Drexel University
Energy & Architecture

Assignment #1 - "U" Value Calculation

Wall Construction	**"R" Value**	**"U" Value**	**"F" Value**
Exterior air film			
Wood shingles			
R-7 polystyrene sheathing			
R-11 batt insulation between 2 x 4 studs @ 16" o.c.			
2-ply kraft paper vapor retarder			
1/2" gypsum wallboard			
Interior air film			
Wall Total	**0.00**	**#DIV/0!**	
Windows			
Double pane insulated glass with 1/4" air space			
Slab edge			
R-5 insulation extending 2' vertically			
Roof / Attic insulation			
Exterior air film			
Asphalt shingle roof	0.00		
1/2" plywood roof sheathing	0.00		
2 x 8 rafters @ 16" o.c.	0.00		
Vented attic space	0.00		
2 layers of R-19 blanket insulation			
1st layer between 2 x 6 joists @ 24" o.c.			
2nd layer continuous across joists			
6 mil polyethylene vapor barrier			
1/2" gypsum wallboard ceiling			
Inside air film			
Roof / Attic Total	**0.00**	**#DIV/0!**	
Door		**#DIV/0!**	
Infiltration			
Number of air changes per hour			