


Wide choice of horizontal discharge coolers for residential wall or roof installations, available in capacities through 4500 CFM. Ballerina window model (right) has patented adjustable flow-trial grille. Capacities 2000 to 3000 CFM.




ARCTIC CIRCLE AIR COOLERS

FOR EFFICIENT LOW-COST COOLING OF ALL TYPES OF BUILDINGS, including:

- Residences • Hotels and Motels • Stores
- Super Markets • Offices • Schools
- Churches • Factories


Arctic Circle Coolers are built to the highest standards of quality by the world's largest manufacturer of evaporative cooling equipment. They have demonstrated their superior efficiency in hundreds of installations in all types of buildings.




Residential down-discharge types are available in capacities through 4500 CFM.

Arctic Circle commercial and industrial coolers for stores, schools, factories, etc., can be used singly or in multiples to cool economically any size building. Horizontal or down-discharge models. Capacities: 7500 through 15000 CFM.

**WRITE TODAY
FOR FULL DETAILS!**




INTERNATIONAL METAL PRODUCTS COMPANY
500 South Fifteenth Street • P. O. Box 1712 • Phoenix, Arizona
the world's largest manufacturer of evaporative cooling equipment.

ARIZONA ARCHITECT

OFFICIAL PUBLICATION OF THE ARIZONA SOCIETY OF ARCHITECTS, THE CENTRAL ARIZONA CHAPTER AND SOUTHERN ARIZONA CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS



NO LIMEING PROBLEMS
COMPACT
COMPLETE PACKAGE
FULLY AUTOMATIC
EASILY INSTALLED
GAS OR OIL FIRED

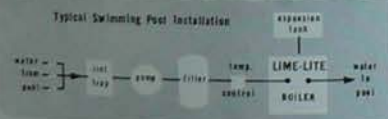


Rite Lime-Lite Boiler



Manufactured by

Rite ENGINEERING AND MANUFACTURING CORPORATION
Represented in Arizona by **CARNS-HOAGLUND CO.**
420 N. 15th Ave., Phoenix
Air Conditioning • Heating • Ventilating



ARIZONA ARCHITECT

POST OFFICE BOX 904
PHOENIX, ARIZONA

1423 N. Third Ave.,
Phone Alpine 2-4318



Official Monthly Publication of the
ARIZONA SOCIETY OF ARCHITECTS
comprised of
**CENTRAL ARIZONA CHAPTER and
SOUTHERN ARIZONA CHAPTER of
THE AMERICAN INSTITUTE OF ARCHITECTS**

Phil Stitt Managing Editor

CHAPTER OFFICERS

CENTRAL ARIZONA CHAPTER		SOUTHERN ARIZONA CHAPTER	
David Sholder	President	Santry Clay Fuller	President
1630 E. Camelback Rd., Phoenix		2566 North Campbell, Tucson	
A. John Brenner	Vice-President	Edward H. Nelson	Vice-President
Jimmie R. Nunn	Secretary	David S. Swanson	Secretary
P. O. Box 904, Phoenix		2447 N. Stone, Tucson	
Kemper Goodwin	Treasurer	Robert J. Ambrose	Treasurer
James W. Elmore	Director	D. Burr DuBois	Director
Ralph Haver	Director	Eleazar D. Herreras	Director
Martin Ray Young, Jr.	Director	Emerson C. Scholer	Director

Subscriptions: \$4 a year
Per copy: 40 cents

July, 1958
Volume 1, No. 11

IN THIS ISSUE

COVER Photo by Stuart Weiner for McConnell Pool Co.	Page 5
THE PRESIDENT'S PAGE	Page 7
PERSPECTIVE The editor looks at the swimming pool industry	Page 11
POOL INSTALLATIONS BOOM Survey of rapid increase	Page 13
DESIGNING THE POOL Points to watch for	Page 17
RESIDENTIAL POOL LANDSCAPING By George Christensen	Page 18
SHAPES Some Arizona pools	Page 20
CONVENTION PICTURE Delegates in Cleveland	Page 20
CRITIQUE Comments on May issue	Page 21
PUBLIC POOLS CAN BE TOO LARGE By R. J. Koupal, Inflico, Inc.	Page 22
LIABILITY HAZARDS CAN BE MINIMIZED By William G. Barnes, Attorney	Page 24
THE "OTHER ARTS" OF ARCHITECTS First of a series	Page 27
POOL IN THE PINES Problems of mountain swimming	Page 29
FUNCTIONAL PUBLIC POOLS By Kemper Goodwin, AIA	Page 30
PORTER NEW REGIONAL DIRECTOR	Page 31
POOL PLANS, SPECS NEED SANITATION BUREAU OKAY	Page 34
BOOKS FOR PROFESSIONALS	
Signed articles reflect the views of the authors and do not necessarily represent the official position of the Arizona Society of Architects or the Central or Southern Arizona Chapters, AIA.	

Photo Credits: Pages 18 and 19, Stuart Weiner; Ray Masley and Phoenix Chamber of Commerce; Pages 11 and 20, Phil Stitt; Pages 27 and 29, Charles B. Gandy; Page 31, Phoenix Chamber of Commerce. Center layout by Dick Sitt.

IN NEXT ISSUE: Convention Reports; Subcontractors

Advertisers' Index

ARIZONA LATH & PLASTER INSTITUTE	16	NELSON-HOLLAND Builders' hardware	20
ARIZONA PORTLAND CEMENT COMPANY	10	O'MALLEY'S BUILDING MATERIALS	28
ARIZONA STRUCTURAL CLAY PRODUCTS ASSN.	20	PHOENIX ROOFING & SUPPLY CO. Acousti-Celotex	21
ARIZONA TESTING LABORATORIES	21	PIONEER PAINT AND VARNISH COMPANY	6
ARIZONA WHITE EAGLE STUCCO CO.	29	PIPE TRADES INDUSTRY PROGRAM	33
WM. BENNDORF Foundations by Kim	16	PRECISION CHEMICAL PUMP CORP.	20
CARNS-HOAGLUND COMPANY Rite boilers	2	REGISTRAR OF CONTRACTORS	9
CONCRETE PRODUCTS COMPANY Featherlite block	28	RINEHART & HARRIS KITCHENS St. Charles kitchens	14
CONTINENTAL MANUFACTURING CO. Air conditioning	13	A. B. ROBBS TRUST COMPANY	4
DEERO PAINTS & CHEMICALS, LTD. Frostcap	11	ROBINSON BRICK & TILE CO. Vitrified	10
ENGINEERS TESTING LABORATORIES	32	SULLIVAN MANUFACTURING CO. Ornamental iron	31
GIENMAR DOOR MANUFACTURING CO.	23	SUPERIOR PRESTRESSED CONCRETE	23
HASKELL-THOMAS, INC. Naturalite skylights	36	SUPERLITE Block walls and fences	22
INTERNATIONAL METAL PRODUCTS Arctic Circle covers	26	UNION GYPSUM COMPANY	15
LAING-GARRETT Construction specialties	10	VENT-A-HOOD OF ARIZONA Ranges, ventilators	12
McCONNELL POOLS Architects pool brochure		WARE-McCLELLAND SUPPLY CO. A. O. Smith Burky heaters	

LEBEAU PRINTING

July, 1958

Three

St. Charles KITCHENS

CUSTOM BUILT OF STEEL

16 mix or match colors in baked-on enamel
Birch wood doors and drawer fronts
Roller drawers
Adjustable shelves
Modern "off-the-floor" models, as well as conventional

Use our Free Planning Service. Call us early
for details on preliminary plans.

Rinehart & Harris Kitchens
2561 E. Grant Rd. • Phone EA 6-1105
TUCSON, ARIZONA

ARCHTIFACTS

Refresher courses are now being offered for those who will be taking the State Board examination in October. Brenner-McIntire-Arnold have courteously offered the use of their office at 97 W. Lynwood for these classes.

Courses being offered are History of Architecture, Structures and Mechanical Equipment. The classes will be held every Wednesday through September from 8 to 9 p.m.

Those interested in enrolling may call the A.I.A. office for further information.

— AIA —

How many books on drafting and any phase of architecture are gathering dust unused on your shelves? Good use can be made of them.

Thurman Johns, police reporter for The Phoenix Gazette, received a request for such books from an inmate at the state prison. Checking with the prison chaplain, Johns found that the inmate has a sincere desire to study drafting and architecture but that the prison library has no books on the subject. Johns called *Arizona Architect* for help in rounding up such books.

If you can help, bring or send the books to the office. They will be given to Johns, who will send them to the prison.

... tomorrow and tomorrow
creeps in this petty pace ...

If the wise Bard of Avon lived today I doubt that he would find anything petty in the pace of time. Instead of creeping, time and progress are zooming.

The architect finds himself directly and responsibly involved in this mad race, which not only involves technological change, but is rapidly making "necessities" out of what were formerly luxuries of living.

The way we're going, lots of people will soon be rationalizing swimming pools into "necessities." Already contractors are advertising: "You can own a pool for the price of a car."

There is a tremendous increase in the number of pools. It has been reported that last year more pools were built than even existed before then; that many more pools will be built this year than last. *Arizona Architect* we attempt to underscore a few major points that the architect should be thinking about.

In planning homes, even though no pool is immediately contemplated, the architect would do well to point out to the owner that one may someday be wanted. Location of utilities, cesspools, and the very design of the house could be affected by the fact or prospect of a pool.

Although the shape of a pool will be influenced by general design factors and the relationship of indoor-outdoor living, there are more obscure factors that deserve thought.

Children will use pools. Some will first learn to swim in their own back yards, and because of early interest, might even develop into future Olympic champions. That's why more modern pools have side bays for steps — so there is a clear channel for swimming. That's why pools are now three and a half feet in minimum depth, rather than three — so the new approved turnabout techniques in competitive swimming can be learned properly, and practiced.

Cost factors in swimming pool design are significant. But as in anything else, the architect considers not only initial costs, but ultimate costs and the design latitude that the various methods of construction allow.

Most pools today are pressure-applied and, in part, hand-formed. This permits maximum design leeway. But these pools generally must be kept filled, rather than allowed to stand empty. New problems therefore arise. Keeping water clean, for example.

The Editor's PERSPECTIVE

Another area of concern is safety. Filled pools could constitute an "attractive nuisance." Fencing thus needs consideration, not only from a standpoint of safety and privacy, but as a matter of total design. And what about legal liability for damages in the event the pool is used in the absence of the owner, and an accident occurred?

All these things the architect will consider in order to advise his clients well. This issue of *Arizona Architect* deals with some of these matters. Yet the swimming pool industry is growing so rapidly that what is said today may be out of date tomorrow. There are new catalogs constantly being issued by suppliers to this burgeoning industry. And there are qualified contractors and swimming pool engineers who would welcome an opportunity to consult with architects and give them the benefit of their specialized knowledge about these problems. That knowledge, coupled with the architect's ethical obligation to represent the interests of the client, can provide the kind of swimming pools that will fulfill every expectation of utility, safety, and esthetic pleasure.

Since last month's issue on church architecture, I've had a chance to visit the new Presbyterian Church in Stamford, Connecticut, recently featured in *Life*, and listed here last month in an advertisement for "Air-floor".

The building is shaped like a fish, with stained glass walls arching and joining each other at the top. I was curious to sense the "feel" of this widely publicized church that looks like no other church in existence.

It is beautiful. It is warm. It immediately invites quietude and reverence. If the quality of spiritual leadership is as high as I suspect it must have been to inspire this kind of building program, Stamford Presbyterian Church will become one of America's best-known religious structures.

On the way to New York and Stamford, I flew a day and an evening across this great and beautiful country of ours. From the "organic" beauty of natural contours of mountains, forests and moonlit rivers and lakes, to the man-made designs of subdivided land, ploughed fields and intricate traffic interchanges, the comprehensive view one gets from a transcontinental plane on one clear day is one to remember always.

Phil Saut

Seven



Give your design added beauty and lasting protection

with **Pioneer paints & varnishes**

Proved best in over 24 years of climate tests in Arizona and New Mexico ... on the finest residential and commercial buildings. When you specify Pioneer Paints you are getting the best. Paint catalog and color chip display gladly furnished upon request.

Pioneer
PAINT AND VARNISH CO.
P.O. Box 3096 • Tucson, Arizona

Offering a Complete Line of
RESIDENTIAL
ARCHITECTURAL
INDUSTRIAL
GOVERNMENT SPECIFICATION
PAINTS AND VARNISHES

MADE FOR THE SOUTHWEST

Scientifically formulated and manufactured in Tucson for nearly 25 years ... specifically for the southwest

ARIZONA ARCHITECT

July, 1958

WHAT'S **BEST** IN CHLORINATION?

Throughout the swimming pool industry, "S Treatment" has come to mean operating dependability and precision proportioning. A positive displacement, diaphragm pump, the Model S features chemically resistant, fibre-tough construction. Simplicity of solution handling parts, foul-resistant valve design produce accurate and consistent pumping. A rugged motor and gear train, immersed in oil, insure long life.

Precision's Model S will handle all chemicals used in the treatment of swimming pool water . . . from hypochlorites and soda ash to alum . . . in ranges between 0 and 15 g.p.h. The single-headed "S" will alone treat pools of 500,000 gallons in capacity. All pumps are covered by a one year guarantee.

For further information, write Department 1B, Precision Chemical Pump Corporation, 1396 Main Street, Waltham 54, Massachusetts.

chlorination •
pH control •
fluoridation •
corrosion control •



PRECISION



CHEMICAL PUMP CORPORATION

1396 MAIN STREET • WALTHAM 54 • MASSACHUSETTS

PERFECT

Eight

ARIZONA ARCHITECT



CHAPTER AFFAIRS COMMITTEE of the AMERICAN INSTITUTE OF ARCHITECTS

Document of the Month

Each month, or as often as outstanding material becomes available, the Chapter Affairs Committee proposes to send to every AIA Chapter a publication, generally by one of the Chapters, which has outstanding merit. Opinions expressed in these documents are not necessarily those of The Institute.

This transmits the Document for

June 1958

To All A.I.A. Chapters and State Organizations:

The Chapter Affairs Committee has watched with interest and approbation the steady improvement in the publications produced by the constituent units of the American Institute of Architects during the past few years. It has included a number of these as Documents of the Month and regrets that more could not have been so recognized. It hopes that its monthly commendation has helped to contribute in a way to this improvement but it is the first to acknowledge that the major inspiration behind this improvement has been the genius and hard work of those consecrated individuals who have produced the documents.

This month the Committee has chosen to honor the architects of the Arizona Society of Architects, the Central Arizona Chapter and the Southern Arizona Chapter for the vast strides made in the past year in producing one of the more notable publications which pass over our desk. By latest count the two chapters number a total of seventy-four corporate members but their new publication has the dignity and comprehensiveness of periodicals produced by groups many times their number.

The May 1958 issue of the ARIZONA ARCHITECT is interesting from cover to cover but its main feature, the article on the Mission San Xavier del Bac, with the excellent illustrations and the handsome colored center spread, is particularly commended as an outstanding example of possibilities open to the Committees on Historic Preservation in all of our chapters.

We extend to the Arizona architects and to the managing editor of the magazine, Phil Stitt, our hearty congratulations on producing this issue.

Sincerely,

Paul Hunter

Paul R. Hunter, Chairman,
Committee on Chapter Affairs.

July, 1958

Nine

ARCHITECTS

**Pool Information Is
Specialized and Changing**

You will benefit by having
in your office up-to-date
general pool information
and technical specifications.

Call or write us for a fine,
new data file designed especially
for you. It's free,
of course.

McCONNELL POOL CO.

Authorized Landon Dealer-Builders
AM 5-4294 or CR 4-6960 2532 North 28th Street

IF IT'S ORNAMENTAL IRON

We can supply your every requirement
in hand-wrought or cast-iron.

**Hand-wrought Hardware
Lamps & Lamp Posts
Ornamental Brackets
Ornamental Columns
Room Dividers
Weathervanes
Furniture
Railings
Grilles
Gates**

Call us when you have special problems
in any type of ornamental iron.

SULLIVAN MFG. CO.

2114-28 W. Monte Vista
Phoenix - AL 3-9744

POOL INSTALLATIONS BOOM

Like Topsy, the swimming pool industry has "just
growned," with a national increase in two years of
nearly 150 per cent.

On Jan. 1, 1956, there were 56,000 swimming pools
in the United States, according to the National Swimming
Pool Institute. Just two years later, the total
had climbed to 133,000.

Last year, for the fifth straight year, swimming
pool builders increased by more than one-third the
number of pools constructed. About 44,000 permanent
type pools were built, of which about two out
of three were residential.

Although the growth has been felt nationwide, new
pools on the west coast to the midwest were installed
at an increase of 100 to 600 per cent during 1957.
In Arizona, there were believed to be about 5,000
pools in 1957, with an estimated additional 2,000
built or slated to be constructed this year.

Trade estimate for the current year is that 53,000
pools will be built in the nation at a total installed
price of almost \$600 million.

At one time, swimming pools were generally regarded
solely as the province of very wealthy persons. Today,
however, they are within the means of middle income
families.

Now... Explore the Uses of PRESTRESSED CONCRETE

Architects and engineers are discovering unusual
construction speed and economy in pre-
cast, prestressed concrete structural members.
The remarkable strength developed in concrete
by prestressing permits using long un-
supported spans and lighter, thinner units.

Plan now to use prestressed
concrete on your next job.
Be sure it's made of "Arizona
Portland" cement —
dependable, plentiful and
always conveniently near
at hand.



**ARIZONA
PORTLAND CEMENT CO.**
TULSA, ARIZONA

ARIZONA ARCHITECT

Nearly 42 per cent of all non-
residential pools constructed in
1957 were for motels, an increase
of nearly one-third over the pre-
ceding year. Of the other remain-
ing non-residential pools, 16.5 per
cent were for clubs, 9.5 per cent
for municipalities, 13 per cent for
hotels and 7.8 per cent for neigh-
borhood groups.

One factor which has brought
the swimming pool to the back-
yard of the white and blue collar
workers is the availability and in-
crease of financing.

Among other factors that have
abetted the growth of pools are:
increased leisure time; greater in-
come; the surge to the suburbs;
decreasing cost of pools; the ac-
cent on backyard living; the exis-
tence of a pool as a symbol of pre-
stige, replacing the automobile; the
desire to teach youngsters to swim
and learn water safety; an inability
to get away to resorts for extended
periods; and increased equity in the
home and property.



Floating candles for a party at Town and Country Lodge, Phoenix.

COMPETENT COMPACTION TESTING, CONTROL INSURES PROPER SUB-GRADE PREPARATION

The time has passed in which the bearing capacity and
stability of Arizona's widely-varied soils can be left to guess-
work or "expert" opinions.

Scientific compaction testing and control by an independent
laboratory was specified by Ralph Haver & Associates, AIA, for
the Scottsdale Elementary School under construction at 56th St.
and Exeter Blvd.

"By grading the building site and utilizing controlled compaction
before commencing construction, we were able to place the entire
group of buildings on one level. This simplified layout of con-
struction and road connections, saved concrete for footings and
stem walls, eliminated steps and ramps, and enabled utility lines
to be run with fewer offsets," Haver reports.

Assumptions can lead to serious and expensive difficulties.
Whether the building site is on a fill, partial fill or natural grade,
the best insurance against construction problems is competent
supervision, testing and control by a qualified independent test-
ing laboratory.

"A structure is only as sound as the foundation on which it is built."

Engineers Testing Laboratories, Inc.

2515 East Indian School Road • CR 4-4690 • Phoenix, Arizona

July, 1958

Eleven

for the finest in swimming pool heaters

...look to **A.O. Smith
Burkay**

DESIGNED EXCLUSIVELY FOR POOL USE

• TROUBLE-FREE AS A HEATER CAN BE!

Burkay has just eliminated the most common source of maintenance problems in a pool heater, the pressure-regulated control system, and replaced it with a new concept in pool heater operation—the Burkay flow switch.

This new, positive-action control turns the heater on and off according to the rate of water flow instead of the presence (or absence) of pressure within the system.

Variations in pressure, false pressures, erratic pressure, vibrations—none of these common disturbances can cause a control problem in the improved Burkay heater, because the performance of a Burkay is in no way related to the pressure.

with these outstanding features:

- Self generating controls
—no external wiring
- Combination pool and temperature
and high limit control
—completely wired and mounted
- Weather resistant construction
- Fully automatic — gas fired



A. O. Smith BURKAY heaters are compact, light weight, easy to install... no external wiring required. Their exclusive design features all copper construction, assuring rust and corrosion free service; the patented burner, unique heat exchanger and

• SIZING INFORMATION •

Use this table to determine the correct water heating equipment required to raise water temperature about 1 degree per hour. For indoor pools, slightly less capacity is needed.

POOL SIZE	BURKAY MODEL(S) RECOMMENDED
10,000 gallons	One 10F or One 10DF
20,000 gallons	One 20F or One 20DF
40,000 gallons	One 40F
60,000 gallons	One 20F and One 40F
80,000 gallons	Two 40F
100,000 gallons	Two 40F and One 20F

• SPECIFICATIONS

	10DF	20DF	10F	20F	40F
Input, BTU per Hour	110,000	195,000	110,000	195,000	420,000
Approx. Shipping Weight, Pounds	180	233	163	202	349

water wall combustion chamber provides efficient operation.
Gas fired — operate on all gases; bears the A.G.A. and A.S.M.E. seals of approval.
The complete range of sizes fit all requirements.

**Ware—
McClelland supply company**

PHOENIX, ARIZONA, 717 WEST BUCHANAN ST., P.O. BOX 4367
TUCSON, ARIZONA, 3024 EAST 14TH STREET, P.O. BOX 4877
Alpine 8-6747
Tucson 3-7901



ARIZONA ARCHITECT

DESIGNING THE POOL

Obtaining a swimming pool is like buying a suit of clothes. It's possible to purchase a \$40 suit which will well serve its purpose. It is wearable and looks all right. Then again, one can pay \$150 for a suit which serves the same function, but in a different, more highly satisfying manner. So it is with pools.

The National Swimming Pool Institute reported this year that the national average selling price of a pool today is \$3,700. Average of top price pools is \$7,346, in the low price range, \$3,225. In Arizona a functional pool can be obtained for considerably less. Thus it can be readily seen that the cost of a pool is highly variable.

There are three basic types of pools from which the architect or designer can fashion an installation to suit the needs and wishes of the client.

For people who want a pool in which to dunk themselves to cool off and primarily are interested in the social attributes of owning a pool, the free form is most acceptable. The pool generally is small, has lights, is three to five or six feet deep and has no board.

The athletic type of family generally will find that the rectangular pool is best suited to its needs. The rectangular shape, with its modifications still the most popular type of pool, gives the greatest swimming area for the money. For people who will

use the pool a lot and want to swim properly, perhaps the best bet is one about 15 by 38 to 40 feet, three and one-half to six feet deep, with no board or ladder. The board and corresponding depth are optional.

For the wealthy family which entertains large groups of people, a glamorized rectangle about 20 by 40 feet is most popular. These frequently include steps at the shallow end and benches in the deep corners, black tile trim to define the edges and beautify the pool, lights and coping made from flagstone or various blocks and bricks.

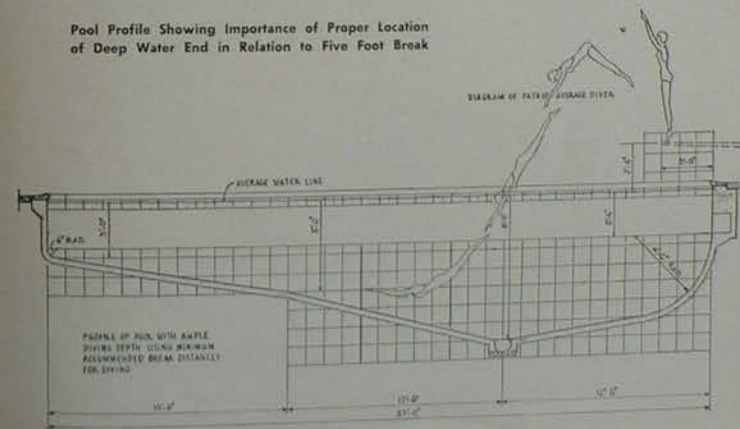
The trend in apartment houses and motels, incidentally, is away from boards since one teenager in a 17 by 34 foot pool can completely monopolize use of the pool.

In designing a pool for a client, it is wise to discourage pools two and one-half feet deep or less because it will be wasted area when the children are older and it invites use by young non-swimmers.

A popular misconception is that the depth under a diving board is the most important safety element. On the contrary, as the drawing below shows, the critical point is the five foot depth, at which swimmers come out of the dive. That point should be at least 22 feet from the end of the pool.

Other factors which influence the design for a pool

Pool Profile Showing Importance of Proper Location of Deep Water End in Relation to Five Foot Break



July, 1958

Thirteen

include such topics as coping and tile, lights, the filtration system, heaters, maintenance and location. Four colors of coping, in order of their popularity, are white, pink, buff and yellow. Blue or turquoise tile is almost universally chosen, although such combinations of tile and coping as black and yellow are finding favor.

Frequently, especially if the client has a health problem, anchor bolts are installed for a life line. The location of entrances and exits is influenced by the family.

When designing a house, the architect would do well to plan for a pool even if the client does not want one. He, or a subsequent owner, may want one later. If planning for a pool, the architect should place his sewer lines or septic tanks and cesspools out of the way. If the ground is rocky, it is far more economical to blast it out before construction of the house and refill it until needed for the pool.

For convenience and more economical installation later, put an extra switch right outside so the lights can be turned on before going into the pool area. Wiring for 220 should be available and properly located for later hookup. When building the pool, provide for the heater by putting it in the plumbing and, because the heater can be up to six feet tall, choose well its location so that it will be as inconspicuous as possible.

Most pools are placed in direct sunlight, but if there is to be a board, it is wise to avoid facing the board into the west and thereby creating a dangerous situation for late-afternoon divers. Consider where the shade will be in the morning and afternoon. The trend is to place the pool as close to the patio as possible, so that the area becomes an outdoor living room and is easier to supervise. A word of caution, however: leave the pool lights out of the side facing the patio and eliminate a source of irritation to patio-seated spectators.

Once the pool is filled, water requirements are practically nil. With excessive use and evaporation, the pool may require 50 to 100 gallons a day, but by carefully combining the function of the filter, automatic skimmer and circulation system it is possible to get crystal clear, sparkling water and to cut down cleaning maintenance by about 50 per cent.

The swimming pool industry is keeping development in pace with its fast-increasing sales. The next big advance will be fully automatic pool covers. There will be improvements in methods of killing bacteria and algae and in pool finishes. Just as it is with women's clothes, something new and different is developed each year in the pool industry. Any pool builder stands ready to inform the architect of new methods and equipment.

MARKS THE SPOT
FOR ALL KINDS
OF REAL ESTATE
LOANS

MAXIMUM LOANS NOW AVAILABLE

for

- RESIDENCES
- OFFICE BUILDINGS
- APARTMENTS
- WAREHOUSES
- SHOPPING AREAS
- CONSTRUCTION AND
PERMANENT LOANS

FREE ESTIMATE APPRAISALS
ON CONVENTIONAL LOANS



A. B. ROBBS TRUST COMPANY

3500 N. CENTRAL AVE. • PHONE CRESTWOOD 7-7211
PHOENIX, ARIZONA

Fourteen

ARIZONA ARCHITECT

Frost-Cap Vinyl Roof Coating

**cuts cooling costs 25 to 50%
in churches, schools, or homes!**

By actual tests, cooling costs in existing homes were reduced by 25 to 50%. And, in new construction smaller than normal refrigeration units were found to be feasible, with the addition of Frost-Cap on the roof. Obviously, similar figures will apply to churches or schools, whether existing units or new construction. With Frost-Cap on the roof, temperatures will be 20° lower, and cooling costs reduced 25 to 50%.

For churches, or schools, specify —

frost-cap



DEER-O
Paints and Chemicals, Ltd.
Phoenix

BUILT-IN KITCHEN BEAUTY

MOST FAMOUS NAME
Vent-A-Hood
IN COOKING VENTILATION

FOR A BRIGHTER,
COOLER, CLEANER
KITCHEN

the Fabulous **Flair**
Designed specifically for the
thorough ventilation of built-in
cooking surfaces.

MODEL F-100

and the Handsome
Conqueror

Designed specifically for the
thorough ventilation of free
standing ranges.

MODEL
WB

* BOTH IN RAINBOW COLORS *

Vent-A-Hood OF ARIZONA

EMIL A. SALMI

6415 E. Thomas Rd., Scottsdale — Dial WH 5-5602

O'KEEFE & MERRITT
BUILT-IN RANGES

features

- * Triple Rotisserie
- * Grillator Broiler
- * Pin Point Flame
- * Starjet Thermatic
Burner Control
- * Snap Off Top
- * Automatic Clock & Timer
- * Oven Signal Lights

HEATFORM



Fireplace at right is built around
HEATFORM unit Model "A". Air
inlet and outlet grilles are formed of
masonry.

Circulates HEAT



Custom screens
available to fit
any type fire-
place.



the BAKER THOMAS CO.

BUILDING MATERIALS AND SPECIALTIES
P. O. BOX 8410 • PHOENIX, ARIZONA

July, 1958

Fifteen

PLASTER MAKES IT PERFECT!

The new headquarters office of the Salt River Power District combines inviting charm with architectural impressiveness. Plaster walls and acoustical plaster ceilings were chosen for their long-lasting, handsome appearance, low upkeep and versatility.

Because lath and plaster is virtually fireproof, it provides greater safety. It is an important factor in insulation, reducing heating and cooling bills.

In the creation of new homes and commercial buildings, your good reputation is at stake. Build with quality . . . genuine lath and plaster.



BUILD WITH PLASTER • BUILD WITH PLASTER • BUILD WITH PLASTER • BUILD WITH PLASTER • BUILD WITH PLASTER • BUILD WITH PLASTER • BUILD WITH PLASTER • BUILD WITH PLASTER • BUILD WITH PLASTER • BUILD WITH PLASTER

ARIZONA LATH AND PLASTER INSTITUTE

QUALITY • JUST
LATH • PLASTER

FOUNTAINS BY KIM



OUTDOOR
UNDERWATER
LIGHTING

Kim Lighting & Mfg.
Co.

EL MONTE, CALIF.

Represented In Arizona by

WM. BENNDORF COMPANY

221 East Camelback Road, Phoenix, Arizona

Section

ARIZONA ARCHITECT

RESIDENTIAL POOL LANDSCAPING

By GEORGE CHRISTENSEN



Part of the American dream was to have a home that had a back yard planted with flowers and shaded with trees that surrounded a green lawn. Today this dream is shared with a blue swimming pool. In many yards pools are just placed in the center of the area with no thought of their relationship to the landscaping. For safety reasons a woven-wire fence is placed around this construction to add to the eyesore.

In our desert climate we have a wide choice of landscaping techniques. The surrounding yard is usually partly lawn and partly concrete. A strip of flowers and a strip of trees. The general effect is pleasing, although rather barren in concept.

A pool should be integrated as much as possible with the building and landscaping around it. Even in a very small lot the space can be divided, so that there is some group of foliage that forms a landscaped island to add a feeling of diversity and space to the swimming area. Sensible solutions allow swimmers to walk to and from dressing rooms and cabanas to the pool without walking through areas such as grass or gravel that would track extraneous matter into the water. Of course, this can be eliminated by such things as foot baths. However, in most residential pools the cost is prohibitive. A grassy area adjacent to the water's edge is a most pleasant sun bathing area. Next to such an area should be a shaded plot or patio, where one can get out of the sun and glare during hot periods of the day. The trees that shed their leaves should not be near a pool, and plants that require cultivation are a pool side hazard. Many natural things such as rocks and cacti add a theme to a pool's design and are reflected in the mirrored surface.

For people with small children, safety is of primary importance in pool design. Often landscaping and


convenience take a far second place. One of the most interesting solutions to this problem, sketched below, was a pool on the back of a residence. Near the building the owners had a complete structure of post and beams covered with a wire lattice built over the entire pool area. Interwoven in this lattice was an intricate fabric of plants that formed the walls and ceiling; however, not densely enough to restrict greatly the sunlight. There was no entrance to the pool except for one door from the house, which offered maximum security, control and safety. The total effect was most pleasant, giving definition to the swimming area and still allowing a view of the surroundings.

In designing pools, then, a few simple considerations of relation of the use of the pool and the landscaping will offer far more utility and enjoyment to the pool owner and swimmers.



Seventeen

July, 1958




Shapes...

Shapes of today's swimming pools, especially in the southwest, where there is a wide freedom of expression, are as varied and intriguing as Arizona's landscape itself.

The trend in pools these days is toward custom-designed or irregular shapes. Since the advent of new construction methods, pool builders have not been restricted by mechanical problems to square or rectangular pools. Flexibility in construction procedures has given the architect, landscape specialist and pool designer a free hand in producing swimming pools to fit the individual back yard, motel or hotel, camp or institution. Practically anything is possible.

Individuality, combined with the functional need of the client and the location of the pool, is the determining factor in the selection of its shape. Given sufficient latitude with respect to the available space in which the pool is to be constructed, the architect or pool builder — who most often work together — can fashion virtually any shaped design.

The shape and the size of the pool and the types of fixtures it contains must be



"...Varied As Arizona's Landscape"

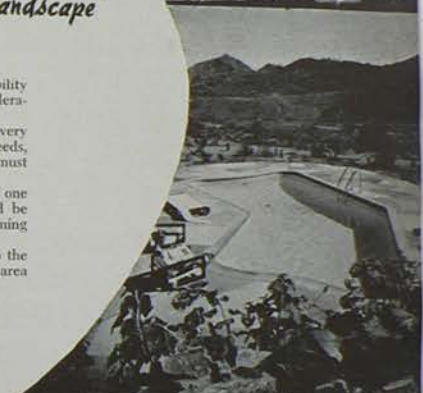
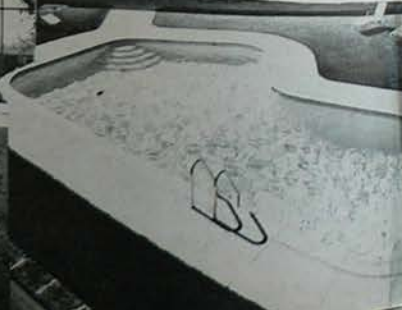
determined by the client, with the architect having the responsibility of being sure that his client takes several factors into serious consideration before the decision is made.

Remembering that a pool is a permanent investment and cannot very well be traded in on a new model, the family must consider its needs, at present and in the future. The manner in which a family lives must not be forgotten when planning the poolscape.

An angular shape with high esthetic value may be right for one family, but a rectangle, modified in one of several ways, could be best for youngsters who like to race or who dream of becoming future intercollegiate swimming stars.

With the accent on outdoor living, pools generally are close to the house for entertaining and ease of serving. A shaded recreational area for day and night use may be the need, or older clients could prefer a small patio area with perhaps just a nearby barbecue or lounging spot.

Shape, location and style, determined by the client with the aid of the architect's art and knowledge, provide a lifetime of fun.





Seven Arizona architects participated in the committee and general business sessions at the A.I.A. annual convention in Cleveland, Ohio this month. From left: E. D. Herreras, Tucson; James Elmore, Phoenix; Arthur T. Brown, Tucson; Martin R. Young, Mesa; John Brenner, Phoenix; David Sholder, Phoenix. John Brenner was elected a director of the National Council of Architectural Registration Boards, which held its annual meeting in Cleveland. Not in picture: M. H. Starkweather.

CRITIQUE

EDITOR, ARIZONA ARCHITECT:

Please accept my personal congratulations on the splendid progress you have made in the design and presentation of *Arizona Architect*. It is one of our best publications, and I am happy to see the chapter affairs committee recognize it as such.

Please extend this congratulatory expression to David Sholder and Santry Fuller.


ULYSSES FLOYD RIBLE, FAIA
AIA, Washington, D.C.

EDITOR, ARIZONA ARCHITECT:

We, the Southern Arizona Chapter, would like to take this belated opportunity of expressing our appreciation, and enjoyment, for the fine job you are doing for the Arizona architects in the publication of *Arizona Architect*.


In particular we wish to congratulate you on the fine May issue devoted to the restoration of San Xavier del Bac and the work of Mr. Ed Herreras.

D. S. SWANSON, Secretary,
Southern Arizona Chapter.



BETTER INSULATION

CLAY BRICK

	GRABE BRICK COMPANY	LOUIS DeVRY AND SON	
PHOENIX BRICK YARD		TUCSON PRESSED BRICK COMPANY	
WALLPAI BRICK & CLAY PRODUCTS		WESTERN CLAY PRODUCTS	

Twenty

ARIZONA ARCHITECT

Public Pools Can Be Too Large; Design Factors Based On Needs

By R. J. KOUPAL, INFILCO, INC.

Many municipal pools being built today are too large for the communities they will be serving. Possibly local civic pride, Chamber of Commerce over-optimism as to population increase, rivalry between neighboring towns, over-designing for extreme, instead of average, hot weather conditions are some of the things bringing about this situation.

Be that as it may, there is this tendency to build pools too large. Thus, it frequently happens the local taxpayers find, at bidding time, they cannot afford to build and equip their proposed new pool substantially — to say nothing of providing sufficient funds for operation and maintenance.

Thirty years of observations and experiences in swimming pool work have suggested the use of certain factors for developing conservative design data indicating just what a community actually needs in the way of swimming pool facilities. These factors are set forth below in the hope that they will prove interesting — and perhaps helpful.

FACTORS	EXAMPLE
P Population of community to be served by pool	15,000
P x 0.033 Number of persons for which bath house facilities should be provided	495
P x 18.0 Volume of pool in U. S. Gallons	270,000
P x 0.48 Number of square feet of pool surface area	7,200 (60' x 120')
P x 0.02 Maximum number of persons actually in pool at any one time	300
P x 0.01 Number of persons for which to provide lounging areas around pool	150
P x 0.03 Maximum attendance load at any one time (persons in pool plus persons in lounging areas)	450
P x 0.12 Maximum daily attendance — assuming 8 hr. day	1,800

(a) Factors apply only to public municipal pools.
 (b) Towns of less than 5,000 should assume "P" equal to 5,000.
 (c) If population is greater than 25,000, consideration should be given to building two or more smaller pools.

July, 1958

GOT A NOISE PROBLEM?

... in offices, hospitals, schools, churches, restaurants, banks, hotels? Acousti-Celotex Sound Conditioning will help you solve it. Depend on our broad experience, using the world's most widely-accepted acoustical materials ... backed by 32 years of sound conditioning know-how. Call or write today!

PHOENIX ROOFING & SUPPLY CO.

1655 W. JACKSON

AL 3-2161

a subsidiary of

Southwestern Glass & Millwork Co.



ACOUSTI-CELOTEX

Sound Conditioning



Almost any desired strength of concrete can be obtained by varying the ingredients. The proper proportioning of these ingredients is one of the functions of A.T.L.

Trial concrete mixes are made in the laboratory at various W/C ratios to determine the "job-mix curve." The desired concrete mix is then calculated from this curve.

Laboratory mixes are designed for the particular project on which they will be used. The use of these mixes assures the user of having the right concrete for his job.

Next month: Concrete Strength (continued)

ARIZONA TESTING LABORATORIES

Member, American Council of Independent Laboratories
PHOENIX • TUCSON • FLAGSTAFF

Twenty-one

Liability Hazards Can Be Minimized

By WILLIAM G. BARNES, Attorney

(Editor's Note: As private swimming pools have become common, a tragic corollary has been an increase in child drownings. So that architects may understand the question of legal liability and both advise their clients and prevent unnecessary fears, we asked Mr. Barnes to prepare a special report, part of which follows. For detailed information, consult an attorney.)

If an uninvited child drowns in a neighbor's unguarded pool, is the pool's owner liable? Given these facts alone, no clear answer can be given on the basis of existing Arizona decisions. We must look to cases in other states and to Arizona decisions on analogous subjects.

A property owner has no duty to anticipate the coming of trespassers on his property. He is not liable for injuries that may befall them while there unless he has permitted hidden conditions amounting to a trap to exist on his property.

However, a significant exception to the landowner's immunity exists: the presence on his land of something so attractive to children as to constitute an implied invitation to trespass can render the owner liable for harm resulting from the attracting substance. The doctrine of "attractive nuisance," of relatively recent origin, has not found universal acceptance. Thirteen states have rejected it and others have limited its application to inherently dangerous machinery or to artificial, as opposed to natural, hazards. The semi-authoritative Restatement of Torts, Sec. 339, has recognized a relatively broad interpretation of the doctrine:

"A possessor of land is subject to liability for bodily harm to young children trespassing thereon caused by a structure or other artificial condition . . . if, (a) the place where the condition is maintained is one which the possessor knows or should know that such children are likely to trespass, and (b) the condition is one of which the possessor . . . realizes or should realize involves an unreasonable risk of death or . . . bodily harm . . . and (c) the children, because of their youth, do not discover the condition or realize the risk involved . . . and (d) the utility to the possessor of maintaining the condition is slight as compared to the risk to young children involved . . ."

As a general rule, bodies of water are not classified as attractive nuisance. This exclusion applies to natural bodies of water and to artificial bodies which do not differ in characteristics from natural bodies. Why do so many states exempt water bodies from attractive nuisance coverage? Among several strong reasons are: water is a common substance, its danger in pools is obvious and well known, and, in the absence of concealed elements of danger, the presence

of water does not constitute an unreasonable risk; parents have a duty to care for their children, warn them of obvious dangers and keep them away from water hazards; this duty should not be shifted to neighbors.

Also, children normally become aware of the nature of water at an early age and its dangers are known to them; some states refuse to apply the doctrine because the dangers of drowning or serious injury due to the water hazard are only possibilities, and not probabilities; some states hold that the keeping of water bodies is not the "implied invitation" to child trespassers required for an attractive nuisance; and, perhaps, most important, once liability in such cases is recognized, there might be a deluge of litigation.

In the states permitting recovery under the doctrine for injuries resulting from water hazards, there must usually be some element of hidden danger. Liability is more likely if the hazard is easily accessible to children, if the owner can reasonably anticipate the presence of children and if he should recognize the dangerous propensities of the hazard. Whether the owner takes reasonable precautions under the circumstances are questions of great importance in such cases.

The age of the children can be crucial. Many of the cases rejecting the attractive nuisance doctrine and denying recovery involved as the trespassers young boys. Such boys could recognize the danger of water and for landowners to keep them away was a near impossibility. As one Wisconsin judge said, ". . . to construct a boy-proof fence at a reasonable cost would tax the inventive genius of an Edison." But is the same principle applied if a three-year-old tot falls in a private swimming pool?

Another element of importance is that of "attraction." Many courts feel that the substance must be so unusual and uncommon as to draw the child upon the owner's property. Thus, a normal, well-known object cannot be the subject of attractive nuisance.

Courts have been emphatic in declaring that the doctrine should not be a substitute for the basic responsibility of parents for the welfare of their children. As one judge stated, "There is a growing tendency to make everybody responsible for the safety of children except their parents. . . . The duty to safeguard them, however, rests primarily upon their parents. . . . Parental responsibility is in danger of becoming a vanishing quantity in this age of progress. The law should not, without effort, let it entirely disappear."

The modern private swimming pool is an artificial body of water, often placed in the middle of a residential section for the specific purpose of recreation. It is sufficiently small in size to make fencing or

guarding practical. The residential nature of the neighborhood puts the owner on notice of the probability of trespasses by children. Most decisions involving residential swimming pools have, in the absence of special elements of danger or invitation, rejected the attractive nuisance doctrine.

In a 1956 case, Justice Dudley W. Windes gave one of the finest expressions of the doctrine available anywhere:

"If one maintains on his premises an artificial, dangerous instrumentality under such conditions that he as a reasonable person should anticipate the access of children who would not realize the dangers involved and should anticipate that there is an unreasonable risk that the instrumentality would tempt or entice the children to trespass by tampering, playing, or intermeddling therewith and that there is an unreasonable risk of harm resulting from such trespass, he is negligent, unless to provide protection against the harm would involve serious interference with the owner's use of his premises or would entail unduly burdensome costs."

Arizona cases on analogous subjects show a decided trend toward a more liberal application of the doctrine of attractive nuisance. Further, the expression of the doctrine by Justice Windes and the approval of the Restatement rule in another case provide a definite standard which can be applied to swimming pool cases.

According to Windes or the Restatement, or both, it is possible that Arizona courts, on the basis of existing Arizona law, could find that residential pools are attractive nuisances, at least to very young children, though such a finding would be different with respect to children old enough to appreciate fully the danger of a pool.

If there is a possibility the pool owner may be liable for the drowning of trespassing children, what can he do to protect himself? To offer a very sketchy list of suggestions, he might:

Build a fence around his pool or around his property. Even then he should be sure that it is high enough to discourage climbing by small children. It would be wise to lock the gate.

Then even if a child should get in, the court would probably find sufficient precaution had been taken. Even if it would be meaningless to younger children, a warning sign would put older children and possibly parents on notice as to the danger and the landowner's desire that trespassers stay away from the pool.

It might mean becoming the ogre of the neighborhood, but a warning to trespassing children and their parents might save the landowner much trouble later.

The landowner might agitate for some type of legislation to clarify his position with reference to trespassing children who get in his pool.

And then, there is liability insurance.

SUPERLITE
BRICKS AND BLOCKS



"For Life... For Beauty"
Residential
and **Commercial**
F.H.A. Approved

**PREFABRICATED
BLOCK FENCE**

**NO..MORTAR
..FOOTING**

SUPERLITE
BUILDERS SUPPLY Co.

4012 N. Central Phoenix, Arizona
842 W. Main Mesa, Arizona
AM 5-4755



Above: San Pedro, California
Right: Solvang, California



Twenty-four

The "Other Arts" of Architects



Left: Simi, California

Below: From Sketchbook
in Spain — 1924

ARCHITECTURE has been described as the "Mistress of all the Arts."

Architects often utilize murals, stained glass, sculpture, etching and other art forms in creating beautiful buildings.

Inevitably, architects have studied "the arts" and some have done interesting and even notable work in water colors, oils, lithography, photography, and other media.

This is the first of a series of examples of the artistic talent of members of the two Arizona chapters of the American Institute of Architects.

THE EARLY ambition of Lester Laraway, AIA, was to become an "artist." He attended various art schools in Southern California, studying with, among others, Nicholas Haz, Hernando Villa, Hamilton Wolf, Colin Campbell Cooper and Frank Morley Fletcher. He earned a living working for advertising agencies and architects, later settled on architecture as a satisfying outlet for his creative drive.

July, 1958



Twenty-five

Construction Specialties for Quality Building

WOOD STRUCTURAL

TIMBER STRUCTURES

ACOUSTICAL

FLINTKOTE • Fiberglas • ReynoCoustic • Burgess-Manning • KEMWOOD

FLOOR COVERING

TILE-TEX • Bruce • Goodyear • WoodX • DEX-O-TEX

WINDOWS

RUSCO • Sealux • Watson • LEMCO

DOORS

Modernfold • Ador

Whether it's a simple floor covering or an engineered timber construction job, the staff at Laing-Garrett has been trained to execute its work with expert craftsmanship using quality materials.

LG *Laing-Garrett*
CONSTRUCTION SPECIALTIES, INC.

PHOENIX
4700 N. CENTRAL
AM 8-5606

LAS VEGAS, NEV.
1307 S. "A" ST.

Twenty-six

ARIZONA ARCHITECT

Pool in the Pines

The ole swimmin' holes are drying up, even in the mountainous areas of the state. Because of dry spells and overpopulation of the few natural swimming spots in northern Arizona, owners of summer camps are putting in pools.

At Friendly Pines, operated for 17 seasons by Phoenician Bud Brown, a pool was installed last year in order to provide for the day-long water traffic at the camp.

Two pools, in fact, were installed, a major factor in water safety at the camp. The large pool, for accomplished swimmers, is 16 feet wide by 32 feet long, with a graduated depth of three to seven feet. The smaller pool is 14 by 24 feet, with a depth graduation of three to five feet. Brown reports that the youngsters can be watched and supervised more effectively than would be possible in one larger pool.

Again improving on nature, Friendly Pines has in its pool a completely automatic filter system and skim-



mer so that changes in water, on short supply, are infrequent. A heating system improves the temperature of the water, which is 52 degrees coming out of the ground and the heating extends the swimming season from two to three and one-half months.

"Made to Beat the Desert Heat"

ALAMOGORDO N. MEX. TUCSON ARIZ.

YUMA ARIZ. IMPERIAL CALIF. BAKERSFIELD CALIF.

PALM SPRINGS CALIF. PHOENIX ARIZ. INDO CALIF.

FT. WORTH TEX.

Continental
SUPER AERODYNE
AIR COOLED REFRIGERATION

and Proved
in the "Hot Spots"

DESERT BUILT • DESERT TESTED • DESERT PROVEN
Continental Manufacturing Co. - 712 So. 23rd Ave., Phoenix, Arizona

July, 1958

Twenty-seven

For a BETTER INSULATED HOME

Specify



Quality Tested
Light
Sound Absorbent

Economical
Fireproof
Versatile

CONCRETE PRODUCTS CO.

Quality & Service since 1937

4445 North First Avenue

Phone: MAin 2-8857

TUCSON, ARIZONA



Pittsburgh Plate Glass Company features a unique color system to aid architects in choosing paint colors for interior and exterior uses. This system, known as the Maestro Color Service, features 300 colors.

An architectural file, showing all colors, with an ample supply of small color chips, is reserved exclusively for architects.

Phoenix Branch: 1140 N. 21st Avenue Phone Alpine 8-7461



SYMBOL OF SERVICE FOR SEVENTY-FIVE YEARS
PITTSBURGH PLATE GLASS COMPANY

PAINTS - GLASS - CHEMICALS - BRUSHES - PLASTICS - FIBER GLASS

Twenty-eight

ARIZONA ARCHITECT

For The Best In BUILDERS HARDWARE See O'MALLEY'S

Complete Architectural Service

EXCLUSIVE DISTRIBUTORS

FOR: SARGENT
McKINNEY
PLUS: NORTON
LCN
RIXSON
VON DUPRIN



WILLIAM E. WELLINGTON
Manager Builders Hardware Department



PHOENIX
4TH AVE. AND MADISON
TUCSON
247 NORTH 4TH AVE.

Functional Public Pools

By KEMPER GOODWIN, AIA

The main design problems of a public pool can often be centered as much in the bath house and office area as in the pool itself.

Our firm, in designing the pool for Arizona State at Tempe, found that there were specialized requirements for both pool and shower-locker rooms.

For the pool, which is 60 by 110 feet and divided by a bulkhead into 75 and 31 foot areas, we had to provide sufficient length so that swimmers could qualify for records which might be set in intercollegiate meets and also enough width so classes or water sports could be divided into groups and go on simultaneously.

Because the pool is used for both instruction and recreational swimming, the decks had to be wide enough to accommodate those involved and to permit spectators at exhibitions.

Other features included raising the bulkhead to eliminate the need for starting platforms in competitive swimming; raising the office to a height permitting full visibility and using the space under it for storage; and the erection of a 10 foot wall to cut out winds and still tie in architecturally with other heights.

We still had the problem, however, of getting students changed in the brief time allowed between classes. Our studies showed that over 50 per cent of the time was taken in the check-out process, so instead of baskets, we devised a system of racks on which the students can deposit all their clothes. The racks, when full, are rolled into the checkroom and locked up.

After the class, students save the waiting time of a number-basket operation. When the pool is used for recreation only, the racks remain in the checkroom and numbers are given. There is also a single check-in for valuables so that one attendant can handle both sides.

July, 1958



SWIMMING POOL BEAUTY has to be more than skin-deep!



When you finish a pool with WHITE EAGLE POOL-MIX, every swimmer falls in love at first sight. Even the severest critic takes the plunge for WHITE EAGLE's smooth finish and enchanting pure-white color. But there's a lot more to WHITE EAGLE than a beautiful surface.

For this is a non-silicate finish! Prolonged exposure to water and chemicals won't break it down. It inhibits the growth of algae and other marine bacteria, makes cleaning a breeze, cuts trouble calls to a fraction. Yet, with such outstanding superiority, WHITE EAGLE POOL-MIX costs no more than ordinary finishes!

Dive right into the profit picture! Whenever you build or refinish a pool, use WHITE EAGLE POOL-MIX! Here's the finish that'll be the beginning of bigger pool business for you!

WANT MORE INFORMATION?
Just Mail the Coupon Today!

ARIZONA WHITE EAGLE STUCCO COMPANY
301 SOUTH 30TH STREET, PHOENIX, ARIZONA
Please send complete information on WHITE EAGLE POOL-MIX
NAME _____
ADDRESS _____
CITY & ZONE NO. _____ STATE _____



Quality
Stucco Products
Since 1936

Twenty-nine

NELSON - HOLLAND BUILDERS HARDWARE

ARIZONA'S ONLY BUILDERS HARDWARE CO.

When you specify SCHLAGE locks, you benefit from 30 years experience in lock craftsmanship dating from Walter Schlage's invention of the modern cylindrical lock. You benefit from Schlage's insistence on the finest, most dependable materials available: strong, tempered cold-rolled steel for lock mechanisms . . . the finest brass, bronze and aluminum metals for knobs and escutcheons . . . rich lustrous brass and bronze finishes preserved with a coating of transparent lacquer applied electrolytically to assure a smooth unbroken surface . . . and non-tarnishing chrome and luster-sealed aluminum for extreme-weather installations.

Schlage locks given extra security . . . extra beauty . . . extra economy.

For Service call on

Vic Nelson, AHC — Cliff Holland, AHC
Joe Woolford, AHC

Members of the American Society of Architectural Hardware Consultants

Phone AM 6-8411 • 1205-1207 E. Camelback
Phoenix, Arizona

From a Pool to a Palace

FOR YOUR OWN AND YOUR CLIENTS' PROTECTION

Always recommend a contractor licensed by the —

Registrar of Contractors

State of Arizona

1818 W. Adams St.

• Phone ALpine 2-2381

• Phoenix

F. H. "BUNK" PORTER ELECTED NEW REGIONAL DIRECTOR OF AIA

Frederic H. Porter, Sr., founder and first president of the Wyoming chapter, AIA, this month was elected regional director of the AIA to represent the Western Mountain District.

Frederic "Bunk" Porter, of Cheyenne, has been in the profession since 1906 and is a registered architect in Wyoming, Colorado, Nebraska and Utah. He is present secretary of the Wyoming AIA chapter and has been a member of AIA since 1925.

Regional chairman of the National Committee on Architectural Practice, AIA, Porter also serves as secretary-treasurer of the architects.

"Bunk," who went into practice for himself in 1923, was elected to the Wyoming legislature of 1931, where he introduced an architectural registration law. It was after 20 years of promoting the law, however, that it was finally passed in 1951.



Wyoming state board of

Pool Plans, Specs Need Sanitation Bureau Okay

In accordance with the provisions of part IX, regulation 81 (h) of the Sanitary Code, an application for the approval of plans and specifications for the construction of swimming pools or alterations to existing swimming pools must be submitted to the bureau of sanitation, state department of health, on a form furnished by the bureau.

The application must be accompanied by plans and specifications and a report describing the proposed construction in detail, giving the basis of design and furnishing information not clearly shown on the plans.

In general, the plans of swimming pools and appurtenances, or modifications thereto, should be in sufficient detail to show whether the pool can be constructed and operated in accordance with the requirements of the appropriate section of the Sanitary Code.

Plans should show the source of water supply, the method of disposal of discharged water and of sanitary sewage. They shall also show the proposed method of operating the pool, i.e., recirculation, flow-through or fill-and-draw.

A copy of policies governing the preparation and submission of plans of swimming pools and bathing places may be obtained from the bureau of sanitation.

Engineering Bulletin No. 4, the report deals in detail with requirements for such topics as general principles of bathing place sanitation, location and layout of pools, design and construction features, proportioning pool areas to expected load, inlets and outlets, scum gutters, steps, ladders and step holes, runways or sidewalks, lighting, ventilation and heating, the recirculation system, filters, disinfection, diving towers, spring boards and floats, and safety precautions.

New swimming pool codes are being prepared and will be available within a few weeks.

SUPERIOR PRESTRESSED CONCRETE

...A LEAP PRODUCT



as used in the **Maricopa High School** building

MARICOPA, ARIZONA

Pre-stressing overcomes the basic weakness of plain concrete's low tensile strength in a manner quite different from reinforced concrete. Almost double the conventional load-bearing capacity is realized with pre-stressing.

YOUR ADVANTAGES WITH SUPERIOR PRESTRESSED CONCRETE

- Long Spans
- Fire, Blast & Storm Resistance
- Pleasing Appearance
- Versatility in Designs
- Controlled Manufacturing
- Large Savings in Construction Time
- Low Maintenance Costs
- Proven Standard Products
- Low Cost



3604 S. 19th Avenue

Superior
PRESTRESSED
CONCRETE

Phoenix

AL 8-7741

In planning the Maricopa High School, Prestressed Concrete enabled the architect to produce this building within a limited budget as well as meet a tough time schedule.

Ralph Haver & Associates
Architect

Hal Grammer Construction Co.
Contractor

FOR SCHOOLS, OFFICES AND FINER HOMES

Glen-Mar offers the "Glen-Cor" INSTITUTIONAL HOLLOW CORE DOOR

RECOMMENDED SPECIFICATIONS

Doors shall be flush type hollow core as manufactured by Glen-Mar Door Manufacturing Company, Phoenix, Arizona.

Rails — Top and bottom rails shall both be 10" wide.

Stiles — Shall be a minimum of 3 1/4" wide of soft wood. (2x) Matching hardwood edges shall be a minimum of 1/2" after trimming.

Lock-blocks — Shall be 2 1/2" long by 4" wide, covered vertically, giving a total width from outer edge of 7 1/4" of solid blocking.

Core — Constructed in two parts, separated by a 2" intermediate rail. Rails to be 1/2" thick placed vertically spaced 2" apart, with rounded ends, received in mortised rails.

Faces — Shall be of three piles of veneer, hot press bonded, or "Out-Let" Masonite, 1/4" thick and smooth sanded.

Adhesives — To conform to CS 25-56 Type II water resistant bond unless otherwise specified.

Lighter in weight than solid core doors yet heavier and sturdier by far than the standard residential kind, GLEN-COR doors are "easy on the hinges" and are built to withstand the extra abuses of school and commercial traffic. Core design is such that adequate blockage is located where needed for the installation of all types of hardware, opening and closing devices.

IT'S THE CORE THAT COUNTS

Glen-Mar
DOORS OF QUALITY

Glen-Mar Door Manufacturing Co. 1310 North 21st Ave. — Phoenix, Arizona

INDUSTRY IN THE MAKING! by an Arizona Industry



LT W
88806
256

UNION GYPSUM CO.
FIRST NATIONAL BANK BLDG. — PHOENIX — PHONE ALpine 8-6106

In 1957, UNION GYPSUM COMPANY became one of the largest customers of the Railroads which serve Arizona and the Southwest. Freight movement into our modern Phoenix plant (basic Gypsum materials all from our Winkelman, Arizona mine) and millions of square feet of highest quality finished Plaster Lath and Wallboard shipped into the ever expanding building market of the area, made rails hum, hammers sing, structures sprout and cash registers jingle. UNION is proud of the "Industry Building" part it plays in the growth of Arizona and the Southwest — proud, too, that all of its products are MINED AND MANUFACTURED IN ARIZONA.

Thirty-two

ARIZONA ARCHITECT



SWIMPOOL ACCESSORIES. One of the fine things about being the swimming pool capital is the type of publicity our chambers of commerce generate. When asked for comment on the above examples, a couple of younger architects observed that our pools exhibit the "most complete line of structural shapes available."

More specifically, they said: "These graceful lines reflect both beauty of structure and simplicity of design. Good taste in swimming pool accessories is achieved by means of close relation between the architect and the client." "Nice clients!" they added.

Quality

There is no substitute for quality, whether in human character, a finished product, or workmanship. For quality is a lasting virtue, implying humble pride in perfection.

The Pipe Trades Industry Program of Arizona is devoted to higher quality throughout the trade. By co-operating in apprentice and journeymen training programs, by seeking high standards in building codes for protection of health and safety, and by requiring contractors and employees to meet ever-increasing standards, the Program constantly seeks a better Arizona.

Remember — if you seek quality in plumbing, heating, or air conditioning, know your contractor!

Pipe Trades Industry Program of Arizona

1616 East Maryland

Phoenix

CR 7-2634

July, 1958

Thirty-three

BOOKS FOR PROFESSIONALS

REINFORCED CONCRETE IN ARCHITECTURE by Aly Ahmed Raafat. (Reinhold Publishing Corporation, \$15.00). Reviewed by George W. Christensen.

Concrete is where buildings begin. In Arizona the concrete is poured early in the day because of the heat. From then on concrete is almost forgotten, save for boxy beams and columns in a few buildings. Reinforced concrete is on a new threshold; in Arizona where this material is so ideal, we as architects must consider the many ways it is used so effectively.

"Reinforced Concrete In Architecture" brings back to view how very plastic a material concrete is. One of the best collections of building photos throughout the world show the varied nature of the material.

No architect can remain in practice and not keep up to date. Perhaps just a reminder will recall terms such as "pre-stressed," "curvature forms" and "linear structural forms." Not the way an engineer must look at them but the way an architect is free to look at them. Review and clear investigation will point out that concrete does not have to be boxy. Cement is fluid. It is poured into forms. Architecture and economy are easily combined in reinforced concrete, especially where the surface is exposed. Arizona is one of the many climates in the world that can and should use reinforced concrete effectively.

This book is divided very neatly into ten chapters and gives a complete description of the many ways concrete is used today and the photo collection of the buildings used as examples is well worth any architect's spare time. It begins with a technical approach to concrete and is followed by consideration of the architectural approach, material, design and regional development. All of this goes under the main title of "Cycle of Growth," which is followed by "The Architecture It Creates," which analyzes structures and aesthetics.

Reinforced concrete is at its real dawn in architecture and this book gives a good glimpse of the direction it will take in tomorrow's buildings.

THE NORTHWEST ARCHITECTURE OF PIETRO BELLUSCHI Edited by Jo Stubblebine. Fully two-thirds of this book is devoted to superb photographs which bear witness to Belluschi's integrity, his rare ability to express in wood and stone the rugged character of the Pacific Northwest. An excellent reference bibliography is included. 112 pages - 8 x 10 1/2. \$6.50.

JAPANESE TEMPLES AND TEA-HOUSES by Werner Blaser. (Translated by D. Q. Stephenson). The

prize-winning Wiss book, available for the first time in the English language, and profusely illustrated with over 90 photographs, plus line drawings and plans of classic examples of Japanese architecture. 156 pages. \$12.75.

THE NOTEBOOKS OF LEONARDO DA VINCI, The Edward McCurdy translation, edited and abridged by Robert N. Linscott. A sampling of Leonardo's ingenious ideas on anatomy, fossils, perpetual motion, astronomy, guns, etc. \$1.65.

BAUHAUS: 1919-1928. Edited by Walter Gropius. Covers the many activities of this famous school and its pioneer efforts in modern design. 224 pages, 550 plates - cloth. \$5.50.

DESIGN OF CONCRETE STRUCTURES by Leonard Church and Urquhart and George Winter. Covers plain concrete in detail, deals with practical design problems, contains useful data and design tables, covers all changes in the 1956 ACI BUILDING CODE. 546 pages. \$8.00.

THE SWIMMING POOL by Robert Scharff. A book written for those people planning a pool or for those who have owned one for years. Covering a variety of subjects including: maintenance, landscaping around a pool, pool safety, various types of pool construction, filters, etc. Publication date - July. \$3.50.

GREAT FRENCH PAINTING IN THE HERMITAGE. Text by Charles Sterling, Curator of Painting in the Louvre, Paris. 216 pages, 162 reproductions with 80 in full color, hand tipped. \$25.00.

The following magazines are available for subscription through the Architect's Book & Magazine Service:

Architect and Engineer
Architectural Digest
Architectural Forum
Architectural Products
Architectural Record
Fortune
House & Home
Industrial Design
Interiors
Life
Progressive Architecture
Reader's Digest
Sports Illustrated
Time

Special introductory offer for new subscribers only on the following magazines: Life, Time and Sports Illustrated. This offer ends October 31, 1958.

Technical Magazine Subscriptions Central Arizona Chapter, A.I.A.

ARCHITECTS BOOK & MAGAZINE SERVICE • P. O. Box 904, Phoenix • AL 2-4318

On all book orders please add 2 1/2% sales tax.

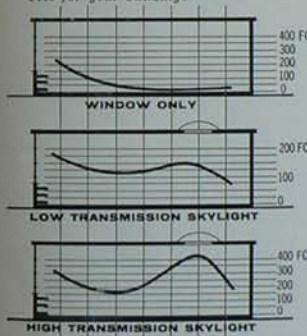
Thirty-four

ARIZONA ARCHITECT



And a New Cost-Saving Way to Use Them

Which Daylight plan is best for your building?



You can achieve

Adequate Light Transmission
Good Light Diffusion
Low Brightness Ratio
Low Solar Heat Transfer

quickly and easily - with
Naturalite's Daylighting Plan

Here is the kind of help you have been looking for! NATURALITE's new Daylight Engineered Plan provides scientific, accurate information that lets you determine the exact amount of daylighting for your buildings, quickly and easily. You can now write specifications for daylight illumination with the same accuracy as you do for artificial illumination.

- You quickly specify precise, mathematically correct daylighting for the job at hand - no guessing about too much or too little skylighting.
- You plan skylighting that saves so much in illuminating costs it becomes self-liquidating, quicker than any other domes on the market.
- You get Naturalite's wide choice of dome materials in standard units - easily select the one best suited for the job.

You get a better buy when you specify NATURALITE. Write or call today for complete information on Naturalite's new Daylight Plan

HASKELL THOMAS INC.

State Distributors

TUCSON
3740 E. Grant Rd.
EA 7-4090

PHOENIX
3808 N. Central
CR 7-5488