**Description**
A flat head bolt with a bearing surface that is countersunk to a 150° angle. Although flat, the head has a measurable side height causing it to protrude above its mating surface when it is completely tightened. Directly below the head is a square neck and a threaded section that has a unified thread pitch.

**Applications/Advantages**
The square neck design keeps the bolt from turning as a nut is tightened. The flat head feature gives a lower profile on the front or top side of the fastening than a round head carriage bolt. Designed specifically, but not exclusively, for the garage door industry.

**Material**
Grade-2: AISI 1006 - 1025 steel  
Grade-5: AISI 1030 - 1055 steel

**Core Hardness**
Grade-2: Rockwell B80 - B100  
Grade-5: Rockwell C25 - C34

**Tensile Strength**
Grade-2: 74,000 psi. min.  
Grade-5: 120,000 psi. min.

**Plating**
Flat head carriage bolts are usually supplied with a clear zinc finish.

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### FLAT HEAD CARRIAGE BOLTS, SQUARE NECK

<table>
<thead>
<tr>
<th>Bolt Diameter &amp; Thread Pitch</th>
<th>Head Diameter</th>
<th>Head Height</th>
<th>Square Width</th>
<th>Square Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>T</td>
<td>O</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Max</td>
<td>Min</td>
<td>Max</td>
<td>Min</td>
</tr>
<tr>
<td>1/4-20</td>
<td>.640</td>
<td>.590</td>
<td>.098</td>
<td>.078</td>
</tr>
</tbody>
</table>

**Tolerance on Length**
+ 0.02, -0.04