



# B7 Deficiency?

## Why High Strength materials


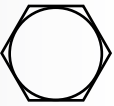


Some customers require high strength parts for their installations, especially for seismic areas.

Newton customers expect high quality. Newton has for many years stocked higher grade materials so that you can be sure you are getting what was ordered. Newton only sells high strength threaded rod or hardware for sizes 3/8" diameter or higher.

## How to Tell the Difference




**Hardware**

You are able to distinguish between Standard Hardware (grade 2) and Grade 5 hardware by lines designated on the bolt head. Grade 5 has three lines running from the Center towards the edge.

|   |   |   |
|---|---|---|
|  |  | <p><b>Standard "Low Carbon" Hardware</b></p> <ul style="list-style-type: none"> <li>» SAE J429 Grade 2</li> <li>» Tensile Strength (Sut) = 74 kPSI</li> </ul>                 |
|  |  | <p><b>Newton Grade 5 Hardware</b></p> <ul style="list-style-type: none"> <li>» SAE J429 Grade 5 (ASTM A449 -- Type 1)</li> <li>» Tensile Strength (Sut) = 120 kPSI</li> </ul> |

**Threaded Rod**

Unfortunately you are not able to tell visually. That is why the relationship between you and your supplier is critical. Newton acquires only B7 from our suppliers to guarantee you are getting what you paid for.

|   |   |   |
|---|---|---|
|  |  | <p><b>Standard "Low Carbon" ASTM A36</b></p> <ul style="list-style-type: none"> <li>» Yield Strength (Sy) = 36 kPSI</li> <li>» Tensile Strength (Sut) = 58 kPSI</li> </ul>            |
|  |   | <p><b>Newton B7 ASTM A193</b></p> <ul style="list-style-type: none"> <li>» Yield Strength (Sy) = 105 kPSI (724 MPa)</li> <li>» Tensile Strength (Sut) = 125 kPSI (862 MPa)</li> </ul> |

## Are You Getting What You Ordered?