

U-values of building assemblies Passive House with PHPP Version 10.6 EN

/ Climate: PHPP-Standard / TFA: 0 m² / Overheating: % / PER: 0 kWh/(m²a) Show special cases and secondary calculations on the right ->

Description of building assembly							Assembly no.
Passive House - Wall							01ud
Orientation of building assembly (or R _{si})		2-Wall					Interior insulation?
Adjacent to (or R _{se})		3-Ventilated					U-value supplement [W/(m²K)]
Area section 1	λ [W/(mK)]	Area section 2 (optional)	λ [W/(mK)]	Area section 3 (optional)	λ [W/(mK)]	Thickness [mm]	
1/2" Drywall	0.180					13	
3-1/2" Service cavity	0.483	2x4 framing @ 24" o.c.	0.130			89	
1/2" Plywood	0.130					13	
3-1/2" Cellulose	0.039	2x4 framing @ 24" o.c.	0.130			89	
3-3/4" Cellulose	0.039					95	
5-1/2" Cellulose	0.039	2x6 framing @ 24" o.c.	0.130			140	
1/2" Plywood sheathing	0.130					13	
3" Rockwool ComfortBoard 80	0.033					76	
Percentage of sec. 1:		94%	Percentage of sec. 2:	6.3%	Percentage of sec. 3:		
Heat transmission resistance coefficients						Total thickness [cm]: 52.8	
Interior R _{si} :		0.13	m²K/W				
Exterior R _{se} :		0.13	m²K/W		U-value [W/(m²K)]: 0.093		

Description of building assembly							Assembly no.
Passive House - Foundation							02ud
Orientation of building assembly (or R _{si})		2-Wall					Interior insulation?
Adjacent to (or R _{se})		2-Ground					U-value supplement [W/(m²K)]
Area section 1	λ [W/(mK)]	Area section 2 (optional)	λ [W/(mK)]	Area section 3 (optional)	λ [W/(mK)]	Thickness [mm]	
1/2" Drywall	0.180					13	
2-3/4" Quadlock ICF - EPS	0.036					70	
8" Concrete foundation	2.300					203	
2-3/4" Quadlock ICF - EPS	0.036					70	
2" EPS	0.036					51	
2" EPS	0.036					51	
Percentage of sec. 1:		100%	Percentage of sec. 2:		Percentage of sec. 3:		
Heat transmission resistance coefficients						Total thickness [cm]: 45.8	
Interior R _{si} :		0.13	m²K/W				
Exterior R _{se} :		0.00	m²K/W		U-value [W/(m²K)]: 0.143		

Description of building assembly							Assembly no.
Passive House - Header							03ud
Orientation of building assembly (or R _{si})		2-Wall					Interior insulation?
Adjacent to (or R _{se})		3-Ventilated					U-value supplement [W/(m²K)]
Area section 1	λ [W/(mK)]	Area section 2 (optional)	λ [W/(mK)]	Area section 3 (optional)	λ [W/(mK)]	Thickness [mm]	
1/2" Drywall	0.180					13	
3-1/2" Service cavity	0.483	2x6 @ 24" o.c	0.130			89	
1/2" Plywood	0.130					13	
9-3/4" Cellulose	0.039					248	
3" Wood header	0.130					76	
1/2" Plywood sheathing	0.130					13	
3" Rockwool ComfortBoard 80	0.033					76	
Percentage of sec. 1:		94%	Percentage of sec. 2:	6.3%	Percentage of sec. 3:		
Heat transmission resistance coefficients						Total thickness [cm]: 52.8	
Interior R _{si} :		0.13	m²K/W				
Exterior R _{se} :		0.13	m²K/W		U-value [W/(m²K)]: 0.100		

Description of building assembly							Assembly no.
Passive House - Slab							04ud
Orientation of building assembly (or R _{si})		3-Floor					Interior insulation?
Adjacent to (or R _{se})		2-Ground					U-value supplement [W/(m²K)]
Area section 1	λ [W/(mK)]	Area section 2 (optional)	λ [W/(mK)]	Area section 3 (optional)	λ [W/(mK)]	Thickness [mm]	
4" Concrete slab	2.300					104	
4" EPS type ii	0.036					102	
4" EPS type ii	0.036					102	
Percentage of sec. 1:		100%	Percentage of sec. 2:		Percentage of sec. 3:		
Heat transmission resistance coefficients						Total thickness [cm]: 30.8	
Interior R _{si} :		0.17	m²K/W				
Exterior R _{se} :		0.00	m²K/W		U-value [W/(m²K)]: 0.170		

ASSEMBLY VALUES

	U - Value	R - Value	RSI
Wall Assembly	0.093	61.05	10.75
Foundation	0.143	39.71	6.993
Window Header	0.102	55.67	9.804
Slab	0.170	33.40	5.882

NOTES:



Revisions

1.	
2.	
3.	

Notes
1.
2.
3.

NOT FOR CONSTRUCTION

