# ALPHABETICAL INDEX



# HOW TO USE THIS CATALOG

- **NEW PRODUCTS**
  New products are shown with the NEW symbol. There are also new sizes within existing model series.

**EXTRA CORROSION PROTECTION**
This icon identifies products that are available with additional corrosion protection *(ZMAX®, Hot-Dip Galvanized or Stainless Steel)*. **Check with Simpson Strong-Tie for availability. The end of the product name will indicate what type of extra corrosion protection is provided *(Z = ZMAX, HDG = Hot-Dip Galvanized or SS = Stainless Steel)*.** See page 12–13 for information on corrosion. Visit our website ***www.strongtie.com/info*** for more technical information on this topic.

## HOW WE DETERMINE ALLOWABLE LOADS

Allowable loads in this catalog are determined using calculations and/ or one or more of the following methods:

- a minimum of 3 static load tests in CFS assemblies;
- a minimum of 3 static load tests in structural steel jigs;
- a minimum of 3 static load tests of products embedded in concrete or masonry.

Some tests include only portions of a product such as purlin anchor tests—only the embedded hook is tested, not the screwed or bolted section of the strap, which is calculated. Testing to determine allowable loads in this catalog is not done on connection systems in buildings. Testing is conducted in an IAS accredited laboratory. **Typically the allowable load is limited to an average test load at ⅛" deflection, an average or lowest test value *(nominal load)* divided by a safety factor or the calculation value. The safety factor is prescribed by Section F1 of the 2001 AISI NAS. For LRFD, the nominal connector strength is multiplied by a resistance factor, also prescribed by Section F1 of the 2001 NAS.**

For detailed information regarding how Simpson Strong-Tie tests specific products, contact Simpson Strong-Tie.

**Dimensions:** This shows the product dimensions *(material thickness, length and width in this case.)* The product drawing includes these callouts as a cross-reference.

**Allowable Design Loads**: The maximum load imposed on a connection during the life of a structure. There may be multiple design loads acting in different directions *(up, down, lateral, perpendicular, etc.)* imposed on a connection. When connectors are attached to 2 CFS members of different thicknesses, the Designer shall use the thinner of the 2 members for selecting allowable loads.

**Model No.**: This is the Simpson Strong-Tie product name.

**Fasteners**: This shows the fastener **quantity** and **type** required to achieve the table loads.

**Thickness**: CFS supporting member thickness to which the product is attached. Allowable Load is based on this CFS supporting member thickness.

**Code Ref**: See page 8 for the Code Listing Key Chart, to determine which code reports include this product.

| Model No. | Connector Material Thick. mil (ga) | L | W | Fasteners | | | Allowable ASD Tension Loads | | | Code Ref. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Rafter/Stud/Joist Thickness | | | | | | |
| | | | | 33 mil (20 ga) | 43 mil (18 ga) | 54 mil (16 ga) | 33 mil (20 ga) | 43 mil (18 ga) | 54 mil (16 ga) | |
| PA18 | 97 (12 ga) | 18½ | 2⅛ | 16- #10 | 16- #10 | 8- #10 | 2830 | 3685 | 3685 | FC1 |
| PA23 | | 23¾ | | 22- #10 | 16- #10 | 8- #10 | 3685 | 3685 | 3685 | |
| PA28 | | 32½ | | 22- #10 | 16- #10 | 8- #10 | 3685 | 3685 | 3685 | |
| PA35 | | 35 | | 22- #10 | 16- #10 | 8- #10 | 3685 | 3685 | 3685 | |
| HPA28 | 118 (10 ga) | 21½ | 2⅛ | 28- #10 | 20- #10 | 10- #10 | 4845 | 4845 | 4845 | |
| HPA35 | | 38½ | | 32- #10 | 22- #10 | 12- #10 | 5420 | 5420 | 5420 | |

**OTHER CATALOG DEFINITIONS:**

**Deflection**: The distance a point moves when a load is applied.

**Nominal Tension Load (Strength):** The capacity of a structure or component to resist the effects of loads, as determined in accordance with 2001 AISI NAS using specified material strengths and dimensions. Typically taken as the average value of at least 3 tests.

The Nominal Tension Load should not be compared against design loads (ASD, LRFD), but used only where the AISI Lateral Design Standard requires the holdown to have nominal tension load (strength) to resist lesser of amplified seismic load or what the system can deliver.