



COMcheck Software Version COMcheckWeb Envelope Compliance Certificate

Project Information

Energy Code: 2015 IECC
 Project Title: Juneau Village Towers - Amenity Building
 Location: Milwaukee, Wisconsin
 Climate Zone: 6a
 Project Type: Addition
 Vertical Glazing / Wall Area: 30%

Construction Site:
 1029 N. Jackson Street
 Milwaukee, Wisconsin 53202

Owner/Agent:
 Katz Properties

Designer/Contractor:
 Architectural Tredo Group, LLC
 219 N Milwaukee St, Suite 630
 Milwaukee, Wisconsin 53202

Building Area

Floor Area

1-Office : Nonresidential

9619

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor ^(a)
Roof: Insulation Entirely Above Deck, [Bldg. Use 1 - Office]	9619	---	30.0	0.032	0.032
Floor: Concrete Floor (over unconditioned space), [Bldg. Use 1 - Office]	570	---	12.0	0.066	0.064
<u>NORTH</u>					
Ext. Wall 2: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	72	0.0	18.0	0.048	0.064
Ext. Wall 4: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	884	0.0	18.0	0.048	0.064
AL15: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	70	---	---	0.340	0.360
AL14: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	53	---	---	0.340	0.360
Ext. Wall 6: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	78	0.0	18.0	0.048	0.064
Ext. Wall 10: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	409	0.0	18.0	0.048	0.064
<u>WEST</u>					
Door AL23: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID Marvin Solarban 70, SHGC 0.40, [Bldg. Use 1 - Office] (b)	118	---	---	0.300	0.770
<u>NORTH</u>					
Ext. Wall 14: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	89	0.0	18.0	0.048	0.064
AL05: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	47	---	---	0.340	0.360
<u>EAST</u>					
Ext. Wall 1: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	590	0.0	18.0	0.048	0.064
AL01: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	382	---	---	0.340	0.360

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor ^(a)
Door 01: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer IsoPour Thermal Entrances 500T, SHGC 0.17, [Bldg. Use 1 - Office] (b)	27	---	---	0.770	0.770
Door 02: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer IsoPour Thermal Entrances 500T, SHGC 0.17, [Bldg. Use 1 - Office] (b)	27	---	---	0.770	0.770
Ext. Wall 3: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	2338	0.0	18.0	0.048	0.064
AL16: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	27	---	---	0.340	0.360
AL16: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	27	---	---	0.340	0.360
Door 03: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer IsoPour Thermal Entrances 500T, SHGC 0.17, [Bldg. Use 1 - Office] (b)	27	---	---	0.770	0.770
AL16: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	27	---	---	0.340	0.360
AL16: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	27	---	---	0.340	0.360
AL16: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	27	---	---	0.340	0.360
SOUTH					
Ext. Wall 8: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	409	0.0	18.0	0.048	0.064
AL23: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	54	---	---	0.340	0.360
Door AL23: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID Marvin Solarban 70, SHGC 0.40, [Bldg. Use 1 - Office] (b)	118	---	---	0.300	0.770
Ext. Wall 12: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	89	0.0	18.0	0.048	0.064
AL07: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	47	---	---	0.340	0.360
Ext. Wall 16: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	1057	0.0	18.0	0.048	0.064
AL03: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	49	---	---	0.340	0.360
AL02: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	77	---	---	0.340	0.360
WEST					
Ext. Wall 5: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	127	0.0	18.0	0.048	0.064
Door AL13: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer IsoPour Thermal Entrances 500T, SHGC 0.17, [Bldg. Use 1 - Office] (b)	27	---	---	0.770	0.770
AL13: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	28	---	---	0.340	0.360
Ext. Wall 7: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	891	0.0	18.0	0.048	0.064
AL12: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	191	---	---	0.340	0.360
Ext. Wall 9: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	1345	0.0	18.0	0.048	0.064
AL10: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	724	---	---	0.340	0.360
Door AL10: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer IsoPour Thermal Entrances 500T, SHGC 0.17, [Bldg. Use 1 - Office] (b)	27	---	---	0.770	0.770

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor ^(a)
Door AL10: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer IsoPour Thermal Entrances 500T, SHGC 0.17, [Bldg. Use 1 - Office] (b)	27	---	---	0.770	0.770
Ext. Wall 11: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	198	0.0	18.0	0.048	0.064
AL08: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	112	---	---	0.340	0.360
AL23: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	54	---	---	0.340	0.360
Ext. Wall 13: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	147	0.0	18.0	0.048	0.064
AL06: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	49	---	---	0.340	0.360
Door AL06: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer IsoPour Thermal Entrances 500T, SHGC 0.17, [Bldg. Use 1 - Office] (b)	27	---	---	0.770	0.770
Ext. Wall 15: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Office]	199	0.0	18.0	0.048	0.064
AL04: Metal Frame with Thermal Break: Fixed, Perf. Specs.: Product ID Kawneer Trifab 601UT Solarban 70 clear, SHGC 0.25, [Bldg. Use 1 - Office] (b)	112	---	---	0.340	0.360
Door 01A: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer IsoPour Thermal Entrances 500T, SHGC 0.17, [Bldg. Use 1 - Office] (b)	27	---	---	0.770	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 14% 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 COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

JEFFREY S. TREDO, AIA
Name - Title

Signature

Date

PERMIT SET
8/21/2022



11/9/2022



COMcheck Software Version COMcheckWeb Inspection Checklist

Energy Code: 2015 IECC

Requirements: 0.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR1] ¹	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.4.1 [PR10] ¹	The vertical fenestration area <= 30 percent of the gross above-grade wall area.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.4.1 [PR11] ¹	The skylight area <= 3 percent of the gross roof area.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C406 [PR9] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C303.2.1 [FO6] ¹	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.2.6 [FO1.2] ³	Radiant heating systems panels insulated to $\geq R-3.5$ on face opposite space being heated.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.

Additional Comments/Assumptions:

1 High Impact (Tier 1)
 2 Medium Impact (Tier 2)
 3 Low Impact (Tier 3)

Section # & Req.ID	Framing / Rough-in Inspection	Complies?	Comments/Assumptions
C303.1.3 [FR12] ²	Fenestration products rated in accordance with NFRC.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.1.3 [FR13] ¹	Fenestration products are certified as to performance labels or certificates provided.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.4.3 [FR10] ¹	Vertical fenestration SHGC value.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
C402.4.3, C402.4.3.4 [FR8] ¹	Vertical fenestration U-Factor.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
C402.4.4 [FR14] ²	U-factor of opaque doors associated with the building thermal envelope meets requirements.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
C402.5.1.2.1 [FR19] ¹	The building envelope contains a continuous air barrier that is sealed in an approved manner and material permeability ≤ 0.004 dfm/ft ² . Air barrier penetrations are sealed in an approved manner.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.5.2, C402.5.4 [FR18] ²	Factory-built fenestration and doors are labeled as meeting air leakage requirements.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.5.7 [FR17] ³	Vestibules are installed on all building entrances. Doors have self-closing devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier 3)
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Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.5.5, C403.2.4.3 [ME3] ³	Stair and elevator shaft vents have motorized dampers that automatically close.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.5.5, C403.2.4.3 [ME58] ³	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1)
 2 Medium Impact (Tier 2)
 3 Low Impact (Tier 3)

Section # & Req.ID	Insulation Inspection	Complies?	Comments/Assumptions
C303.1 [IN3] ¹	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the roof slope is ≤ 3 in 12.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.1 [IN10] ²	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.2 [IN7] ¹	Above-grade wall insulation installed per manufacturer's instructions.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.2, C402.2.4 [IN9] ²	Floor insulation installed per manufacturer's instructions. Cavity or structural slab insulation installed in permanent contact with underside of decking or structural slabs.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.2.1 [IN14] ²	Exterior insulation is protected from damage with a protective material. Verification for exposed foundation insulation may need to occur during Foundation Inspection.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.2.1 [IN17] ³	Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C104 [IN6] ¹	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
C104 [IN8] ²	Installed floor insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
C402.2.6 [IN18] ³	Radiant panels and associated components, designed for heat transfer from the panel surfaces to the occupants or indoor space are insulated with a minimum of R-3.5.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C104 [IN2] ¹	Installed roof insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. For some ceiling systems, verification may need to occur during Framing Inspection.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
C402.5.1. 1 [IN1] ¹	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req. ID	Final Inspection	Complies?	Comments/Assumptions
C402.5.3 [FI51] ³	Where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air opening are located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope. Such rooms are sealed and insulated.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.5.6 [FI37] ¹	Weatherseals installed on all loading dock cargo doors.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.5.B [FI26] ³	Recessed luminaires in thermal envelope to limit infiltration and be IC rated and labeled. Seal between interior finish and luminaire housing.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)
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