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TEXTILE DESIGNING (Lat. textilis, relating to weaving, from textus, fabric, composition, text, from texere, to weave; connected with Gk. τέκτων, tektūn, carpenter, τέχνη, technō, art, Skt. taks, to cut, form). That branch of textile manufacturing which is devoted to the construction of fabrics, their weaves and patterns or designs for the same. Unlike the designing for printed patterns, whether for textiles, wall-paper, or other purposes, which are termed applied designs—and for which the designer is only called upon to use his skill in drawing and color combination—the designing of fabrics in which the pattern is to be woven of threads colored before weaving, or in which the pattern is produced by the weaves, necessitates in addition to knowledge of combining colors and drawing a thorough knowledge of each of the various departments or processes of textile manufacturing (q.v.). The designer must be able to construct fabrics of a required weight, texture, and finish, or for a specific purpose, telling the manufacturer what size of warp and filling to use, how many threads of each to the inch, and what weave will give the required results.

The construction of various weaves is one of the most important features of textile designing, and an account of weave construction will be found in the article WEAVING. A complete design for a woven fabric must contain at least the following specifications: Number of warp threads to an inch; number of inches wide on loom; number of picks, or filling threads, to an inch; size of warp and filling yarns and materials for same; the weave and the arrangement of the warp thread on the loom harness, with full particulars relative to manipulation of materials in the process of manufacturing; the estimated weight of the fabric as woven; the finishing processes it is to be submitted to, together with its finished width, weight, and texture, that is, the count in warp and filling threads to the inch. When the pattern is to be worked out in colored threads the arrangement of these must be given; and when the pattern is drawn and possibly colored, then the weave is constructed in such a way as to produce with the woven threads the effect of the drawing as nearly as possible. See Loom; WEAVING; TEXTILE MANUFACTURING.

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