

COMcheck Software Version COMcheck-Web
Interior Lighting Compliance Certificate

Project Information
 Energy Code: 2012 IECC
 Project Title: 40452-13 Aldi Store #65 Charlotte, NC
 Project Type: New Construction
 Construction Site: 6113 Idlewild Road, Charlotte, NC 28209
 Owner/Agent: ALDI, Inc., 1985 Old Union Church Road, Salisbury, NC 28146, 330-273-7351
 Designer/Contractor: ms consultants, inc., 2221 Schrock Road, Columbus, OH 43229, 614-998-7100

Additional Efficiency Package
 Reduced interior lighting power. Requirements are implicitly enhanced within interior lighting allowance calculations.

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts
1 Grocery Store (Retail)	21115	1.30	27460
Total Allowed Watts =			27460

Proposed Interior Lighting Power

A Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	B Lamps / Fixture	C # of Fixtures	D Watt (C X D)	E (C X D)
1 Grocery Store (Retail)				
LED N1 Other	1	33	57	1140
LED N2 Other	1	39	72	3056
LED N3 Other	1	8	37	296
LED N4 Other	1	18	72	1288
LED N5 Other	1	10	37	650
LED N6 Other	1	4	72	288
LED N7 Other	1	7	28	196
LED N8 Other	1	33	45	1485
LED L1 Other	1	16	68	1088
LED L2 Other	1	2	44	88
LED L4 Other	1	10	44	704
LED L10 Other	1	7	83	441
LED L11 Other	1	36	18	648
LED L12 Other	1	6	38	216
Total Proposed Watts =			15882	

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Exterior Lighting Compliance Certificate

Project Information
 Energy Code: 2012 IECC
 Project Title: 40452-13 Aldi Store #65 Charlotte, NC
 Project Type: New Construction
 Exterior Lighting Zone: 2 (Neighborhood Business District)

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Parking area	47000 sq	0.06	Yes	2820
Entry canopy	800 sq	0.35	Yes	280
Illuminated length of facade wall or surface	205 ft	2.5	No	758
Main entry	8 ft of door	20	Yes	160
Other door (not main entry)	12 ft of	20	Yes	240
Total Allowed Watts =			3784	
Total Allowed Supplemental Watts =			622	

Proposed Exterior Lighting Power

A Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	B Lamps / Fixture	C # of Fixtures	D Watt (C X D)	E (C X D)
Parking area (12000 sq) Tradable Wattage				
LED L31 Other	1	4	112	448
LED L34 Other	4	2	448	896
Entry canopy (800 sq) Tradable Wattage				
LED L28 Other	1	4	42	172
Illuminated length of facade wall or surface (205 ft) Non-Tradable Wattage				
LED L24 Other	1	32	928	
Main entry (8 ft of door width) Tradable Wattage				
LED L29 Other	1	4	88	
Other door (not main entry) (12 ft of door width) Tradable Wattage				
LED L31 Other	1	4	172	
Walkways & 10 feet wide (300 ft) of walkway length Tradable Wattage				
LED L33 Other	1	1	172	
Total Proposed Watts =			1720	

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Envelope Compliance Certificate

Project Information
 Energy Code: 2012 IECC
 Project Title: 40452-13 Aldi Store #65 Charlotte, NC
 Location: Charlotte, North Carolina
 Climate Zone: 3a
 Project Type: New Construction
 Vertical Sloping / Wall Area: 0%

Building Area
 Construction Site: 6113 Idlewild Road, Charlotte, NC 28209
 Owner/Agent: ALDI, Inc., 1985 Old Union Church Road, Salisbury, NC 28146, 330-273-7351
 Designer/Contractor: ms consultants, inc., 2221 Schrock Road, Columbus, OH 43229, 614-998-7100

Additional Efficiency Package
 Reduced interior lighting power. Requirements are implicitly enforced within interior lighting allowance calculations.

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Window Above Vertical Metal Frame with Thermal Break Fixed Perf. Specs. Product ID: Product ID Kawneer 451, SHGC 0.43, PF 1.00 (Bldg. Use 1 - Grocery Store) (c)	46	---	---	0.330	0.480
Window Type A: Metal Frame with Thermal Break Fixed Perf. Specs. Product ID Kawneer 451, SHGC 0.43, PF 0.80 (Bldg. Use 1 - Grocery Store) (b)	46	---	---	0.330	0.460
Window Type B: Metal Frame with Thermal Break Fixed Perf. Specs. Product ID Kawneer 451, SHGC 0.43, PF 0.11 (Bldg. Use 1 - Grocery Store) (a)	46	---	---	0.330	0.480
Window Type C: Metal Frame with Thermal Break Fixed Perf. Specs. Product ID Kawneer 451, SHGC 0.43, PF 0.50 (Bldg. Use 1 - Grocery Store) (d)	31	---	---	0.330	0.460
Window Type D: Metal Frame with Thermal Break Fixed Perf. Specs. Product ID Kawneer 451, SHGC 0.43, PF 0.80 (Bldg. Use 1 - Grocery Store) (e)	31	---	---	0.330	0.480
Window Type E: Metal Frame with Thermal Break Fixed Perf. Specs. Product ID Kawneer 451, SHGC 0.43, PF 0.11 (Bldg. Use 1 - Grocery Store) (f)	31	---	---	0.330	0.460
Long Wall of Tower & Deck Steel-Framed 16in. o.c. (Bldg. Use 1 - Grocery Store)	4433	14.0	10.1	0.054	0.064
Vertical Glass Door - Part Type Energy code default, Single Pane, Clear, SHGC 0.80, PF 0.74 (Bldg. Use 1 - Grocery Store)	151	---	---	1.200	0.770

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Issued: 12/05/17

A	Permit Set	12/05/17
B	Client Review Set	05/03/18
C	Bid Set	05/11/18
D		

Revisions: _____ Date: _____

1		
5		
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DRAWN BY: MEM/KNW

REVIEWED BY: JAB

Seal

ALDI Inc.
 1985 Old Union Church Road
 Salisbury, NC 28146
 (704) 642-0028
 (704) 642-0078 fax

ALDI Inc. Store #: 65
 Charlotte, NC
 6113 Idlewild Road
 Charlotte, NC 28212
 Mecklenburg County
 Project Name & Location:

COMcheck

Drawing Name: Prototype Rls. 09/07/17 Project No. 40452-13

Type: LHSD-V8 G-003

Scale: As Noted Drawing No.

COMcheck Software Version COMcheck-Web
Mechanical Compliance Certificate

Project Information
 Energy Code: 2012 IECC
 Project Title: 40452-13 Aldi Store #65 Charlotte, NC
 Location: Charlotte, North Carolina
 Climate Zone: 3a
 Project Type: New Construction

Additional Efficiency Package
 Reduced interior lighting power. Requirements are implicitly enforced within interior lighting allowance calculations.

Mechanical Systems List

Quantity, System Type & Description

HVAC System (Single Zone)
 Heating: 1 each - Central Furnace, Gas, Capacity = 85 kBtu/h
 Proposed Efficiency = 80.00% EE, Required Efficiency = 80.00% EE
 Cooling: 1 each - Single Package Unit, Capacity = 264 kBtu/h, Air-Cooled Condenser, Air Economizer
 Proposed Efficiency = 13.00 SEER, Required Efficiency = 13.00 SEER
 Fan System: FAN SYSTEM 2 (RTU) - Compliance (Motor nameplate HP method): Passes

Fans:
 FAN 2 Supply: Constant Volume, 900 CFM, 0.3 motor nameplate hp

HVAC System (Single Zone)
 Heating: 1 each - Other, Electric, Capacity = 12 kBtu/h
 No minimum efficiency requirement applies.
 Cooling: 1 each - Split System, Capacity = 9 kBtu/h, Air-Cooled Condenser, No Economizer, Economizer exception: Low Capacity
 Proposed Efficiency = 20.00 SEER, Required Efficiency = 13.00 SEER
 Fan System: FAN SYSTEM 3 (RTU) - Compliance (Motor nameplate HP method): Passes

Fans:
 FAN 3 Supply: Constant Volume, 360 CFM, 0.1 motor nameplate hp

Water Heating:
 Electric Storage Water Heater, Capacity: 20 gallons
 No minimum efficiency requirement applies.

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Mechanical Compliance Certificate

Project Information
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 Project Type: New Construction

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Fans:
 FAN 2 Supply: Constant Volume, 900 CFM, 0.3 motor nameplate hp

HVAC System (Single Zone)
 Heating: 1 each - Other, Electric, Capacity = 12 kBtu/h
 No minimum efficiency requirement applies.
 Cooling: 1 each - Split System, Capacity = 9 kBtu/h, Air-Cooled Condenser, No Economizer, Economizer exception: Low Capacity
 Proposed Efficiency = 20.00 SEER, Required Efficiency = 13.00 SEER
 Fan System: FAN SYSTEM 3 (RTU) - Compliance (Motor nameplate HP method): Passes

Fans:
 FAN 3 Supply: Constant Volume, 360 CFM, 0.1 motor nameplate hp

Water Heating:
 Electric Storage Water Heater, Capacity: 20 gallons
 No minimum efficiency requirement applies.

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Window Type C: Metal Frame with Thermal Break Fixed Perf. Specs. Product ID Kawneer 451, SHGC 0.43, PF 0.50 (Bldg. Use 1 - Grocery Store) (d)	31	---	---	0.330	0.460
Window Type D: Metal Frame with Thermal Break Fixed Perf. Specs. Product ID Kawneer 451, SHGC 0.43, PF 0.80 (Bldg. Use 1 - Grocery Store) (e)	31	---	---	0.330	0.480
Window Type E: Metal Frame with Thermal Break Fixed Perf. Specs. Product ID Kawneer 451, SHGC 0.43, PF 0.11 (Bldg. Use 1 - Grocery Store) (f)	31	---	---	0.330	0.460
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