

Calculation Worksheet for Min. Board Width - (U.S. Std.)

Purpose: To ensure last board of the installation (or long board at an obstruction) is not too narrow.
General Rule: Kährs requires that no board have a width less than 3" or .38" of a full board width.
Notes on Equation: This rule applies to boards with an original thickness of 5/8" x 3-strip wide. This equation should be used when a board 4' or more in length meets an obstruction.

WORKSHEET

Step 1
Measure width of connected area* from starting wall to finish wall or obstruction, in inches. Round to the nearest 1/4".

Connected Area Width in inches with fraction: _____

Step 2
Convert "inches with Fraction" to "Inches with Decimal". Use conversion chart below.

Connected Area Width in inches with decimal: _____

Step 3
Multiply "Required Expansion Space" by 2. Use chart below.

Connected Area Width (from Step 2)	Expansion Space	Total
Under 144"	1/4" x 2 =	.50"
144" - 288"	1/2" x 2 =	1.0"
288" - 480"	3/4" x 2 =	1.5"

Total Expansion Needed from above: _____

Step 4
Subtract Total Expansion Needed from Connected Area Width to determine Actual Floor Width.

Total from Step 2: _____"
 Total from Step 3: - _____"
 Actual Floor Width in inches with decimal: = _____"

Step 5
Determine total # of rows of flooring needed.

Actual Floor Width (Step 4): _____"
 Board Width in Decimal - measure board and use chart below to convert: ÷ _____"
 Total Rows of Flooring: = _____ rows

Step 6
If the result in Step 6 contains a decimal less than .38", you must rip the starting row in half to ensure proper width of the last row.

EXAMPLE

Step 1
Measure width of connected area* from starting wall to finish wall or obstruction, in inches. Round to the nearest 1/4".

Connected Area Width in inches with fraction: _____ 325-1/4"

Step 2
Convert "inches with Fraction" to "Inches with Decimal". Use conversion chart below.

Connected Area Width in inches with decimal: _____ 325.25"

Step 3
Multiply Required Expansion Space by 2. Use chart below.

Connected Area Width (from Step 2)	Expansion Space	Total
Under 144"	1/4" x 2 =	.50"
144" - 288"	1/2" x 2 =	1.0"
288" - 480"	3/4" x 2 =	1.5"

Total Expansion Needed from above: _____ 1.5"

Step 4
Subtract Total Expansion Needed from Connected Area Width to determine Actual Floor Width.

Total from Step 2: _____ 325.25"
 Total from Step 3: - _____ 1.50"
 Actual Floor Width in inches with decimal: = _____ 323.75"

Step 5
Determine total # of rows of flooring needed.

Actual Floor Width (Step 4): _____ 323.75"
 Board Width in Decimal - measure board and use chart below to convert: ÷ _____ 7.875"
 Total Rows of Flooring: = _____ 41.11 rows*

* The first board in this installation would be cut in half.

Step 6
If the result in Step 6 contains a decimal less than .38", you must rip the starting row in half to ensure proper width of the last row. Ripping the starting row in half will increase the last board width by .50 of a board. In this case the last board will end up being .61 of a board or approx. 5", instead of .11 or 1" wide.

* From Step 1 - Connected Area is defined as all areas connected without a break. If Room A and Room B both are to have flooring installed and are directly connected, or connected by a hallway, without a t-molding, the connected area is the width of both Room A and Room B, and the hallway (if applicable). Obstructions can include cabinets, islands, and the wall opposite the starting wall in the same room, if the flooring continues to another room without a break. Multiple calculations may need to be made to best determine the amount cut from the starting row.

Fraction to Decimal Conversion Chart	
Fraction	Decimal Equivalent
1/4"	.25"
1/2"	.50"
3/4"	.75"

Board Width Decimal Equivalent Chart	
Board Width	Decimal Equivalent
7-7/8"	7.875"
8-1/10"	8.100"

