AIPHA CEMENT

THE
HOME GARAGE
of Concrete Masonry

..........



ALPHA PORTLAND CEMENT COMPANY

Baltimore Boston New York Battle Creek, Mich.

Chicago Philadelphia Easton, Pa.
Pittsburgh

Birmingham, Ala. Ironton, Ohio St. Louis

The Home Garage of Concrete Masonty



PORTLAND CEMENT ASSOCIATION

The Home Garage of Concrete Masonry

The amount of money invested in the average motor vehicle justifies a garage that will satisfy three essential requirements: first and most important, security against fire; second, protection against the weather; third, reasonable convenience in its use and maintenance. A garage which provides all of these features is the most economical in the long run.

Whether it be for a small, one-car garage or a large community type, concrete is the preferred construction material. Not only does a concrete garage satisfy all of these important requirements at minimum first cost but has the additional merits of long life, low maintenance and ready adaptability to almost any architectural treatment.

Perhaps the greatest single advantage in the use of concrete as a construction material is its great fire resistance. A garage which increases the fire risk is a menace. The owner may rest assured that his car has maximum fire protection when it is housed in a concrete masonry garage.

In addition to the fire hazard common to all buildings the garage has a hazard of its own due to the presence of gasoline and oil



Walls of concrete masonry and portland cement stucco and roof of concrete tile give maximum fire protection to the garage



A concrete garage is a good investment because of the security afforded and the absence of maintenance expense

which makes it of vital importance that the garage be firesafe. The fire-resistive properties of concrete are well known. In laboratory tests and in actual fires concrete walls have repeatedly and successfully demonstrated their ability to withstand exposure to intense heat. Quoting from Underwriters Laboratory Retardant Report No. 1555 giving the results of tests on hollow concrete masonry units:

"Walls composed of these units do not add fuel to fire. From the fire protection point of view, their use is to be preferred over walls of combustible materials or non-combustible materials, the strength of which is seriously affected by fire temperatures."

In many cities building regulations require that structures of inflammable construction be built some distance from the lot line but allow fireproof buildings to be built to the lot line. Thus on narrow city lots or where it is desirable to build the garage as a part of the house, fireproof concrete construction has a decided advantage.

Roof as well as walls should be of nonburnable construction to give complete fire protection and is secured through the use of concrete roofing tile or cement asbestos shingles. Either of these materials may be obtained in a number of attractive colors to blend with the color scheme of the walls.

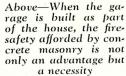
Added to the economies resulting from fireproof construction there are other features about a concrete garage which result in tangible savings for the owner. Maintenance costs are practically eliminated. There are no bills for painting except an occasional renewal of paint on window frames, sills and trim. Even these may be built of concrete and the upkeep reduced to a minimum. With a permanent concrete garage the cost per year is negligible.

In whatever location the garage is placed it usually appears in a general view of the

house and should therefore be an attractive structure that will add to the beauty of the surroundings. Sharp contrast between the design of the house and garage should be avoided. To secure unity of appearance some predominating feature in the

Below — A concrete masonry garage approached by a concrete driveway enhances the value and utility of the home grounds





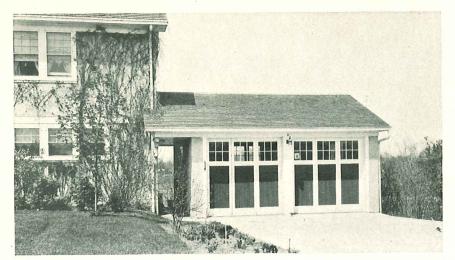
Left—An effect of unusual roominess is given the house when the garage is attached. The type shown here is suitable only for southern climates

house design is often incorporated in the lines of the garage. One of the outstand-

ing advantages of concrete masonry is the ease with which it lends itself to almost any architectural treatment. With portland cement stucco—the usual method of surfacing concrete masonry garages—an almost endless variety of colors and surface finishes is possible.

The extensive and increasing use of concrete for all classes of structures indicates that architects, builders and owners recognize the value of permanent, maintenance-free construction. Concrete masonry units are obtainable almost everywhere and there is scarcely a community that is not within easy hauling distance of a plant or yard where concrete block or tile can be obtained.





Small building lots and the desirability of locating the garage most conveniently have made the attached type very popular. The firesafety of concrete masonry gives the owner perfect safety

MALL building lots and the desirability of locating the garage in the most convenient position have resulted in the development of the attached and semi-detached types. With either of these firesafety is not only an advantage but is a necessity. In the attached type where the garage is an integral part of the house, costs are reduced due to the use of common walls and often a common roof. Likewise the extra cost of heating the garage in winter is lessened as the house system can be extended to the garage.

Where building codes prohibit connecting doors between the house and garage, a narrow covered passageway may be built between the house entry and the garage so that it can be reached comfortably in stormy weather. This is known as the semi-detached type.

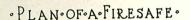
In case the lot slopes slightly towards the street, the garage is often conveniently built in the basement; then a sleeping porch or sun parlor is frequently placed over the room where the car is housed. In using this arrangement it is necessary that the garage ceiling be fireproof. A reinforced concrete slab is the best means of insuring this. A cement plaster ceiling applied on metal lath is likewise an effective fire stop.



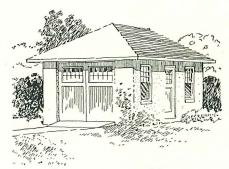
To obtain unity of appearance a predominating feature of the house design is often incorporated in the lines of the garage



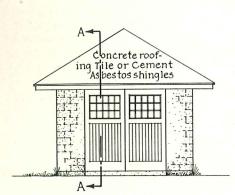
Where the lot slopes sharply to the street the garage is often planned and conveniently built as a part of the basement



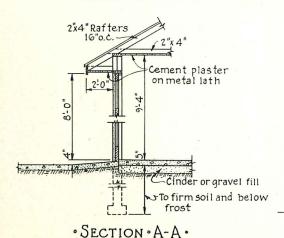
- ·SINGLE·CAR·GARAGE·
 - ·BUILT · OF ·
 - · CONCRETE · MASONRY ·
 - ·AND.
- ·PORTLAND · CEMENT · STUCCO ·
- ·PORTLAND · CEMENT · ASSOCIATION ·



· PERSPECTIVE · VIEW ·



·FRONT·ELEVATION ·



Work bench

Prain 2 - 12

PLAN •



· REAR · ELEVATION ·



The rental received from one-half of a two-car garage pays all expenses and often nets a profit



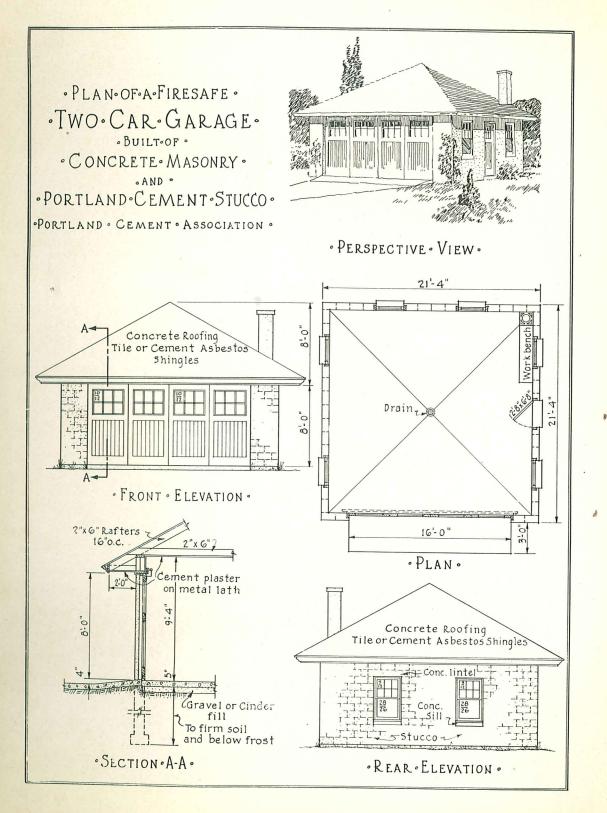
The cost per car of building a garage for two or more cars is relatively less than for a one-car garage

ARAGES constructed to provide storage space for two or more cars have become popular with thrifty owners. The cost per car of building a garage for two or more cars is relatively less than for a one-car garage, and the extra space over that required by the owner can usually be rented at a substantial profit. The rental received is usually more than sufficient to cover interest charges, taxes and other expenses on the entire structure, giving the owner storage space for his car at practically no cost and often giving him considerable cash return as well. For the owner of a single car who prefers not to rent out space, the double garage is still a good investment, providing a handy workroom and furnishing accommodations for visiting cars—a mark of hospitality that is appreciated.

A width of not less than 10 feet should be allowed for each car. A length of less than 20 feet is seldom advisable and for larger cars 22 feet to 24 feet is not too much. The convenience of the extra space is worth many times the slight additional cost of building the garage 2 or 4 feet longer.



If not needed for car storage the extra space in a two-car garage serves as a good storeroom for garden tools. It also provides accommodations for visiting cars

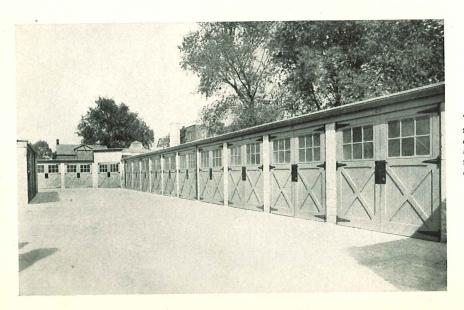


The community garage of concrete can be attractively designed and surfaced with portland cement stucco so as to be unobjectionable even in the most exclusive residential sections

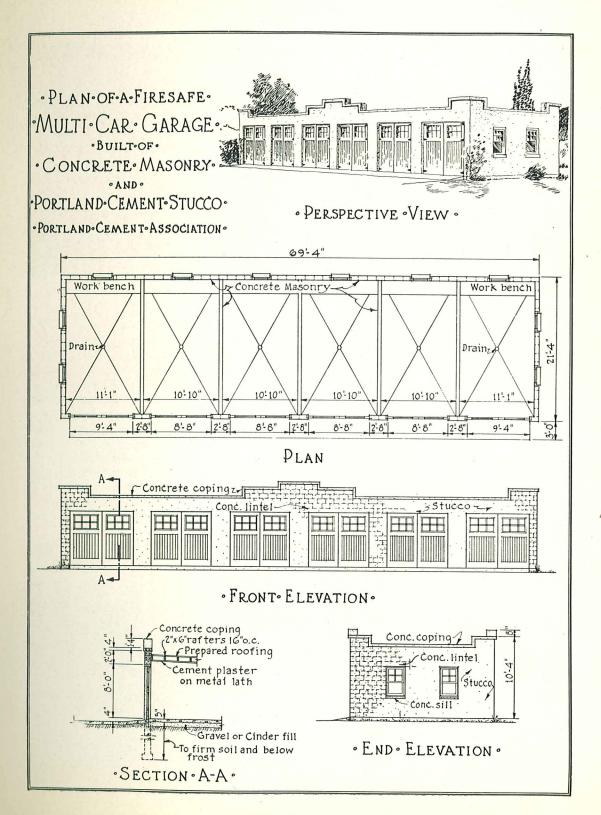


THE community or multi-car garage is rapidly gaining popularity in the more densely populated residential sections of our larger cities. In principle, the community garage resembles a number of single car garages placed side by side with heating arrangements and other facilities in common. It provides private stalls where the automobiles can be cleaned, lubricated and repaired by the owners if desired. In each stall sufficient space is generally provided for the storage of supplies and each has its own doors, water pipes and lockers.

The community garage often represents the most economical use of space for automobile storage purposes and in many localities offers an excellent opportunity for investment. By paying some attention to the planting of vines and shrubs the community garage can be made sufficiently attractive to be unobjectionable even in the most exclusive residential sections.



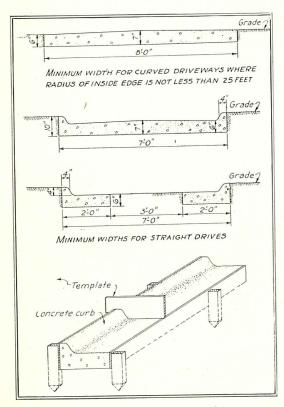
The low cost and minimum expense of a community garage built of concrete masonry assures its owner of a profitable investment



Year Round Concrete Driveways

N attractive concrete driveway adds much to the appearance of the home grounds, creates a good impression on visitors, and provides a convenient year round passage to the street or highway. Concrete is universally accepted as the ideal driveway material because it is durable, smooth without being slippery, and can be made extremely pleasing to the eye. Cleanliness, long life, and low maintenance are additional features.

Like a street or a highway, the driveway must be designed to meet the needs of those who use it. It should look well and be conveniently located. The charm of the home grounds is in the trees and lawns and it is folly to destroy a fine tree because it happens to be in line with the location of the driveway. A graceful curve around the tree does not inconvenience those who use the drive-



Plans of various types of concrete driveways



A concrete driveway provides convenient year round passage to the street or highway

way and adds much to the beauty of the surroundings.

There have been several types of drive-ways developed and the choice of which to build is largely dependent upon how it is to be used. Where subjected to hard service, pavements covering the entire driveway area give best satisfaction. Narrow, parallel strips of concrete often provide satisfactory approach where the driveway is subjected only to occasional use. In the latter type of driveway, the runways should be built with curbs on the outer edges to prevent running off and cutting up the lawn. Three designs for driveways are presented on this page.

The pavement type of driveway is usually made from 8 to 10 feet wide. A 6-inch slab is



A side entrance where the driveway passes the house is a convenience in wet weather



An attractive entranceway adds much to the appearance of the grounds and creates a good impression on visitors

recommended in order to take care of coal and other delivery trucks. The center of the driveway should be given a 1-inch crown to insure drainage. The crown is produced by means of a curved strikeboard or template which shapes the surface so that the center is 1 inch higher than the edges. The base is also shaped with the center 1 inch higher than the outer edges so that the finished pavement will have a uniform thickness of 6 inches. Care should be taken to see that the area upon which the pavement is to lay is brought to grade well compacted before concreting.

One-course construction is recommended, using the same mixture throughout. With



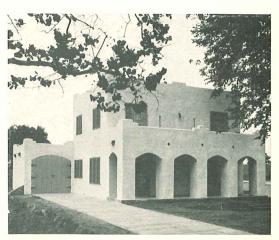
Curbs on the outer edges of a parallel-strip driveway are advisable to prevent running off and injuring the lawn



In addition to its convenient location, the attached garage lends an impression of largeness to the home and the grounds

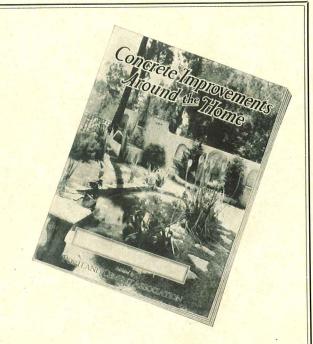
moist sand and pebbles, the correct mixture is 4½ gallons of water for each sack of cement. To this add sufficient amounts of sand and pebbles in the proportions of 2 parts sand and 3 parts pebbles until the mixture is rather stiff. Finishing should be done with a wood float, producing a smooth yet gritty, non-skid surface.

Damp earth, sand or straw is used to cure the driveway after it has hardened sufficiently so it is not easily marred. This covering must be kept moist for a week, sprinkling as often as necessary, and the driveway should not be put into service until the concrete has hardened for two or three weeks.



A good combination—semi-detached garage of concrete masonry and a concrete driveway. The driveway also serves as a walk

Send for Your Free Copy



Garden pools—sun dials—bird baths—steps—drive-ways—lawn seats and many other attractive and useful home improvements can easily be made in your spare moments. Working with concrete, the stone that you can mold, is fascinating, and the beauty and utility of the things that you can make is limited only by your skill and ingenuity.

Here's a book about concrete that tells you how to make all sorts of improvements, giving plans and construction details. It's free—write to our district office nearest you for a copy.

PORTLAND CEMENT ASSOCIATION

A NATIONAL ORGANIZATION TO IMPROVE AND EXTEND THE USES OF CONCRETE

Atlanta
Birmingham
Boston
Chicago
Columbus, O.
Dallas
Denver

Des Moines
Detroit
Helena, Mont.
Indianapolis
Jacksonville
Kansas City

Lincoln, Nebr. Los Angeles Milwaukee Minneapolis Nashville New Orleans New York
Oklahoma City
Parkersburg
Philadelphia
Pittsburgh
Portland, Oreg.

Richmond, Va. Salt Lake City San Francisco Seattle St. Louis Vancouver, B. C. Washington, D. C.

