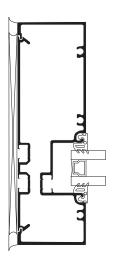
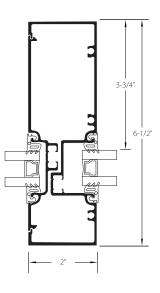
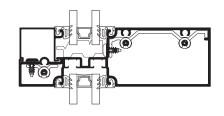


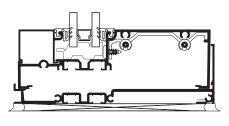
E24650

Storefront Framing











System Features:

- 2" x 6-1/2"
- Non-thermal
- Glass plane: Outside
- 1" standard infill (1/4" to 1-1/8")

Optional Features:

- Screw-spline or shear block connections
- Steel reinforcing if required
- A wide variety of standard anodized and painted colors are available to complement any project with warrantied protection, as well as street appeal.
- Integrates with: all Entrances, 3700 Insert Vents, and Sun Control

Performance Test Standards						
Air Performance ASTM E 283						
Water Performance	AAMA 501 and ASTM E 331					
Structural	ASTM E 330					
Thermal	AAMA 1503					
Thermal Break	AAMA 505 and AAMA TIR-A8					
Acoustical	AAMA 1801 and ASTM E 1425					

E24650 Series Product Specifications

Application: Medium-Rise storefront, front set glass, outside glazed

Description: 2" x 6-1/2" nonthermal, outside or inside flush glazed storefront, front set glass.

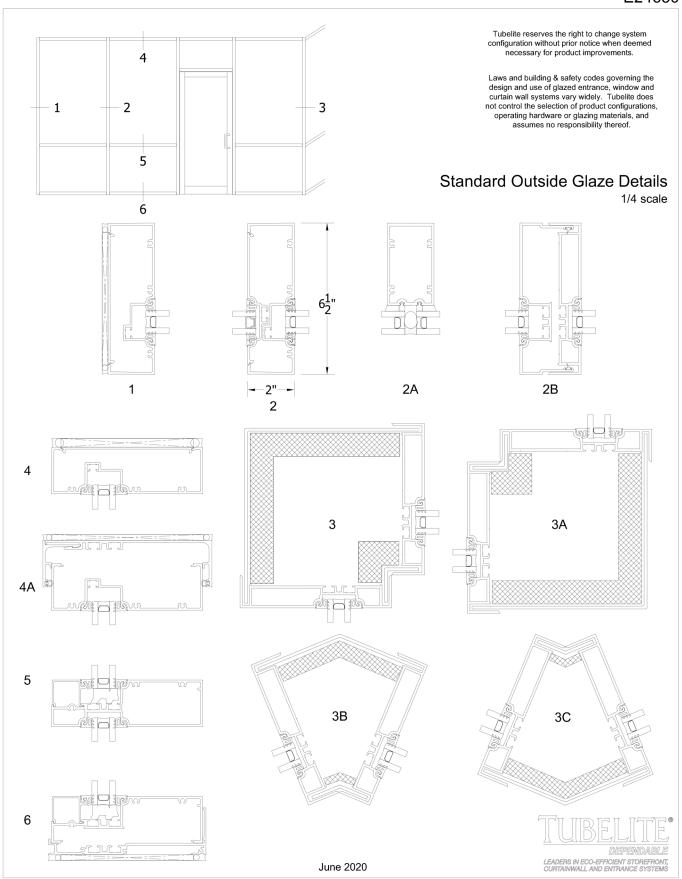
Face Width:	Overall Depths:	Glass Thickness:	Air Infiltration:	Water Infiltration:	Structural:	CRF:	U-Factor**:	Acoustic
2"	6-1/2"	1"	0.06 CFM/Ft.2 @ 6.24 PSF	12 PSF – Static 12 PSF – Dynamic	30 PSF – Design 45 PSF - Overload	P & D 63 _F / 69 _G Strut 72 _F / 72 _G	0.40 - P&D Filler 0.35 – Strut Filler	31 STC 25 OITC

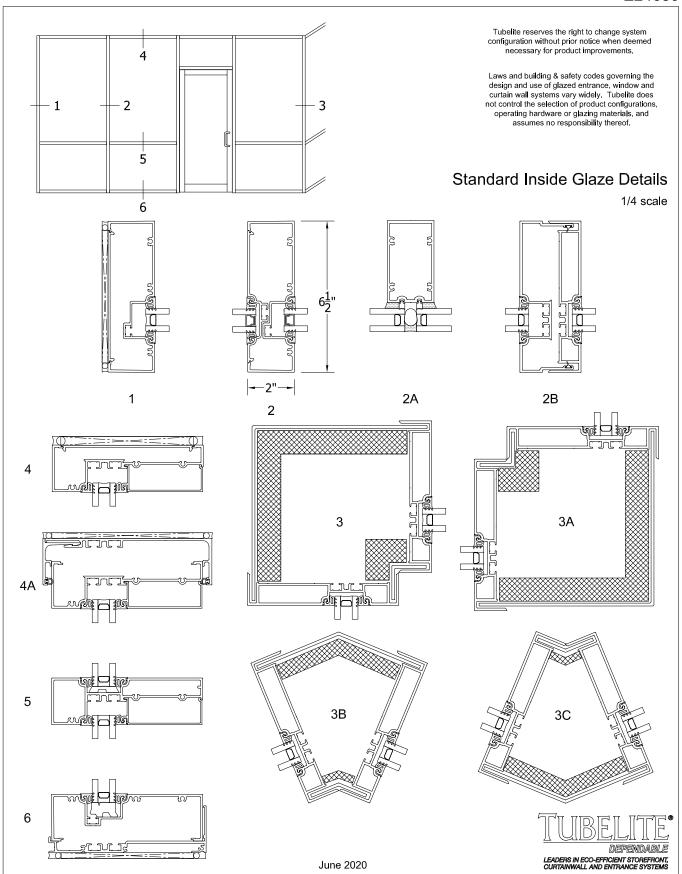
^{**} U-Factor per NFRC 100: COG = 0.24 with warm edge spacer, 1-3/4" x 4-1/2" non-thermal frame.

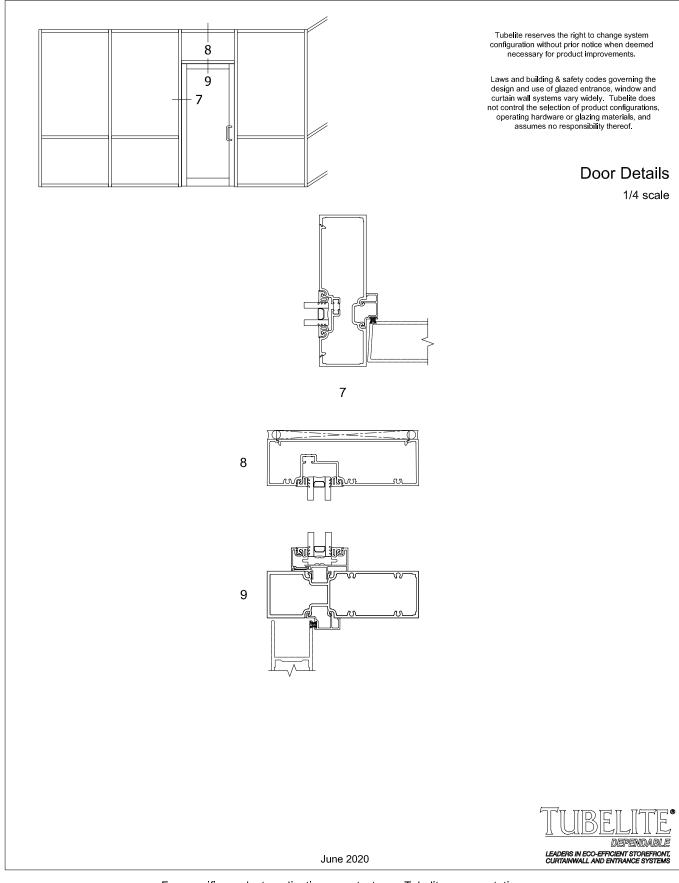
Refer to the U-Factor table at: www.tubeliteinc.com/products/storefront/e-t-series-storefront-framing/ for other glass makeups and configurations.

DISCLAIMER: Tubelite takes no responsibility for product selection or application, including, but not limited to, compliance with building codes, safety codes, laws, merchantability or fitness for a particular purpose; and further disclaims all liability for the use, in whole or in part, of this Technical Guide in preparation of project specifications and/or other documents. Technical Guides are subject to change at any time, without notice, and at Tubelite's sole discretion. ©2018 Tubelite Inc.

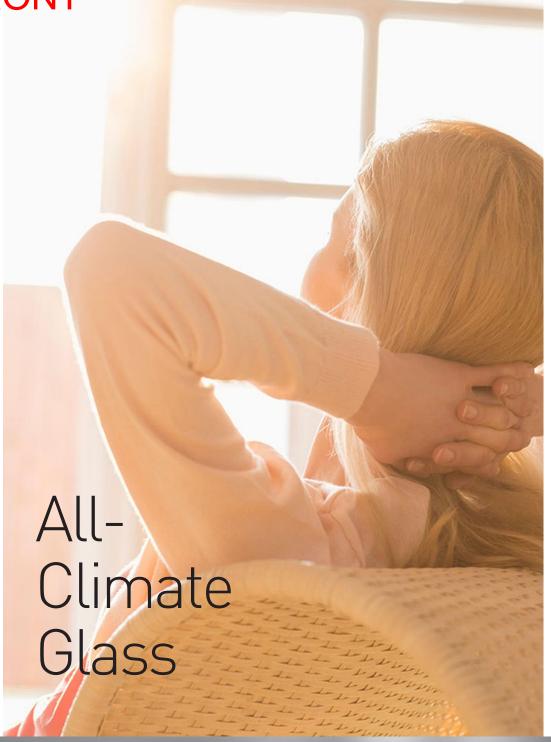








STOREFRONT GLASS





CARDINAL CG & ENGINEERING THE FUTURE OF COATED GLASS



Who says you can't do anything about the weather? Cardinal's $Lo\bar{E}^2$ coated glass delivers year-round comfort in all types of weather. In summer, it rejects the sun's heat and damaging UV rays. In winter, it reflects heat back into the room.



Cardinal Lo \bar{E}^2 glass includes two variations, Lo \bar{E}^2 -272 and Lo \bar{E}^2 -270. Lo \bar{E}^2 -272 offers a little more light transmittance, while Lo \bar{E}^2 -270 gives a little more solar control.

Regardless of where your home is located, choosing windows that provide you with the highest level of comfort and energy savings year-round is extremely important. And choosing the right glass for your windows is the most important factor in that decision. Go beyond ordinary low-E glass. Let $Lo\bar{E}^2$ glass help you handle the weather – any weather.

When the temperature is heading to the top of the thermometer, ordinary window glass simply welcomes in the heat. Cardinal LoE2. however, has been specially formulated to reject the sun's heat and damaging rays and keep your home cool and comfortable. The patented LoE² coating provides high-performance solar control and visual clarity. The end result of all this engineering is that Cardinal LoĒ² provides the ultimate in comfort because it reduces window heat gain by 50% or more when compared to ordinary glass.



Frigid outside, cozy inside.

During cold weather, the insulating effect of your windows has a direct impact on how your rooms feel. Typically, 75% of the exposed surface of a window is glass, and the temperature of the room-side of the glass directly affects the air temperature in the room. The better insulated the window glass, the warmer your room will be.

In fact, the Efficient Windows Collaborative (www.efficientwindows.org) suggests that when glass surface temperatures fall below $52^{\circ}F$, there is a risk of thermal discomfort. To maintain the best comfort during the winter, select a glass product that produces surface temperatures that will stay above this point during the coldest outdoor conditions.



INSIDE GLASS AND OUTSIDE TEMPERATURES

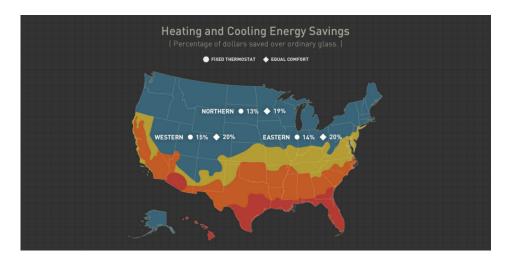
The table below compares the room-side center of glass temperatures of different glass types against two different winter conditions.

IG TYPE	OUTSIDE TEMPERATURES						
AND COATING	VERY COLD OUTSIDE -20°F (-30°C)	COLD OUTSIDE 20°F (-10°C)					
	INSIDE TEMPERATURES						
Single-pane, Clear	0°F (-19°C)	31°F (-3°C)					
Double-pane, Clear	37°F (2°C)	51°F (9°C)					
Ordinary low-e (air fill)	46°F (7°C)	57°F (13°C)					
LoĒ ² -272/270 (air fill)	49°F (9°C)	58°F (14°C)					
LoDz-272/270 (argon fill)	52°F (10°C)	60°F (15°C)					

The superior insulating capability of Cardinal $Lo\bar{E}^2$ glass is a key factor in the construction of comfortable windows for cold climates. The dramatic comfort improvement from windows with warm glass surfaces also means the relative humidity of the indoor air can be controlled and maintained properly. Proper humidity levels (not too much, not too little) will improve comfort and promote a healthier living environment.

Glass so smart, it controls your comfort.

Although windows provide beautiful views and wonderful natural light, they can also account for up to 50% of the heating and cooling energy consumed in a home. In the summer Cardinal Lo \bar{E}^2 keeps your home cool and comfortable by rejecting the sun's heat and damaging rays. In the winter it helps your home stay warm and cozy by blocking heat loss to the cold weather outside. In short, it can save energy year-round.



^{*}Thermostat settings are the largest variable in establishing the heating and cooling energy savings potential with window replacements. If you tolerate the discomfort from your current windows and don't change thermostat settings with the weather, consider the savings suggested from the "Fixed Thermostat" column. If on the other hand you frequently adjust the thermostat, add space heaters to compensate for cold rooms, or close drapes/blinds to block the sun, consider the additional savings suggested in the "Equal Comfort" column.

GLASS COMPARISONS

IG TYPE AND COATING		VISIBLE LIGH	Т		DE MISSION	SOLAR	U-FA	CTOR
	TRANSMIT- TANCE	EXTERNAL REFLECTANCE	INTERNAL REFLECTANCE	UV	IS0	HEAT GAIN COEFFICIENT	AIR FILL IP / SI	ARGON FILL IP / SI
Single-pane, Clear	90%	8%	8%	0.71	0.84	0.86	1.04 / 5.91	_
Double-pane, Clear	82%	15%	15%	0.58	0.75	0.78	0.48 / 2.73	_
Ordinary low-e	76%	17%	17%	0.50	0.68	0.72	0.34 / 1.93	0.30 / 1.70
LoĒ ² -272	72 %	11%	12%	0.16	0.55	0.41	0.30 / 1.70	0.25 / 1.42
LoDz-270	70%	12%	13%	0.14	0.53	0.37	0.30 / 1.70	0.25 / 1.42

The difference is clear.



Cardinal LoĒ² glass is ideal for all weather conditions in most climates. In summer, its patented coating blocks 86% of the sun's harmful ultraviolet rays and 63% of the sun's heat. It even outperforms the tinted glass often used in warm climates. You can see out and the light shines in, with no heavy bronze or smoke colored tints to darken the personality of your home. In winter, it reflects heat back into rooms.

 $Lo\bar{E}^2$ glass can also be purchased in hurricane-resistant laminated glass and in a variety of shapes and sizes.

To learn more about $Lo\bar{E}^2$ and other Cardinal glass products, ask your window manufacturer, contractor or architect.



ENGINEERING THE FUTURE OF COATED GLASS

775 Prairie Center Drive, Eden Prairie, MN 55344 cardinalcorp.com



FALLEY WINDOW

SYMBOL LEGEND

S INDICATES FIELD APPLIED SEALANT BY OTHERS

F FASTENERS BY OTHERS

INDICATES BLOCKING BY OTHERS

SHIM AS NEEDED BY OTHERS

CI SHEET NUMBE CUT SECTION SHEET NUMBER

FINISH SCHEDULE: COLOR						
2604:						
2605: DARK BRONZE						
ANODIZED:						
CUSTOMER TO PROVIDE COLOR CHIP						
OTHER:						
CLISTOMER TO VERIFY FINISH AND COLOR						

GLAZING SCHEDULE						
STANDARD G	STANDARD GLAZING DESCRIPTION					
1" ENERGY BA	1" ENERGY BASIC,CARD 272(DUAL SILVER), ARGON FILL-1/4 PANES					
VARIATION	VARIATIONS FROM STANDARD (NOTED ON WINDOW ELEVATIONS)					
SYMBOL	DESCRIPTION					
T	TEMPERED					
SP	SPANDREL					
OP	OPAQUE					
ОВ	OB OBSCURE					
	CUSTOMER TO VERIFY GLAZING OPTIONS					

WARRANTY

FINISH: 15 YEAR GLASS: 10 YEAR HARDWARE: 2 YEAR

ABBREVIATIONS

M.O. = MASONRY OPENING

O.R.O. = OVERALL ROUGH OPENING

O.U.D. = OVERALL UNIT DIMENSION

R.D. = RECEPTOR DIMENSION R.O. = ROUGH OPENING

T.T.P. = TIP TO TIP OF PANNING

U.D. = UNIT DIMENSION

AWN = AWNING

CA = CASEMENT

DH = DOUBLE HUNG

HOP = HOPPER

SH = SINGLE HUNG

SL = HORIZONTAL SLIDING

DS = DIRECT SET

INDEX						
SHEET #	DESCRIPTION					
A1	COVER SHEET					
A2	GENERAL NOTES					
A3-A4	ELEVATIONS					
C1-C3	CUT DETAILS					

GENERAL WINDOW DETAILS AND NOTES

ELEVATIONS ARE VIEWED FROM THE EXTERIOR

DEVIATIONS FROM GENERAL WINDOW DETAILS AND NOTES TO BE LISTED ON WINDOW ELEVATIONS

CUSTOMER TO VERIFY COUNTS AND SIZES

SERIES: E300

CONFIGURATIONS: DS

- EXTERIOR: N/A
- INTERNAL: N/A
- INTERIOR: N/A

HARDWARE: N/A

SCREENS:

N/A

ADDITIONAL PARTS:

- CUSTOM APPLIED FRAME PROFILES-(3)
- CUSTOM PRE-SET PAN-(1)
- CUSTOM C-MULL STK EXP-(1)
- SILL FLASHING-13716
- SNAP TRIM-1 1/2" X 1 1 1/4"
- STK EXP MULL(AS NOTED)-21087
- STK MULL (AS NOTED)-537248
- 2" FLAT APPLIED (AS NOTED)-764
- STRUCTURAL TUBE (AS NOTED)-21586 (FIELD APPLIED) (INCLUDE W/ 536207)

EXAMPLE ELEVATION DESCRIPTION

WINDOW TYPE -TYPE X

WINDOW CONFIGURATION -→ XX - XXXXX DEVIATIONS FROM GENERAL -

DETAILS AND NOTES

-QTY. X QUANTITY -

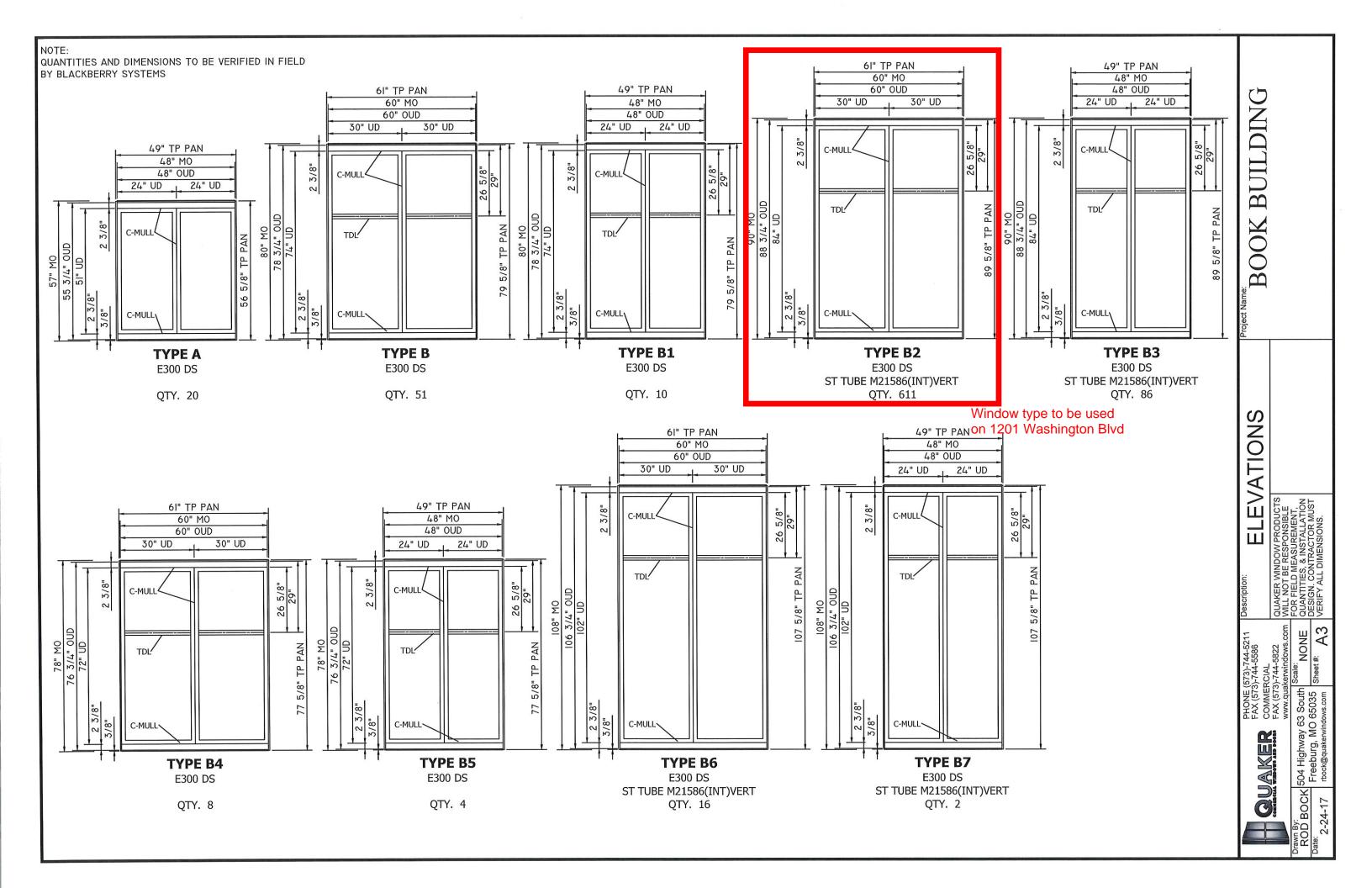
REVISIONS	BY	DATE
SIZE/DESIGN CHANGES	ROD BOCK	3-17-17
		5.
		14

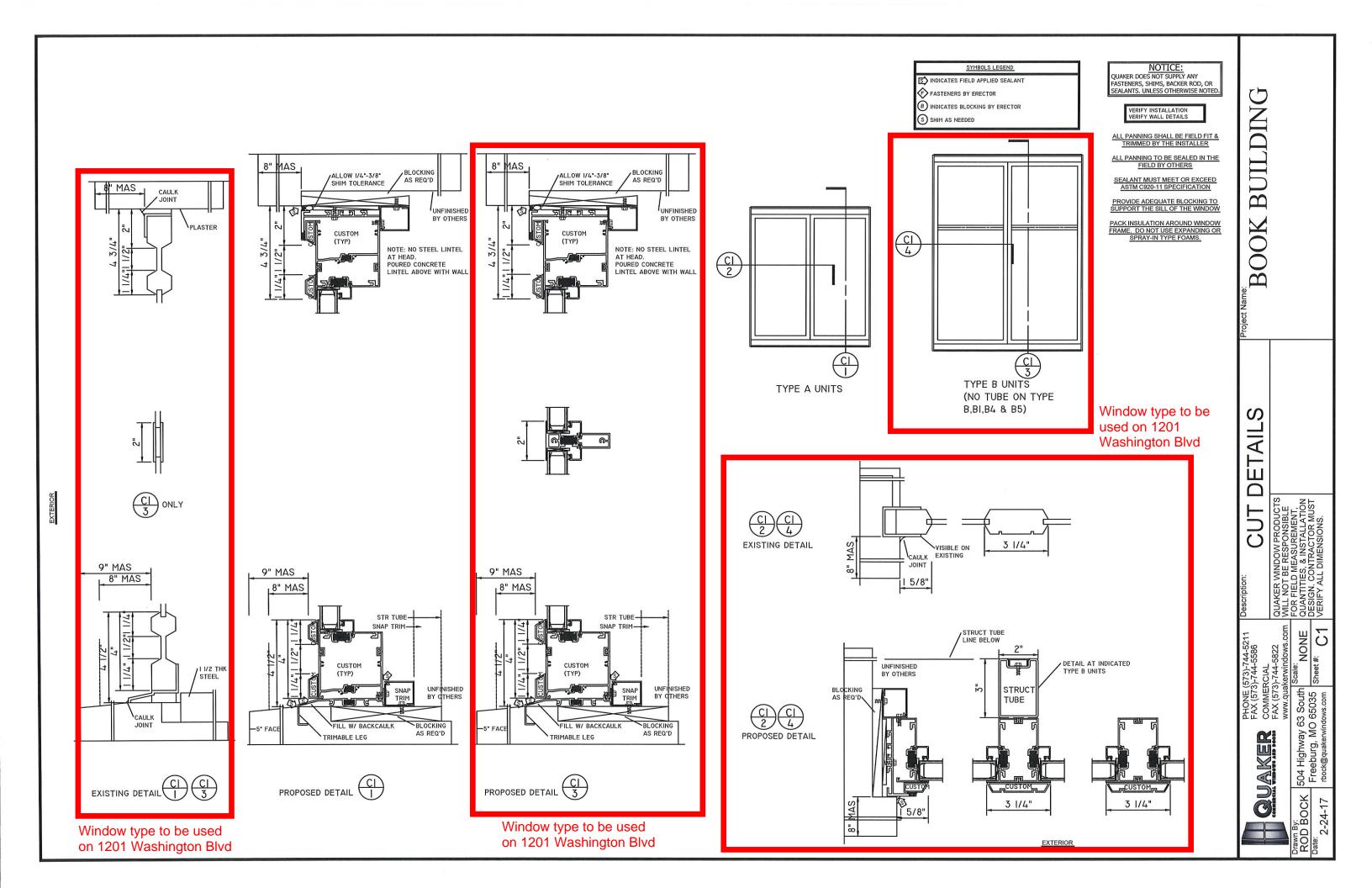
BUILDING BOOK

S NOTE ENERAL

QUAKER

G

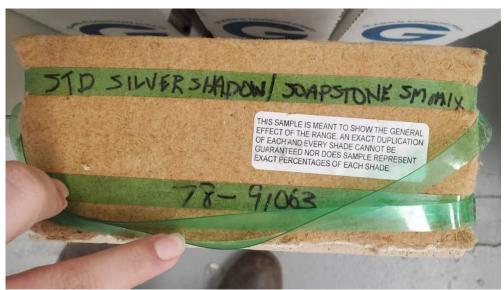














BASIC INDIANA LIMESTONE TO MATCH EXISTING





Estate Veneer Series Vanderbilt Classic®



Vanderbilt Classic® Full Bed Veneer

Smooth Face 3-5/8" Bed Depth

Vanderbilt Classic® Smooth is a solid, genuine, and natural Indiana Limestone sawn veneer. The strong, clean look of real limestone is ideal for commercial, industrial, and fine residential structures.

Modular Units

- Made of the same naturally durable and high quality raw material used in our nation's most renowned buildings.
- Use proven, time-tested natural stone readily available in full bed thickness, precision cut modular units.
- Full Color Blend exhibits the subtle natural color range that has become the standard of Indiana Limestone over the last 150 years.
- Indiana Limestone is the classic complement to brick and other building materials.
- Available in standard sizes of 4", 8", 12", or 16" heights by 24" in length.

Competitively Priced

- A historic natural stone competitively priced to engineered or cast stone imitations.
- Cost effective modular unit installation using traditional brick ties and having proper coverage/weight balance for efficient setting.
- Packaged ready-to-set and easily trimmed in the field for corner, door, and window openings.

Trim and Accent

■ A full line of standard accent units is available to match the entire range of color of Vanderbilt Classic®.



Vanderbilt Classic® Smooth Face

Product IDColor		Height	Depth	h Length		
1200-100	FCB	3-5/8"	3-5/8"	23-5/8"		
1200-101	FCB	7-5/8"	3-5/8"	23-5/8"		
1200-102	FCB	11-5/8"	3-5/8"	23-5/8"		
1200-103	FCB	15-5/8"	3-5/8"	23-5/8"		
1260-100	Gray	3-5/8"	3-5/8"	23-5/8"		
1260-101	Gray	7-5/8"	3-5/8"	23-5/8"		
1260-102	Gray	11-5/8"	3-5/8"	23-5/8"		
1260-103	Gray	15-5/8"	3-5/8"	23-5/8"		

Also available in 35-5/8" length

Product Description and Packaging

- Standard grade Full Color Blend or Gray material
- Smooth face with sawn top, bottom, back, and ends
- Tolerances:

Height (+/-) 1/16"

Length (+/-) 1/16"

Depth (+/-) 1/16"

■ Palletized on 48" x 48" pallet



AQUA 200 SQUARE LX

UP + DOWN SCONCE

EXTERIOR SCONCE

PROJEC	т		
Job		Notes	
Туре			
Part #			

SPECIFICATIONS -

Source Two Xicato XTM LED modules - up to 1300 source lumens each

CCT 2700K, 3000K, 3500K or 4000K

Color Consistency 1x2 SDCM (MacAdam) along BBL, CCT +/- 40K to 70K, Duv +/- .001

CRI (Ra) 83 or 98

Driver / Location Included / must be remote mounted

Dimming 0-10V or phase to 10% standard; Ecosystem, DALI, DMX and 1% available

Input Voltage 100 to 277VAC (347VAC consult factory), phase dimmable versions are 120VAC only

Power Up to 35 watts max, depending on LED module / driver

Reflector 10°, 20°, 40°, 60° & optical accesories

Materials Tamper resistant design, stainless steel hardware, metal reflectors

Finish Powder coat - Exterior grade TGIC polyester, optional marine-grade finish

Weight 7.0 lb. [3.2 kg]

Location Listed for Wet location, tested to IP66 per IEC 60529

Approvals ETL Listed to UL 1598, 2108, 8750 and CSA C22.2# 9 & #250.0

L70 Life > 55,000 hours at 70% lumen maintenance, LM80 / TM-21, see pg 2

Warranty Lifetime Limited Warranty - see warranty for details

IES Files LM-79-08 IES files available

Modifications Any modification or customization is possible - consult factory



















ORDERING LOGIC -

Model -	Driver	# of	Dimmina		ı	U p		Optical		Do	own		Optical	
model	Location	Circuits		 Output 	CRI	CCT	Reflector	Accessory -	Output	CRI	CCT	Reflector	Accessory -	Shell Color
K2SU-	R			-				-					-	
K2SU	R=Remote	1 = 1	N =None	07 =700 lm	83 =83	27 =2700k	10 =10°	NN=None	07 =700 lm	83 =83	27 =2700K	10 =10°	NN=None	XX=v2 color
		2 =2	P=Phase, 10%	10 =965 lm*	98 =98	30 =3000k		DF*	10=965 lm*	98 =98	30 =3000K		HL*	see pg 4
			V =0-10V, 10%			35 =3500k		LS*			35 =3500K		DF*	ZZ =Custom
prem	nium drivers ((REMOTE	location only):			40 =4000k		WW*			40 =4000K		LS*	
Z1 =6	eldoLED 0-10	V, 0%			(OR		FT*		(OR .		WW*	add +MF for
Z2 =6	eldoLED DAL	I, 0%		07 =700 Im	83 =83	27 =2700k	20 =20°	*see pg 3	07 =700 lm	83 =83	27 =2700K	20 =20°	FT*	Marine Finish
Z3 =6	eldoLED DM>	۷, 0%		10 =965 lm	98 =98	30 =3000k	40 =40°		10 =965 lm	98 =98	30 =3000K	40 =40°	*see pg 3	
Z4 =1	_utron Hi-Lun	ne™ LDE	1, 0-10V, 0%	13=1300 lm	1*	35 =3500k	60 =60°		13=1300 lm	1*	35 =3500K	60 =60°		
Z 5=l	_utron Hi-Lun	ne™ LTE	A, Phase, 1%			40 =4000k					40 =4000K			
Z 6=l	_utron 5-Serie	es™ LDE	5, 0-10V, 5%	*available i	n 83CR	l only			*available i	n 83CRI	only			

Example Part Number: K2SU-R1V-10832710NN-138304060NN-L1

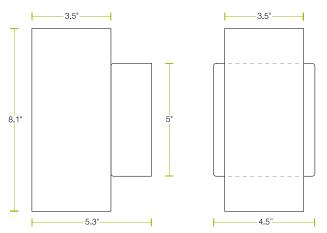
K AQUA 200 Square LX Up+Down Sconce - Remote Driver, 1 Circuit, 0-10V Dim - Up: 1000lm, 83CRI, 2700K, 10° - Down: 1300lm, 83CRI, 4000K, 60° - L1 Gloss White

W alwusa.com



AQUA 200 SQUARE LX UP + DOWN SCONCE

DIMENSIONS



Canopy fits standard 3.5" and 4" round and octagonal junction boxes

Not to scale, dimensions are nominal Go to www.v2LightingGroup.com for CAD drawings

LED OPTIONS -

Reflector	LED Specifications								
Option	LES ¹	L70 ²	CRI	Lumens ^{3,4,5}	Wattage ⁶	Efficacy ⁷ (Im/W)			
		> 33,000	Ra = 83 ±3	720	7.4	97			
10° 9	9mm		na = 65 ±5	965	10.9	89			
		hours	Ra = 98	700	10.6	66			
				720	4.5	160			
		> 55.000	Ra = 83 ±3	965	6.6	146			
20°, 40°, 60°	19mm	hours		1300	9.5	137			
		riours	Ra = 98 R9≥90	720	6.3	114			
			R15≥95	965	9.2	104			

- ¹ LES: Light Emitting Surface diameter
- ² 70% lumen maintenance based on IESNA LM-80-08 and TM-21
- 3 ±10%
- ⁴ Typical source lumens see photometrics on page 3 for LOR to calculate delivered lumens
- ⁵ Higher lumen outputs are available in AQUA 300 and 400 series
- ⁶ Typical luminaire wattage including LED driver = LED wattage x 1.2
- ⁷ Higher efficacies may be available via lower drive currents consult factory

CONTROL OPTIONS

Driver Option	Odering Code	Description
Standard	N	No dimming
LED Drivers*	V	0-10V dimming to 10%
(included in	P	Phase dimming to 10%
base price)		Compatible with both forward and reverse phase dimmers
	Z1	eldoLED, 0-10V dimming to 0%
	Z2	eldoLED, DALI dimming to 0%
Optional	Z3	eldoLED, DMX dimming to 0%
LED Drivers*	Z4	Lutron Hi-lume [™] , EcoSystem to 1% with Fade-to-Black (-LDE1)
	Z 5	Lutron Hi-lume [™] , Forward phase dimming to 1% (-LTEA)
	Z 6	Lutron 5-series, EcoSystem to 5% (-LDE5)

- * Standard LED drivers are suitable for Wet Location
- * Optional LED drivers are suitable for Damp Location remote mount only
- * For EM applications: v2's Remote EM Solution is compatible with all LED options

All LED drivers may be used with 3rd party inverter style systems



AQUA 200 SQUARE LX UP + DOWN SCONCE

COLOR OPTIONS -

Basic Powder Coat



GW Gloss White



SW
Satin White
AW
Antimicrobial
option



TW Textured Matte White



TBTextured
Matte Black

Satin Anodized Effect Powder Coat



CS Clear Silver



OB Oil-Rubbed Bronze



DB Dark Bronze



Metallic Powder Coat



SG Silver Gray



CG Charcoal Gray



CU Copper



BR Brass

Gloss Powder Coat (80-95% Gloss)



GO Orange (RAL 2003)



GR Red (RAL 3020)



GM Magenta (RAL 4010)



GB Blue (RAL 5015)

Aluminum



BABrushed Aluminum
Cost adder applies.

Special Order



RAL ____ Most RAL Classic Colors (80-95% Gloss) are available for powder coat - consult ALW. Minimum setup fee applies. See: alwusa.com/finishes for more information



CAT _ _ _ The complete range of powder coat colors from the Tiger Drylac and TCl catalogs are available - consult ALW. Minimum setup fee applies.

Custom



CCM _ _ _ Custom powder coat color matching is available - consult ALW.

Premium setup fee applies.

Printed or on-screen colors are only approximations - consult actual Color Chip Set before specifying Note: An individual setup fee will apply to each unique Special Order/Custom Finish per purchase order. (ex: RAL 5023 and RAL 2008 are specified for multiple line items on a purchase orer. 2x setup fees will apply)

SITE MATERIALS

OLD Document_05-10-22_The applicant submitted a new site material page







GRANITE CURB







MAIN ENTRY COBBLE PAVERS



PERMEABLE PAVERS