**Lecture 11: Twill Weave**

**Diamond & Diaper Design**

**Features of Diamond Design:**

* Diamond design is the combination of *horizontal* and *vertical zigzag twill*.
* This design is symmetrical on both axis.
* *Point draft* is used to produce this design.
* The repeat size of warp and weft are equal.
* Because of large number of ends in the repeat, *Dobby loom* is generally referred.
* Uses: Towel, bed cover, table cover, pillow cover.

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|  |  |  |  | x | x | x | x | x |  |  |  | x |
|  |  |  | x | x | x |  | x | x | x |  |  |  |
|  |  | x | x | x |  |  |  | x | x | x |  |  |
|  | x | x | x |  |  |  |  |  | x | x | x |  |
|  | x | x |  |  |  | x |  |  |  | x | x | x |
|  | x |  |  |  | x | x | x |  |  |  | x | x |
|  | x | x |  |  |  | x |  |  |  | x | x | x |
|  | x | x | x |  |  |  |  |  | x | x | x |  |
|  |  | x | x | x |  |  |  | x | x | x |  |  |
|  |  |  | x | x | x |  | x | x | x |  |  |  |
|  |  |  |  | x | x | x | x | x |  |  |  | x |
|  | x |  |  |  | x | x | x |  |  |  | x | x |
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|  |  | 3 |  | Diamond Design | | | | | | |  |  |
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**Features of Diaper Design:**

* Diaper design is the combination of *horizontal* and *vertical herring bone*.
* *Broken* or *Straight draft* is used to produce this design.
* The repeat size of warp and weft are equal.
* Uses: Towel, bed cover, table cover, pillow cover.

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | X | X | X | X |  |  |  |  | X | X | X | X |  |
|  |  |  |  | X | X | X | X |  | X |  |  |  |  | X | X | X |  |
|  |  |  | X | X | X | X |  |  | X | X |  |  |  |  | X | X |  |
|  |  | X | X | X | X |  |  |  | X | X | X |  |  |  |  | X |  |
|  | X | X | X | X |  |  |  |  | X | X | X | X |  |  |  |  |  |
|  | X | X | X |  |  |  |  | X |  | X | X | X | X |  |  |  |  |
|  | X | X |  |  |  |  | X | X |  |  | X | X | X | X |  |  |  |
|  | X |  |  |  |  | X | X | X |  |  |  | X | X | X | X |  |  |
|  |  | X | X | X | X |  |  |  | X | X | X |  |  |  |  | X |  |
|  |  |  | X | X | X | X |  |  | X | X |  |  |  |  | X | X |  |
|  |  |  |  | X | X | X | X |  | X |  |  |  |  | X | X | X |  |
|  |  |  |  |  | X | X | X | X |  |  |  |  | X | X | X | X |  |
|  | X |  |  |  |  | X | X | X |  |  |  | X | X | X | X |  |  |
|  | X | X |  |  |  |  | X | X |  |  | X | X | X | X |  |  |  |
|  | X | X | X |  |  |  |  | X |  | X | X | X | X |  |  |  |  |
|  | X | X | X | X |  |  |  |  | X | X | X | X |  |  |  |  |  |
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|  | 4 |  |  | Diaper Design | | | | | | | | | | | | |  |
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**Difference between Diamond and Diaper Design:**

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| **Diamond Design** | **Diaper Design** |
| In this design, points are created. | No point is created. |
| It is symmetrical about their vertical axis. | It is symmetrical about their diagonal axis. |
| Point draft is used. | Broken or Straight draft is used. |
| It is based on Zigzag twill. | It is based on Herringbone twill. |
| If repeat size is split into two halves, both would be similar. | If repeat size is split into two halves, both would be opposite. |