

Fabric Structure Frame System Product Catalog

- *Patent Pending Fabric Covered ZipStrip*
- *Staple-in System Aluminum Extrusions*
- *GatorStitch™ Staple-in Steel Tubing*
- *20+ Shapes of Extruded Aluminum Standards*
- *Patented PVC Finishing Strips*
- *SnapCrate™ Ceiling Support System*
- *Power Production Equipment & Tools*
- *Manufacturing and Installation Accessories*
- *Pre-Fabricated Parts, Trusses and Kits*
- *Sales, Marketing & Training Aids*
- *Fluorescent Lighting Fixture Enclosures*
- *Support Services Unique in the Industry*

| | |
|--|--------------------|
| Introduction | 2 |
| Experience | 2 |
| Training | 2 & 24 |
| Toll Free Help-Line | 2 |
| Aluminum Extrusions | 3 - 10 |
| Staple-in Channeled Extrusions | 3, 5, 6, 10 |
| Ceiling Support Extrusions | 6, 7 |
| Non-Channeled Extrusions | 8 |
| Generic Aluminum Extrusions | 9 |
| NEW! Round Staple-In Tube for Marine Applications..... | 10 |
| GatorStitch™ Steel Staple-in Tube | 11 |
| PVC Extrusions | 12-13 |
| ZipStrip® | 12-13 |
| DividerStrip® | 12-13 |
| FlashStrip® | 12-13 |
| Fabric ZipStrip® | 14 |
| Ceiling Enclosures | 15 |
| SnapCrate® Plastic Snap-in Ceiling Support System | 15 |
| Egg Crate Ceiling Panels | 15 |
| Production Equipment | 16-17 |
| Pneumatic Staplers | 16 |
| Pneumatic Hammer | 17 |
| Power Bender & Tooling Accessories | 18 |
| Accessories | 17 |
| Staples | 17 |
| Grinding Disks | 17 |
| Finishing Screws | 17 |
| Lighting | 17 |
| Gasketed Enclosures | 17 |
| Pre-Fabricated Trusses, Bends | 19 |
| Sales Aids | 20 & 22 |
| Awning Specifier's Guide | 20 |
| Sample Awnings | 22 |
| Sales Video | 22 |
| Instructional Publications | 21 & 22 |
| Awning Manufacturer's Guide | 21 |
| Production Video..... | 22 |
| Installation Video..... | 22 |
| Steel Stitch Training Seminar & Support | 23-24 |

INDUSTRY ACCEPTANCE

Steel Stitch™ Corporation's products are patented and/or licensed. Steel Stitch™ owns the following U.S. Patents: No. 5,469,672 for "Awning Flashing Strip", No.5,577,352 & No.5,794,400 for GatorStitch™ and No.D455,841 "Octagonal Structural Frame Member". Steel Stitch's unique Fabric-Covered ZipStrip is Patent Pending.

The Steel Stitch™ System is available in the United States from our website: www.steelstitch.com, or by phone at 1.800.441.3316.

For over nineteen years, Steel Stitch™ has worked to educate and inspire architects. Through direct contact, print advertising, our web presence and the distribution of our *Awning Specifier's Guide*, Steel Stitch™ has built a loyal following of repeat architectural specifier's. The *Awning Specifier's Guide*, distributed to thousands of pre-qualified architects and specifiers each year, is a comprehensive guide on specifying staple-in fabric structures. The Steel Stitch™ system has become fully recognized in the architectural community as a source of quality, dependability and amazing design flexibility.

PRODUCT SELECTION

Steel Stitch™ is proud to offer the most complete line of Staple-In System products available! Our product line includes our Unique Aluminum Profiles in a choice of wall-thicknesses, 3 PVC Trims, and GatorStitch™ - the world's first and only steel staple-in tube.

Our product line also includes the power equipment, pneumatic hand tools, manufacturing and installation accessories, sales aids, and training materials you need to ensure your continuing success.

Our product development team is constantly working on new ideas and innovations that enable us to maintain our position as the Industry Leader.

EXPERIENCE

Steel Stitch™ Corporation has been an **innovator** in the Staple-In Fabric Awning Industry since 1988. We were **instrumental in the introduction of the process** in the United States and have maintained with great pride our reputation as the most dependable, knowledgeable and progressive supplier to the industry.

Our **Manufacturing Division** is active in the design, manufacture and installation of commercial, institutional and residential projects day-in and day-out.

Toll-Free Support Line (800) 441-3316

- Free call in the Continental United States -

Steel Stitch's U.S. Toll-Free phone number is available from **8 AM until 5 PM** (Eastern Time), Monday through Friday, to answer your questions about the Steel Stitch™ System. You won't get an Answering Service or an Electronic Mail Service ... **you'll get a Real Person ... with Real Answers!**

www.steelstitch.com & www.gatorstitch.com
 email: stapleit@steelstitch.com

This first-hand contact with architects, general contractors & end-users allows us to maintain our product designs and monitor current industry needs. From this vital knowledge of the fabric structure industry we've been able to develop the products and provide the technical support that manufacturers value. If you run into a technical problem, our personnel are just a phone call away

... **completely free of charge** to our customers!

TRAINING

Steel Stitch™ Corporation has accumulated a wealth of knowledge and experience as the Staple-In Industry has matured. If you are just starting out, or if you just want to stay on top of your productivity, you'll find our **Steel Stitch™ Awning Manufacturer's Guide** and **Video Training Library**, including the "**Secrets of Staple-In Awnings**" to be an invaluable reference!

So that we can offer you our full attention, programmed **Training Classes** are held on a regularly scheduled basis to offer instruction in Frame Fabrication, Fabric Application, Frame Design and Sales Techniques. Call for scheduling - **We'll be glad to see you!**

See Page 24 for more detail about our in-depth Training Seminars. Class sizes are limited, so contact Steel Stitch, at 800.441.3316, to sign up early!

**Guaranteed Consistent
Hardness for Improved
Bending, Welding and Stapling**

Staple-in Channel Extrusions

| Steel Stitch Item Number | Length | Standard Packaging | Shipping Wgt per Bundle |
|--------------------------|--------|--------------------|-------------------------|
| SMP-1A | 25' | 10 pcs per bundle | Approx. 148 lbs |

1" x 1" x 3/16" wall staple-in member generally used in spans up to 50". Most commonly used to fabricate top-bars, front bars, panel edges and rafters that are laterally supported against tensioned fabric at a maximum of 48" o.c.

SMP-1A
3/16" (.1875") Sidewall with Staple-In Channel



| Steel Stitch Item Number | Length | Standard Packaging | Shipping Wgt per Bundle |
|--------------------------|--------|--------------------|-------------------------|
| SMP-1B | 25' | 10 pcs per bundle | Approx. 122 lbs |

1" x 1" x 1/8" wall staple-in member generally used in spans up to 44". Most commonly used to fabricate top-bars, front bars, panel edges and rafters that are laterally supported against tensioned fabric at a maximum of 42" o.c.

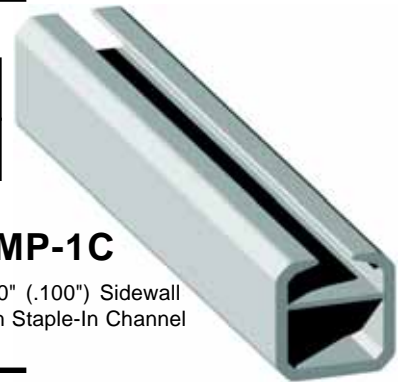
SMP-1B
1/8" (.125") Sidewall with Staple-In Channel



| Steel Stitch Item Number | Length | Standard Packaging | Shipping Wgt per Bundle |
|--------------------------|--------|--------------------|-------------------------|
| SMP-1C | 25' | 10 pcs per bundle | Approx. 105 lbs |

1" x 1" x 1/10" wall staple-in member generally used in spans up to 38". Most commonly used to fabricate top-bars, front bars, panel edges and rafters that are laterally supported against tensioned fabric at a maximum of 36" o.c.

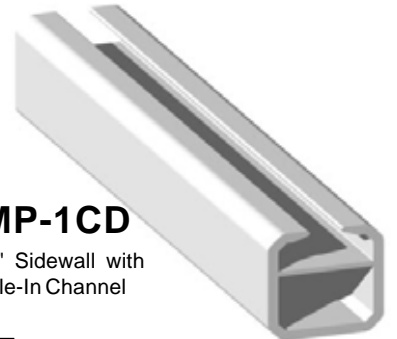
SMP-1C
1/10" (.100") Sidewall with Staple-In Channel



| Steel Stitch Item Number | Length | Standard Packaging | Shipping Wgt per Bundle |
|--------------------------|--------|--------------------|-------------------------|
| SMP-1CD | 25' | 10 pcs per bundle | Approx. 90 lbs |

1" x 1" x .090" wall staple-in member generally used in spans up to 34". Most commonly used to fabricate top-bars, front bars, panel edges and rafters that are laterally supported against tensioned fabric at a maximum of 30" o.c. Typically used for interior or smaller residential projects.

SMP-1CD
.090" Sidewall with Staple-In Channel



| Steel Stitch Item Number | Length | Standard Packaging | Shipping Wgt per Bundle |
|--------------------------|--------|--------------------|-------------------------|
| SMP-1D | 25' | 10 pcs per bundle | Approx. 77 lbs |

1" x 1" x 1/16" wall staple-in member generally used in spans up to 30". Most commonly used to fabricate top-bars, front bars, panel edges and rafters that are laterally supported against tensioned fabric at a maximum of 30" o.c. Typically used for interior or smaller residential projects.

SMP-1D
1/16" (.0625") Sidewall with Staple-In Channel



T5 Aluminum vs T6 Aluminum

All Steel Stitch SMP series extrusions are made of T5 aluminum. Some competitor products are made of T6. T6 is stronger than T5. So why does Steel Stitch make its SMP series aluminum extrusions from a weaker material?

First, there are a number of important advantages of T5 over T6 when used in a staple-in awning application. T5

can be processed in a manner that locks in the hardness - a process that cannot be replicated in a T6. This is critical for staple-in awnings since the aluminum has to be soft enough that it can be stapled. Steel Stitch extrusions are guaranteed to be within a range of hardness between 7 and 11 on a Webster hardness scale, even as the aluminum ages.

Freshly tempered T6 aluminum, on the other hand, ranges in Webster hardness anywhere from 11 all the way up to 16. As aluminum reaches the upper ranges of this hardness it becomes more difficult to shoot the staples into the material. The staples simply bounce and bend - even with the air pressure at maximum settings. Then, as the aluminum ages, it gets even harder.

Often awnings made with T6, that were originally soft enough to staple, are too hard to staple 5 or 6 years later when the awnings need to be recovered.

Another advantage of Steel Stitch's T5 over T6 is that it bends more consistently. The narrow "locked in" range of hardness of Steel Stitch's T5 makes bending of the metal, even from one batch to another, extremely consistent. This allows you to use the same settings to bend the same radius time after time. Without this predictability, material and time are wasted in trying to determine the required bender setting to achieve a particular radius. So, there are numerous reasons to use T5.

Each of Steel Stitch's SMP series extrusions is guaranteed to be within 7 and 11 on the Webster hardness scale, even as the aluminum ages."

"But what about the T6 strength advantage?" You ask. The advantage that T6 supposedly has over T5 is not such an advantage after all. Why?

After welding, there is no strength advantage around the heat affected zone

(the welded joints) of T6 over T5. Table 2 below, taken from the Aluminum Association's Aluminum Design Manual, shows the strength characteristics of both tempers after they have been welded. Note that the tension, compression, shear and bearing numbers given are the same for both the T5 and the T6. The extreme heat of the welding removes the temper from the aluminum.

The overall strength of a welded awning frame is limited by the welded joint strength within 1" of the joint. This critical part of the frame strength is known as the Heat Affected Zone (or HAZ).

Note: Some of Steel Stitch's generic shapes (see page 9) are T6 Temper, where stapling and/or bending is typically not a factor.

Table 2
MINIMUM MECHANICAL PROPERTIES FOR
WELDED ALUMINUM ALLOYS
(Gas Tungsten Arc or Gas Metal Arc Welding With No Postweld Heat Treatment)

| ALLOY AND TEMPER | PRODUCT AND THICKNESS RANGE in. | TENSION | | COMPRESSION | SHEAR | | BEARING | |
|-----------------------------------|---------------------------------|-------------------------|--------------------------|-------------------------|---------------|---------------|---------------|---------------|
| | | F_{tuw}^{\dagger} ksi | F_{tyw}^{\ddagger} ksi | F_{cyw}^{\dagger} ksi | F_{suw} ksi | F_{syw} ksi | F_{duw} ksi | F_{dyw} ksi |
| 1100-H12, H14 | All | 11 | 4.5 | 4.5 | 8 | 2.5 | 23 | 8 |
| 3003-H12, H14, H16, H18 | All | 14 | 7 | 7 | 10 | 4 | 30 | 12 |
| Alclad 3003-H12, H14, H16, H18 | All | 13 | 6 | 6 | 10 | 3.5 | 30 | 11 |
| 3004-H32, H34, H36, H38 | All | 22 | 11 | 11 | 14 | 6.5 | 46 | 20 |
| Alclad 3004-H32, H34, H36, H38 | All | 21 | 11 | 11 | 13 | 6.5 | 44 | 19 |
| 3005-H25 | Sheet | 17 | 9 | 9 | 12 | 5 | 36 | 15 |
| 6063-T5, T6 | All | 17 | 11 | 11 | 11 | 6.5 | 34 | 22 |
| -T5** | Extrusions Over 0.375 | 24 | 15 | 15 | 15 | 9 | 50 | 30 |