



Hunter Xci Tech Topic #107

Comparing Weight, Piece Count, R-Value and Installation of Wall Sheathing Products

Question: How does the higher weight of Mineral Fiber impact a typical wall assembly?

Answer: A wall system using Mineral Fiber has to be designed to support significantly more weight and allow for the additional thickness compared to the same R-Value using Polyiso. Mineral Fiber is up to 7 times heavier and up to 50% thicker than polyiso with an equivalent R-Value. This will impact construction costs, not only in materials, but also in labor costs. Polyiso is available in 4'x8' sheets, where Mineral Fiber is primarily supplied in 2'x4' sheets.

Mineral Fiber wall insulation weighs significantly more than Polyiso wall insulation with comparable R-Values. In addition, Mineral Fiber thicknesses are also greater than Polyiso with comparable R-Values. (See chart below.)

Wall Insulation Comparison Chart					
Product	R-Value	Thickness	Panel Size	Approx. Weight per Piece (lbs)	Approx. Weight of 4x8 Equivalent (lbs)
Xci Foil (Class A)	10.1	1.6"	4x8	13.85	13.85
Roxul Cavity Rock	10.75	2.5"	2x4	7.83	31.32
Xci Foil (Class A)	13.0	2.0"	4x8	14.20	14.20
Roxul Cavity Rock	12.9	3.0"	2x4	9.40	37.60

Question: What other benefits does Polyiso have over Mineral Fiber?

Answer:

Easier To Install





- larger panels go up quicker
- fewer pieces to install
- potentially less fasteners due to fewer pieces
- easier to cut

Reduced Carbon Footprint

- fewer trucks required to deliver material to the jobsite

Easier Project Staging

- fewer pallets of material to move around
- fewer packages to unwrap, resulting in less packaging waste

Example Job Specs: 35,000 SF R-13 Insulation					
	Material Size	SF Pkg/Truck	Trucks	Installed Pieces	Overall Weight
R 12.9 Roxul Cavity Rock	3"x24"x48" 	40 SF/pkg, 364 pkg/truck, 14,560 SF/truck	2.4 	4,375	41,125 lbs 1.175 lbs/SF
R 13 Hunter Xci Foil (Class A)	2"x48"x96" 	24 pc/pallet, 24 pallets/ truck, 18,432 SF/truck	1.8 	1,094	15,534 lbs .444 lbs/SF

Summary: Polyiso vs. Mineral Fiber

25,591 less lbs installed! 3,281 less pieces installed!