LAUNDRY AREAS
SPACE REQUIREMENTS AND LOCATIONS

ISSUED BY THE
SMALL HOMES COUNCIL – BUILDING RESEARCH COUNCIL

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AUTOMATIC LAUNDRY EQUIPMENT —

Its Influence on House Design

The convenience and the compact working arrangements offered by automatic washers and dryers have changed considerably the concept of washday in the home and the planning of laundry areas.

- Laundering today can be a simple household task instead of an irksome chore. Improvements in appliances have eliminated the drudgery, dampness, and disorderliness once associated with the family washing.
- Monday is becoming less common as the traditional washday. With automatic equipment, homemakers tend to wash several times a week, doing small quantities at a time.
- Laundry areas are smaller. Automatic washers do not require laundry tubs for their use and therefore, take less floor space than non-automatic equipment. The dryer has made it possible to eliminate space-consuming indoor drying areas.
- Laundry centers can be more conveniently located for use by homemakers since the present-day compactness and convenience of the laundry operation have increased the number of possible locations.

To insure a laundry area which is both economical in the use of space and easy to work in, the floor area needed for washing and ironing should be known.

The space requirements presented in this circular relate to the use of the major pieces of laundry equipment — washer, dryer, ironer and ironing board. These recommendations were established through a University of Illinois study of laundry work operations conducted by Helen E. McCullough, associate professor of home economics.*

In the study, she measured the amount of space which homemakers of different heights and weights needed for all the processes involved in doing a laundry. The processes included filling a machine, removing clothes from a machine, walking, turning, stooping, using a cart, carrying a basket, arising from a seated position, passing another person.

The study showed that there was no consistent relationship between the size of the homemakers measured and the space they used to do a laundry. The small women participating in the study frequently required more work space than the larger women. Work habits and body use in most instances decided the amount of space needed. The space requirements given in this circular would be adequate for nearly all women.

WORK SPACE REQUIRED

In designing an easy-to-work-in laundry area, the space needed to perform the various processes of laundering must be considered as well as the dimensions of the appliances. The amount of work space is relatively constant whereas the sizes of appliances may change.

In the diagrams on the opposite page, the various appliances and laundry accessories are grouped according to the way they are ordinarily used. The work space needed at the front and at the sides of each of the groupings is indicated.

These work space recommendations are the minimum which permit freedom of action for most women, both physical and psychological. They take into account:

- The space required by the homemaker to perform all operations with free elbow movement.
- The space needed to move a laundry cart or basket to convenient working positions.

The size of the washer, dryer or ironer does not affect the amount of work space. For this reason, the space occupied by these appliances is not included in the measurements.

When the various pieces of equipment are combined into complete laundry areas, two activity spaces may overlap. The total work space, thus, can be less than that assigned to two appliances individually.

* Acknowledgment is given to Mary B. Farnham for her assistance with the study.
MINIMUM SPACE REQUIREMENTS

Washer or Dryer, Combination Washer-Dryer
For a washer or a dryer alone, or for a combination washer-dryer, the work space at the front should be at least 3 feet, 8 inches wide (side-to-side) and 3 feet, 6 inches deep (front-to-back).

Washer and Dryer, Side-by-Side
For an automatic washer and a dryer placed side-by-side, the width should be increased to not less than 5 feet, 6 inches. The front-to-back measurement remains 3 feet, 6 inches, exclusive of appliances.

Ironing
For ironing, the width of the work space should be at least 5 feet, 10 inches. The depth should be 3 feet. This is the minimum recommended for either an ironer or an ironing board. This space will accommodate a chair and a laundry cart or basket, but does not include ironing board, ironer or clothes rack.

The ironing board requires 6 inches of work space behind the board and 2 feet, 6 inches in front of it. The width of the board—15 inches—must be added to the work space depth, making a total of 4 feet, 3 inches.

Where a clothes rack is to be used, a work space of 2 feet, 4 inches should be allowed on at least one side and one end of the rack.

Passageways
If the space in front of a washer and a dryer is a main passageway, such as between two rooms, the depth should be increased to at least 4 feet. This will permit a second person to pass in front of the equipment without seriously interfering with the laundering. Room doors should not be allowed to swing into this work space.

Appliances Opposite Each Other
If a washer and a dryer are located opposite each other, the work space should be at least 4 feet deep.
EQUIPMENT

Where space is not critical, a well-planned laundry area should be large enough to accommodate not only washing and ironing appliances, but related laundry equipment.

Clothesbasket or Laundry Cart: A clothesbasket or laundry cart is a necessary item for efficient work operations. The latter is easy to move and is especially versatile when the clothes container is removable. The high position of the container is convenient when the cart is used at a top-opening washer or for ironing; the removable container can be placed on the floor for front-opening washers and dryers. The clothesbasket or the container should be of a non-snagging material.

Laundry Sink: Although laundry tubs are not needed with an automatic washer, a sink should be easily accessible so that stained or extremely soiled portions of clothes — i.e., collars and cuffs — can be given extra attention.

Counter: Sufficient space for clothes sorting may be provided by the cart or basket and the top of a front-opening washer and a dryer. A counter, preferably at the sink, however, is useful for additional sorting space, for dampening clothes, and for stacking ironed articles.

Cabinets: A place for the storage of such items as soaps, detergents, bleaches, starch, and the iron should be provided near the sink. Closed-in cabinets are preferred to open shelves. Shelves should be adjustable.

Drip-dry Space: Since some garments cannot be satisfactorily dried in dryers, it is desirable to provide a drip-dry space in the laundry area. A wall-type pull-out drying rod, for instance, can be placed over a floor drain or a laundry sink.

Ironing Board: The choice between a built-in ironing board and a free-standing one is a matter of personal preference. Free-standing boards should be stored where they are readily accessible at the point of use.

Clothes Rack: Clothes racks, once important for drying clothes, are a convenience in ironing. These racks are available in both floor and wall types.

LAUNDRY EQUIPMENT AND FLOOR SPACE REQUIRED

The various pieces of equipment used for laundering and ironing are listed below. The dimensions given are not for any particular model but represent the largest width and depth of equipment now available. Many models are smaller in width or depth. In most cases, space for pipes and wiring is included in the dimensions, but this should be checked when appliances are purchased.

The depth of appliances must be added to the recommended minimum depth for washing and drying areas (page 3) to obtain the minimum depth for the complete laundry area. Accessories, such as laundry cart or chair, influence the size of the work space and, thus, are included in the space recommendations.

### WASHING AND DRYING EQUIPMENT

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Maximum Width (Side-to-Side)</th>
<th>Maximum Depth** (Front-to-Back)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automatic Washer</td>
<td>30&quot;</td>
<td>30&quot;</td>
</tr>
<tr>
<td>Top-opening</td>
<td>31&quot;</td>
<td>30&quot;</td>
</tr>
<tr>
<td>Front-opening</td>
<td>32&quot;</td>
<td>30&quot;</td>
</tr>
<tr>
<td>Automatic Dryer</td>
<td>36&quot;</td>
<td>30&quot;</td>
</tr>
<tr>
<td>Combination Washer-Dryer (front- and top-opening)</td>
<td>31&quot;</td>
<td>30”</td>
</tr>
<tr>
<td>Combination Washer and Dryer (stacked)</td>
<td>16”</td>
<td>28”</td>
</tr>
<tr>
<td>Laundry Cart or Basket</td>
<td>48”</td>
<td>24”</td>
</tr>
<tr>
<td>Sink and Sorting Counter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### IRONING EQUIPMENT

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Maximum Width</th>
<th>Maximum Depth**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Ironer (opened)</td>
<td>65”</td>
<td>38”</td>
</tr>
<tr>
<td>Ironing Board</td>
<td>54”</td>
<td>15”</td>
</tr>
<tr>
<td>Chair (for electric ironer or ironing board)</td>
<td>18”</td>
<td>20”</td>
</tr>
<tr>
<td>Clothes Rack†</td>
<td>24”</td>
<td>22”</td>
</tr>
<tr>
<td>Floor type</td>
<td>22”</td>
<td>20”</td>
</tr>
<tr>
<td>Hanging type</td>
<td>18”</td>
<td>24”</td>
</tr>
</tbody>
</table>

† Also used for fabrics which should be drip-dried.

* Water heaters and water softeners are considered as part of the plumbing equipment. See Small Homes Council circular G5.0 — "Plumbing."

** Includes space for pipes and wiring in many, but not all, cases.
ARRANGEMENT OF EQUIPMENT

No matter what kind of equipment is selected, the task of laundering can be simplified by having all work operations move in one direction — toward the place where the clothes are to be dried. The articles to be laundered should be moved from the hamper 1) to the sorting counter, 2) to the laundry sink if they need special attention for removal of stains and soiled spots, 3) to the washer, 4) to the dryer, and eventually 5) to the ironing center.*

The normal sequence for laundering for a right-handed person is from right to left, the same as in dishwashing. This means that the dryer should be at the left of the washer when they are placed side-by-side.

While this sequence is desirable, it is not always possible because of the way the doors on a front-opening washer and on a dryer are hinged. To achieve this recommended sequence, the door of the washer should be hinged at the right or at the bottom; the door of the dryer should be hinged on the left or at the bottom. Doors which are not so hinged, even if they fold back, interfere with work operations when the equipment is arranged in the recommended sequence.

Placement of Dryers
The laundry arrangement should permit the placement of the dryer near an outside wall if the dryer needs to be vented to the outside. Otherwise, the dryer should have a built-in moisture condenser to avoid excessive moisture and lint within the house.

* Motion studies conducted at the State College of Washington have shown that this is the most efficient working arrangement.

NON-AUTOMATIC LAUNDRY EQUIPMENT

Because two tubs are necessary for its use, a non-automatic washer requires a larger laundry area than that for an automatic machine. The laundry area for a non-automatic washer should be at least 7 feet from front to back (depth). The width should be at least 8 feet, 6 inches. This area includes both the work space and the space occupied by the equipment.

Laundry tubs for non-automatic washers are most convenient to use when they are in an “island” position — that is, away from the walls. Such placement provides ample elbow room for a person who is working at the side of the tub.

Where indoor drying space is necessary, 20 feet of clothes lines is recommended for each person in the household. Lines should be placed at least 8 inches apart.*

DIMENSIONS OF EQUIPMENT FOR NON-AUTOMATIC WASHING
(Based on maximum sizes available)

<table>
<thead>
<tr>
<th></th>
<th>Width (Side-to-Side)</th>
<th>Depth (Front-to-Back)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Automatic Washer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single-tub</td>
<td>31&quot;</td>
<td>21&quot;</td>
</tr>
<tr>
<td>Twin-tub</td>
<td>44&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>Laundry Cart or Basket</td>
<td>16&quot;</td>
<td>28&quot;</td>
</tr>
<tr>
<td>Laundry Tub</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single or Double</td>
<td>24&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>Sorting Counter</td>
<td>60&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>Clothes Rack</td>
<td>36&quot;</td>
<td>38&quot;</td>
</tr>
</tbody>
</table>

* Maud Wilson, Plans for Oregon Farm and Acreage Homes, Oregon Agricultural Experiment Station, May 1945.
LOCATION OF THE LAUNDRY AREA

The laundry can be conveniently located in one of several places. Each has advantages and disadvantages. The homemaker’s work preference, the general layout of the house, and the floor construction will probably be the determining factors in selecting the location. Floor construction must be sturdy enough to support the load of appliances without excessive vibration.

Locating the laundry area on the first floor instead of the basement makes laundering a much simpler operation for the homemaker. She no longer has to concern herself with getting the laundry up and down basement stairs; she is freer to supervise children or do other tasks; and she generally has pleasanter surroundings in which to work.

First-floor laundries can be either in the work area or the bedroom-bath area of the house.

IN THE WORK AREA

Laundry or Multi-Purpose Room: A laundry area on the first floor near the kitchen has long been high in the favor of homemakers. This area can be a separate room, a hall, or a part of a multi-purpose or utility room.

A hall is suggested for a minimum laundry assembly — washer and dryer — if there is adequate space, light and ventilation. The appliances can be hidden from sight when not in use by recessing them into the wall and enclosing them with doors.

Laundry in Kitchen: Since laundry equipment has been designed to harmonize with kitchen appliances, the kitchen-laundry has had considerable acceptance.

This location is convenient for the homemaker, but it draws objections from many who dislike the idea of soiled clothing in an area dedicated to the cleanliness of food preparation. Counter peninsulas, islands, or partitions, however, can be used to separate the laundry area from the kitchen work centers. These have the effect of forming a laundry work center.

*The material presented is based in part on reactions of families occupying the Small Homes Council’s research space laboratory (1952-56).
IN THE BEDROOM-BATH AREA

A departure from conventional plans which is gaining in popularity is the location of the laundry in the bedroom-bath area of the house—either first or second floor. The laundry may be placed in the bathroom, or in a room or hall adjacent to the bathroom.

Most items in the family laundry are used and stored in the bedroom area of the house; hence, having the laundry center in this part of the house eliminates many steps in gathering soiled articles and putting away clean linens and clothing. It also eliminates the need for clothes-chutes and, in some cases, hampers.

**Bathroom-Laundry**: A bathroom (preferably the second bathroom) is particularly suited for laundry use because the walls and floor are usually finished to take care of high humidities. There is, moreover, little additional plumbing cost required for such a laundry installation. This location should be limited to a washer-dryer assembly. Space for ironing must be provided somewhere else in the house.

**Room Adjacent to Bathroom**: A separate laundry room adjacent to a bathroom frees the latter from the clutter of hand-washables. This laundry area should be large enough to include a laundry sink for items to be washed by hand, a drip-dry area, and space for ironing and pressing. Facilities for pressing are particularly appropriate in the bedroom area.
IN THE GARAGE OR CARPORT

The laundry can be placed in the garage or, in mild climates, in the carport.* Equipment is usually installed in a simple one-wall arrangement.

IN THE BASEMENT

Dryers have made the basement much more acceptable as a laundry area than formerly since the problem of carrying heavy baskets of damp clothes to outdoor lines is eliminated. Generally, space is not a critical factor in basement laundries. On the other hand, such laundry centers require other considerations if they are to be desirable.* These include:

- A clothes chute — preferably from the bedroom area to the laundry room.
- Windows to admit light and enable the homemaker to look out — and perhaps even allow her to enjoy a pleasant view.

For homemakers who like to hang clothes out-of-doors, an outside door at ground level eliminates the need to climb stairs. Such a “walk-out” entrance can be easily achieved on a sloping lot, or by grading a level lot to provide a large areaway. (The latter may be costly.)

* See Small Homes Council circulars F2.0 — “Basements” and C5.9 — “Garages and Carports.”