VECTOR COMPONENTS:

Vectors are scaled to return components in terms of the basic known angles **SS**, **DD**, and **R1**. Values listed in the table may be negative with respect to the vector orientation shown in the diagram.

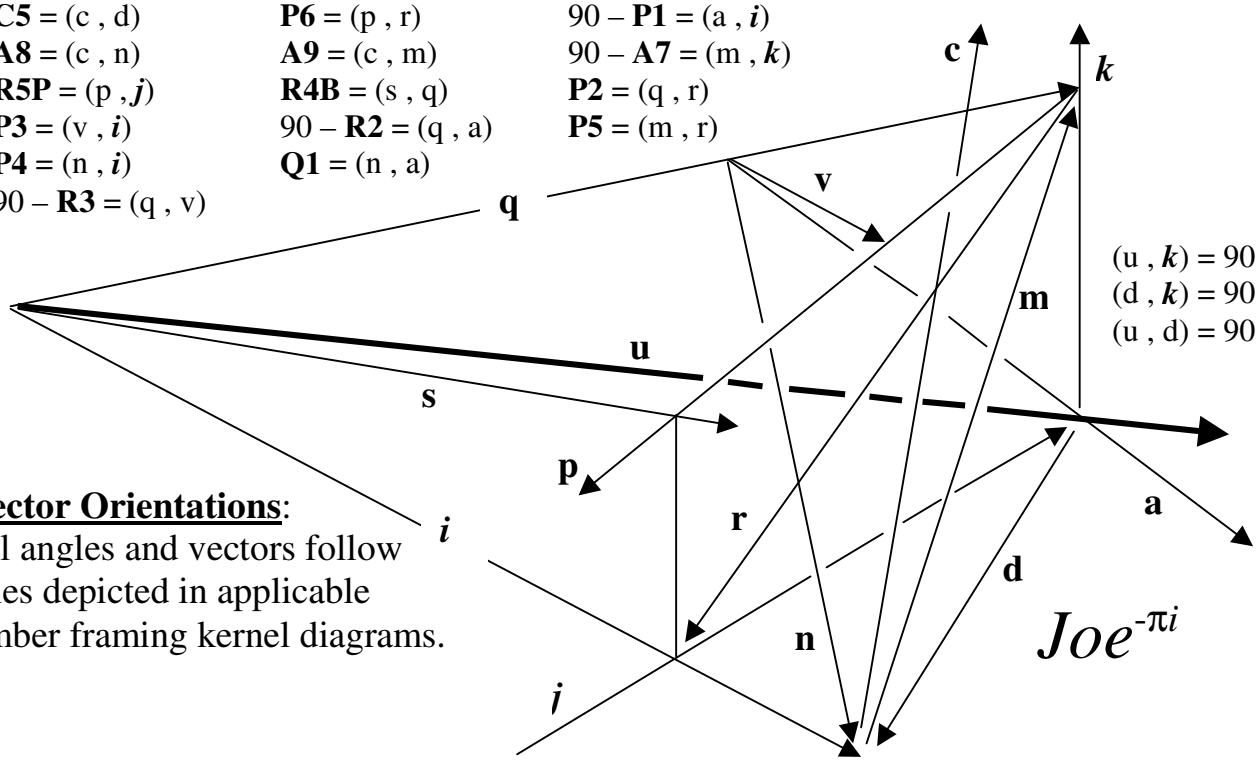
TABLE of VECTOR COMPONENTS			
Vector	***x***	***y***	***z***
a	tan **SS**	tan **SS** tan **DD**	– tan **DD**
c	$\cos^2$ **DD** $\cos^2$ **R1** – 1	sin **DD** cos **DD** $\cos^2$ **R1**	cos **DD** sin **R1** cos **R1**
d	sin **DD**	– cos **DD**	0
i	1	0	0
j	0	1	0
k	0	0	1
m	– tan **DD**	1	tan **SS**
n	$\tan^2$ **DD** + $\sin^2$ **SS**	– $\cos^2$ **SS** tan **DD**	– sin **SS** cos **SS** tan **DD**
p	0	1	sin **DD** tan **R1**
q	cos **DD**	sin **DD**	tan **R1**
r	0	1	tan **SS**
s	1	0	cos **DD** tan **R1**
u	1	tan **DD**	0
v	$\sin^2$ **SS** cos **DD**	$\sin^2$ **SS** sin **DD** – tan **SS** sin **R1** cos **R1**	sin **R1** cos **R1** – $\cos^2$ **SS** tan **R1**

Examples:

C5 = (c , d)
A8 = (c , n)
R5P = (p , ***j***)
P3 = (v , ***i***)
P4 = (n , ***i***)
90 – **R3** = (q , v)

P6 = (p , r)
A9 = (c , m)
R4B = (s , q)
90 – **R2** = (q , a)
Q1 = (n , a)

90 – **P1** = (a , ***i***)
90 – **A7** = (m , ***k***)
P2 = (q , r)
P5 = (m , r)



Vector Orientations:
All angles and vectors follow lines depicted in applicable timber framing kernel diagrams.