The Wedge-All® wedge anchors are a non-bottom bearing, wedge-style expansion anchor for use in solid concrete or grout-filled concrete masonry. A one-piece clip ensures uniform holding capacity that increases as tension is applied. The threaded stud version is available in eight diameters and multiple lengths. A single size tie-wire version is available for wire supported fixtures. Threaded studs are set by tightening the nut. Tie-wire anchors are set with the claw end of a hammer.

**WEDGE-ALL SPECIAL FEATURES:**
- One piece wrap around clip
- Threaded end is chamfered for ease of starting nut
- Most sizes feature full thread for added versatility

**MATERIAL:** Carbon and stainless steel

**FINISH:** Carbon steel anchors are available zinc plated or mechanically galvanized.

**CODES:** ICC-ES ESR-1396 (CMU); City of L.A. RR24682; Factory Mutual 3017082, 3031136, and 3043442; Underwriters Laboratories File Ex3605; Meets requirements of Federal Specifications A-A-1923A, Type 4. The Tie-Wire anchor is not code listed.

**TEST CRITERIA:** The Wedge-All anchor has been tested in accordance with ICC-ES’s Acceptance Criteria for Expansion Anchors (AC01) for the following:
- Static tension and shear loading
- Seismic and wind loading
- Combination tension and shear loading
- Critical and minimum edge distance

**INSTALLATION:**
- Holes in metal fixtures to be mounted should exceed nominal anchor diameter by 1/4" for 1/2 thru 5/8" diameter anchors, and by 1/4" for all other diameters.
- Do not use an impact wrench to set or tighten the Wedge-All.

Caution: Oversized holes in the base material will make it difficult to set the anchor and will reduce the anchor’s load capacity.

**Threaded studs:**
- Drill a hole in the base material using a carbide drill bit the same diameter as the nominal diameter of the anchor to be installed. Drill the hole to the specified embedment depth and blow it clean using compressed air. Overhead installations need not be blown clean. Alternatively, drill the hole deep enough to accommodate embedment depth and dust from drilling.
- Assemble the anchor with nut and washer so the top of the nut is flush with the top of the anchor. Place the anchor in the fixture and drive into the hole until washer and nut are tight against fixture.
- Tighten to the required installation torque.

**Tie-Wire:**
- Drill a hole at least 1 1/4" deep using a 1/2" diameter carbide tipped bit.
- Drive the anchor into the hole until the head is seated against the base material.
- Set the anchor by prying/pulling the head with the claw end of the hammer.

**SUGGESTED SPECIFICATIONS:**
Wedge anchors shall be a threaded stud with an integral cone expander and a single piece expansion clip. The stud shall be carbon steel with a minimum 70,000 psi tensile strength, or type 303, 304 or 316 stainless steel, as called for on the drawings. Anchors shall meet Federal Specification A-A-1923A, Type 4. Anchors shall be Wedge-All® anchors from Simpson Strong-Tie, Pleasanton, CA. Anchors shall be installed following the Simpson Strong-Tie instructions for Wedge-All anchors.

**Length Identification Head Marks on Wedge-All® Anchors (corresponds to length of anchor – inches):**

| Mark | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| From | 1 1/2 | 2 | 2 1/2 | 3 | 3 1/2 | 4 | 4 1/2 | 5 | 5 1/2 | 6 | 6 1/2 | 7 | 7 1/2 | 8 | 8 1/2 | 9 | 9 1/2 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Up To But Not Including | 2 | 2 1/2 | 3 | 3 1/2 | 4 | 4 1/2 | 5 | 5 1/2 | 6 | 6 1/2 | 7 | 7 1/2 | 8 | 8 1/2 | 9 | 9 1/2 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

**Wedge-All® Anchor Installation Sequence**

**Wedge-All® Anchor Installation Data**

|----------------------|-----|------|------|------|------|------|------|-----|------|------|------|------|------|------|-----|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|
Mechanical Anchors

Wedge-All® Anchor Product Data
Carbon Steel: Zinc Plated and Mechanically Galvanized

<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>Carbon Steel Model No.</th>
<th>Mechanically Galvanized Model No.</th>
<th>Drill Bit Dia. (in.)</th>
<th>Thread Length (in.)</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 x 1 1/4</td>
<td>TWD251121¢</td>
<td>*</td>
<td>1/4</td>
<td>Hole dia. is 9/16</td>
<td>100 500</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

Material Specifications
Carbon Steel - Zinc Plated

<table>
<thead>
<tr>
<th>Component Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anchor Body</td>
</tr>
<tr>
<td>Carbon Steel</td>
</tr>
</tbody>
</table>

Material meets minimum 70,000 psi tensile strength.

Application: Interior environment, low level of corrosion resistance. See page 11 for more corrosion information.

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1. The published length is the overall length of the anchor. Allow one anchor diameter for the nut and washer thickness plus the fixture thickness when selecting the minimum length.
2. Special lengths are available on request. Load values are valid as long as minimum embedment depths are satisfied.
3. Tie-Wire Wedge-All® anchor, overall length is 2”.
4. Tie-Wire Wedge-All® anchor also available in bulk quantity of 2,000, model TWD25112B.
5. Bulk packed Wedge-All® anchors available, call Simpson Strong-Tie® for details.