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1960 ANNUAL REVIEW AND YEAREND PREDICTIONS

UNITED STATES PLYWOOD CORPORATION

Americans will spend more money for home modernization than for new home construction during 1961.

That's the prediction of S. W. Antoville, United States Plywood Corporation chairman, who puts the 1961 home modernization figure at $20 billion.

Mr. Antoville made the statement at ceremonies today marking the graduation of the first class of Richheimer Modernization Systems, Inc., a new organization training and franchising home improvement contractors throughout the country.

"Many of those families that took on long term mortgage obligations 12 to 15 years ago are thinking about bringing their present residence requirements up to current family needs," Mr. Antoville said.

"Rather than undertake another long term mortgage obligation at higher interest rates, the family may decide to expand and improve the old homestead."

He pointed out that for every new home built there are as many as 60 older homes in need of repair.

Home modernization resulting from this need next year, Mr. Antoville said, "will exceed estimates for new dwelling units, including private homes in cities and on farms, as well as military, federal and city public housing and college dormitories."

He added that recently published reports indicate banks are becoming increasingly eager to make loans for home improvement. This, he said, would insure ample money for home improvement financing.

Mr. Antoville also told the RMS Systems' graduates that they were "in a modest way" making history, since they were the products of the first organized effort to apply modern management methods to the home modernization industry.

In addition, he pointed out that by encouraging home modernization they would be "helping to enhance and protect the value of what is today about 98 per cent of our total housing inventory in the United States."

"Your customers," he added, "will acquire new pride in their homes and you are going to give their neighbors a new standard of excellence to measure up to. In short, you are going to put into thousands of neighborhoods some new 'Joneses' that are worth keeping up with."

RUBEROID COMPANY

"The need of the average family for a new home is fast disappearing in the American economy," states E. J. O'Leary, president of The Ruberoid Co., in discussing the outlook for residential construction. Ruberoid, now in its 75th year, is a major producer of building materials for home, farm and industry.

"As recently as 1959, a new home was a necessity for many families. However," the Ruberoid executive continues, "this need for shelter which had existed throughout the Fifties, has largely been satisfied. The building industry must now stimulate action on the part of the potential buyer to satisfy the ever-existing want for a better place in which to live.

"Prices of new homes have shown a gradual rise during the past decade. So, too, has the value built into them. Nevertheless, the type of market that residential construction will offer in the next several years will require an all-out effort by our industry to give even greater house value. We must continue to upgrade building materials and methods and develop new products to create increased value. In combination with reasonable prices, these advances will form a package that is attractive to be ignored. In addition, the building industry is going to have to do a more forceful job selling its accomplishments in bringing better living to more people.

"People resist change, but change for a higher mode of living will be the lifefood of the building industry until our mounting population and new family formations re-establish need as a criterion of home ownership. Meanwhile, not only must we appeal to individual want of a new home, we must encourage owners of forty million older homes to want to enhance through modernization their present living conditions as well as their investment. The immediate growth of our industry, therefore, depends not on satisfying a need for shelter but on how well we merchandise our product and its value so as to convert want into positive buying action."
"Make it functional yet spectacular, have it ready in nine months, and keep costs down." Such was the challenge faced by architect Harris A. Sanders of Albany, N.Y., designer of the luxurious Country Squire Motel, one of the largest resort motels in the northeast located near Rochester, N.Y.

Specification of Champlin building components ... stressed skin panels for floors and roofs, straight line laminated beams, plywood box beams, plywood arches for roof support, and members for the folded plate roof ... proved a key move in completing the project on time with one-fifth the manpower required for conventional construction.

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Champlin components, scientifically designed and quality-built to rigid standards, give the high strength to weight ratio so important in many of today's jobs. Arch in the illustration (left) is constructed of built-up plywood units by Champlin.
A COUNTRY RECONSTRUCTS

In recent decades, it seems, Finnish architecture has become an important factor in the international art of building. This is evidenced not only by the many notable successes gained in Scandinavian and international architectural competitions, and by the numbers of architects and other interested people who find their way to our distant country to study what has been built here.

Olavinlinna Castle... this castle was built in 1475 as a bulwark against the east. It is situated in the center of the beautiful Easter Lake District of Finland next to the small idyllic town of Savonlinna.

In many architectural publications Finnish architecture is accorded plenty of space, and the articles reveal a generous appreciation of its consistent virile character and magnificently rectilinear nature. Even the most severe critic must admit that among the indifferent, schematic and superficial buildings of which there are many being built in Finland, there emerges with force and authority much that is of value—and not only the creations by Alvar Aalto, one of the peaks in international architecture of this century—which will perhaps prove permanent.

The Finnish architecture of today is of course no rootless phenomenon, but was preceded by a century-long development, which it is admitted cannot match that of the wealth of forms to be found in countries with an ancient civilization, but which in its rugged matter-of-factness and bold organic structure creates aesthetic values of imperishable beauty. We only need to think of our medieval castles—that at Turku, unique Olavinlinna near the town of Savonlinna, of our greystone and brick churches of the 14th centuries, such as Turku Cathedral and the churches of Hattula, Hollola, Sibbo, Lohja and many others, of the genuine and expressive wooden church architecture of more recent centuries and the manorial and peasant architecture of different periods.

A survey of Finnish architecture,
by
Prof. Hilding Ekelund,
Architect, Helsinki

Of course, this older architecture shows great kinship with contemporaneous phenomena in Sweden, but different geographical, social and economic conditions lend to it a special character, harsher and more ascetic; a certain influence from the east can hardly be denied.

Not until the end of the 18th century, in the final phases of the period of Swedish supremacy, could there be seen in Finland the results of the work of the theoretical training of architects, brought up in Sweden (the building of Abo/Turku Academy, some private houses in the same town, etc.). But soon after the country had been severed from Sweden and had become an autonomous part of Tsarist Russia, a climax occurred in building, consequent upon the new aspect of affairs in the coun-

Hattula Church... a medieval greystone church from the 13th Century.
Helsinki University—Architect: C. L. Engel. Helsinki succeeded Turku as the capital, and the small fishing community was built up in accordance with a new town plan conceived on a large scale in the spirit of the Neoclassicism prevalent at that time, and with columned public buildings, magnificent for the circumstances: the university and its library, the senate building, the Great Church, and so on. Together these buildings constitute a town centre which is still one of the most homogeneous and monumental to be found. The creator of these imperishable aesthetic values and of numerous churches and manor houses all over the country—and the most eminent architect in Finland in the first half of the 19th century—was C. L. Engel, of German birth but naturalized in Finland, an artist who, regarded from an international aspect also, is among the greatest of his era.

The latter half of the 19th century was characterized by this same imitation of diverse styles, a typical feature of architecture in other countries at that time: Gothic, classic or baroque motifs abounded on the facades with their rich but false designs. The central parts of Helsinki were largely given form during this period, coinciding as it did with the heyday of industrialism. We cannot deny that this period nevertheless brought about many outstanding buildings, where the superimposed eclectic styles could not conceal an architectural solution which was constructively and functionally correct (the Guards' Riding School, the House of the Nobility, the commercial buildings of Mercator, Lundquist, and so on in Helsinki).

The reaction to this heterogeneous, "academic" eclecticism of style around the turn of the century is known to have assumed various forms in different countries. An attempt was often made to continue building on the basis of old national traditions, as in Denmark and also in Sweden (the Vasa Renaissance) but it was also easy to slip back into a new false imitation of style. Free from this was the Central European "Jugend" Style, which recognized that the new materials and construction methods needed an entirely new type of architecture, but which often brimmed over with bizarre and capricious decorative forms. Headed by some unusually prominent architects, the reaction in Finland became more drastic and original than in the neighboring countries. "National romanticism," as suggested by the name, was a highly romantic style...
created on a national basis. Its characteristics were primitiveness and fundamental power, and a picturesque but massive construction was combined with rough material treatment—unhewn granite was mostly used for the facade—and with a self-created, rich ornamentation at times based upon old national patterns. This style is indeed worth studying, and among its most conspicuous works may be mentioned Tampere Cathedral and the Telephone Company building in Helsinki (Lars Sonck), as well as the Pohjola Insurance Company building and the National Museum in Helsinki (Gesellius, Lindgren and Saarinen). Finnish national romanticism in architecture derives added interest from the fact that it had its parallel phenomena in painting (above all, in the works of Gallen-Kallela, who also made a great contribution to the new direction of architecture) and in music (Sibelius, and others).

This period was short in duration, but left conspicuous traces in our towns. A return to greater severity and more refined treatment of material, horizontality and axiality soon followed, at the beginning with details showing personal characteristics: Helsinki Railway Station (Elie Saarinen), the Mortgage Society House, the Stock Exchange building, and Kallio Church (Lars Sonck), the Suomi and Kaleva Insurance Company buildings (Armas Lindgren). Subsequently, after the First World War, the attachment to ideals of classical form became clearly discernible simultaneously with the restoration to places of honour of the old national traditions, the simplicity of form of our old manor houses, town planning and churches. At this point, development in Finland took a parallel course to that in Sweden (Westman, Ostberg, and the young Asplund). The culmination and termination of this classicism of the 1920's, which also otherwise produced a number of good results, especially in housing construction, consisted of the House of Parliament (J. S. Siren), a building created with a wealth of artistic force and ambition, with a monumental, classically inspired stability. The well planned and monumentally effective Stockmann Department Store (Sigurd Frosterus) is one of the buildings of this period that have best resisted the passing of the years.

Before the Parliament House was completed in 1932 the current had changed, and it seemed that the new trend would finally put paid to all the old traditions. The breakthrough of the new style of architecture, that of functionalism, occurred in Finland at approximately the same time as it did in Scandinavia generally. The Stockholm Exhibition of 1930 is usually taken to be the dawn of the new era.

On the European continent, signs of an architectural regeneration had been discernible for a long time; but the ground was not unprepared in Finland. The national romanticism had liberated planning and the grouping of masses from the axial and symmetrical strait jacket of architectural style, and the subsequent classisizing architecture, often built upon a national ascetic tradition, had striven for clarity and constructive order. It was very appropriate, when the ideas of functionalism were applied to feeling of social responsibility and a form originating in expediency, the new materials and methods of construction.

The most prominent names in the 1930's were first and foremost Alvar Aalto and Erik Bryggman. The former is an expansive creator, rich in ideas, with an extraordinary talent for lending an expressive and brilliant artistic form to his ideas. Bryggman—who died recently—was a tranquilly meditative artistic personality whose work radiated a confidential intimacy which can hardly fail to be understood by all. Aalto’s first important work of the 1930’s, the Paimio Sanatorium, completed in 1932, continues to appear just as fresh and genuine as it did at the time of its creation. During the 1930’s, the sanatorium was followed by several other buildings which contributed towards his being accepted as one of the world’s leading architects: the famous Sunila factory with the adjacent residential area, near the town of Kotka, the exquisitely beau-
tiful municipal library in Viipur, since ceded to the Soviet Union, Villa Mairea in Noormarkku near Peni, Finnish stands for Paris and New York exhibitions, etc.

Erik Bryggman's personal and splendidly exclusive art found its expression in buildings such as the Athletics Institute at Vierumaki near Heinola, several buildings for Abo Academy and its student nations in Turku, and above all in the impressive funeral chapel near Turku.

As for the remainder of the noteworthy works from the first bold decade of functionalism mention may be made of the Helsinki Stadium, an extraordinarily virile and logically composed athletic forum, especially in its earlier form (Lindegren and Jantti), the elegant Exhibition Hall, also in Helsinki (Hytonen and Luukkonen), the harbour warehouse on Katajanokka, Helsinki, with its powerful lines (Gunnar Taucher, and others), several examples of hospital buildings, and the earliest housing areas planned in accordance with new rational principles in some Finnish towns, as for instance the older "Olympic Village" near Helsinki.

Finland was twice drawn into the whirlpool of the Second World War, and this naturally meant a radical interruption of the particularly promising development outlined above. It is true that Finland emerged from the chaos with her independence preserved, but utterly impoverished by the war itself, the extremely heavy war reparations, and by extensive territorial cessions.

The most topical problem in the 1940's was that of trying in some way to create, under the most difficult of circumstances, adequate housing for nearly half a million evacuees, that is approximately 12 per cent of the population of the country at that time. It can hardly be said that this problem has been completely solved yet. Despite intense building activity, first of all the erection of small houses in the countryside and semipermanent plain wood-construction blocks of flats in urban areas, and subsequently permanent blocks of flats in stone, the housing shortage has not yet been overcome in urban districts. In Finland, as in other countries, reconstruction has required governmental support; in the first instance this was directed towards the creation of one-family houses. After 1949, when ARAVA, the government office for the granting of building loans, started its work, apartment houses were also given appreciable support in the form of low-interest loans.

It is obvious that such compulsory production of housing with the work being carried out under difficult economic conditions, could not achieve the best possible results, in spite of the control exercised by the credit granting institution. Nevertheless, a number of excellent housing areas have been built up in recent years, partly under communal administration, and partly on the initiative of well-managed general utility companies. A housing area which is modern in every respect, and which attains a high architectural level, that of the garden city of Tapiola, outside Helsinki, is often quoted. The foundation, Asuntosaatio, which is responsible for the enterprise, has in fact managed to bring into being, with the aid of several eminent architects, a pleasant conglomerate of high and low buildings, of tower houses, terraced houses, one-family houses, with schools, kindergartens, shopping cen-

Church in a small rural parish of Rajamaki. Architect: Erkki Huttunen.

tres, etc. in park surroundings. A visit is really worthwhile even for those not immediately interested in building.

As far as "grander," official architecture is concerned, a stagnation which was almost absolute prevailed for natural reasons throughout the 1940's. What was built and projected easily assumed the characteristic of romantic resignation, a fairly common phenomenon after difficult periods; the idyll became a refuge to be sought as a means of escape from hard reality. The beautiful and well-planned children's hospital (Ullberg and Linnasalmi) and the stately Sokos building with its business premises, hotel and offices (Huttunen), both in Helsinki, had been projected and started before the war. Among the buildings of note erected in the 1940's, there may be mentioned the group of buildings for the Finnish School of Economics (Baeckman & Harmia), richly proportioned and with refinement of detail.

From 1950, approximately, one can sense a complete return to the concepts of ideal form of the 1930's. Aalto, who remained faithful to his own dynamic-organic line, and who built for instance a personally characteristic dormitory for the Massachusetts Institute of Architecture in Boston, was once again the pioneer. His organically creative, highly varying architecture became the unattainable model for many. A list of Aalto's brilliant works...
during the last decade would be very long, and it is here possible to cite only the most striking examples.

In Helsinki, he has produced the building complex of the National Pensions Institute, massive and yet full of life, the finely proportioned business building of Rautakonttori Oy, with a charming inner courtyard, the "House of Culture" with its freely conceived concert and meeting hall of excellent acoustic qualities. The facade materials used in these buildings are confined to brick, copperplate and natural wood. A jewel of its type is the small local government building of Saynatsalo near Jyväskyla, an intimate little brick house with the masses arranged in wings of varying height surrounding a partly open courtyard. The buildings of the Jyväskyla Teachers' Training College are also of great interest. Two churches, one in Vuoksenniska and the other in Seinajoki, reveal a new and interesting grip of ecclesiastical architecture. A number of highly interesting projects, not yet completed (Ljungby Crematorium, Denmark; the main building of the new Institute of Technology at Otaniemi, the Art Museum in Alborg, etc.) supplement the list of his works, to which should be added numerous buildings from his hand that have been, or are being, erected abroad in Germany, France and Italy. Aalto has substantially contributed to town planning, and also to furniture design, where his creations can truly be said to have constituted an era.

Despite his position of dominance in Finland's architecture of today, Aalto is not alone in the field. His work is supplemented by that of a number of young architects, some of whom are highly talented, and who are frequently absolutely independent. In recent years, a strict and mathematically rectilinear style, in contrast with Aalto's organic-dynamic creations, has gained ground among his younger contemporaries. This trend, and the thought behind it, have a certain connection with the present endeavors to find, by the use of prefabricated elements, a modern and economic solution to building problems. Supporters are also to be found for a theorizing, metaphysically speculative conception of architecture.

In conclusion, a list is given of some of the middle-aged and young architects who, often with considerable success, have asserted themselves in the 1950's, and have made an active contribution to Finland's newly acquired fame in international architecture. Viljo Rewell's powerful, rectilinear, bold conception of composition is beautifully expressed in the Teollisuuskeskus office building by the South Harbor of Helsinki, a new conspicuous addition to the capital's "representation façade" to the sea. An elementary school building in Meilahti, Helsinki, shows a boldly sweeping plan solution. The Textile factory of Kudeneule in Hanko is an example, in its crystallized simplicity and delicate

Continued on Page 22
Each tile is 12" square and individually hand sculptured. No two tiles bear the same design. The basic material used for these rough textured tiles is fire clay colored with a high-fire felspathic glaze. Available colors include turquoise, green, metallic blues, black, antique white and a variety of "earth" hues. Mrs. Harmon has also designed a series of corresponding, flat-textured tiles which may be coordinated with the deeply dimensioned pieces. These tiles may be used indoors or outdoors. They are drilled for wall bolts or they may be installed by setting in cement. Since each overall installation of these tiles is designed according to the requirements of a specific application, preliminary sketches and estimates are submitted upon request by the Virginia Frankel Gallery.

Mrs. Eloise Norstad Harmon, who specializes in architectural sculpture, has developed a series of hand-sculptured stoneware wall tiles that have received an International Design Award from the American Institute of Decorators. The daughter of artist-parents, Mrs. Harmon has worked as a "potter" in decorative stoneware practically all her life. In recent years, she has concentrated on the design of sculptured wall tiles as well as garden lanterns and sculpture, wall and free-standing fountains and planters. In discussing the tiles that won the A.I.D. award, Mrs. Harmon explained that she feels that much of modern architecture needs some of the decorative elements inspired by the art of oriental countries and the Victorian era. Her work has been exhibited at the Silvermine Artists' Guild and at the Syracuse National Ceramics Show. Decorators and interior designers throughout the country have selected Harmon sculptures for many residential and commercial installations.

A group of sculptured, stoneware wall tiles by Eloise Norstad Harmon received an International Design Award from the American Institute of Decorators recently at the A.I.D.'s annual Awards dinner.

The Virginia Frankel Gallery, exclusive distributor of the Harmon tiles, also received an award given for the first time this year, to manufacturers of winning designs. The Gallery, a contract art service for architects and interior designers, represents artists and craftsmen who work in various media.

The tiles, each 12" square, are individually hand sculptured, with no two bearing the same design. Suitable for both indoor and outdoor use, these rough textured tiles are made of fire clay highlighted with a high-fire felspathic glaze.

The choice of glaze colors includes turquoise, green, metallic blues, black, antique white and a variety of "earth hues."

Mrs. Harmon has also developed a series of corresponding, flat-textured tiles which may be coordinated with the deeply dimensioned pieces. All of these tiles are drilled for wall bolts or they may be installed by setting them in cement.

The tiles are designed according to the requirements of each installation. Preliminary sketches and estimates are available from the Virginia Frankel Gallery, New York. The Gallery will open a Chicago showroom early in 1961.
Ground was broken on Thanksgiving morning for the new Concordia Lutheran Church on Pitkin Street in Manchester, Connecticut. The structure will house a church unit to seat 590 and include administrative offices. An attached two level educational facility will contain 11 classrooms and school office at the lower level, and social room, stage, kitchen, and lounges at the upper level.

Designed by Architect Arnold Lawrence, the construction contract has been awarded to Squillacote Builders, Inc., both of Manchester, Conn. The project will represent a total investment of $500,000 when completed.

The most unusual aspect of the new Center will be the building itself. The 20-story structure, 325 feet high, approximately 120 feet long and 50 feet wide, will be supported by four corner columns only. Stair, elevator and mechanical shafts will be in the ends of the building, leaving the floors completely free of any structural or mechanical obstructions. This allows great flexibility in interior planning and it will be as easy to provide large spaces—such as the library which will occupy the entire eleventh floor—as smaller classrooms or offices.

The floor structure consists of pre-stressed concrete joists, 47 feet long and five feet on center, resting on floor high Viereckel trusses, whose webs are hollowed out by the oval windows. The trusses transmit their loads to the four corner supports, and the whole is braced against the wind by the end walls. The ground floor is completely open, except for the entrance lobbies, and land coverage is kept to a minimum.

Exterior of the building will be cast architectural concrete whose surface will be lightly sand-blasted to expose some of the stone aggregate. The masonry qualities of concrete make it a natural choice for the building because of the unity with existing M.I.T. buildings, which are mostly built of stone. Reinforced concrete, like no other material, permits the merging of structure and architecture into an organic entity, each indispensable to the other, and none in the least superfluous. Mr. Pei, and his associate, Aldo Cosutta, believe that concrete offers great possibilities in the realm of pure architectural form as well as structural expression. They are confident the Center for the Earth Sciences building will be an outstanding example of this.

In his post Mr. Korth will be responsible for the operations of the entire Tufts University physical plant in Medford and of the facilities of the Tufts University School of Medicine and Dental Medicine in Boston. The plants have a replacement valuation in excess of twenty-million dollars.

Mr. Korth, a superintendent with the Turner Construction Company, has directed the construction of numerous multi-million dollar projects at Purdue University and at Swarthmore College. A graduate of Princeton University, he is a past president of the Juniors Engineering Club of Philadelphia. He is a Navy veteran of World War II and joined the Turner Construction Company in 1946, following his discharge from the Navy.

KORTH APPOINTED

Appointment of Donald W. Korth, Jr., of 5 Balfour Circle, Lansdowne, Pa., as Director of Physical Plant at Tufts University was announced today by Dr. Nils Y. Wessell, president of the University. He succeeds Jan T. Friis who has retired.

M.I.T. CENTER FOR THE EARTH SCIENCES

Ground was broken recently at the Massachusetts Institute of Technology for construction of one of the most unusual campus buildings in the world. The building, which will house most of M.I.T.'s teaching and research in the earth sciences, will be the first major unit erected under the Institute's $66 million Second Century Fund.

The shovelful of earth that was turned over by Dr. Julius A. Stratton, M.I.T. president, and Cecil H. Green, M.I.T. alumnus from Dallas, Texas, whose gift made the building possible, marked the start of a structure architecturally unique in the United States.

In his post Mr. Korth will be responsible for the operations of the entire Tufts University physical plant in Medford and of the facilities of the Tufts University School of Medicine and Dental Medicine in Boston. The plants have a replacement valuation in excess of twenty-million dollars.

Mr. Korth, a superintendent with the Turner Construction Company,
fourth-year students on The Integration of Engineering and Architecture, The Impact of the Mechanical Systems on Structure, and Heating and Air-Conditioning Systems for Schools, Colleges, Office Buildings and Museums; and Monday and Tuesday with the fifth-year students discussing the mechanical requirements of their fifth-year problem, a building developed by a hyperboloid of revolution and torus to be used for a World's Fair exhibit.

Mr. Mindell conducted a series of lectures Wednesday, Thursday and Friday for fourth-year students on the significance of "What an Architect Should Know About Mechanical Systems for Buildings," "The Role of Mechanical Systems in Building Function" and "Heating, Ventilating and Air-Conditioning Systems for Laboratories, Apartment Houses, Hotels and Residences." In the afternoons he continued the mechanical critique with three six-man groups of fifth-year students on their World's Fair project.

Both visiting lecturers stressed the need for closer communication between Architect and Engineer and the importance of the influence of mechanical systems on building configuration, size and use of materials. Mr. Mindell stated that "Creativity is stimulated by a recognition of the human needs which can be fulfilled by proper building design, and the Architect must be familiar with the technology available to him to assist in his planning."

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J. FREDERICK KROKYN, 79, BROOKLINE ARCHITECT, DIES

J. Frederick Krokyn, 79, of 69 Babcock St., Brookline, an architect in Boston since 1907, died Dec. 3rd at Massachusetts Memorial Hospital.

Designer of buildings at Harvard, the Lowell Institute and the Hebrew Home for the Aged in Roxbury, among others, he was a partner in the firm of Krokyn, with a son, William, of Cambridge.

He had a part in designing the first freshman dormitories built at Harvard under the then president, A. Lawrence Lowell, and also received the Parker Medal for his work on the Motor Mart Garage in Park Square, a pioneer structure of its type.

Born in the North End, he attended English High School and was graduated from Harvard in the Class of 1908. He received a degree in architecture from the university two years later.

From Harvard, he went to San Francisco, where he worked on reconstruction after the earthquake and fire of 1906, returning to Boston the following year to practice with the firm of Coolidge & Shattuck. He opened his own office in 1918.

In World War I, he served in Washington with the U. S. Housing Corp., designing housing for war workers.

Returning to Boston after the war, he entered partnership with Ambrose A. Brown. The firm of Krokyn & Brown over the years designed a great variety of public and private buildings throughout New England.

From 1918 through 1952, he served as a member of the Bureau of Standards of the Massachusetts Department of Public Safety.

He was a member of the state, national and local societies of his profession, the American Jewish Committee, the American Technical Society, the Massachusetts Horticultural Society and the Institute of Contemporary Art.

He also leaves his wife, the former Rae Tannenbaum of Montreal.

Services were held at the Temple Israel, Boston, with burial in Tifereth Israel Cemetery, West Roxbury.
The design of Boston's new $20,000,000 City Hall in the Government Center may be determined in a nation-wide competition among leading architects, it was announced yesterday.

Frank W. Crimp of the Boston Society of Architects said the Boston Government Center Commission, of which he is a member, favors the broad competition as it prepares to engage an architect.

Crimp said a competition would also "excite interest, curiosity, speculation and hence a better understanding and acceptance among the citizens of Boston and would produce widespread favorable publicity for the city at little added expense."

The 500,000 square feet of office and corridor space in the new City Hall will accommodate all city agencies except the school department, which will be placed in the present City Hall Annex.

The nation-wide architectural competition would be conducted by the American Institute of Architects, Crimp said.

Robert B. Curtis has been promoted to the position of general manager of the prestress plant of C. W. Blakeslee & Sons, Inc., New Haven, Conn. general contractors, according to an announcement by James H. Gilbert, vice president. Curtis joined the Blakeslee firm in 1958 as sales engineer of the prestress operation.

For four years previous to coming to New Haven, Curtis was construction engineer in the highways and bridges department of the Worthington Construction Co., Line-Lexington, Pa., working on the Pennsylvania Turnpike. He has also held construction engineering posts with United Engineers & Contractors, Philadelphia, and Eastern Prestress, Inc., Hatfield, Pa. Curtis received his B.S. degree in civil engineering, from Lehigh University, in 1951. He is a registered professional engineer in New Jersey, and a member of the Connecticut Society of Civil Engineers.

CORRECTION:
Architect as listed on the back cover of the October Issue should have been shown as M. A. Dwyer Company, Boston.
This is the Bostik Look

...blends a touch of texture with a shade of color to produce a new concept of form

*Trademark of B B Chemical Company
New protective and decorative Bostik Textured Coatings have been developed to answer the needs of architects, engineers, contractors and owners who are concerned with designing and building structures whose exteriors demand protection, durability and beauty.

They are designed to be spray-coated on poured, precast and prestressed concrete; masonry, brick and concrete block; asbestos board, masonite and overlay plywood.

**BOSTIK: product of polyurethane chemistry**

Bostik Textured Coatings are the end result of a chemical reaction that takes place when an isocyanate activator in solvent is introduced to a pigmented urethane resin. Upon mixing, a cross linking reaction occurs and the film cures to a tough, weather resistant surface.

Aggregates of various sizes are introduced to the base film to produce a “textured” effect which can be dramatically pronounced or just a bit above smooth.

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The urethanes make one of the most resistant organic coatings ever developed. They possess a combination of desirable qualities heretofore unobtainable in conventional coating materials.

As a basic component of Bostik Textured Coatings, the urethanes provide high resistance to abrasion, wear, impact and mechanical abuse. Useable indoors or out, they are extremely resistant to industrial fumes, salt spray and smog. They are virtually invulnerable to the attacks of solvents, oils, grease, water and similar substances.

As tough and durable coatings, the urethanes are setting a new standard of excellence for the construction industry.

**BOSTIK: worldwide background to performance**

Bostik Textured Coatings are a colorful result of the BB Chemical Company’s emphasis in discovering, developing and marketing finishes and adhesives to industry for over three quarters of a century.

Using this background of finishing know-how, amassed at home and abroad in other BB Chemical affiliates, the company was one of the first to research and develop both clear and pigmented urethane coatings.

Urethane coatings have proven their worth in all manner of applications and in all areas of the world... from resisting torrid heat in the boilers of steel mills deep in the Rhur Valley... to fighting corrosion in the holds of oil tankers sailing Lake Michigan... to coating wooden dye sticks in Southern textile mills... to protecting the laboratory floors at the BB Chemical plant in Cambridge, Massachusetts.

Now, urethane chemistry takes another dramatic, colorful step forward. From the BB Chemical Company laboratories comes a touch of texture and a shade of color to produce a new concept of form... Bostik Textured Coatings.

FROM SWEDEN... Facade of housing project is warm, inviting and protected in depth from 400,000 square foot application of "the BOSTIK look."
Location: Stockholm — Ostberga
Architect: SAR L.M. Gierty, ALVSJO
Contractor: Ohisson & Skarne, Stockholm

TO MASSACHUSETTS... Mobile mission church uses "the BOSTIK look" to protect medium density overlay plywood in honeycomb cored roof panels.
Location: Burlington, Massachusetts
Pre-fabrication: Acorn Structures, Inc., East Acton, Massachusetts
TO FLORIDA . . . "The BOSTIK look" as it appears on the folded plate reinforced concrete roof and Y-shaped concrete supporting columns of this modern beach house in Miami.

Location: Miami, Florida
Architect: R. B. Browne, Miami, Florida
Coating Contractor: Bailey, Lewis & Williams Co., Miami and Atlanta

AND BB, TOO . . . Bright (and protective) way to make industrial-chemical plant attractive to townspeople and visitors is use of "the BOSTIK look" at Middleton, Massachusetts plant.

BOSTIK: in colors that befit imaginative design

The BOSTIK TEXTURED COATINGS color spectrum embraces over a dozen tones. Some are shown in this story; others appear in color charts available on request. All colors may be intermixed for an infinite variety of shades.

All are durable. All will retain their true tones without fading far longer than other types of applied finishes. All make it possible to suit color to the personality of the structure . . . individually or in combination.

BOSTIK: proved in the laboratory and on location

BOSTIK TEXTURED COATINGS demanded — and received — substantial proof of their worth and performance capabilities before being marketed commercially. Testing and development programs were conducted in the laboratory and on location, both in this country and abroad.

On Location Applications:

BOSTIK TEXTURED COATINGS had their first full-scale test in Stockholm, Sweden, where in 1955, over 400,000 square feet of precast concrete was given "the BOSTIK look." Due to the outstanding weather resistance of these textured coatings no further re-treatment of the surface will be required for many years.

It is interesting to note that, due to the many commercial successes BOSTIK TEXTURED COATINGS have enjoyed in Sweden, architects, engineers and construction firms in England, Germany and other European countries are rapidly becoming aware of — and putting to use — their excellent protective and decorative capabilities in many kinds of building applications.

From success in Sweden, "the BOSTIK look" came to Florida where it was sprayed on the roof and supporting concrete columns of a suspended design house in Miami.

In all, over 4,000 square feet of concrete was sprayed in an area where harsh sunlight, torrential rains and wind-driven sand can take their toll of exterior surfaces. The house continues to retain "the BOSTIK look".

Another application, important for its future potential, was the use of BOSTIK TEXTURED COATINGS to coat roof sections of medium density overlay plywood at a mobile mission church in Burlington, Massachusetts.

The 70,000 square foot addition to the BB Chemical plant in Middleton, Massachusetts, was sprayed with four colorful shades of BOSTIK TEXTURED COATINGS to demonstrate their remarkable corrosion resistance in a highly chemically concentrated atmosphere. In addition to protection, "the BOSTIK look" brought a new kind of beauty to what might have been just another industrial chemical plant.

In Laboratory Performance:

BOSTIK TEXTURED COATINGS have been, and continue to be, subjected to a continuing testing program which encompasses a full round of comprehensive performance tests.

These include WeatherOmeter tests, FadeOmeter tests, SaltFog tests, Hot-Cold-Wet-Dry Cycle tests, a year-round research program in Florida, plus practical field applications throughout the country.

The knowledge accrued from tests in the laboratory and on location assures architects, engineers, builders and owners continuing standards of coating excellence when specifying, building and designing with BOSTIK TEXTURED COATINGS.
ARCHITECTURAL SPECIFICATIONS for
BOSTIK TEXTURED COATINGS

GENERAL CONDITIONS:
The General Conditions of the specifications covering the over-all project shall form an integral part of this section.

EXTENT OF WORK:
Work included in this section covers all labor, material, equipment and supervision necessary for the installation of BOSTIK TEXTURED COATINGS by an approved franchised applicator to all areas set forth in the exterior coating schedules, drawings, and specification.

MATERIALS AND WORKMANSHIP:
BOSTIK TEXTURED COATINGS are the end result of a chemical reaction occurring when an isocyanate activator in solvent is introduced to a pigmented urethane resin. Upon application, a cross-linking reaction occurs in which the film cures chemically to form a tough, weather-resistant surface.

All BOSTIK liquid materials shall be first-quality, freshly compounded, and applied to wall surfaces directly from factory-sealed drums, without dilution or additives. Aggregates to be used shall be Wausau Quartz or approved equal delivered dry to the spray gun from a portable CXW sand blast unit manufactured expressly for the BB Chemical Company and supplied by Spray Engineering Company, 100 Cambridge Street, Burlington, Massachusetts. All installations shall be made by technically trained factory approved mechanics, using technical equipment specifically designed for this purpose.

PREPARATION:
All exterior exposed concrete, masonry, block, or cement based surfaces to have spray-applied BOSTIK TEXTURED COATINGS shall be dry and free from dirt and other materials.

Any major surface imperfections shall be remedied before spray operation begins. No BOSTIK TEXTURED COATINGS shall be applied to deteriorating surfaces without prior sandblasting to sound substrate and/or approval of franchised applicator. No spraying will be allowed in rainy or foggy weather or when the temperature is below 45°F.

APPLICATION PROCEDURE:
Application shall be made by an applicator who is licensed and franchised by the BB Chemical Company. Evidence of franchise must be submitted to architect in writing.

BOSTIK TEXTURED COATINGS are packaged in a unique 2-part system consisting of five gallon drums, with four gallons of Part A pigmented binder in the bottom, and one gallon of Part B clear, activator in the top insert. After removing cover, lift out insert, and pour Part B into Part A. Mix thoroughly for three to five minutes, with conventional mixing paddle. Quantities mixed at job site, should be governed by requirements for one day’s application. Once mixed, the coating should be placed in a standard pressure feed tank with duplex control head. Materials remaining mixed for more than 8 hours shall be discarded and removed from the site.

BOSTIK TEXTURED COATINGS are applied to masonry surfaces by a two coat spray application, using the Spraco Triple Spray Gun Model #230, as manufactured by Spray Engineering Company expressly for the BB Chemical Company.

After spray application of the gritted base coat, the top, or sealing coat, may be applied with the same gun and material by merely shutting off the flow of the aggregates and proceeding to spray over the base coat. Cleaning of equipment follows the usual spray equipment procedure using BB Chemical Company’s solvent cleaner or a mixture of methyl ethyl ketone and isopropanol in equal parts.

COVERAGE:
A minimum mil thickness of 60 mils for the finished coating is the standard coating thickness when an aggregate is used that will pass a 20 mesh screen and be returned on a 35 mesh screen.

COLOR SELECTION:
All color selections shall be made and approved by the architect before the applicator shall proceed.
"Project Turnkey"—the nation's first automated post office at Providence, R. I.—was officially dedicated in October by Postmaster General Arthur H. Summerfield in elaborate ceremonies that attracted worldwide attention.

Costing $20 million, the building was first started in April, 1959. It was designed by Charles A. Maguire & Associates with Gilbane Building Co. as the general contractor on the project.

Intelex Systems, Inc.—a subsidiary of International Telephone & Telegraph Co.—owns the new facility and equipment and leases it to the Post Office Dept. for an annual rental of $1.4 million.

The building is 420 feet long, 300 feet wide and 55 feet high and features six poured-in-place parabolic concrete domes with a clear span of 150 feet.

Used in the area beneath the arches formed by the domes is an unusual curtain wall system, known as "Thinlite," which provides glare-free daylight to the building's interior.

Thinlite is composed of four feet x two feet prefabricated glass tile panels bolted to aluminum struts and featuring interlocking neoprene gaskets on all perimeters to assure weather-tight fit. Glass tiles used in the panel are two inches thick and have prisms built into their hollow core which eliminate glare and diffuse the light.

Installation of the approximately 31,000 square feet of Thinlite in "Project Turnkey" has saved an estimated $45,000 in the initial cost of air-conditioning equipment required for the building compared to the originally proposed alternate curtain wall made up of ordinary flat glass.

Features of the new automated post office include:

- "Cullers" which shake the mail apart, pushing aside abnormal-sized letters and packages and putting normal letter mail onto conveyor belts for processing.
- Face cancellers which turn letters address side up and cancel the stamps.
- A 15-ton letter sorter, worked in conjunction with a key punch code system, which carries the letter along a belt and drops it in one of 300 bins according to its destination.
- A package sorter which, by means of coding and a memory unit, tips each package into its proper destination bin.

The Post Office also has its own separate lubritorium to service postal trucks and a heliport for helicopter delivery and pickup of mail.
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GIANT STAINED GLASS WINDOW DEFIES DESTRUCTIVE FORCE OF HURRICANE DONNA

When the largest stained glass window in the world—317 feet long—endured gale force winds of Hurricane Donna last September, it proved that a massive area of leaded stained glass could endure destructive winds. More than 7,000 square feet of colored glass—dominating the facade of the new American Airlines Passenger Terminal at Idlewild International Airport—resisted gusts measured at over 58 miles per hour.

According to the Idlewild Weather Bureau Observatory, steady peak winds blew at 46 miles per hour for two hours in that early afternoon of the 12th. The storm, the worst of the season, poured 5.83 inches of rain at the airport during a total period of only 12 hours.

Representing $200,000 and a year’s work, the stained glass window was not at all affected. The 22½-foot high window designed by artist Robert Sowers of New York remained as airtight as before.

The giant window’s ability to withstand such heavy winds is attributed largely to its lead frame construction. To exploit to the maximum lead’s properties of “giving” under pressure and of absorbing vibrations, the fabricators, Rambusch Decorating Co., of New York, set each pane of glass and each of the 936 panel sections in lead came (flexible grooved rods). The supporting steel network of frames into which each panel section was fitted was wrapped by the John F. Abernethy Co., Brooklyn, N. Y., with 2½-pound sheet lead and the lead seams burned to form a hermetic seal. The retaining frames which hold the panel sections in place were also composed of lead.

Calked with thiokol (a polysulfide synthetic rubber used in calking windows of many contemporary buildings) the panel sections were sealed against weather and also bedded in a yielding plastic support. Small neoprene pads were placed under the lower edge of each panel to prevent it from sinking to the metal framework without destroying the “give” of this rubber suspension.
CONNECTICUT SCHOOL USES
GAS-HEATED WARM AIR SYSTEM

A unique, glass-wall design for individual classroom buildings has been made practicable by the use of a gas-heated warm air system at the new Foote School in New Haven, Conn., a private elementary day school.

The unusual plan calls for just one or two classrooms in each individual "building," which are connected by unwalled, roofed passages. When completed, the school will consist of 20 individual or semi-attached classrooms, a common building, custodian housing, cafeteria and gymnasium-assembly room.

Individual gas-heated furnaces were selected for the 713 square-foot classrooms, gas-fired vertical-type blowers for some small-area applications such as lavatories. Heat loss from classroom is 68MBH each, and 15.2MBH from the lavatories.

A gas-fired boiler is installed in the gymnasium building. While the small buildings are heated with hot air, and the large buildings are designed to accommodate a combination of hot air and hot water heating. Cooking and domestic water heating are also done by gas.

"One of the advantages of gas," said Mr. Allen Hubbard, consulting engineer, "is its flexibility, which allows us to use gas heating in a combination of ways."

Other advantages cited by Mr. Hubbard include: cleanliness, lack of maintenance problems, and quietness of operation. "While operation of a gas heating system in this part of the country is somewhat more costly than oil," he added, "the advantages—plus lower installation and maintenance costs—make the system worthwhile."

The total cost of operation during the 1959-1960 school year, including domestic hot water and the gymnasium building with its apartment, was $2,455 for 251,400 cubic feet of gas consumed. Heat loss is estimated at 1,066.7MBH for the entire structure, and there were 5,502 degree days registered during this period.

The new Foote School campus, designed by Perkins & Will and Carleton Granbery, architect, is half completed. It currently includes the Assembly Unit, comprised of gymnasium-assembly room, lobby, locker rooms and custodian's apartment, seven classrooms of the Upper School and the connecting walkways. Work is currently in progress on three kindergarten units and the Common Unit, which includes library, music, art, administration, 8th grade, kitchen, cafeteria and shop and science laboratories.

Explaining the unusual pattern of the school, designer George B. Cash, R.A., said: "The program requirements, educational philosophy and the rolling... Continued Next Page
NEW FOOTE SCHOOL

Continued

wooded site suggested decentralized units which are connected by covered walkways. These units are grouped according to use as Upper, Middle, and Lower schools, common unit, Assembly unit and Kindergarten."

Each unit is kept warm and draft-free by a double-vent, gas-fired heater—despite the fact that the two "tall" walls are floor-to-ceiling, single-pane glass. Each vent blows warm air at a glass wall over the students' heads.

The warm air moves down the glass walls, preventing window fogging and condensation, and is collected by perimeter floor ducts. It then passes under the classroom floor and is reintroduced into the heating unit.

The heater for each teaching station is rated at 100,000 Btu input and 80,000 Btu output. This is considered adequate to maintain optimum classroom temperature on the most rigorous New England day, despite the 68MBH heat loss from each unit.

A 792,000 Btu input—633,600 Btu output gas-fired boiler serves the 8,700 square feet which comprise the gymnasium building, including the shower rooms and custodian's apartment. Heat loss for this structure is rated at 575.5MBH.

The Foote School, one of Connecticut's top-rated primary schools, began its new building program in 1958. Approximately 120 pupils are currently enrolled, and when the building project has been completed, it will have a capacity of just over 200 students.

ARCHITECTURAL PLAN TEMPLATE INCLUDED IN NEW K&E LINE

A versatile drafting template for making architectural drawings is included in a new line of templates now offered by Keuffel & Esser Co.

Trade-named "Speedraft"®, the line consists of 18 individual templates for a widespread variety of applications.

The architectural drawing template contains a compact arrangement of the most widely used symbols for bathroom-kitchen fixtures and equipment, electrical outlets and door swings. It also provides a handy stair-run scale for various rises and treads, and a roof pitch scale.

In addition to the architectural drawing template, the new K&E Speedraft line includes templates for use in drawings of office plans, store layouts, electrical and electronic diagrams, and plans for ductwork; and templates for drawing circles, squares, triangles, ellipses and other drawing symbols, all in graduated sizes and scales.

Keuffel & Esser Co. is America's leading manufacturer of a quality line of precision optical instruments and engineering, drafting and reproduction equipment and supplies. For more information about the K&E Speedraft line, write: Keuffel & Esser Co., Adams and Third Streets, Hoboken, N. J.
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ARCHITECT: STANLEY B. PARKER

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A COUNTRY RECONSTRUCTS
Continued from Page 12

proportions, of the high level attainable in industrial
architecture. In his numerous residential buildings,
in Tapiola, Maunula and Vaasa, his efforts at a
striking architectural effect may occasionally have
resulted in less successful house planning.

Aarne Ervi is a highly capable architect with much
experience. He has also been busy in Tapiola, where
he has planned residential and commercial build­
ings, and projected a shopping centre which is now
under construction. He has made the drawings for
a number of splendid power stations in the north of
Finland, but his most important works are probably
the Porthania Institute building of Helsinki Uni­
versity, a logical and skillfully realized element of con­
struction, and buildings for the Finnish University
of Turku.

The passenger pavilion of Helsinki Harbour, pro­
jected by architects Luukkonen and Hytonen, is in
its rugged simplicity and equilibrium a very good
example of present-day Finnish architecture.

Jorma Jarvi’s production comprises several fine
schools with unconventional plan solutions, in Kulo­
saari, Vartiokyla and Tapiola, all in the vicinity of
Helsinki. He also projected the attractive swimming
stadium of the capital. Aulis Blomstedt, an
individualistic architectural theoretician, has drawn
series, terraced and atelier houses in Tapiola, and a
new, well-restrained annex to the Finnish Workers’
Institute in Helsinki. Among the talented young
architects, first mention must go to Heikki Siren,
son of the architect of Parliament House. His al­
ready extensive production includes the restrained
cubist annex to the Finnish National Theatre, the
Student Village at Otaniemi with its beautiful little
chapel of frankly personal solution, and several
noteworthy terraced houses and blocks of flats in
Otaniemi and Tapiola.

SCULPTURED METAL AND
WOOD SHAPES FORM UNIQUE
ROOM DIVIDER

Nine-foot murals using plastic as an art form and a
large room divider created from a series of sculptured
metal and wood shapes have become the decorative
focal points in the recently renovated Palace Corner
of the Sheraton-Palace Hotel in San Francisco.

At the same time, this installation has demonstrated
how effectively art of these proportions can be sold,
specified, co-ordinated and installed from a long dis­
tance.

The murals and divider, together with rosewood
paneled walls and a boomerang-shaped sunken bar are
principal elements of the new splendor that has been
added to one of San Francisco’s oldest and most widely
known landmarks.

In developing the contemporary Tudor decor of the
new room, Mrs. Mary Morrison Kennedy, A.I.D., Vice
President of Architecture, Decorating and Design for
Sheraton Corporation of America in Boston, assigned the mural and divider task to the Virginia Frankel Gallery, New York, after seeing a previous installation by the same Gallery in a Manhattan hotel.

The Gallery's responsibility was to coordinate the work of its artist-craftsmen with the over-all design of the new room. Throughout the job, only two or three meetings were held between Mrs. Kennedy and the Gallery staff. The remaining exchanges of specifications, sketches, samples and installation instructions were conducted by mail and telephone conversations.

Artist-designer Peter Ostuni of the Virginia Frankel Gallery combined layers of painted and colored plastic to give his unusual mural panels a stained-glass effect when backlit. Ostuni, a painter who works in many media, is a forerunner in using plastic as an art form.

A representational painting, by Ostuni himself, of Henry VIII and his six wives is on the first layer of plastic. Over this, Ostuni has placed an abstract pattern of transparent plastic sheets in various colors. The third layer is a protective sheet of clear plastic.

Artists George Stark and John Cataldo, both also of the Virginia Frankel Gallery, worked together in the design and execution of the 170-square foot sculptured divider which separates the sunken bar from the main dining area and dance floor.

Here the two artists combined a series of cut-out copper, brass and steel forms with blocks of Brazilian rosewood in varying sizes and shapes. The blocks match the rosewood paneling of the bar and in the mural wall. Some of the metal pieces were treated with acid to create additional color and textural variations. All are suspended on vertical brass tubes attached to the ceiling.

Together, the mural and sculptured room divider also demonstrate how effectively contemporary art forms can be used in introducing modern elegance to a setting while, at the same time, preserving the traditional atmosphere so long associated with an interior such as San Francisco's Palace Hotel.

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The 1961 Edition of the Sargent & Company condensed Architectural Hardware Catalog has been released by the New Haven manufacturer of architectural locks and builders hardware. The new section includes new lock functions, new trim designs as well as information on Fire Exit Hardware and Sargent's new line of lever handles.

This new condensed catalog will be included in the 1961 Sweet's Architectural File and additional copies are available from Sargent Architectural Hardware distributors or Sargent & Co., New Haven 9, Conn.
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Unit Structures, Inc., of Peshtigo, Wisconsin, announces publication of a new full-color brochure giving description and specifications on UNIT DECK, the company's structural timber decking.

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Also included in the brochure are specifications and description of Unit's CLEAR PANEL Deck, a custom product featuring kiln-dried Western Red Cedar Deck faced with a permanent glued lamina of knot-free Oak or Birch.

Information in the folder includes standard patterns, assembly detail, how to estimate quantities, installation details and description of grades.

Copies may be obtained by writing to the Advertising Department, Unit Structures, Inc., Peshtigo, Wisconsin.

KLEMP INTERNATIONAL

A new ANOTEC Architectural Anodized Aluminum Grilles specification manual has just been published. The manual provides complete product specifications on the wide choice of standard geometric patterns, dimensions and colors on which this modern exterior/interior, decorative/structural material is now available. Outstanding industrial, commercial and housing design use in new construction and modernization, are shown in full color and black and white. The construction details of different applications—i.e., as a curtain wall, as a solar screen, as a walkway, etc.—are fully illustrated with technical drawings.

For a free copy, write manufacturer: Klem International, 1132 West Blackhawk Street, Chicago 22, Illinois.

ECONOMICAL ENCLAVE

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NEW WHEELING TILE FOLDER

Information on Wheeling Tile Company's unusual design concept for wall tile—ELEGANCE—is now available in a new 5-color folder just released.


The folder illustrates the 8 available patterns, shows several interior applications and gives detailed information on the entire ELEGANCE Series.

The folder is available on request from Wheeling Tile Company, Wheeling, West Virginia.

ZERO CATALOG SHOWS NEWEST WEATHERSTRIPPING DESIGNS IN FULL SIZE DETAIL

The use of full size detailed illustrations, to simplify incorporation directly into architectural plans with a minimum of scaling, is continued in Zero's new 1961 catalog of extruded aluminum and bronze weather stripping for doors, windows, saddles, lightproofing and soundproofing, sliding doors, and saddles for floor hinged doors. The 28-page catalog has just been issued by the manufacturer, Zero Weather Stripping Co., Inc., N. Y.

DATA SHEET DESCRIBES CARBOLOY-TIPPED PENS

Drafting pens tipped with tungsten carbide (Carboloy), one of the hardest metals obtainable, are described in a product data sheet now available from Keuffel & Esser Co.

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A photograph of greatly enlarged pen tips is included in the data sheet to show the marked wear of a plain steel tip after drawing 500 feet and the almost negligible wear on the Carboloy point of a Red Tip pen after drawing 5,000 feet. The test was made on Herculean film which is a Mylar-based material.

Also shown are four of the five pens in the Paragon Red Tip line. A price list and specifications of the pens are also included.

Keuffel & Esser Co. is America's largest manufacturer of a complete line of quality reproduction, optical, drafting and engineering materials and instruments. For your data sheet, write: Keuffel & Esser Co., Third and Adams Streets, Hoboken, N. J.

PENN VENTILATOR

A Technical Report, available from Penn Ventilator Co., Inc., Philadelphia 40, Pa., is prepared to show how fire vents reduce fire destruction to commercial and industrial property. The Pyroport, Smokehatch and Smokeport are offered as fire and smoke protection devices to provide adequate ventilation if a fire occurs, and to prevent total devastation.

Bulletin FY-R39 presents many important elements that must accompany the installation of Fire Vents. Penn provides for the first time, Fire Hazard Rating Charts that simplify selecting the appropriate number of vents required for a given area, and hazard condition. Factors such as proper sizing and spacing of units in relation to plant construction are also reported upon. Valuable engineering data for Fire Vent designs, such as the Pyroport shown in the accompanying photograph, is also included.

This technical report will provide Architects and Engineers as well as Fire prevention and Insurance authorities with a comprehensive guide to fire protection.
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