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Ornament, judiciously applied, will enhance the beauty of furniture, but no amount of ornament can effectually conceal the ill proportions of an unfortunate design.

Color applied to furniture by means of enamels and stains is an effective means of obtaining individuality in the home. It has the added virtue of contributing a lighthearted, informal atmosphere. Such an environment is especially desirable in children's rooms. By means of color, especially in furniture, we are getting still farther away from the sepulchral chill of our grandmother's "parlor." More than anything else, a carefully selected color scheme will aid in the furnishing of a cheerful, happy, livable room, designed to enhance the attractiveness of the entire home.

If a selection of period furniture is desired, it is well to make sure that the particular style chosen is sympathetically and correctly interpreted. There is much period furniture, so called, which is unworthy of the name. But authentic reproductions and original designs inspired by the master cabinetmakers of the past can be obtained from a few well-known manufacturers.

The design of the furniture should be compatible with the architecture of the house. Many true colonial houses with their fine interior features present a bizarre appearance when filled with furniture made from chrome-plated tubing with plastic topping or covering and excessive amounts of mirrors and glass.

Another requirement of furniture selection—comfort—is no less important than appropriateness and beauty, the other two. A piece of furniture can be neither appropriate nor beautiful, in the strict sense of the word, if it lacks in practical utility. Obviously, the first consideration should be utility. For instance, it is often possible in selecting a table to make a gate-leg serve two purposes where another design could serve but one. Common sense should dictate here very largely in the general type of furniture chosen.

Seating furniture, chairs, settees, davenports, and benches, should be suited to the physical requirements of the people for whom they are selected. Tradition designates father's chair as a large overstuffed piece and mother's chair as a small rocker. Perhaps in your individual case the very opposite would be more appropriate.

Many excellent styles and types of furniture are available today that are made from various types of material and the upholstery coverings run the gamut from genuine leather to fabrics made from coal.

Several of the present day designers have produced notable furniture and furnishings that fulfill every requirement for comfort and convenience as well as being in complete harmony with the contemporary architecture of most of the houses being built today.
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COVER PICTURE

Saint Thomas More Rectory at Durham.

Interior Photos of Harmon Work by David K. Johnson, Dover, N. H.

Exterior Photos by R. S. Harmon, Jr. Durham, N. H.

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In 1922 Russ Harmon completed his formal architectural education under the guidance of Professor Eric T. Huddleston, A. I. A., and was graduated by the University of New Hampshire from its class in Architecture. Because of thepling nation-wide railroad strike and absolute lack of architectural and construction work at this time, he spent his post graduate year as an instructor in physics, mechanical drawing and general training.

The next year he gained valuable experience as foreman and field engineer for the construction of the Queen City Bridge over the Merrimack River in Manchester, New Hampshire. Following the completion of this structure, the Amoskeag Manufacturing Company employed him as its architect where he accomplished many building modifications and signed a new wool dye house, as the new structure built by the textile company which already was beginning to feel the impact of southern competition.

Then followed almost eight years of diversified architectural and engineering work with the well known contracting firm of T. Stuart and Son Company where for many years he was construction superintendent. Just before the impact of the “depression” was felt, he was employed by the J. McCormick Company of Providence, R. I., to superintend the construction of thirty-five miles of the first cross-country gasoline pipe-line in New England. The next move for him in the construction field was employment as senior resident engineer by the highway department of the State of New Hampshire. For six years the efforts of Russ Harmon were in the supervisory engineering field either as resident engineer or construction superintendent on several of the highway department’s largest projects, including the construction of the first traffic circle, built as such, in the State of New Hampshire.

The next few years were spent with private contractors where he either engineered or superintended the successful construction of many highway and bridge projects, the enclosed ice skating rink for the Skating Club of Boston, a sizeable section of the, then new, twelve-foot-diameter Metropolitan Boston Aqueduct, a new submarine barracks and a large extension to the outside machine shop in the Portsmouth Naval Shipyard. Still gaining valuable construction experience, his responsibilities were involved in defense housing, prior to World War II at Westover Field, Mass., and at Portsmouth for the United States Government.

The advent of World War II found Naval Reserve Lieutenant R. S. Harmon in the Civil Engineer Corps where his

(Continued on Page 10)
architectural and engineering "know-how" stood him in good stead from 1942 to 1950,—both in this country and overseas. Russ directed the construction of or supervised contractors involved in the construction of: air strips, dry docks, towers, buildings, highways, bridges, pipelines, revetments, utilities, piers, quays, coffer-dams, piling and other waterfront work.

After Commander Harmon returned from the war, he operated his architectural office in Durham for a brief period only to return to active duty for over two years during the Korean conflict to carry out the contracting, construction and maintenance duties of a senior Civil Engineer Corps officer. Concurrently he was able to keep a small measure of his architectural practice alive in Durham.

Upon his return to civilian life, after the Korean conflict, Russ became supervising architect for the architectural firm of M. A. Dyer Company of Boston, on the 20 million dollar Columbia Point Housing Project. After completion of this project, he supervised the construction of a large gymnasium and school addition and preliminary design of new dormitories later constructed for Boston College.

When the opportunity presented itself for him to carry on his architectural work in the Portsmouth Naval Shipyard, Captain Harmon gravitated to it. Being a Navy man at heart, Russ is doing the work he likes, is enjoying his beautiful home in Durham and is happy in an expanding private architectural practice.

Mr. Harmon is licensed in the State of New Hampshire as a registered architect and as a professional engineer.

NEW BULLETIN ON VERMICULITE AVAILABLE

A new technical bulletin on Casprovermiculite Concrete is now available on writing to California Stucco Products, N. E., Inc., 169 Waverly Street, Cambridge, Mass.

The new bulletin contains latest technical data, typical construction details and specifications for installation.
After the parish of Saint Thomas More outgrew the classroom space assigned to it by the University of New Hampshire for its formal religious meetings, and after the new church was well established, the next logical step was the construction of a much needed rectory.

The site chosen for the new rectory as a height of land on church property above and to the east of the Catholic church. As most of Durham is either ledge rock or clay, it was initially assumed, and later found to be true, that the height of land level with the street was solid ledge. Therefore, the original location was shifted approximately six feet to eliminate blasting and to increase the quantity of fill material for proper grading. The established elevation of the first floor was not changed and the nearly level driveway to the two car garage was built as planned.

An interesting feature of the brick-veneered, square shaped, modified Georgian colonial structure is the gleaming white cross above the architrave of the colonial entrance.

After entering the front vestibule, a step or two to the right brings one into the restful waiting room with its warm oak wainscot. Then upon entering (Continued on page 12)
Father's office, one can feel that his appreciation of the aesthetic is fully exemplified in the oak-paneled walls and fine furnishings. In full complement to Father's favorite oak, the feeling of quietness and reverence is developed further by the soft brown tone of the cork tile floor and the beautiful fissured tile acoustical ceiling.

Should one go straight ahead from the front vestibule into the lower hall, the soft carpeted stairs, enhanced by the graceful coping of the flat balusters, carry our thoughts back to the days of Washington and Lafayette. A glance to the left and there is a softly illuminated niche containing an unbelievable beautiful wood carving in the image of Christ.

As we move a few steps to the left, we find a spacious living room with its oak-beamed ceiling and Father's favorite oak paneling on the fireplace wall. An ecclesiastical feeling, generated by the careful and selective placing of icons, is strongly increased as we gaze through the small paned windows upon Our Lady of Fatima in the churchyard.

The gracious square dining room and the immaculate ample kitchen provide comfort and convenience for the daily satisfaction of the physical being.

On the second floor are three suites, each comprised of a study, bedroom and tiled bath. Attic space with its four eyebrow windows is undeveloped but may prove of value in the future when and if a need arises. The knotty-pine sheathed committee room, with its separate entrance, is proving to be a valuable adjunct to the rectory which in a great many ways is now fulfilling many needs of the priest and his parish.
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Early in the development of the project, it was decided that the structure would have a "conventional modern" exterior with a modified colonial interior and that the rectangular form would be utilized to effect certain economies in construction. The beautiful countryside rolling down to the meandering Oyster River with its colonial mill site and dam with the Exeter Road in the distance provides an enchanting vista in any season of the year. In order to lose no appreciation of an ever-changing panorama, it was decided early in the development of plans to incorporate three "picture" windows in the front of the house. Therefore, real "picture" windows were provided in the living area, dining area and in the front bedroom. Although the horizontal panes of glass in the double-hung windows definitely conform to the "rambling ranch" exterior, it was felt that in no way would they detract from the interior colonial decor including the "christian" doors.

The spacious living and ample dining areas are separated only by a five-by-five divider of unique shelved design. This gives the diner the feeling of being in a separate dining room. In the living room, the effect of spaciousness and gracious living is increased by the "openness" beyond the divider.
The comfortable dining area, with its two built-in china cabinets of early American Type, is further enhanced by a very interesting mural. This excellent creation by Professor John Hatch of the University of New Hampshire is his conception of what the McIntire view would have been in colonial days. To establish an authentic basis for his painting, artist Hatch scouted the banks of the Oyster River for landmarks and other historical data. Although the country pine kitchen is Helen McIntire's pride and joy, the Judge is extremely proud of his music room with its cove lighting, cork tile floor, acoustical ceiling, open fireplace, built-in wood box and concealed record cabinets. While the several built-in speakers furnish the final word to Brad's high-fidelity sound reproduction system, his real joy knows no bounds with his new pipe organ.

The open flagstoned patio with its tinted plastic roof on its redwood egg-crate frame enhances the gracious living of the McIntires as they and their guests enjoy "the view" including the lily-padded fish pond with its itinerant bullfrog near the towering blue spruce. The scenes are no less entrancing under the mantles of winter, spring or fall. At certain times, the screened-in porch on the opposite side of the house, off the music room, provides for ideal relaxation or restful inspiration aided frequently by dulcet tones from the carillon of the University.

To return to the grounds for a moment, it seems that in bygone days of ox-power, someone erected a rugged well-capped (Continued on Page 16)
granite wall at the front property line. This wall is now beautifully complemented by the new retaining wall of weather-beaten granite supporting a very colorful rock garden adjacent to the driveway and the patio. As the McIntire property was part of an almost palatial early American estate, it boasted of many beautifully landscaped paths. Hidden in the brush and verdure were found two old granite six-step flights of stairs including granite stringers. These were dismantled, moved and incorporated in the flagstone walk from the driveway to the front entrance, which was where we started.

ANNUAL MEETING OF CHAPTER MAY 22

Andrew Isaak of Manchester has been appointed chairman of a committee in charge of arrangements for the annual meeting of New Hampshire Chapter, A.I.A., by President John D. Betley, to be held in the Manchester area on Thursday, May 22. Election of officers is to highlight the meeting.

In the April issue of New Hampshire Architect, the time and place of the meeting will be published, together with the program for the annual event.

NEW HAMPSHIRE CHAPTER DISCUSSES INCORPORATION

Plans for the incorporation of New Hampshire Chapter, A.I.A., were discussed at the February meeting of the chapter held at the Highway Hotel Concord, presided over by President John D. Betley.

The recommendations for incorporation of the chapter were brought before the meeting by the executive committee to which Norman P. Randlett of Lancaster is the chairman.

No action was taken, but President Betley stated that a decision on incorporation will be made at the May meeting.

SANYMETAL 1958 CATALOG ON TOILET COMPARTMENTS, SHOWER STALLS, HOSPITAL CUBICLES

A 28-page, 4-color catalog illustrates Sanymetal toilet compartments, shower stalls, hospital cubicles and dressing room compartments. The catalog (designated Number 95) contains a complete set of Sanymetal color samples (22 colors available), standard specifications, and descriptions of advanced construction features including the new Sanymetal "8800" concealed door latch, and Sanymetal stirrup bracket supports.

Simple diagrams give required information regarding mounting of stalls on floors, walls, etc., as well as exact dimensions of standard designs. An extensive variety of floor layouts is included. Write to Maurice Laframboise, Manchester N. H., for "Catalog 95."
ALTERATIONS TO FIRST CONGREGATIONAL CHURCH
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This 117 year old landmark of rugged timber construction rested, more or less peacefully, on its granite curbing foundation for over a century. Down through the years New England weather has caused the granite slabs to move in various directions,—some in, some out, and some down. Thus, excessive strains were induced in many of the timbers causing varying amounts of deflection which adversely affected both interior and exterior appearances. It was rapidly becoming apparent that something would have to be done to maintain the structural integrity of the church while a growing congregation felt the need for additional modern facilities.

A bequest by the late Mr. and Mrs. Frank C. Young provided an impetus toward planning for the much needed modernization and included a library to be named for the sponsors. Soon, building and fund-raising committees were formed and the project was on its way. Early consideration was given to building an addition to the rear of the church. This was abandoned, for one reason or another, and the final determination was to add to the front of the church. To change the century-old facade and come up with a new face satisfactory to all concerned proved to be quite a challenge in itself.

The final solution resulted in provision for a library, Sunday school rooms and toilet facilities on the first floor of the addition. The basement, under the new addition, coupled with a partial new basement under the church, would furnish space enough for what were considered essential additional facilities.

It was originally planned to excavate under the church for stairs, foyer, kitchen, heater room and part of the auditorium. As the excavation progressed, it was determined that the wooden beams and joists, for the most part, were in an excellent state of preservation. It was apparent that this condition resulted from adequate ventilation caused by air circulation past the ends of the granite blocks and under the wooden sills. Another aid to preservation was the lack of dampness due to percolation and drainage through the underlying sand and gravel. A low water table eliminated all doubt and hesitancy in effecting the economy of constructing the basement auditorium.

After the basement of the addition was excavated, the next step was to support the church building while excavating under it. The new wide flange steel beams, for permanent use to support the addition's floor, were ingeniously used by the Contractor to support the old edifice during the phases of excavation and of forming and pouring the new concrete foundation walls of the church. The success of these operations resulted in increasing the scope of the work to provide a full and complete dry basement under the entire old church. Thus, additional space, at a nominal cost, was made available for future use by the parishioners when needed.

Aside from the conventional uses for parish halls, the new auditorium was found entirely adequate for regular Sunday services while much needed redecoration was being accomplished in the sanc- (Continued on Page 18)
(Continued from Page 17)

uary and vestry of the church. The accompanying photograph was taken at this time.

A genuine feeling of cordial reverence is generated by the feather-edged knotty pine used on walls of the library and auditorium. Oak paneling used for the hall wainscot and for the walls of the large classroom offer a feeling of rich sturdiness and stability. When required, the large classroom can be divided into two smaller rooms by means of the two folding plastic covered doors.

Mottled beige colored plastic tile used on all the floors is a fine complement to the rich wood grained and pastel shaded walls. The use of acoustic tile ceilings and the concentric light fixtures result in excellent control of sound and illumination.

Although no use is currently planned for the attic of the addition, the installation of dormers could provide considerable usable space.

All in all, the patient appears quite happy with the result of the operation.
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A color mixing machine, operated by punch card, now is bringing automation to the paint industry. Called Colorobot, the mechanical brain, developed by the Martin-Senour Company, can prepare any of an unlimited range of colors within a few seconds.

The architect or color stylist can select any one of 7500 colors which can be custom made through the new electronic machine—COLOROBOT. The colorobot was the result of the combined efforts by the Martin-Senour Company; Morton Goldsholl, Chicago industrial designer; and Arthur G. Russell Co., Forestville, Conn., designers and builders of precision machinery.

The colorants—green, two intensities yellow, black, purple, two intensities red, and blue—are added to full quantity of standard quart, gallon, or five gallon cans. Colorobot permits color modifications with as many as three colorants to any given formula, delivering them instantaneously and simultaneously.

(Continued on Page 22)
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The range of finishes of Colorobot colors includes exterior, trim, floor, flat, semi-gloss, gloss, etc. These are made from alkyds, latex, strains, and oil bases—all this from the electronic machine.

Your editor was fortunate in being able to see the first Colorobot in New Hampshire just last week at a press showing. Plans are being made to take the Colorobot throughout New Hampshire and Vermont this spring to show to architects, painters, and others interested in color styling. Meantime, we suggest it would be time well spent to contact Clark & Stearns, Inc., Manchester, distributors of Martin-Senour products for a demonstration.

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FORMBLOC MASONRY CONSTRUCTION

BY ARNOLD A. PERRETON, A. I. A.
Architectural Consultant
for Formbloc, Inc.

continued from February Issue

ow is Formbloc better than other Masonry Wall Construction.

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The use of a Formbloc masonry shell with an insulating concrete core provides the possibility for obtaining better thermal insulation in 8" and 12" exterior masonry walls. For example, the 5"-thick monolithic core of vermiculite concrete in an 8" wall, block up all masonry joints and, when poured integrally with wood or metal door and window frames, it also stops up all joints around these openings. This stops all air infiltration through any part of the masonry wall, which formerly was a difficult condition to overcome in masonry walls laid up of conventional hollow units. Also, with the use of a vermiculite core treated integrally with waterproofing, moisture migration is resisted, and this keeps the inside of the wall dry. With this method the condensation within the wall due to high humidity within the building, and the moisture penetration due to leakage through the joints and porous facing material on the outside are eliminated. Hence, this air-repellent core eliminates the moisture inside the wall and the resultant dampness frequently found in buildings with walls of solid gravel concrete, hollow masonry units, and even with cavity walls. Likewise, the non-conducting character of the expanded mica in the vermiculite concrete core, plus its myriads of non-conducting cells, prevent thermal conductivity. Consequently, the core is superior to the cavity in hollow units and in cavity walls, which tend to trap hot or cold air, making the building hot in summer and cold in winter. Due to the fact that there is a minimum of air infiltration, moisture migration and thermal conductivity, the Formbloc wall is considerably superior to the conventional hollow unit and cavity walls.

Since the U factor can be kept to even less than .12 in the 8" Formbloc walls, it is 6 times better than the .70 of the concrete wall, more than 4 times better than the .53 of the hollow unit wall and solid brick wall, and 3 times better than the .34 of the cavity wall, when sand and gravel units are used. A similar relationship exists in the 12" walls.

In order to improve the thermal insulation in the conventional masonry-unit walls, units made of cinder, expanded slag, clay or shale, with a U factor of .34, have been used. If one of these materials is also used in making Formbloc units, a corresponding improvement can be made. However, if hard and dense units made of gravel concrete are preferred for durability, they can be used in the shell of the Formbloc wall and will still provide excellent thermal insulation with a core of vermiculite concrete.

In some cases, in conventional hollow-unit masonry construction, the cores have been filled with dry insulation such as cork or vermiculite, to gain a U factor of about .39, with sand and gravel units. This is similar to Formbloc construction, but this fill does not block the end joints, it tends to settle, and does not provide an all-over insulation as does the monolithic concrete core in the Formbloc walls.

From the point of view of sound-insulation, the vermiculite core with its excellent and well-known coefficient of sound absorption, makes an ideal medium for the reduction of sound transmission through exterior Formbloc walls and Formbloc partitions, and through other structural forms, such as vaulting, roof and floor

(Continued on Page 26)
View of building 120' x 40' showing the FormBloc wall immediately after pouring the insulating concrete. Note moisture line of pour. The 15' high wall was poured in two sections — one from the floor to window sill, and the other from window sill to the top of wall.

Corner of FormBloc wall being poured from bucket on crane.

Inside view of building while pouring end wall.

Erected FormBloc wall after drying, ready to receive concrete roof beams. Note the straight line joints in courses of Formbloes.
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at Hooksett, New Hampshire
(Continued from Page 23) slabs, when used in conjunction with Formbloc units.

From the point of insulation against harmful radiation, such as X-Rays, atomic radiation and others, the concrete core can be composed of a variety of radiation-resisting materials, to provide the proper protection within the building or sections of the building.

In all, it can safely be said that the insulated Formbloc construction is better in many ways than other types of masonry construction.

2. Greater Strength

The reinforced concrete core in the Formbloc wall increases the potential strength of masonry construction. The type and amount of the reinforcement, the strength of the concrete in the core, and the strength of the Formbloc units can be adjusted more easily to meet greater strength-requirements as far as vertical, transverse, and other loads in walls and other structural forms are concerned, than in conventional masonry construction. Also, the concrete core, properly reinforced, gives the Formbloc structure a superior shatter-proof quality against the shock of hurricanes, floods, tornados, earthquakes and explosions. The strength of the Formbloc structural member, along with the possibility of strong anchorage and moment connections, provide a structure insured against most severe shock conditions.

3. More Fire-Proof

Formbloc wall construction meets the Board of Underwriters requirements. A letter from the National Board of Fire Underwriters, dated February 25, 1949, contains the following statement which is of interest:

"Further, we think it would be proper to permit these walls to be of the same thickness as specified for solid walls of plain concrete, as provided in Section 907-11 of The National Building Code. This means that they may be two inches less than that required for solid masonry walls, but not less than 8 inches."

This acceptance of the 8" Formbloc wall, as equivalent to a 10" masonry wall, provides equal fire-proofing at a lower cost; or more fire-proofing is provided by Formbloc construction than by solid masonry construction of equal thickness.

4. More Durable

Numerous structures built of Formbloc wall construction, which have been inspected over the past ten years, have shown no indication of condensation, cracks, or other structural defects, either with the use of an insulated or a structural core. Since reinforcing rods are encased in the moisture-resisting concrete core and in structural steel or metal furring is needed, the rusting of structural steel members and metal furring, the rotting of wooden furring, formation of plaster mould, and efflorescence due to dampness inside the wall are avoided. Also, since a denser and harder concrete is usually used in the Formbloc unit, better weathering and a more durable finish can be had in case it is not stuccoed, plastered or otherwise coated with a finish material. In general, Formbloc construction assures a more permanent and durable structure, which is easy and more economical to maintain.

5. More Flexibility

The combination of masonry units and concrete in Formbloc construction makes its use and application in building more flexible. Concrete masonry units can be used in places where only concrete or other similar materials were used before; when concrete, with masonry units as a form, can be used where its use has been avoided due to the prohibitive cost of form work. Also, Formbloc units can be used by unskilled workers as well as by masons skilled in their trade, since they can be laid dry as well as in mortar; and concrete can be used by unskilled workers, where heretofore intricate form work required workers skilled in this trade. Concrete masonry units, combined with a concrete core, permit these materials to be used not only for wall construction but also for vaulting, floor and roof slabs. In general, Formbloc construction permits more flexibility in the use of concrete and masonry material, labor, and new structural forms in all types of building construction.

Continued on next page
6. Faster Construction

The use of Formbloc wall construction for either concrete or masonry walls reduces construction time. The use of 8” and 12” Formbloc for concrete walls eliminates the need for erecting and stripping of form work. By erecting dry Formbloc walls and filling them with structural insulating concrete, one saves from 50-60% of the usual time consumed in using metal or wood form work for foundation walls and other concrete walls in the first and upper stories in all types of buildings. In comparison with masonry walls, the use of Formbloc dry construction, filled with concrete, instead of brick masonry work, saves from 40-50% of the time. With the Formbloc units laid only with a thin horizontal mortar joint, instead of using the conventional masonry work, saving of 20% of time can be made. By saving of time in erecting Formbloc walls, along with the speedy filling of the wall with concrete from the transit mix job mixer on ground level, and with a pump on upper levels, assures the faster construction of all types of buildings.

(Continued on Page 28)
7. Favorable Cost

The material and labor costs of Form bloc Wall construction and other types of masonry wall construction, not including the cost of footing, window and door frames, or contractor’s overhead and profit, are approximately as follows:

### A. COST OF FORMBLOC WALL - DRY CONSTRUCTION

1. **With structural concrete filler:**
   - **Form bloc Unit, sand and gravel concrete, Zone I, per unit.** $0.29
   - **Stabilizing steel, per unit.** $0.04
   - **Filler, sand and gravel concrete, @ $14/cu. yd.,**
     - (1 cu. yd. fills 80 - 8” units) per unit $0.175
     - (1 cu. yd. fills 50 - 12” units) per unit
   - **Labor - 1 layer, 1 or 2 tenders, and 1 carpenter, @ $80 to $100 per day for laying, filling and cleaning blocks, setting frames, etc., at rate of 1,000 blocks per day, for foundations, per unit.** $0.08
   - **Total Cost per unit.** $0.585
   - **Total Cost per sq. ft. of Form bloc wall.** $0.66

2. **With insulating concrete filler:**
   - **Form bloc Unit, sand and gravel concrete, Zone I, per unit.** $0.29
   - **Stabilizing steel, per unit.** $0.04
   - **Filler, vermiculite concrete, @ $24/cu. yd.,**
     - (1 cu. yd. fills 100 - 8” units) per unit $0.24
     - (1 cu. yd. fills 70 - 12” units) per unit
   - **Labor - 1 layer, 1 or 2 tenders, and 1 carpenter, including pump equipment, @ $100 to $120 per day for laying, filling and cleaning blocks, setting frames, etc. at rate of 1,000 blocks per day, for first and upper stories, per unit.** $0.10
   - **Total Cost per unit.** $0.67
   - **Total Cost per sq. ft. of Form bloc wall.** $0.75

### B. COST OF FORMBLOC WALL - MORTAR CONSTRUCTION

Eliminate stabilizing steel and lay Form bloc units with thin horizontal mortar joint, but with no vertical mortar joints. Add 5 cents to above total costs.

### C. COST OF OTHER MASONRY WALL CONSTRUCTION

From Contractor's Quotations

1. **Concrete wall**
   - **Plain concrete, including form work for walls above 8’ high, @ $35/cu. yd.,** per sq. ft. $0.90
   - **For house foundations, less than 8’ high wall, per sq. ft.** .55

2. **Concrete block wall**
   - **Gravel concrete units and labor, per sq. ft.** .58

3. **Brick wall**
   - **Common brick and labor, per sq. ft.** 1.35

4. **Brick and backed-up block wall**
   - **4” brick and 4” block, per sq. ft.** 1.07
   - **4” brick and 8” block, per sq. ft.** 1
Cavity wall

<table>
<thead>
<tr>
<th>Description</th>
<th>10&quot; wall</th>
<th>14&quot; wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two 4&quot; blocks, per sq. ft.</td>
<td>$0.82</td>
<td></td>
</tr>
<tr>
<td>One 4&quot; and one 8&quot; block, per sq. ft.</td>
<td>$1.00</td>
<td></td>
</tr>
<tr>
<td>One 4&quot; brick and one 4&quot; block, per sq. ft.</td>
<td>1.10</td>
<td></td>
</tr>
<tr>
<td>One 4&quot; brick and one 8&quot; block, per sq. ft.</td>
<td>1.30</td>
<td></td>
</tr>
</tbody>
</table>

Frame wall

Including 2 x 4 studs, sheeting, clapboard, insulation and sheetrock, per sq. ft. - $0.97.

Comparing the cost of Form bloc wall construction with that of other minimum-cost masonry wall and frame construction, we find that with the exception of concrete block walls, and poured concrete wall for house foundations, the Form bloc wall construction is lower even when using insulated concrete filler. If the cost of heating, the use of the concrete wall at .70 and the concrete block wall at .53, is considered in comparison with Form bloc wall at .145, the insulated Form bloc wall would be less costly when considered over the life span of the house or other building. Also, an 8" insulated Form bloc wall at 75 cents per sq. ft., compared to a frame wall at 97 cents, is considerably cheaper and provides better insulation. Therefore, it can be said that Form bloc construction, either with a structural or insulating filler, is very favorable in cost compared to other masonry frame wall construction.

This article will be continued in the April issue.

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View from driveway of house under construction. The straight walls, varied angles and curved walls indicate the flexibility of Formbloc masonry construction.

Another view of the house showing Formbloc walls laid dry and filled with insulating concrete. Walls are to be left natural with grouted joints. Note the joints in the lower courses grouted in, and the joints in the upper courses still unfinished.
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First Stage — Formbloc dry wall erected on footing. Note straight line of wall, corners, continuous void, square face pattern on outside of wall and smooth on inside.

Third Stage — Formbloc masonry wall after pouring, being brushed on inside with a cement wash to fill all joints. Exterior of wall ready to be waterproofed below grade and painted above grade.
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