PASSIVE HOUSE - DETAIL SET

J-values of building	g asse	mblies		Passive House wi	th PHPP V	ersion to.o i
Climate: PHPP-Standard / TFA: 0 m² / Ov	verheating: %	/ PER: 0 kWh/(m²a)				
			Show sp	ecial cases and secondary ca	lculations	on the right
Description of building assembly					Assembly r	10.
Passive House - Wall						1ud
Orientation of building assembly (or R _{si})	2-Wall			Interior	insulation?	
Adjacent to (or R _{se})	3-Ventilated			U-value supplemen	t [W/(m²K)]	
Area section 1	λ [W/(mK)]	Area section 2 (optional)	λ [W/(mK)]	Area section 3 (optional)	λ [W/(mK)]	Thickness [mr
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 Percentage of sec. 1:	0.033 94%	Percentage of sec. 2:	6.3%	Percentage of sec. 3:		76
Heat transmission resista $ \text{Interior } R_{\text{si}} $ $ \text{Exterior } R_{\text{se}}. $	0.13 0.13	m²K/W m²K/W		Total thickne		52.8 0.093
Interior R _{si} :	0.13	m²K/W				
$\begin{array}{c} \text{Interior R_{si}:} \\ \text{Exterior R_{se}:} \\ \\ \text{Description of building assembly} \end{array}$	0.13	m²K/W			V/(m²K)]:	0.093
Interior R_{si} .	0.13	m²K/W			V/(m²K)]:	0.093
Interior R _{si} Exterior R _{se} Description of building assembly Passive House - Foundation	0.13	m²K/W		U-value [V	W/(m²K)]: Assembly r	0.093
	0.13 0.13	m²K/W		U-value [V	Assembly r 0 insulation?	0.093 10. 2ud
	0.13 0.13 2-Wall 2-Ground	m²K/W m²K/W	λ IW/(mK)	U-value [V	Assembly r 0 insulation? t [W/(m²K)]:	0.093
	0.13 0.13 2-Wall 2-Ground \(\lambda \cdot [W/(mK)]\)	m²K/W	λ [W/(mK)]	U-value [V	Assembly r 0 insulation? t [W/(m²K)]:	0.093 io. 2ud Thickness [mr
	0.13 0.13 2-Wall 2-Ground	m²K/W m²K/W	λ [W/(mK)]	U-value [V	Assembly r 0 insulation? t [W/(m²K)]:	0.093
	0.13 0.13 2-Wall 2-Ground \(\lambda \cdot [W/(mK)]\) 0.180	m²K/W m²K/W	λ [W/(mK)]	U-value [V	Assembly r 0 insulation? t [W/(m²K)]:	0.093 io. 2ud Thickness [mr
Description of building assembly Passive House - Foundation Orientation of building assembly (or R _{se}) Adjacent to (or R _{se}) Area section 1 1/2" Drywall 2-3/4" Quadlock ICF - EPS	0.13 0.13 2-Wall 2-Ground λ [W/(mK)] 0.180 0.036	m²K/W m²K/W	λ [W/(mK)]	U-value [V	Assembly r 0 insulation? t [W/(m²K)]:	0.093 10. 2ud Thickness [mr 13 70
Description of building assembly Passive House - Foundation Orientation of building assembly (or R _{se}) Adjacent to (or R _{se}) Area section 1 1/2" Drywall 2-3/4" Quadlock ICF - EPS 8" Concrete foundation 2-3/4" Quadlock ICF - EPS	0.13 0.13 2-Wall 2-Ground λ [W/(mK)] 0.180 0.036 2.300 0.036	m²K/W m²K/W	λ [W/(mK)]	U-value [V	Assembly r 0 insulation? t [W/(m²K)]:	0.093 10. 2ud Thickness [mt 13 70 203
Description of building assembly Passive House - Foundation Orientation of building assembly (or R _{se}) Adjacent to (or R _{se}) Area section 1 1/2" Drywall 2-3/4" Quadlock ICF - EPS 8" Concrete foundation 2-3/4" Quadlock ICF - EPS	0.13 0.13 2-Wall 2-Ground λ [W/(mK)] 0.180 0.036 2.300 0.036 0.036	m²K/W m²K/W	λ [W/(mK)]	U-value [V	Assembly r 0 insulation? t [W/(m²K)]:	0.093 Do. 2ud Thickness [mr 13 70 203 70 51
Description of building assembly Passive House - Foundation Orientation of building assembly (or R _{se}) Adjacent to (or R _{se}) Area section 1 1/2" Drywall 2-3/4" Quadlock ICF - EPS 8" Concrete foundation 2-3/4" Quadlock ICF - EPS	0.13 0.13 2-Wall 2-Ground λ [W/(mK)] 0.180 0.036 2.300 0.036	m²K/W m²K/W	λ [W/(mK)]	U-value [V	Assembly r 0 insulation? t [W/(m²K)]:	0.093 10. 2ud Thickness [mr 13 70 203 70
Description of building assembly Passive House - Foundation Orientation of building assembly (or R _{se}) Adjacent to (or R _{se}) Area section 1 1/2" Drywall 2-3/4" Quadlock ICF - EPS 8" Concrete foundation 2-3/4" Quadlock ICF - EPS	0.13 0.13 2-Wall 2-Ground λ [W/(mK)] 0.180 0.036 2.300 0.036 0.036 0.036	m²K/W m²K/W	λ [W/(mK)]	U-value [V	Assembly r 0 insulation? t [W/(m²K)]:	0.093 Do. 2ud Thickness [mr 13 70 203 70 51
Interior R _{si} Exterior R _{se} Description of building assembly Passive House - Foundation Orientation of building assembly (or R _{si}) Adjacent to (or R _{se}) Area section 1 1/2" Drywall 2-3/4" Quadlock ICF - EPS 8" Concrete foundation 2-3/4" Quadlock ICF - EPS 2" EPS 2" EPS Percentage of sec. 1:	0.13 0.13 2-Wall 2-Ground λ [W/(mK)] 0.180 0.036 2.300 0.036 0.036 0.036	m²K/W m²K/W Area section 2 (optional) Percentage of sec. 2:	λ [W/(mK)]	Interior U-value supplement Area section 3 (optional) Percentage of sec. 3:	Assembly r 0 insulation? t [W/(m²K)]	0.093 No. 2ud Thickness [mr 13 70 203 70 51 51
Interior R _{si} Exterior R _{se} Description of building assembly Passive House - Foundation Orientation of building assembly (or R _{si}) Adjacent to (or R _{se}) Area section 1 1/2" Drywall 2-3/4" Quadlock ICF - EPS 8" Concrete foundation 2-3/4" Quadlock ICF - EPS 2" EPS 2" EPS Percentage of sec. 1:	0.13 0.13 2-Wall 2-Ground \$\lambda [W/(mK)]\$ 0.180 0.036 2.300 0.036 0.036 0.036 100%	m²K/W m²K/W Area section 2 (optional) Percentage of sec. 2:	λ [W/(mK)]	U-value [V Interior U-value supplemen Area section 3 (optional)	Assembly r 0 insulation? t [W/(m²K)]	0.093 Do. 200 Thickness [mr 13 70 203 70 51
Interior R _{si} Exterior R _{se} Description of building assembly Passive House - Foundation Orientation of building assembly (or R _{si}) Adjacent to (or R _{se}) Area section 1 1/2" Drywall 2-3/4" Quadlock ICF - EPS 8" Concrete foundation 2-3/4" Quadlock ICF - EPS 2" EPS 2" EPS Percentage of sec. 1:	0.13 0.13 2-Wall 2-Ground λ [W/(mK)] 0.180 0.036 2.300 0.036 0.036 0.036	m²K/W m²K/W Area section 2 (optional) Percentage of sec. 2:	λ [W/(mK)]	Interior U-value supplement Area section 3 (optional) Percentage of sec. 3:	Assembly r 0 insulation? t [W/(m²K)] λ [W/(mK)]	0.093 no. 2ud Thickness [mr 13 70 203 70 51 51

Description of building assembly					Assembly I	no.
Passive House - Header					C)3ud
		1				
Orientation of building assembly (or R _{si})					r insulation?	
Adjacent to (or R _{se})	3-Ventilated			U-value suppleme		
Area section 1	λ [W/(mK)]	Area section 2 (optional)	λ [W/(mK)]	Area section 3 (optional)	λ [W/(mK)]	Thickness [n
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	:	
Interior R_{si} . Exterior R_{se} .	0.13 0.13	m²K/W m²K/W		U-value [\	W/(m²K)]:	0.100
Exterior R _{se} :		-		U-value [۱		
		-		U-value [۱	Assembly	no.
		-		U-value [۱	Assembly	
	0.13	-			Assembly	no.)4ud
Exterior R _{se} : Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si})	0.13 3-Floor	-			Assembly (no.)4ud
Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si}) Adjacent to (or R _{se})	0.13 3-Floor 2-Ground	m²K/W	λ [W/(mK)]	Interio U-value suppleme	Assembly of Contract of Contra	no.)4ud
Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si}) Adjacent to (or R _{se})	0.13 3-Floor	m²K/W	λ [W/(mK)]	Interio	Assembly of Contract of Contra	no.)4ud
Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si}) Adjacent to (or R _{se}) Area section 1 4" Concrete slab	0.13 3-Floor 2-Ground λ [W/(mK)]	m²K/W	λ [W/(mK)]	Interio U-value suppleme	Assembly of Contract of Contra	no.)4ud Thickness [r
Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si}) Adjacent to (or R _{se}) Area section 1 4" Concrete slab 4" EPS type ii	0.13 3-Floor 2-Ground \(\lambda \text{[W/(mK)]}\) 2.300	m²K/W	λ [W/(mK)]	Interio U-value suppleme	Assembly of Contract of Contra	no. 04ud Thickness [r
Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si}) Adjacent to (or R _{se}) Area section 1 4" Concrete slab 4" EPS type ii	0.13 3-Floor 2-Ground λ [W/(mK)] 2.300 0.036	m²K/W	λ [W/(mK)]	Interio U-value suppleme	Assembly of Contract of Contra	104 102
Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si}) Adjacent to (or R _{se}) Area section 1 4" Concrete slab 4" EPS type ii	0.13 3-Floor 2-Ground λ [W/(mK)] 2.300 0.036	m²K/W	λ [W/(mK)]	Interio U-value suppleme	Assembly of Contract of Contra	104 102
Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si}) Adjacent to (or R _{se}) Area section 1 4" Concrete slab 4" EPS type ii	0.13 3-Floor 2-Ground λ [W/(mK)] 2.300 0.036	m²K/W	λ [W/(mK)]	Interio U-value suppleme	Assembly of Contract of Contra	104 102
Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si}) Adjacent to (or R _{se}) Area section 1 4" Concrete slab 4" EPS type ii	0.13 3-Floor 2-Ground λ [W/(mK)] 2.300 0.036	m²K/W	λ [W/(mK)]	Interio U-value suppleme	Assembly of Contract of Contra	104 102
Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si}) Adjacent to (or R _{se}) Area section 1 4" Concrete slab 4" EPS type ii	0.13 3-Floor 2-Ground λ [W/(mK)] 2.300 0.036	m²K/W	λ [W/(mK)]	Interio U-value suppleme	Assembly of Contract of Contra	104 102
Exterior R _{se} : Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si})	0.13 3-Floor 2-Ground λ [W/(mK)] 2.300 0.036	m²K/W	λ [W/(mK)]	Interio U-value suppleme	Assembly (Continuation) Int [W/(m²K)] λ [W/(mK)]	104 102
Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si}) Adjacent to (or R _{se}) Area section 1 4" Concrete slab 4" EPS type ii 4" EPS type ii	0.13 3-Floor 2-Ground λ [W/(mK)] 2.300 0.036 0.036	Area section 2 (optional)	λ [W/(mK)]	Interio U-value suppleme Area section 3 (optional)	Assembly (Continuation) Int [W/(m²K)] λ [W/(mK)]	Thickness [r 104 102 102
Description of building assembly Passive House - Slab Orientation of building assembly (or R _{si}) Adjacent to (or R _{se}) Area section 1 4" Concrete slab 4" EPS type ii 4" EPS type ii	3-Floor 2-Ground λ [W/(mK)] 2.300 0.036 0.036	Area section 2 (optional) Percentage of sec. 2:	λ [W/(mK)]	Interio U-value suppleme Area section 3 (optional)	Assembly (Continuation) Assembly (Continuation) A [W/(m²K)] λ [W/(mK)]	Thickness [r 104 102 102

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:

IN FORM

ALBERTA

Project No.



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Notes

IOT EOD CONSTBILLT

Project North



Passive House

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