**EZ-WRAP® Side Tie**

**NOMENCLATURE**

- **Tie Tube**: For bare conductor, each tie is furnished with a Tie Tube Component. The Tie Tube is detached and applied over the bare conductor.

- **Identification Tape**: Shows catalog number, nominal sizes.

- **Insulator Identification Mark**: Identifies the correct insulator headstyle by colors corresponding to information on catalog pages.

- **Color Code**: Assists in identification of conductor size, corresponding to tabular information appearing on catalog pages.

**GENERAL RECOMMENDATIONS**

**INTENDED USE**: EZ-WRAP Side Ties, manufactured of aluminum covered steel, secure conductors in the side groove of interchangeable headstyle insulators.

EZ-WRAP Side Ties provide an improved method of securing conductor compared to clamp-top insulators or hand ties over Armor Rods.

**EZ-WRAP SIDETIE**: EZ-WRAP Side Ties provide superior abrasion protection over hand tie wire for the conductor under all types of motion, including low-frequency sway oscillation, high-frequency aeolian vibration and galloping.

The tube component surrounds the bare conductor with a resilient cushion where the conductor would come into contact with the insulator. In the case of EZ-WRAP Side Ties applied over plastic jacketed conductors, the tube can be discarded because contact with the bare conductor is prevented by the jacketing itself.

**VIBRATION DAMPERS**: While the EZ-WRAP Side Tie is superior to hand tie wire, there may be conditions where excessive conductor movement requires the use of supplemental dampers.

For excessive aeolian vibration on conductors up to .760" OD, the Spiral Vibration Damper is recommended. Typically 2 SVD/span on distribution construction is adequate for protection, although more may be required depending upon a number of factors.

For **conductor galloping**, the Air Flow Spoiler is recommended. Use of the proper size and quantity of AFS per span can eliminate or minimize the effects of galloping. Quantity per span is based upon total span length and other factors.

Review the Motion Control section and/or consult PLP for engineering recommendations for Air Flow Spoilers, and if necessary SVD's.

**MECHANICAL STRENGTH**: The EZ-WRAP Side Tie is designed to provide longitudinal holding strength in excess of values required by the National Electric Safety Code. The holding strength is usually sufficient to contain the broken conductor to a single span, however, the EZ-WRAP Side Tie is designed to relieve the load before severe damage is done to the pole's structural components. **TM-200E** covers the mechanical testing of the EZ-WRAP Side Tie and is available upon request.

**INTERCHANGEABLE HEADSTYLE INSULATOR**: To insure proper fit and service life, it is recommended that only insulators corresponding to C-Neck, F-Neck, or J-Neck be used. These neck-diameters and groove-height dimensions appear on ANSI standards.

(Continued)
EZ-WRAP® Side Tie

GENERAL RECOMMENDATIONS CONT'D.

Consult PLP for engineering recommendations on non-interchangeable headstyle insulators. A sample of the insulator in question is desirable.

CONDUCTOR SIZE: The EZ-WRAP Side Tie exactly matches the DISTRIBUTION Ties’ ranges, which means identical color codes on armless construction. Conductor sizes up to 1.240” O.D. can be accommodated depending on the insulator’s side groove radius.

The EZ-WRAP Side Tie is designed to permit controlled movement of unbroken conductor, reducing cantilever loading at the base of the insulator or bracket, then restore itself. We refer to this unique feature as “resilience.”

RADIO INTERFERENCE: The RIV/TVI characteristics of EZ-WRAP Side Ties are equivalent to those of a well-made hand tie when originally installed. During service life the precontoured EZ-WRAP Side Tie assures continued fit, which would have better RIV/TVI performance than a loosened tie wire.

TAPPING: Compared to the use of protective rods, placing hot-line clamps directly over the applied legs of EZ-WRAP Side Ties cannot be recommended. Tapping over protective rods will remain permissible, however, there are now stirrups available that provide a superior method of making hot-line taps.

LINE ANGLES GENERAL GUIDELINES: On horizontally-mounted insulators, EZ-WRAP Side Ties can normally accommodate line angles up to 10°. On vertically-mounted insulators, line angles up to 40° can normally be achieved. When insulators are mounted at various degrees of cant between the horizontal and the vertical, line angles between 0° and 40° may be accommodated depending upon the actual cant of the insulator.

In all cases, the conductor should rest in the preferred insulator groove, independently of the tie, so the tie is not required to force the conductor to remain in that groove. The largest practical angle a tie can accommodate depends upon limiting factors such as conductor size, tension, span lengths, sag angles, insulator style and orientation, etc. Consult PLP® for further guidance on line angle issues not covered in the above test report.

SAFETY CONSIDERATIONS

1. This product is intended for a single (one-time) use and for the specified application. CAUTION: DO NOT REUSE OR MODIFY THIS PRODUCT UNDER ANY CIRCUMSTANCES.
2. This product is intended for use by trained craftspeople only. This product SHOULD NOT BE USED by anyone who is not familiar with and trained in the use of it.
3. When working in the area of energized lines with this product, EXTRA CARE should be taken to prevent accidental electrical contact.
4. For PROPER PERFORMANCE AND PERSONAL SAFETY be sure to select the proper size EZ-WRAP Side Tie before application.
5. EZ-WRAP Side Ties are precision devices. To insure proper performance, they should be stored in cartons under cover and handled carefully.
For use on: ACAR, ACSR, All-Aluminum, AWAC® Compacted ACSR, Aluminum Alloy

C-Neck Interchangeable Headstyle Insulators

### ANSI 55-2 PIN
2-1/4" Neck Diameter

### ANSI 55-3 PIN

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Diameter Range (Inches)</th>
<th>Nominal Conductor Size</th>
<th>Units</th>
<th>Wt./Lbs.</th>
<th>Approx. Applied Length (Inches)</th>
<th>Insulator Identification Mark</th>
<th>Color Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9/16&quot; R. GROOVE (See Note 2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EZSTC-270</td>
<td>.190 - .215</td>
<td>#6, 6/1, #4, 7W Comp.</td>
<td>100</td>
<td>16</td>
<td>21</td>
<td>Black</td>
<td>Blue</td>
</tr>
<tr>
<td>EZSTC-271</td>
<td>.216 - .244</td>
<td>#4, 7W, All Alum. #4, 6/1, 7/1 Comp.</td>
<td>100</td>
<td>17</td>
<td>22</td>
<td>Black</td>
<td>Brown</td>
</tr>
<tr>
<td>EZSTC-272</td>
<td>.245 - .277</td>
<td>#4, 6/1 7/1 #4, 7W, Alum. Alloy</td>
<td>100</td>
<td>18</td>
<td>23</td>
<td>Black</td>
<td>Orange</td>
</tr>
<tr>
<td>EZSTC-273</td>
<td>.278 - .315</td>
<td>#3, 7W, Alum. Alloy #2, 7W, All Alum.</td>
<td>100</td>
<td>18</td>
<td>24</td>
<td>Black</td>
<td>Purple</td>
</tr>
<tr>
<td>EZSTC-274</td>
<td>.316 - .357</td>
<td>#2, 6/1 - 7/1 #2, 7W, Alum. Alloy #1, 6/1</td>
<td>100</td>
<td>19</td>
<td>25</td>
<td>Black</td>
<td>Red</td>
</tr>
<tr>
<td>EZSTC-275</td>
<td>.358 - .405</td>
<td>1/0, 7W All Alum. 1/0, 6/1, 1/0, 7W, Alum. Alloy</td>
<td>100</td>
<td>21</td>
<td>23</td>
<td>Black</td>
<td>Yellow</td>
</tr>
<tr>
<td>EZSTC-276</td>
<td>.406 - .459</td>
<td>2/0, 7W All Alum. 2/0, 6/1, 2/0, 7W Alum. Alloy</td>
<td>100</td>
<td>22</td>
<td>25</td>
<td>Black</td>
<td>Blue</td>
</tr>
<tr>
<td>EZSTC-277</td>
<td>.460 - .520</td>
<td>3/0, 7W All Alum. 3/0, 6/1 3/0, 7W, Alum. Alloy</td>
<td>100</td>
<td>24</td>
<td>27</td>
<td>Black</td>
<td>Orange</td>
</tr>
<tr>
<td>EZSTC-278</td>
<td>.521 - .588</td>
<td>4/0, 7W All Alum. 4/0, 6/1 4/0, 7W, Alum. Alloy</td>
<td>100</td>
<td>30</td>
<td>28</td>
<td>Black</td>
<td>Red</td>
</tr>
<tr>
<td>EZSTC-279</td>
<td>.589 - .665</td>
<td>266.8, 37W All Alum. 266.8, 18/1 336.4, 19W All Alum.</td>
<td>100</td>
<td>34</td>
<td>31</td>
<td>Black</td>
<td>Purple</td>
</tr>
<tr>
<td>EZSTC-280</td>
<td>.666 - .755</td>
<td>336.4, 37W All Alum. 336.4, 18/1 397.5, 19W All Alum. 400, 19W, 37W All Alum.</td>
<td>100</td>
<td>35</td>
<td>33</td>
<td>Black</td>
<td>Brown</td>
</tr>
<tr>
<td>EZSTC-281</td>
<td>.756 - .858</td>
<td>477, 19W, 37W, All Alum. 477, 18/1, 24/7, 26/7</td>
<td>50</td>
<td>29</td>
<td>35</td>
<td>Black</td>
<td>Red</td>
</tr>
<tr>
<td><strong>5/8&quot; R. GROOVE (See Note 2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EZSTC-282</td>
<td>.859 - .968</td>
<td>556.5, 26/7, 636, 18/1 700, 37W, 61W, All Alum.</td>
<td>50</td>
<td>35</td>
<td>36</td>
<td>Black</td>
<td>Blue</td>
</tr>
<tr>
<td><strong>11/16&quot; R. GROOVE (See Note 2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EZSTC-283</td>
<td>.969 - 1.096</td>
<td>795, 37W, 61W, All Alum. 715.5, 24/7 795, 54/7</td>
<td>50</td>
<td>38</td>
<td>38</td>
<td>Black</td>
<td>Green</td>
</tr>
<tr>
<td><strong>3/4&quot; R. GROOVE (See Note 2)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EZSTC-284</td>
<td>1.097 - 1.240</td>
<td>954, 36/1, 54/7 1033.5, 37W, 61W, All Alum.</td>
<td>50</td>
<td>38</td>
<td>39</td>
<td>Black</td>
<td>Yellow</td>
</tr>
</tbody>
</table>

Right-hand lay standard

**EXPLANATORY NOTES:**

1. Nominal Conductor size indicates one of various conductors within each range.
2. For the succeeding ranges, the insulator’s side groove radius should be at least as large as shown above.
3. AWAC is a registered trademark of the Copperweld Co.
### EZ-WRAP® Side Tie

For use on:
- ACAR, ACSR,
- All-Aluminum, AWAC®
- Compacted ASCR,
- Aluminum Alloy

F-Neck Interchangeable
Headstyle Insulators

ANSI 53-4 Spool
ANSI 53-5 Spool
ANSI 55-4 Pin
ANSI 55-5 Pin
ANSI 57-1 Post
ANSI 57-2 Post
ANSI 57-3 Post

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Diameter Range (Inches)</th>
<th>Nominal Conductor Size</th>
<th>Units</th>
<th>Wt./Lbs. Applied Length (inches)</th>
<th>Insulator Identification Mark</th>
<th>Color Code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min.</td>
<td>Max.</td>
<td>9/16&quot; R. GROOVE (See Note 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EZSTF-170</td>
<td>.190</td>
<td>.215</td>
<td>#6, 6/1 – #4, 7W Comp.</td>
<td>100</td>
<td>16</td>
<td>21 Yellow</td>
</tr>
<tr>
<td>EZSTF-171</td>
<td>.216</td>
<td>.244</td>
<td>#4, 7W All Alum. – #4, 6/1, 7/1 Comp.</td>
<td>100</td>
<td>17</td>
<td>22 Yellow</td>
</tr>
<tr>
<td>EZSTF-172</td>
<td>.245</td>
<td>.277</td>
<td>#4, 6/1, 7/1 – #4, 7W Alum.</td>
<td>100</td>
<td>18</td>
<td>23 Yellow</td>
</tr>
<tr>
<td>EZSTF-173</td>
<td>.278</td>
<td>.315</td>
<td>#3, 7W Alum. Alum. – #2, 7W All Alum.</td>
<td>100</td>
<td>18</td>
<td>24 Yellow</td>
</tr>
<tr>
<td>EZSTF-174</td>
<td>.316</td>
<td>.357</td>
<td>#2, 6/1, 7/1 – #2, 7W Alum.</td>
<td>100</td>
<td>19</td>
<td>25 Yellow</td>
</tr>
<tr>
<td>EZSTF-175</td>
<td>.358</td>
<td>.405</td>
<td>1/0, 7W All Alum. 1/0, 6/1, 1/0, 7W Alum.</td>
<td>100</td>
<td>21</td>
<td>23 Yellow</td>
</tr>
<tr>
<td>EZSTF-176</td>
<td>.406</td>
<td>.459</td>
<td>2/0, 7W All Alum. 2/0, 6/1, 2/0, 7W Alum. Alloy</td>
<td>100</td>
<td>22</td>
<td>25 Yellow</td>
</tr>
<tr>
<td>EZSTF-177</td>
<td>.460</td>
<td>.520</td>
<td>3/0, 7W All Alum. 3/0, 6/1, 3/0, 7W Alum. Alloy</td>
<td>100</td>
<td>24</td>
<td>27 Yellow</td>
</tr>
<tr>
<td>EZSTF-178</td>
<td>.521</td>
<td>.588</td>
<td>4/0, 7W All Alum. 4/0, 6/1, 4/0, 7W Alum. Alloy</td>
<td>100</td>
<td>30</td>
<td>28 Yellow</td>
</tr>
<tr>
<td>EZSTF-179</td>
<td>.589</td>
<td>.665</td>
<td>266.8, 37W All Alum. 266.8, 18/1, 336.4, 19W All Alum.</td>
<td>100</td>
<td>34</td>
<td>31 Yellow</td>
</tr>
<tr>
<td>EZSTF-180</td>
<td>.666</td>
<td>.755</td>
<td>336.4, 37W All Alum. 336.4, 18/1, 397.5, 19W All Alum. 400, 19W, 37W All Alum.</td>
<td>100</td>
<td>34</td>
<td>34 Yellow</td>
</tr>
<tr>
<td>EZSTF-181</td>
<td>.756</td>
<td>.858</td>
<td>477, 19W, 37W, All Alum. 477, 18/1, 24/7, 26/7</td>
<td>50</td>
<td>54</td>
<td>36 Yellow</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5/8&quot; R. GROOVE (See Note 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EZSTF-182</td>
<td>.859</td>
<td>.968</td>
<td>556.5, 26/7, 636, 18/1, 3700, 37W, 61W, All Alum.</td>
<td>50</td>
<td>36</td>
<td>37 Yellow</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11/16&quot; R. GROOVE (See Note 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EZSTF-183</td>
<td>.969</td>
<td>1.096</td>
<td>795, 37W, 61W, All Alum. 715.5, 24/7, 795, 54/7</td>
<td>50</td>
<td>39</td>
<td>39 Yellow</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3/4&quot; R. GROOVE (See Note 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EZSTF-184</td>
<td>1.097</td>
<td>1.240</td>
<td>954, 36/1, 54/7, 1033.5, 37W, 61W, All Alum.</td>
<td>50</td>
<td>40</td>
<td>40 Yellow</td>
</tr>
</tbody>
</table>

Right-hand lay standard

**EXPLANATORY NOTES:**

1. Nominal Conductor size indicates one of various conductors within each range.
2. For the succeeding ranges, the insulator's side groove radius should be at least as large as shown above.
3. AWAC is a registered trademark of the Copperweld Co.
## EZ-WRAP® Side Tie

For use on:
ACSR, ACAR, All-Aluminum, AWAC®,
Compacted ACSR, Aluminum Alloy

J-Neck Interchangeable
Headstyle Insulators

ANSI 55-6
Single Skirt Pin
3-1/2"
Neck Diameter

ANSI 55-7
Single Skirt Pin

ANSI 56-1
Double Skirt Pin

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Diameter Range (Inches)</th>
<th>Nominal Conductor Size</th>
<th>Units</th>
<th>Wt./Lbs.</th>
<th>Applied Length (Inches)</th>
<th>Insulator Identification Mark</th>
<th>Color Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>EJSTJ-570</td>
<td>.190 .215</td>
<td>#6, 6/1</td>
<td>100</td>
<td>18</td>
<td>24</td>
<td>Green Blue</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-571</td>
<td>.216 .244</td>
<td>#4, 7W, All Alum.</td>
<td>100</td>
<td>19</td>
<td>25</td>
<td>Green Brown</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-572</td>
<td>.245 .277</td>
<td>6/1 - 7/1 #3, 7W, All Alum.</td>
<td>100</td>
<td>19</td>
<td>26</td>
<td>Green Orange</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-573</td>
<td>.278 .315</td>
<td>#3, 7W, Alum. Alloy #2, 7W, All Alum.</td>
<td>100</td>
<td>20</td>
<td>27</td>
<td>Green Purple</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-574</td>
<td>.316 .357</td>
<td>#2, 6/1 - 7/1 #2, 7W, Alum. Alloy #1, 6/1</td>
<td>100</td>
<td>21</td>
<td>28</td>
<td>Green Red</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-575</td>
<td>.358 .405</td>
<td>1/0, 7W-19W All Alum. 1/0, 6/1 1/0, 7W, Alum. Alloy</td>
<td>100</td>
<td>23</td>
<td>26</td>
<td>Green Yellow</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-576</td>
<td>.406 .459</td>
<td>2/0, 7W-19W, All Alum. 2/0, 6/1</td>
<td>100</td>
<td>25</td>
<td>28</td>
<td>Green Blue</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-577</td>
<td>.460 .520</td>
<td>3/0, 7W-19W, All Alum. 3/0, 6/1 3/0, 7W, Alum. Alloy</td>
<td>100</td>
<td>26</td>
<td>30</td>
<td>Green Orange</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-578</td>
<td>.521 .588</td>
<td>4/0, 6/1 4/0, 7W, All Alum. 4/0, 7W, Alum. Alloy 250, 19W-37W All Alum.</td>
<td>100</td>
<td>35</td>
<td>31</td>
<td>Green Red</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-579</td>
<td>.589 .665</td>
<td>266.8, 19W-37W All Alum. 300, 19W37W, All Alum. 266.8, 26/7</td>
<td>100</td>
<td>38</td>
<td>34</td>
<td>Green Purple</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-580</td>
<td>.666 .755</td>
<td>336.4, 37W, All Alum. 397.5, 19W-37W, All Alum.</td>
<td>50</td>
<td>40</td>
<td>36</td>
<td>Green Brown</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-581</td>
<td>.756 .858</td>
<td>397.5, 24/7, 26/7 477, 19W, 37W, All Alum. 477, 18/1, 24/7, 26/7</td>
<td>50</td>
<td>31</td>
<td>38</td>
<td>Green Red</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-582</td>
<td>.859 .968</td>
<td>556.5, 61W All Alum. 556.5, 26/7 636, 18/1</td>
<td>50</td>
<td>38</td>
<td>39</td>
<td>Green Blue</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-583</td>
<td>.969 1.096</td>
<td>636, 24/7, 26/7, 30/19 715.5, 36/1, 24/7, 26/7</td>
<td>50</td>
<td>40</td>
<td>41</td>
<td>Green Green</td>
<td></td>
</tr>
<tr>
<td>EJSTJ-584</td>
<td>1.097 1.240</td>
<td>954, 54/7 1033.5, 457 1113, 61W All Alum. 954, 37W All Alum. Alloy</td>
<td>50</td>
<td>43</td>
<td>42</td>
<td>Green Yellow</td>
<td></td>
</tr>
</tbody>
</table>

Right-hand lay standard

EXPLANATORY NOTES:

1. Nominal Conductor size indicates one of various conductors within each range.
2. For the succeeding ranges, the insulator’s side groove radius should be at least as large as shown above.
3. AWAC is a registered trademark of the Copperweld Co.