



POWESHIEK COUNTY BANK.



1 DES MOINES - 450 N.E. 44th Ave. - (515) 244-0186 2 CEDAR FALLS - 602 State Street - (319) 266-8751 3 CEDAR RAPIDS - 1600 Ninth Ave. S.W. - (319) 366-3652

> SWANSON GENTLEMAN, INC. 450 N. E. 44TH AVENUE DES MOINES, IOWA 50313

The "dead" air space in brick cavity and block walls is very much alive. Whenever the temperature differs on the inside and outside of a wall (that's always), convection currents in the cavities shuttle therms from the side where you want them to the side where you don't. A masonry wall filled with anything—peanut butter, strawberry jam or dirty shirts is better insulated than a wall filled with nothing but air.

Anything in the wall is better than nothing at all

Now read about the only insulation that doubles insulating value and fire ratings of masonry walls

GRACE

Zonolite[®] Masonry Fill Insulation was developed specifically for concrete block or brick cavity walls.

By doubling their insulating value, it keeps the occupants much more comfortable and cuts heating and air conditioning bills as well.

Fire ratings can double, too. An 8" lightweight block wall rated at two hours gets a four-hour rating when insulated with Zonolite Masonry Fill. Particularly important in party walls, elevator shafts and stairwell walls.

In addition, Zonolite Masonry Fill cuts sound transmission.

All for as little as 10¢ per sq. ft., installed.

There is simply no other way to build a masonry wall that blocks thermal and sound transmission so well, increases fire safety so much, and does it at such low cost.

For complete information, mail the coupon.

more for a wall oth	as I like peanut butter, it d her than insulate it better t y Fill Insulation folder w d specifications.	han air. Please sen	d me
NAME			— i
FIRM			
ADDRESS			
CITY	STATE	ZIP	

Zonolite Div., W. R. Grace & Co., Dept. 000

Merchandise Mart Plaza, Chicago, III. 60654



Manufactured by COTA INDUSTRIES, INC. 5512 S.E. 14TH ST. • DES MOINES, IOWA TELEPHONE 515 285-4352

2

IOVA ARCHITECTURE IN IOWA

OFFICERS

Stanley C. Ver Ploeg AIA, West Des Moines President

Willis E. Schellberg AIA, Forest City Ist Vice President

Allen B. Salisbury AIA, Des Moines

2nd Vice President Marvin L. Stenson AIA,

Waterloo Secretary

Richard F. Hansen AIA, Iowa City

Treasurer William M. Woodburn AIA, Des Moines Raymond Reed AIA, Ames H. Kennard Bussard AIA, Des Moines Charles V. Richardson AIA, Davenport Directors

PUBLICATIONS COMMITTEE

James A. Lynch AIA, Des Moines Chairman

Roy E. Berger, Des Moines Richard O. Bernabe, W. Des Moines William M. Dikis, Des Moines James A. Paxton, Des Moines David N. Soliday, Des Moines H. Ronald Walker, Des Moines

EDITOR

James A. Lynch AIA 314 Savings & Loan Building Des Moines, Iowa 50309

DISTRICT EDITORS

James L. Amend, Council Bluffs Donald R. Baltzer, Iowa City Robert C. DeVoe, Cedar Falls Glenn E. Lundblad, Sioux City John Pfiffner, Cedar Rapids Charles V. Richardson, Davenport Norman H. Rudi, Ames Willis E. Schellberg, Forest City

MANAGING EDITOR

Julian B. Serrill 401 Savings & Loan Building Des Moines, Iowa 50309 Telephone (515) 244-7502

GRAPHIC DESIGN

Kep Sharp/Studio K

VOLUME XV .	NUMBER II	
-------------	-----------	--

CONTENTS

The Face of Banking in Iowa	5
Space in a New Age	18
Winnipeg Art Gallery	24
Civil Rights and Architecture	26
The Urban Crisis To Be Explored in Depth at Architects' Convention	28
Fire Marshal's Committee Revising School Safety Regulations	28

Cover sketch/Wagner Photography: Joel Strasser — 8, 12, 14 Jack Heyn — 13 Mark Knudsen — 16

The "Iowa Architect" is the official publication of the Iowa Chapter, The American Institute of Architects, and is published quarterly. The annual subscription rate is \$3.50 per year. Appearance of names and pictures of products or services in editorial or advertising copy does not constitute endorsement by either the A.I.A. or this chapter. Information regarding advertising rates and subscriptions may be obtained from the office of the chapter, 401 Savings and Loan Building, Des Moines, Iowa 50309. Telephone 244-7502, Area Code 515.

1968

TWO BETTER TUNNEL = BRICK KILNS FOR YOU

Pacesetters Of The Iowa Brick Industry



in 1965 we were first to introduce the advantages of tunnel kiln face brick, when we started our new Sergeant Bluff tunnel kiln plant:

BETTER COLOR! BETTER QUALITY! BETTER DELIVERY!

Sergeant Bluff-Iowa's first tunnel kiln brick plant



Now we have two! The new Adel tunnel kiln plant is now in operation. This efficient assembly-line production is today's departure from the century-old method of making brick. The controlled temperatures make uniform brick in just seven days!

Adel-Iowa's first red producing tunnel kiln face brick plant.

SIOUX CITY BRICK AND TILE CO. 207-12 Benson Building

Sioux City, Iowa 51102 Phone 258-6571 UNITED BRICK AND TILE CO. OF IOWA

1200 Thomas Beck Road — Box 654 Des Moines, Iowa 50303 Phone 244-3264



Traditionally, financial institutions have been thought of as temples devoted to money and conservative advice. Reflecting that idea architects were asked by their clients to create bank and savings and loan buildings that reflected solidarity, tradition, and awe. Forms frequently were inspired by Greek and Roman temples with an occasional touch of Egyptian injected for good measure.

Since World War II a new image for these institutions has been created; one of friendliness, assistance, and hospitality still coupled with sound business advice and a concern for the community. The architect privileged to serve such clients has helped in establishing the banking industry's new image through the use of intelligent, thoughtful, and sometimes provocative design.

Part of this new image revolves around doing business in an automobile. Many of the examples of bank and savings and loan buildings on the following pages are classified as drive-in or drive-up facilities and in some instances do not provide all of the services of the parent institutions.

On the following pages, selected by the editors, appear recent representative works of Iowa architects in this one field of endeavor.



denver savings bank

denver, iowa

robert c. devoe

morningside state bank

sioux city, iowa

james m. duffy





first federal savings & loan association

cedar falls, iowa

robert c. devoe



bankers trust company

merle hay office des moines, iowa

griffith-kendall



mutual federal savings & loan association

mason city, iowa

waggoner and waggoner



first national bank ottumwa, iowa steffen and stoltz





FIRST FLOOR PLAN

~~~~

## east dubuque savings bank

east dubuque, illinois

donald p. mc ginn associates





## first national bank

davenport, iowa

 $stewart\-robison\-laffan,\ architects$ 









## marshalltown savings & loan association marshalltown, iowa

smith-voorhees-jensen, architects associated





## iowa des moines national bank

douglas office des moines, iowa

savage and ver ploeg







## capital city state bank addition

des moines, iowa

charles herbert and associates



### university bank & trust company ames, iowa

james lynch and associates



## SPACE IN A NEW AGE

#### Willis E. Schellburg

What part should man's presence play in architectural space? Is he often purely an observer and sometimes even an intruder in today's architecture? Since the late nineteenth century the mainstream of architecture seems either to be preoccupied with the technology of building or with the creation of three dimensional visual art. Thus we find this period in its crescendo with concrete brutalism which combines the expression of structural form with the beauty of the abstract. Spaces such as Paul Rudolph's Yale Arts and Architecture Building, Architects Colaborative's Harvard Medical Library and I. M. Pei School of Journalism at Syracuse are good examples of this concept. In these buildings it seems to me man becomes a viewer of, rather than a participant in, the space created, and because of this alienation often feels uneasy and unrelated to it.

In contrast to this concept of creation of space as form centered, would it not be better to think of it as space centered. It was Laotze who said: "Thirty spokes are made one by holes in a hub, by vacancies joining them for a wheel's use; the use of clay in molding pitchers comes from the hollow of its absence; doors, windows, in a house, are used for their emptiness; thus we are helped by what is not, to use what is." The "not" then becomes prime -not as a void or even as a static space but as a dynamic space-a place. If this is true then we must find our center not just in space but in the people in it. It is when we see this concept I believe we view a new direction-the whole man and his involvement.

Marshall McLuhan who has done a great deal to sensitize us to the new age makes this clear when he pictures us as thinking of space primarily in terms of the visual when we are being thrust into a new age of space that is accoustic, horizonless, boundless, olfactory. We move from a space defined only by walls to one defined possibly only by action, thus as a freedom march or any other group acting in concert constitutes a space. This opens up a new field of thought dedicated to design of a man-centered arena.

We have moved partially in the direction of this "non-linear" type of architecture with some buildings such as the Samuel F. B. Morse dormitories at Yale and Habitat in Montreal. These show evidence of a "cool" space theory which allows the inhabitant to feel that he is a participant in the creation of the space much in the same manner as a listener to the music of Schoenberg, Ives or Cage or a viewer of realist cinema.

While moving in this direction visually in these buildings, there has been a noticeable tendency to disregard the non-visual environment, and man finds himself unconsciously irritated by the lack of consideration of his other sensual feelings. Habitat is a good example of this. Although the total visual concept is excellent,

(Continued on page 20)







(Continued)

individual residents must feel uneasy in the space created. The thought of approaching his apartment over the bleak ramparts in Montreal's seven months of inclement weather shows a lack of understanding for the inhabitant. The accoustical environment in the interior and the total lack of textural change of the exterior give the project a complete sense of austerity. Other buildings such as our modern air terminals are also good examples of this In them we are regimented into rows facing each other in a volume of space that is completely bewildering and accosted by a constant bombardment of noise, both casual and deliberate, so that the time between flights becomes not tranquil but traumatic.

In contrast Fuller's U. S. Pavilion at Expo used technology to an advantage, providing us with a total experience. The German Pavilion also treats us with the same involving experience. In both buildings we could hardly have imagined them without seeing a pageant of people as an integral part of them. Although the pavilions certainly served a different function, each of these building types must achieve a sense of relationship to the realism of its purpose.

The new direction then lies not in a new scintillating visual form of architecture but in the development of an environment centered in the total man. To do this we must start by studying the actions of man in the space to be created. We must study the sociological forces that relate people to one another in the space. If it is a housing development, we must know how to create a neighborhood. Physiologically we must set the environment that best suits the action. If it is a school, the thermal, light and accoustical treatment must be of a nature to encourage learning. We must also study the psychological forces that affect the design criteria. If a high-rise office building, do we understand the problem of vertigo as it relates to floor-to-ceiling glass.

When we can understand these environmental responses of contemporary man and use them effectively, then we can develop architecture that becomes not just the stage setting for the action but the total drama itself.





UNITED COMMUNITY HIGH SCHOOL R. R. No. 2, Boone, Iowa CONTRACTOR: Spencer Construction Company Spencer, Iowa

ARCHITECT: Emery-Prall and Associates Des Moines, Iowa CONSULTING Frank Pulley Associates ENGINEERS: Des Moines, Iowa

# Free-floating integrated ceiling from ALLIED fits architect's plan and stays within budget



This free-floating integrated ceiling from ALLIED was expressly built to the architect's design at United Community High School, located between Ames and Boone. Bid as an alternative to a conventional ceiling and lighting system, ALLIED'S suggested integrated installation provided components necessary for design flexibility, yet kept costs well within the budget. The 39" x 39" grid system is of modular Fiberglas textured ceiling board. Special 1' x 8' Lok 1201 troffers were used. Light level is in the 80 to 90 ft.-candle range. ALLIED welcomes the opportunity to discuss your next project.

**ALLIED** CONSTRUCTION SERVICES, INC.

DES MOINES DAVENPORT PEORIA

## HAYDITE BLOCKS offer 10 advantages

... the difference in concrete

blocks starts with the aggregate

**LIGHT WEIGHT**—approximately  $\frac{1}{3}$  lighter than ordinary concrete, Reduces deadload without sacrificing strength.

**STRENGTH**—in excess of Federal and ASTM specifications and local building code requirements.

**FIRE RESISTANCE**—manufactured at temperatures in excess of 2,000° F., Haydite aggregate produces a block of unusually high fire resistance.

**UNIFORMITY**—in size, texture and color for accuracy and beauty.

**ACOUSTICS**—are improved by the cellular structure of the aggregate and the texture of the block. Approximate Noise Reduction Coefficient is 0.45.

Haydite blocks manufactured from Carter-Waters Haydite, produced in Iowa, are available from more than 40 Iowa plants. For complete information contact your local plant or write toTHERMAL INSULATION—the U factor (average) on 8" Haydite blocks is 0.35 and on 12", 0.32.

NAILABLE—nails can be driven in Haydite blocks to save time and money in many applications.

**DURABLE**—Haydite blocks have passed laboratory tests of 100 cycles of freezing and thawing without visible damage or loss of weight.

**PAINTABILITY**—the chemically inert composition of Haydite eliminates paint discoloration by rust or other chemical reactions.

ATTRACTIVE—a pleasing texture and natural gray color suitable for many applications without further treatment.



Producers of Haydite aggregate at Centerville, Iowa, and New Market, Missouri.



SENIOR HIGH SCHOOL Winterset, Iowa

ARCHITECTS: SMITH, VOORHEES, JENSEN ARCHITECTS ASSOCIATED Des Moines, Iowa BETTS and BEER CONSTRUCTION COMPANY Adair, Iowa

RUSSET VELOUR SAXONS



### ADEL CLAY PRODUCTS CO.

WEST DES MOINES, IOWA



knows no location limitations



Any area that will accommodate its plan dimensions is good enough for a Marley UNDERFLOW AQUATOWER.

This low-silhouette tower for intermediate-capacity water cooling is based on a new principle of operation. The fan and air intake are located beneath the cooling cells and air is discharged vertically. Hence, without any sacrifice of performance, UNDERFLOW can be placed immediately adjacent to walled structures that would obstruct air and discharge in any other type of tower. See your Marley Engineer today.

UNDERFLOW TOWERS are protected by U.S. Patents granted.

Represented in by: **R.S.STOVER** COMPANY 203 W. Main Street . Marshalltown, Iowa 120 N. 69th Street • Omaha, Nebraska





The City of Winnipeg, Manitoba, Canada, recently held a competition for the design of an art gallery. A team composed of Tadeus M. Janowski, currently on the staff of Iowa State University, and Gustavo Da Roza, architect practicing in Winnepeg, won the competition. The site was triangular in shape which led the architects to a triangular plan as their solution. The jury felt it to be the most successful trangular building they had ever seen. It has been described as a giant "ax cutting the prevailing northern winds". It is located on a main axis of downtown Winnipeg and is adjacent to the Capitol Building for the Province of Manitoba. The building contains two large galleries, a sculpture gallery, an auditorium, roof and street level outside galleries, an art school with studios for painting, sculpture, and ceramics, and meeting rooms for committees, offices for the administration of the museum and a penthouse with coffee shop facilities. It is to be built of reinforced concrete and a stone native to Manitoba. The team of architects received a \$10,000 prize for their design and also the commission for the \$4,000,000 structure.

The building is of particular interest to Iowa because Professor Janowski has been a member of Iowa State University's Department of Architecture staff for more than a year. Mr. Janowski was born in Poland and graduated from the University in Cracow with a second Master's Degree from the University of Illinois. He has been the architect for a number of projects in Poland and Russia before emigrating from his native Poland to Canada and the United States. He has won prizes or honorable mention in 36 national or international competitions, among them the F. D. R. Memorial Monument in Washington, D.C., and the Olympic Stadium in Banff, Canada. Members of the Iowa Chapter of the American Institute of Architects are pleased that the students at Iowa State have the opportunity to study with a man of such obvious skill in delineation and design. We congratulate Professor Janowski on his achievement in Winnipeg.



SOUTH ELEVATION 9 8\_16





## A PART OF YOUR GENIUS

may be in your persistence toward perfection. Let's talk brick.

Brick is foundation. Brick is structure. Brick is Beauty. For your next building, you will choose the brick carefully for its quality and esthetic appeal. Your CARE in this selection will be part of your genius. We hope you recognize the consistent high quality of Vincent brick and tile. Our care in quality control and the wide selection of beautiful face brick is a part of our success.

Please ask for sample panels. Our phone number is 573-8126.

#### VINCENT CLAY PRODUCTS COMPANY



2930 5TH AVENUE SOUTH, FORT DODGE, IOWA FACTORY: 21/2 MILES SOUTH OF FORT DODGE

#### CIVIL RIGHTS AND ARCHITECTURE

#### Reprinted from Northwest Architect

We feel that the following quotations from "Showdown for Non-Violence" an article by the late Dr. Martin Luther King Jr. which appeared in Look magazine just before his untimely and unnecessary death have particular meaning to those in our profession:

"White America has allowed itself to be indifferent to race prejudice and economic denial. It has treated them as superficial blemishes but now awakes to the horrifying reality of a potentially fatal disease. The urban outbreaks are 'a fire bell in the night' clamorously warning that the seams of our entire social order are weakening under strains of neglect.

"The American people are infected with racism-that is the peril. Paradoxically they are also infected with democratic ideals-that is the hope. While doing wrong they have the potential to do right. But they do not have a millenium to make changes. Nor have they a choice of continuing in the old way. The future they are asked to inaugurate is not so unpalatable that it justifies the evils that beset the nation. To end poverty, to extirpate prejudice, to free a tormented conscience, to make a tomorrow of justice, fair play and creativity-all these are worthy of the American ideal. . . ."

"Our whole campaign . . . will center on the job question, with other demands, like housing, that are closely tied to it. We feel that much more building of housing for lowincome people should be done. On the educational front, the ghetto schools are in bad shape in terms of quality and we feel that a program

(Continued on page 28)



## Modern masonry is reaching new heights with loadbearing concrete block



## THE HIGH RISE

## newest concept in concrete masonry construction

Today concrete block possesses more comprehensive strength than ever before—yet still provides more wall area for less material and labor costs. This, combined with the wide variety of shapes, sizes, colors and textures, helps to elevate the most creative designs, the most demanding loadbearing requirements, to new highs.



Concrete block is coming up in the world—and fast. These loadbearing walls of scored 8" x 8" x 16" block were completed at a rate of one story per week over a four month period, enabling the owner to open for the summer season. Note how tranverse wall system provides the amenity of balcony privacy. Integral scoring treatment in the modular unit evinces a more attractive wall network of 8" squares. The loadbearing walls support concrete floor slabs that were precast at the site.

#### members of IOWA CONCRETE MASONRY ASSOCIATION

Clinton Block Co. Clinton, Iowa Smith Concrete Products Co. Creston, Iowa

Creston, Iowa Iowa Concrete Block &

Material Co. Des Moines, Iowa

Merle Hay Block Co. Des Moines, Iowa

Lake View Concrete Prod. Co. Lake View, Iowa Oskaloosa Concrete Products Co. Oskaloosa, Iowa

Rock Valley Block & Tile Co. Rock Valley, Iowa

Concrete Products Co. Sioux City, Iowa Lakes Concrete Industries Spencer, Iowa Demco, Inc. West Des Moines, Iowa Iowa-Illinois Concrete Prod. Co. Bettendorf, Iowa Burlington Block Co. Burlington, Iowa Cedar Rapids Block Co. Cedar Rapids, Iowa Cherokee Concrete Products Cherokee, Iowa Zeidler Concrete Products Co. Clear Lake, Iowa Marquart Concrete Block Co. Waterloo, Iowa Concrete Products Co. Dubuque, Iowa Estherville Concrete Prod. Co. Estherville, Iowa The Johnston Corporation Fort Dodge, Iowa Coralville Products, Inc. Iowa City, Iowa Concrete Products Co. Iowa Falls, Iowa should be developed to spend at least a thousand dollars per pupil. Often, they are so far behind that they need more and special attention, the best quality education that can be given. . . ."

"... We will place the problems of the poor at the seat of government of the wealthiest nation in the history of mankind. If that power refuses to acknowledge its debt to the poor, it will have failed to live up to its promise to insure 'life, liberty and the pursuit of happiness' to its citizens.

"If this society fails, I fear that we will learn very shortly that racism is a sickness unto death."

What will you do?

#### THE URBAN CRISIS TO BE EXPLORED IN DEPTH AT ARCHITECTS' CONVENTION

The urban crisis and the architect's role in helping solve it will be discussed in sessions on MAN/ARCH-ITECTURE/NATURE at the 1968 convention of The American Institute of Architects, June 23-26. Keynote speakers for the June 24 session on "MAN" in Portland, Oregon, are Whitney M. Young, Jr., Executive Director of the National Urban League, and Gene C. Brewer, Chairman of the Board of the National Forest Products Association and President of U. S. Plywood-Champion Papers, Inc. Donald Canty, Editor of Urban America's City magazine, will be discussion leader.

Under Mr. Young, the Urban League has been in the forefront of the civil rights movement. It has broadened its approach and services, and launched new programs aimed at providing equal opportunity for Negroes in employment, education, housing, health, and welfare. Mr. Brewer has been active in the forest products industry since 1937, when he went to work on the production line at U.S. Plywood Corp. By 1959, he had worked his way up to the presidency. He continued to hold that title, when in 1967, the firm became U.S. Plywood-Champion Papers, Inc. He has always been active in both business-related and civic affairs.

Miss Barbara Ward, internationally known author, editor and economic interpreter, will present the Purves Memorial lecture entitled "Hope for an Urbanizing World" to the conventioneers.

Regarded as one of the most in-

fluential writers in England, Miss Ward was formerly Foreign Affairs Editor of "The Economist" of London. Her most recent book is "The Rich Nations and the Poor Nations". In private life, Miss Ward is Lady Jackson, wife of Sir Robert Jackson, senior consultant to the United Nations Development Program. For a number of years, she has been a visiting lecturer and research associate at Harvard University and a Carnegie Fellow.

#### FIRE MARSHAL'S COMMITTEE REVISING SCHOOL SAFETY REGULATIONS

For some years fire safety regulations in schools and colleges have been in effect a matter of one-man law, some of which has been good and some of which has been bad.

The State Fire Marshal, Wilbur Johnson, is holding a series of meetings to bring fire safety regulations for schools and colleges into line with reality in so far as safety is concerned. Present and working on this Committee are representatives of the Board of Regents and the Department of Public Instruction, building inspectors, school superintendents, the State Fire Marshal's office, and several architects. These architects are Herbert K. Enzmann of Des Moines, James M. Bentley of Davenport, Donovan D. Kramer of Dubuque, N. Clifford Prall of Des Moines, and Richard R. Jordison of Iowa City.

While the regulations as decided upon will eventually be published, it goes without saying these discussions are of interest to all architects who provide service to schools, and the architect members of this advisory committee would welcome suggestions and comments.

The mobile classroom is one of the problems being discussed because frequently there are not two means of exit as required, and furnace rooms are sometimes not sufficiently fire-resistive and are often included in the classrooms.

Architect members of the Committee are working to get some uniformity established in regulations, and to determine whether the NFPA Regulations, the Uniform Building Code 1967 Regulations, or the Fire Marshal's regulations are paramount in case of conflict.

Perhaps the most important conclusion to be drawn is the need for a State Building Code.

herman miller is a pioneer.

herman miller is charles eames. and the shell chair. and the aluminum chair.

herman miller is george nelson. and the comprehensive storage system. and the action office.

how bright is a color. how dark is light. how light is texture. herman miller is the color of light and dark. herman miller is alexander girard.

herman miller is a researcher. and an innovator. herman miller works nights studying the environment for learning (how much does an 18-year-old move when he is sitting still). for living (where does one store material that should not be hidden in closets). for working (how much information is retained after it is out of sight).

in iowa herman miller is

#### koch brothers 325 grand avenue des moines 50308

they know who herman miller is.



who is herman miller

# BREAKTHROUGH! New Culligan automated electronic water softener



New Culligan industrial Aqua-Sensor provides unlimited soft water, saves up to 36% on salt! Other automatic water softeners are recharged at pre-set times. But because industrial water usage varies, recharging can be too soon or too late. New Aqua-Sensor keeps pace with your water demands—never lets you run out of soft water, yet never recharges needlessly.

Fully Automated. Just as a thermostat detects the need for heat, Aqua-Sensor detects the need for soft water. No timer clocks to set, switches to flip, or buttons to push. Ever.

Unlimited Soft Water. When water usage or water hardness increases — no problem. You always get clear, filtered soft water.

Efficient, Economical. During periods of no water usage—no problem. Aqua-Sensor does not recharge. If the hardness of your water supply varies—same answer. Aqua-Sensor recharges only when needed.

Saves Salt, Saves Water. When a con-

ventional automatic unit was replaced with our patented Aqua-Sensor, the actual salt consumption decreased from 3,900 lbs. to 2,510 lbs. And water needed for recharging was 6,720 gallons less.

How Aqua-Sensor Works. There are two sensors located at the bottom of the ion-exchange resin bed. When hard water reaches the upper sensor, the lower sensor is still immersed in softened water. The sensors electronically detect the difference and signal the solid-state controller. At the proper time, unit automatically recharges.

Lease or Buy. Comes in a full range of sizes, from 5 gpm to 600 gpm. Single and

Duplex units. Available for outright purchase, or lease with option to buy. For your convenience, your Culligan Man offers automatic salt delivery service. All in all, the Aqua-Sensible thing to do is call and say—





Recent uses: No. 68 in Northwestern Bell Telephone Building in Omaha. No. 412 in Quadrangle Dorm in Iowa City. No. 412 (75% solid) special duty fire rated two hours plastered one side. No. 412 (60% solid) special duty fire rated two hours plastered two sides. Available in Scored or smooth faces.



MANUFACTURING DIVISIONS DES MOINES CLAY COMPANY FORT DODGE BRICK AND TILE COMPANY MASON CITY BRICK AND TILE COMPANY OSKALOSA CLAY PRODUCTS COMPANY OTTUMWA BRICK AND TILE COMPANY REDFIELD BRICK AND TILE COMPANY

JDIES IMICOINIES 3810 INGERSOLL AVENUE DES MOINES, IOWA 50312



Architect-Engineer: Daniel, Mann, Johnson & Mendenhall, Los Angeles, Calif. General Contractor: C, W, Driver. Inc., Los Angeles, Calif. Prestressed Concrete Consultants: Rockwin Prestressed Concrete Corp., Santa Fe Springs, Calif.

## Dream creamery comes true in concrete

It's the world's most modern and efficient dairy food processing plant, the new home of the Challenge Cream and Butter Association at City of Commerce, California. Serving metropolitan Los Angeles, the facility totals 255,000 square feet.

A simple and economical structural system was made possible by use of prestressed, double-tee concrete roof members and precast tilt-up panels, flat and sculptured.

Efficiency of operation called for large, unobstructed production areas. Pretensioned "tees" met this need with clear spans of 40 to 80 feet and cantilevers up to 20 feet. The few interior supports and walls required are cast-inplace concrete.

Here again, concrete provided not only maximum economy and fast construction, but an aesthetically pleasing structure. Low maintenance costs and the high hygienic standards required in a dairy operation also influenced the selection of concrete for this plant.

Whatever the building, it can be built *better* with concrete.



PORTLAND CEMENT ASSOCIATION 408 Hubbell Bldg., Des Moines, Iowa 50309 An organization of cement manufacturers to improve and extend the uses of portland cement and concrete





**COLOR-BALANCED** . . . Color-balanced Suntile ranges from warm and bright colors to cool and darker hues. These colors make it possible to achieve visual effects suited to personalities, regional and geographical localities and general or specific purposes of the installation.



## SMULEKOFF'S

Wunda Weve carpets are



Phone or Write **SMULEKOFF'S**, let one of our experts call on you with samples and give full details without obligation.

Contract and Commercial Design Department PHONE (319) 362-2181 - Ext. 64 Cedar Rapids, Iowa

Jack Crosley, Designer Don Donahay, Manager

Wunda Weve took extra pains to create commercial carpets with everything an institution needs.

They're here. And they're tough!



So dish if out. Wunda Weve commercial carpets are made to take it—the scutfile and shuffle of school children. The pounding of heavy traffic. Mud, snow, sand—you name it:



And pour it on. Wunda Weve carpets are made to clean quickly—just for the liquids and foodstuffs that spot and spill in cafeterias, hospitals, clubs...everywhere.



Put the colors to the test. Wunda Weve's fashion-rich colors were created to last! The carpet born tough, that's Wunda Weve. Tough and big —up to 12' wide—to eliminate



seams, to look better and wear better. Little wonder the extrastrong, extra-thick pile and jute or high-density foam backing promise less wrinkling, shedding, balding or restretching.

Get tough! Get Wunda Weve!

## **Prime Time**

Whenever there's steel, or other metals, on the job, it's Prime Time — time to be sure you have specified the primer coating needed for maximum corrosion protection and finish coat bonding.

lowa Paint produces a wide selection of quality primers. Each is designed to provide tough, longlasting, low cost protection. Each is specially formulated for adhesion to a specific type of metal surface.

Your experienced Iowa Paint representative can prescribe the right primer for your job. He is your prime source of information.





## Adobe-crete the block with a bulging waistline!

This ad appeared when Marquart introduced Adobe-crete to this area two years ago. Now, by popular demand, we are manufacturing this unit in 7%" x 3%" x 15%" size in addition to the 3%" x 35%" x 15%" size.

## MARQUART CONCRETE BLOCK COMPANY

110 Dunham Place

Phone 233-8421

Waterloo, Iowa





or complete freedom of design — combine YOUR nagination with our PERL-TILE. Specify precast ERL-TILE concrete roof deck and you'll enjoy an unmited range in designing roofs for all types of buildngs. On sloped surfaces, roofing materials of metal,



#### FIREPROOF

Underwriters' Laboratories, Inc. have tested Perl-Tile and have awarded Perl-Tile a two hour rating. (See U.L. RC5.)



#### INSULATES

Thermal Conductivity Testing shows Perl-Tile decks have a "U" value of .195.



#### STRONG

Perl-Tile will support a minimum superimposed load of 200 lbs. per sq. ft.



#### WORKABLE

Ordinary hand tools are used by the electrical and mechanical trades.



#### LIGHTWEIGHT

Perl-Tile weighs less than 1/3 the weight of conventional concrete—only 10 lb. per sq. ft.



#### ACOUSTICS

Perl-Tile will absorb up to 75% of incident sound. Porous textured ceiling surface with a Noise Reduction Coefficient (N.R.C.) of .75.

asphalt, wood, or clay can be nailed directly to PERL-TILE to provide a strong, permanent, fire-rated deck. Add NAILABILITY to the following list of outstanding PERL-TILE features and you'll see why so many architects agree . . . "You can do more things, in more ways, with PERL-TILE".







Checkma

RUDE

A Cat Electric Set offers the utmost in dependability the most critical factor in a power outage when costly manufacturing losses or even lives are at stake. The diesel unit can automatically start and assume the total required load within five seconds!

Caterpillar Engines are designed to use fuel burned in steam boilers, eliminating the need for premium fuel or special storage tanks. Rugged reliability is a proven trademark of Cat products.

At Boone County Hospital,\* Boone, Iowa, continuous generation of critical electricity has been insured. When a recent addition was constructed, a 250 KW, Cat D343 turbocharged and aftercooled electric set was installed. Now, not only the emergency power requirements can be handled, but a large portion of the balance of the load as well.

> YOUR IOWA CATERPILLAR dealers ALTORFER MACHINERY CO. CEDAR RAPIDS, DAVENPORT, HANNIBAL, MISSOURI GIBBS-COOK EQUIPMENT CO. DES MOINES, FORT DODGE, MASON CITY, POSTVILLE

MISSOURI VALLEY MACHINERY CO. OMAHA, NEBRASKA, SIOUX CITY

\*FRANK PULLEY ASSOCIATES Mechanical Engineer WOODBURN AND O'NEIL Architects

Caterpillar, Cat and Traxcavator are Registered Trademarks of Caterpillar Tractor Co., Peoria, Illinois, U.S.A.

we'd like Ea draw attention ta ta the bact that we se-c re-cast ighty MCL MIDWEST CONCRETE INDUSTRIES WEST DES MOINES, IOWA

Iowa Agents: Swanson Gentleman, Inc. Des Moines



## close coordinate colors

Ottumwa's Ivory Cameo Face brick are in close harmony colors. The blends are subtle and vary in hue in equal gradients on the color scale with saturation and lightness or brightness uniform — the only variable is the hue.

These light, soft colors blend exceptionally well and are adapted for both exterior and interior use. Further, because of the lightness of the colors and low saturation, the designer has flexibility in choosing other colors to include in his design.

Ivory Cameo's are available in textures: a pleasing matt and the velour or wirecut face; colors: light, light range and medium range; size: regular modular or Norman.

|          |   | THE COLORS                                         |
|----------|---|----------------------------------------------------|
| Ivory    | - | Ivory-White                                        |
| 91 Shade | - | a light Beige, Natural, Sandtone Flaxen            |
| 82 Shade | - | Chalk Beige, Golden Blond, Pale Pecan              |
| 73 Shade | - | Light Warm Tan, Light Sandalwood, Light Rose Beige |

When one sees a wall built with the full range, you might think of some of the following colors: Ivory White, Bone Ivory, Sand Tone, Chalk Beige, Light Rose Beige, Light Sandalwood, Beach Tan, Golden Blonde, Sahara, Light Warm Beige, Natural, Champagne, Straw, Pale Pecan, Bleached Beech.



MANUFACTURING DIVISIONS DES MOINES CLAY COMPANY FORT DODGE BRICK AND TILE COMPANY MASON CITY BRICK AND TILE COMPANY OSKALOOSA CLAY PRODUCTS COMPANY OTTUMWA BRICK AND TILE COMPANY REDFIELD BRICK AND TILE COMPANY

3810 INGERSOLL AVENUE DES MOINES, IOWA 50312

DES

MOINES