handling each 3 times.

The questionnaires were analyzed province by province.

The reason for doing this was to ensure that any local or regional problems would be uncovered and recorded with the correct emphasis. As things turned out there are few problems that can be considered regional. Professional ailments and attributes are very democratically distributed across the country. However, if we had not sorted and recorded province by province, the above opinion could not be expressed with any degree of authority.

The first part of the questionnaire dealing with personal and office statistics was recorded and analyzed by an architect.

The size of the partnership, number of architectural associates, engineering partners, staff numbers, size of community served and volume of work were recorded. Each partnership was recorded in this fashion *once* only.

It was found that frequently only one member of a firm answered the questionnaire for all members of that firm. Relating the statistics to the individual occupation gave the total number of architects represented by the questionnaires received. The 1126 questionnaires in fact represent 1429 architects or 58.9% of the membership.

The second handling of questionnaires was done by the secretary. The Yes, No, No Opinion, or an answer qualified by a comment were recorded according to the tick-off of the respondents, and totalled.

The third handling of questionnaires was done mainly by architects with the assistance of the secretary in order to record the comments appended by members under the question posed.

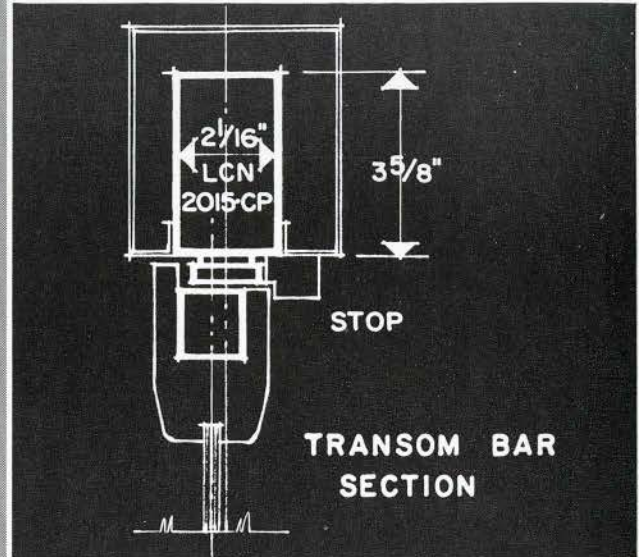
There is a limit to the number of questionnaires that can be handled at one sitting, particularly when recording comment. The comments must be checked for context to the whole questionnaire. 75 questionnaires require about three hours' time.

Many members made no comments and as time went on, rightly or wrongly, we began to bless them — silence can be golden. There were many whose comments were bright, entertaining and very informative and did much to relieve a rather tedious undertaking.

The comments so compiled would add up to at least 300 legal-size pages. They are at this time unpublishable; to do so would place them out of context with the whole report and would not reflect the comments of the tapings with architect, contractors and owner.

The material thus far assembled is being prepared in report form to be followed by specific recommendations by the Committee on the Profession for the consideration of the Executive, Council and Members.

Entrance to The Horizon Room.
Winnipeg International Airport.
Green Blankstein Russell Associates: Architects.



CONSTRUCTION DETAILS

for LCN Closer Concealed in Transom Bar Shown on Opposite Page

The LCN Series 2000-CP Closer's Main Points:

1. Efficient control of door using full rack and pinion construction.
2. Mechanism entirely concealed; arm disappears into door stop on closing.
3. Adjustable hydraulic back-check to prevent the door's being violently thrown open.
4. General closing speed and latching speed are separately adjustable.
5. The spring is also adjustable.
6. All adjustments are easily made without removing any part.

Complete Catalogue on Request—No obligation
LCN CLOSERS OF CANADA, LTD.,
P. O. BOX 100, PORT CREDIT, ONTARIO.

AIA/RAIC FILE NO. 27-B



Horizon Room



MODERN DOOR CONTROL BY **LCN**. CLOSERS CONCEALED IN TRANSOM BAR

LCN CLOSERS OF CANADA, LTD., PORT CREDIT, ONTARIO

Ordinary plumbing fixture trim sells at an ordinary price, does an ordinary job. Extraordinary plumbing fixture trim costs more, does an extraordinary job and features a 5 year warranty. Prestige trim from American-Standard is extraordinary.

For some jobs, ordinary trim is not good enough. If you believe a good design is the sum of all its parts, then an extraordinary building needs extraordinary trim. What's important is what makes the difference. In the Prestige line it's the Super Aquaseal valve assembly for one thing. You can fit it with any handle style in the line without changing your specification. It simplifies installations in commercial buildings, schools and hospitals, where many faucets are needed.



Then there's the weight of Prestige. It's extraordinarily heavy because it contains more brass. The fittings are simply designed in clean contemporary lines that won't become outdated. Functionally, Prestige is especially outstanding. It offers fingertip control and an end to dripping through an exclusive internal cartridge called Super Aquaseal.

Super Aquaseal contains no washers to wear out and it moves up and down to control the flow of water which also eliminates

grinding. This so minimizes wear and the chance of breakdown, that **we feature a 5 Year Warranty** with Prestige fittings.

Of course, there are other things, too, like push-pull fittings, single lever faucets, self-closing metering faucets, and a wide range of handle and spout options, all individually hand-crafted and inspected.

So don't specify ordinary trim. For a solid investment, specify

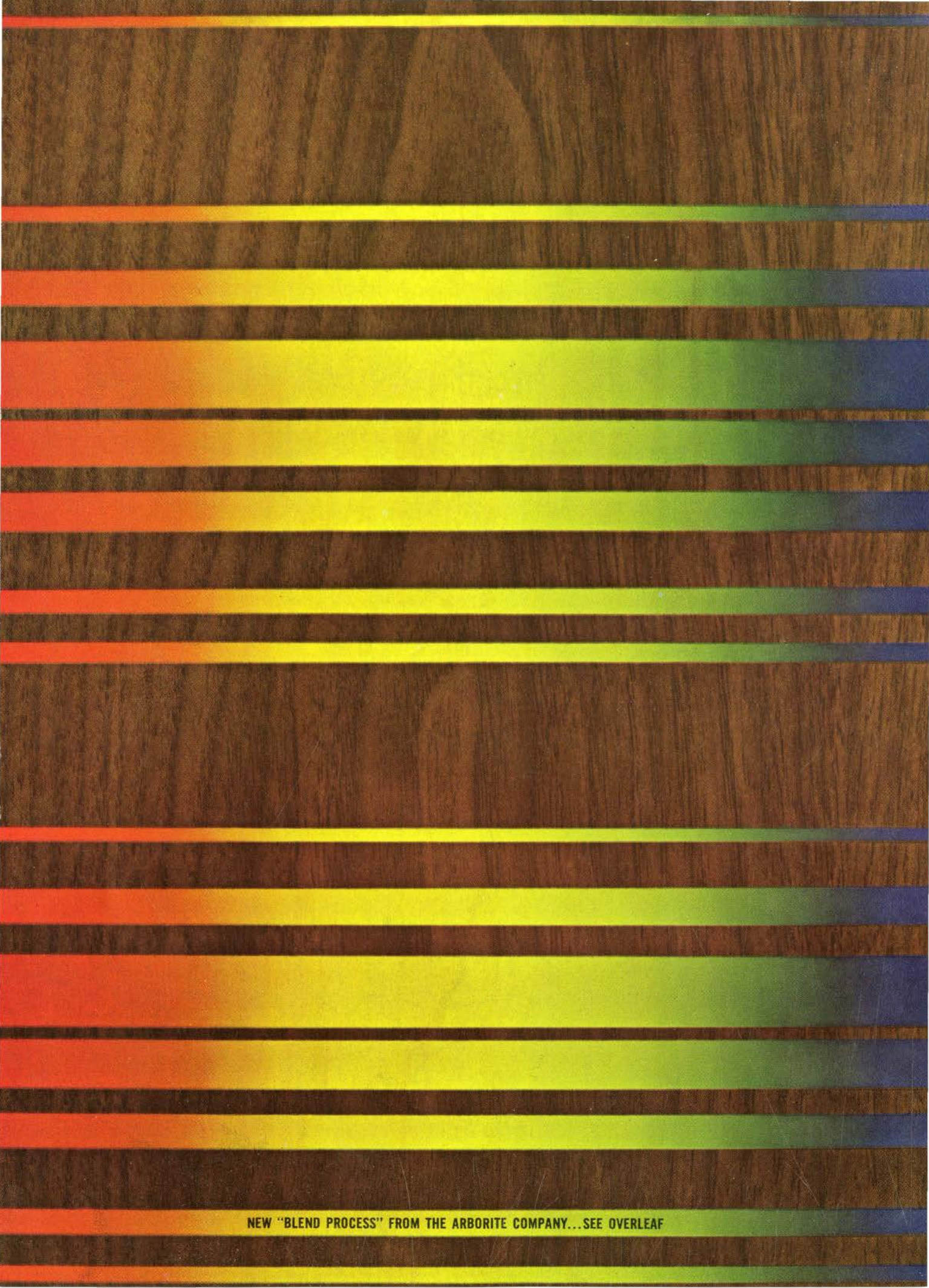


Prestige trim from American-Standard. It's extraordinary.

Prestige Fixture Trim — A Solid Investment.

AMERICAN-STANDARD

AMERICAN-STANDARD PRODUCTS (CANADA) LIMITED
1201 DUPONT STREET, TORONTO, ONTARIO



NEW "BLEND PROCESS" FROM THE ARBORITE COMPANY...SEE OVERLEAF

NOW:
*a major advance
in plastic laminate designs
for domestic and institutional
applications from
The Arborite Company*

**NEW
“BLEND
PROCESS”**

New “Blend Process” doesn’t just print colours. It *blends* them in exciting *blended* designs that were never possible until now. The reverse side of this page illustrates an example of new “Blend Process” in action. Look how effectively it can be integrated with an Arborite Woodgrain for a unique laminate design.

“Blend Process” blends easily with any current Arborite pattern or any of the Arborite Pageant Decorator Colours. It can be co-ordinated with any decor style and colour scheme; with painted concrete, mosaics, tiles, marbles; with upholstering fabrics, plain and coloured drapes, period and contemporary furniture. It spans a full range of applications: in reception areas, or executive offices, or on doors, for example.

And it can achieve striking and original mural designs for small or large wall surfaces.

You’ll find “Blend Process” in Arborite 6 (1/16”), 10 (1/10”), DC-30 (1/32”), Solid Grades, and Bending Grade. And it’s available in Arborite Furniture Finish, Glossy Finish and texture finish.

Look into versatile new “Blend Process” now. It offers a new, wide scope in the imaginative co-ordination of laminate designs with interior decorating materials.

For more information about “Blend Process”, call your Arborite representative or write to the Design Department at: The Arborite Company, Division of **DOMTAR** Construction Materials Ltd., 385 LaFleur Avenue, LaSalle, Quebec.

A
DOMTAR
PRODUCT

 **ARBORITE** DECORATIVE
LAMINATE
*Trade Mark Reg'd

ON THE SURFACE AROUND THE WORLD!

The Arborite Company, division of **DOMTAR** Construction Materials Ltd.

Halifax • Quebec City • Montreal • Ottawa • Toronto • Winnipeg • Calgary • Edmonton • Vancouver
466-1440 522-8141 366-2710 PA 8-2708 RU 1-2431 SP 4-3484 269-4050 455-4161 MU 2-1307

New in wall beauty

WESTROC VINYLBOARD

Westroc Vinylboard is a pre-decorated gypsum wallboard with a beautiful vinyl covering so durable it will absorb exceptional punishment without damage, washes clean with soap and water. Vinylboard is available in Bombai

or Wood-Grain finish, in six attractive colours or special colours on request. Δ Discover the beauty and durability of Westroc Vinylboard. Investigate its time-saving, money-saving advantages.

OFFICES APARTMENTS INSTITUTIONS

Ideal for office partitions and heavy traffic areas, such as corridors and foyers where durability as well as beauty is of paramount importance.



IN HOMES

Adds dramatic beauty to otherwise plain and ordinary rooms. Hallways, living rooms, bedrooms and play rooms have added appeal, added value, with Westroc Vinylboard.



For a technical brochure on Westroc Vinylboard, fill in this coupon and send it to: Western Gypsum Products Limited, 2650 Lakeshore Highway, Clarkson, Ont.

Please send me information on Westroc Vinylboard

NAME _____

ADDRESS _____

FIRM _____



WESTERN GYPSUM PRODUCTS LIMITED

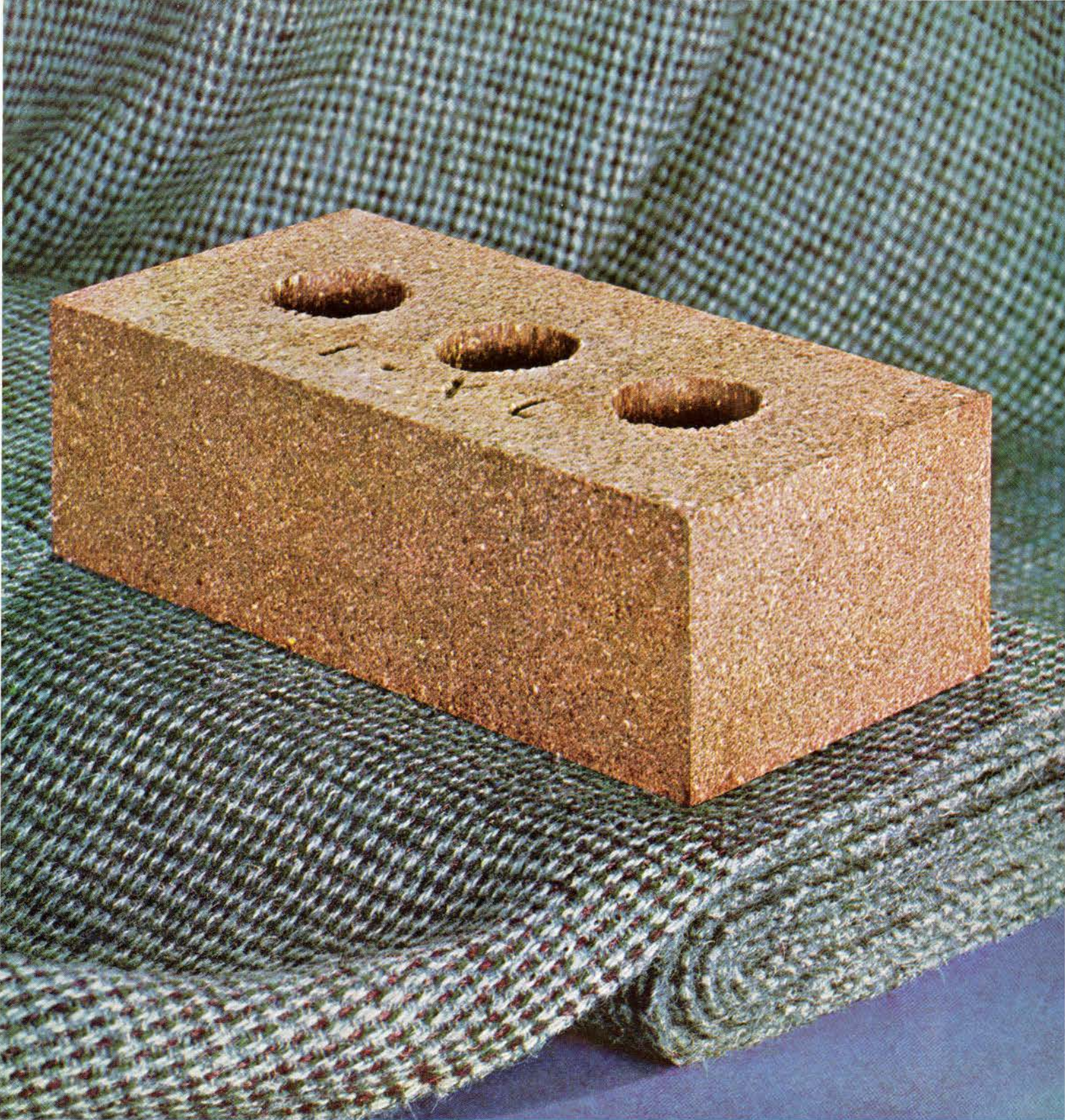
WINNIPEG

CALGARY

VANCOUVER

TORONTO

MONTREAL



Tweed wears well – especially when tailored in the exclusive **I·XL** manner, from a material as indestructible and unchanging as fired clay. Available in modular dimensions, in dark or light ranges, **I·XL** Tweed Face Brick makes new and interesting contributions to wall fashions. Well worth looking into for handsome appearance, exceptional design latitude and the matchless wearing qualities obtained only with fired clay brick.

“I·XL” MARK OF EXCELLENCE

I·XL BRICK & TILE

MEDICINE HAT BRICK AND TILE COMPANY, LIMITED AND ASSOCIATED COMPANIES • Head Office: Box 70, Medicine Hat, Alta, Tel: 527-1131

Book Reviews

REFLECTIONS ON ZONING

Reflections on Zoning, the report of the RAIC Zoning Study Committee on a three year study of city zoning regulations in Toronto by a group of architects and planners under the chairmanship of Professor J. B. Milner of the Faculty of Law, University of Toronto. The study was financed by a grant from CMHC, and follows upon the 1960 Report of the RAIC Committee of Inquiry into the Design of the Residential Environment. Associated with Professor Milner in the study were architects Henry Fliess and Harry B. Kohl, of Toronto and town planners Max J. Bacon, Toronto, and George Nordman, of CMHC. There is a foreword by Professor James A. Murray (F), Chairman of the RAIC-CMHC Joint Committee on Housing Design. A limited number of copies are available at fifty cents from RAIC Headquarters, 75 Albert St., Ottawa.

BY JOHN SULLIVAN, MRAIC, AMPTIC, ARIBA.

The publication of this Report is timely in its reflection of a widespread dissatisfaction with a planning method which has produced such visually barren results after two decades of intensive building.

"Zoning", considered by most people to be synonymous with "planning" and "protection", does in fact serve neither purpose well. If used efficiently it can serve the planning process by co-ordinating land use patterns with essential services, but it cannot provide that most vital aspect of planning concerned with the human responses to compositions of streets, parkways, open spaces, buildings, enclosed and open vistas, views, hills and water. "Protection" is quite illusionary, for planning by its nature cannot be static, and the pressures of growth must always bring change.

There are many aspects of zoning practice that should receive a searching analysis, and this Report concentrates upon the failure to provide a framework which would encourage good design solutions in growing residential areas. In addition to making detailed suggestions for improving the existing regulations, a proposal is put forward for a different concept of development control which might provide an improved legislative framework.

The Report is developed through a well-ordered commentary on the parts which make up the whole of zoning:—

The Role of the Zoning By-Law

In examining the growth of the zoning by-law from its original role as a protective device into a method of achieving the "purposes" of planners, this section stresses the need for a plan, or goal, to achieve. In its efforts to control development, zoning develops limitations by its need to be precise when events cannot be foretold precisely, by its generalized assessment of use zones which gives no control over exact locations, and by its total inability to "bring about a better looking city". The conclusion is that the traditional zoning by-law is an inadequate legal instrument for the control of development.

Planning and the Control of Development

On the premise that *control of development*, by zoning by-law or any other method, must be preceded by a *plan of development* based on survey and study, the report outlines the purpose and contents of such a plan, primarily as related to growing residential areas in the suburbs. The plan, then, should provide a perceptible order of development, setting out general densities, limits of the community, and standards to ensure a stated degree of amenity and convenience. The plea here is for statements of principle and intent, allowing a flexibility of application, rather than the precise form of a zoning by-law. The plan, as outlined, offers a degree of ordered progress, though little is said of any aspiration to higher visual or social values of environment.

Control of Density

The point made here is that density is a matter of judgment. High density, in terms of persons per acre, does not mean overcrowding, provided services are adequate, traffic can be accommodated and ample open space is available. More accurate methods are required to assess the many factors influencing the choice of density, and the development plan should explain the social and economic reasons which determine the selection of a desired density. It might have been added here that the application of a precise zoning by-law indicates where specific development can occur, without of course knowing that it will, thus making difficult any real service provision for its occurrence. Being also applied in blanket fashion to large parcels of land each site developer believes that his specific location has features demanding more favourable consideration of density. There is no doubt that much more research is needed on this subject.

By-Law Standards of Land Use

Development control is put aside here to

explore the workings of zoning in relation to land use, and in general to advocate greater variety and numbers of zones. Concern is felt about the monotony of large areas of similar land uses and the need to introduce not only variety among residential units but also to consider limited introduction of commercial and industrial uses into the residential.

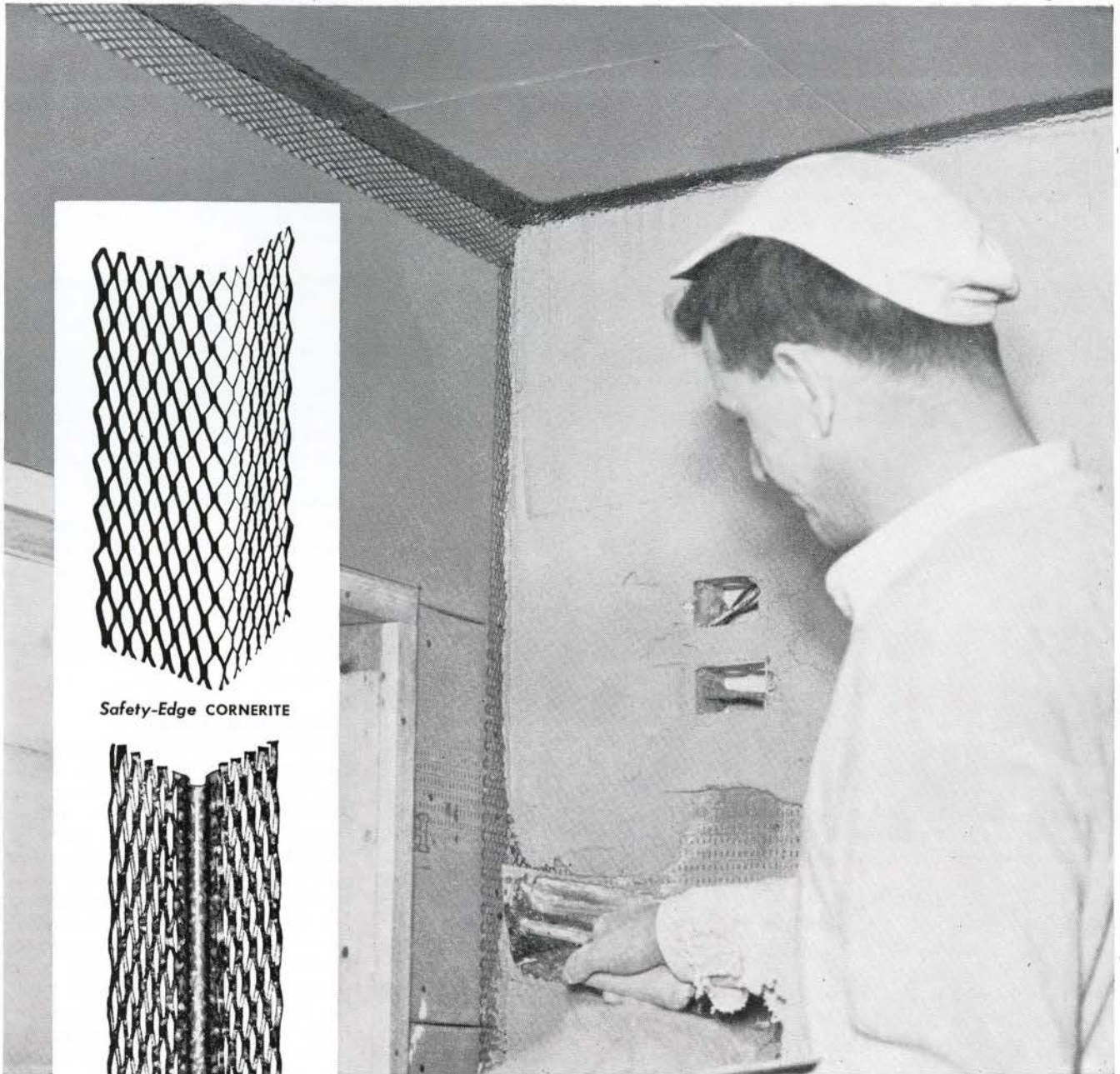
By-Law Standards of Bulk Regulation

This, the largest section of all, takes task in detail with the specific site limitations in zoning by-laws, that is, lot boundaries, front yards, side yards, rear yards, lot coverage and building height. Calling most regulations arbitrary it endeavours to assess the reasons bringing about these limitations and suggest a re-assessment to establish new criteria. While again condemning the zoning by-law as a poor tool to control proposed development, a case is being made for an easing of existing regulations rather than a new form of control, and calls for a freeing of the designer "from all too common restrictions that interfere with his design, but serve no useful purpose."

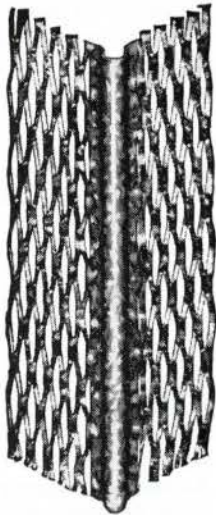
Development Control

Having examined the drawbacks of zoning by-laws as practiced, this last section is devoted to an explanation and analysis of an alternative approach called development control which may provide the framework within which good planning and design may be encouraged, not stultified. The instrument of this control would be a development plan showing intended development in terms of land use and density, which plan would become increasingly specific as experience and study widened. Control would then be exercised over development on the basis of the merits of each individual application and its conformity to the aims of the general plan. The authors suggest areas of legislative change and hearing procedures which must be more fully examined; they are aware that the professional staff required to administer such a programme is not even available in most areas. Such an approach would demand from the planning authority a maturity of design analysis and guidance that has yet to be demonstrated, and demand from the designer undeveloped skills and a much greater dedication to community interest rather than client interest. Yet despite this, and the dangers of political pressures, there is considerable merit to an approach which challenges the skills of all involved and encourages efforts towards better design. It moves towards a goal of design by example rather than restriction.

This brief survey should indicate the



Safety-Edge CORNERITE



"PEDEX" Corner Bead

How to keep cracks out of a corner

Nothing annoys a client faster than to see his new home or building break out in a rash of corner cracking. But there is an effective method of eliminating this annoyance. That's with Pedlar "Safety-Edge" Cornerite . . . the easy, fast way to smooth corner plastering.

Like all Pedlar metal lath and accessories, Cornerite is made from tough, prime quality steel for lasting strength, customer satisfaction and economy. Pre-formed to fit snugly, this metal lath accessory provides the sure way to crack-free corners. Its small open mesh allows the first plaster coat to pass through, forming a perfect bond. There's no plaster wasted and installation time and costs are minimized.

The same time and money-saving features are found in Pedlar Metal Lath and in "Pedex" Corner Bead. For full technical information call your nearest Pedlar office.

THE PEDLAR PEOPLE LIMITED

519 SIMCOE STREET SOUTH, OSHAWA, ONTARIO



MONTREAL

OTTAWA

TORONTO

WINNIPEG

EDMONTON

CALGARY

VANCOUVER

considerable scope and well-ordered presentation of the Report. It is conscientious in tackling the existing zoning methods point by point at their own level, but although recognizing that the only way to create an environment is to design it, it is not until the final section that references to the use of models brings us back to the vital missing element in all our planning, that is, urban design, the use of enclosures, volumes, open spaces, vistas to stimulate and satisfy our need for shape and visual organization. To achieve this in the domain of private enterprise the planner must have a very clear picture of his aims. These he can only find by experiments in massing and volumes, not by the setting of densities and land use patterns. Knowing then what he wishes to strive for he can set about achieving it by influencing private developers, attracting by concessions, acquiring strategic open spaces to advance the concept. Amending, tightening and improving both the general and the specific as the area develops, the planning authority knows its aims and can give the developer guidance. Development control then begins to bring meaning and form.

This applies not only to sub-urban areas but to city and town centres where

with urban re-development schemes fast approaching, urban design is still a mystery. Zoning—yes. Land use studies abound. But no conception of massing, relationships of buildings and voids, compressions and releases, the creation of environment. It is a rare building that relates to its neighbour let alone to the many other design elements that surround it and mould the spatial character of an area.

Whilst not addressing itself specifically to these design concepts, the "reflections" contained in this Report form a valuable basis for legislative change which could enable an attainment of these goals. It is hoped that this review will encourage the reading of a document which may be a presage of the return of urban design to planning.

Recent Books Received

THE PEOPLE'S ARCHITECTS, edited by Harry S. Ransom, University of Toronto Press, Toronto, 1964, 147 pages, \$6.95.

THE IDEAL THEATRE: EIGHT CONCEPTS, prepared and circulated by the American Federation of Arts, Burns and

MacEachern Ltd., Don Mills, Ontario, 1964, 142 pages, \$9.00.

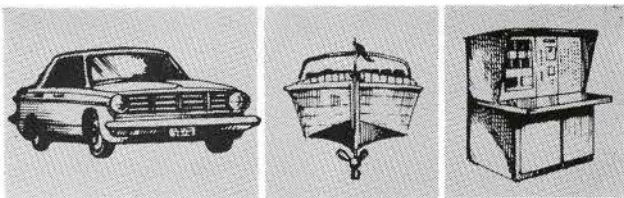
DESIGNING FOR THE DISABLED, prepared by Selwyn Goldsmith, Technical Information Service of the Royal Institute of British Architects, London, England, 1963, 236 pages, 50 shillings.

PRINCIPALS OF HOSPITAL DESIGN, by Hugh and John Gainsborough, The Architectural Press, London, England, 1965, 279 pages, 45 shillings.

RELIABILITY OF SHELL BUCKLING PREDICTIONS, by William A. Little, General Publishing Company, Toronto, 1964, 178 pages, \$11.00.

TROPICAL ARCHITECTURE, by Maxwell Fry and Jane Drew, B. T. Batsford, London, England, 1964, 264 pages, 84 shillings.

ROOM AND BUILDING ACOUSTICS AND NOISE ABATEMENT, by Willi Furrer, translated by Evelyn R. Robinson and Peter Lord, Butterworth and Co. (Canada), Toronto, 1964, 226 pages, \$13.00.



AUTOS • BOATS • COMPUTERS

OUR RACKS STORE ANYTHING

We Design
Supply and Install
Manual or Automatic
Storage Systems

For Complete Details Call:

RICHMOND

SCREW ANCHOR COMPANY

OF CANADA LIMITED

34 Six Points Rd., Toronto 18. Phone 231-2276 or 766-7689

Licensed in Canada by Palmer-Shile Company

*Oak Street is the home of Laidlaws—
A fitting home for a company which
has had the first name in Quality
Architectural Woodwork since 1871*



LAILAWS

50 Oak Street, Weston, Ontario

ARCHITECTS

will find 59 suppliers exhibiting building materials from Canada, the United States, the United Kingdom and Europe in 81 booths in the Manufacturers' Exhibit.

ARCHITECTS

are the people for whom the exhibit has been especially designed. To inform them about their products these firms have invested thousands of dollars in space, samples, displays and literature.

ARCHITECTS

will find here many completely new products being introduced. A current project might benefit from the knowledge gained here.

ARCHITECTS

will have an opportunity to meet top supplier executives, to discuss current problems and to keep posted on developments. The exhibitors are also organizing a luncheon and program.

ANNUAL ASSEMBLY, QUEEN ELIZABETH HOTEL, MONTREAL, JUNE 9-12, 1965

58

ASSEMBLÉE ANNUELLE, HÔTEL REINE ELIZABETH, MONTRÉAL, 9-12 JUIN 1965

ROYAL
ARCHITECTURAL
INSTITUTE
OF CANADA
88 METCALFE ST.
OTTAWA 4

RAIC
IRAC

INSTITUT
ROYAL
D'ARCHITECTURE
DU CANADA
88, RUE METCALFE
OTTAWA 4

FIRMS SHOWING IN MANUFACTURERS' EXHIBIT

BOOTH No.	EXHIBITOR	BOOTH No.	EXHIBITOR
79	Ambass-A-Dor Manufacturing Company	75 & 76	Delta Faucet of Canada Ltd.
70	American Bilrite Rubber Co. (Canada) Limited	1	Dominion Oilcloth & Linoleum Co. Ltd.
57	Anaconda American Brass Limited	56A	Domtar Ltd.
60	Andersen Corp.	9 & 10	Dow Chemical Co. of Canada Limited
59	The Arborite Company	15	Duron Company Ltd.
23	Armstrong Cork Canada Limited	27	Frontenac Floor and Wall Tile Limited
46	Atlas Asbestos Co. Ltd.	45	Gail International Canada
30, 31	Atlas Steels Company	55 & 56	W. R. Grace & Co. of Canada Ltd.
38	Belcana Glass Limited	39	Graham Products Limited
4	P. Graham Bell Associates Ltd.	28	Integrated Lighting Limited
66A	Bell, Rinfret & Cie Ltée.	77 & 78	IBM Co. Limited
71	The Bell Telephone Company of Canada		(International Business Machines)
14	Blue Giant Equipment of Canada Ltd.	6 & 7	The International Nickel Co. of Canada Limited
49	Brique Citadelle Ltée.	66	Johl's Contract Corp.
17 & 18	Building Products Limited	1A	La Salle Builders
64 & 65	Canada Flushwood Door Manufacturing Ltd.	5	W. R. Meadows of Canada Ltd.
61 & 62	Canada Iron Foundries Ltd., Pressure Pipe Division	52	The Miner Rubber Co. Ltd.
42 & 43	Canadian General Electric Company Limited	8	National Ceramics Limited
36 & 37	Canadian Gypsum Co. Ltd.	72	Penn Interiors Ltd.
16	Canadian Industries Limited, "Fabrikoid" Division	29	St. Lawrence Ceramics Ltd.
67, 68 & 69	Canadian Pittsburgh Industries Limited	25	Sealite Glass Limited
23A & 24	Cartier Chemical Co. Limited	41	Shawinigan Chemicals Limited
74	Philip Carey Co. Limited	44	Spancrete Limited
47-48	Cetic Limited	21 & 22	Steel Industries Advisory Council
53-54	Jos. Charlebois Cie Ltée.	58	Sweet's Catalogue Service
73	Clerk Windows Ltd.	40	Tremco Manufacturing Co. (Canada) Limited
26	Columbia Acoustics and Fireproofing Company (Canada) Ltd.	50, 51 & 51A	Val Royal Building Materials Ltd.
2 & 3	Crane Canada Limited	11	Wade International Limited
35	Cresswell Pomeroy Limited	32, 33	Westeel Products Limited
19 & 20	Cyanamid of Canada Ltd.	34	World Mosaic Inc.
		12	G. H. Wood & Co. Ltd.

Product Highlights at Exhibit

58th RAIC Annual Assembly, June 9-12, Montreal

Architects at Assembly will find a bonus of product information in 59 booths.

Dominion Oilcloth will present their newest commercial gauge vinyl product, marbolite "Cordoba", designed for heavy traffic areas where the simplest of maintenance is required. Range of seven colors designed to blend with any interior decor.

Dominion Oilcloth & Linoleum Co. Ltd., Montreal 24.

(Circle Reply Card Item 1)

The modern uses of the Coppermetals in Architecture will be displayed in the Anaconda American Brass Limited exhibit.

Anaconda American Brass Limited, New Toronto, Ontario.

(Circle Reply Card Item 2)

Bell, Rinfret and Co. Ltd plans to exhibit glass products from Continental Europe Saint-Gobain factories in Spain, Italy, France, Belgium, Holland and Germany along with Securit doors from the American Saint-Gobain Corporation.

Bell, Rinfret and Co. Ltd, 368 Notre Dame St. W., Montreal.

(Circle Reply Card Item 3)

"Asbestolux" insulation board, South African Amosite Asbestos and a selected grade of silica bonded together under steam pressure, will be shown by La Salle Builders Supply Limited. Asbestolux provides a combination of fire protection, structural strength, insulation and lightness of weight and stability.

La Salle Builders Limited, 159 Jean Talon West, Montreal, Que.

(Circle Reply Card Item 4)

Some of the extensive range of Glaverbel glass products including grey sheet glass which reduces heat and glare will be exhibited by Belcana Glass Limited.

Belcana Glass Limited, 3817 Jean Talon West, Montreal.

(Circle Reply Card Item 5)

Miner Butyl Membrane, a polyisobutylene formulated roofing and flashing material developed in conjunction with Polymer Corporation Ltd will be shown by Miner Rubber Company. This product features elasticity providing for expan-

sion and contraction from climatic changes and flexibility overcoming design limitations imposed by conventional roofing.

Miner Rubber Company, Granby, Quebec.

(Circle Reply Card Item 6)

Delta Faucet of Canada Ltd will be displaying a complete line of Delta Single Handle Faucets of which there are 400 model applications and the new Del Dial series.

Delta Faucet of Canada Ltd, 48 Shaft Rd, Rexdale, Ontario.

(Circle Reply Card Item 7)

Four new ceiling light products will be introduced by Integrated Lighting Limited: "Celestial" dimmer-controlled lighting combinations designed for expensively appointed locations; "Contura" constructed of non-combustible permanent materials providing visual impact through precise sculptured form; black and aluminum "Lightframe" retaining the simplicity and economy of the inverted T-Bar grid ceiling lights and "Heritage" handrubbed walnut frame and white acrylic light diffuser. (See Photograph)

Integrated Lighting Limited, 135 Van Horne Avenue, Montreal 14.



Heritage Ceiling System features total concealment of T-bars.

(Circle Reply Card Item 8)

To be shown for the first time in Canada is the new surface material introduced by the US Rubber Company. A floor covering with the durability and resilience of vinyl with a woven carpet texture and appearance. Non skid surface, effective in deadening sound, resists affects of vermin, mildew, moths as well as being weather-proof. Can be used outdoors as well as indoors.

Penn Interiors Ltd., 1357 Greene Avenue, Montreal 6.

(Circle Reply Card Item 9)

W. R. Meadows of Canada Limited specialists in products for the control of moisture and thermal movements in building structures will present their complete range of Expansion Joint Fillers and Sealers, Waterstops, Sealants, and Waterproofing Systems.

W. R. Meadows of Canada Limited, 130 Toryork Drive, Weston, Ontario.

(Circle Reply Card Item 10)

Among the products to be displayed by B. K. Johl are "Storex" Side Files and Shelf Files featuring flush doors with stainless steel handles and plastic labels, full pull out drawers and optional bars for suspended filing systems.

B. K. Johl Inc., 1200 Jules Poitras Blvd., Montreal 9.

(Circle Reply Card Item 11)

Specifically featured by Columbia Acoustics & Fireproofing Co. will be "Cafco" Blaze Shield Type "D", a recent development in structural fireproofing that has resulted in application costs savings.

Columbia Acoustics & Fireproofing Co. (Canada) Ltd., Montreal.

(Circle Reply Card Item 12)

Frontenac Floor and Wall Tile Limited intends to exhibit their regular line of vitrified ceramic tile available in different dimensions, textures and colors. Among new products will be 4" x 12" by 1/2" unglazed vitrified tile for heavy duty floors, and 6" and 4" round unglazed tiles.

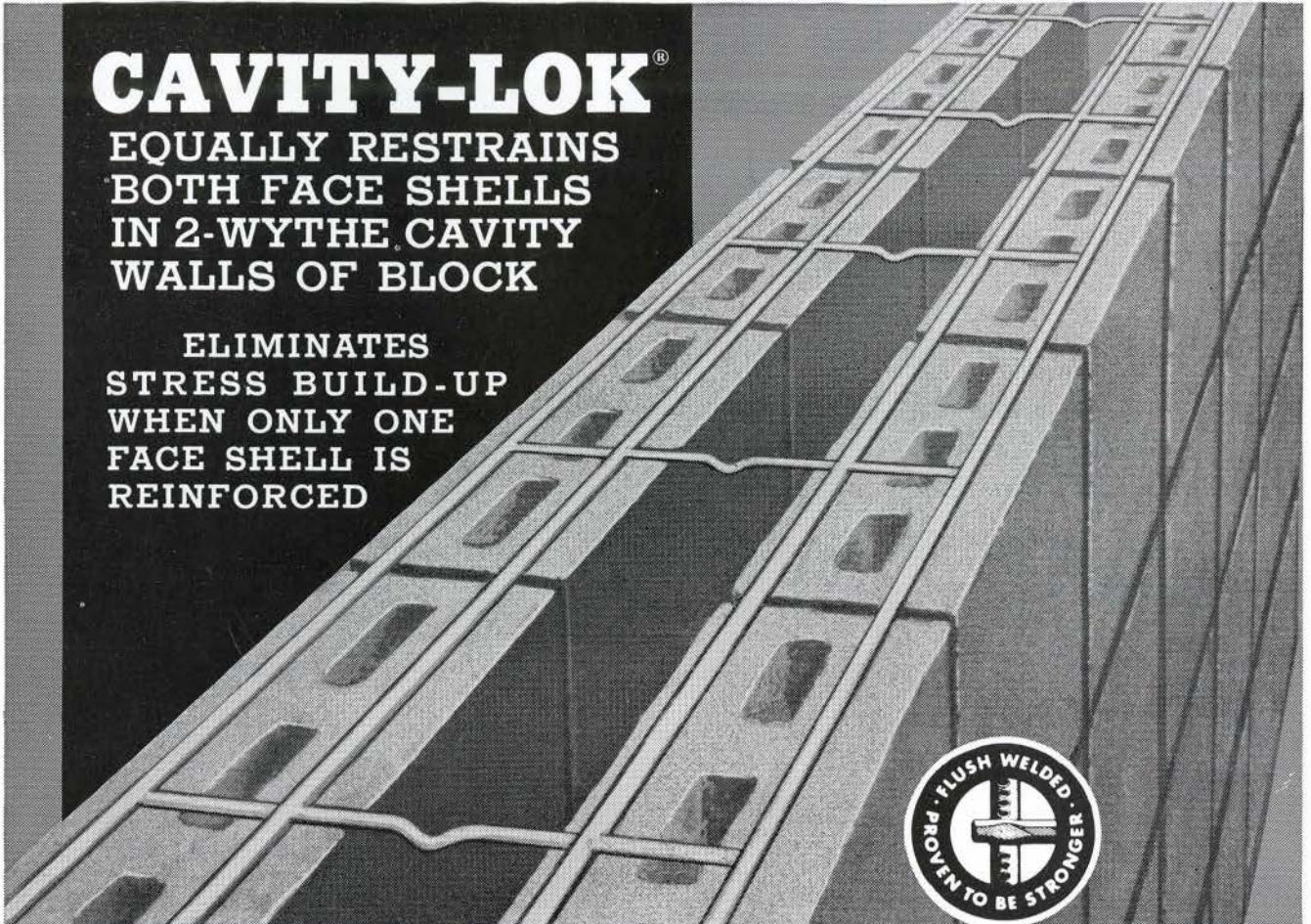
Frontenac Floor and Wall Tile Ltd, 5150 Jean Talon W., Montreal.

(Circle Reply Card Item 13)

CAVITY-LOK[®]

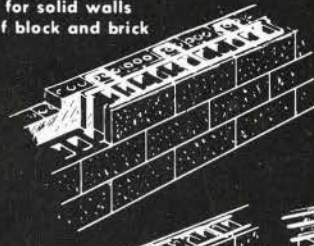
EQUALLY RESTRAINS
BOTH FACE SHELLS
IN 2-WYTHE CAVITY
WALLS OF BLOCK

ELIMINATES
STRESS BUILD-UP
WHEN ONLY ONE
FACE SHELL IS
REINFORCED



OTHER MASONRY REINFORCING TIES AVAILABLE FROM BLOK-LOK[®] LIMITED

ECONO-LOK[®]
Reinforcing Tie
for solid walls
of block and brick




Also pre-fabricated
components for
partitions and corners

**MADE IN
CANADA**



BLOK-LOK[®]
for all masonry walls



CAVITY-LOK[®]
for cavity walls
of block and brick

TITELWALL — our Rubber Control Joint that fits!
Eliminates irregular cracking and water leakage.

4-WAY REINFORCEMENT

The four parallel reinforcing wires of CAVITY-LOK[®] control shrinkage cracking and provide 4-way reinforcing against external and internal loads and pressures.

CAVITY-LOK versus Z-BARS

- Cavity-Lok[®] equally restrains all face shells.
- Ties are properly placed.
- More steel per square foot of wall.
- With Cavity-Lok[®] you place 12 equally-spaced ties with each installation and cover ten feet of wall with a single effort.
- 32 mortar locks for every 16" of wall, providing protection against slippage.
- Bonds both face shells homogenously with high tensile 3/16" dia. rods which are V-notched to prevent moisture transfer.

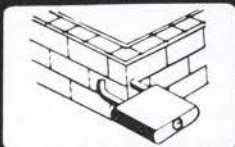
MASONRY REINFORCING BOND & TIES CATALOGUE

Illustrated catalogue with specifications, tests and technical data on control of masonry wall cracking sent on request.



AIA/RAIC File No's. 3M & 5F. CSI Format, Division 4

[®]Registered trade name. Canadian patents 575399, 574984, 575392



BLOK-LOK[®] LIMITED

HEAD OFFICE AND PLANT
202 MILVAN DRIVE, WESTON, ONTARIO • TELEPHONE 749-1010



NO DRAFTS!

Even the most beautiful building may blemish your reputation if it is drafty. The International *Controlled Air Entrance** Revolving Door is the only type of entrance that can keep out drafts. It is always open, yet always closed because at least two wings always touch the enclosure, ceiling and floor. Specify International *Controlled Air Entrance** Revolving Doors and design for complete comfort.

*Trademark

Write for free 54-page book, *The Controlled Air Entrance**

INTERNATIONAL STEEL COMPANY

1627 Edgar Street • Evansville, Indiana 47707

NEW CONCEALED SPEED CONTROL:



Nothing to get in the way of your straight-line design. Speed control is hidden within revolving door ceiling.

International originated revolving doors over 75 years ago. Experience says, "They must be the best!"



FRANKI FACTS



Heavy Column Loads Transferred to Water Bearing Sandy Till

Problem

The design of the Coachman Inn Motor Hotel at Edmonton required all mechanical equipment to be located below street level. The Consulting Engineers were presented with the task of planning the support of this 15-storey structure at a depth of 16' below grade.

The soil borings revealed medium plastic clay overlying dense glacial till. Interspersed through the till were silt and water bearing sand layers. Static water level readings indicated that the water in these layers was under an average hydrostatic head of 6'.

Conventional spread footings at basement level were ruled out because of limited bearing capacity and the possibility of heaving due to hydraulic uplift pressures.

The recommendation brought forth by the Soil Consultants was a deep foundation of driven piles founded in the dense glacial material.

Solution

The Franki Caisson-Pile was selected because of the nature of the subsoil and the need to support heavy structural loads in the till.

All foundation units were installed from the initial excavation of 5' with the exception of the nine exterior piles. This procedure proved advantageous to the General Contractor because the main excavation of 16' was exposed to the elements for a shorter duration.

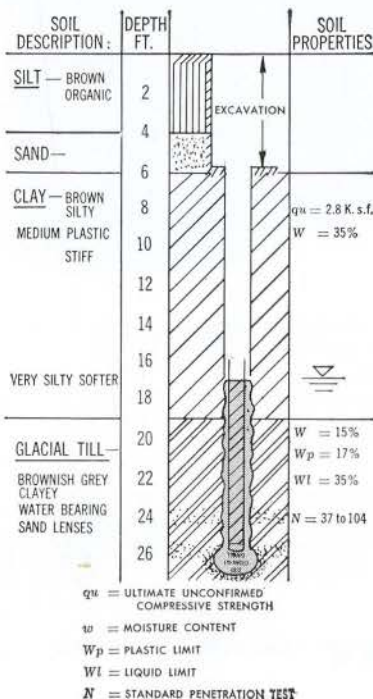
The Franki method of ramming zero slump concrete through the bottom of the casing with massive blows of the drop hammer when making the base, increased the relative density of the glacial till. In building the shaft, successive batches of concrete were rammed into the soil with smaller blows of the drop hammer while progressively raising the casing and always retaining some concrete inside it to ensure against the intrusion of water or soil.

Tension piles were required to resist the overturning forces due to wind. These units were installed in the same manner as the compression piles with the vertical reinforcing cage anchored 6" into the concrete base.

Franki has the men, experience and equipment to produce the **RIGHT FOUNDATION FOR EVERY STRUCTURE.**



Literature — This series of job highlights, as well as other descriptive literature, will be sent to you upon request to Franki Canada Ltd., 187 Graham Blvd., Montreal 16, P.Q.



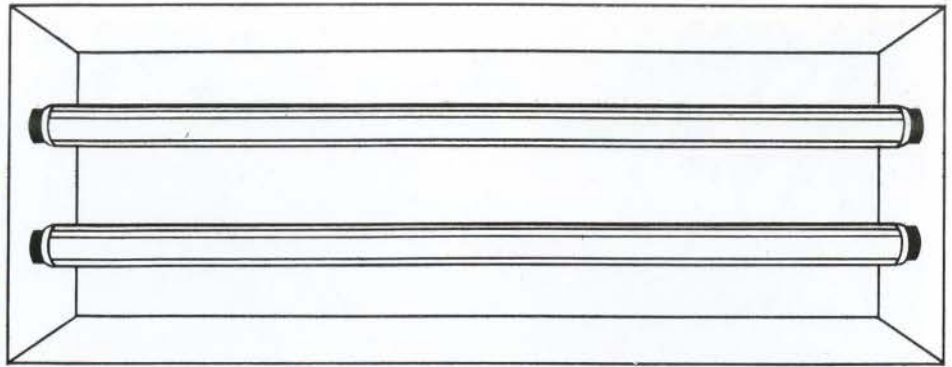
- OWNERS:**
Arthur and Richard Assaly
Edmonton
- LOCATION:**
Edmonton, Alberta
- TYPE OF STRUCTURE:**
Hotel
- ARCHITECTS:**
Annet & Bittorf
Edmonton
- CONSULTING ENGINEERS:**
Read Jones Christoffersen
Limited, Edmonton
- SOIL CONSULTANTS:**
R. M. Hardy & Associates
Limited, Edmonton
- GENERAL CONTRACTOR:**
McNamara Construction
(Western) Ltd., Edmonton
- NUMBER OF FRANKI UNITS:**
102 Reinforced Caisson-Piles
14" to 20" diameter
- UNIT WORKING LOADS:**
45 to 140 Tons in Compression
18 Tons in Tension

FRANKI

CANADA LIMITED

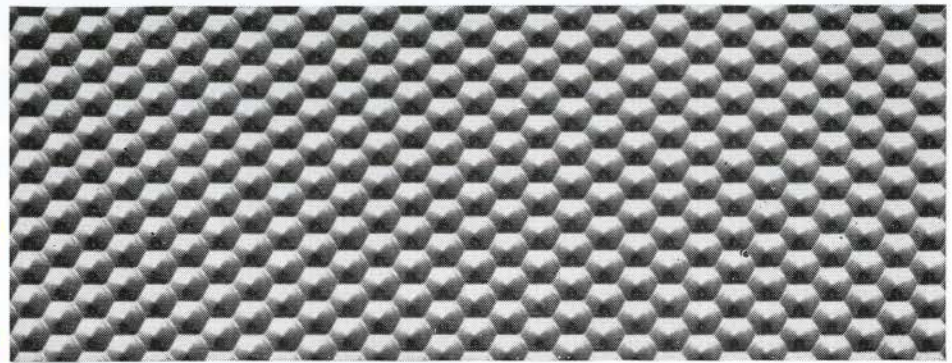
Head Office: 187 GRAHAM BLVD., MONTREAL 16, P. Q.
 QUEBEC OTTAWA TORONTO EDMONTON VANCOUVER

Q:



Is there a lens for recessed fixtures which combines sophisticated appearance with proven, practical photometrics?

A:



Yes. Just one... GEMLITE No. 7 Pattern

When you specify recessed or lay-in fixtures, you're after a clean, unbroken ceiling area. But there must be efficiency, too — shadow-free brightness control, good lamp-hiding power, and proper candlepower distribution. GEMLITE No. 7 prismatic pattern, in acrylic or styrene, offers this combination of sophisticated appearance and proven, practical photometrics. Lightweight, low cost and pre-stressed to eliminate sag, GMA-7 is, for example, the lens selected over all others for Montreal's spectacular

Place Victoria project. Perhaps most important, only GEMLITE offers comparative photometrics. All GEMLITE lenses are tested by an independent authority on a standard, low-efficiency fixture. We call it the YARDSTICK. These tests prove the photometric values of patterns such as GMA-7 . . . allow you to compare against known values. If you would like more facts on GMA-7, together with photometric values from the YARDSTICK tests, write today.

GEMLITE...



**for
'yardstick'
photometrics**

GEMLITE

Division of G.M. Plastic Corporation
40 Mills Road, Ajax, Ontario.

Please send specification folder for GMA-7 pattern and information on GEMLITE "yardstick" photometrics.

Name.....

Company.....

Address.....

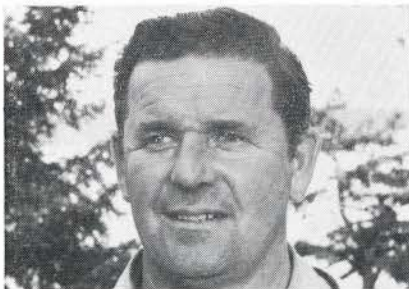
City..... Prov. or State.....

Please have representative contact me.



150 panels of GUARDMASTER were used in this house. Where were they used?

On the exterior - for the soffits, fascias, porches, balustrades, feature siding and carport ceiling. Guardmaster medium-density overlaid plywood was used for detailing this large, custom-built residence because of its exposed location and to ensure a lasting first class paint finish. On the job we talked with the builder, Gordon Ellis, of Victoria, B.C., and asked him why.

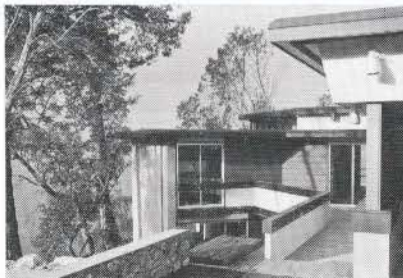


"On this coast, a house is exposed to sun, rain, mist and salt air, and you can expect to repaint in two or three years. On Guardmaster, a good paint job will last at least five years - and when you *do* have to repaint, you need *less* paint and *less* preparation."

That's a three way saving! Which raises the question - what is Guardmaster?

Guardmaster is exterior grade plywood with a smooth, hard, tile flat overlay of phenolic resin and cellulose

lose fibre bonded permanently to it - providing a surface that's perfect for painting, outdoors and indoors.



Guardmaster takes paint far better than bare wood, holds it longer, and needs less paint and fewer coats for a first class finish. Paint can be applied with brush, roller or spray. No sanding is required beforehand. Furthermore, the overlay eliminates grain-checking, eliminates telegraphing of grain pattern, and cuts water absorption by fifty percent. Panels dry quickly after rain, allowing the painters to get on the job sooner.

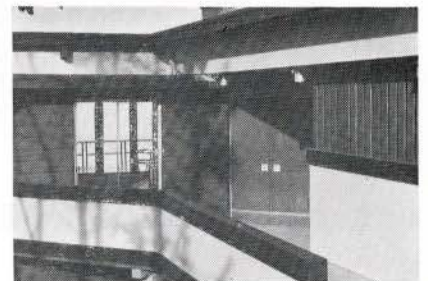
For a free sample and product literature, write to Dept. F, Box 140, New Westminster, B.C.

GUARDMASTER

MEDIUM-DENSITY OVERLAID PLYWOOD

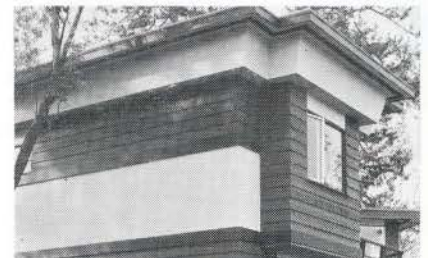


MANUFACTURED FOR
CANADIAN FOREST PRODUCTS LTD.
BY ITS AFFILIATE
NORTH CANADIAN FOREST INDUSTRIES LIMITED
GRANDE PRAIRIE, ALBERTA



Guardmaster is bonded with waterproof glue to C.S.A. Standards, and is available in all thicknesses from 1/4" to 3/4" - with the overlay on one or both sides.

Guardmaster is C.M.&H.C. accepted - No. 4871.



ANNOUNCEMENT

Ellison

CUSTOM FABRICATED BALANCED DOOR ENTRANCES

**now made,
installed &
serviced by**

Previously imported, Ellison Balanced Door Entrances in Stainless Steel, Bronze and other metals are now being fabricated, erected and serviced in Canada exclusively by Canadian Rogers Eastern Limited.

Each entrance is an integral unit consisting of doors, jambs, frames, thresholds, operating mechanisms and all finishing hardware.

CANADIAN ROGERS

— BACKED BY OVER FIFTY YEARS' EXPERIENCE

ALLEVIATES "STACK ACTION"

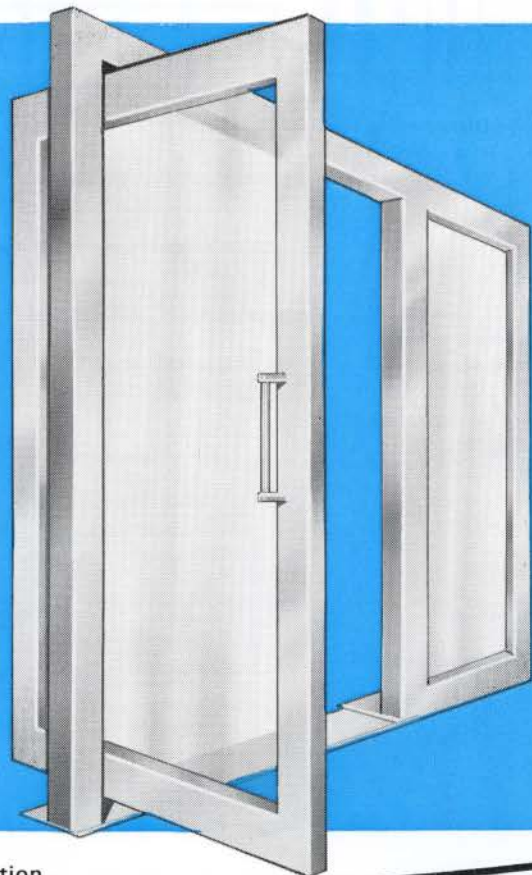
Ellison balanced doors let people through quickly — make possible an uninterrupted flow of traffic where winds and suction problems exist. The hinge stile swings inward as the door opens — instantly neutralizing any effect of exterior wind pressure or interior suction (see Sketch 2 below).

SAVE SPACE

Architects specify Ellison Balanced Doors to save lobby space or reduce sidewalk obstruction. The shorter arc which the Balanced Door travels permits faster opening and closing and reduces the outward projection of the door when fully opened. Sketch 3 below shows the latch stile travelling in an elliptical arc.

EASY TO OPEN

The force required to open Ellison Balanced Doors against external wind or internal suction load is only a fraction of that needed to open conventional doors. Ease of operation also permits the use of extra large doors.



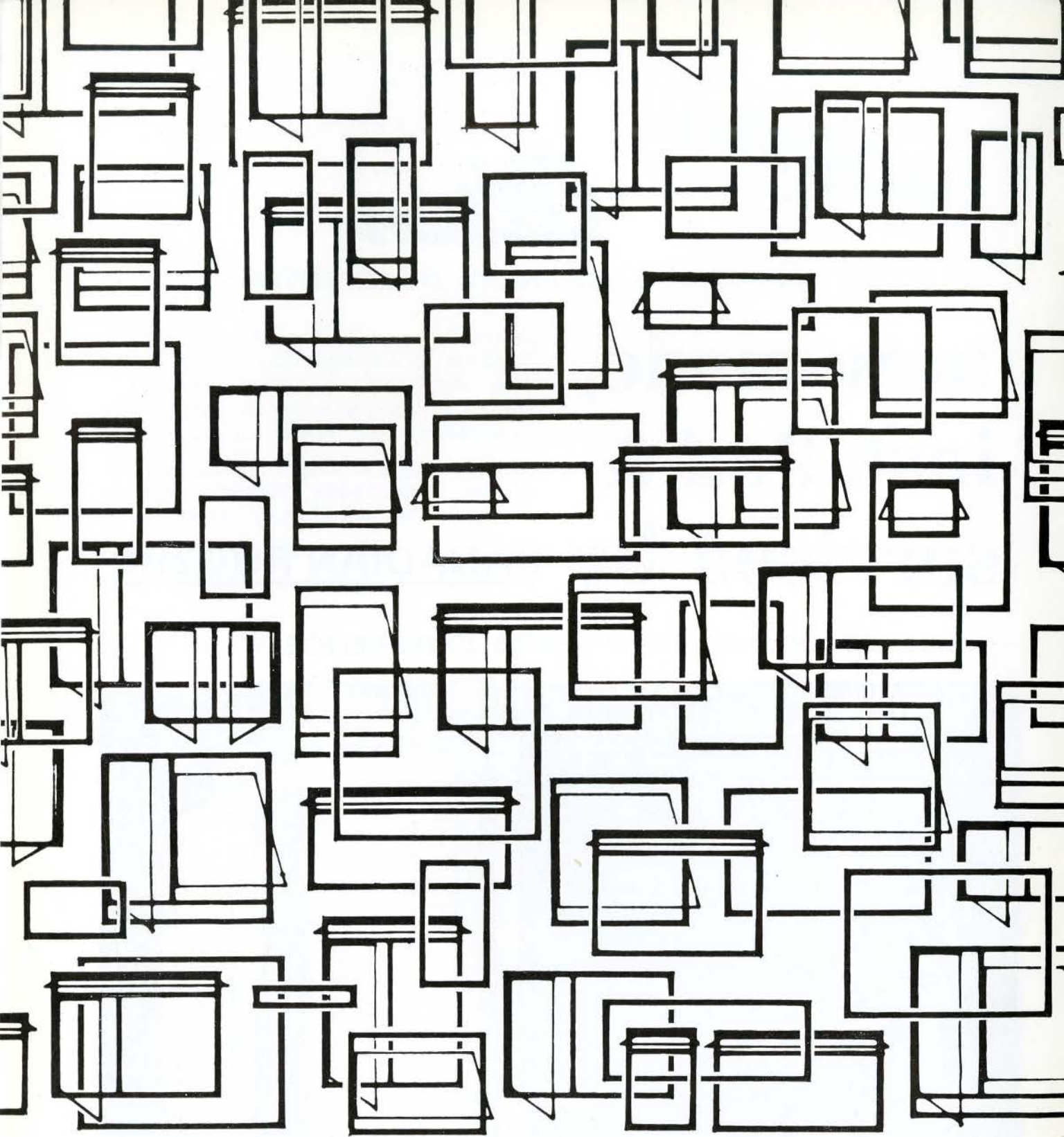
Write or phone for full information

CANADIAN ROGERS EASTERN LIMITED

108 Vine Avenue • Toronto • Ontario • 762-7211

CANADIAN LICENSEES OF GENERAL BRONZE CORPORATION & ELLISON BRONZE CO., INC.





CRITTALL aluminum & steel **WINDOWS**

CANADIAN CRITTALL METAL WINDOW LTD.

Head Office & Factory: 685 WARDEN AVENUE, SCARBOROUGH, ONT.
Branch Office: 3300 CAVENDISH BLVD., MONTREAL 26, P.Q.

Manufacturers of Metal Windows for more than 50 years



**Cut call-backs! Under built-up roofing,
Fir Plywood strengthens buildings by
acting as a powerful diaphragm.**



Plywood roof sheathing acts as a horizontal diaphragm, transferring some roof loads to the walls. Build up these thin, strong structural ele-

ments with cross-laminated Fir Plywood panels. Send for free booklet, "Fir Plywood Diaphragms" and benefit from this structural principle.

Waterproof Glue FIR PLYWOOD

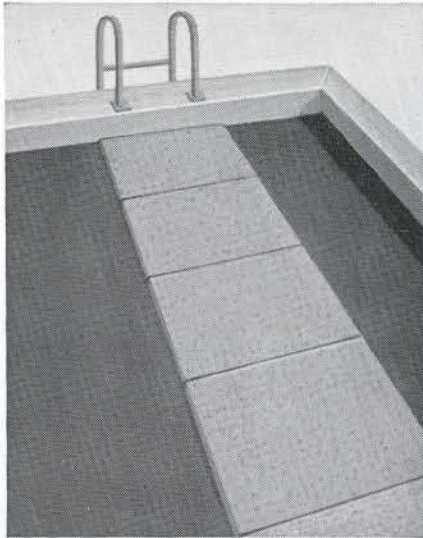
Look for the edge-mark PMBC — your assurance that the plywood has been manufactured to CSA Standards.
Plywood Manufacturers Association of British Columbia, 1477 West Pender Street, Vancouver 5, B.C.

S-65-FM

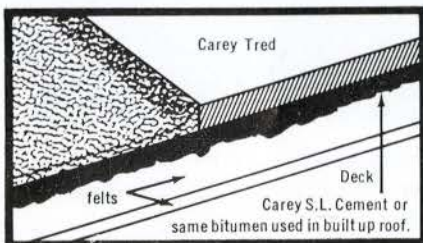
SPECIFY
Carey

CAREY TRED

for built-up roof walkways



Carey Tred for roofs solves increased roof traffic problems due to installation of top side equipment, security watchmen, service men, etc. Prefabricated in slabs 36" x 36" x 1/2", it consists of a homogeneous core of asphalt, plasticizers and inert fillers heat and pressure bonded between saturated sheets of organic felt. Plain bottom, grey anti-skid ceramic granules on top.

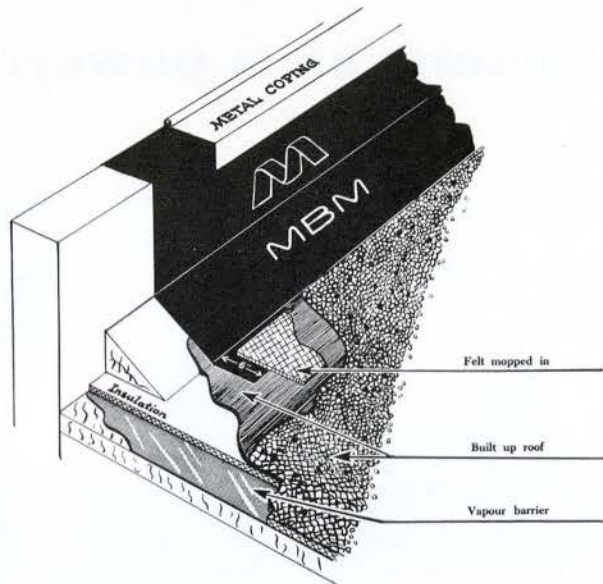


CAREY TRED — one of many kinds of quality products made in Canada by:

The Philip Carey
COMPANY LIMITED

SAINT JOHN • MONTREAL • TORONTO
QUALITY SINCE 1873

MBM
MINER BUTYL MEMBRANE



An integral roofing and flashing material that remains flexible at -65° and withstands temperatures up to 230° F.

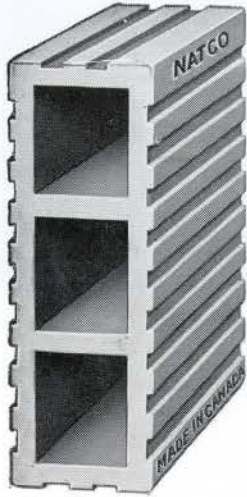
MBM is ideally suited as a complete roof membrane for complex designs. MBM and MBM adhesives are compatible with built-up roofing and are widely used for flashing of parapets, eaves, expansion joints and all types of roof openings.

Extensive laboratory tests and field applications prove that MBM is unaffected by sun, freeze or thaw — season after season. MBM is not affected by corrosion or bacterial growth and it resists all chemicals except those of petroleum origin.

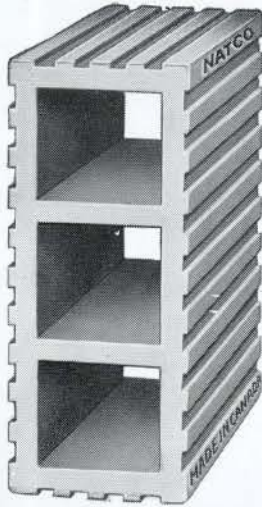
Write for specification and application literature.

MBM
MINER BUTYL MEMBRANE

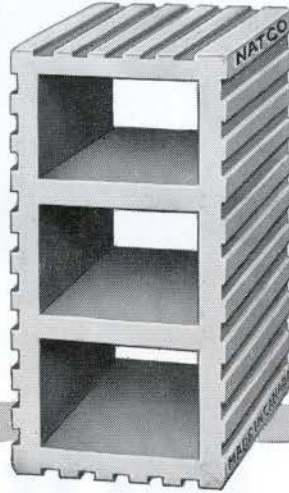
THE MINER RUBBER
COMPANY LTD.
ROOF PRODUCTS DIVISION
GRANBY, QUE.



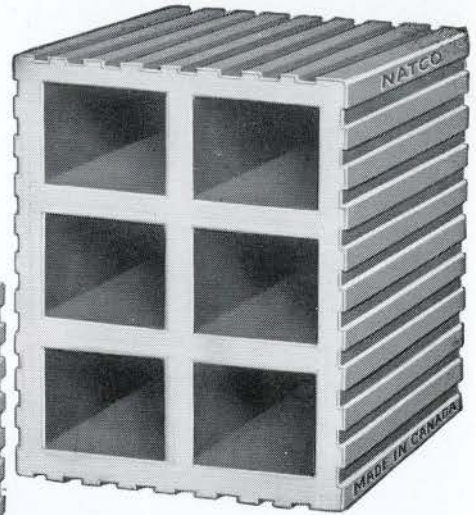
4" x 12" x 12"
Partition Tile
Code No.
DD4212
WT 16#



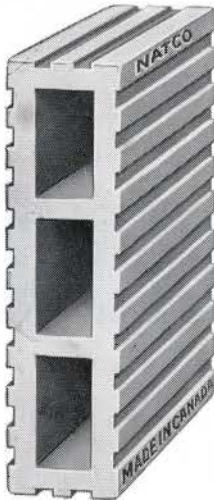
5" x 12" x 12"
Partition Tile
Code No. DD5212
WT 20#



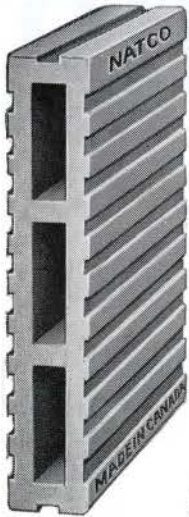
6" x 12" x 12"
Partition Tile
Code No. 6212
WT 22#



10" x 12" x 12"
Partition Tile
Code No. DD10212 WT 36 #



3" x 12" x 12"
Partition Tile
Code No. DD3212
WT 14#



2" x 12" x 12"
Partition Tile
Code No.
DD2212
WT 14#



8" x 12" x 12"
Partition Tile
Code No.
DD8212 WT 30#

NATCO

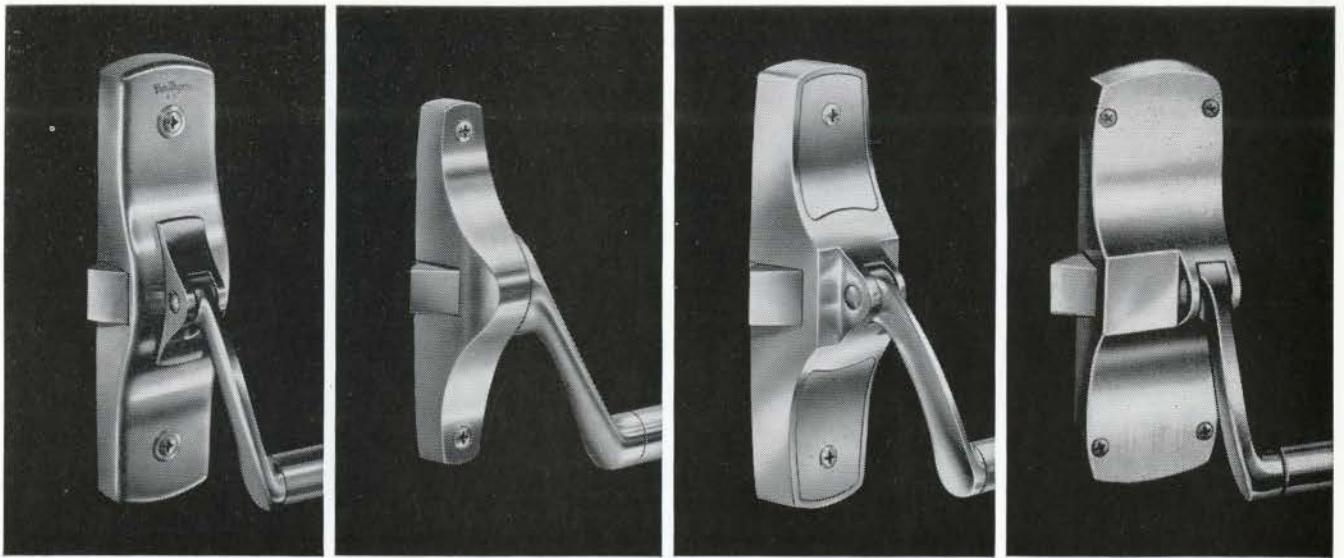
STRUCTURAL SCORED PARTITION TILE

Made of shale burnt to maturity, which produces a lightweight, unshrinkable and fire proof building unit.

ADVANTAGES—Unshrinkable, Fire proof, True to size, Rodent proof—Has high Insurance rating—High resistance to passage of sound and heat.

CONSTRUCTION NOTE—When plastering, wood or steel channel bucks at door openings should be 1½" wider than thickness of the tiles to act as grounds for plaster.

NATCO
CLAY PRODUCTS LIMITED
55 EGLINTON AVENUE EAST
TORONTO, ONTARIO
THE COMPLETE LINE
OF STRUCTURAL TILE



Now manufacturing in Canada

We now have a plant in Chambly, Quebec . . . new from the ground up . . . staffed and equipped to maintain the same high standards that have made Von Duprin the *quality* name in fire and panic exit hardware and auxiliary items. Now you can count on us for better-than-ever service, faster-than-ever delivery, and the same top-quality exit devices that have always assured "the safe way out!"

Von Duprin 
LTD.®

VON DUPRIN LTD. • 903 SIMARD STREET • CHAMBLY, QUEBEC



Structural and Mechanical Consulting Engineers: Monti, Lefebvre, Lavoie and Nadon, Montreal. Seismic Consultant: Dr. N. M. Newmark. Architects: D'Astous and Pothier, Montreal.

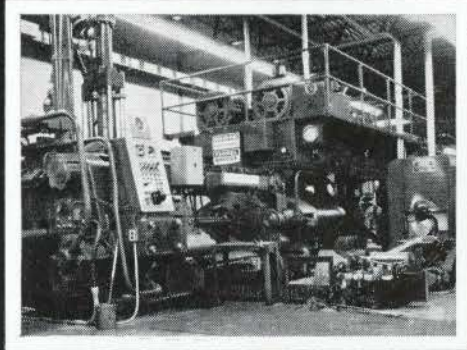
**THE BLUEPRINTS
AND 'SPECS' ARE
FINALIZED...
THE DECISION:
BUILD WITH STEEL**

Opening early 1967: Canadian Pacific's *Le Chateau Champlain*, a spectacular, 38-storey, \$20 million hotel that has been designed, in the words of Canadian Pacific Chairman N. R. Crump, "to reflect the burgeoning spirit of new Montreal." □ During the initial design stages a decision had to be made on the selection of a building material which would best satisfy the following requirements: which product would best meet the earthquake design conditions and which product would provide more favourable conditions during winter months to meet the owner's construction schedule? The decision was made to "BUILD WITH STEEL." □ In addition, steel is produced with known chemical properties and known rolling tolerances to meet specific design requirements resulting in a minimum of hindrance to other trades. □ New steel specifications, new construction and design techniques reduce building costs and save time. Steel tested by time is still the most modern building material.



**THE ALGOMA STEEL
CORPORATION, LIMITED**

SAULT STE. MARIE, ONTARIO • DISTRICT SALES OFFICES: SAINT JOHN
MONTREAL, TORONTO, HAMILTON, WINDSOR, WINNIPEG, VANCOUVER



LIGHT BRONZE



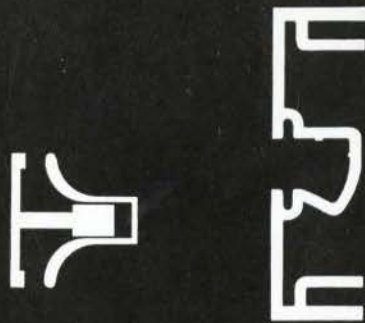
MEDIUM BRONZE



DARK BRONZE



BLACK



ZIMMCOR

EXTRUSIONS

A complete, automated plant, Canadian owned and employing Canadian labour and materials. Our 90,000 sq. ft. plant in Lachine is second to none in the industry. Our engineering staff will gladly assist you in any problems relating to metals in architecture.

ZIMCOLOR

A new division of Zimmcor. With an ever increasing need for variety and adaptability in architecture, we now offer the beautiful finishes of the **DURANODIC 300** process. This colour anodizing process allows 4 lustrous bronze tones to choose from. Call us for additional information — We'll be pleased to help!



Zimmcor Company — 2100 Remembrance Road, Lachine, Que.
Telephone: 637-5851

INDEX TO ADVERTISERS

<i>Page</i>	
103	Algoma Steel (B1)
7	American Bilrite Rubber Co. (B2)
82	American-Standard (B3)
83-84	Arborite Company Div of Domtar (B4)
21	BB Chemical Co. of Canada Ltd (B5)
35	Belcana Glass Ltd (B6)
92	Blok-Lok Limited (B7)
8	Canada Metal Company Ltd (B8)
39	Canadian Celotex Cweco Industries Ltd (B9)
26	Canada Cement Company Ltd (B10)
98	Canadian Crittall Metal Window Ltd (B11)
18	Canadian International Paper Co. (B12)
97	Canadian Rogers Eastern Limited (B13)
100	The Philip Carey Company Ltd (B14)
20	C/S Construction Specialties (B15)
24	Dewey & Almy Chemical Division (B16)
36-37	Dominion Foundries & Steel (B17)
20	Dominion Sound Equipment Ltd (B18)
28	Dow Chemical of Canada Ltd (Rovana) (B19)
17	Dow Chemical of Canada Ltd (Roofmate FR) (B20)
94	Franki Canada Ltd (B21)
4	Gail International Canada (B22)
95	Gemlite (B23)
33	Glaceries de la Sambre (B24)
27	Government of Canada (B25)
25	Holophane Company Ltd (B26)
13	Hydro Electric Power Commission of Ontario (B27)
OBC	International Hardware, Russwin Lock Division (B28)
93	International Steel Co. (B29)
11	Kirsch of Canada Ltd (B30)
80-81	LCN Closers of Canada Ltd (B31)
89	R. Laidlaw Lumber Company Ltd (B32)
86	Medicine Hat Brick & Tile (B33)

Reader Service Reply Card

Advertised product

See index at left for key numbers

B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17
B18	B19	B20	B21	B22	B23	B24	B25	B26	B27	B28	B29	B30	B31	B32	B33	B34
B35	B36	B37	B38	B39	B40	B41	B42	B43	B44	B45	B46	B47	B48	B49	B50	B51
B52	B53	B54	B55	B56	B57	B58	B59	B60	B61	B62	B63	B64	B65	B66	B67	B68
B69	B70	B71	B72	B73	B74	B75	B76	B77								

Product information

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60						

Name _____

Firm Name _____

Address _____

Occupation or Profession _____

5/65

Please enter my subscription to the
Journal of the Royal Architectural Institute of Canada
for one year at \$7 for 12 issues

Payment enclosed

Bill me

Name _____

Address _____

Firm _____

Position _____

Occupation or Profession _____

5/65

For information on any product or service not listed on these cards. Please print your question on this side and drop the card into a mail box.

Name _____

Address _____

Firm _____

Position _____

Occupation or Profession _____

Business Reply Card

No postage stamp necessary if mailed in Canada

5c postage will be paid by



Journal RAIC /L'IRAC

160 Eglinton Avenue East

Toronto 12, Ontario

Journal of the Royal Architectural Institute of Canada

Business Reply Card

No postage stamp necessary if mailed in Canada

5c postage will be paid by



Journal RAIC /L'IRAC

160 Eglinton Avenue East

Toronto 12, Ontario

Journal of the Royal Architectural Institute of Canada

Business Reply Card

No postage stamp necessary if mailed in Canada

5c postage will be paid by



Journal RAIC /L'IRAC

160 Eglinton Avenue East

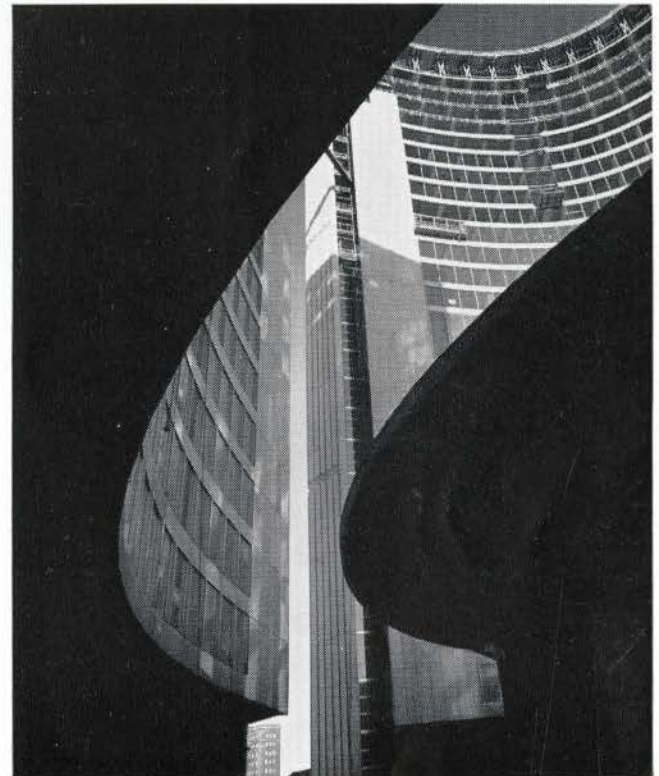
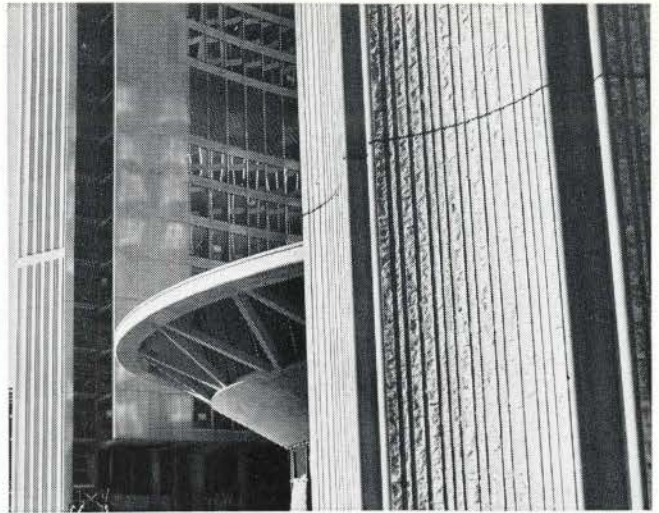
Toronto 12, Ontario

Journal of the Royal Architectural Institute of Canada

INDEX TO ADVERTISERS, Cont'd

- IBC Master Builders Company Ltd (B34)
- 100 Miner Rubber Co. Ltd (B35)
- 101 Natco Clay Products Ltd (B36)
- 90 Manufacturers Exhibit Committee (B37)
- IFC Newlands & Co. Ltd (B38)
- 96 North Canadian Forest Industries Ltd (B39)
- 34 Otis Elevator Company Ltd (B40)
- 30-31 Pedlar People Limited (B41)
- 88 Pedlar People Limited (B42)
- 99 Plywood Manufacturers Association B.C. (B43)
- 29 Reynolds Extrusion Co. Ltd (B44)
- 89 Richmond Screw Anchor Co. of Canada Ltd (B45)
- 14-15 Steel Company of Canada (B46)
- 32 G. F. Sterne & Sons Ltd (B47)
- 3 Terrazzo Tile & Marble Association (B48)
- 22 Tremco Company (B49)
- 23 Turnbull Elevator (B50)
- 102 Von Duprin Division, Vonnegut Hardware (B51)
- 85 Western Gypsum Products Ltd (B52)
- 38 Yale & Towne, Inc. (B53)
- 19 Zero Weather Stripping Company (B54)
- 104 Zimmcor Company (B55)
- opp. 38 Medusa Products of Canada Ltd (B56)

For further information on any item listed in this issue circle the corresponding key-number on reply card.



Toronto's new City Hall. Architects and Engineers: Viljo Revell, John B. Parkin Associates. General Contractor: Anglin-Norcross Ontario Limited. Ready-Mix Suppliers: Dual Mixed Concrete Materials Co. and Canada Building Materials Ltd.

Again, better concrete through the use of POZZOLITH

Used exclusively in over 60,000 cubic yards of concrete in Toronto's new City Hall, POZZOLITH made possible the lowest water content for a given workability. It also provided the desired setting time for the handling, placing and finishing of the concrete under varying job conditions.

Used with Master Builders' MB-VR, POZZOLITH provided optimum air content as well as improved workability, strength and other desired qualities. POZZOLITH makes concrete a better, more uniform building material than plain concrete or concrete with any other admixture.

Remember: good concrete contains adequate cement. The best concrete includes POZZOLITH.

POZZOLITH^{*}
A Product of
MASTER BUILDERS

*POZZOLITH, a registered trade mark of The Master Builders Company, Ltd.

MASTER BUILDERS Field Service

Benefit by the competent, job-proven experience of your MASTER BUILDERS field man. Through him you get maximum value from the use of modern technical products. General Office and Factory—Toronto 15, Ontario. Branch offices: Vancouver, Calgary, Edmonton, Winnipeg, Ottawa, Montreal and Saint John.



MC-6501P

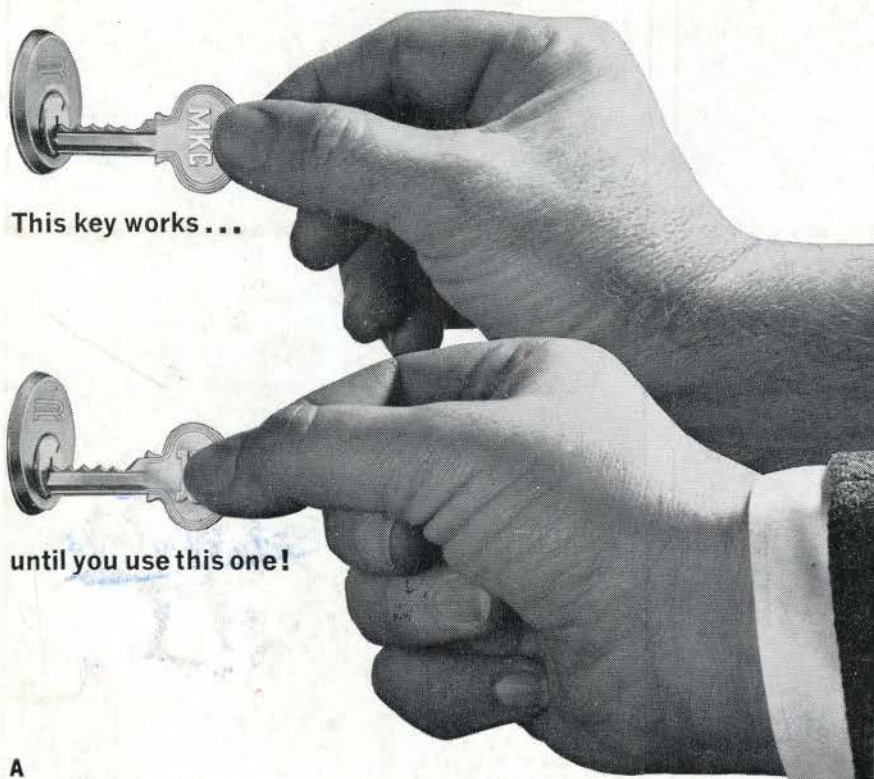
In the news . . . wherever new college buildings are being built

RUSSWIN

Security systems for colleges



B



This key works . . .

until you use this one!

A

Ruswin Construction Key System — makes a new building remarkably easy to keep secure. A set of "construction keys" operates while work is in progress. A second set — the permanent change keys — cancels the first set when the work is completed. No cylinders must be changed.

Ruswin Visual Key Control — makes key identification easy. Control symbols stamped right on the plugs and keys help prevent mix-ups during — or after — installation.

Ruswin Key-Removable Cylinder — for laboratories . . . offices . . . supply rooms . . . dormitories —

wherever lost keys or unreturned keys make rekeying necessary this cylinder solves the problem fast. You simply insert a Control Key into the keyway, turn it slightly, then withdraw the cylinder. It takes only seconds to remove the old cylinder and replace it with a new one. And the Ruswin Cylinder has no tell-tale "piggy-back" keyways.

Your Ruswin supplier can tell you more about these and other Ruswin doorware products — and the advantages of "single-source responsibility". Call him. Or write RUSWIN, Division of The International Hardware Co. of Canada Ltd., Belleville, Ontario.



C

RUSWIN
®