FORMULA FOR LEGAL GROSS WEIGHT

W = 900 (L + 40)
L = Dist. bet. 1st & last axles
W = Max. legal gross weight

WEIGHT DISTRIBUTION FORMULA

\[ D_1 = \frac{s \times \text{Payload}}{b} \]
\[ D_2 = \frac{c \times K}{d} \]

COMBINATION EMPTY WEIGHT

Payload Center Of Gravity

TIRE SIZE
Allowable load per tire
No. of tires per axle
Allowable axle load (Tire Formula)

PARAMETERS
a = distance from 5th wheel to center of gravity of Payload.
b = " " " " = 5th axle of trailer.
c = " " " " = axle 1 to 5th wheel of truck-trailer.
d = " " " " = 1 to center of axles 2 8 3.
D_1 = computed payload for axles 4, 5 8 6 (see above).
D_2 = " " " " = 2 8 3 (see above).
D_3 = " " " " = 1 (K - D_2 + D_3).
K = " " " " = 5th Wheel.

PERMIT No. TO

TRUCK TRAILER
LOAD Wt. Wd. Lt. Ht.

DATE BY

Checked By Date

2/02/92
FORMULA FOR LEGAL GROSS WEIGHT

W = \frac{900(L + 40)}{L = \text{Distance between 1st & last axes.}} \quad W = \text{Maximum legal gross weight.}

WEIGHT DISTRIBUTION FORMULA

\begin{align*}
D_1 &= \frac{\text{Payload} \times a}{d} \\
D_2 &= \frac{\text{Payload} \times b}{c} \\
D_3 &= \frac{\text{Payload} \times K}{d}
\end{align*}

COMBINATION EMPTY WEIGHT

\begin{align*}
D_3 &= D_2 = D_1 = \text{TOTALS}
\end{align*}

PAYLOAD

\begin{align*}
D_3 &= D_2 = D_1 = \text{TOTALS}
\end{align*}

GROSS WEIGHT

\begin{align*}
D_3 &= D_2 = D_1 = \text{TOTALS}
\end{align*}

TIRE SIZE

\begin{align*}
\text{Allowable load per tire} \\
\text{No. of tires per axle} \\
\text{Allowable axle load (tire formula)}
\end{align*}

PARAMETERS

\begin{align*}
a &= \text{distance from 5th wheel to center of gravity of Payload.} \\
b &= \text{distance between tandem axle of trailer}; \text{axes} 5 \text{ to } 7. \\
c &= \text{axle 1 to 5th wheel of truck-tractor.} \\
d &= \text{center of axle 3.} \\
D_1 &= \text{computed payload for axles 5 to 7 (see above).} \\
D_2 &= \text{2, 3 & 4 (see above).} \\
D_3 &= \text{1} (K = D_2 - D_3). \\
K &= \text{difference of D from the Payload (Payload - D_1 = K).}
\end{align*}

PERMIT NO. TO

\begin{align*}
\text{TRUCK} & \quad \text{TRAILER} \\
\text{LOAD} & \quad \text{WT.} \quad \text{WD.} \quad \text{LT.} \quad \text{HT.}
\end{align*}

CHECKED BY: \quad DATE:

DATE: \quad BY: