DENSE PACK FORMULA

R-value divided by 3.75 (r-value per inch) equals depth of insulation.

EX: depth in feet X 8' high wall X 10' long wall equals cubic feet to insulate.

R-25 divided by 3.75 = 6.67 inches divided by 12 = depth in feet or .55 feet.
.55 X 8 X 10 = 44 cubic feet.

A density of 3.25 pounds per cubic foot is a minimum density.

Cubic feet X 3.25 equals pounds of insulation.

EX: 44 X 3.25 = 143 pounds of insulation.

Pounds of insulation divided by 25 (wt. per bag) equals bags needed.

EX: 143 divided by 25 = 5.72 bags.

Square feet divided by number of bags equals sq. ft. coverage per bag.   In the example, the wall is 8 feet high and 10 feet long or 80 sq. ft.

EX: 80 divided by 5.72 = 13.98 sq. ft. coverage per bag.

Pounds of insulation divided by sq. ft. equals weight per sq. ft.

EX: 143 divided by 80 = 1.78 pounds per sq. ft.

Another example:

R-30 ÷3.75 = 8.0 inches.   8 ÷ 12 = .67 feet.   .67 ft. X 8 ft. X 10 ft. = 53.60 cubic feet.

53.60 X 3.25 = 174.20   pounds of insulation.

174.20 ÷ 25 = 6.96 bags   80 sq. ft. ÷ 6.96 = 11.49 sq. ft. per bag

174.20 pounds of insulation ÷ 80 = 2.17 pounds per sq. ft.

R-value	depth	sq. ft. per bag	weight per sq. ft
25	6.67"	13.98	1.78
30	8.0	11.49	2.17
38	10.13	9.16	2.73