



Envelope Compliance Certificate

Project Information

Energy Code: 2015 IECC
 Project Title: Prairie Centre Building F2 (North)
 Location: Saint Charles, Illinois
 Climate Zone: 5a
 Project Type: New Construction
 Vertical Glazing / Wall Area: 30%

Construction Site: St. Charles, IL	Owner/Agent: Dave Patzelt Shodeen 77 North First Street Geneva, IL 60134 630-444-8252 dave@shodeen.com	Designer/Contractor: Don Mckay Nagle Hartray Architecture 55 West Wacker Suite 302 Chicago, IL 60601 312-425-7654 dmckay@naglehartray.com
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Building Area	Floor Area
1-Floors 1-3 (Multifamily) : Residential	54915
2-Basement (Parking Garage) : Residential	19460

Additional Efficiency Package

On-site Renewable Energy

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor ^(a)
Basement Wall 1: Solid Concrete:10" Thickness, Normal Density, Furring: None, Wall Ht 9.1, Depth B.G. 9.1, [Bldg. Use 2 - Basement]	6708	---	9.6	0.090	0.108
Metal Door: Insulated Metal, Swinging, [Bldg. Use 2 - Basement]	24	---	---	0.500	0.370
Door 7: Insulated Metal, Non-Swinging, [Bldg. Use 2 - Basement]	158	---	---	0.700	0.700
Roof 1: Attic Roof with Wood Joists, [Bldg. Use 1 - Floors 1-3]	22504	51.2	2.1	0.019	0.021
<u>NORTH</u>					
Exterior Wall 1: Wood-Framed, 16" o.c., [Bldg. Use 1 - Floors 1-3]	6721	20.0	2.3	0.055	0.064
Window 1: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID NA, SHGC 0.53, [Bldg. Use 1 - Floors 1-3] (b)	1228	---	---	0.450	0.450
Patio Doors: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.35, [Bldg. Use 1 - Floors 1-3] (b)	767	---	---	0.340	0.770
Metal Door: Insulated Metal, Swinging, [Bldg. Use 1 - Floors 1-3]	24	---	---	0.500	0.370
<u>EAST</u>					
Exterior Wall 4: Wood-Framed, 16" o.c., [Bldg. Use 1 - Floors 1-3]	1785	20.0	2.3	0.055	0.064
Window 4: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID NA, SHGC 0.40, [Bldg. Use 1 - Floors 1-3] (b)	359	---	---	0.450	0.450
Patio Doors: Glass (> 50% glazing):Nonmetal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.35, [Bldg. Use 1 - Floors 1-3] (b)	127	---	---	0.340	0.770

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor ^(a)
SOUTH					
Exterior Wall 2: Wood-Framed, 16" o.c., [Bldg. Use 1 - Floors 1-3]	6709	20.0	2.3	0.055	0.064
Window 2: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID NA, SHGC 0.40, [Bldg. Use 1 - Floors 1-3] (b)	1111	---	---	0.450	0.450
Patio Doors: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.35, [Bldg. Use 1 - Floors 1-3] (b)	1084	---	---	0.340	0.770
WEST					
Exterior Wall 3: Wood-Framed, 16" o.c., [Bldg. Use 1 - Floors 1-3]	1787	20.0	2.3	0.055	0.064
Window 3: Vinyl/Fiberglass Frame:Operable, Perf. Specs.: Product ID NA, SHGC 0.40, [Bldg. Use 1 - Floors 1-3] (b)	359	---	---	0.450	0.450
Patio Doors: Glass (> 50% glazing):Nonmetal Frame, Entrance Door, Perf. Specs.: Product ID NA, SHGC 0.35, [Bldg. Use 1 - Floors 1-3] (b)	128	---	---	0.340	0.770

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.

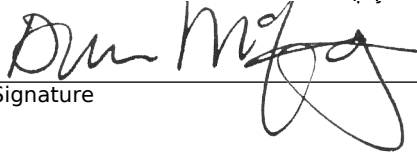
Envelope PASSES: Design 13% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.0.6.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Don McKay, Principal

Name - Title


Signature

07.12.2017

Date

