

Australian Standard®

**TEXTILES—
STITCH TYPES—
CLASSIFICATION AND
TERMINOLOGY**

This Australian standard was prepared by Committee TX/-, Textile Standards Board. It was approved on behalf of the Council of the Standards Association of Australia on 25 February 1986 and published on 5 May 1986.

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Australian Knitting Industries Council
Australian Retailers Association
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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 2860—1986

Textiles—Stitch types—Classification and terminology

RECONFIRMATION NOTICE

Technical Committee TX-020 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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AWTA Textile Testing
Council of Textile and Fashion Industries of Australia
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National Association of Testing Authorities Australia
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NOTES

Australian Standard[®]

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PREFACE

This standard was prepared by the Association's Textile Standards Board. It is identical with and has been reproduced from the International standard ISO 4915, drawn up by ISO/TC 38, Textiles.

The purpose of this standard is to describe and illustrate the various kinds of stitch types used in hand- and machine-sewn seams. It is not intended to be a specification but primarily a descriptive guide and reference standard for purposes of identification and ease of reference.

For the purpose of this Australian standard, the text of the ISO standard used should be modified as follows:

- (a) *Terminology*: The words 'Australian Standard' should replace the words 'International Standard' wherever they appear.
- (b) *Decimal sign*: A dot on the line should replace the comma wherever it appears as a decimal sign.

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Textiles — Stitch types — Classification and terminology

0 Introduction

For the analysis of stitch types used in the fabrication of sewn articles, a clear understanding of the terms employed is essential. The following standard nomenclature, descriptions of stitch types and the system of identifying symbols should provide valuable information for purchasing officers, garment manufacturers, machine manufacturers, students and others, who require a reference book on this subject. This International Standard is not intended to be a specification but primarily a descriptive guide for purposes of identification and ease of reference. A separate International Standard is being prepared on the classification of stitched seams.

NOTE — Further stitch types which may be developed in future should be notified to the secretariat of ISO/TC 38 in order to obtain the correct classification.

1 Scope and field of application

This International Standard classifies, designates, describes and illustrates the various kinds of stitch types used in hand- and machine-sewn seams.

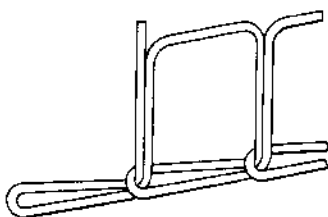
2 Definitions

2.1 stitch : One unit of conformation resulting from one or more strands or loops of thread intralooping, interlooping or passing into or through material.

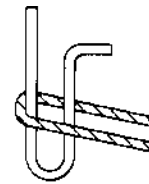
A stitch may be formed

- without material;
- inside material;
- through material;
- on material.

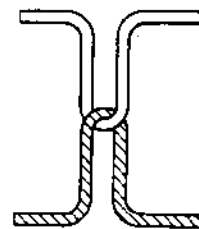
2.1.1 intralooping : The passing of a loop of thread through another loop by the same thread.



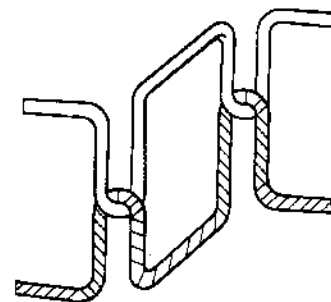
2.1.2 interlooping : The passing of a loop of thread through another loop formed by a different thread.



2.1.3 interlacing : The passing of a thread over or around another thread or loop of another thread.



2.2 stitch type : An assembly of recurring stitches, relating to the material and which may be characterized by a change in direction. The minimum number of stitches that describe a stitch type are indicated.



2.3 group of threads : A number of threads fulfilling an identical function, for example needle or looper.

3 Classification

Stitch types are divided into six classes. The characteristics of these classes are indicated below.

3.1 Class 100 — Chain stitches

In this class, stitch types are formed with one or more needle threads, and are characterized by intralooping. One or more loops of thread are passed through the material and secured by intralooping with a succeeding loop or loops after they are passed through the material.

3.2 Class 200 (originated as hand stitches)

In this class, stitch types which originated as hand stitches are characterized by a single thread, which is passed through the material as a single line of thread and the stitch is secured by the single line of thread passing in and out of the material.

3.3 Class 300 — Lockstitches

In this class, stitch types are formed with two or more groups of threads, and have for a general characteristic the interlacing of the two or more groups. Loops of one group are passed through the material and are secured by the thread or threads of a second group.

3.4 Class 400 — Multi-thread chain stitches

In this class, stitch types are formed with two or more groups of threads, and have for a general characteristic the interlooping of the two groups. Loops of one group of threads are passed through the material and are secured by interlacing and interlooping with loops of another group.

3.5 Class 500 — Overedge chain stitches

In this class, stitch types are formed with one or more groups of threads, and have for a general characteristic that loops from at least one group of thread pass around the edge of the material.

Loops of one group of threads are passed through the material and are secured by intralooping before succeeding loops are passed through the material, or secured by interlooping with loops of one or more interlooped groups of threads before succeeding groups of the first group are again passed through the material.

3.6 Class 600 — Covering chain stitches

In this class, stitch types are formed with two or more groups of threads, and have for a general characteristic that two of the groups cover both surfaces of the material. Loops of the first group of thread are passed through loops of the third group already cast on the surface of the material and then through the material where they are interlooped with loops of the second

group of thread on the underside of the material. The one exception to this procedure is stitch type 601 where only two groups of threads are used and the function of the third group is performed by one of the threads in the first group.

4 Designation

4.1 Stitch types

Stitch type classes are designated and identified by the first digit of 3-digit numerals.

Stitch types within each class are designated and identified by the second and third digits.

4.2 Combination stitch type

The combination of stitch types shall be represented by the designation of the individual stitch types separated by a full stop, for example 401.502. If the combination stitch type is achieved in one operation, it is to be enclosed in brackets, for example (401.502).

5 Conventions used in the illustrations

The drawing conventions used in the stitch type illustrations (see clause 6) are as follows:

5.1 All the illustrations are in perspective for clarity and at an angle chosen to show all threads as clearly as possible.

5.2 The direction of successive stitch formation is from right to left.

5.3 Each stitch type starts and finishes with only one end of each thread shown, and with the needle threads leaving the material vertically.

5.4 All needle threads are clear, all other threads hatched.

5.5 All needle threads are numbered **1, 2, 3, ...**; all under threads, **a, b, c, ...**, all cover threads **Z, Y, X, ...**

5.6 The material is shown only where it assists clarity, for example in class 500.

NOTE — In a few cases where the above drawing conventions do not give a clear indication of the stitch, a plan diagram is used.

6 Illustrations

Illustrations are included of the following stitch types :

Class 100

101 105
102
103 107
104 108

Class 400

401 406 411 416
402 407 412 417
403 408 413
404 409 414
405 410 415

Class 200

201 213
202 214
204 215
205 217
206 219
209 220
211

Class 500

501 508 521
502 509
503 510
504 511
505 512
506 513
507 514

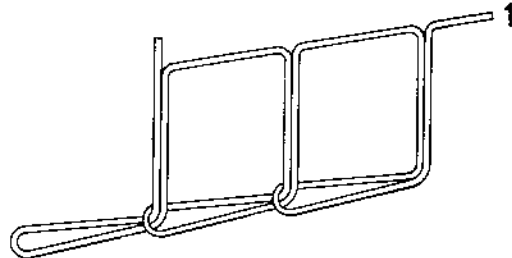
Class 300

301 311 321
302 312 322
303 313 323
304 314 324
305 315 325
306 316 326
307 317 327
308 318
309 319
310 320

Class 600

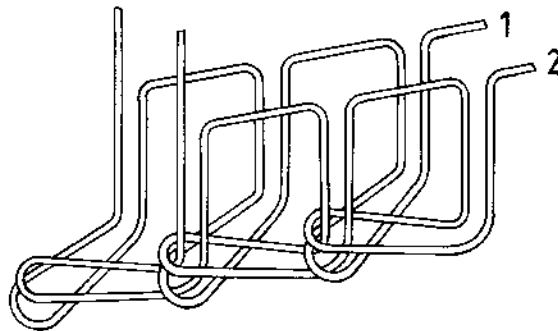
601 606
602 607
603 608
604 609
605

NOTE — Illustrations show a number of needle penetrations the first of which may not produce a stitch of the stitch type. The written descriptions in all cases refer to the stitches of the stitch type.

Class 100**101**

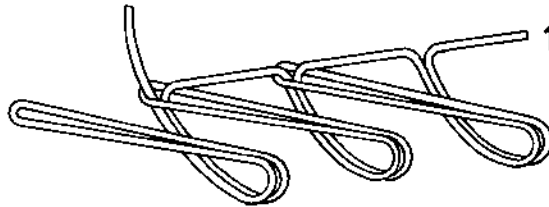
This stitch type is formed with one needle thread (1), a loop of which is passed through the material from the needle side and intralooped in the other side.

A minimum of two stitches describes this stitch type.

102

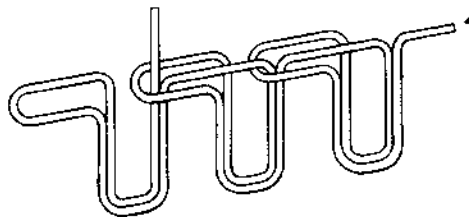
This stitch type is formed with two needle threads (1 and 2), loops of which are passed through the material from the needle side. Thread 2 is intralooped with thread 1 on the other side of the material.

A minimum of two stitches describes this stitch type.

103

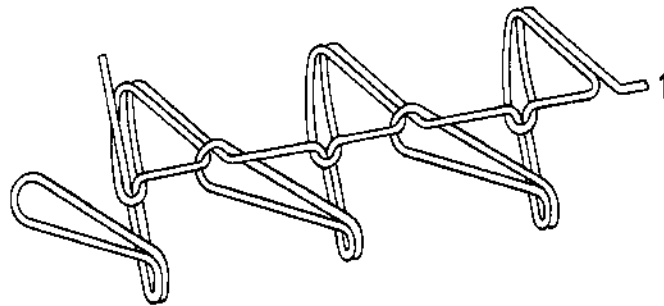
This stitch type is formed with one needle thread (1), a loop of which is passed into the material from the needle side, through portions of the material, emerging on the needle side where it is intralooped at the next point of needle penetration.

A minimum of two stitches describes this stitch type.

104

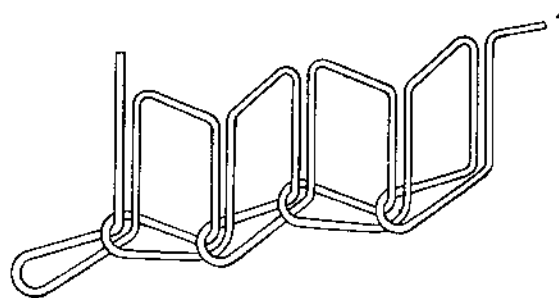
This stitch type is formed with one needle thread (1), a loop of which is passed through the material from the needle side, passed back through the material to the needle side at a distance, and intralooped on the needle side of the material at the next point of needle penetration.

A minimum of two stitches describes this stitch type.

105

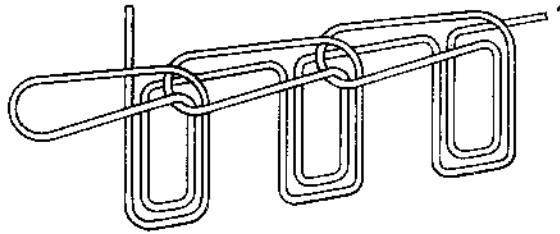
This stitch type is formed with one needle thread (1), a loop of which is passed into the material from the needle side, through portions of the material, emerging on the needle side where it is intralooped at the next point of needle penetration on the axis of stitch formation.

A minimum of two stitches describes this stitch type.

107

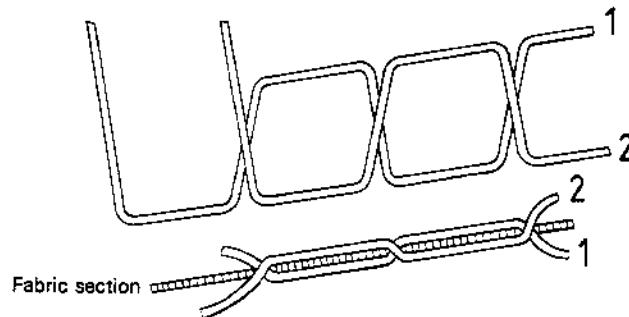
This stitch type is formed with one needle thread (1), a loop of which is passed through the material from the needle side and intralooped on the other side. This stitch type is the same as 101 except that successive single stitches form a symmetrical zigzag pattern.

A minimum of two stitches describes this stitch type.

108

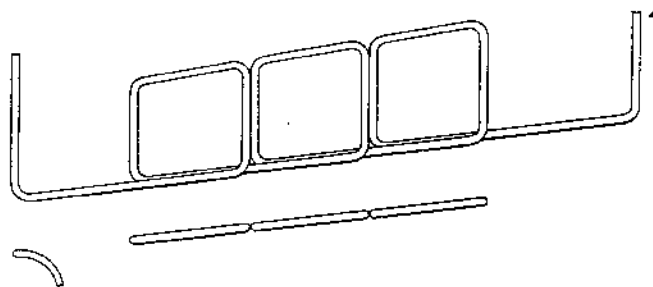
This stitch type is formed with one needle thread (1), a loop of which is passed through the material from the needle side to the other side and passed back through the material to the needle side at a distance. The thread is intralooped where the next loop is passed through the material.

A minimum of two stitches describes this stitch type.

Class 200**201**

This stitch type is formed with two needle threads (1 and 2), which are passed through the material, through the same perforation from opposite directions, without interlacing or interlooping. They are then brought forward a suitable length and passed back through the material, from opposite directions, through another perforation without interlacing or interlooping.

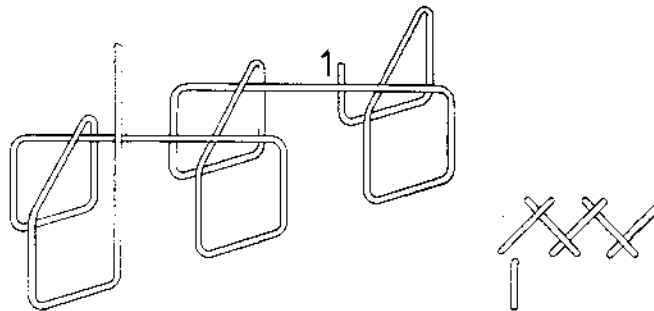
A minimum of two stitches describes this stitch type.

202

This stitch type is formed with one needle thread (1), which is passed through the material, brought forward a suitable length, passed back through the material, and, brought back half the initial length before passing back through the material at the point of emergence of the previous thread. This stitch type is often used at the beginning or end of other stitch formations.

A minimum of two stitches describes this stitch type.

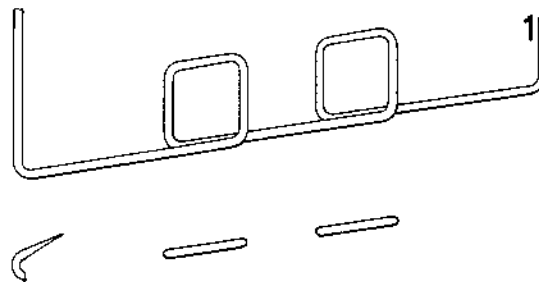
204



This stitch type is formed with one needle thread (1), which is passed through the material, moved diagonally across the material the width of the stitch, passed back through the material and brought back a suitable length before passing again through the material. It is then returned diagonally across the material the width of the stitch, passed through the material and back through the material a similar length behind. This process is repeated to form parallel rows of separated and offset stitches on the needle side and a criss-cross pattern on the other side. (When done by hand, this stitch type is normally worked from left to right.)

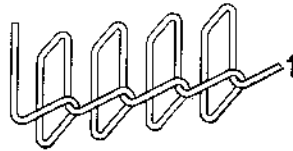
A minimum of two stitches describes this stitch type.

205



This stitch type is formed with one needle thread (1), which is passed through the material, brought forward a suitable length, passed back through the material, and brought back one-third of the initial length before passing again through the material.

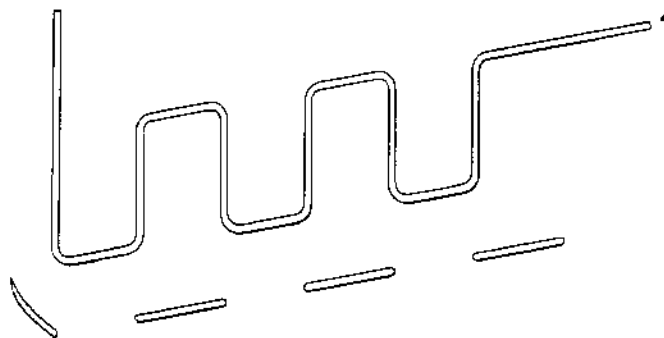
A minimum of two stitches describes this stitch type.

206

This stitch type is formed with one needle thread (1), which is passed through the material twice, emerging in a position at right-angles to the direction of successive stitch formation, and passing over the thread from the previous stitch forming a loop.

Successive stitches are spaced at chosen intervals, and can be worked open or close. (When done by hand, this stitch type is normally worked from left to right.)

A minimum of two stitches describes this stitch type.

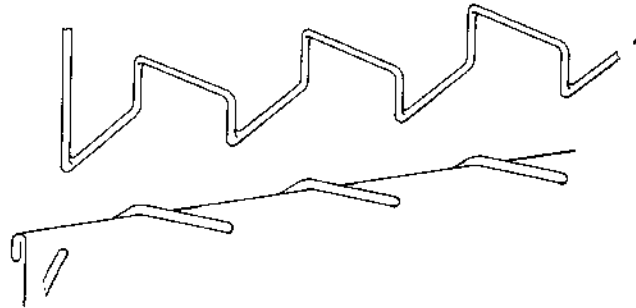
209

This stitch type is formed with one needle thread (1), which is passed through the material, brought forward a suitable length and passed back through the material.

The points of needle penetration may be close together and used for gathering material or gauging, or widely spaced, or alternatively with varied spacing.

A minimum of two stitches describes this stitch type.

211



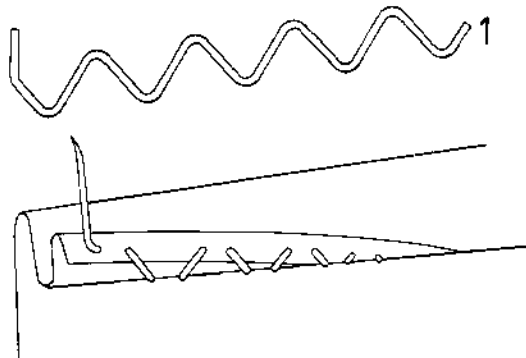
This stitch type is formed with one needle thread (1), which is passed through the material, cast over the rolled edge of the material and brought forward through the material, in line with the previous thread emergence.

This stitch type is used as an edge finish, usually on fine material; when worked from left to right, the main use of the stitch is for neatening edges, seams, etc.

The stitch type can be worked with variable spacing.

A minimum of two stitches describes this stitch type.

213

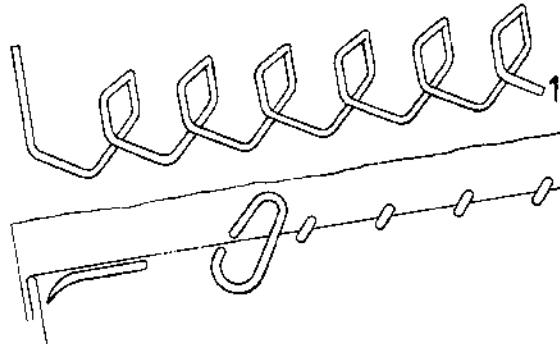


This stitch type is formed with one needle thread (1), which is passed through the single material, passed forward through the turned over edge of the hem (turned back for the purpose), emerging slightly in front, in line with the previous thread penetration and taking up a very small amount of the material; the thread is then brought forward and through the material below the hem to repeat the stitch. Very small amounts of material are taken up.

This stitch type is used when it is particularly desirable that no stitch should finally be visible.

A minimum of two stitches describes this stitch type.

214

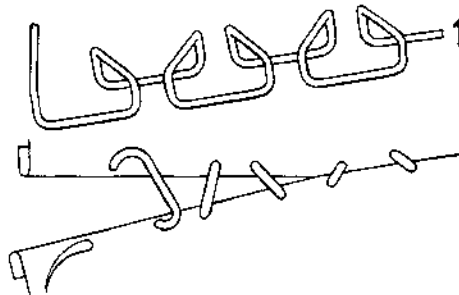


This stitch type is formed with one needle thread (1), which is passed through the fold of material and into the single material a short distance above and slightly to the right. The thread is then passed diagonally back through both material layers to a point in line with the previous point of thread emergence.

This stitch type is used for sewing one material to another such as linings to garments, etc.

A minimum of two stitches describes this stitch type.

215



This stitch type is formed with one needle thread (1), which is passed through the folded edge of a material and brought forward a suitable length in the fold before emerging from the material. It is then passed through an opposite folded edge of material at a point slightly behind the point of thread emergence.

It is brought forward a suitable length in the fold, before emerging from the material. The thread is drawn rather taut.

This is a stitch type which is used by tailors to draw together two folded edges, for example collar and lapel.

A minimum of two stitches describes this stitch type.