

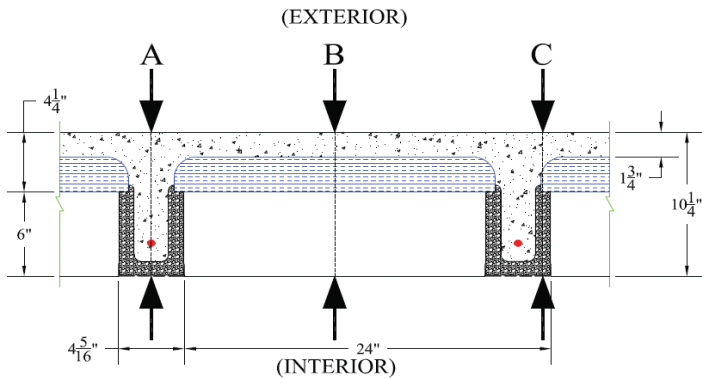


R -VALUE FOR Xi SUPERIOR WALLS

(The R-Value Computation Method)

This calculation for the R-value for the Superior Wall system is calculated using an area weighted R-Value computation method (2012 IRC Section N1102.1.1 and IECC 402.1.2). Results are based on percent of actual wall area for a 24 inch section of the wall area (See section detail below). This R-value computation method uses insulation materials only and does not include any R-value for other building materials or air films.

	Stud Center R-value: (A)	Cavity Space R-value: (B)	Stud Side R-value (C)
Insulation: 2- ¹ / ₂ " XPS	0	12.5	0
Insulation: EPS	<u>3.8</u>	<u>0</u>	<u>22.8</u>
Total R-values	3.8	12.5	22.8



Object Dimension as a Percentage of 24" Section

Concrete stud width ratio	0.094
Cavity width ratio	0.823
Stud side insulation ratio	0.083

R-Value of Object as it Contributes to 24" Section

Stud (A)	=	3.8 x 0.094	=	0.357
Cavity (B)	=	12.5 x 0.823	=	10.3
Stud Sides (C)	=	22.8 x 0.083	=	1.89

R-VALUE (Total System) = 12.5

U-VALUE (Total System) = 0.080