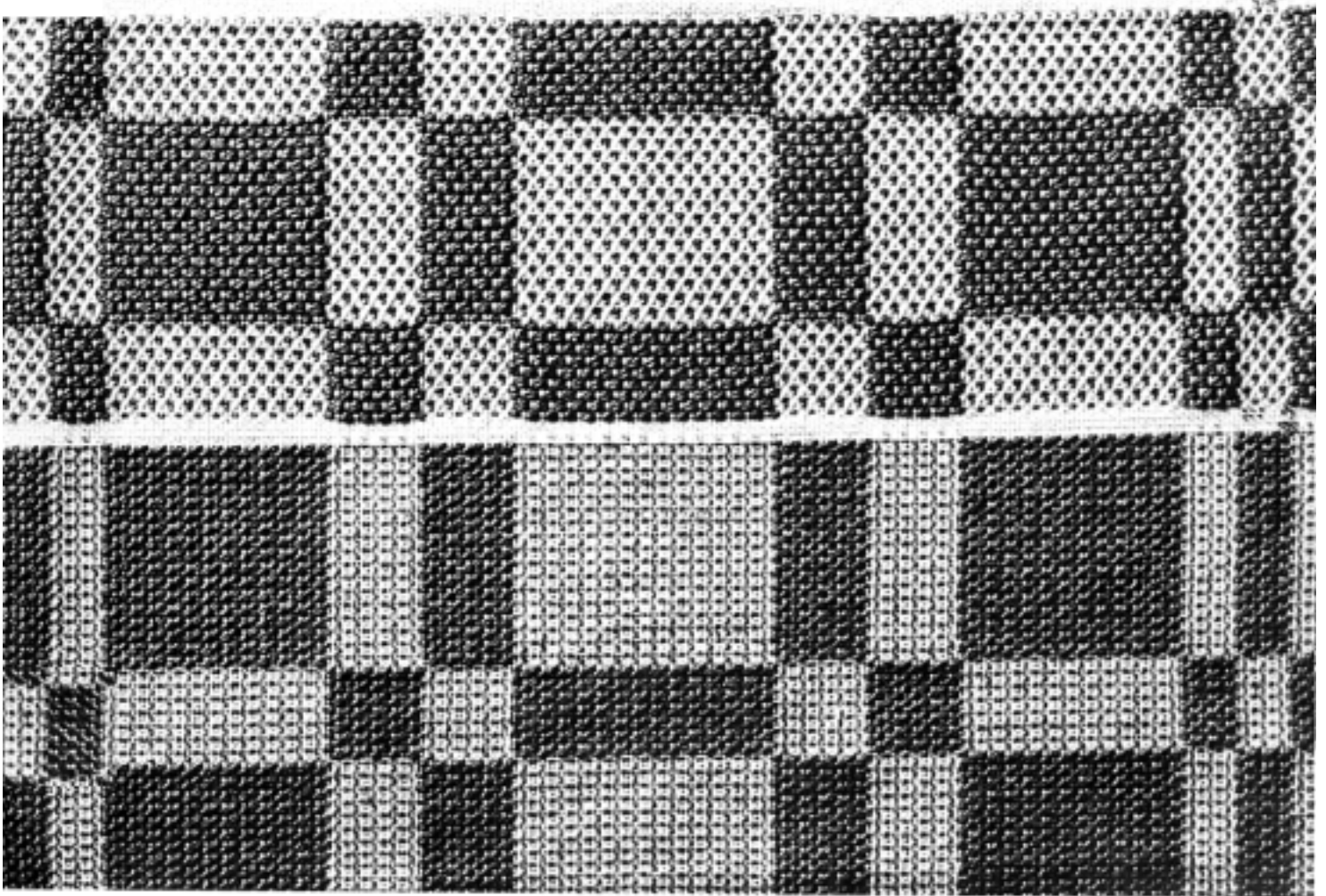


practical weaving suggestions

VOL. 3-67

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SUMMER AND WINTER

John S. Fishback

The Summer and Winter technique is so versatile, and produces such fine material, we hope this brief study will encourage more weavers to experiment with its possibilities.

Perhaps the unit of four warp ends is a good place to begin as it is most often used on four harness looms. Then we will go on to a very interesting unit of 16 warp ends. Both may be used on four frames, or expanded to the limit of your loom. All Summer and Winter units weave a firm cloth with short skips which is suitable for linens, upholstery material and even rugs. For some uses it is necessary to square the pattern units. This is done by selecting the correct size of warp, pattern weft and tabby as well as number of ends to the inch. This is more of a problem with the 16 end unit than with the 4 end unit. A short experimental warp is advised if using yarns that are new to you.

Before going on with the details of these drafts a little history may be of interest. Many early examples of Summer and Winter coverlets in the United States were woven in the Pennsylvania Dutch country. From there the drafts seem to have spread to the east and also to the southern mountain area. As with many of our other well known patterns it is not possible to say just where this one originated, and when it arrived in Colonial United States. Some authorities believe it came from Germany, yet very fine old pieces are to be found in Finland, frequently in linen. It seems possible that 'designing weavers' who required a firm cloth, with short skips, well bound together, might have arrived at the same solution in more than one country. Certainly this is true of some of our overshot patterns which may be found in Central America and Japan where they believe them to be original. We think the same patterns came to us from the Scandinavian countries. Where this draft originated is not too important, nor is it essential that we know how it got its name. However, we like this version of why this pattern of light and dark sides is called Summer and Winter. The story goes that because of small windows and rather dark bedrooms in early colonial houses the colorful side of a coverlet in this threading was exposed during the winter to brighten the room. During the summer the light or cool side was uppermost on the bed. Therefore the weave became known as Summer and Winter.

THE FOUR THREAD UNIT

WARP: Lily Art. 214, Mercerized Warp, size 10/2, Natural
WEFT: Lily Art. 114, Mercerized Pearl, size 3, Reseda 1453
TABBY: Lily Art. 214, Mercerized Warp, size 20/2, Natural

Several backgrounds are possible with this weave and therefore the number of warp ends in a unit. As the unit most generally used contains four ends we will consider this first, then go on to a more elaborate unit of sixteen warp ends. Which frames are chosen for the background or pattern threading, and which treadles are used may be decided by the individual weaver. However, the threading used here, one - pattern two - pattern, seems logical as the common threads are on frames one and two and the tabby is tied to treadles one and two. Frame three is used for the three unit and frame four the four unit. Therefore, the threading for this four thread unit on four harness frames will be; 1 - 3 - 2 - 3 for the three units and 1 - 4 - 2 - 4 for the four units. This same sequence of threading would continue for as many frames as you have on the loom less those first two required for the common or background ends. It is well to note here that Summer and Winter units may be alternated or repeated at will without skips or flats. Another advantage of this pattern is that threading and treading may be done in units so the short form of drafting is used.

To illustrate three methods of weaving this threading, without changing the tie-up, a small sample has been made. As the planning, designing, threading and treadling for a large project would be in the same order the steps followed for the sample will be given in detail. The plan called for a warp 13 inches wide in the loom. Lily yarn Art. 114 to be used. 10/2 natural for the warp, size 3 pearl dark green for the pattern weft, and 20/2 natural for the tabby. The sleying to be 24 ends to the inch so $13 \times 24 = 312$ warp ends, or 78 units of 4 ends each. The next step was to count off 78 squares on 10 x 10 cross section paper and then make a short draft that would balance within this space. Add to this the tie-up and treadling by units may begin. (The tie-up given is for a rising shed if you have a counter balanced loom with sinking shed tie blank spaces.)

To check threading as you go count warp ends for each pattern block and tie together with a slip loop. In this draft the first block contains 4 units x 4 ends each = 16 ends. The next block contains 3 x 4 = 12 ends, and so on to the left edge of the draft. To complete this check have all heddles at the left of the frames. Then count and move heddles to the right for each block as you thread. For the right hand block you would move 4-1s, 4-2s and 8-3s. When you have used the 16 warp ends knotted together in these 16 heddles, that part of your threading has been checked. Then knot in front of the heddles. The next block is for three units on four so count and move to the right 3-1s, 3-2s and 6-4s in which to thread next 12 ends. Continue counting heddles for the previously counted warp ends.

As we have said before Summer and Winter is a versatile technique. To demonstrate this the sample pictured on next page has been woven in three methods with no change in tie-up.

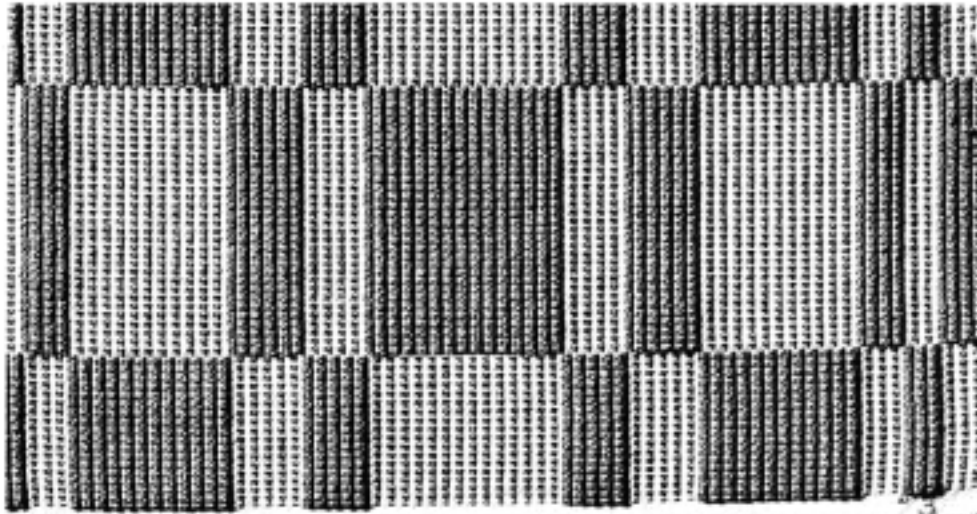
Sample No. 1 was woven in singles. Treadling 3 then 4 until the three block was square, and treadling 5 then 6 until the four block was square. Each of these pattern picks was followed by the correct tabby. It is helpful if we think of treadle 1 as right tabby and treadle 2 as left tabby.

Sample No. 2 illustrates weaving in pairs. This is probably the most popular method as it makes an attractive background of diagonal lines and birds eyes. Two points are quite important when treadling this method. All pattern picks are in pairs except the first and last in a block to avoid a break in the back ground when changing from one block to another. All pattern picks must be followed by the correct tabby so that the right tabby is between the weft picks making the pair and the left tabby after the pair. As this is not easy to explain, the treadling for each of these units is given below. The first pick is from the left, the last from the right.

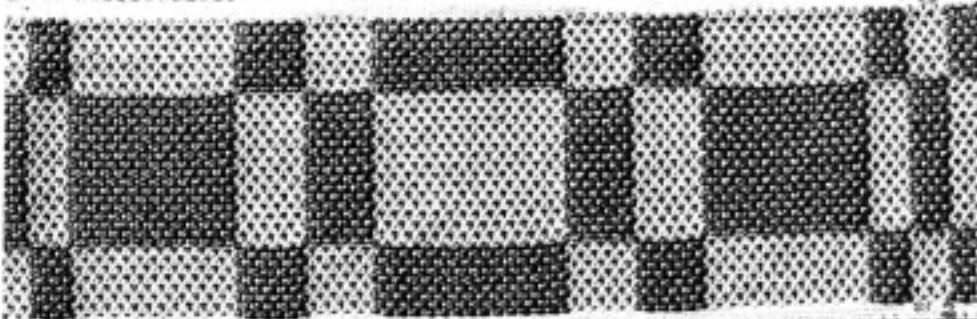
One unit on 3	One unit on 4
Treadle 4 Pattern	Treadle 6 Pattern
Treadle 2 Tabby	Treadle 2 Tabby
Treadle 3 Pattern	Treadle 5 Pattern
Treadle 1 Tabby	Treadle 1 Tabby
Treadle 3 Pattern	Treadle 5 Pattern
Treadle 2 Tabby	Treadle 2 Tabby
Treadle 4 Pattern	Treadle 6 Pattern
Treadle 1 Tabby	Treadle 1 Tabby

For as long as the above order of treadling is repeated the pattern weft will be in pairs except for the first and last pick in the block.

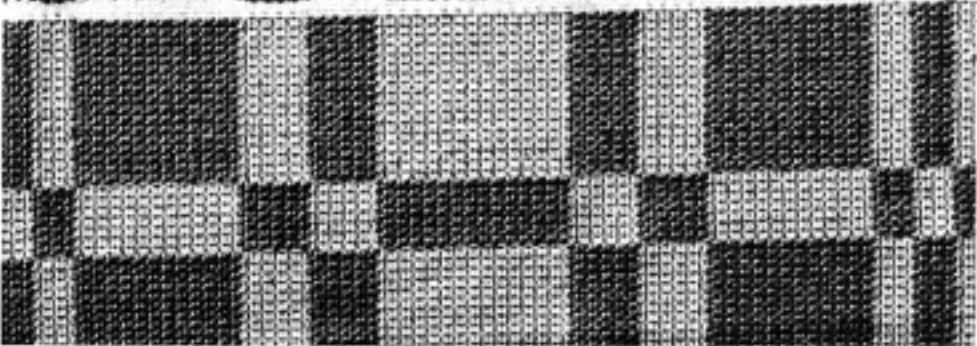
Sample No. 3 was woven by repeating the same treadle for the length of pattern block desired. To maintain the same background in the two blocks use treadle 6 for the four block if you use treadle 3 for the three block. If you use treadle 4 for the three block use treadle 5 for the four block. Again it is important to use the tabby in correct order or it will be quite noticeable in these heavy pattern blocks. This technique is often called the Dukagang method.



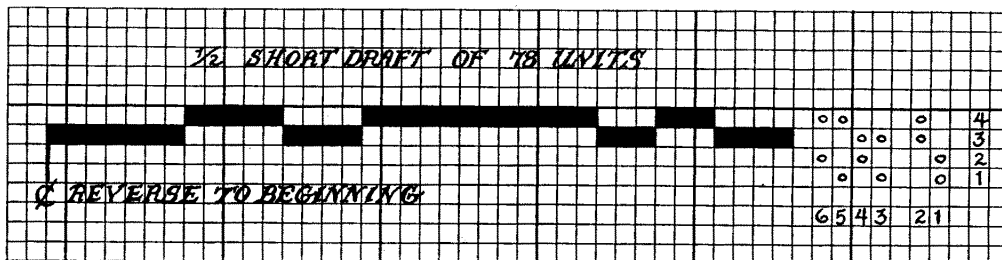
Sample 3



Sample 2



Sample 1



Draft
No. 1

Note: The tie-up given is for a rising shed for a counter balanced loom, with sinking shed tie blank spaces.

THE SIXTEEN THREAD UNIT

WARP: Lily Art. 314, Cotton Warp Yarn, size 20/3 White

WEFT: Lily Art. 121, Six Strand Floss, Yellow for Sample B and Natural for Sample C

TABBY: Lily Art. 215, Fine-Weave, size 50/3, Pongee

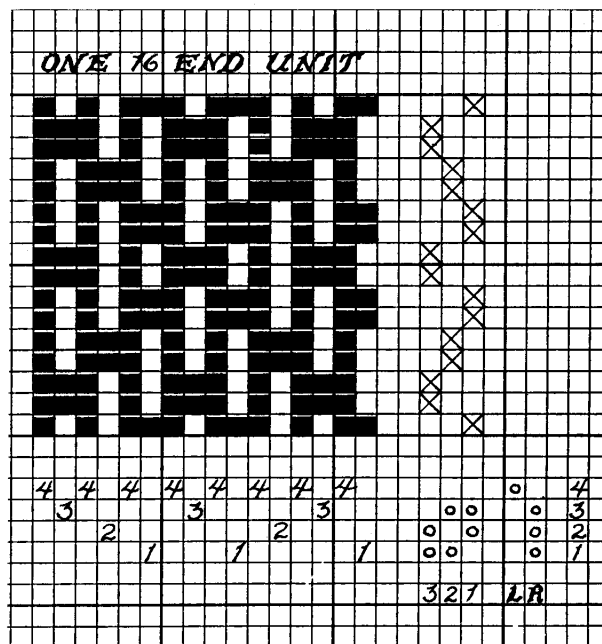
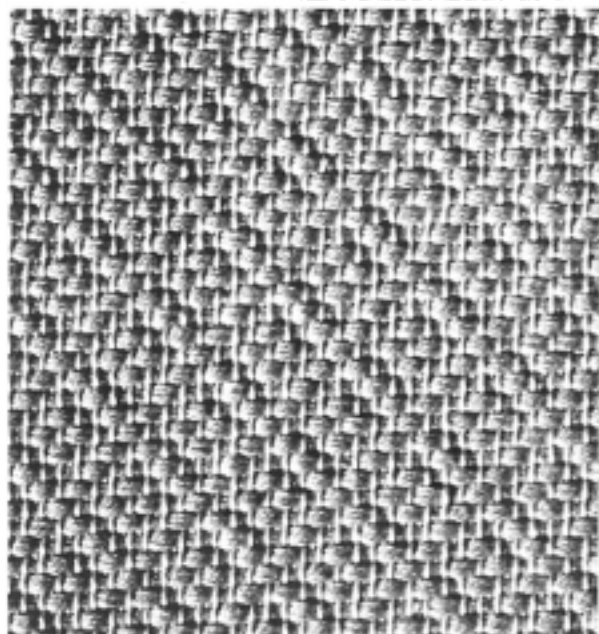
A number of years ago Margaret Bergman developed many original Summer and Winter drafts using eight to twelve harness frames. The technique of four thread units, explained above, was used in many of these beautiful patterns, and some were woven with a diamond background using 16 warp ends to the unit. Using this technique two samples of upholstery material have been woven for this article. One with the basic threading which requires four frames and the other for eight frames.

To make this diamond background the eight common ends on frames one, two and three, alternate with the eight pattern ends on one of the other frames according to the pattern. If the pattern does not extend to the selvage one pattern frame must be used to complete the diamond background. This frame is not tied to any treadle except the left hand tabby. Frame four is so used in this draft and therefore only the diamond background may be woven on a four frame loom. However this makes a firm piece of cloth with a subdued overall pattern which is very good for upholstery material. The threading for one unit and tie-up for a rising shed four harness loom is given below. Tie blank spaces for a sinking shed.

Yellow Chair Seat Cover Sample and Draft Below

You will note that the treadling is in the same order as the threading but in pairs. First weave a small heading with the tabby shuttle ending at the left. Then start the pattern weft from the left on treadle 1, followed by the left hand tabby. Then weave pairs of pattern weft on treadles 3 - 2 - 1 - 3 - 1 - 2 - 3, each pick followed by the correct tabby, then end the unit with one pick on treadle 1 and a right hand tabby. For this chair seat cover a 20/3 warp was used sleyed 24 ends to the inch. The pattern weft was yellow floss and the tabby 50/3 Fine-Weave. These sizes were necessary to square the diamonds when materials was off the loom and tension released.

For those having more than four harness frames a short draft on eight frames is given on next page for weaving a chair seat cover, with a small pattern in the center and diamond background around it. The draw up from this draft is all that is needed to thread and weave the material.

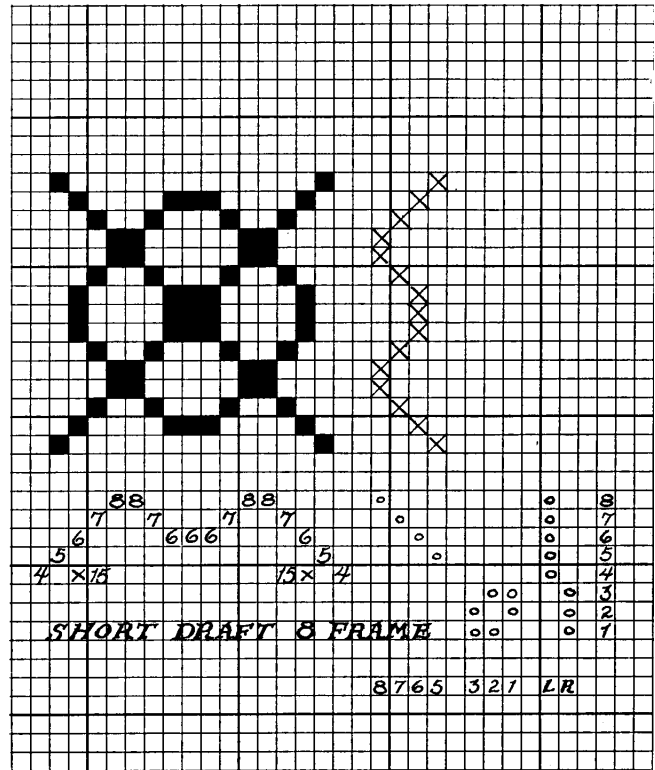
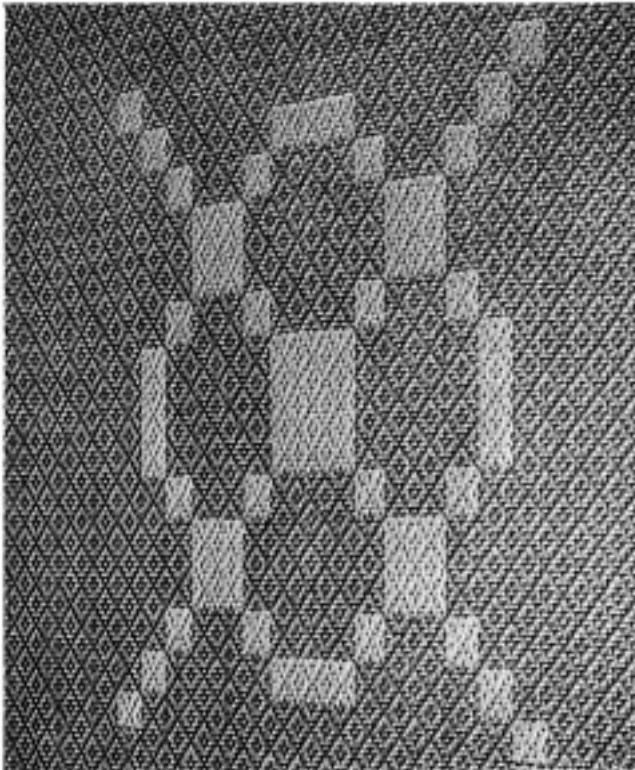


Eight Harness Seat Cover Sample and Draft Below

We have learned that four frames will weave the background using 16 warp ends to the unit as shown in preceding draft. To place the pattern in the center we examine the draw up and find that it contains 15 units of 16 ends each or 240 ends. Our sleaying is to be 24 ends to the inch so this pattern will be 10 inches square. If the material is to be 30 inches wide in the loom there must be 10 inches of background on each side of the pattern. As shown in the draft frame four is threaded with the pattern ends for background and frames 5 - 6 - 7 - 8 for the pattern.

The tie-up for this eight frame draft will be as for the four frame background except that four treadles on the left, 5 - 6 - 7 - 8 will be tied to frames 5 - 6 - 7 - 8 to carry the pattern units. To weave this chair seat cover, treadle as explained for the four frame pattern for 15 units, ending with a single pick from the right. Then weave the 15 pattern units, treadling with both feet. The right foot on one of the three background treadles and the left on the pattern treadle indicated by the short draft. Following is the treadling for pattern unit 5: First treadle 1 & 5 for pattern pick from the left, then weave pairs of pattern weft using treadles 3 & 5, 2 & 5, 1 & 5, 3 & 5, 1 & 5, 2 & 5, 3 & 5, and end the unit with a single pick on 1 & 5 from the right. Tabby from the right must follow the first weft pick of the pair and tabby from the left after the second pick of the pair. To square the diamonds after tension was released the following Lily yarns were used for this weave with 24 warp ends to the inch. Art. 314 white 20/3 for the warp, Art 121 natural Floss for the pattern weft, and Art. 215 pongee for the tabby.

Try Summer and Winter drafts, especially your own, for any project from fine linen to heavy rugs and we believe you will be pleased with the results.



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