



# Installation

## *Tools and Supplies*

1. Paint Roller – can be used to apply size or universal primer, as well as paste, if required.  
**HINT:** When applying paste with a paint roller, always move the paste and push the roller outward, from the middle of the paper, to the edges.
2. Razor Trim Knife – For trimming at ceiling, baseboards, around windows and fixtures, a snap knife is recommended for frequent changing of blades, which is essential for a clean cut.
3. Tape Measure or Yard Stick – for measuring walls and wall covering strips.
4. Plumb Bob or Bubble Stick – for insuring a true vertical drop on each wall.  
**HINT:** Use the bubble stick to make a vertical pencil line as your starting guide.
5. Broad Knife – used along with razor knife as an aide in making straight trim cuts.
6. Smoothing Brush – used to smooth each strip flat against the wall, removing any air bubbles that may develop during installation.
7. Seam Roller – used to flatten the seams, where the edges of two different seams meet.  
**HINT:** Gently roll the seams as a final smoothing operation in order to join the seams together, but without forcing out the paste needed to hold the seams down.
8. Water Box – filled with water, it is used for submerging each pre-pasted wall covering strip in order to activate paste on the back during installation.
9. Pasting Brush – As an option to the paint roller for applying pre-mixed adhesive to the back of un-pasted wall covering during installation.
10. Sponge – A good quality natural or synthetic sponge should be used to wash each strip as a final installation step to wash away and prevent any potential residue paste from drying on the front of your wall covering.
11. Other Supplies that may be needed: Paste (if needed, and as recommended by manufacturer), Spackle (for filling nail holes and cracks), Scissors (to aid in trimming and cutting measured strips from wall covering bolts), Size or Universal Primer (to prepare surface for ease of installation), Screwdriver (for removing electrical face plates and heating duct covers), Drop cloth and cleaning rags.



## Surface Preparation

The most important part of the wall covering job is to make sure the wall surface is properly prepared. Time spent before hanging the wall covering will make the job easier and help insure satisfactory results that will last for years. Always read the manufacturer's instructions on the product's label before using.

Basic tips for all wall surfaces include:

- Remove all switch plates, outlet plates and wall fixtures that are not permanent. If removing any type of electrical obstacle, remember to disconnect the source of electricity.
- The wall surface should be cleaned, dry, structurally sound and free of grease, mildew or other stains.
- Ball-point ink, grease, lipstick, crayon or any foreign contamination should be cleaned with a stain killer primer/sealer to prevent any bleeding of the mark through the wall covering. Marking pen inks must be removed from the wall.
- Mildew should be cleaned from the wall surface with a solution of two cups household bleach per gallon of water. Rinse and allow to dry. Any mildew stains should be sealed with a good quality stain killer/primer, and any exterior and/or in-wall source of the moisture that may promote mildew growth must be eliminated.
- Any loose paint must be removed from the wall. Glossy and semi-gloss paint should be sanded to dull the surface and a coat of adhesion promoting primer applied prior to the installation of wall covering.
- Any wall irregularities should be corrected with either spackling, drywall compound or other wall repair materials.

The most important step before applying a primer and hanging wall covering is to make sure that the wall surface is clean, dry and sound. Always remember that you will be using a water-based adhesive to hang the wallpaper which puts stress on the wall surface as the adhesive cures and the wallpaper shrinks or contracts. If the wall surface is not sound, adhesion failure will occur.

### Special Considerations

**Each type of wall surface needs to be treated accordingly:**

**New drywall:** Make sure the drywall is free of contaminants such as dust, dirt and mildew. Joints and spackled areas should be thoroughly cured and sanded smooth. Best results are obtained when the moisture content of the drywall is at or less than 5 percent. Apply a good quality opaque/white primer.

**Paint:** Test painted surfaces for moisture sensitivity. Hold a wet sponge or cloth to the paint surface for 15 seconds, then rub the surface vigorously with a cloth. If little or a slight amount of paint is removed, paint should be sound. If all or a large quantity is removed, the wall should be washed with ammonia and water or sanded and washed to remove the paint. Painted walls should also be tested for adhesion. Cut three small x's into the painted wall surface, then apply a piece of clear cellophane tape over the x's. Yank the tape off vigorously. Inspect the tape for any paint: no paint flakes indicates good adhesion. Paint flakes on the tape indicate that the paint adhesion is not adequate for hanging wallpaper. The wall should be sanded with a coarse sandpaper to remove or break through the old paint. All painted walls should be primed with a good quality opaque/white primer.

**Walls where old wall covering has been removed:** Old adhesives should be removed by sanding or by using adhesive remover. Rinse the wall and allow to dry. Old adhesives can act as a food source for mold and mildew and makes the wall surface uneven and difficult to bond to. If the wall shows any signs of existing mold or mildew, it should be washed with a diluted household bleach solution and thoroughly rinsed and allowed to dry. Repair the wall as necessary. Prime with a good quality wall covering primer. If the old wall covering is peelable, remove both the top and bottom layer of wall covering.

**Existing wall covering:** Make sure the wall covering is firmly bonded to the wall and has no lifting seams or loose spots. You can check for poor adhesion by rubbing your hand over the surface of the wall covering and listening for a “crackling” sound. Make sure the surface is clean and free of any dirt or grease. If the surface is textured or patterned, consider the wall covering you are about to hang and decide what primers are suitable.

**Paneling:** Prime with adhesion promoting primer. Groves should be filled, then reprimed and/or an appropriate wall liner should be used. For best results, use a clay-based adhesive. Some wall covering will require additional priming of the wall liner. See wall liner instructions for priming, installation and adhesive recommendations.

All of these procedures should be followed by an application of a good quality wall covering primer.

If there are any questions concerning the surface to be covered, test installations of at least three strips applied three days in advance of main installation is recommended, or follow manufacturer’s instructions.

## *General Installation Instructions* (Detailed instructions follow)

1. Before cutting, examine goods to make sure pattern colour is satisfactory and as ordered.
2. Check all roll tickets to determine if more than one run or lot number of the same pattern is to be installed.
3. Cut panels and headers in roll number sequence, making sure that run numbers are broken at INSIDE corners only. Wall covering must be installed in reverse roll number sequence. Allow for matching of repeats and trimming at the ceiling and the baseboard.
4. Number panels and headers as they are cut from the roll and apply to the wall in the same sequence. Be sure to cut in reverse roll number sequence.
5. Install all wall covering under adequate lighting and evaluate for color uniformity. When proper lighting conditions are not possible, duplicate the final lighting conditions as nearly as possible.
6. Before starting to hang wall covering, clear the work area, and make sure electrical outlets are off and remove wall fixtures.
7. See manufacture’s instructions for proper adhesive to use.
8. Measure the wall length, add 4 inches/10 cm, then cut the wall covering. It will overlap at the ceiling and the baseboard by approximately 2 inches/5 cm. Note: Be sure to allow for pattern match, either random, straight across or drop match.
9. Selvage (excess trimmed edge) should be removed from the wall and seams closed within one hour.

10. Create vertical plumb lines.
11. Hang the first strip to the vertical line and allow overlap onto the ceiling and baseboard. Using a smoothing brush, broad knife or plastic smoother, remove any air bubbles and make sure all of the wall covering has made good contact with the wall without distorting or stretching the wall covering. Use a seam roller to lightly flatten seams. Make relief cuts (diagonal cuts in windows and doors) with scissors or a knife. Trim with a broad knife and razor knife at the ceiling, baseboard, around windows, etc.
12. Proceed to second strip. If butting (for overlap and double cut), place the second strip to the edge of the first strip and smooth out firmly.
13. Be certain to wash the ceiling and the baseboard to remove any paste residue. Protect the face of the wall covering when cleaning. Seams should be vertical, have a tight fit and be free from air and paste bubbles.
14. After three panels have been smoothed to the wall surface and excess paste removed, examine the installed panels for uniformity in colour. Proceed in the same manner around the room. Geometric and other matching patterns may need additional selvage trimming to obtain color matches across seams. Any objectionable variations in colour and/or pattern match must be immediately communicated to the manufacturer's representative for inspection before proceeding with the installation.
15. Keep going! You've got it!
16. Enjoy your beautiful room.

**Special Tip:** Take extra care and precaution to keep adhesives and dirt from getting on the wall covering surface.

## *Engineering the Hanging Process*

You don't have to be a technical whiz to "engineer" a room. All this means is to determine your seam placements before beginning your installation to avoid waste mistakes. Other things to consider when planning a covering hanging are:

- the placement of the pattern so it is pleasing to the eye
- focal points
- accent walls
- border placement
- arrangements of doors and windows or other unique architectural features.

All these factors affect seam and pattern placement, and also determine starting points, ending points and area of mismatch.

The most likely point to start the engineering process should be the area of the room that will cause the most difficult situations. Once this area is planned, seam placement can be established in two different directions working from the problem area back to the ending point.

Before engineering the room, it is important to measure the expanded width of wall covering (using a scrap of the wall covering). Most wall coverings will expand to a certain degree after they have been pasted and then booked. After booking, re-measure the wall covering for its true hanging width. If seam placement is figured before this expansion (or, in some rare cases, shrinkage) has occurred, seams will fall in areas different than originally figured.

A rule of thumb is to try to avoid having a seam fall less than 2 inches/5 cm next to an obstacle like a window, door or corner. In some rooms, this may not be possible.

While engineering a room, pattern placement also needs to be noted. Be sure to plan pattern placement so that the design falls at specific points on the wall that are aesthetically pleasing. Areas that need to be watched are:

- ceiling line -- do not cut a design element in half
- chair rails -- again, do not cut design elements in half
- door/window headers and dados (areas above cabinets), etc.

Occasionally, pattern placement is more important than seam placement. When this is the case, the design element should be placed where it will be most visually pleasing. But, if at all possible, seam placement should still be considered.

## *Where to Start*

While engineering the room, not only will seam placement be planned, but also the location of the mismatch - where the final strip to be hung will be butted up to another strip and the pattern may not match. Two factors affect this decision:

1. pattern of the wall covering
2. architectural layout of the room

If hanging an entire room, choose the place where the partial strip will butt against a full strip, or where the mismatch will be most inconspicuous. Choose a short area of wall to place the mismatch, instead of having the mismatch be the length of an entire wall. The ideal place in most occasions is over a door or window that is not on the focal wall. There are times when the mismatch will be best placed in the corner behind a door, even though that will yield a mismatch the length of the wall.

A natural breaking place such as floor-to-ceiling fireplace can eliminate a mismatch, but only if the pattern being hung does not contain large design elements. If there are large design elements, the pattern needs to be hung with the main part of the design element symmetrical on each side of the breaking point, and then hang the walls going both right and left, planing where the mismatch will land.

After the mismatch point has been designated, decide where to start hanging based on seam placement from the engineering. It is possible to start in the middle of a wall and work in two different directions to the mismatch point.

## *Making a Plumb Line*

For a successful hanging job, it is essential that your wall covering be hung straight. Most homes, however, have walls and ceilings that are often slightly out of alignment. To compensate for this, you must begin your job with a truly vertical plumb line. In fact, you should make several vertical plumb lines around the room as you go along.

To make vertical plumb lines:

- Decide where you want to begin your hanging (see the Where to Start section in this Web site).
- Line up a carpenter's level or straight edge/level and lightly draw a straight vertical line with a pencil. (Always use a pencil as inks may bleed through your wall covering after it is hung.)
- Line up your first strip of wall covering with this line.
- For best results, make several plumb lines around the room to make certain all wall covering strips are straight.

**Special Tip:** If you are starting your hanging at a corner, make your plumb line half an inch less than the width of your wallpaper from the corner. This way, your wallpaper will overlap on the adjoining wall by about a half-inch/1,5 cm and can be covered by your final strip.

## *Booking Each Strip*

Once you have made your plumb lines and are ready to begin hanging your wall covering, apply or activate your paste.

If using the more common pre-pasted residential wall covering, follow manufacturer's instruction for activating the paste. (If using un-pasted wall covering, see manufacturer's instructions for the proper paste to use.)

Booking each strip after the paste has been activated is a very important step in your hanging process. By booking your strip, you will allow the adhesive to penetrate, or soak into, the wall covering. It also allows the strip to relax and keeps it from drying out until you are ready to hang it. It is important to remember to activate the paste and book each strip one at a time.

### **Booking Instructions:**

1. Activate or apply paste to two thirds of your wall covering strip, then fold the top of the strip about two thirds the way down, allowing paste to rest against paste.
2. Activate the paste on the remaining portion of the wall covering and fold paste to paste
3. Do not crease folds.
4. Roll the folded, booked strip loosely to keep edges together so they will not dry out.
5. Allow three to five minutes for the booked strip to relax before hanging (or follow length of time according to manufacturer's instructions). If you will not be using the strip for a while put the strip in a plastic bag to keep moist.

Now you're ready to hang your first strip!

**Once your strip is activated and booked, it's time to start hanging your wall covering.**

## *Booking the First Strips*

Carry your booked strip to the wall, step up to the ceiling and unfold the top portion of your strip. Press the upper portion against the wall, leaving two inches/5 cm for trimming along the ceiling line. Line up the edge of your wall covering to your plumb line.

Give the upper portion of the strip a couple of horizontal strokes at the ceiling line to force it flat against the top of the wall. Use downward strokes to smooth down the upper portion of the strip.

Slide the middle portion of the strip into position using the palm of your hands. Always avoid pulling on the edges of any wall covering. Check for alignment against the plumb line, and smooth with downward strokes.

Unfold the remainder of the strip and smooth down the bottom portion making sure the strip is aligned with the plumb line. When you are sure the strip is positioned evenly with the plumb line, smooth over the entire surface of the strip. Remove any air bubbles, pulling the strip away from the wall if necessary.

Now using your wall scraper or broad knife as a guide, trim at the ceiling line and the baseboard with your razor knife. Hold your scraper or broad knife tightly in place between the wall and the razor knife. Move the scraper along the wall, keeping the blade of the razor knife in contact with the wall. Replace blades with every strip for a clean cut.

Rinse wall covering, ceiling and baseboards thoroughly to remove excess adhesives. Change your rinse water frequently and use a good quality natural sponge.

### **The Second Strip**

Take your second booked strip to the wall and unfold the upper portion, sliding it into place. Adjust the strip carefully to align the pattern to the strip already on the wall. Butt the two edges of the strips together tightly, but do not overlap. Use the palms of your hands too to smooth the second strip into position.

Once the second strip is positioned and properly matched, use your smoothing brush to line the rest of the strip along the edge of the first strip. Trim excess at ceiling line and baseboard. Smooth out once again. Rinse. Continue with third strip.

Once you have hung three strips, go over the seams lightly with a seam roller. (Do not press hard as you may squeeze the adhesive from under the wall covering.)

Take a look at these strips and see if the pattern repeat is correct and that any tonal variations in the wall covering are acceptable. It is best to leave these strips on for a few days as test strips before you continue your job.

Once you are happy with the look of the first three strips, finish hanging your room.



## *Special Instructions for Special Areas*

In every virtually every room you will hang wall covering, you will run into special areas that need extra -- but simple -- attention. These include electrical outlets, corners, windows and doors. See how easy it is to cover these areas.

### **Electrical Outlets**

When wallpapering on a wall with an outlet, play it safe! Make sure the electrical current is off. Your switch or outlet plate should have already been removed in your initial wall preparation, but, if not, remove it now.

To paper, simply run the wall covering over the outlet box and with your razor or knife, cut away the wall covering around the hole and replace your plate or switch.

### **Hanging Inside and Outside Corners**

#### **Inside Corners**

When you come to an inside corner, like in the corner of a room, measure the distance between the edge of the last strip hung to the corner. Add 1/2 inch/1,5 cm to this measurement and cut your wall covering. Align this strip with the wall covering strip already on the wall (or your plumb line); the extra 1/2 inch/1,5 cm will wrap inside the edge of the corner to the other wall. To make the wall covering wrap easily, cut small diagonal slits and the ceiling and baseboard. Next, measure the next strip from the corner, and hang this strip OVER the 1/2 inch/1,5 cm piece wrapped in the corner.

**Special Tip:** If you are using a vinyl wall covering, be sure to secure this overlap with a vinyl-to-vinyl adhesive.

#### **Outside Corners**

Unless adjoining walls to an outside corner (corners that point outward) are badly out of line, the easiest way to hang an outside corner is to wrap the strip you are hanging around the corner to the other wall. Slit the 2 inches/5 cm overhang at the ceiling and baseboard to make wrapping easier.

If you know you will hanging around an outside corner, start with the longer wall first to avoid any pattern drop at the ceiling line in the event your corner is not perfect.

If your walls are badly out of alignment, measure the distance between the last strip and the corner and add 1 inch/2,5 cm. Hang this piece, wrapping the extra 1 inch/2,5 cm around the corner. For the next piece, measure your wallpaper and add 1/2 inch/1,5 cm, letting this extra 1/2 inch/1,5 cm overlap the corner piece.

**Special Tip:** when hanging outside corners, make sure all trapped air is eliminated by smoothing the wallpaper tight.

#### **Ending at an Outside Corner**

If your paper job ends at an outside corner (you are not going to papering the wall on the other side of the corner) be sure to trim the last strip of wallpaper 1/8 inch/0,3 cm from the edge. This will prevent fraying. Another way to avoid fraying at the corners is to use clear plastic guards available at from your retailer.



## Hanging Around Windows and Doors

Do not try to pre-cut a strip of wall covering to fit around a window or door. Instead, when you reach the window or door opening, hang the wall covering right over the edge. Cut away most of the excess wall covering, and then make diagonal cuts to the edges of the frame. Use your scraper or knife to trim.

Continue to match the pattern around doors and above and below windows using sections of full-width strips. Make sure these shorter strips are vertical when hanging.

You can use this easy technique for other obstacles, including bookcases fireplaces, built-ins, etc.

## Hanging Borders

Borders are one of the most popular and economical way to brighten up a home. They are most often placed at the ceiling, but can be placed around doors, windows, mirrors -- anywhere you would like a splash of colour.

Wherever you hang borders, they should be folded in one of three ways:

1. like an accordion
2. paste-to-paste
3. pattern-to-pattern

However you choose to fold, make sure you do not crease the paper, and gradually unfold and smooth as you hang.

**Special Tip:** If your border comes by the yard, make sure you purchase enough to be able to hang a wall at a time. If your border comes in fixed lengths, you can overlap and double cut to match your pattern.

## Wall Covering Roll Estimator

How many double roll bolts (56 square feet) will I need?

Distance Around Room	*Ceiling Height			
	8 ft/2,44 m	9 ft/2,74 m	10 ft/3,05 m	12 ft/3,66 m
24 ft/7,3 m	4	5	6	7
28 ft/8,5 m	5	6	6	8
32 ft/9,8 m	6	7	7	9
36 ft/11 m	7	7	8	10
40 ft/12,2 m	7	8	9	11
44 ft/13,4 m	8	9	10	12
48 ft/14,6 m	9	10	11	13
52 ft/15,8 m	10	11	12	14
56 ft/17 m	10	11	12	15
60 ft/18,3 m	11	12	13	16
64 ft/19,5 m	11	13	14	17
68 ft/20,7 m	12	14	15	18
72 ft/21,9 m	13	14	16	19

Deduct one bolt for every 4 openings - door or windows - of average size.

\*If you have a chair railing or wainscoting, adjust your wall height according by measuring from the rail to the ceiling.