Can this be Asphalt Tile? It can—and is—remarkable new Kentile® Gravelle. Color shown: Brownstone with accenting feature strips. 4 other colors. 9" x 9" x 1/4".

New in asphalt tile . . . textured Kentile Gravelle! Here's more quality, color, and styling than you've ever seen in asphalt tile. Each tile simulates random-size stones set in appealing textured relief. And its Group D price makes it perfect for commercial and residential installations where economy and long wear are musts. Samples? Call your Kentile Representative.

Circle No. 1 on product information card
Keep the free dishes! Our news is bigger! Now K-H has a California plant and now both coasts can get our same-day service on Du Pont ZE PEL® and 3 M's Scotchgard® Brand Stain Repeller. Fabrics that arrive in New York, Philadelphia or Los Angeles in the morning are shipped that afternoon. And that goes for any yardage, large or small. Any fabric, even the most finicky. With or without shrinkage, as you specify. Gee. Now K-H appears in more places than selected short subjects.
If you're a carpet expert... you may not need Alexander Smith!

You'll have worked out all the facts:

If you know all the answers about carpeting, just pick up the phone and arrange delivery. But if you need some guidance and a bit of advice you can become a carpet expert simply—and easily—by calling Alexander Smith.

We're ready to answer the call right now... 

- To translate your ideas about color and style into finished carpeting.
- To make recommendation based on your requirements and your project's budget for fiber content, construction, maintenance.
- To watch out for final details like on-time delivery, proper installation and cost.

Alexander Smith makes every kind of carpet, all fibers and weaves... and backing up our experts is the largest force of designers with access to the greatest manufacturing capacity in the industry.

Alexander Smith
CARPETS AND CUSHIONS
295 FIFTH AVENUE, NEW YORK 16, NEW YORK

Circle No. 3 on product information card
The Cover
Acoustical tile, man with air-hammer and bell jar are the graphic symbols for sound control, featured in this month's issue. The cover design is by Peter Harrison.
Under this roof is the world's most complete Contract Furnishings Center

In it you'll find an amazing metropolis of contract buying sources and facilities. In The Merchandise Mart, you're never more than any elevator button away from everything you need to furnish a small motel or a huge hotel. An office building or a college dorm. A practical hospital or a swank restaurant. Or anything else you may have in mind. You and your clients can come for breakfast, stay for dinner and, in between, do a full day's buying from the country's top furnishings and equipment lines. All on one cab fare to The Merchandise Mart. Why don't you try it? If you'd like to have a complete directory of contract sources, just write us.

There's no place like this Showplace!

THE MERCHANDISE MART
CHICAGO
HEADQUARTERS FOR FURNITURE • BEDDING • DRAPERIES • FABRICS • INSTITUTIONAL MERCHANDISE
FLOOR COVERINGS • LIGHTING AND FIXTURES • ACCESSORIES • KITCHEN MACHINES AND EQUIPMENT

Circle No. 4 on product information card

CONTRAC
Does your client demand luxury underfoot?

Sell him the kind that’s guaranteed without time limit—B.F. Goodrich Sponge Rubber Carpet Cushion. There’s the best of all possible reasons why B.F. Goodrich Sponge Rubber Carpet Cushion lasts and lasts. BFG makes only the best.

No matter which BFG cushion you choose to install, it cannot pack down, lose its springiness, go to pieces, or shred. Every cushion is guaranteed to be free of defects in workmanship and material without time limit. Under the terms of the warranty, B.F. Goodrich will replace any carpet cushion that has imperfections, absolutely free. And all BFG cushion has the famous Duraseal® finish that locks out dirt and moisture. It is not the cheapest cushion, but it is the best.

You are sure to find the cushion to fit any specification. So, if your client demands luxury underfoot, sell him the kind that’s guaranteed without time limit, B.F. Goodrich Sponge Rubber Carpet Cushion.

For further information and samples, write on your letterhead to: The B.F. Goodrich Co., CMPD, 277 Park Ave., New York, N.Y. 10017.
Emphasis: Creativity

STYLE 5830

STYLE 5870

STYLE 3900

STYLE 9922CT

Shelby Williams
INDUSTRIES, INC.

2500 West Ogden Ave., Chicago, Ill. 60608

Factories: Chicago, Ill.—Los Angeles, Calif.—Morristown, Tenn.
Showrooms: Dallas, Chicago, Los Angeles, Atlanta

Circle No. 6 on product information card
Interior decorators, designers and architects know the needs of their clients and the ability of Desks Inc. to fill them go hand in glove. Desks Inc. offers a unique collection of fine office furniture from America's foremost manufacturers. At our fingertips is a handful of significant client services that guarantee "a job well done". Desks Inc. will order it (or have it custom crafted to your specifications) warehouse it, deliver it, service it and lovingly care for your clients' needs. Before you specify or buy, show it to your client first in our showroom at 71 Fifth Avenue, N. Y. C. (corner 15th Street). If you're convinced call 212 AL 5-5454 ... if you're still stubborn visit us for our personal touch. You'll be glad you did.

Desks Inc.

A COMPLETE SOURCE FOR FINE OFFICE FURNITURE IN NEW YORK
Virco stack chairs are usually much too busy to be stacked.

Wherever Virco stack chairs are in use . . . convention centers, hotels, business offices, auditoriums, community centers . . . they've proved their round-the-clock versatility.

Virco stack chairs can go from convention hall to dining room to reception area and be perfectly at home wherever they are. They have the kind of decorator-approved style that lets them complement almost any public setting.

That's why Virco is the chosen stack chair in some of the most impressive new public facilities. Drop us a line and we'll be happy to send you the whole Virco stack chair story. Write: Virco Mfg. Corp., Dept. C-3, Box 44846, Hancock Station, Los Angeles 44, California or Box 911, Conway, Arkansas.

VIRCO
Mfg. Corporation

Circle No. 8 on product information card
3 minutes ago this drapery was dirty

it's clean. And back up it goes. It's how easy it can be to take care of glass draperies in practically any building.

own the hall, there's a Hoyt Roll-A
go Washer. It's hooked up to the supply at the janitor's closet. In the course of a couple of hours tonight, every glass drapery on this floor will be washed, washed, and rehung.

ow does it work? This portable elec
tiwasher is easily moved from floor to floor, is quickly hooked into any standpipe water supply, can be operated by skilled maintenance personnel. One of 90-inch, single-width fiber glass draperies can be washed, rinsed, have glare removed, and be ready for rehanging in less than three minutes!

is unit saves time, eliminates the inconvenience of bare windows while draperies are out for cleaning, cuts maintenance costs, permits handling by your own maintenance force.

The Hoyt Roll-Along Washer, developed jointly by Hoyt Manufacturing Corporation and PPG, can also handle bedspreads and cubicle curtains. It's ideal for use in office buildings, hospitals, hotels, motels, schools, and other commercial and institutional buildings.

Send coupon for full information.

Pittsburgh Plate Glass Company
Fiber Glass Division, Dept. C
One Gateway Center
Pittsburgh, Pennsylvania 15222

Please send me complete information on the Hoyt Roll-Along Washer.

Name__________________________
Title_________________________
Company______________________
Address_______________________
City___________________________
State__________________________ Zip Code_________________

fiber glass
...the fiber glass for finer fabrics

Circle No. 9 on product information card
At Esso Touring Service, Rockefeller Center, New York, Gulistan Carpet in a special wilton weave of 70% wool, 30% nylon, withstands the daily assault of thousands of feet. Architects: D.arden & Crowe. Installation by Anchor Carpet.

DO YOU KNOW THAT THE MORE PEOPLE TRAVEL, THE MORE THEY SEE GULISTAN? THE PERFORMANCE RATED CARPET!

They see Gulistan in motels, hotels, trains, planes, ships, automobiles, touring offices. For such heavy-traffic areas, Gulistan Carpet is most often chosen for its wearing quality and long-lasting beauty. The quality is unexcelled. Wearability has been tested and proved for years. The widest range of colors, textures, and designs — in all modern fibers — makes it easy to choose the right carpet for any interior. And most important, all Gulistan Carpet is Performance Rated* for wear and appearance retention under varying traffic conditions. No other carpet offers this assurance.

For immediate delivery, the most extensive line of qualities is available from stock. Or, if you prefer, Gulistan provides individual custom designs in broadloom or area rugs. For complete description and illustration of many Gulistan lines and services, see our full-color catalog in Sweets Architectural File. Or write Gulistan Commercial Department, A. & M. Karagheusian, Inc., 295 Fifth Avenue, New York, N. Y. 10016.

*TM of A&MK, Inc.

GULISTAN® CARPET

A. & M. KARAGHEUSIAN, INC., 295 FIFTH AVENUE, NEW YORK, N.Y. 10016 - SUBSIDIARY OF J. P. STEVENS & CO., INC.

Circle No. 10 on product information card
They didn't hear the punch line of that was a great joke. Too bad. It could have been avoided so easily. Howe round folding table instead of the oblong being used would have done it.

In contrast with the "mess hall" atmosphere created when oblong tables are used, Howe rounds make everyone feel in the midst of things. Set-up of Howe rounds creates the sort of warm, attractive atmosphere it enables banquet managers to turn prospects into customers.

Another important point: Contrary to popular opinion, a room equipped with Howe rounds usually accommodates as many diners as that same room equipped with oblong tables.

Howe rounds come in 7 sizes to accommodate 4 to 12 diners comfortably. Learn how to use these tables to create the kind of place that people think of first when it comes to making reservations for get-togethers. For the details write today.

Howe Folding Furniture, Inc., Dept. 25
360 Lexington Ave., New York, N.Y. 10017

Please send me details describing HOWE round folding tables.

Name
Title
Institution
Address
City State Zip Code

Circle No. 11 on product information card
If you want to keep appearances up and costs down in carpeting... look for this.

It takes very little to keep All Wool carpeting fresh and new-looking. Little time, little effort, little money. How come? In between vacuumings wool does the work for you. It’s naturally resilient. Bounces right back when it’s stepped on. Keeps bouncing back for years and years. And, it's this lively strength that means less pilling, too.

But appearance retention is just part of the story. All Wool carpeting is easy to install and maintain. Resists soil, resists stains, spot cleans beautifully. Needs less frequent vacuuming, shampooing, restoring. And wool has a low rate of replacement, too. Wool is permanently mothproofed and naturally resists flame. (Dropped cigarettes leave just a pinpoint burn, not a deep scar in your carpet.)

Wool is just about the perfect floor covering. Proven. By years and years of superb performance in hotels, motels, schools, hospitals, restaurants. Wool gives you everything you want, for so little. Any color, design or texture. Appearance retention. Low cleaning maintenance cost. Low rate of replacement. Get All Wool. That's how to get the most for your money in carpet.

The answer is wool...it costs less in the long run.
a revolution is taking place in carpet backing

It is called Poly-Bac! A remarkable new tufting back that’s vastly superior to any primary backing presently available. Woven of polypropylene yarn, Poly-Bac offers unique advantages to manufacturer, retailer, and consumer.

- Poly-Bac, immune to humidity changes, is, and not subject to stretch, shrink, or. Restretching is minimized.
- Poly-Bac puts more face yarn on the where it belongs. A minimum of face hidden in the backing.
- Poly-Bac makes possible clearer, predictable colors. There are no lignin present to muddy the dye as ventional backing.
- Poly-Bac makes it possible to shampoo et without danger of oils bleeding h to stain the surface or cause irreg- interface fading, as is the case with con- nal natural fiber backing.
- Poly-Bac yarns are stronger than those ventional backing, permitting a surer installation.
- Poly-Bac is uniform in texture, permitting more intricate designs and patterns.
- Poly-Bac, being virtually non-absorb- ent, is mildew-free, thus eliminating a common odor source.
- Poly-Bac is non-allergenic, impervious to bacteria and insect resistant.
- Poly-Bac’s moisture-resistant proper- ties make it possible for carpets to be used safely in hospitals, schools, kitchens and nurseries, and other areas formerly consid- ered impractical for carpeting.

Circle No. 13 on product information card

PATCHOGUE PLYMOUTH CO.
295 Fifth Avenue, New York 16, N.Y.
OUT OF THE MANY MOODS OF MOLLA

MARINA . . . the perfect collection for motel or hotel pools and cabana clubs everywhere. Choose it, and you treat your guests to glamour and the ultimate in comfort. . . . yourself to the pleasure of knowing there's lots of long wear ahead and next to no maintenance to plan for or worry about. Marina is as carefree as it looks. . . . with heavy vinyl straps and sturdy frames of Alumaloy that are 1/2 the weight of wrought iron and won't rust ever! Write for illustrated catalogue. Molla Contract Company, Inc., 425 East 53 Street, New York. Showrooms in Boston, Chicago, Dallas, Los Angeles, Miami, Philadelphia, San Francisco, Washington, D.C.

Circle No. 14 on product information card.
Creative ideas in glass:
A two-level reception area

ASG's Beadex brightens two floors of the administration building of a large manufacturing plant, in an imaginative interior by Saphier, Lerner, Schindler, Inc., New York.

Above: Beadex* forms a shimmering backdrop to the stairway from entrance floor to executive floor. Beadex panels continue upward to form a partition wall at edge of stairwell on upper level, screening activities from visitors below. Cantilevered receptionist's desk has top of ¾"-thick Starlux® twin-ground, polished plate glass.

Below: Reception area on second level features a sparkling vertical thrust of Beadex. Panel provides a visual center-point for room, separates waiting space from work areas. More obscure Beadex matte in partitions assures privacy in adjoining offices. Above partitions, clerestory of Beadex matte admits diffused natural light.

Beadex's sparkling pattern of water droplets is emphatically contemporary and works harmoniously with a broad range of materials and color schemes. Obscure enough to afford privacy, it is also highly translucent.

For more information on Beadex and the whole exciting line of ASG patterned glasses, write:
Dept. X-3, American Saint Gobain Corporation, Box 929, Kingsport, Tennessee 37662.

The complete glass line for contract interiors!

AMERICAN SAINT GOBAIN

* Creative ideas in glass
Dear Sir:

We have just received our first issue of CONTRACT Magazine and as you will notice, are making use of your product information card. Since ours is a new firm, we have been faced with the task of writing many manufacturers for information with regard to their products, and we want to take this opportunity to thank you for making this task much easier. We feel that one letter of thanks is the least we can do to show our appreciation for your services, and you can be sure that we will be renewing our subscription.

M. R. Cavalon
Cavalon Associates Inc.
New York City

Readers laud January issue

Dear Sir: Your January issue is the greatest and the Forum articles are most interesting. Keep up your policy of presenting new concepts and ideas.

J. Garth Caldwell
Designs Unlimited Inc.
St. Petersburg, Fla.

Dear Sir: I would like to take this moment to congratulate you on the very fine January issue of CONTRACT Magazine. Not only is the Directory of the various sources important to all concerned, but your Challenge Forum was stimulating and aired some problems that should have been talked about long ago. Such an informative issue will be of valuable use to our staff.

Richard Kramer
President
Integrated Design Associates Inc.
Beverly Hills, Calif.

Dinner comments continue

Dear Sir: I, too, thought Roland Jutras’ talk was excellent and certainly enlightened many of the manufacturers present on some of their shortcomings. Such a procedure always means a little toe-stepping and therefore some opposition, but such an exchange is very much worthwhile. I think it was good for all concerned.

M. R. Cavalon
Cavalon Associates Inc.
New York City

Quality contribution

Dear Sir: Often, a reader has a thought or a response to a publication, but unless it is a complaint the publisher rarely hears from him. Both my staff and I have felt that CONTRACT, with its coverage, design, products, and detailed specifications is offering a quality contribution to the field. Your sensitivity to planning and professional services have reflected an understanding well beyond that expressed in other publications. My best to you and your program. We look forward to forthcoming issues.

Leon Gordon Miller, FIBI
Leon Gordon Miller & Associates
Cleveland, Ohio

Compact, clear, and precise

Dear Sir: The wallcovering article in your December issue is one of the best I have ever read in a trade publication. It is compact, clear, and precise; it gives the reader a security in the product. That is important to all concerned, but it is not the only advantage of such an interesting and well written article.

Victor Pen
Contract Sales Director
Gene McDonald, Inc.
New York City

Circle No. 16 on product information card

ITALIAN PROVINCIAL... imaginatively interpreted... and crafted with the inimitable SCERBO touch... to bring Old World charm and elegance to the office interior of today.
Who's creating exciting new carpet with electronics?

Monarch is...with Colorset

When electronics and carpet get together, watch out for COLORSET. When multicolor patterns come vibrantly alive in free-flowing uninhibited designs, then it's sure to be COLORSET. And when you see the same plush resilience, the same deep, deep pile and luxurious quality in each patterned carpet, of course it's COLORSET! Monarch's COLORSET process combines the creative craftsmanship of the past with electronic know-how and inventiveness of today. COLORSET glows with progress and personality... with new ways to magnetically dye and preserve color... to shape designs... to turn out better quality in less time — at a lower cost. The old laborious, loom-threading methods for making patterned carpet are obsolete. Monarch's COLORSET marks the advent of a modern era in carpet-making. So... if you like to pioneer... look to COLORSET for exciting interiors. Select from a collection of elegant patterns in a wide range of color combinations... in any yarn. For additional information and samples, please write today to our CONTRACT DEPARTMENT.
SCOPE AND INFLUENCE OF FEDERAL SPECS

By Ash Gerecht

Federal specifications and standards for contract furniture and furnishings, as in other areas, are far more influential than even the size of federal procurement of these items would indicate. And that is sizable enough—running, for example, some $60 million or more per year recently for office furniture alone. The United States Government is the industry’s largest single customer. In addition, however, large users often take the federal specifications as a guide, at least, in their own efforts to secure quality and standardization in the goods they buy.

The number of specifications is sizable. Many of them are quite complex. For some in the industry, the federal requirements are too complex, and they stay away. But if you want to do business with the federal government—and a great many firms find this a sizable source of volume, and a good way to smooth out production curves in their plants—a knowledge of U.S. specifications and standards is essential.

There are today some 150 specifications for furniture alone in the federal index. These carry references to many more, both “Federal” and “Military.”

For all practical purposes, work in the contract furniture field is done by the standardization division of the Federal Supply Service, in the General Services Administration, the government’s housekeeping agency. Head of the division is Willis S. McLeod.

Here’s an example of what the government can do—and does. Wanting a modular line of office furniture some years back, it found too many differences between commercial lines to adopt any one. Instead, it developed its own unitized line, which has become a big “seller” among federal agencies.

The general specification for wood unitized office furniture, most recently revised Nov. 30, 1964, lists federal specifications for these items by reference: laminated plastic sheet; laminate table top assemblies; glass; hardware; two types of wood screws; cleaning methods; wood paste filler; lacquer; zinc coating; three types of adhesive; four types of boxes; cushioning material; gummed paper tape.

It also refers to two federal standards—for preservation, packaging and packing levels, and for marking for domestic shipment. Then it refers to military specifications for wood stain, and for determining moisture content in wood, and to four military standards—welding terms, sampling procedures for inspection by attributes, marking for shipment, a identification marking for military property.

This has worked out so well, the government now working up a junior executive metal line furniture which will be complementary to the wood line. Presumably this, like the wood unitized line, might have a general specification and then detailed specifications. The wood line, for instance, includes detailed specs for such items as tables, filing cabinets, storage units, desks and desk attachments, credenzas, bookcases, etc.

The number of federal specifications is increasing. GSA’s standards division is now scheduling 1,3 projects for fiscal 1965, which ends June 30. By midyear—Dec. 31—it had accomplished 726 of projects. It has about 5,000 specs in the system and is projecting about 7,600. The standards division has increased its productivity by 20 to 25 percent the past few years, says McLeod.

Standards are increasing too, but not at the same rate. GSA now has about 250, is projecting at least double that. It produces a standard only when there is an explicit technical or limitation problem.

GSA has all the office furniture specs. The military have some of the household furniture specifications, but GSA has the majority.

A significant policy, in this field, has been getting away from purchase descriptions or “equal-provisions, to the providing of a federal specification which is competitive. Considerable progress has been made in this direction in recent years.

Two main reasons for this: Officials can’t technically evaluate equal-or items to the brand-name prototype. And GSA doesn’t put as good a buy on a purchase description as it does with a spec. The price under a spec is almost always less, officials say. GSA does allow the use of a purchase description in an emergency—for small, spot orders, for instance—but then this has to be a technically sound purchase description, not a simple brand-name type.

Specifications start out as “interim.” In this stage an agency can deviate from the spec. The interim is voluntary, but it is used extensively, nevertheless.

After this seasoning, and with consideration changes suggested during this phase, GSA moves
Specify—BUY THE DOORS THAT
Save the $10-$20 Refinishing Cost

This is the estimated cost of materials and labor to refinish a door every three years. FORMICA laminate clad interior doors require no refinishing — ever. They are precision made, clean of line, prepared for hardware, install in 20 minutes, and last the life of the installation.

Authorized manufacturers of FORMICA laminate clad doors are located reasonably close to every building site. They will be pleased to serve you . . . with samples, details, estimates.

California General Veneer Mfg. Co., South Gate
Colorado Butler Fixture & Mfg. Co., Denver
Florida . Oleson Industries, Tampa
Georgia . Murphy & Orr Co., Forest Park
Iowa . . Van-Topp, Inc., Holstein
Kentucky Anderson Woodworking Co.,
Louisville
Louisiana Bernard Lumber Co., Inc.,
New Orleans
Michigan . . . Wilburn Co., Grand Rapids
Minnesota . . Aaron Carlson Co., Minneapolis
New Jersey . . General Laminates, Weehawken
Ohio . . . Pease Woodwork Co., Hamilton
Pennsylvania National Wood Products Co., Chestwick
Texas . . . Hawn Sash & Door Co., Corpus Christi

FORMICA® is our brand of laminated plastic. Insist on this identification to avoid imitations.

Formica Corporation • Cincinnati, Ohio 45232 • subsidiary of CYANAMID
spec into the “federal specification” stage. As such, it becomes mandatory upon the user agencies, without deviation. As an example, unitized chairs and desks are going into federal specification from interim—almost 30 items in case goods. But there’ll be no fundamental change.

Another area of activity is the establishment of standard samples. The federal specification for conference-type flat-top steel desks mentions, for instance, sample panels of the standard color of metal finish, of the gray linoleum and the green plastic sheet color. GSA is now setting up a standard sample to simulate walnut in laminated plastic tops. The color supplied by manufacturers has been all right, but some of the interpretation of grain looks like mahogany. It plans to send a sample of this to each bid.

Current projects include the development of an interim specification on picture frames; on wood library furniture—this will develop into a complete line; and expanding the cafeteria line.

All is not expansion. The standards division has just consolidated six specifications for carpeting into one—“Carpets and Rugs, Wool, Nylon, Acrylic, Mohair,” after several years of discussion and work. This should make it easier for GSA to buy carpeting and should get more mills that are interested in more than one type of carpeting to bid.

For the government, standardization is essential with an emphasis on quality that may be unique for general use, perhaps, some of its items are overbuilt—but it wants to make sure its products will stand up under many moves with millions of varying expertise. Officials who’ve seen loads of desks being slid down a ramp to bump to a stop need for sturdiness that may not always be apparent to others. They’re proud of the quality, too—features as double electrodepositing of finish on desk corners—and of the prices they can get with their specs—they estimate the U.S. was able to get its unitized furniture at prices 35 percent under wholesalers’ prices.

Should the U.S. set the pace for standardization when its own requirements are such a small fraction of total output? The question seems to be resolved by the lack of other efforts. In the furniture field, for instance, the American Standards Association has been considering reinitiating its furniture standardization project, at the request of users and manufacturers. But manufacturers haven’t been anxious.

Last year, United States officials called a developmental conference on the problem of adhering plastic tops to metal desks. It was a general industry problem. But no one else was doing anything on it—so that a case of government self-interest, as a result, became a matter of industry interest.

For a full listing of Federal Specifications, Standards and Handbooks, write the Government Printing Office, Washington 25, D. C., for the index to them. It’s $1.50. (C)
North American makes the carton obsolete because...
**CALENDAR**

1965


March 11. **Contract Seminar.** Western Merchandise Mart, San Francisco. The 1965 session will be a morning workshop on contract industry problems, co-sponsored by the Mart and CONTRACT Magazine. Panel members will be Pat Bischoff of Carson Pirie Scott, Manfred Steinfeld of Shelby Williams, and Roland Jutras of Roland Wm. Jutras & Associates. For further details, write to Robert Zinkhon, Western Merchandise Mart, 1355 Market Street, San Francisco 3, Cal.

March 22-25. Furniture Show. War Memorial Auditorium, Boston.


April 4-8. Furniture Market. Jamestown, N.Y.

April 5-10. Spring Furniture Market. Americas Furniture Mart, Chicago.


April 23-30. Southern Spring Furniture Market. High Point, N.C.


---

**COLOR-CUED HAEGER LAMPS**


One of a group of beautifully appointed designs clued through inspired new glaze colors to a distinctive and most harmonious relationship with the new widely popular fashions in interior furnishings. Please make your selections as soon as possible to insure prompt delivery.

Circle No. 21 on product information card.
North American’s uncartoned service takes the waste out of shipping because... 

Circle No. 20 on product information card
New concept in resorts
The new Host Farm, a 250-acre motel-resort complex in the heart of Lancaster County, Pennsylvania, combines the luxury features of resort hotels and the function rooms of commercial establishments. Construction has just been started on the new $6 million facility, expected to attract convention groups, sales meetings, tourists, and commercial travelers in the area when it formally opens in the summer of 1965. Operated by the Host of America chain in conjunction with its member of 1%. Operated by the Host of Lancaster Motel, the Host Farm (see rendering) will include 346 guestrooms—poolside cabanas with private terraces, rooms with golf course view, and executive and bridal suites. All rooms will offer such conveniences as in-room coffee, refrigerators, remote-control TV, radiant-heated bathroom floors, dual lavatories, service bars, and private lounge areas. For group functions, conventions, and meetings, there will be 14 conference rooms, banquet facilities, a grand ballroom, and smaller ballrooms. Dining facilities will include several formal and informal rooms, two lounges, and coffee shop. For the vacationing tourist, the Host Farm will offer recreation programs. Facilities will include two outdoor pools, an indoor pool, a health club with Sauna baths, championship golf course, a model farm, and children's day camp. There will also be stables, riding and bicycling trails, ice skating rink, fishing lagoon, tennis club, plus other attractions. Architect for the complex is Wassell & Pyros; Marilyn Motto is interior designer.

Thalhimers' new contract building
Thalhimers Industrial Sales Corp., Richmond, Virginia, recently broke ground for a new building at 1925 Westmoreland Avenue. The new facility, with approximately 11,000 square feet of space, will be devoted strictly to contract interior design and furnishings and will have complete displays of furniture for motels, hotels, offices, dormitories, and geriatric homes and clubs. Thalhimers claims its new facility will be one of the largest and most complete contract sales operations in the southeast.

Adanlock in Chicago Mart
Adanlock Jamestown Corp., of Jamestown, N.Y., has opened a midwest showroom, located on the contract floor of the Merchandise Mart, Space 1167, Chicago. The showroom displays the broad Thinwall partition lines as well as other related products.

CMC elects officers
Contract Manufacturers Center Association, the 11th floor of the Merchandise Mart, has elected its officers for 1965. James Bidwell of Commercial Carpet Co., is the Center's new president, succeeding Manfred Steinfeld, of Shelby Williams, Industries who was named vice president-promotion. Other officers for 1965 include Ted Mathews, Steelcase Inc., vice president-advertising; William Riddle, Buckstaff Co., secretary; Paul Hay, Viertex Sales Corp., treasurer; Mary Ann Krivak, Shelby Williams, recording secretary. The one-year-old Association, with members representing all phases of the contract industry, is dedicated to building better relationships between manufacturers, interior designers, architects, and clients concerned with the total furnishings commercial/institutional interiors.

50th year for Western Mart
The Western Merchandise Mart, in San Francisco market center, is celebrating its 50th anniversary this year. The story of the Mart is also the chronicle of the growth of the west in the furnishings business. Its beginnings in 1915 were modest and its prospects, in a relatively untouchable frontier, were enormous. Today, the Mart is the nation's largest and most complete contract sales operation in the west. Among its immediate programs: a contract seminar on industry problems, co-sponsored by the Mart and Contract Magazine, March 11; a national home furnishings conference in conjunction with National Retail Furniture Association, August 1-4.

Tashman celebrates anniversary
Philip Tashman, president of Wall Trends Inc., celebrates his 50th year in the wall covering industry this year. During his span, Mr. Tashman has seen the industry grow up and reach the stage of maturity it now enjoys. Never an on-looker, he has been instrumental in many design and technical innovations, including silk-screen printing. To produce a quality line in this new medium, he formed Wall Trends Inc. in 1944. Mr. Tashman also one of the first to recognize the potential of vinyl wallcoverings, from which evolved Wall Trends' Stylovin. His latest achievement is the establishment of a new division, Wall Trends International, reflecting the firm's growing international interests and broad range of imports from Europe and the Orient.

(Continued on page 30)
on time...at lower unit
cost...with less damage!

Now North American takes the waste and the fat out of shipping new residential, institutional, and store furniture, fixtures and appliances! Here's why.

With North American's New Products Service, you don't have to carton or pack products for shipping. You save the cost of labor for cartoning and uncartoning...and the cost of cartoning materials.

Only one carrier...North American...handles your products. No interlining. No multiple handling. No warehousing. No inventory expense. No intermediate stops. Delivery is faster, surer.

And there's much less chance of damage (experience proves damage is less than 1%). There can be no concealed damage either since your products travel uncartoned.

Here's how it works. At your loading dock, a specially-trained and experienced North American driver takes full responsibility for loading your products into the specially-equipped and capacious North American van. There are no heavy, space-wasting cartons.

On the road, your North American driver is in daily contact with North American Central Dispatch. He and your products arrive right on schedule. No waiting at the unloading site. (Our driver notifies the consignee of his exact time of arrival 24 hours in advance.) And he'll be completely responsible for unloading...even installation if you wish.

Now your product moves from the truck right into the apartments, school, or hotel. No delays. No uncartoning. No time spent in getting rid of cartons.

Think over what you've just read. You'll see why North American can deliver your products faster...and at a lowered delivered cost per unit.

Let him save you time, money, and headaches in shipping. Let North American study your shipping problems, see if you can ship more economically by North American. Just phone collect to Del Lambert, V.P., New Products Service • Area code 219, ph. 742-5451.
Big year seen for carpeting

Continued growth in the carpet industry is the outlook for 1965. Earl W. Glazier, president of Hardwick & Magee, predicts another peak year ahead, exceeding even the records set during 1964. At a press conference held during Market Week in Chicago, Mr. Glazier stated: "The commercial carpet market should continue to grow at an even faster rate in 1965 than in the past. Added to the broad base of residential demand, the two combined should make 1965 another record year for carpet sales with square yard volume running at least 10 percent ahead of 1964. With dollar shipment running at approximately the same increase at wholesale, this should give the carpet industry total shipments in excess of a billion dollars."

Hotel Show polls exhibitors

A night opening only once during a four-day period was the consensus of National Hotel & Motel Exposition exhibitors polled in a survey conducted by the show's exposition committee. Sent to exhibitors of the 1964 edition of the annual event, the questionnaire asked, "Should the 1965 Exposition be open one night, or two nights?" Returns indicated 215 exhibitors favored one night opening, 50 for two nights, and 24 write-ins opposed to any night opening at all. Responding to another of the questions, "Should the Show be open four days or five days?" 270 exhibitors voted for a four-day show, and 29 for a five-day show. The 1965 Exposition is scheduled for November 8-11.

New assignments

Frank Schneider & Associates, AIA, will design a new nationwide chain of hosteleries for Royal Motels, a subsidiary of Appling Motels, Inc., of Salinas, Cal. The architectural firm has designed more than 150 motels and hotels for national chains, including Imperial "400" and Astromotels, since 1960. Royal's first motel is under construction in Ukiah, Cal., with other construction scheduled to start in Tracy and Martinez, Cal. Plans will eventually include 15 motels erected through the U.S. each year... Wells M. Squier, industrial/interior designer of Ft. Lauderdale-by-the-Sea, Fla., is completing the public areas for Ft. Lauderdale's large condominium, the Fountainhead. Interior design for the street level of the new, multi-million dollar, Sanger Harris department store in Dallas, is another project on Squier schedule. Other recent completions of the firm include public area interiors for the Sheraton-Lauderdale Hotel, Le Dome of the Four Seasons Restaurant both of Ft. Lauderdale, and redesign the Top of the Columbus in Miami... Cleas Cranne Associates of Schenectady, N.Y., announce their appointment as sign agents for the development of new dormitories for Union College of New York State, Morton Textiles & Furniture, a Chicago-based institutional furnishings firm, has been awarded a $100,000 sign and furnishing contract by the Air Sands Hotel, a two-level, 10-acre side tract in the heart of the Beverly Hills Bel Air and Brentwood areas near Angeles. Morton's responsibilities will include a new dining room and cocktail lounge, though contemporary in theme keeping with the atmosphere of other areas of the four-year-old hotel.
Be one drapery track minded.

Grant 2200 drapery hardware is a singularly unique line.

2200 limits debate. Curbs indecision. Reduces risk.

One track, one line of hardware, one specification to meet virtually every physical requirement.

2200 Drapery Hardware. It boasts sleek, trim, contemporary lines. It works beautifully. 2200 is the best architectural drapery hardware made. Data on request.

GRANT PULLEY & HARDWARE CORPORATION 181 HIGH ST., WEST NYACK, N.Y. / LOS ANGELES, CALIF.
A. & M. KARAGHEUSIAN INC. a subsidiary of J. P. STEVENS & Co. will become a division of that firm and will be renamed the GULISTAN CARPET DIVISION. The executive structure of the new division will remain the same, with Steele L. Winterer continuing as president.

DOWNS CARPET CO. is expanding its Willow Grove operation by adding a new 105,000-square-foot building to its tufting plant, at a cost of about $1,500,000.

LUCAS BROS. INC. has expanded its commercial interior planning and design department to serve the Washington, D.C. area, and has opened showrooms at 1523 L Street, N.W.

THEODORE LUDEROWSKI and JAMES H. CARMEL have formed a new office, LUDEROWSKI & CARMEL INC., 91 West Long Lake Road, Bloomfield Hills, Mich., specializing in commercial interiors, exhibitions, museums, and product and graphic design.

TROY SUNSHADE CO. has been named exclusive distributor for the complete line of DA VINCI casual furniture under an exclusive distribution agreement, excluding the State of Florida.

KENTILE FLOORS INC. is planning a new multi-million dollar plant in South Plainfield, N.J., for the production of vinyl inlay roll products. It is expected to become fully operative sometime in 1966.

SHELBY WILLIAMS INDUSTRIES INC. and AMERICAN OF CHICAGO, affiliated furniture companies, report a sales increase of 30 percent for 1964. Manfred Steinfel, chief executive officer of both firms, expects an increase of 25 percent for both firms for 1965, due in part to expanding hotel, office building, and restaurant construction.

EDWARD FIELDS INC., custom rug producer, has established a new division, CARPETS FOR INDUSTRY, for the design and production of custom rugs and carpet for the commercial/institutional markets.

HERMAN MILLER SPACEPLANNING, the interior design branch of the furniture firm, has established planning offices to offer total design services in New York City, Chicago, and San Francisco; national director is Edward W. Farrow.

DESIGNS FOR DINING exhibition, designed by Everette Brown Associates, will be presented at the National Restaurant Show, May 24-27, McCormick Place, Chicago. Designs for Dining, depicting four centuries of dining and wining out in America, was a feature exhibit at last year's National Hotel & Motel Exposition.
Some of our best customers are in jail.

Others are in colleges, hospitals, institutions—wherever healthful, restful sleep is needed. And that depends on the bed, not the sleeper.

Conventional link-type springs “hammocked” 30 years ago. And still do. No-Sag Springs eliminate this condition, keep the spine straight by not only supporting the body but conforming to it. (They have a shallow but permanent arc built right in when properly anchored which creates enduring resiliency. They always return to their original profile.)

No-Sag foundations assemble easily (no special tools). Require virtually no maintenance. Come in standard and special sizes. All are available with our durable welded-steel bed ends.

If you like what you’ve heard so far, wait’ll you hear how No-Sag Springs can lower your long-term cost. Too. Just drop us a line at 124 W. State Fair, Detroit 3, Michigan. We’ll talk.
General Tire Sponge Rubber Carpet Cushion Registers with Holiday Inn®

General Tire sponge rubber carpet cushion, now installed in many Holiday Inns across America, is part of the comfort and luxury which will attract 23,000,000 Americans to the Holiday Inns this year. The reason is evident once you inspect any one of the many quality grades of General Tire underlay. Each is manufactured to exacting specifications that give more quality per dollar than any other underlay made. If your requirements call for comfort, long-carpet life and trouble-free service, specify General Tire sponge rubber carpet cushion.

Guaranteed Unconditionally

All qualities of Sponge Rubber Carpet Cushion manufactured by The General Tire & Rubber Company are guaranteed to provide satisfactory performance. This guarantee applies to installations on grade and above grade, to include use over radiant-heated floors and cement floors. Any General Tire Sponge Rubber Carpet Cushion which does not render satisfactory service will be replaced and reinstalled without charge to the customer.
OFFICE INTERIORS has moved its headquarters to the Palmolive Building, 919 North Michigan Avenue, Chicago. Services include office layout, interiors planning, office furniture and supplies.

COLLINS & AIKMAN's home fabrics division has established a new sales operation under the direction of general sales manager B. L. Little. Regional divisions will include northeast, southeast, midwest, southwest, northwest, and west.

O. F. WANDER, office equipment refinishers of Norristown, Pa., announces its return to the greater New York and New Jersey Trade. FRANK MCLHAIR is new sales manager for the area.

HIEBERT, INC., office furniture manufacturer of Los Angeles, has undergone a change of management. Directing new policies is newly appointed president, JOHN D. TUTTLE.

DIRECTIONAL CONTRACT FURNITURE CORP. occupies more than 10,000 sq. ft. in New York’s D & D Bldg. The sq. footage given in the D & D supplement last month was incorrect.

HANK LOWENSTEIN will display ROBERT JOHN office furniture, PETER PEPPER accessories and CROSSROAD furniture at 565 Western Merchandise Mart, San Francisco.

HEIFETZ Co. has opened a New York City showroom to display its lighting collections at the National Design Center, 425 East 53 Street.

ROBERT AARON YOUNG, INC. has opened new showrooms at 244 East 58 Street, New York City for display or original art.

LONDON LAMPS, in its third major expansion program, is now completing construction of a new plant in Redondo Beach, Cal., which will house office showroom, and factory.

KURT VERSEN, commercial and institutional lighting has opened a new factory and office building at 10 Charles Street, Westwood, N.J.

MAGEE CARPET Co. has opened its sixth national showroom at the Atlanta Merchandise Mart under the supervision of Walter Vanderlip, territory manager.

JIM and BEN TILSON have purchased controlling interest in CAPITAL BUSINESS EQUIPMENT INC Charlestown, W. Va. contract furnishing firm.

Circle No. 28 on product information card

LAGUNA CWI's fast moving outdoor group ... built for hard wear and minimum care ... welded heavy gauge tubular aluminum with durable vinyl lacing. Dining chairs have sturdy cross bracing at base for heavy use and are designed for stacking. 42" round table has double leg support for wobble-free extra strength, top is mottled glass cushioned at eight points with Neoprene. Added to this group is the new adjustable-back chaise, 24" round cocktail table, and (not shown) lounge chair and ottoman. All in a choice of Grass Green, Sky Blue or Black finish with white lacing.

CALIFORNIA WROUGHT IRON / a division of Brown-Jordan Company / shipped from two factories ... Newport, Ark. or El Monte, Calif. SPACE 1168 — L.A. HOME FURNISHINGS MART, LOS ANGELES / SPACE 566 — WESTERN MERCHANDISE MART, SAN FRANCISCO SHOWROOMS: 11th Fl., Merchandise Mart, Chicago...also Los Angeles, San Francisco, Dallas, Atlanta, Miami, Scottsdale

Circle No. 29 on product information card
Here’s why the new MITRE Group is giving Leopold cabinet-makers fits*

First of all, the highly figured American walnut veneer is combined with a straight grain veneer border which is mitered at all four corners. Only a perfect fit is acceptable. Then, the solid walnut legs are mitered to the corners at a point 7/16" below the top, resulting in a slightly lifted look. Only a perfect fit is acceptable. The MITRE design is enhanced by open side panels made of solid walnut ribs encased in a chrome plated structural steel frame. This chrome plated frame is echoed in the graceful pulls that accent the figured walnut drawer fronts. For perfect function, full suspensions allow all drawers to extend beyond the front of the desk. All drawer interiors are made of selected American Black Walnut and are hand rubbed to a rich, satin smooth finish. Patented Densiwood is used on all corners on the working side of the desk pedestals. Densiwood is a toughening process that eliminates dents and mars, and makes the kneespace posts impervious to abuse. MITRE’S new hand rubbed oil finish adds extra beauty . . . and extra pride of ownership. Visit your Leopold dealer’s showroom for a first hand inspection of MITRE . . . or write for a full color brochure. If your budget does not permit such regal indulgence, ask about Leopold’s regular contemporary, traditional, conventional and budget lines. They’re the finest in their price class and well worth your personal investigation.

THE LEOPOLD COMPANY

Burlington, Iowa • Since 1876
NEW YORK CITY SHOWROOM: 25 W 43rd Street, Suite 320

*perfect fits
CARPET STARS IN "TOUGH GUY" ROLE AT ANTA THEATRE.

Powerful performer at ANTA Washington Square Theatre is the 600 yards of INVINCIBLE carpeting by Commercial Carpet Corp. Pile of 100% high-density continuous filament Caprolon® nylon. This carpeting is in its second season at ANTA, and still no traffic lanes are worn in aisles. Caprolan resists stains, cleans easily, saves on maintenance. For an encore of Caprolan's performance at your next showplace, write: Fiber Marketing Dept., Allied Chemical Corp., 261 Madison Ave., New York 1.
a new trade showroom which has been designed to DELIGHT the Eye, ENGAGE the Mind, KINDLE the Imagination.

It does, too!

Manuscreens, inc.
D & D BUILDING, 979 THIRD AVENUE, NEW YORK, N.Y. 10022 - 421-1270
Florence Knoll Bassett has resigned as design director of Knoll Associates. The position will be taken over by Don Albinson. Other executive changes include appointment of Kurt Burgold, vice president product engineering, and Murray Rothenberg, vice president-manufacturing.

George Thiele, long-time head designer at Willi Pahlmann Associates, is resigning to establish his own practice at 509 Madison Avenue, New York City.

Johnny Ellington Greene has been named southeastern sales representative for Deltox, Inc., and will be based in Atlanta, Georgia.

John Celecia has been appointed sales manager for Rockland Mills in New York City as part of the firm's expanded contract market and sales program.

Robert P. Davis has been named manager of Alvan Luit & Co.'s Chicago showroom in the Merchandise Mart.


James Love has joined C. J. Welch & Associates, representing contract lines in the states of Washington and Oregon.

Robert E. Slocum has been named by Howell to represent the firm in Pennsylvania.

William S. Lipton, executive vice president of Harvard Mfg. Co., has resigned his post after a long association. No future plans have been announced.

Two new appointments at Allied Chemical: James Connelly, named to newly created post of director of marketing, fibers division; Raymond C. Barlow, merchandising manager for furnishings, fibers division.

Robert C. Schroeder has been appointed director of marketing, fibers and fabrics division of Union Carbide Corp.

New divisional managers at Commercial Carpet Co: James Bidwell, Chicago; Frank Payne, St. Louis; Edmond Morris, Nebraska, Kansas, western Missouri; Arden Miller, Minneapolis, Iowa, the Dakotas; Richard Bazner, Michigan and Toledo, Ohio; D. Blumenthal, Ohio and Kentucky.

Norris J. Goldman has been named executive president of Albert Parvin & Co. He was former assistant to the president.

New sales changes at Duo-Bed Corp.: J. E. Henry, western regional sales manager; Kurt J. Kellogg, eastern regional sales manager.
The perfect idea for a rug can be a rug.

And it doesn't have to be wooly to be wild. It can be Acrilan. Both handsome and easy to keep clean. Like this custom number made of 100% Acrilan acrylic pile by Barwick. In which case, you can calmly abandon both rug and client to the inevitable. To children, dogs, relatives, friends. To jugglers of brimming coffee cups. And eaters of disastrously overstuffed sandwiches. So be kind. Brainstorm in Acrilan.

Your perfect idea will have a better chance of coming through without egg on it.
THE WONDERFUL WORLD

ALTHOUGH SPECIFICATIONS AND PERFORMANCE STANDARDS ARE TOSSED AT DESIGNERS FROM ALL DIRECTIONS, POSITIVE STRIDES IN PRODUCT QUALITY AND BETTER COMMUNICATION WITH THE DESIGNER HAVE COME OUT OF THE LABORATORIES. BY NORMAN KEIFE
DF SPECS AND STANDARDS

A ANY forces meet to make up the wonderful world of specs and standards. It is a world without absolutes, a great and flexible society, with the spec-makers pitching in to communicate with its citizens—the designing population. Specs are created by practically everyone and anything—science, technology, trade associations, competition, the government, and manufacturers—in the hope, ultimately, of improving the product and making specifying easier for the hitect and designer. There are specs published to cover every segment of the market. Some detail performance standards; others list physical properties; others even make recommendations. But normally there are no invariable rules attached to the use of specs. In most cases, the designers have been using them as guidelines; by digesting their values and gleaning them against the needs of the job, they have been able to increase their clients’ assurance of a hardy dollar’s worth. An examination of some important areas show why.

Yarns, fabrics

Yarns, fabrics, yarns, fabrics

The science and technology, the parents of fabric yarns, have sent their offspring into manufacturing society labeled with a list of properties so long, it includes practically everything but a copy of Dr. Spock—tenacity, elongation, average stiffness, specific gravity, moisture regain, effect of heat, sunlight, and chemicals, abrasion resistance, and color fastness. It is these performance standards that the fabric works with; the specifications that reach the tract buyer are, therefore, a kind of double indemnity clause of quality.

This is not to say that there are no differences. There are, in fact, minute variations in manufacture that can cause major changes in the product. Many manufacturers and fabricators bend over backwards to maintain quality. Testing laboratories all around the country test yarns, and fabrics are scrutinized, washed, exposed, burned, beaten, clean, soiled, and ned again to prove product excellence to the consumer. As an example, Deering-Milliken, producer of the Miliuni process for drapery lining window shades, not only hosted an engineer-symposium on heat gain, but also recently gave a grant to the University of Florida for work on solar-optical research.

Another firm in the drapery lining field, Rockland Mills, Inc., to prove the honesty of its specs, had its product tested in four separate laboratories in a span of two months. And a bedding producer, Englander, solves the problem of quality control by cooperating closely with potential suppliers of foam. “Qualified chemists inspect every potential supplier’s manufacturing facility, go over his manufacturing method, control procedures, labeling of products for Englander use and laboratory checks before qualifying him as a potential supply source,” said E. A. Kamp, Englander’s director of engineering. “Samples of his material made to Englander specifications are then tested and evaluated, and either approved or rejected. After these preliminary qualifications have been completed, plants receiving shipments perform three specific tests on every shipment received. On a less frequent basis, samples are taken from different shipments and sent to the laboratory for further evaluation, including a complete range of tests called for in the specifications. Lots which do not qualify are subject to rejection.”

While this kind of conscientiousness certainly makes life easier for the buyer, it does present him with a kind of pleasant dilemma: If all the cards are Hallmark, where do you go for the very best?

Carpet fibers

Most industry spokesmen and fiber producers seem to think that the most sensible approach to standards will not be achieved by establishing them and then forcing manufacturers to conform. A better approach, it is felt, is to lay down actual construction specifications that are known to give good performance. Then, manufacturers wishing to produce carpets bearing the fiber producer’s trademark can enter into an agreement with the fiber producer, agreeing to fix the trademark only to carpets that conform to the construction specs. With this method, the reputation of the fiber producer and the carpet manufacturer are protected, as is the interest of the architect, contract specifier, and their clients.

Many big fiber producers—American Viscose,
STANDARDS & SPECIFICATIONS

While most fiber producers make similar efforts to keep the manufacturer honest, the real test of their eagerness to hold the standard's line will have to come sometime in tomorrow's market when today's fiber shortage is not so very much in evidence.

An overview of the industry shows that shortages have been wool's basic trouble. Domestically wool is too fine and too soft for carpet weaving. Nearly all carpet wool must be imported and tends to make wool prices fluctuate. Of course in times of price flux and when the demand is greater than the supply, the strain has to be taken somewhere. Enter science and the synthetic fibers—nylon, acrylics, modacrylics, rayon. Wool will not be reduced to second class citizenship, but certainly will share the crown from now on.

This changing dominance in the industry is intended to keep official standards in the dark. This is not to say that specifications on carpet fiber content, weight, and density before the trademark can be affixed.

DuPont, American Cyanamid, Chemstrand, Dow, Allied Chemical—are presently involved in some kind of agreement or other with the manufacturer. Chemstrand, according to Bruce Kenworthy, manager of merchandising, has licensing agreements that bind the manufacturer who uses the Acrilan label to produce a carpet pile of 70-30, 80-20, or 100 percent acrylic fiber by Chemstrand. And, in the area of construction, the company insists that there be a minimum of pile weight of 25 oz. sq. yd. at .312 in. of pile height. As the pile height increases beyond this, the weight must increase with the height until 36 oz. is reached. At this point, the pile height may be anything, Chemstrand's agreement says. The company polices its agreement; Kenworthy said that the samples must come into Chemstrand labs for testing of fiber content, weight, and density before the trademark can be affixed.

QUALITY CONTROL REQUIREMENTS HF-2

Applicable to: Carpets—Woven, Tufted, or Knitted

Exceptions: Carpet Sold as Scatter Rugs

Restrictions: The Creslan® trademark may not be used in connection with carpet graded as "seconds," or any term denoting less than first quality.

Pre-Production Sample Requirements:
1. For testing construction—the equivalent of one square yard of carpet without backsize and a similar size sample of finished backsized carpet.
2. For floor tests, soil removal tests, laboratory tests etc., yardage sufficient to perform the tests may be submitted as follows: 3—3' x 5' carpets in lighter shades; 9—18" x 18" samples ranging from light to dark; 9" x 9" samples of each color in the color line.

Exceptions:

GENERAL REQUIREMENTS
1. Fiber content, pile yarns—a minimum of 70% 15 denier Creslan® acrylic fiber. The other fiber or fibers in the blend may be virgin carpet wool, virgin carpet nylon, virgin carpet modacrylic fiber.
2. Color fastness to light—No appreciable fading to 40 hours light.
3. Minimum pile weight, rug thickness 0.32 inches or lower—25 ounces/square yard.
4. Minimum pile weight, rug thickness over 0.32 inches—Acceptable pile weights for all constructions will be based on acceptable performance during accelerated use tests and laboratory tests.
5. Tufted carpets containing less than 30 ounces/square yard of pile weight must have a scrim back.
6. Production sampling requirements: Approved carpet construction shall be submitted from the first production run.

All manufacturers who use Creslan must live up to the quality control standards set forth by American Cyanamid if they want to earn the Creslan seal.
Council, Inc., which, incidentally, publishes a certified product list, will participate in tests to evaluate the new blend’s performance.

**Carpet backing and underlay**

Throughout the carpet market, for the last ten years or so, there has always been some tremendous stride in the development of face yarns and new processes being announced. The silent segment of the market has been the backing and underlay producers. Until very recently, they seemed content to exist as a silent hand-maiden to the carpet industry. Now, however, this segment is showing up in some fancy new dresses of her own. Felted pads of jute or hair, long the queens of the harem, are being eased out of prominence by new synthetics. Many carpet makers, for example, have lately been replacing felt with unsupported SBR (styrene-butadiene-rubber) latex foam or are coating the felt with SBR (on one or both sides). Twenty-five million pounds of SBR latex are expected to be sold by 1968, and this is double 1963’s level.

---

### Du Pont's specifications for Dacron

"Dacron" (pronounced Day-cron) is noted for its ability to impart excellent wrinkle resistance and true wash and wear performance to garments and fabrics, and it is this fiber that is largely responsible for the wash and wear trend. It is used in intimate blends with wool for spinning on the worsted system and with cotton, rayon and the synthetics for spinning on the cotton system. High-shade silk colors as well as prims of excellent clarity can be obtained on the newer Type 62 and Type 64 Dacron. Available in both filament and staple form.

**REASONS FOR THE USE OF DACRON**

- Automatic Wash and Wear Performance
- Quick Drying Properties
- Permanent Pleats
- Wrinkle Resistance
- Bright Colors on T-62 and T-64 Dacron

**RATING WITH RESPECT TO IMPORTANT FABRIC PROPERTIES**

- Abrasion Resistance—good
- Hand—fair on regular Dacron, good on Type 62 and Type 64
- Pilling—bad on regular type and good on Type 62 and Type 35
- Pressed Crease Retention—good
- Safe Ironing Temperatures—325°F
- Stability to Repeated Launderings—excellent—must be heat set
- Strength—good
- Sunlight Resistance—good
- Color Fastness—good
- Wash and Wear—excellent
- Wrinkle Resistance—excellent

---

Du Pont's specifications for its polyester fiber, Dacron, are a good example of objectivity in explaining the physical properties and advantages of a product.
On top of this, Patchogue Plymouth Co. has announced that it has perfected a new secondary backing fabric. The new fabric, Poly-Doubl-Bac, is woven of multi-filament polypropylene yarns with Kraftcord filling. The new backing is said to be impervious to moisture, mildew, or dry rot, as well as insectproof and completely non-allergenic. Last year, the company launched a primary backing, a woven polypropylene, Poly-Bac. The secondary backing has been designed as a companion to this.

Carpet tufters will begin receiving their first shipments of Chemback, a new primary tufting medium made of scrim encapsulated in a flexible foam. A product of Chemstrand chemistry, the new backing is rotproof and mildewproof, non-allergenic, insectproof, and can be washed or spot and dry cleaned.

Resilient flooring
In floor covering, nearly every producer lists "esthetics" as an attribute of his product. Apart from appearance, most have statistics, gratuitously offered, showing the relative advantages gained in installation, usable life, maintenance, price, and sometimes all of these. It is a fiercely competitive market and if one is put to the really deadly task of separating the advantages of each —both against each other and within each category—he could be driven mad. Fortunately, a decision on which flooring material is desired does not call for so rigid an evaluation. It is in most cases, based on subjectivity, arrived by job purpose and budget. While not unheard of, it is unlikely that an architect or construction specifier will suddenly switch from carpeting to tile, or vice versa. Most, as they say, would rather fight.

Judging from the standards and specifications recommended by the various segments of the flooring industry, it would seem that a battle rages nonetheless. It is apparent that the manufacturers are convinced that there are switchers in with the fighters, that the buyer is persuadable.

The resilient flooring industry, through trade associations, has produced an extensive set of recommended specifications for manufacturers. And the producers have pretty much kept the recommendations. The Asphalt Vinyl Asbestos Institute publishes a rather tight set of recommended specs to insure composition, size, thickness, indentation values at different temperatures, strength, flexibility, stability, as well resistance factors to a long list of things incl

<table>
<thead>
<tr>
<th>TEST</th>
<th>1/16&quot; STANDARD GRADE</th>
<th>.051&quot; POSTFORMING GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (lbs) ft(^2)</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Abrasion</td>
<td>400 cycles</td>
<td>400 cycles</td>
</tr>
<tr>
<td>Rate of Wear/100 cycles</td>
<td>.08 gms.</td>
<td>.08 gms.</td>
</tr>
<tr>
<td>Surface Resistance to Boiling Water</td>
<td>no blisters</td>
<td>no blisters</td>
</tr>
<tr>
<td>Surface Resistance to High Temperature</td>
<td>satin—no blisters &amp; no surface disturbance; gloss &amp; furniture finish—no blisters, slight dulling</td>
<td>satin—no blisters &amp; no surface disturbance; gloss &amp; furniture finish—no blisters, slight dulling</td>
</tr>
<tr>
<td>Cigarette Test</td>
<td>110 seconds</td>
<td>75 seconds</td>
</tr>
<tr>
<td>Color Fastness</td>
<td>no crazing—slight color change</td>
<td>no crazing—slight color change</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Thickness Swell</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Dimensional Change</td>
<td>0.9% in length</td>
<td>1.4% in width</td>
</tr>
<tr>
<td>Flexural Strength (in psi)</td>
<td>face up: 18,000</td>
<td>face up: 15,000</td>
</tr>
<tr>
<td>Modulus of Elasticity (in psi)</td>
<td>face down: 12,000</td>
<td>face down: 12,000</td>
</tr>
<tr>
<td>Stain Resistance</td>
<td>Unaffected by 1 to 20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Superficial by 21 to 29</td>
<td></td>
</tr>
</tbody>
</table>
Typical specs for laminated plastics (opposite page), vinyl wallcoverings and carpeting are formulated in such a way as to provide the contract specifier with fairly precise expectations for materials to be used on walls, floors, counters, etc. The NEMA (National Electrical Manufacturers Association) standards are accepted on an industry-wide basis, the carpeting specs are those recommended by the American Hotel-Motel Association; the vinyl wallcovering specs are for a Vinyl-Royal, a product of The Birge Co., Buffalo, N. Y.

**PHYSICAL CHARACTERISTICS**

**WEIGHT:** Minimum weight per square yard 7 ounces.

**THICKNESS:** Not less than .011 inches, completely impregnated with vinyl acrylic resin.

**WIDTH:** With selvage, 30 inches.

**LENGTH OF ROLL:** There are 5 yards to a single roll. For convenience, Vinyl-Royal is packaged in three-roll bolts.

**COLOR-FASTNESS:** Vinyl-Royal conforms to U. S. Department of Commerce CS 10-29 Standard for Lightfastness.

**DIMENSIONAL STABILITY:** Vinyl-Royal is dimensionally stable. After one hour of soaking in water, then drying, shrinkage of width was only 0.312%; and shrinkage of length 0.000%.

**FIRE RESISTANCE:**

<table>
<thead>
<tr>
<th>Flame Spread</th>
<th>Fuel Contributed</th>
<th>Smoke Developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

(Except flocks and corks; reference Underwriters' Laboratories, Inc.)

**ABRASION RESISTANCE:** Vinyl-Royal is resistant to scuffing, scratching and most accidental defacing. Even hard rubbing of a coin across the surface will leave no mark. Permanent scars result only with deliberate intent.

**MILDEW RESISTANCE:** Vinyl-Royal contains no components that will support fungus, mildew, or vermin. Vinyl-Royal breathes, permitting ready dissipation of moisture which might be conducive to growth of mildew or fungus.

**STAIN RESISTANCE AND WASHABILITY:** Exhaustive laboratory tests indicate Vinyl-Royal has exceptional stain resistant qualities; it appears to be virtually "stain proof" as far as normal stains are concerned. Only very strong solvents such as carbon tetrachloride, nail polish remover and lacquer thinner seem to affect the covering at all. Most stains can be removed with soap or detergents and water. Greases may be removed with facial tissue or a soft cloth. Waxy marks (lipstick or crayon) wipe off completely and easily by first flushing with a cloth dampened with turpentine, then washing clean with soap and water.

**PHYSICAL COMPONENTS:** Vinyl-Royal is a wallcloth of chemically bonded non-woven nylon, Dacron polyester fiber and cellulose, impregnated with vinyl acrylic resin. Its background and design are printed in vinyl and then it is thermally embossed to give you a product of the highest quality.

**NON-TOXIC:** Contains no materials considered toxic or injurious.

---

**CARPETING**

**MINIMUM SPECIFICATION REQUIREMENTS BASED ON PILE DENSITY**

<table>
<thead>
<tr>
<th>Average Heavy Traffic*</th>
<th>Average Medium Traffic*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum Weight² per Square Yard (ounces)</td>
</tr>
<tr>
<td>Axminster Carpet*</td>
<td>36</td>
</tr>
<tr>
<td>Knitted Carpet*</td>
<td>42</td>
</tr>
<tr>
<td>Tufted Carpet*</td>
<td>42</td>
</tr>
<tr>
<td>Velvet Carpet: not woven through the back*</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*See “Classification of Commercial Traffic”.

*Recommendation is for wool only. See section on “Requirements for Man-Made Fibers”.

CH 1965
STANDARDS & SPECIFICATIONS

ing solvents, curl, alkali, stain and flame. The specifications published by the manufacturers list physical characteristics on products that indicate that Institute standards have been observed.

This is also the case for members of the Flooring Division of the Rubber Manufacturers Association, Inc., whose membership includes such industry giants as American Bilt-Rite Rubber Co., General Tire & Rubber Co., B. F. Goodrich Co., Goodyear Tire & Rubber Co., and Kentile. The specs set down by this Association toe a rather precise and firm line, with no quarter given to the producer who may be inclined to scrimp. The manufacturer either meets the specifications or he doesn’t. There are no half-truths. The performance tests applied are exacting, involving the use of impact testers, temperature water baths, indentation testers, and tensile testers. Just as exacting are the specs set down for producers of polishes and cleaners for vinyl and rubber flooring. Before a polish is approved by the Associa-

tion, it must be tested on vinyl and rubber floor by an independent laboratory. “The purpose of the test,” an Association spokesman said, “is to determine that a given product contains nothing harmful to solid vinyl or rubber floors.”

Installation instructions are provided for the architect in rather lengthy detail by both the Association and the manufacturers, and it is interesting to note that the publications closely follow each other. Surely this is as much an attempt to standardize flooring specification as it is to compete—on all levels.

Competition is a bit more intense in the padding area than the backing segment, perhaps because of the defined difference in underlay material’s effectiveness. While not minimizing the qualities of felt, Cornell University reports that sponge rubber and polyurethane foam “retain their resiliency much longer and permit a variety of improved construction designs. They are unaffected by dampness and resistant to moth.

Califoam Corp. of America and General Tire & Rubber Co. are so completely convinced of the soundness of their underlay that they offer unconditional guarantees on performance. Buys

<table>
<thead>
<tr>
<th>VINYL WALLCOVERINGS: FEDERAL SPECIFICATION CCC-W-408</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE I</td>
</tr>
<tr>
<td>Federal Requirement</td>
</tr>
<tr>
<td>Overall weight, oz/sq. yd. minimum</td>
</tr>
<tr>
<td>Breaking strength, pounds, minimum:</td>
</tr>
<tr>
<td>Initial:</td>
</tr>
<tr>
<td>Warp</td>
</tr>
<tr>
<td>Filling</td>
</tr>
<tr>
<td>Tear strength, scale reading, minimum:</td>
</tr>
<tr>
<td>Warp</td>
</tr>
<tr>
<td>Filling</td>
</tr>
<tr>
<td>Hydrostatic resistance, pounds/sq. inch, minimum</td>
</tr>
<tr>
<td>Abrasion resistance—supporting material shall not be exposed after double rubs</td>
</tr>
<tr>
<td>Flame resistance, vertical:</td>
</tr>
<tr>
<td>Flame time, sec. maximum:</td>
</tr>
<tr>
<td>Warp</td>
</tr>
<tr>
<td>Filling</td>
</tr>
<tr>
<td>Char length, inches, maximum</td>
</tr>
<tr>
<td>Warp</td>
</tr>
<tr>
<td>Filling</td>
</tr>
<tr>
<td>Color fastness to light—no appreciable change 200 hours Fade-O-Meter</td>
</tr>
<tr>
<td>Shrinkage percent, maximum:</td>
</tr>
<tr>
<td>Warp</td>
</tr>
<tr>
<td>Filling</td>
</tr>
<tr>
<td>Cold crack at 20° F.</td>
</tr>
<tr>
<td>Blocking, scale rating, maximum</td>
</tr>
<tr>
<td>Heat aging</td>
</tr>
<tr>
<td>Crocking</td>
</tr>
</tbody>
</table>
Synthetic surfacing materials

A lot of ground has been covered since Alexander Parkes invented the first plastics material—cellulose nitrate—about 100 years ago. The discovery, as we know, triggered a search for synthetics, and from all the chemical reactions has grown a science and a massive industry.

A recently completed study of the U.S. building industry has indicated that the consumption of plastics for building totals more than three-quarters of a million tons, valued at close to $100 million dollars.

Plastics, to say the least, is a gigantic business, growing more massive and more competitive each year. Because, fortunately, in a competitive world it is necessary for a manufacturer to keep his product "on a par" with the existing competition, andards are not a great problem here. All the producers in the field of wallcoverings make a big effort to keep pace. More often, their published specifications not only meet the requirements established by the government and significant associations (the Decorative Laminate Section of the National Electric Manufacturers Association, for example) but also outdo them. The specs published by the producers leave one with a sense of confidence. And NEMA has published a "rule of the road" for producers to follow, thereby establishing a common basis for fabricators, architects, and contract specifiers "to understand the unique properties and varied applications of the product."

The important edge in the field does not seem to come from manufacturers trying to "out-spec" each other. Instead, it is apparently taking place in the research laboratories, where chemists labor to find the product that will outmode the current leaders. Here the work is veiled in secrecy, with body daring to breathe a word to the outside world until marketing plans are ironed out and the competitive advantage assured.

Some insiders are casting an eye at propylene polymer research. AviSun Corp. recently announced a new propylene copolymer, Olemer, which is said to possess the outstanding properties of polypropylene plus good low temperature impact strength without significantly sacrificing rigidity and heat resistance at high temperatures. But the fact that there are still many solved scientific and technical problems on established polymers makes it difficult to accept other propylene copolymer as the last word inastics, even though property figures include a mile impact strength of 90-120 ft./lb., compared with 30 ft./lb. for general purpose polypropylene. The producers keep looking.

Meanwhile, the attributes of high pressure decorative laminates for vertical and horizontal interiors continue to be trumpeted. Their virtues were most recently described by U.S. Plywood Corp.'s Richard H. Dement. Melamine surface high pressure laminates, he said, were essentially maintenance free, had stood up well in railroad cars, could be molded and shaped to metal, and asbestos could be incorporated for fire retardance. Virtually 100 percent of the vertical facing materials were developed with a combustible rating of only 20 and a smoke rating of only 5. In addition, variety and individuality are obtained through a paper overlay, with color and texture variable at will.

Federal vinyl specifications

Until recently, producers of vinyl wallcoverings have not over-extended themselves in establishing standards. At least this seems to be the implication Columbus Coated Fabrics Co. makes in its "Guide for Specifications." The report reads: "On May 8, 1963, the Federal Government published a Minimum Vinyl Wallcovering Physical Property Specification. We urge that this specification be considered by all agencies of government, private and captive architectural specification people. This particular specification reduces to standard the vinyl wallcovering subject, which has needed a standard clarification for many years." Before this clarification arrived, competition, existing fire regulations, and good
STANDARDS & SPECIFICATIONS

conscience had forced producers to keep performance standards up to snuff. The specifier’s lot should be easier in the future now that the specs are precisely promulgated by federal edict.

Lighting

In spite of the problems that exist in a growing, changing, ever-developing industry, there are standards and recommended specifications available for those who would like to make use of the latest in lighting application and the supporting technical information. The Illuminating Engineering Society, for example, publishes standard recommendations for lighting a prescribed area, including suggested types of lighting systems and luminaires, levels for general lighting and for specific areas, and analyses of seeing tasks. A gem of a booklet, released by IES, on hotel and motel lighting brings together the needs and points of view of the hotel and lighting industries. Called “Lighting for Hotels,” the booklet was prepared by a committee of hotelmen, designers, engineers, and lighting specialists, and was several years in the making. It offers in one 42-page report practically all that there is to know about hotel lighting, starting with a discussion of lighting terms and jumping off into lighting recommendations for special areas, finishing with general information on light sources, lighting installation, and maintenance.

Another IES publication, “Office Lighting,” takes up the task of lighting the office and overcoming the inherent problems. No corner is left to darkness and no illumination level left unrecommended. A good deal of the technical research material had been boiled down into comprehensible language and one is left with the impression, after going through it, that the physics of light and vision is all quite digestible.

The leading manufacturers in the contract lighting field—Lightolier, GE, Century, Klieg Bros., Sylvania—all produce specifications. The problem has not been the lack of them, but rather getting people to look at them.

Acoustics

While the price of quiet is increasing, the hope of arriving at a set of standards in sound absorption is not quite moving in the same direction. To start with, one does not always agree on what sort of sound, or lack of it, is desirable. An intolerable noise to one person may hardly faze another. One answer to noise abatement is better soundproofing, but even a perfectly quiet office can be made unpleasant by irregular impacts.

While research is still going on in the various aspects of noise abatement, standards for controlling noise are difficult to put a finger on. We have not yet arrived at just what type and intensity of sound is noise. The producers of acoustic materials do have the wherewithal to create less loud environments, but since the real issue in acoustics seems to be “What is noise?” and “Which sound is coming from where?” standards will only be possible when the questions are answered. For the realistic present, the specifications listed by the manufacturers of acoustic materials seem to be practically successful if not theoretically, witnessed by the fact that most of us have managed to survive the “noise” of the office. Who knows? When we are able to hear a pin drop, it may sound like a clap of thunder.

Another aspect of acoustics is reviewed beginning on page 48 of this issue.

Representative Specification Literature

American Carpet Institute, 350 Fifth Avenue, New York City: “Basic Facts About the Carpet and Rug Industry.”
American Cyanamid Co., 505 North Avenue, Wakefield, Mass.: “Fabric Primer.”
American Standards Association, 10 East 40 Street, New York City: “ASA’s Installation of Ceramic Tiles.”
Asphalt & Vinyl Asbestos Tile Institute, 101 Park Ave., New York City: “Recommended Installation Specifications.”

Chemstrand Co., 350 Fifth Avenue, New York City: “Carpet Manufacturer”; “Carpet Technology.”
Institutional Research Council, 221 West 57 Street, New York City: “1965 Certified Products List.”
National Electrical Manufacturers Association, 155 East 44 Street, New York City: “Recommended Practice for Fabricating and Applying Thermo-setting and Decorative Sheets.”
Rubber Manufacturers Association, 444 Madison Avenue, New York City: “Specification for Vinyl and Rubber Flooring”; “Moisture Test.”
On the eleventh floor of The Merchandise Mart, Chicago, you will find the world’s largest concentration of contract furnishings, established especially for the use of contract designers, architects, dealers and their clients. What could be more convenient and efficient?

- O. Ames Company
- Astra Bentwood Furniture Co.
- Beautycraft Furniture Industries
- B. Brody Seating Company
- The Buckstaff Company
- Peter G. Buckstaff Co., Inc.
- Charlotte Chair Company
- Chicago Hardware Foundry Co.
- Commercial Carpet Corp.
- Condi Division, Pacific Furn. Mfg. Co.
- De Luxe Metal Products
- Paul L. Dodds Company
- Empire State Chair Company
- The Howell Company
- J. G. Furniture Company
- Johnson Plastic Tops, Inc.
- Krueger Metal Products
- M. R. M. Showrooms
- Madison Furniture Ind.
- Jo Mead Designs
- Milwaukee-Sikes
- Molia, Inc.
- Peerless Steel Equipment Co.
- Peter Pepper Products
- R-Way Furniture Co.
- Robert John Company
- Royalmetal Corporation
- Rubee Furniture Mfg. Corp.
- Shelby Williams Industries, Inc.
- Steelcase Inc.
- Superior Sleeprite Corp.
- Tri-Par Manufacturing Co.
- Albert Van Luit & Company
- Vicrtex Sales Corp. of Illinois
- Victory Upholstered Seating Co.
- Virtue Bros. Manufacturing Co.
- John D. Williams Company
- Richard Winter Associates
- Yawman & Erbe
THE MEANING OF ACOUSTICAL CONTROL IS BROAD — SOME SOUNDS MUST BE SUBDUED, OTHERS TRANSMITTED WITH CLARITY; A REPORT ON THE WAYS IT IS BEING DONE AND THE PRODUCTS THAT HAVE BEEN DEVELOPED FOR A VARIETY OF PURPOSES. BY LEE ROSENTHAL

One of the most glaringly oppressive features of modern life is the intrusion of unwanted sound, otherwise commonly and just as accurately known as noise." With large sections of the country becoming vast urban areas loosely connected by crowded highways and fast-growing suburbs, it is necessary to travel many miles for that peace and quiet" all human beings seem to need in some measure. But even if we could escape to the proverbial desert island it would very likely be ringing with the sounds of outboard motors, rock-and-roll, or low-flying planes. Scientific control of sound is therefore no longer a luxury but a necessity if human beings are to be able to hear themselves think, actually a matter of survival.

The problem of acoustics in public buildings has come to our attention recently in a notable example, Philharmonic Hall at the Lincoln Center for the Performing Arts in New York City. A recent report in The New York Times tells us that "major changes on the stage of Philharmonic Hall, to improve the acoustics, will be made..." and the "cost of these improvements is an estimated $335,000, for last year's improvements an estimated $500,000." But emphasis of this kind can be misleading, for it gives the impression that, in spite of great expense and reputable experts, this luxurious new structure, intended to replace old Carnegie Hall with its fine acoustics, fails where the older building succeeded perhaps by some miracle. But there are no miracles, at least not in acoustics; Carnegie Hall was built many years ago and has had the advantage of time. As conductor Leonard Bernstein of the Philharmonic has said, "the acoustical properties of Philharmonic Hall... have, not unexpectedly, been in a state of flux."

Controlling unwanted sound

Our most urgent need, however, is in the area of controlling unwanted sound, which can come from two sources: (1) extremely high noise level within a given room or single area, and (2) sound transmission from one area invading the acoustical privacy of another. The transmission can take place through all connecting media: partitions, doors, air, utility runs. In residential buildings it is sound transmission from one apartment to another which causes the greatest annoyance and which cannot be appreciably alleviated with the use of acoustical material within each apartment. This is a building or structural problem, and builders are beginning to tackle it because tenants are beginning...
to demand some solution. The Sunday, August 16, 1964 issue of The New York Times carried a story in the Real Estate Section about a building team on Long Island, Harvey and Stuart Spivack. The Spivacks are specifying that each apartment in their Wildwood Gardens project be treated as an entity with little or no physical contact with its neighbors to avoid sound transmission. Their method consists of hanging the floors, walls, and ceilings not on wood beams, which contain sound-conducting nails, but on a series of specially made steel extrusions which keep the walls from coming into contact with the building’s supporting timbers. The walls are attached to the steel extrusions by special screws so that walls, ceilings, and floors are hanging in space.

Noise within an enclosed area is the greatest problem in commercial and institutional buildings and can most easily be controlled by the use of sound-absorbing, or acoustical, materials.

All building materials have some effect on the absorption of sound. Hard interior surfaces such as plaster and glass generally absorb less than five percent of the sound energy and reflect the remainder. A material is usually considered “acoustical” only if its sound absorption rate is well above 50 percent. Effective absorption of sound must be accomplished by low-density materials. Since these materials are relatively fragile, they must be located so as to avoid abrasion and impact. This, simply, is the reason for designing ceilings to assume the major role in room sound conditioning.

Almost any structure, new or old, can be sound conditioned, but of course sound control is most important in “loud noise” areas such as restaurant kitchens or supermarkets and in areas where maximum quiet is essential, such as hospital rooms, libraries, or classrooms. Insurance companies require fireproof materials in schools, for instance, both for life and property insurance and since most acoustical material has fire resistant qualities, sound- and fire-control feature can be combined in one material. Employers have found that quiet working conditions promote increased efficiency. In the factory extreme noise can be a safety factor; in the office it can be an obstacle to communication in the course of the day’s work. The typewriter is no longer the only machine in the business office but is accompanied by dozens of others, including the ubiquitous telephone; the pyramiding of noises make sound conditioning mandatory. Dining room banks, and public buildings, all areas where the mood of both customer and employee alike can be affected by unwanted noise, can benefit from sound conditioning.

Time was when only the executive office, where the administrator would retire to peace and quiet to make the decisions his responsibilities required, was afforded the luxury of an acoustical ceiling. But today executive areas with carpeting, draperies, and upholstered furniture—all sound-absorbing materials—actually need less addition soundproofing than other areas in plant or office. It has become customary, for instance, for any area with IBM machines to be enclosed to have special heavy-duty acoustical ceilings.

Types of acoustical products

The main types of acoustical ceiling products are (a) acoustical metal pans—perforated aluminum or steel casing backed with a sound-absorptive pad; this product is a heavy-duty item with maximum sound absorption, washable and incombustible; acoustical metal pans are widely stalled in schools and kitchens; (b) ceiling tiles and ceiling panels—acoustical products composed of various materials such as mineral wool, cel...
OWENS-CORNING supplied large 4 by 4 foot textured acoustical tiles to conform with the large bay areas of a new library (above) at University of Miami. The special large size tile facilitated proper spacing and location of lighting fixtures, air diffusers, and sprinkler heads. At the new Kingsley Inn Motel, Birmingham, Mich. (left), fissured Fiberglas ceiling board provides effective noise control. Each panel measures 24 by 48 by ½ inches. Circle No. 86.
ACOUSTICS: SOUND CONTROL

lose fibers, or various combinations thereof; finishes such as plastic or acrylic coating produce "scrubbable" surfaces.

Practically all acoustical material can now be used as decorative components of any installation, particularly ceiling tiles, which are available in a variety of punctured patterns and fissured, textured, striated, and sculptured designs of varied sizes. They offer many features in varying degrees, according to the user's specific needs; they can be vacuumed, washed, or painted; they are fire and humidity resistant and non-combustible; they reflect light, absorb sound, reduce sound transmission to other areas; they offer accessibility to hidden utilities and can be removed and re-used in other locations; they are decorative and economical.

The most important functional development in the acoustical materials market is the "integrated ceiling," an acoustical ceiling which combines elements of soundproofing, decoration, fireproofing, heating and cooling, and lighting. Although installation of an integrated ceiling is more costly than simple acoustical tile, the long-run expenditure is lower, because it involves a single installation rather than several separate ones for each of the functions of lighting, heating, cooling, and soundproofing, and results in a less cluttered appearance. Since the entire ceiling is a self-contained source of lighting, air conditioning, and sound control, arrangement of floor space beneath the ceiling need not be determined before the ceiling is installed. Partitions can be placed along any grid line at any time with assurance that space below will be adequately served by all three elements. An adapter channel which fits over the lower grid members is available to facilitate attachment of partitions to the ceiling. The effect is evenly distributed warm or cool air without pockets of stale air and reduction of grime and dirt on upper walls and ceiling, since there is a constant and even downward flow of air.

The architect or designer who specifies the type of ceiling must work in conjunction with a mechanical engineer, electrical engineer, and acoustical engineer.

Who specifies acoustical ceilings

Despite the fact that no building codes require them, acoustical ceilings have become standard in commercial construction, both in speculative projects and in institutional buildings. If the owner or builder does not specify acoustical ceilings, the architect will insist on them. As a matter of fact, acoustical ceilings are less expensive than plaster.

A new speculative office building at 250 Broadway in New York City is a good case in point. In this 35-story project, all acoustical ceilings were made part of the building standard, that is, supplied by the landlord through his general contractor at no additional cost to the tenant. Interior designers for individual tenants then proceeded to make many adaptations for functional or decorative purposes. Grand Central Building, Inc., owner-agent for the new Pan Am Building in New York City, states that about percent of the 2,202,000 square feet of space was changed to conform to individual specifications. Emery Roth & Sons, architect for the Pan Am Building, places the figure at 90-10 in over-all experience, as does Michael J. Koda, acoustical consultant. Richard Roth, Sr., of Emery Roth, maintains that where a good grade of ceiling is installed, particularly one with a concealed spline (the metal stripping that supports acoustical tiles), only a very small percentage
ARMSTRONG’s new Wood Beam (above) has the look of an open-beam ceiling while retaining the advantages of conventional suspended systems. The beams are actually an integral part of the suspension system, as opposed to the more costly snap-on attachments. A particularly successful system, one that combines both functional and esthetic qualities, is Armstrong’s Luminaire, shown here (right) in an automobile showroom. Utilization of entire ceiling as a light reflective surface results in maximum downward direction of light. Angled acoustical panels also contain hundreds of tiny ventilating perforations so that air from plenum flows directly into the room through the entire ceiling surface. Circle No. 88.

E. F. HAUSERMAN CO. assumes a single-contract approach in marketing its complete line of incombustible acoustical ceiling systems. Maintaining a staff of sales engineers, architectural consultants, and installation specialists, Hauserman coordinates and integrates both walls and ceilings, considers the effect of air conditioning and heating and lighting services. Its Metal Pan ceiling (left), for instance, was installed along with the Hauserman movable walls to insure maximum sound control. Circle No. 89.
ACOUSTICS: SOUND CONTROL

space will be altered, but many builders supply a lower grade, and consequently the tenants specify an above-average percentage of special acoustical materials.

Firms like Saphier, Lerner, Schindler, Inc., and Space Design Group, Inc., both recently engaged in very large projects associated with the new office buildings, report that they too use about 80 percent of the building standard acoustical ceilings. The remaining 20 percent ranges from complete executive offices with luminous-type ceilings to special metal ceilings for IBM rooms.

In institutional buildings or single-purpose buildings, such as hospitals, banks, stores, and motels with single tenants or owners, the architect or designer can select his acoustical material with the one tenant in mind and can fulfill his needs with the knowledge that his specifications will not be subsequently changed. The architectural firm with a design department can play a particularly vital role in the case of single-client institutional buildings, since the architect and interior designer work together all the way for the desired result. The Hebrew Home & Hospital in Jersey City, New Jersey, designed by Katz, Waismann, Strauss & Weber, is a good example of such collaboration. In this $3,000,000, 150-bed project, above-grade acoustical ceilings were used throughout.

Smith, Smith, Hanes, Lundberg & Waehler, one of the nation's largest architectural firms, with a full-scale design department, selected an expensive brand of fissured tile for the 32-story Prudential Insurance Co. building in Newark, N. J. The selection and specification of interior materials was coordinated between the design and architectural departments, which also selected a specified luminous ceilings for Fidelity Trust Building, a small sister building, part of the Prudential complex.

In modernizing existing buildings, acoustic ceilings are installed in almost all cases. For this reason the modernization market, long considered a secondary market compared to new construction, is becoming a lucrative field for manufacturers. In a modernization project the extensiveness of the changes desired by the client will probably determine whether an architect, interior designer, a furniture dealer with design department, or a contract furnisher with a design department is called in. Department stores with design departments may advise on acoustical material, but more often than not they merely supply names of acoustical contractors. According to experts in the field, it is wise to employ the services of an acoustical consultant or engineer who can help to avoid costly mistakes and to select the proper solution.
also assumed the role of interior designers. They specify and select all materials to be used on a project, including ceilings. Itkin Brothers, commissioned to design, select, and specify all materials to be used in an 80,000-square-foot executive and sales building for Unishops, chain store operator in Jersey City, New Jersey, drew up plans for the entire interior, not only for the ceilings, but also for the mechanical and electrical systems. Employing licensed engineers as consultants, Itkin was able to give the client a turn-key job for the entire interior.

Large contract furnishers specialize in producing “turn-key” jobs. They are responsible for all furniture, fixtures, and materials used in such projects as motels, hotels, restaurants, clubs, and private schools, everything except the shell of the building. They, not the architect or owner, select and specify the type of ceiling to be used. This power is made possible with the financial backing of the contract furnisher. The Rickshaw Motel, Monmouth County, New Jersey, is a good example. This 130-room project was completely handled by Consolidated Hotel Supply Co., a division of H.B.U. Furniture Corp.

Acoustical Materials Association—source of data

The acoustical materials industry has produced a wide variety of materials to meet many needs within a wide range of cost; it also continually offers the market improvements and innovations.

Not only has the industry been busy improving its products and producing new ones, but it has also availed itself of sound scientific assistance through the Acoustical Materials Association, an organization in New York City formed by producers of architectural acoustical materials for the purpose of furnishing architects and others with reliable technical data on sound-absorbing materials and their uses. Members are: Armstrong Cork, Baldwin-Ehret-Hill, Celotex, Gustin-Bacon, Elof Hansson, E. F. Hauserman, Johns-Manville, Kaiser Gypsum, National Gypsum, Owens-Corning Fiberglas, Simpson Timber, United States Gypsum, and Wood Conversion Co. All manufacturers of architectural acoustical materials are invited to apply for membership.

The Association publishes annually a bulletin with up-to-date information on products of members with specific definitions of terms and criteria by which materials may be classified as to performance. These include NRC range (Noise Reduction Coefficient—the higher the NRC, the greater the sound absorption; a ceiling tile with an NRC range of .65-.75 will soak up roughly 65%-75% of the noise in a room), fire rating (the flame spread index deals with surface characteristics; fire resistance establishes measurements in hours of resistance to the passage of heat through an entire construction), maintenance, surface finish and pattern, and cost.
STANDARDS IN DRAPERY SELECTION SET BY PPG

The selection of draperies for contract installation has long since ceased to be a purely decorative function. It is increasingly realized that drapery and casements can be an important factor in the control of glare, view, privacy, heat, thereby reducing air conditioning loads, and even sound, added to the equally important considerations of long-range maintenance care and costs. The growing science of environmental control through the selection of drapery has come to include not only a particular fabric type and characteristic, but also color, width, weight, and the shading factor of the various kinds of glass in the window itself.

In an effort to standardize all the variables in drapery selection, the Fiber Glass Division of Pittsburgh Plate Glass recently conducted a research program on fiber glass drapery with the cooperation of Pennsylvania State University. In PPG's own laboratories and those of Penn State, fiber glass curtains were tested under conditions of actual use with comparative studies of other window treatments. The tests resulted in the development by PPG of the Feneshield System. The first of its kind, Feneshield gives the drapery specifier a laboratory-tested method for selecting fiber glass draperies to control view, glare, radiant heat, and sound, tailor-made to the particular installation.

Classifying fabrics scientifically

At Pennsylvania State University, researchers determined the performance of fiber glass fabrics in many different combinations of color and weave under conditions of actual use. Under the Feneshield System, fabrics are assigned to one of nine classifications. Each classification has its own special characteristics in the control of the environmental factors, and are ranked in importance to the specific interior design project according to outward view, privacy, glare, heat and sound control.

For greater convenience in using the Feneshield method by designers and specifiers when technical calculations are not required, the nine classifications were broken down into three broad classifications, Types A, B, and C. Charts and tables developed as part of PPG's new scientific system are consulted to select the fabric with the best combined ratings for the particular environmental needs. The final choice of drapery fabric is made from Feneshield samples keyed to the designator system.

Subduing radiant heat

The Feneshield fabric classifications were the result of extensive tests and research by PPG and Penn State. It was known that radiant energy striking a drapery surface is reflected or absorbed or diffused through the openings between yarns. Weave construction will determine to a large degree how the sun's rays affect the atmospheric conditions of a room, help to lower high air conditioning loads while maintaining a comfortable working environment for building occupants. Heat transmittance will also vary to some extent with the color of the yarn. Colors of the fabrics tested ranged from white to deep tones, of blue green or brown; weave constructions were open, semi-open or closed. By the development of a special method to measure the "openness" or space between individual yarns, PPG then assigns the fiber glass fabrics to the proper classification.

Shading also plays an important part in the control of radiant heat. The lower the shading coefficient of the window assembly, the less heat that is allowed to pass through it. In its comprehensive system, PPG has incorporated tables and technical data with more than 70 shading coefficients, showing the values for various classes of Feneshield fabrics in combination with common types of window glass. Both the glass itself and the window treatment can be designed to hold the heat near the windows so it cannot measurably increase room temperature.

Direct or reflected sunlight beams through vision surfaces can create glare and shifting illumination at different times of the day and with the changing seasons, causing discomfort and eyestrain. With the proper choice of fabric color and density such sunlight can be softened and diffused, but still not shut out completely.

Type A fabrics in the Feneshield classification, generally of medium dark color, with an open or semi-open weave, assure outward vision through total area of the window. They enhance the natural view by reducing sky glare so that clouds and sky can be seen clearly with complete eye comfort. Type B includes light-colored, open weave, media and dark-colored semi-open weave, a dark-colored, closed-weave (opaque) fabric, used when control of heat and glare are prime requirements. These fabrics protect from solar radiant heat and glare, soften brightly lighted areas while permitting a modified outward view. In the type C classification, fabrics include a closed-weave in light- or medium-colored materials and a semi-open weave in light-colored materials. These fabrics were found to give maximum protection from solar radiant heat; the combination of a light color and a relatively close weave was remarkably effective in reducing radiant heat loads. Yet, these fabrics conserve heat in winter.

Improving sound control

Sound control through the use of a fabric is a relatively new consideration in the selection of window treatment. Commercial buildings, it is limited to the use of acoustic ceilings. To help this to cut down the sound reflections between floor and ceiling does little to overcome reflections between walls. The noise reduction of plastic glass is extremely low, accounting for high reverberation and magnification noise in bare, untreated areas and noise reflection between windows and...
itc hard walJ&. Te^ls of the fiber g]a>-
gardics ><how«d a high degree of !>ound
l>r|)ur|)tion that improved the over-all eon-
tr-erd of noise, trapping and muffling the
sound striking them. Sound entering the
soft surfaces of the fabric, loses its energy
in the millions of tiny spaces between
he inverwoven filaments of the fiber glass
arn. Though all of the Fenseshield fabrics
were found to help mute office noise, the
most effective were the heavier, more
ightly woven fabrics, draped in soft folds
at windows, room dividers or partitions.

Modifying the view

In considering view and privacy, the
selection of a weave and color to em-
phasize a pleasing view can create a
sense of visual freedom. Yet an unde-
irable view from an opposite wall, can
be masked while still maintaining a uni-
form exterior appearance. The selection
of a Fenseshield fabric type A, will open
a desirable view while minimizing sky
lare and still letting adequate natural
ght penetrate. For the undesirable view,
abric can be chosen in color identical
ith that for windows opening on the
leasant view. A Type B fabric, with its
oser, more opaque weave will block
an unwanted view while still permitting
atural light. When complete privacy un-
er all conditions is sought, a tightly
osed weave was the most effective choice.

Studies showed that properly selected
her glass draperies significantly lower
aintenance costs. Since the Fenseshield
abrics do not require dry cleaning and
ressing, but can be laundered, main-
enance costs were found to be lower than
ose of other window treatments. In ad-
ition, PPG has developed a portable
undering machine for the washing of
her glass fabrics, currently being mar-
ted by the Hoyt Manufacturing Co. The
roll-along” washer can be wheeled from
indow to window, laundering, rinsing,
nd removing excess moisture in a contin-
uous cycle so that long-range maintenance
sts can be further reduced. (C)

Fenseshield Fabrics are classified broadly into types A, B, and C, for convenience in
selecting a suitable fiber glass drapery fabric when technical calculations are not
required. Type A, (top) permits outward vision through the total area of the win-
dow, yet helps to reduce sky glare. Type B (bottom, left) provides good protection
from solar radiant heat and glare, while still permitting a modified outward view.
Type C fabrics (bottom, right) give maximum protection from solar radiant heat.
The three broad classifications are contrasted against each other in the middle
photograph, emphasizing the view, privacy, or protection from sun rays afforded
by each.

ARCH 1965
SOME OBSERVATIONS ON JAPANESE DESIGN

By Michael Saphier

The following excerpts are taken from a talk given by Michael Saphier at a meeting of the National Society of Interior Designers at the Nippon Club in New York City last month. Mr. Saphier, who is chairman of the board of Saphier, Lerner, Schindler, leading contract design firm, made a trip to Japan recently. We think his remarks about Japanese design and designers are of exceptional interest.

The Japanese designer, steeped in centuries of tradition, with building, interior, and product design being done in prescribed fashion, has only been recently exposed to vast numbers of new design problems. The industrialization of Japan and its introduction to new standards of working, living, and playing have brought all of the problems of environetic design to the Japanese designer: the need to suddenly design all of the things the Japanese now use and the places in which they use them.

In meeting these problems, the Japanese designer is extremely fortunate in one respect—in understanding the environment; the simplicity and sincerity of the Japanese past will lead naturally and easily into its future. Neither the designer nor his public will be hampered in the search for true design by any frightened desire to conservatively stay with twenty varieties of the past. The Japanese will never know a Jacobean television set, a Gothic radio, or a Regency electric clock. The interior designer will never enter into lengthy discussions with his client over the question of using French Provincial or Early American decor. The office designer will never have to convince the computer manufacturer that Chippendale is not the true company image. The search for the answer to today's design problems will not be made any more difficult by the fogs of many pasts.

There are exciting, interesting years ahead for the Japanese designers. Some of the challenges that lie ahead are common, international design problems, while some are peculiar to the Japanese designer. As Japan becomes more Westernized, as more Western customs are adopted, more design problems face the designer. The Japanese are getting used to sitting in chairs in offices, in hotels, in restaurants. It is not unusual to dine in a restaurant and see the tourist struggling valiantly with chopsticks, while his Japanese table-neighbor uses knife and fork with a dexterity and aplomb that would have Emily Post applauding.

Good design is based on end-use, and end-use means people. As Japanese living changes, the problem of supplying good design cannot be met by importing Western styles in existing forms. To illustrate what I mean, let's take one of the problems that makes such import impossible—space. Space is at a premium, something that is easy to understand when we realize that Japan, the size of the State of California, houses 97 million people, or seven times as many as live in California. Without beds, without chairs, without large dining tables, the Japanese homes and apartments and hotel rooms seem comparatively spacious. How does the designer now supply these rooms with comforts of Western furniture and still keep them roomy? Where do they go from here? The small television sets which the office designer will never have to convince the computer manufacturer are portable toys to us were properly scaled for Japanese homes. But not all furniture or all appliances can be scaled down like the TV sets.

And that brings us to another problem facing the Japanese designer. We notice that even in the Westernized hotels and inns, everything was just a little too low for us. We had to stoop to wash our hands, stoop to get through some doorways, bend a little more than we were accustomed to doing when reaching for a drink on a cocktail table. All of these things were properly designed for end-use because the Japanese are little people, or rather they were little people. The children we met all over Japan were dressed and well fed and their diet no longer a Japanese diet, but a Western one. The result is that the children are no longer small. The high school children are beginning to look like our high school children. And in another generation, Japan will not only supply players for our basketball teams, but for our basketball teams as well. Ninety-seven million tall people in a small country will bring tall problems to the designers. I expect that very exciting design solutions will be coming out of Japan in the years ahead.

EXECUTIVE OFFICE of the president of Mitsubishi International, in New York City, was designed by Mr. Saphier's firm, Saphier, Lerner, Schindler, Inc.
SUPERIOR WINDOW INSULATION FOR UNDER 3½¢ PER. SQ. FT.

MILIUM® INSULATED DRAPERY

Now proved by extensive tests at the engineering laboratory of a nationally known University.* MILIUM® drapery linings with a shading coefficient of 0.32 (¼" glass) have a far superior insulation value than venetian blinds or plain unlined draperies.

Using the example of a 150 unit motel in New York City, MILIUM® insulated linings reduce the cooling capacity requirements by approximately 20 tons. At an average cost of $900 a ton, this saves the owners $18,000 of initial installation cost.

Operating costs are reduced by approximately $342 a year for air conditioning and this does not include the saving in heating during the cold winter months.

From an esthetic viewpoint, consider the luxurious appearance of draperies lined with MILIUM®—the uniform exterior appearance of a building, the elimination of fading of upholstered furniture, expensive carpeting and luxurious draperies. Think of the reduction in glare, the increase in privacy by using MILIUM® drapery linings. All MILIUM® insulated fabrics are completely dry cleanable and available in white and decorator colors in many weights and widths. Now for the first time MILIUM® is available in white and colored room darkening window shades.

For additional information or answers to specific problems, write:
MILIUM Dept. H 1045 Sixth Ave., New York, N. Y. 10018

© Registered T.M. of Deering Milliken, Inc. for insulated fabrics

*Name supplied on request

Circle No. 34 on product information card
Advanced technology has produced no flooring material superior to the fine woods now available in greater variety than ever as a result of the surge of imports from the under-developed (or newly developing) countries of the world. Bangkok Industries, Inc., of Philadelphia, a firm which has a notable record for introducing handsome, durable woods into this country in the form of parquetry, has recently added to its repertory two Far Eastern types that offer significant advantages in contract work. One, called kerriwood—known as ironwood in some parts of the world—comes highly recommended for dance floors and commercial establishments where very heavy traffic is the rule. Kerriwood was used in the Mexican Pavilion at the World’s Fair and came up smooth and shining after being trampled by thousands of feet on each long Fair day. The other new Bangkok import is Karpawood. Not only is it far harder than most domestic woods, but it has highly distinctive graining and variations in tone, ranging from light brown to deep maroon. These, plus teak and other quality imported woods, are available from Bangkok Industries in a series of patterns of unusual interest—basketweave, foursquare, mosaic, herringbone, diamond, and block designs. The parquetry is brought into this country in finished form, carefully packaged and ready when it arrives for immediate application to the floor. Descriptive material and samples are available from Bangkok Industries upon request, with export recommendations for different types of contract applications.
When you want the subtlety of success, design his office with the finest wood in the world. You’ll build good taste and good sense around him and he’ll have it easier with both customers and board members. You’ll have a friend and client forever—thanks to Genuine Mahogany.

As the world’s largest importer and manufacturer of Genuine Mahogany, Weis-Fricker produces only *Swietenia Macrophylla* from Central and South America. It’s yours quickly in any quantity at prices that will please you, and at lengths up to 20 feet, widths to 24 inches, and thicknesses to 4 inches!

From Weis-Fricker you’ll get the same magnificent material that tests by the U.S. Forest Products Laboratory and Cornell University show superior over all other popular hardwoods in nearly all properties for mortising, boring, planing, warping, shrinking, shaping and turning. You’ll have the same wonderful wood that remains unchanged, uncracked, unwarped in the Cathedral of Ciudad Trujillo after 450 years of tropical climate with hurricanes, earthquakes, and insects. And you’ll join America’s top architects who chose Genuine Mahogany recently for the interior of the luxurious Hotel Sheraton in San Juan, the Professional Golf Association’s (PGA) clubhouse in Palm Beach, and the Library at the University of Chicago. In fact, watch for *House Beautiful’s* 1965 Pace Setter Home. It’s full of Genuine Mahogany from Weis-Fricker!

For the name of your nearest dealer, write today. Free mahogany kit on request. Contains samples with finishes in red, yellow, green, blue, brown, and violet, plus mahogany fact book with mechanical stresses and other information. Circle number 60 on the readers service card or write Weis-Fricker Mahogany Company, P. O. Box 391, Pensacola, Florida.

PHOTOGRAPH BY EZRA STOLLER ASSOCIATES

QUALITY GENUINE WEIS-FRICKER MAHOGANY
PENSACOLA, FLORIDA
Versatility in outdoor furniture from Molla

Comfortable living, indoors and out, sets the theme for new designs from Molla, Inc. The newest edition is the Key group with a graceful sculptural Greek Key motif framing the chairs and tables. The collection includes chairs, dining and accessory tables and a variety of seating units, all in lightweight Alumaloy. A completely new line of upholstery fabrics for the groups is protectively treated. To its wide range of hand-rubbed finishes, Molla adds four colors, soft pink, mint yellow, Mediterranean blue and antiqued Roman bronze. Additions to another popular collection, Festival, include an unusual hunt table which can be fitted together to form an open-centered rectangle or strung out in a serpentine curve, or used in other imaginative arrangements.

Circle No. 100 on product information card

Adaptable vinyl for outdoor use

Buttermold, a sturdy upholstery vinyl from Ford Fabrics, is soil and moisture resistant and adaptable for outdoor use. The Buttermold pattern, suggested by Early American kitchen utensils, is available in a wide range of colors and features easy cleanability. The vinyl is here shown on wrought iron patio units by Molla.

Circle No. 101 on product information card

Oriental influence in Woodard's casual series

Pacific, Lee L. Woodard's newest group of wrought iron furniture, fits perfectly into the growing interest in wrought iron. Drawing on the graceful lines of the Torii (gate arch) of Japanese Shinto shrines for its motif, Pacific combines ruggedness with esthetics—each piece receives seven separate finishes to withstand the rigors of salty air. Rocker-like seats and cane wrappings are constructed of weather and wear resistant plastic, fully rust proof frames, and tempered glass is standard on all glass top tables (replaced n/c if broken). Low arm chairs are related in height to the continental and standard heights of the dining tables with love seats, coffee table, nesting tables and a spring base chair ottoman also included in the Pacific collection.

Circle No. 102 on product information card

Popular Scroll lines feature Fiberglas tops

Fiberglas table tops are now available in the popular Weathervane and Floridiana lines of Scroll's aluminum furniture. The optional fiberglas tops are offered in white, turquoise, and tangerine. Long lasting and weather-resistant, the tops have an attractive, easy-cleaning rippled surface. Though basically unchanged for '65, new colors have been added to the Scroll lines.

Circle No. 103 on product information card
The appointments of the Hotel Astor Ballroom in New York City are indeed majestic. And the carpeting in these regal surroundings—built—and must—be no less. Hardwick ... the carpet magnificent, recommended and installed by Budd Looms, of New York City.

Beauty? You can see it in the lovely mottled leaf pattern signed on a rich gold background and overlaid with black. Quality? Though you can’t see it, it’s there. It’s backed up by Hardwick’s more than a century of carpet-making craftsmanship.

It’s the kind of craftsmanship that guarantees whether your needs call for special design or standard contract quality, you’ll fill those needs better at Hardwick.

And being a compact mill, Hardwick offers you the flexibility to give you exactly what you need exactly when you need it. Compactness ... means Hardwick offers you a better edge on price, too.

FREE! Hardwick’s new “Carpet Selector” . . . In Hardwick’s “Selector” are ACTUAL CARPET SWATCHES showing today’s newest and most popular contract qualities to help you demonstrate carpeting dramatically, professionally and effectively.

HARDWICK & MAGEE CO.
Lehigh Ave. at 7th St., Phila., Pa. 19133

Gentlemen: Please send me, without charge or obligation, your new “Carpet Selector” ... the contract carpet guide prepared as a Hardwick professional service.

Name: ________________________________
Firm Name: ___________________________
Address: ______________________________
City: __________________ Zone: __ State: __ C

Circle No. 35 on product information card

ARCH 1965
Cabana Star has unusual new features

For all-around patio use, O. Ames Co. introduced the Cabana Star collection of casual furniture. Unusual features of the collection are the swivel chairs which can be adjusted to desired heights for comfortable dining or lounging, and special Conver-A-Arm that converts the chairs into captain chairs. The new line of resilient vinyl cord stretched over zinc-coated frames has wallsaver legs and self-leveling feet, all carrying a five-year guarantee. Four models of chairs and a variety of umbrellas and dining tables in various sizes comprise the group. Tables have ripple-mist tempered glass tops and umbrellas in matching or complementary colors are optional items. Color range with four cord colors on bronze and two on black frames are stocked with 14 other combinations on special order.

Circle No. 104 on product information card

Troy Sunshade introduces da Vinci lines

The cast aluminum and aluminum clad wrought iron line, da Vinci, is now being distributed exclusively by the Troy Sunshade Co. to the national market. The da Vinci line presently consists of five design collections, in a complete range of pieces, including side and arm chairs, tables, lounges, settees, serving cart and barstools. Pompeii, shown, is executed in aluminum clad steel for durability and weather resistance with a primarily contemporary motif.

Circle No. 105 on product information card

Mallin's cafe sets

Cafe sets in the popular Mardi Gras series from Mallin Co. feature five chair styles and five frame finishes, in a wide variety of fabrics and plush upholstery. The tables, with pedestal bases, can be specified in 30 or 42 inch diameter. Newest addition to the Casual Aire collection from Mallin is the glider in 6 frame and 8 cording colors. The glide with ball bearing glides, is all unwelded construction of zinc-plated tubular steel.

Circle No. 106 on product information card

Sunrest in wide color range from Samsonite

A colorful new addition to Samsonite's collection of outdoor furniture is Sunrest with bright extruded plastic slats, in a contoured hammock-like construction. The hollow slats keep cool with greater circulation in a choice of four alternately colored designs: orange/yellow, blue/green, light olive/yellow, and two-tone greens. The Bonderized frame and legs, of square tubular steel, are in white olive.

Circle No. 107 on product information card
PRODUCTS & SERVICES CONTINUED

Durable all-aluminum umbrella

A popular aluminum umbrella from Crown Deco-
tive features reinforced ribs and tubular rim,
ten baked-enamel colors and combinations. The

umbrella has a simple tilting and locking device for
positioning. Shipped completely assembled,
imizing installation time, the umbrella arrives
plete with a sleeve for installing into concrete.

Circle No. 108 on product information card

Line features stainless steel frames

Awest casual furniture line from Wall Tube &
Products Co. features stainless steel frames
features a ten-year guarantee underlining its
bility and corrosion resistant qualities. Con-
ected of 18-8 nickel stainless steel (18% one and 8% nickel), the surface will not
atch, pit, whiten or warp, nor will it roughen
lext dirt. Safety-styled legs have self-level-
feet for sturdiness and the vinyl cord wrap
ferred in aqua, coral, seagreen, and yellow.

New SurfLine group includes an arm chair,
sional chair, rocker lounge, ottoman, round
table, and square end table.

Circle No. 109 on product information card

NORQUIST PRODUCTS INC.
JAMESTOWN, NEW YORK  Dept. CC  SINCE 1881

Circle No. 36 on product information card
Newest casual collection from Meadowcraft

Dogwood, the newest group from Meadowcraft, a division of Birmingham Ornamental Iron Co., features leafy blossoms and graceful branches of wrought iron in an antique finish. The Meadowcraft collections include tables with tempered glass tops, chairs, loveseats, sofas, sectionals, chaises, and carts, with sturdy construction adaptable for contract work. All pieces carry a 10-year guarantee.

Circle No. 110 on product information card

Tropitone chair designed for soft lawns

Tropitone's new line of chairs is especially designed for soft surfaces such as lawns and gardens, and use on boats and around swimming pools. The diagonal, close spaced lacing dries quickly after a rain and is available in more than 150 color combinations. The new diagonal lacing is also a feature of Tropitone's 600 series of chairs. The vinyl lacing affords comfort with durability; it is sun proof, non-porous and completely washable. Frames are finished baked acrylic enamel, rendering them rust weather proof.

Circle No. 111 on product information card

B. BRODY SEATING COMPANY

5921 W. Dickens, Chicago, Illinois 60639
Telephone . . . Area Code 312 889-9000

Foam filled, channel tufted seat and back. Square tube frame in mirror chrome, satin chrome, painted finishes. Mirror chrome finish, in Grade 3 fabric, 24-99 quantity—No. 461 Arm Chair, $90.75 list. No. 460 Side Chair, $65.13 list.

Circle No. 37 on product information card
ammock comfort with nylon netting

The new Breeze collection from Hampden Corp., combines aluminum frames with nylon mesh netting in seat and back for hammock-like comfort. The resilient netting, securely fastened to the frame with steel clips, can be removed for replacement or easy laundering. Colors are lavender and turquoise; 4 pieces fold compactly.

Circle No. 112 on product information card

Brown-Jordan's classic aluminum furniture

Newly introduced at the January Market is Atrium, classically inspired line of aluminum furniture from Brown-Jordan. A feature of the new line is J's unique method of gripping the vinyl seat lacing with an aluminum extrusion, set within a channelled frame on all four sides. Atrium may be used in complete exposure to weather, needing very little care. The collection includes dining tables, side and arm chairs, an occasional chair, a bar-side table with a cast aluminum second shelf and a commodious day-bed sofa. Colorful seat cushions and bolster cushions complement the line. Lime green, brilliant spring green, joins BJ's 20 baked enamelishes of bright accent colors, monotypes and spots. Marine blue and a sparkling red are the rest of the 13 popular lacing colors.

Circle No. 113 on product information card
Dining Group from Arlington

The new five piece dining group by Arlington Home Furnishings carries a 12 year guarantee against rust and corrosion. The table is available in either 42 or 48 inch diameter and in any one of 9 frame finishes, with the choice of tempered or untempered glass. A range of 49 fabrics is the choice for upholstery.


INHERENTLY FIRE-RESISTANT!

The yarns of our exclusive textured casements are woven of Rovana and/or Verel blended with linen and/or rayon. There are 12 distinctive weaves, all 48/50", in white and linen tones. Series 122270-122380.

Samples and prices on request.

Contract Division

FABRICS, INC.

155 E. 56th ST., NEW YORK, N. Y. 10022
Tel. 212 Plaza 1-0200
American of Martinsville's highly popular contract group, Diana II, is executed in walnut with a durable matte lacquer finish that has the luxury look of oiled walnut. The multi-purpose triplex wall unit is light in scale, and combines the functions of desk, drawer space and luggage rack in one compact unit. Cane graces the curved back of the desk chair, sides of the arm chair, with decorative touches on the desk and luggage rack.

Circle No. 115 on product information card

Mosaic influence in light panels

Lighting panels of Acrylite acrylic plastic, a product of American Cyanamid Co.'s Building Products Div., are applied with colorful chip sizes of Acrylite. The chips, in various sizes, are cemented one another and to the smooth white translucent lighting pan with a viscous-type cement. Translucent Canterbury, recalling the rich tones of stained glass, is one of many decorative patterns.

Circle No. 116 on product information card
New showings at The Sculpture Studio

Hivaro is from a collection of wall sculptures created by William Bowie and available at The Sculpture Studio, Inc. Approximately 39 inches high by 29 inches wide and 6 inches deep, the sculpture of steel with a gold and silver leaf finish, is one of many new pieces currently on display at The Sculpture Studio.

Circle No. 117 on product information card

Multi-use collection from Greeff

Livingstone, the pattern illustrated, is one of varied designs in the Texture Prints collection from Greeff Fabrics. Screen printed on a nubby texture of cotton, rayon and a small percentage of silk, Livingstone along with its sister prints, is adaptable to many uses. The 54-inch material is sturdy enough for upholstery, yet suitable for draperies, slipcovers and bedspreads, as well. Each design comes in four or five colorways on sub color related backgrounds. A special finish renders the new prints stain/crease resistant and water repellent.

Circle No. 118 on product information card

Circle No. 43 on product information card
mons' new guest room furniture

Inspired by traditional designs of the Far East, the Ima group from Simmons Contract Div. includes a complete selection of furniture for hotel-motel rooms. The drawer fronts, headboard, and chest simulate rare teakwood and are finished in a multi-step process that affords great durability.

Tekko

One of the Most Unique Wall Coverings of the Decade

We found it in Switzerland, where its originator, Salubra SA, holds a world-wide reputation for excellence in wallcoverings. Tekko is a wear-ever paper for both the contract and residential markets. Beautifully embossed, it's guaranteed fade-free and scrubbable for five years. Tekko is available exclusively in the United States and Canada through George K. Birge Co., Inc. in a wide variety of patterns and colorings.

Stocks and sample books are available.

George K. Birge Co., Inc., 120 East 56th Street, New York.

Circle No. 119 on product information card

Chair has Far East influence

Lightly scaled with a Far East influence, the new-stack chair from Tri-Par Mfg. Co. features a tapered, back with a cushioned inset upholstered to match the chair seat. The frame of heavy-gage tubular steel with a durable Parminized finish resisting scratches, peeling or bubbling, is built to withstand plenty of hard use. A number of finishes are available, including Sparkling Satin and Satin Gold. Upholstery covers the seats of Tri-Par's vast selection of fine fabrics and leathers. The chairs also include self-adjusting, cushioned and rubber cushions built into the legs to guard the finish when stacked.

Circle No. 41 on product information card

Circle No. 120 on product information card
Newest sand urns enhance waiting rooms

Sand urns created to combine good design and functional utility are newest offerings from Architectural Pottery. The free-standing or wall mounted receptacles to be used with seating groups are ideally suited to waiting rooms and insure the proper disposal of cigarettes or cigars. Each design is available in a choice of eight glaze colors.
Office tables by Stylex

A new steel office table in the low-priced CP Series is being introduced by Stylex Seating Co. The new table features standard plastic laminate tops in hued walnut, rosewood, or teak, white, gray, or tan scrim. Special plastic laminate patterns are also available at slight extra cost. The model has chrome steel legs with self-leveling glides and is designed to coordinate with other pieces in the new CP series. Three sizes are available: two with flush tops from 45 by 20 inches to 60 by 30 inches, and a larger model with a top measurement of 72 by 36 inches, 6 inch overhangs sides 3 inch overhang back and front.

Circle No. 123 on product information card

ollections in Leathercraft

Hich Leathercraft Co. are specialists in the bookbinding, album repairing, and restoring of leather screens and tooled leather table tops. Among its many services are inlay work and gold tooling, restoring of old manuscripts and repairs on fine books. Experiments in leather dyeing chemistry have enabled the company to offer soft bookbinding leathers in any color and any quantity. Froelich also excels in wall-coverings in leather and produces desk sets and accessories. A specialty at Froelich are dummy bookbacks and custom designed items. The company offers expert advice on any bookbinding problems.

Circle No. 125 on product information card

Moldable felt has wide range of properties

A "moldable" felt which can be formed into a wide variety of shapes, and with physical properties tailored to industrial applications, is a new development from the Felters Co. Produced from wool or synthetic fibers, or a mixture of both, the material with thermoplastic or thermosetting properties, can be formulated to yield qualities of toughness, tensile strength, resiliency, selective chemical inertness, and freedom from corrosion. The new product is expected to be of special interest to design engineers and its static applications include gaskets, spacers, filters and insulators (thermal acoustical, electrical) as well as sound barriers and enclosures. The unusual moldability of the felt is shown in a brochure which illustrates sample parts produced by the Felters Co.

Circle No. 124 on product information card

It's A natural!

NORCOLD COMPACT COMPRRESSOR REFRIGERATORS

FASTEST ICE CUBE MAKER PROVEN SERVICE-FREE PATENTED COMPRESSOR 5 POSITION THERMOSTAT 5 YEAR WARRANTY LOWEST COST INVESTMENT FROM $59.95

If you investigate before you invest your choice will be Norcold. The reasons are obvious! Smallest in size. Biggest in capacity. Quietest in operation. Greatest efficiency. Smartest in design. Lowest in cost.

Circle No. 48 on product information card
EMINENCE IN WOOD
A continuous effort by Stem to maintain bold inventories of hardwood lumber and sliced wood ranging from domestic Ash to exotic Zebrwood assure you a reliable source for over 100 species.

CHESTER B. STEM, INC.
1600 GRANT LINE ROAD • NEW ALBANY, INDIANA, U.S.A.

A DAY IS ALL YOU PAY!
Incredible as it may seem—for as little as 43¢ a day you can lease a complete room of furnishings. No job too large or too small. Inquiries promptly answered.

Rooms designed exclusively for WHOLESALE LEASING Corp. by MARILYNN MOTTO, internationally known design consultant.

PRODUCTS & SERVICES
CONTIN'

GEOMETRIC SCULPTURED WALLS
Design #8, a three dimensional concrete model is the latest addition to the collection of sculptural pierced walls from Arts for Architecture. Designed by prize-winning sculptor Ervin Hathaway, this completely geometric block (8 by 8 by 4 inch) affords particular ease of installation in both interior and exterior use. This newest member of the Arts for Architecture collection upholds the theme of the arresting repetition of sculptural form, a constant interplay of light and shadow. Each unit weighs 7 lbs. and is available in warm brown and off-white.

Circle No. 126 on product information card

Metlon's metallic threads
Metlon's gold serrated staple adds a metallic sparkle to Charles Bloom's antique satin drapery fabrics. Two patterns, Sovereign, in baroque style and Coronado, a floral, are printed on a background of plain satin with the same metallic thread. The plain, called Klondike, is also available in Charles Bloom's collection.

Circle No. 127 on product information card

CARPETs by GULISTAN
BEDDING by SEALY
DRAPES AND BEDSPREADS by COHAMA FABRICS
RUG CUSHION by ALLEN Industries
PLASTIC LAMINATES by PARKWOOD Laminates

R.T.A. Bldg., 991 Broadway, Albany, N. Y. 12204
(Area Code 518) HObart 5-7346

WHOLESALE LEASING CORPORATION
LEASING EQUIPMENT EXPERTS
Circle No. 50 on product information card

Circle No. 49 on product information card
Now available with color strapping, too — solid or with white —
Hispana is more popular than ever
for porch, patio, poolside...
the unquestioned leader in truly
fine furniture for casual
indoor/outdoor use. Also a favorite
for contract installations...
write for new Catalogue Five today!

SHOWROOMS:
NEW YORK, D&D Bldg. 979 Third Ave.
CHICAGO, Merchandise Mart. Also in
Cincinnati, Cleveland, Dallas, Denver,
Grand Rapids, Indianapolis, Los Angeles,
Miami, Nashville, Philadelphia,
Pittsburgh, St. Petersburg, Syracuse,
Tampa, Washington, D.C.

SCROLL, INC.
800 N.W. 166th St., Miami, Fla. 33164
A Subsidiary of Keller Industries, Inc., Miami
We'd rather talk about its Classical Beauty... but some practical souls would rather hear about the 10 Year Warranty on SurfLine®

The matchless gleam and durability of NICKEL STAINLESS STEEL make SurfLine America's top quality line of casual furniture. Stainless steel won't chip or peel... corrosion resistant even in salt-air... easy to clean. Cuts your maintenance and replacement costs. Genuine vinyl cord wrap in four colors. Full 10-year warranty against defects in materials and workmanship.

Write today for Free Color Brochure
Dept. C-365
Wall Tube and Metal Products Co.
NEWPORT, TENNESSEE

Table bases for contract
Chairmasters, Inc., enters the field of table bases for contract use with its new line. Styles of high quality bases are traditional or contemporary available in black porcelain or black enamel, finished in a wide selection of colors. Chairmaster's table base, shown, is an all wood model available in solid oak or ash; other bases combine metal and wood.

Circle No. 128 on product information card

SOLVED: THE UPS & DOWNS OF EXPANDED WINDOW BLINDS
No matter how many they'll all level lock with hairline precision when installed with Webb's new window mechanism. What's more, blinds operate by just finger-tip pressure! Installed at Interstate Hosts in all satellite buildings at Los Angeles International Airport... now available to designers and architects everywhere... write to Webb Planning Department regarding your requirements.

Circle No. 54 on product information card
Duo-Bed unveils broad contract lines

Three groupings of guest room furniture designed to complement its broad contract line of dual-purpose bed-sofa units were presented by Duo-Bed Corp. Featuring Spanish, Mediterranean and Danish styling, furnishings include solid walnut-framed cane detailing on the Scan grouping, shown, ebony accents with antique bronze pulls on the Monaco group and a distressed golden walnut finish for the Hacienda line. The surface sheen on both the Scan and Monaco groupings is a special oil-lacquer finish. Engineered for contract use, all desk-chest cases have a series of attaching luggage benches, with or without drawers, and a special TV/luggage unit can be added to any piece for versatility.

Circle No. 130 on product information card

Contract Seating for America’s Finest Restaurants, Clubs, Offices and Homes

Information and literature upon request.

1123 NORTH McCADEN PLACE, LOS ANGELES 36, CALIFORNIA

Circle No. 56 on product information card
**Comfort stressed in office chairs**

People-planned comfort and contemporary styling characterize the new line of office chairs from Globe-Wernicke Co. Waterfall front cushion, torsion bar mechanism and low profile base with hooded casters give a clean uncluttered appearance to the line designed to complement contemporary office furnishings. Frames are heavy gauge tubular steel and arms are of oil-finished solid walnut.

Circle No. 131 on product information card

**Occasional tables complement Mitre series**

A complete line of occasional tables complementing Leopold's new Mitre Group of executive furniture include magazine, end, and corner tables. The tables, made of specially selected, American walnut veneer, maintain the unique Mitre construction of the original collection.

Circle No. 132 on product information card

**Solid Walnut Stacking Group**

A new folding table and stacking chair line from the John D. Williams Co. is constructed of solid walnut frames with a choice of top materials. The solid walnut chairs are standard with vinyl upholstery. The tables and chairs are available in a variety of sizes.

Circle No. 133 on product information card
Specifications Can Identify

*Only* Proven Use Assures Performance

DURALOOM CARPET MILLS, INC.
Lehighton, Pennsylvania
"Silent-Cor," a new sound-deadening construct, is the subject of a booklet from Monsanto Co. The illustrated booklet describes in detail methods and properties for using the polystyrene foapaper laminate, with high acoustical values, in ceiling, and floor applications.

Circle No. 134 on product information card

Kleigl Bros., who executed the exterior light of the Pan Am Bldg. in New York City, present a brochure on its theatrical lighting series. Whether the lighting elements are used theatrically generally for developing dramatic lighting effects in other areas, Kleigl informs designers on long life, high intensity, quartz lamps.

Circle No. 135 on product information card

For the floor covering industry, Roberts Consolidated offers a new brochure on its binder bars metal moldings for use in carpet installations. A wide variety of new colors and finishes, the N Lok products add a decorative element to finishing the area where carpeting meets a floor surface.

Circle No. 136 on product information card

the best-dressed windows in town are wearing our draperies

Bragging? Not really. It takes a lot of work and talent to become No. 1 in this field. And to stay in that spot. Of course, our prompt service and reasonable prices help, too. All are why we were chosen to do more than 18 World's Fair Pavilions. And you can be sure we'll appreciate giving yours just as much care ... and beauty. Call C'Helsea 2-2607.

GENERAL DRAPERY SERVICE
135 West 17th Street • New York, N.Y. 10011
Phone 212-242-2607

Circle No. 62 on product information card
the Acoustical Div. of Elof Hansson, Inc., releases a new '65 catalog on acoustical products. The 48-page pamphlet contains a comprehensive listing of acoustical ceiling systems and integrated acoustical, ventilating, and translucent construction materials. Products in the electro-acoustical fields, such as masking generators and similar items, are mentioned in detail.

Circle No. 137 on product information card

A comprehensive story of suspended ceilings is available in a new catalog from General Ceilings Corp. The 9-page booklet graphically illustrates the various types of luminous and acoustical suspended ceilings. Several new and unusual fluorescent fixtures designed to achieve minimum ceiling drops are included with price lists and planning diagrams.

Circle No. 138 on product information card

Alumi Div. of Aluminum Extrusions, Inc. has issued a new brochure, "Shelves," which describes the firm's complete line of components for shelving applications ranging from a single bookshelf to a large library. The low-cost Octagon poles which require fasteners to install and Omni's new wall rails wall mounted shelf systems are illustrated in the folder.

Circle No. 139 on product information card

We love tough buyers
When they insist on getting the toughest, most durable and best styled industrial, institutional and commercial furniture they end up buying Fibermold. Why don't you take this short cut to complete satisfaction? Write, wire or phone:

FIBERMOLD CORPORATION
2221 ABALONE AVE. • TORRANCE, CALIFORNIA • (213) 775-6288
An Affiliate of Borg-Warner

We love tough buyers
When they insist on getting the toughest, most durable and best styled industrial, institutional and commercial furniture they end up buying Fibermold. Why don't you take this short cut to complete satisfaction? Write, wire or phone:

FIBERMOLD CORPORATION
2221 ABALONE AVE. • TORRANCE, CALIFORNIA • (213) 775-6288
An Affiliate of Borg-Warner

A new stacking, ganging chair collection with infinite design versatility, to fit infinite seating needs. Designed by Herbert C. Saiger, A.I.D., I.D.S. Catalog on request.

The Troy Sunshade Company. Division of The Hobart Manufacturing Co. Troy, Ohio
Show Rooms: One Park Ave., N.Y./Merchandise Mart, Chicago/612 Grant St., Troy Ohio
9100 7th Ave N.W Miami/Dallas Trade Mart, Dallas, Texas

Circle No. 64 on product information card

Circle No. 65 on product information card
MANUFACTURERS' LITERATURE

Designs by Eero Saarinen Associates, Gibbs & C (naval architects), the contract division of W. & Sloane, and other distinguished design sources are featured in a new catalog issued by Somerset Cran men, Ltd. Among the custom-designed items shown in the catalog are lobby seating, sofas, desks, tab chairs and modular cabinetry, many of them signed originally for use in public buildings, aboard ships and in airline terminals. Somerset offers them as design ideas for lobbies, hotels, office building schools and other contract situations in a catalog of 72 pages that include more than 100 sketches.

Circle No. 140 on product information card

Colonial furniture stylings for restaurants, ho motel and other contract work are the subject of a new brochure from Roxton Mill & Chair. T Canadian firm has printed the catalog with French and English explanations, with a complete show of its varied Colonial furniture designs.

Circle No. 141 on product information card

The new catalog from Costa Mesa Furniture illustrates the firm's new Philadelphian line of office furniture. Philadelphian is a series of wood office furniture with an unusual and elegant routed on tops, pedestals and drawer fronts.

Circle No. 142 on product information card

Marnay Inc., presents its diverse product line office furnishings in a group of related brochures. Signore, a budget priced steel furniture line, many colors and varied Formica tops, corresponds its line of office chairs. Marnay's aluminum of partition series is also described in color finishes of laminated plastic, metal or fabric.

Circle No. 143 on product information card

Lamp stylings from Norman Perry are presented in a folder with individual slip-in sheets. Lamp designs are beautifully executed in the inspired by classic motifs from the important sign eras. Dimensions, contract prices, and maerials used accompany the illustrations.

Circle No. 144 on product information card

The attractive line of Signet Mirrors from Carolina Mirror Corp., is described in its new catalog. More than 100 models, ranging from American and European period to contemporary and utilitarian stylings are shown with dimensions, weights and prices.

Circle No. 145 on product information card
FUNCTIONAL BEAUTY IN LIBRARY FURNITURE BY

Adelphi University Library
Garden City, N.Y.
Special 4603 chairs, reading and carrell tables

The classic “S” chair by Thonet enhances the dignity and functional beauty of this library. Its simple form and resilient comfort make it an excellent choice and it blends well with Thonet’s apronless metal leg table.

Thonet’s comprehensive line of library furniture includes a selection of chairs, reading, index, study and carrell tables. See them at Thonet Showrooms in: New York, Chicago, Detroit, Los Angeles, San Francisco, Dallas, Miami, Atlanta, Statesville, N. C.

THONET INDUSTRIES, INC.
One Park Avenue, New York, N. Y. 10016
Telephone: (212) MU 3-1230

THE COMPLETE WALLCOVERING SOURCE

HANDPRINTED AND GRAVURE PRINTED DESIGNS, TEXTURES AND MURALS. CUSTOM SERVICE ON VINYL, FOIL, GRASSCLOTH AND WALLPAPER. ARCHITECTURAL SCREEN WALLS AND ARCHITECTURAL STONE FACINGS.

JAMES SEEMAN STUDIOS, INC.
MURALS & WALLCOVERINGS, INC.
ARTS FOR ARCHITECTURE, INC.

FACTORY AND MAIN OFFICES:
50 ROSE PLATE, GARDEN CITY PARK, N.Y. 11041, NEW HYDE PARK P.O.

NEW YORK SHOWROOM:
30 E. 42nd ST., 926 3RD AVE.
NEW YORK, N.Y. 10022

CHICAGO SHOWROOM:
425 S. WABASH AVE.
CHICAGO, ILLINOIS 60604

LOS ANGELES SHOWROOM:
327 SOUTH BROADWAY
LOS ANGELES, CALIFORNIA 90012

SAN FRANCISCO SHOWROOM:
326 PIONEER AVENUE
SAN FRANCISCO, CALIFORNIA 94113

RCH 1965
**MANUFACTURERS' LITERATURE**

An unusual service for contract and industrial designers is described in Howard Ketcham, Inc's new brochure. "What the right color can do for you explains the firm's approach to the psychology of color theory and offers its services as color, design, and illumination specialists.

Circle No. 146 on product information card

Pioneer Plastics Corp. offers an all new, eigth page brochure, in full color, on its Pionite Lifetime Laminates. New factual material on Pion high pressure plastic laminates, grades, finish, sizes and properties updates the '64 catalog and becomes a handy reference for designers.

Circle No. 147 on product information card

American Olean shows its wares colorfully in a new 35-page catalog. Ceramic tiles in every conceivable shape, size and color along with bathroo accessories, its architectural design service for the preparation of murals, and a budget-priced glazed ceramic facing tile, Contours CV, are technics and tastefully presented.

Circle No. 148 on product information card

**FOLDING TABLES**

Rectangular—square—trapezoidal—circular—half-round folding tables for banquets, meetings, classrooms, offices or homes, are built by Metwood/Hanover. Handsome in appearance, superior in construction, and economical to use, M/H Folding Tables are easy to store, quick to setup and lock automatically, providing a table as rigid as a regular table.

Write for catalog

Circle No. 72 on product information card

15 EAST 32nd ST. N.Y.C. • OR 9-2565

Circle No. 73 on product information card
The '65 catalog of CI Designs illustrates the firm's elegant office and institutional furniture lines with a unique combination of standard product photographs and actual installations photos. The firm's beautifully Scandinavian-designed sofas, chairs, groupings, tables and storage cabinets are naturals for today's progressive architecture.

Circle No. 149 on product information card

Present its new concept in packaged business interiors, Rex Craft, designing, contracting, furnishing firm, has issued a brochure that discusses services for such diverse operations as shops, res, and chains; restaurants; banks and offices; institutional kitchens; theaters; cocktail lounges; country clubs. Full-color photographs of recent projects cross-section its complete interiority.

Circle No. 150 on product information card

Luxury, full-grain genuine leather tiles, manufactured by L. Farber Co., are equally applicable to walls and floors. Meeting federal specifications, the tiles are made from extremely tough Farberized leather, is dimensionally stable, and resists chemicals and moisture. Farber's informative brochure gives general and architectural specifications. Tiles range from 4½ inches square, up to 4 by 12 inches, permitting flexibility in design patterns.

Circle No. 151 on product information card

Enjoy the softness and resilience of warm-toned leathers. Here is charm that is a delight for daily office living. Select desk pieces from the DUK-IT 3500 line. You can specify waste baskets, floor stands and planters to match.

Write for Catalog.

Circle No. 74 on product information card

This is only one of 200 styles featured in our catalog. Write for your copy.

Circle No. 75 on product information card

LEATHER for the DESK

Write for Catalog.

Circle No. 76 on product information card
ADDENDA

A number of inaccuracies and omissions occurred in our January Directory Issue and we wish to make amends by publishing the following Addenda regarding firm names, showrooms, and classified product listings. We suggest that readers who plan to use these firms as sources add this page as a supplement to their copies of the January Directory.

Charles Bloom Inc., is located at 15 East 26th Street, New York, N. Y.

Crown Wallpaper Co., has opened new showrooms for its wallcovering line at 979 Third Ave., New York City, in the Decoration & Design Bldg.

The correct phone number for Design-Technics, 7 E. 53rd St., New York City, is EL 5-3183.


Future listings of the Robey Div. will be found under the name of Drexel Enterprises, Drexel, N. J.

Showrooms for Ben Rose, manufacturer of fabrics, are located in Chicago at the Merchandise Mart and in New York City at the Decoration & Design Bldg., 979 Third Avenue.

Stark Carpet Co., at its new location, 979 Third Ave., New York, N. Y. now supplies carpets, rugs and resilient flooring to the trade.

A slight inaccuracy occurred in the spelling of Tiberbone Decorative Co., Inc., manufacturers of wallcoverings.

Vinyl-Tex Co., is located at 165 Ward Street, Paterson, N. J.

World Wide Marble Importers, Ltd., serves the trade in marble aggregates, onyx, custom ceramic tiles, mosaics and sculpture from its showroom at 5 Third Ave., New York City, in the Decoration Design Bldg.
KNIGHT custom metal letters... speak with distinction.

WHEN YOU CREATE distinctive custom letters and numbers for our clients' buildings and offices... have them cast in solid three-dimensional metal by Knight. Every detail of your original design will be faithfully reproduced by Knight's master craftsmen in the size, style and finish to meet your requirements perfectly. YOU CAN ALSO CHOOSE from a wide variety of designs currently available, to match any architectural style, any decorating plan. Keep a copy of our latest Knight Catalog in your files. Write for it today.

THE HITCHCOCK CHAIR COMPANY

RIVERTON (HITCHCOCK'S-VILLE) CONNECTICUT

CONTRACT DIVISION

Circle No. 79 on product information card
Many LONDON LAMPS are CONTEMPORARY.
Some LONDON LAMPS have that popular SPANISH FEELING
FEATURING, RICH, WARM TEXTURES AND COLORS:
MEDIEVANE RED
BLACK OLIVE
DEEP AQUA
DARK TANGERINE
RIPE AVOCADO

WRITE FOR THE FULLY ILLUSTRATED 1965 CATALOG

LONDON LAMPS
10711 VENICE BLVD.
LOS ANGELES 34, CALIFORNIA

SHOW ROOMS:
ATLANTA
CHICAGO
DALLAS
LOS ANGELES
SAN FRANCISCO
SEATTLE
Stop.
Read.
Fill out coupon. Mail.

That way we'll know where to send you literature on Hooker Contract Furniture. Contains information on 5 different groups — Architectural Modern, Italian, Classic, Contemporary and Oriental. Manufactured with quality and style at Hooker's very excellent price.

Mail to: Mr. J. W. Roberts, Sales Manager
Contract Division
Hooker Furniture Corporation
Martinsville, Virginia
Please send me your Contract Furniture literature.

NAME
TITLE
FIRM
ADDRESS
CITY
STATE

This is classic Upper Story.

This is Fontano, the Italian look.

HOOker
For 40 years a trend-leader in preferred furniture

Circle No. 92 on product information card
new word for versatili... in fabric finishing...

SYNBA® - Provides a broad area of "end use" potential. Every Synbac modification gives your fabric these welcome properties: improved ravel-resistance, improved seam strength, better "hand", improved curl resistance, easier cutting because of improved weave stability, increased abrasion resistance, and prevention of yarn slippage. All these without change in texture or color. Odorless.

SYNBA® FABRIC BACKINGS PROVIDE A MULTIPLICITY OF USES FOR ALMOST ANY FABRIC

<table>
<thead>
<tr>
<th>Specification</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPRAY BACKINGS</td>
<td></td>
</tr>
<tr>
<td>SYNBA® BA®</td>
<td>A general purpose backing especially suitable for matelasses, brocatelles, and other fabric with irregular surfaces.</td>
</tr>
<tr>
<td>SYNBA® CBA®</td>
<td>Same as above without framing to provide maximum relaxation.</td>
</tr>
<tr>
<td>SYNBA® SA®</td>
<td>For fabrics containing temperature sensitive fibers. Excellent for canes and speaker grill cloth</td>
</tr>
<tr>
<td>ROLLER BACKINGS</td>
<td></td>
</tr>
<tr>
<td>SYNBA® RGW</td>
<td>A backing designed for fabrics containing bulky, textured yarns. Provides excellent binding qualities and dimensional stability.</td>
</tr>
<tr>
<td>SYNBA® RR</td>
<td>Developed for specialty fabrics such as shoe linings, shade cloth and handbags.</td>
</tr>
<tr>
<td>SYNBA® RA</td>
<td>For luggage, handbags and automotive seat covers.</td>
</tr>
<tr>
<td>K N I F E B A C K I N G S</td>
<td></td>
</tr>
<tr>
<td>SYNBA® KA®</td>
<td>Designed for automotive body cloth, institutional fabrics and other fabrics requiring maximum binding properties.</td>
</tr>
<tr>
<td>SYNBA® FA</td>
<td>A unique backing for furniture upholstery, providing good binding power with a soft hand.</td>
</tr>
<tr>
<td>SYNBA® FR**</td>
<td>Effective on fabrics with open constructions requiring a higher degree of opacity.</td>
</tr>
<tr>
<td>SYNBA® KN</td>
<td>A special upholstery backing with flame extinguishing properties to satisfy FAA Aircraft Specifications.</td>
</tr>
<tr>
<td>SYNBA® WP</td>
<td>A new backing that makes a wide variety of fabrics usable as wall coverings.</td>
</tr>
<tr>
<td>ROTO PRINT BACKING</td>
<td></td>
</tr>
<tr>
<td>SYNBA® TK</td>
<td>A backing developed for fine, delicate fabrics such as silks, satins, shantungs and other hard handle constructions.</td>
</tr>
</tbody>
</table>

All of the above may be combined with other finishes such as Scotchgard® for other desired effects.

YOU CAN RELY ON AMERICA'S OLDEST AND MOST EXPERIENCED CUSTOM FINISHING SERVICE

MAIL COUPON FOR FREE FILE CATALOG

FOR YOUR FILES!

SYNTHETIC FINISHING CORP.
462-70 N. 8th St., Philadelphia 23, Pa. • MArket 7-8282
Registered T.M. of Synthetics Finishing Corp.