PLAN A WORKROOM
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Square foot for square foot, a workroom can be one of the most useful rooms in the entire house. It can provide a convenient place for doing the laundry—plus space for several other activities that would otherwise clutter up the rest of the house.

Doing the laundry is more convenient and pleasant if you have enough room to work easily—and most homemakers wash from 5 to 15 loads a week. Many women report that they don't mind washing but find that ironing and mending pile up—"If it weren't such a job to get everything out and get ready."

With a workroom, jobs can be left and finished later. The door can be closed on messy or untidy jobs. Odors and humidity from the laundry won't invade other parts of the house and it will be easier to keep the back entrance more presentable. And there's less competition for the kitchen sink and counters if there is another room with a sink. Example: "Keep the fish catch out of my sink while I'm getting the meal."

If some of these activities are cluttering up the house, try planning a place for them in a workroom—
- Taking off drippy rain or snow boots or shedding coats or umbrellas.
- Changing to and from work clothes or cleaning up after gardening.
- Taking care of garden produce, arranging flowers, or caring for plants.
- Shampooing small children, giving home permanents, or tinting hair.
- Diapering the baby and storing diapers and other baby-care supplies.
- Working on cut-and-glue projects or other do-it-yourself projects.
- Cleaning the fish and game catch or storing sports gear.
- Grooming and shampooing the family's pets.
- Storing out-of-season equipment and supplies—pressure canner, picnic basket, barbecue grill, etc.
- Handling food in quantity at canning or freezing time.

Where costs are a consideration, you'll need to compare benefits—considering frequency of use and the homemaker's time. However, having enough space to make jobs convenient doesn't need to be expensive. Building costs are as much the result of finishes chosen as the amount of space. If you are tempted to put storage or some activities on another floor, consider what good planning could get you for just the space required for the stairs.

If you decide on a workroom, here are the steps to follow in planning—
- Locate the workroom in relation to the other rooms in the house and the activities you plan. You don't need to make a detailed floor plan yet—just consider the relationship of the rooms to each other.
- Determine the size by allowing space for all the activities planned for the workroom. The amount of space needed for many activities has been determined by research at Washington State University and other schools. Homemakers of different heights and ages participated in these studies.
- Complete the details of storage, lighting, wiring, finishes, etc. Activities assigned to the workroom may indicate its finish. If you plan to do the ironing and mending in the workroom, you'll want to finish it in gay, light colors since both ironing and sewing are long-time, stay-at-it jobs. If you sew often and plan to have garden products, muddy clothes, etc. in the workroom, you may want to iron and sew elsewhere and let the workroom be roughly or simply finished.

The rest of this bulletin goes into the specifics you'll need to consider if you'd like to plan a workroom that will really work.
LOCATE THE WORKROOM WHERE IT WILL BE CONVENIENT

The first step in getting a workroom that really works is planning a good location. This depends on what you want to do in the workroom and on how you do your housework.

Here are some things to consider when you plan the location—

- On the main floor if you want to avoid climbing stairs.
- With a view of the play yard if you want to supervise the children while you work.
- Near the kitchen if you want to do the laundry while you prepare meals or clean up.
- Near the bedroom and bathroom area if you prefer to do the laundry and mending along with housework in the sleeping area.
- Or near both the bedrooms and the kitchen.
- So that there are no stairs to the back yard if you want to hang clothes outside occasionally.

The other activities you plan may help determine the location. For example, the workroom needs to be near the back entry if you plan to use it for cleaning up after gardening and similar jobs. You'll also want to consider traffic into and through the house. Let it go past the workroom rather than through it. Saving space by eliminating halls isn't much of a saving. Halls keep rooms from becoming throughways with more traffic space than work space. Halls are wonderful places for storage walls, too.

PLAN SPACE FOR ALL THE STEPS IN DOING THE LAUNDRY

It takes more than a washer and a dryer—no matter how automatic they are—to make a convenient laundry. Just as a deluxe range, a refrigerator, and an automatic dishwasher do not by themselves make a convenient kitchen, appliances alone do not make a convenient laundry.

Each of the steps in doing the laundry needs to be considered. Some require storage space for supplies. Others require space for working; and still others need space for equipment.

Here are some of the things to keep in mind when you plan the laundry area—

FACILITIES FOR COLLECTING LAUNDRY

If the soiled laundry is gathered up from the bedrooms, bathroom, or kitchen at laundry time, a three-shelf cart can be useful. It can be used to return clean laundry, too.

It may be more convenient to have a place for soiled laundry in the workroom than to have hampers scattered throughout the house. Family members can cooperate by bringing their own laundry.

In some homes the workroom can be located so there is a convenient pass-through for both delivery and pick-up.

SPACE FOR SORTING LAUNDRY INTO LOADS

Once the laundry is in the workroom, it still can’t go directly into the washer. It needs to be sorted into loads that can go into the machine together.

Modern washers can be programmed to supply the right conditions for many different kinds of fabrics. Water temperature, wash speed, spin speed, and rinsing can all be controlled. But the homemaker still needs to choose a companionable load and push the right button. It takes careful sorting to prevent fading, shrinking, wrinkling of wash-wear garments, pleat removal, and other costly mistakes.

Many items—sheets, towels, etc.—accumulate so rapidly that there will be a load each time they are collected. Others—wash-wear dresses, white dacron or nylon, dark fabrics, or bright colored ones—will usually have to wait until there is a load of like items that require similar treatment. Bins for sorting and holding are a convenient solution to this problem.

Having from three to six sort bins located on the wall over the appliances or over a table near the washer can make the sorting part of doing the laundry as convenient as the washing and the drying. Stand-up sorting is a back saver, too. It eliminates stooping over stacks of laundry piled on the floor or reaching into deep hampers.

To be most convenient, sort bins need to be planned to suit the height of the homemaker. A woman of average height can reach only one row of bins if they are located over a top-opening washer. She could have two rows of bins if they were located over a front-opening washer or a narrow table (28 inches or less deep).

Bins constructed of perforated board allow for necessary ventilation. If closed bins are desired, a loose hanging or ventilated covering can be used. Garments will stay in if the bins are slanted at the
bottom—about 3 inches lower at the back than the front. With slant bottoms, too, the space is less likely to be commandeered for other storage. If the bins are built so that they hold just as much as the washer holds—8 pounds, 10 pounds, or whatever its capacity—a full bin will indicate that a load is ready for washing.

Custom-built bins are not the only way to solve the sorting problem, however. A less expensive version of this idea is a row of plastic baskets or cardboard boxes on a shelf—still located, of course, at a height that’s convenient for the homemaker. However, even a tall person can use only one row of baskets or boxes because the opening is at the top rather than at the front.

**A PLACE FOR STORING LAUNDRY SUPPLIES**

Laundry supplies—detergents, bleaches, conditioners, softeners, stain removers, fabric finishes, and other laundry aids—need to be stored where they are easy for the homemaker to reach but out of reach for toddlers.

The old rule, “There should be storage space and a work surface next to each piece of equipment,” applies to the workroom as well as the kitchen. Here are some other guides for convenient storage—

- Store often used items within easy reach.
- Store at the point of first use or most frequent use.
- Plan the space to fit the item.
- Store only needed items, discard others.

Heavy containers may be stored under the sink or counter if the door is kept securely fastened to foil inquiring youngsters.

Laundry supplies usually require from 4 to 8 linear feet of shelving. Check the supplies you now have to determine the amount of space you’ll need.

**A DEEP SINK FOR PRE-TREATING LAUNDRY**

A sink that’s 12 inches deep and 18 by 20 inches across is a valuable partner for the automatic washer and dryer. It’s used for pre-treating, stain removal, clean up, dampening for ironing, and a host of other jobs.

If the washer is designed for re-use of wash water, a full-depth laundry tub—about 21 inches deep—will be necessary, but otherwise such a tub is too deep for convenient hand use. A deep tub that’s used to save suds needs to hold as much as the washer holds—or be equipped with an overflow pipe.

From 2½ to 5 feet of available counter space adjoining the sink can be very useful. If the washer is to drain into the sink, the counter will have to be on just one side so that the washer can be on the other. If the washer has its own in-the-wall drain pipe, the counter can be on both sides of the sink.

The counter can be the same height as the collectors, and such,
appliances, but a tall person may find it more comfortable to work at a sink and counter that are from 1 to 3 inches higher than the normal appliance height of 36 inches.

SPACE FOR WASHER AND DRYER

The width of washers and dryers usually varies from 24 to 30 inches each. It may be wise to allow at least 55 to 60 inches of wall space for the pair to accommodate a possible change in size when replacements are chosen. The combination washer-dryer or stack-on models are designed for minimum space laundries.

The depth needed will vary according to plumbing and wiring installation. It's generally wise to allow 28 inches front to back.

Space in front of the washer and dryer for the worker to work conveniently is important, too. Space needed to load and remove laundry varies with the door style, but an allowance of 36 to 40 inches in front of the washer and 38 to 44 inches in front of the dryer will allow the worker to work without being cramped. Add 24 more inches for clearance if a passageway behind the worker is desired. This practically eliminates hallway installations.

If the washer hose is to drain into the sink, the washer needs to be located next to it. Locating the dryer on an outside wall facilitates venting.

A PLACE TO HANG GARMENTS

The directions for drying wash-wear garments are "remove from the dryer immediately and hang on hangers." A rack for hangers near the dryer lets you do this conveniently.

For the very few items that need to be drip-dried—some pleated skirts, glass fiber curtains—an extension rod over the sink or the floor drain, if there is one, will be useful.

A TABLE TO FOLD ON

Towels, sheets, and nearly everything else that isn’t hung on hangers must be folded and sorted into piles for either pressing or return to storage. Research workers recommend a 34 by 60 inch table as a convenient place for folding fitted sheets and other items. The best location is near the dryer. The dryer top can provide some stack space, too.

The table can also serve well for additional sorting space before washing, for pre-treating laundry, for drying sweaters, and for other-than-laundry jobs.

IRONING OR TOUCH-UP PRESSING AREA

Ironing, often the dreaded part of the laundry, is less of a chore when the ironing unit is convenient. To iron comfortably, there should be space for the ironed and unironed garments within easy reach of the worker. It is especially important for the seated worker to be able to reach the hold rack or table without getting up.

It will take a space 6½ by 7 feet for a convenient ironing center. Even if you plan to leave the ironing board up most of the time, it’s still a good idea to have a place that’s high enough and wide enough to store it. A folded ironing board is about 60 inches high and 22 inches wide.

If you plan to do the ironing and sewing in another part of the house, rather than in the workroom, a touch-up pressing center near the dryer may help get lots of garments ready to wear without waiting for ironing time. The dry and steam iron, a jug of distilled water, and a small press board—used on the nearby table—are all that you’ll need. Plan to store them close to the table.

Touch-up pressing is all that is necessary for many garments in today’s laundry. A small press board in the workroom would be a good idea if the full-size ironing board is in another room.
PLAN SPACE FOR OTHER WORKROOM ACTIVITIES, TOO

Many of the other jobs assigned to the workroom can use the same facilities required for the laundry. The deep sink with its adjoining counter can double for plant and flower care, for cleaning fish and game, or for grooming the family’s pets. The only thing that needs to be added is some nearby storage space for supplies. Other activities, however, may require more careful planning.

FOOD FREEZER

The first floor workroom can be a convenient location for the freezer. Since it is a heavy piece of equipment by itself and becomes rapidly heavier at the rate of 35 pounds per cubic foot of storage space, it needs to be located along an outside wall or where there is extra floor support. This is particularly important for upright freezers, since the weight per square foot of floor area is greater than for top-opening styles.

A space 36 inches wide and 26 to 30 inches deep will accommodate most upright freezers; 30 inches additional space in front of the freezer will be needed to open the door. Storage cabinets over top-opening freezers need to be high enough to allow the lid to open, too.

If you plan a storage cabinet over a freezer, it might be a good idea to build it as a separate unit rather than as a permanent part of a larger cabinet. A new freezer might be taller than your present model.

For work space next to the freezer you could have a counter, a table, or a portable cart. Allow at least 4 square feet of space to take care of jobs like sorting packaged food. Storage space for wrapping, sealing, and labeling supplies and for reusable containers should be located near the freezer, too, or near the sink and counter where the packaging is done.

FOOD PANTRY

When kitchen space is scarce, a food pantry can provide extra first-floor storage space for home-canned food, bulk purchases of food, canning equipment, and seasonal equipment. It could be located to open into the workroom or into the hallway.

A space 2 by 2½ feet or larger and with carefully spaced shelves can provide convenient storage. Since even canned food keeps better if the temperature is below 70°F, but above freezing, ventilation may be desirable if the storage area is in a warm part of the house. Even with ventilation, however, a food storage area should not be built along a wall that has hot pipes.

"MUD CLOSET"

A “mud closet” for outdoor wraps, work clothes, and rain gear needs to be near the back entrance. It might be better to locate the closet so that it opens into the rear hall rather than into the workroom.

The closet should be 3 to 5 feet wide to hang wraps for six people. A depth of 30 inches will be needed for men’s topcoats. The rod should be located at least 63 inches above the floor or boot rack. A lower rod for children’s coats can be adjustable to go up as they grow up.

Where there are lots of wet boots and coats to drip, a shower-type floor with a drain could be installed to solve the puddle problem. A rack about 4 inches above the floor would keep boots high and dry. The closet could double as a place to hang drip-dry garments, too.

CHILD-CARE CENTER

The workroom sink and counter and cart or table can serve as a child-care unit. Mother can diaper and bathe the baby or shampoo the small child at a comfortable, stand-up height and leave the soiled laundry near the washer. Water spills are in a can-take-it room.

For a convenient child-care area, you’ll need at least 4½ feet of counter space on one side of the sink—the left, preferably—and extra storage space for supplies.

MENDING OR SEWING CENTER

If you plan to do the ironing in the workroom, having the mending or sewing center there, too, will let you use the same table, ironing board, and good light. Of course, some homemakers who sew a great deal may prefer to have a sewing center in another part of the house.

Floor space requirements for a sewing center may vary from 4 by 4½ feet for a small unit to 8 by 12 feet for a complete sewing center. The space needed for a compact sew-mend center—suitable for a homemaker who does more mending and altering than new garment construction—is shown in the diagrams at the end of this bulletin. Check references for more complete information on planning sewing centers.
This laundry area includes a table for folding at the left and a deep sink at the right of the washer and dryer. It has three sorting bins and storage space for laundry products above the appliances. The valence light provides general room lighting as well as good task lighting at laundry time.

When the day's laundry is done a metal Venetian blind covers the sort bins but still allows ventilation.
Family A wanted their workroom near the kitchen since they planned to put a freezer in the workroom. They also wanted it near the garage or back entry so the laundry sink could double for washing garden vegetables and for clean up when the family came in from yard work. To go along with this, they planned a “mud closet” for work clothes just across the hall from the workroom near the door to the garage.

Mrs. A decided to combine laundry, a mending area, and the freezer

In this example, the family listed—
- Automatic washer and dryer.
- Deep sink and counter.
- Convenient place to sort and hold laundry.
- Place to fold clean clothes, especially fitted sheets.
- Cart to take clean clothes back to bedroom area.
- Storage space for laundry supplies.
- Large upright freezer and a storage area for reusable freezer containers.
- Place where ironing board could be left up if necessary.
- A compact sew and mend unit.

Folding a fitted or contour sheet is less of a problem when there is table room for folding. Even though folding methods vary, research workers determined that one person could fold a fitted sheet quite conveniently and still leave stack room if the table was at least 34 inches wide and 60 inches long. When the laundry is finished, the drop leaf goes down to make a table half that size.

With the aid of a sturdy box, even little sister can bring her pajamas to the bin reserved for them. They’ll wait there until there is a load of like items to be washed together.
The laundry sink and counter is a fine place for a little girl's shampoo. Mother likes to work at this height and daughter appreciates the "no suds in your eyes" shampoo. Spray hose rinsing makes it nearly like a beauty parlor shampoo.

The shelved cart is convenient for taking clean, folded garments back to their storage spaces. Even Junior can share in this part of the laundry job.

The family in this example wanted these things—
- Automatic washer and dryer, deep sink, and space
- Room for a motor-driven ironer and a place to let the job was done.
- Baby-care area and a place where Mrs. B could sit
- Space for a large upright freezer.
- Lots of storage space and a "mud closet" for rain gear.

The B's wanted their workroom near the kitchen and not too far from the bedrooms. They wanted a room that could be closed and made comfortable for bathing the baby and shampooing the girls. After the days of bathinet, playpen, and watercolor games, the area could accommodate adult hobbies. Mrs. B wanted a view of the backyard play area and she also wanted to be able to use the "mud closet" by the back entrance with its drain in the floor as a place for hanging drip-dry clothes. A small sliding door allows access to the closet from the workroom. Since Mrs. B decided that the little sewing she does could be done in the light and sunny dining room area, the ironing board cabinet opens from both the workroom and dining room sides.
This workroom has sort bins over the table and appliances and a place for the roll cart and diaper pail under the counter. Dangerous supplies—bleaches, stain removers, etc.—are stored in the wall cabinet where toddlers can't reach them.

Since Mrs. B is tall, she can easily reach into the top of a double row of bins. Location allows washer to open.

**THE LAUNDRY**

The washer is for stand-up sorting, and the ironing board standing until the washer is open allows the children's hair without stooping. It also dries the washer and drip drys.

![Image of the workroom layout](image-url)
Family C wanted to remodel their house so that they could bring the laundry area out of the basement, have a more convenient kitchen, and add another bedroom. They needed more storage space for linens and cleaning supplies, too. They decided to convert the old kitchen into a workroom and add a combination kitchen-family room with a more attractive entrance because "guests always come to the back door." With this arrangement, they could use much of the plumbing and wiring that was already in the old kitchen. They left the water heater in the basement and added a water softener down there.

THE C'S CHANGED THEIR KITCHEN INTO A WORKROOM WHEN THEY REMODELED

In this example, the family decided to remodel their kitchen as a workroom. They wanted—
- Automatic washer and dryer and space for sorting and storage.
- Convenient ironing arrangement.
- Laundry sink that could also serve for wash-ups in their one-bathroom house.
- Place for flower and plant care.
- Way to shut off workroom so that Mrs. C could leave unfinished jobs until she got back to them.
- Storage for extra food supplies and seldom-used equipment.
- Light color scheme because the room didn't have much outside window space.

Since Mrs. C is only 5'1'', she decided that sort and hold baskets on sliding shelves under the counter would be easiest to reach. Lower row of bins is assigned for less frequent use. The baskets can be removed if needed for portable jobs.
Mrs. C—a plant and flower hobbyist—keeps a few well chosen vases and flower arranging tools near the deep sink with its spray hose for plant leaf washing.

Garment hook and hangers are within easy reach. The electric outlet is high enough and far enough forward of the ironing board to provide a natural cord holder.

The laundry area has an automatic washer and dryer, a deep sink, and sort and hold baskets on sliding shelves—left open to allow for good ventilation.

The storage cabinet near the dryer has a pull-out rack for hanging wash-and-wear garments that should go on hangers just as soon as the dryer stops.
COMPLETE THE PLAN BY PROVIDING GOOD LIGHTING, ETC.

Finishing up the plan by providing for good lighting, electrical service, plumbing, venting, surface finishes, etc. takes some time and requires some attention to details. However, good planning will pay off handsomely through the years in the satisfactions of having a workroom that really works.

Since there are new developments in appliances all the time, it's wise to allow for them—particularly when it comes to wiring. If you just plan on the minimum requirements necessary for present appliances you may not be able to add new equipment without costly rewiring or remodeling.

LIGHTING

It takes both general room lighting and local lighting for each job to make a workroom that's efficient, safe, and pleasant.

However, the general room lights can often double as local job lights. For instance, ceiling fixtures do not need to be centered in the room if moving them from 2 to 5 feet in either direction would provide better light for a certain job. They will still provide general or traffic light, too.

One or more of the ceiling or job lights should be switched by the door. If there are two doors, switch by both.

One way to estimate the amount of light to provide is to allow at least 3 watts per square foot of floor space. (For example, a workroom that's 9 by 12 would have 108 square feet of floor space and would need at least 325 watts for lighting.) More light may be needed for hard-to-see jobs like sewing, night-time ironing, stain removal, or craftwork.

You may use incandescent bulbs in drop or flush-to-ceiling fixtures or fluorescent tube fixtures or a combination of the two types. Count on at least two fixtures. You may need three or four if sewing, ironing, and other activities in addition to the laundry are included in the workroom.

Use “warm white” fluorescent tubes for better color. Incandescent bulbs of 100 watts or more need louvered or diffusing fixtures to soften the light—especially if the bulb can be seen from work areas where you will normally stand or sit. The smooth surfaces generally used in laundry areas cause reflected glare unless light sources are well diffused.

For a workroom that's a real morale booster, consider a luminous ceiling to provide overall, shadowless illumination—especially good where there is a minimum of window space or of sunshine.

WIRING

Don't let inadequate wiring make your workroom old fashioned before it's even built. Plan for wiring that's safe and adequate for all the electrical equipment you want to use and then allow a margin for greater demand in the future.

Wiring must meet state and local code requirements, but these requirements are minimum standards. They help prevent hazards from shocks and fires, but they don't necessarily provide adequate wiring for today's deluxe equipment. Even following adequate wiring recommendations may not let you add more equipment or install newer appliances with higher ratings, so be sure that the wiring will be able to handle more than just your present needs.

Each of the major appliances—washer, dryer, water heater, etc.—will need an individual circuit of its own and its own specially located outlet. Each of these appliances also needs to be separately grounded.

Allow plenty of convenience outlets for portable appliances, too. Locate them on walls or over counters or tables in areas where they will be convenient for the job—ironing, sewing, extra light, etc.

In addition to locating outlets where they'll be convenient, be sure that the circuits behind the outlets will accommodate everything you plan to use—especially the things you want to use at the same time. For instance, while you iron, you might want to dry your hair, have the radio on, and perhaps a fan, too. A 20-ampere circuit has a capacity of 2400 watts; if the total rating of appliances in use is more, the circuit will be overloaded.

Having two or more circuits for convenience outlets will allow more than one heating appliance to be plugged in at the same time. The circuits should have a capacity of at least 20 amperes. Use grounding type duplex outlets on these circuits.

In working with the electrician, list all possible lights and equipment that you might install or plan to use. Indicate those to be used at the same time. Then check the wiring plan to make sure there are outlets where needed—

* Electric water heater and clothes dryer will each require 240-volt individual circuits of 30-ampere capacity. Higher capacity cir-
THIS Wiring Diagram is based on Mrs. B’s workroom. The overhead fixtures for general lighting also serve as local job lights. Instead of one fixture in the center of the room, there are two located to serve as job lights for ironing and for working at the freezer. There is also a light over the sink and a row of fluorescent tubes to light the sort bins. The fan is wall switched for convenience. The washer, dryer, water heater, and freezer each have individual circuits. Convenience outlets are located over the counter, on the wall near the table, and near the ironing area.

Circuits may be necessary if unusually high rated appliances are chosen.

- **Washer and food freezer** each need individual 120-volt circuits of 20-ampere capacity. A red signal light for the freezer may be a good safety precaution. If the current goes off, the light goes out.
- **Wall fan** can connect to a regular 120-volt circuit for convenience outlets. A wall switch for the fan will make it more convenient.
- **Motor driven ironer** can operate from a regular convenience outlet on a 120-volt, 20-ampere circuit—if no other heating appliance is on the same circuit at the same time.
- **Dry and steam iron** plugs into a regular convenience outlet on a 120-volt, 20-ampere circuit. The wall outlet can serve as a natural cord holder if the ironing board is to be used at a right angle to the wall. Locate the outlet 36 to 48 inches above the floor and from 12 to 18 inches ahead of the center of the ironing board.
- **Other portable appliances**—sewing machine, hair dryer, radio, freezer package sealer, floor polisher, etc.—can plug into regular convenience outlets. It will be easy to plug them in if the wall outlets are located 24 to 30 inches above the floor.

**Gas Appliances**

A gas supply line of rigid pipe and flexible copper tubing is a standard requirement for each gas appliance. The supply line for each appliance must have a cut-off valve, installed ahead of the flexible tubing.

- **Water Heaters:** The gas burner must be vented to a pipe-vent or a chimney.
- **Clothes Dryers:** The pilot and burner can be vented through the same exhaust vent used to carry moisture and lint to the outside. This combination exhaust duct should not be connected to any vent or chimney for other gas appliances. Check the code for possible changes in requirements. The gas clothes dryer also needs a regular 120-volt electric outlet for the motor, light, etc.

Because gas burners must have combustion air, an adequate venting system includes bringing in outside air as well as exhausting it.

A “100% safe” automatic gas pilot for thermostatically controlled dryers and water heaters will cut off the gas supply when gas line interruptions put out the pilot light. Manual lighting of the pilot will resume service.

Burners, pilots, and venting should be carefully inspected when the appliances are installed and the gas service is turned on.
VENTING FOR DRYERS

Most air flow type dryers should have a vent to carry moisture and lint outside. Condenser type electric dryers do not require outside venting. However, most of them need a cold water supply and a drain line—usually the same one used by the washer.

Without outside venting, an air flow type dryer may put from 2 to 4 quarts of moisture into the room with each load. Window ventilation or a good wall fan may accommodate infrequent drying, especially in drier climates, but for frequent, successive loads, it's better to vent the dryer directly outside.

For easy outside venting, the dryer should be located on or near an outside wall. Vent pipes under the floor or in the wall or ceiling can travel only about 12 to 20 feet before the air flow is slowed or retarded. This varies with the dryer, the size of the vent pipes, and the number of turns, however. Avoid facing an outside vent opening into prevailing winds.

An exhaust fan installed in an outside wall will help remove heat, moisture, and odors at laundry time. Size or capacity of the fan should be based on the size of the room for effective ventilation.

HEATING AND SOFTENING WATER

When locating the water heater, “short runs for hot water” is the rule. The pipe and original installation is comparatively inexpensive. The cost of heating water lost in long runs and in less efficient washing can be more expensive over the years.

On the basis of heat lost on long runs for use in frequent small quantities, the best location for the water heater is near the bathroom or the kitchen.

Two smaller, fast-heat-recovery water heaters may be more practical than a single large one—particularly for the large or spread-out house. One could serve the kitchen and workroom and the other could serve the bathroom. For efficiency, the heater near the clothes washer and dishwasher could be set at a higher temperature; the heater near the bathroom at a safer, lower temperature—especially if there are small children.

When hard water interferes with laundry and housekeeping, an ion-exchange type water softening system may be installed. It may be plumbed ahead of the water heater for softening hot water only or connected in the pipeline for softening parts or all of the cold water as well.

Rental-service softeners, service-yourself softeners, or completely automatic softeners may be chosen from a variety of brands and in different capacities, sizes, and shapes. Rental units or small capacity softeners require only about 18 by 18 inches floor space. Completely automatic softeners, with brine tank, may take about twice the space of a water heater. Check before building a cubbyhole for a water softening system.

Softeners by themselves won't take care of excessive iron content. If you need to remove iron from the water, too, it will have to be done by iron filters installed ahead of the softener, or by chlorination and filtration, or by iron stabilization. Get professional advice.

PLUMBING

Flush installation—washer and dryer close to the wall—is desirable as both a space saver and to eliminate the problem of garments or articles being trapped back there. Space in the wall behind the washer must accommodate the wasteline standpipe, its trap and vent, and the hot and cold water connections with their cut-off valves.

Cut-off valves for the hot and cold water lines are a safety precaution. They reduce the pressure on connecting hoses and on the washer fill controls. They simplify servicing or changing washers, too. Cut-off valves should be installed in the wall 48 inches above the floor to allow clearance over the washer control panel.

Some appliances allow space within their framework for the turns in the water supply and drain hoses. Many, however, require an additional 3 to 6 inches of space to allow the hoses to bend without crimping. If the wall in back of the washer and dryer is left uncovered, the wall space between the studding will take care of 3 or 4 inches of the necessary space for hose turning.

If the washer is to be flush with the wall, the wasteline needs to be in the wall, too. The wasteline may be an open standpipe, 1 1/2 or preferably 2 inches in diameter and 30 inches high, into which the crook end of the drain hose is hooked. A sealed hose-to-standpipe connection may be made if the trap is properly vented.

Every drain must have a trap and every drain should also have a vent to reduce the likelihood of flooding from over-sudsing. To avoid flooding, many people prefer to drain the washer into the laundry sink rather than into an open standpipe in back of the washer.

A floor drain is sometimes desirable in a workroom. Floor drains can be installed easily if the floor is “on-grade” concrete. Proper slanting and seal of the floor to the drain is not feasible when the floor base is wood.

Floor drain traps must be kept filled—or have
a trap primer—to prevent sewer gas odors. The rare overflow or flooding accident will probably not keep sufficient moisture in the drain trap. However, lubricating oil in the trap evaporates less rapidly than water.

If wasteline traps for the washer, sink, or floor drain are below the main sewer line—as sometimes happens in basements—a sump pump and appropriate vent must be installed.

FLOORS AND FLOOR COVERINGS

If the floor base is concrete, it can be painted or covered with asphalt tile.

To prevent water from leaking to a wood floor base, use sheet linoleum or vinyl floor covering and cove up 2 or 3 inches around the wall base or use a carefully sealed baseboard. Cover the floor under the appliances and move them occasionally to clean and check for leaks. Spills will require wiping up, but the wood floor base need not become soaked. Floor coverings in tile form leave more opportunity for cracks and leaks than floor coverings in sheet form.

Whether the floor is wood or concrete, appliances operate more quietly on sturdy, level floors. They stay in place, maintain proper door swing, and require less servicing, too.

SORT AND HOLD BIN LOCATION AND CONSTRUCTION

BIN HEIGHTS

<table>
<thead>
<tr>
<th>Women's Height</th>
<th>Maximum Distance from Top of Bins to Floor*</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 inches</td>
<td>61 inches</td>
</tr>
<tr>
<td>61 inches</td>
<td>62 inches</td>
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<tr>
<td>62 inches</td>
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<td>67 inches</td>
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<td>68 inches</td>
<td>70 inches</td>
</tr>
<tr>
<td>69 inches</td>
<td>71 inches</td>
</tr>
<tr>
<td>70 inches</td>
<td>72 inches</td>
</tr>
</tbody>
</table>

*To find distance from bottom of bins to floor, subtract 12 inches for one row or 21 inches for two rows.

BIN WIDTH

- 22 inches—5# load
- 26 inches—7# load
- 30 inches—9# load

Construct of perforated board to provide ventilation.

SIDE VIEW

SHORT

Two rows over narrow table or "under-counter" appliances (controls in front)

MEDIUM

Only one row of bins over top-opening washer or two rows over front-opening appliances

TALL

Two rows of bins over dryer, front-opening washer, or table
SPACE ALLOWANCES FOR EQUIPMENT AND WORKER—APPROXIMATE

**APPLIANCES AND WORK SPACE**

- **Dryer and Washer**
  - 38" - 44"
  - 36" - 40"
- **Storage**
  - 5'6" or more

**SPACE FOR CHILD-CARE CENTER**

- **Counter and Sink**
  - 36"
- **Ironing Board and Space for Worker**
  - Allow 6'6" x 7' for complete ironing center

**IRONING BOARD AND SPACE FOR WORKER**

- Dimensions: 4'8" x 32"

**IRONER, EQUIPMENT, AND WORK SPACE**

- **Ironer, Rack for Hangers, Cart**
  - 33"
- **Storage**
  - 4'8"

**SEW-MEND UNIT AND WORK SPACE**

- **Storage**
  - 4'6"
- **Sewing Machine**
  - 30"

**FREEZER AND WORK SPACE**

- **Storage**
  - 5'
### Scale

1/8 INCH = 1 FOOT

**Desk and Space for Worker**

- Desk: 20" - 36" long
- 5' or more

**Coat Closet**

- Closet Width:
  - Two: 2'8"
  - Four: 3'
  - Six: 5'

**Space for Half Bath**

- Basin
- Stool
- 5'6" high

**Heater, Softener, Access Space**

- Water heater
- Softener
- Brine tank
- 23" - 25" wide
- 18" - 40" deep
- 20" - 25" high
- 30" high

**Laundry Table Heights**

<table>
<thead>
<tr>
<th>Women's Height</th>
<th>Table Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>5'0&quot; or below</td>
<td>32 inches</td>
</tr>
<tr>
<td>5'1&quot; - 5'3&quot;</td>
<td>34 inches</td>
</tr>
<tr>
<td>5'4&quot; - 5'7&quot;</td>
<td>35 inches</td>
</tr>
<tr>
<td>5'8&quot; or above</td>
<td>37 inches</td>
</tr>
</tbody>
</table>

**Space for softener varies with capacity, degree of automatic operation, or the service required.**