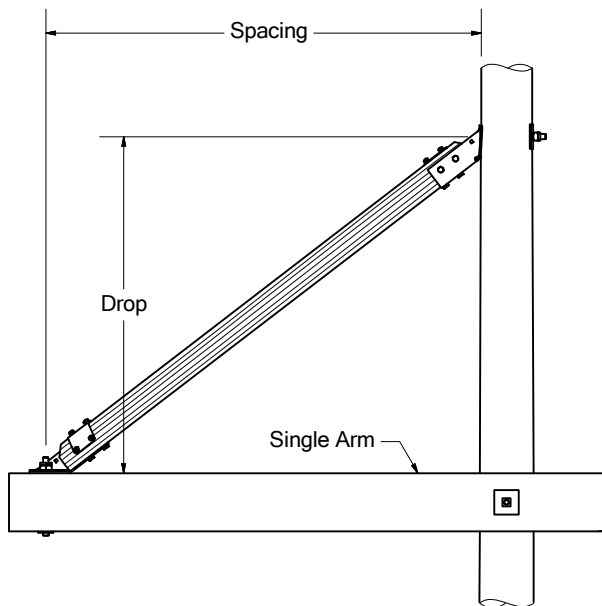


## Knee and Vee Braces

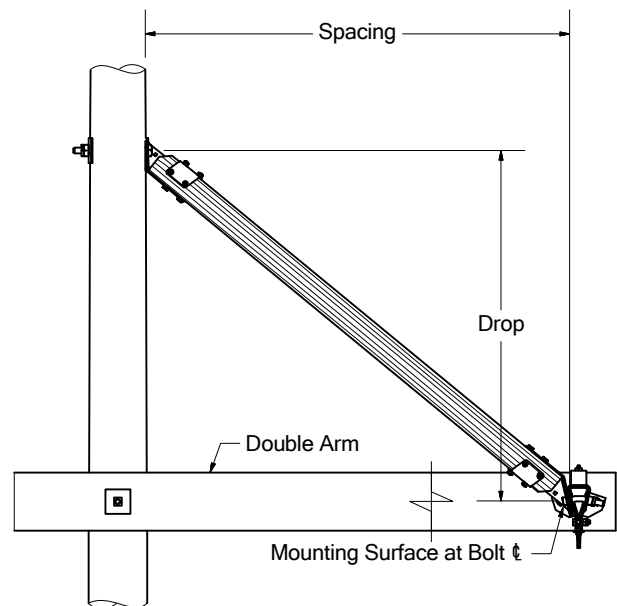
The following examples illustrate typical installations for Knee and Vee Brace applications. Knee Bracing is generally used with single arm construction, having one end attached to the side of the pole, and the other end to the top or bottom face of the single crossarm.

Vee Bracing, by comparison, is generally used with double arm construction, with one end attached to the side of the pole, and the other end to the side of a spacer fitting. Because of the variance in slope of the brace mounting plane on the spacer fitting body, care must be exercised when selecting the end fitting angle for the spacer fitting end.

Knee and Vee Braces may be ordered by the catalog number developed from codes on page B2.2.2, or by brace type and series along with complete descriptive data. A catalog number indicates "each" units, meaning a single piece of wood with end fittings.

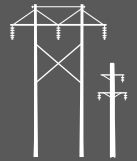


**Knee Brace Application**



**Vee Brace Application**

Knee and vee braces may also be installed under the arm, as the need dictates. Please contact the BROOKS Engineering Department for assistance in determining which application best meets your design criteria.

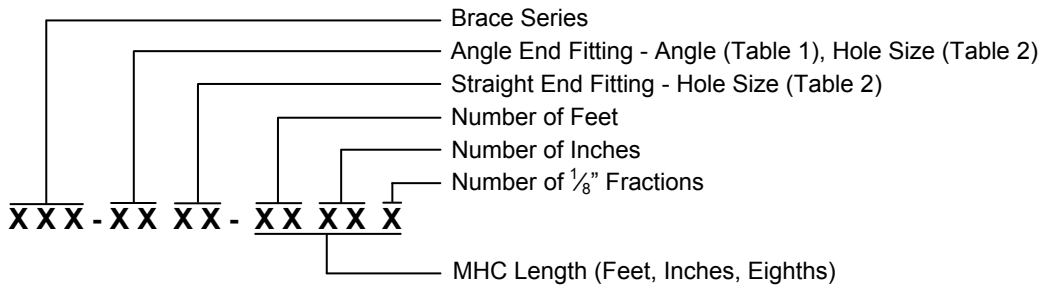


## Knee and Vee Brace Ordering Codes

For 414, 415, 416, 429 and 430 Knee Brace Series

For 417, 418, 419, 425, 426 and 450 Vee Brace Series

### Ordering Information:



**Table 1**

**End Fitting Angle**

Bend Code	Degree
C	30°
F	37½°
J	45°
L	50°
M	52½°

Additional angles are available

**Table 2**

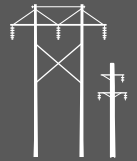
**Mounting Hole Size**

Hole Code	Size
5	11/16"
6	13/16"
7	15/16"
8	1 1/16"

**Ordering Example:** 415-F6M6-07014 = 1 Knee Brace, 3 3/8" x 4 3/8" wood, angle fitting 37½° (degree) with 13/16" hole, and 52½° (degree) with 13/16" hole, MHC = 7'-1 1/2". Approximate shipping weight = 43 lbs. per piece.

**Ordering Example:** 419-J6J7-1006 = 1 Vee Brace, 3 3/8" x 5 3/8" wood, angle fitting 45° (degree) with 15/16" hole, and 45° (degree) with 13/16" hole, MHC = 10'-6". Approximate shipping weight = 65 lbs. per piece.

BROOKS has a wide variety of additional brace sizes to meet your specific requirements that are not illustrated in this general catalog. For assistance in identifying the brace best suited to your applications, contact BROOKS Engineering Department.



### 414 Series Knee Braces

15,000 Lbs. Ultimate Tensile Capacity

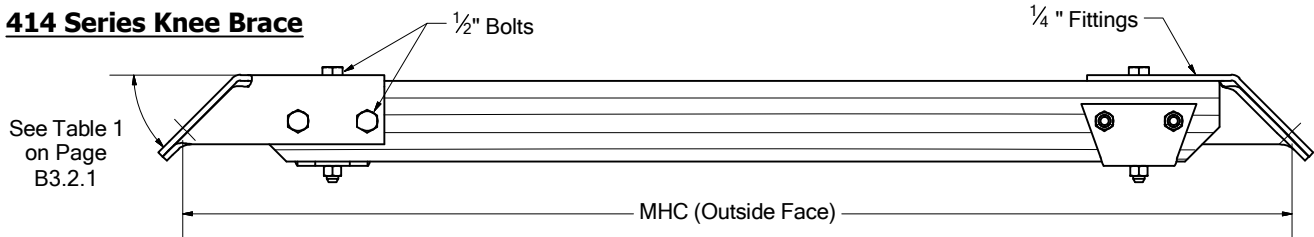
### 417 Series Vee Braces

15,000 Lbs. Ultimate Tensile Capacity

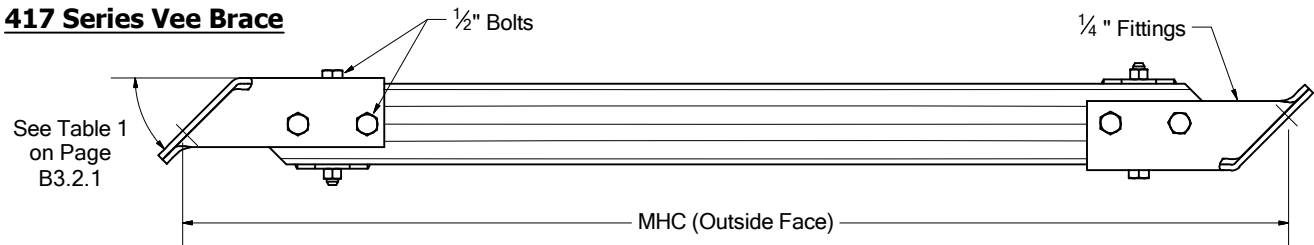
Wood Section -  $2\frac{3}{4}'' \times 3\frac{1}{2}''$ . Standard Holes -  $\frac{13}{16}''$ .  $\frac{11}{16}''$  holes are also available for this series.

To estimate shipping weight per piece, multiply MHC in feet equivalent by 2.5, then add 13 pounds.

#### 414 Series Knee Brace



#### 417 Series Vee Brace



### 415 Series Knee Braces

20,000 Lbs. Ultimate Tensile Capacity

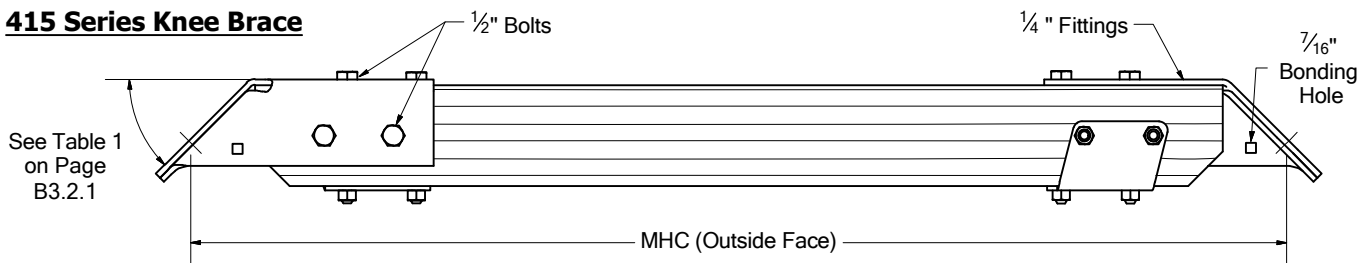
### 418 Series Vee Braces

20,000 Lbs. Ultimate Tensile Capacity

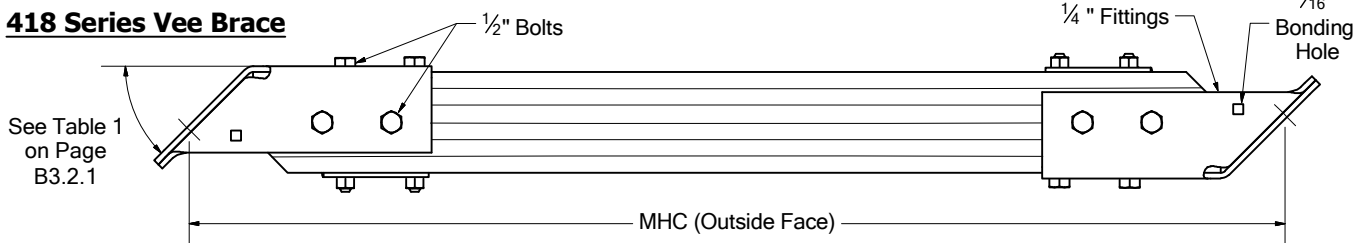
Wood Section -  $3\frac{3}{8}'' \times 4\frac{3}{8}''$ . Standard Holes -  $\frac{15}{16}''$ .  $\frac{13}{16}''$  holes are also available for this series.

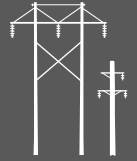
To estimate shipping weight per piece, multiply MHC in feet equivalent by 3.8, then add 16 pounds.

#### 415 Series Knee Brace



#### 418 Series Vee Brace





### 416 Series Knee Braces

20,000 Lbs. Ultimate Tensile Capacity

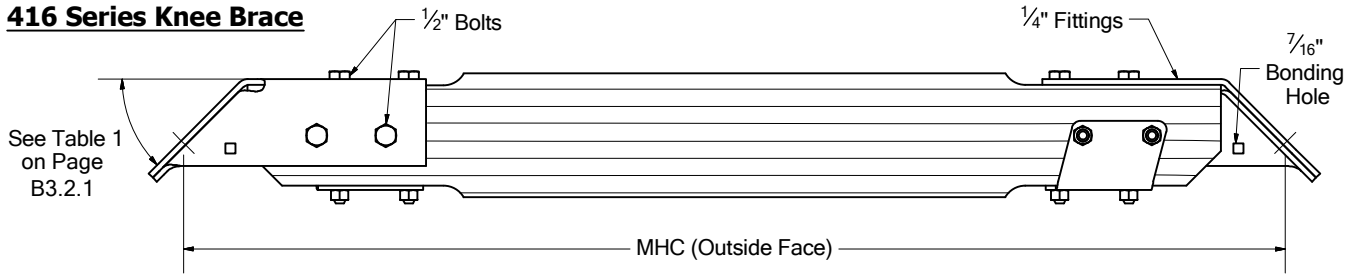
### 419 Series Vee Braces

20,000 Lbs. Ultimate Tensile Capacity

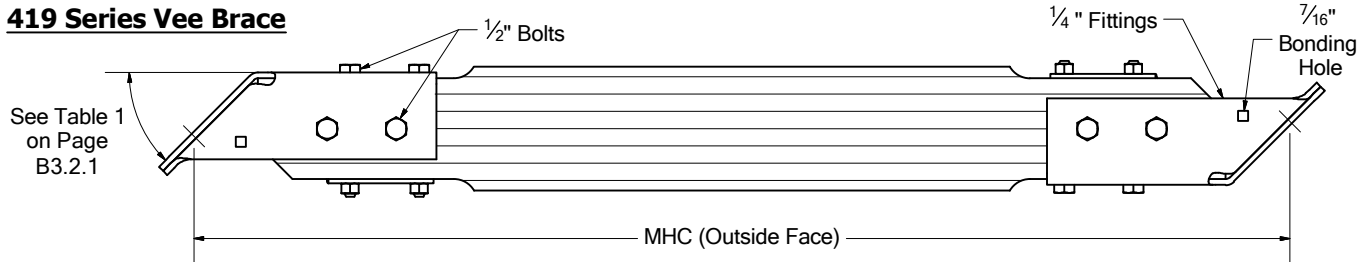
Wood Section -  $3\frac{3}{8}" \times 5\frac{3}{8}"$ . Standard Holes -  $\frac{15}{16}"$ .  $1\frac{3}{16}"$  holes are also available for this series.

To estimate shipping weight per piece, multiply MHC in feet equivalent by 4.7, then add 16 pounds.

#### 416 Series Knee Brace



#### 419 Series Vee Brace



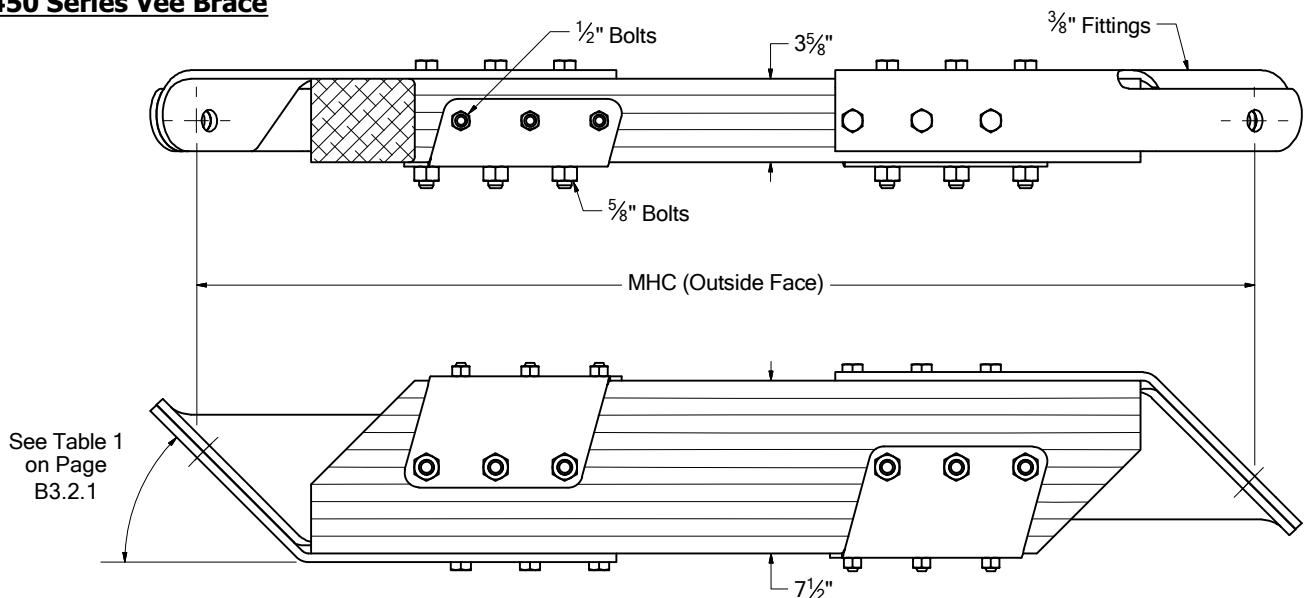
### 450 Series Vee Braces

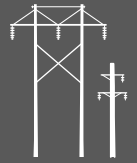
30,000 Lbs. Ultimate Tensile Capacity

Wood Section -  $3\frac{5}{8}" \times 7\frac{1}{2}"$ . Standard Holes -  $\frac{15}{16}"$ .  $1\frac{1}{16}"$  holes are also available for this series.

To estimate shipping weight per piece, multiply MHC in feet equivalent by 7.0, then add 39 pounds.

#### 450 Series Vee Brace





## 429 Series Knee Braces

35,000 Lbs. Ultimate Tensile Capacity

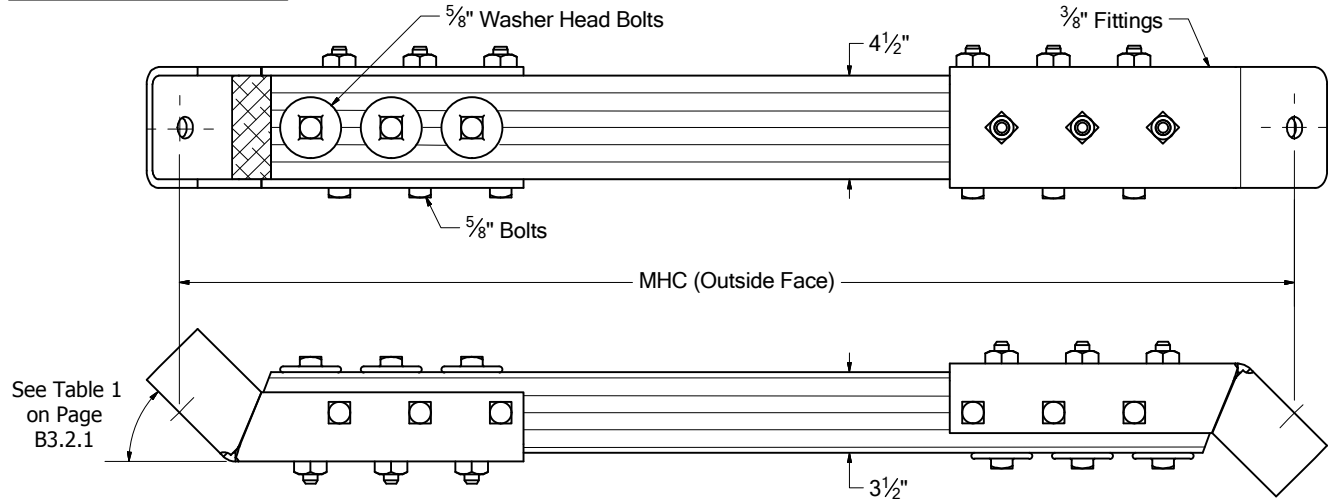
## 425 Series Vee Braces

35,000 Lbs. Ultimate Tensile Capacity

Wood Section -  $3\frac{1}{2}'' \times 4\frac{1}{2}''$ . Standard Holes -  $\frac{15}{16}''$ .  $1\frac{1}{16}''$  holes are also available for this series.

To estimate shipping weight per piece, multiply MHC in feet equivalent by 4.1, then add 42 pounds.

### 425 Series Vee Brace



## 430 Series Knee Braces

35,000 Lbs. Ultimate Tensile Capacity

## 426 Series Vee Braces

35,000 Lbs. Ultimate Tensile Capacity

Wood Section -  $3\frac{1}{2}'' \times 5\frac{1}{2}''$ . Standard Holes -  $\frac{15}{16}''$ .  $1\frac{1}{16}''$  holes are also available for this series.

To estimate shipping weight per piece, multiply MHC in feet equivalent by 5.0, then add 42 pounds.

### 426 Series Vee Brace

