

Calculation of Maximum Pig Load Density

Minimum space per pig and reduction of compartment numbers by 25% are recommendations of the Code of Practice for the Care and Handling of Farm Animals: Transportation 2001

STEP #1:

Calculate the floor space of a compartment

$$\begin{array}{ccc}
 \text{A} & & \text{B} & & \text{C} \\
 \boxed{} & \times & \boxed{} & = & \boxed{} \\
 \text{Width*} & & \text{Length*} & & \text{Floor Space}
 \end{array}$$

STEP #2:

Calculate the maximum number of pigs per compartment

$$\begin{array}{ccc}
 \text{C} & & \text{D} & & \text{E} \\
 \boxed{} & \div & \boxed{} & = & \boxed{} \\
 \text{Floor Space} & & \text{Min. Space per pig**} & & \text{Max. \# of animals}
 \end{array}$$

INSTRUCTIONS:

A & B* – Measure inside of the trailer compartments as this is the floor space available to the pigs

C – Calculated floor space available to the pigs

D - Using the Space Per Pig table, look up the appropriate space per pig by weight

E - This is the calculated maximum number of animals per compartment during cool-cold weather. Use this value to calculate the reduced number of animals per compartment during warm-hot-humid weather.

Warm Weather (15-23°C):

REDUCE compartment numbers by 10%

$$\begin{array}{ccc}
 \text{E} & & & & \\
 \boxed{} & \times & \boxed{0.9} & = & \boxed{} \\
 \text{Max. \# of animals} & & \text{to reduce by 10\%} & & \text{reduced max.}
 \end{array}$$

Hot Weather (24-28°C):

REDUCE compartment numbers by 15%

$$\begin{array}{ccc}
 \text{E} & & & & \\
 \boxed{} & \times & \boxed{0.85} & = & \boxed{} \\
 \text{Max. \# of animals} & & \text{to reduce by 15\%} & & \text{reduced max.}
 \end{array}$$

Hot-Humid Weather (28-32°C):

REDUCE compartment numbers by 25%

$$\begin{array}{ccc}
 \text{E} & & & & \\
 \boxed{} & \times & \boxed{0.75} & = & \boxed{} \\
 \text{Max. \# of animals} & & \text{to reduce by 25\%} & & \text{reduced max.}
 \end{array}$$

IMPORTANT NOTES:

All measurement must be consistent – imperial or metric; Code of Practice recommends no more than 30 hogs in any compartment; All calculations are rounded down, no part hogs.