HASTINGS-ON-HUDSON ARCHITECTURAL REVIEW BOARD APPLICATION AND CHECKLIST

The ARB meets on the 1st Monday of every month at 8:00 P.M. Please complete and submit this application along with a fee of \$25 and all the required supporting material to Hastings-on-Hudson Buildings Department, no later than two weeks before the date of the meeting.

Applicant's Na Gary Spil	me: atro			Date: 10-24-16	
Tel. 914.738.7	949	Fax: 914.738.7940	E-mail: gary@spilatroarchite	ct.com	
Property Owner's Name: Julia Dyckman Memorial			Property Address: 1156 North Broadway		
Brief Project Description: Demo existing one story masonry 1 classroom and storage building. Build new 2 classrooms, 2 HC toilets, 1 Sensor Room and 1 Office Bl					

This application must be submitted in a packet with the following items. Provide eight (8) copies of each item and this application. √ Check off completed items:

	***************************************	The following items are	requ	ired with every application:				
1		DRAWINGS:						
	Elevations and/or photographs with dimensions that show how the proposed elements relate to each other and to the building façade, and to adjacent facades. Identify proposed materials and colors, windows, doors, and light fixtures, if applicable. Provide details of all structures such as awnings and canopies, if applicable.							
2	,	PHOTOS:						
	Photographs of the property/building.							
		Photographs of architectural details, existing lighting, etc.						
	∇	Photographs (full views) of all adjacent pro						
3	SAMPLES of all materials related to the project. For example:							
		Awning fabric		Lighting cut sheets				
		Paint chips		Siding samples				
	マ	Window and door cut sheets		Brick and stucco samples				
		Other .		Other				
	The following additional items may be required by the Building Inspector or the ARB.							
4		ARCHITECTURAL PLANS:						
	V	Including layouts at the street wall, and sid	ewall	s, curbs, and street amenities, if applicable.				
f	V	Wall sections and architectural details		The second secon				
	V	Equipment (including roof equipment, A/C, ref	luse c	ontainers, etc.) if applicable				

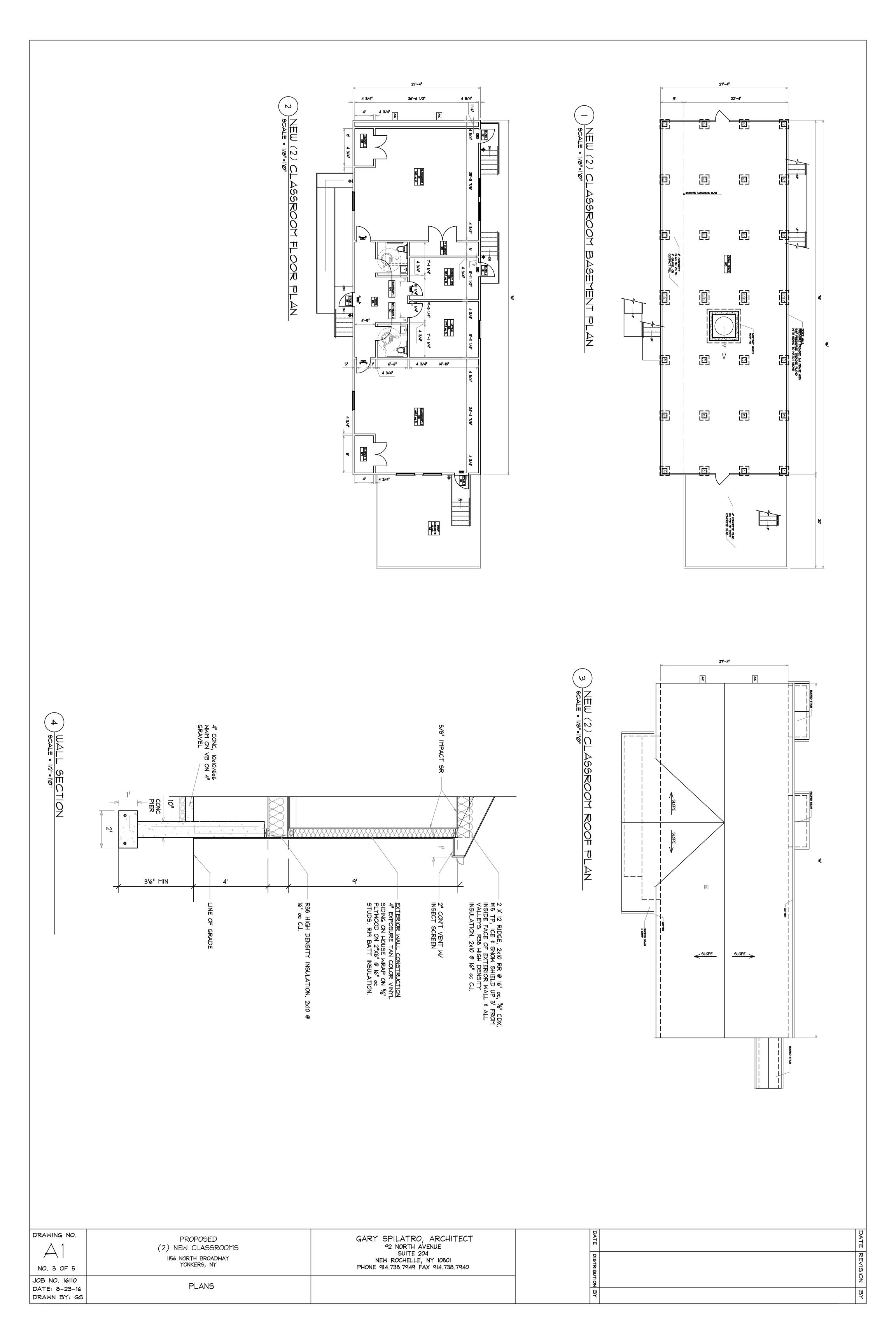
APPLICANT MUST ATTEND ARB MEETING.

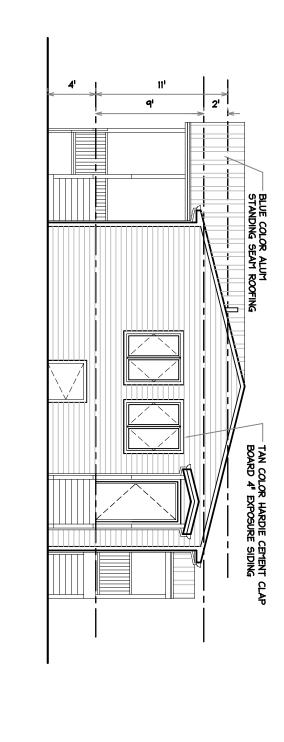
Please feel free to provide any brochures, models, photographs, renderings or other visual aids, or any additional information that might clarify your proposed project and assist in your presentation. No changes to the form, design, color, or materials of a project will be permitted after the Architectural Review Board has approved it.

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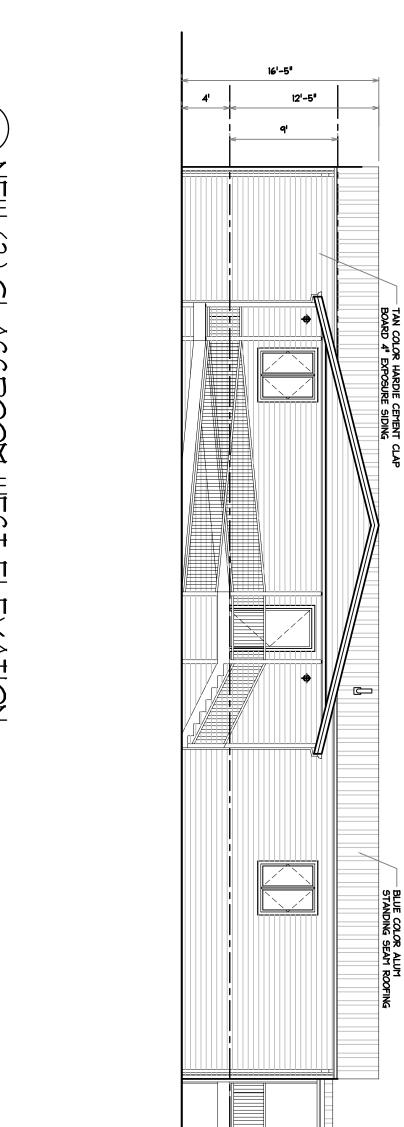
Applicant Signature/Date

August 2013

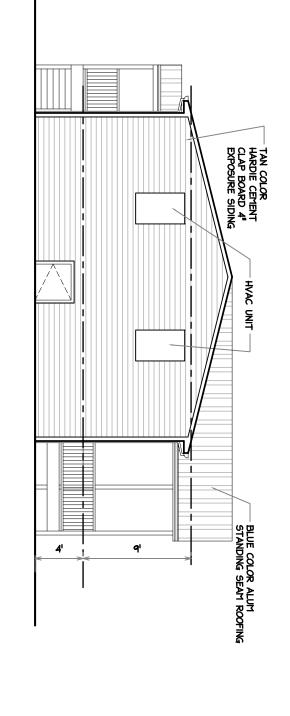




NEW (2) CLASSROOM SOUTH ELEVATION SCALE = 1/8"=1/9"



NEW (2) CLASSROOM WEST ELEVATION SCALE = 1/8"=1'0"



NEW (2) CL ASSROOM NORTH ELEVATION

N

GENERAL NOTES AND SPECIFICATIONS 1. Contractor shall comply with the latest edition of the New York State", "Energy Conservation Construction Code and all Local Codes. "Residential Code of of New York State"

- Моод Lumber standard grade or better 1200 PSI min..
- Моод that rest 2 concrete 9 masonry shall be pressure treated.

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4. All conditions, Architect shall be locations, and dimensions immediately notified of o any Y shall be discrepancies. field verified and

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- All dimensions on drawings shall take precedence over any scaled dimensions.
- Sealant shall be silicone: color to match finish adjacent material. Architect shall in the field sh all approve all shall be amen e all changes amendments made to the to the plans, an 1 building and

<u>original</u>

permit any

such

- 8. The Contractor shall supervise and direct all work using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for all potions of work under the contract. skill
- 9. The Architect shall not be responsible for construction. the supervision of the

- *€* Contractor shall be solely responsible for on and off site safety.
- No changes shall be made to these plans, as per NYS Law and Local Codes.

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- 12. The contractor shall be responsible to the owner for the acts and omissions of his/her employees, subcontractors, and their performing any work under a contract with the contractor.
- 13. All electrical work s contractor shall provide shall comply with the N.Y.S. board of e owner with certificate of inspection. Fire Underwriter;
- Concrete shall be min. of 3,500 psi at 28 days.

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- 15. All plumbing work shall comply with N.Y.S. " State Uniform Fand Building Code", N.Y.S. Energy Code" and all Local Codes. The shall provide owner with certification of inspection. contractor
- All posts to be solid to foundation or
- Fb = 2,900, Fv =285 \$ П 2.0x106

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- All water supply lines to be run in heated areas
- 19. All walls, floors ¢ c Barrier installed on the 20. 5%" plywood is 5%" n ¢ ceiling with batt insulation to have 6 Mil plastic Vapor
 the warm side
- plywood is not ½"

- <u>2</u>. <u>⊥</u>.
- beam.
- :S,777
- $\overline{\circ}$ only.

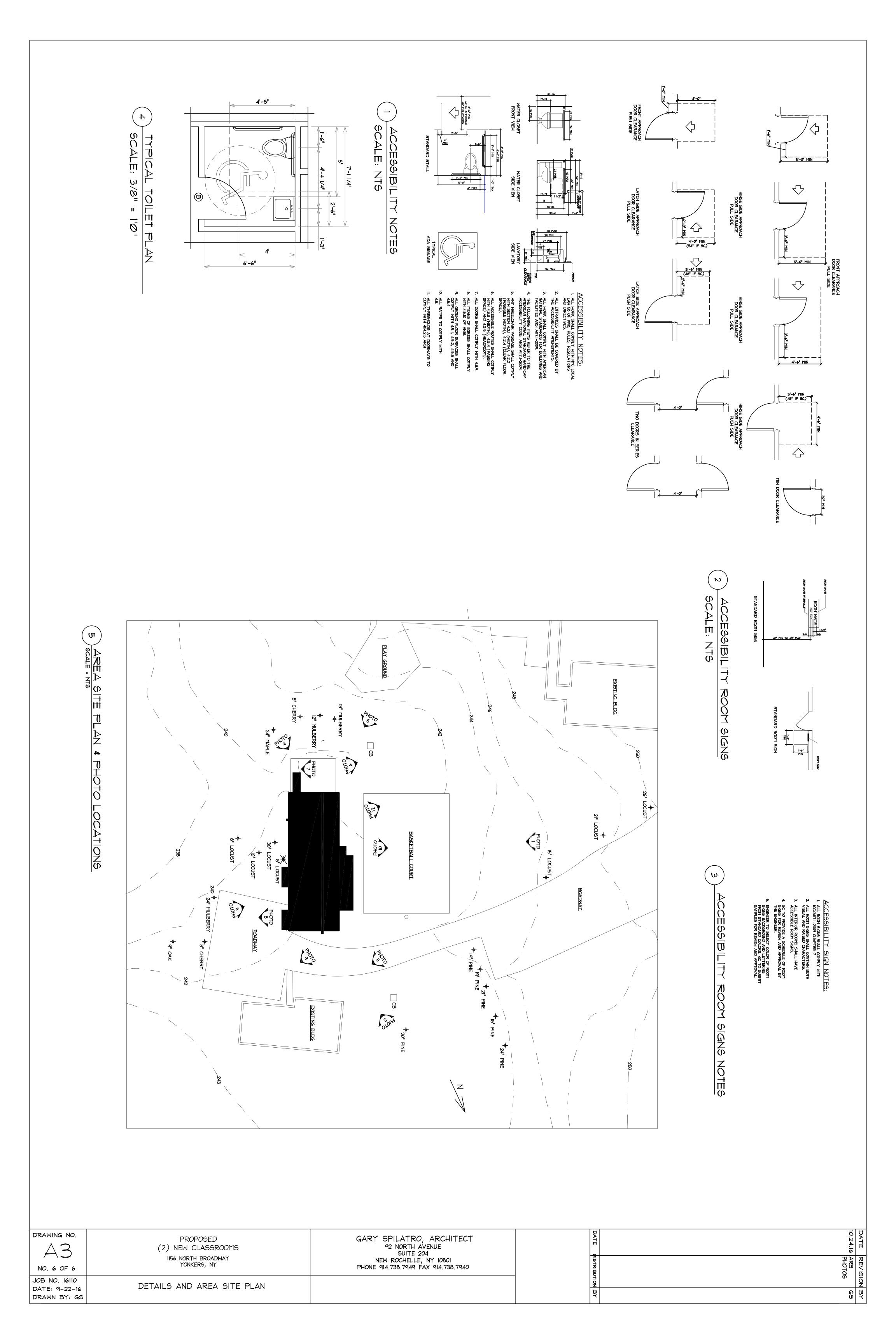
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Electrical subcontractor to review all construction documents and will install all electrical fixtures, outlets, switches and ect. as require by all codes. The electrical layout shown on these plans are the min. and no change orders for additional code items will be given. all code items are base bid.

SMOKE & CARBON MONOXIDE LOCATION NOTE

1) One smoke detector and carbon monoxide detector in each room
2) Smoke and carbon monoxide detectors to be hardwired

DRAWING NO. A NO. 4 OF 5	PROPOSED (2) NEW CLASSROOMS 1156 NORTH BROADWAY YONKERS, NY	GARY SPILATRO, ARCHITECT 92 NORTH AVENUE SUITE 204 NEW ROCHELLE, NY 10801 PHONE 914.738.7949 FAX 914.738.7940	DISTRIB	DATE REVIS 10.27.16 ROOF \$ SIDING
JOB NO. 16110 DATE: 8-24-16 DRAWN BY: GS	ELEVATIONS \$ NOTES		च <u>्</u> रि छ।	ี



ANDRUS MODULAN

FLOOD OVER PROJECT INFORMATION 000M Job Name Catalog Number Approved by . » Full cut-off LED wall-pack with classic design aesthetic » Available two-organ and cold-weather battery pack options

SPECIFICATIONS

FN SERIES

PRODUCT FEATURES:

x Peace of Mind Guarantee⊗

MILLENIUM FINITE™

> Type II, III and IV optical distribution options » High-efficiency, high-power LED sources

HOUSING: High-impact resistant, UV-stabilized injection molded polycarbonate. Marine-grade die-cast aluminum driver housing.

BOOR: High-impact resistant, UV-stabilized injection moded polycarbonate with detachable hinge. Secured to housing with four (4) captive, recessed Ton 6 (or optional Phillips head) stabiliess steel screws, Lens sealed with closed-cell silicone gasket and secured to door frame with heavy gauge stainless steel brackets.

GASKETING: Closed cell, siskone "O"ring gasket seels joint between polycarbonate housing and dis-cast aluminum driver housing and joint between polycarbonate housing and polycarbonate lens trame assembly. Thick gauge, die-cut, closed cell neopreme with self-adhesive gastet seals joint between housing and mounting surface or accessory surface conduit adapter.

ELECTRICAL: Serviceable high-brightness LED array. See Ordering Information for color temperature and CRI options, 70 CRI minimum, 120-277 VAC or 347 VAC SO/66Hz single-phase input; constant-current dimming driver; < 10 % THD, >0.95 PF, Minimum 85% electrical efficiency, 0-10V dimming protocol with 1-100% range, 200µA source current. Replaceable surge suppressor rated to 10/cA/V per IEEE/ANSI C62.41 Cat. A. EMC compliant with FEC 47 CFR Part 15, Class A.

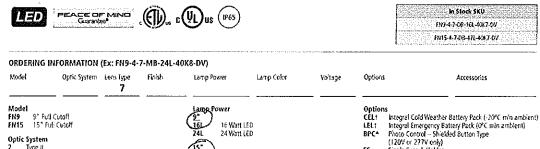
INSTALLATION: Foture is factory pre-wired and includes gasketed. 16-gauge stainless steel quick mounting plate. Once low-point mounted to wait (required for Peace of Mind Guarantee®) or accessory surface conduit adaptet, allows quick mounting with hook-and-lock mechanism. Quick mounting plate boils to wait (lasteness by other), foture attaches to mounting plate with two (2) captive Tont® (or optional Philips head) screws, which are concealed but accessible from bottom. Suitable for ambient temperature applications from -40°C (-40°P) to 40°C (104°P) environments, except as noted.

SURFACE CONDUIT ADAPTER (ACCESSORY): Marine-grade dis-cast aluminum construction includes die-out gaskets and two \"" threaded connection ports. Once four-point mounted to wall (required for Peace of Mind Guarantee®) allows same guick mounting (hock-and-lock) capability as described in the Installation section above.

PROTOMETRICS: Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For additional photometric information, go to www.henall.com.

WARRANTY: One (1) year warranty against defects in materials and workmanship, five (5) year warranty on LED lamps and driver for defects resulting in a fixture lumen depreciation of 30%

USTINGS: Luminaire is certified to UL Standards by either Underwriters Laboratory or Intertek Testing Laboratory for Wet Location. UL certified IP65 per IEC 60598. IESNA-designated full cut-off.



24 Watt LED BPC* Optic System Type II Single Fuse & Holder 24 Watt LED 36 Watt LED Philips Head Fasteners Type IV Two-Circuit Wiring 47L 47 Watt LED Lens Type 7 ...187" Clear Folycarbonate Accessories 9500 Took Screwdiver tamo Color Die-Cast Surface Adapte: Finish 4000K, 70 CRI 4000K, 80 CRI DB Dark Bronze MB Matte Black 1 Available only with FN15-24L model 5000K 70 CRI (cannot be combined with 347V or 2C options)
* Available only with FN15-24L and 49L models. Option Matte White Custom Color (Consult factory) provides separately powered drivers/LED modules 120-277 Volts SA Accessory required 120 277 120 Volts 277 Volts

347 Volts



MILLENIUM FINITE™

FN SERIES - Technical Data

PERFORMANCE

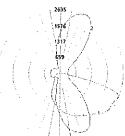
		Initial	Delivered Lume	ns (Im)				
Model	Lamp Type	Туре 2	Туре 3	Туре 4	Efficacy (lm/W)	Input Power (W)	Drive Current (mA)	Estd, L70 LED Life (hrs)
	161-401.7	1855	2100	2078	93-105	20	350	150,000
	161-40K8	1788	2024	2003	89-101	20	350	150,000
1119	16L-SOK7	1968	2228	2204	98-111	20	350 ′	150,000
	24L-40K7	2598	2942	2911	96-109	27	350	125,000
	2 41-40K8	2573	2914	2883	95-108	27	350	125,000
	24L-50K7	2756	3121	3088	102-116	27	350	125,000
	24L-40K7	2823	. 3186.	.: 3169 ".:	101-114	28	350	150,000
	241-40K8	2789	3148	3131	100-112	28	350	150,000
	::24L-50K7. ::	2995	3380	3362	107-121	28	350	150,000
i	36L-40K7	4071	4594	4570	99-112	41	525	125,000
[36L-40K8	3984	4497	4473	97-110	41	525	125,000
FN15	36L-50K7	4279	4830	4804	104-118	41	525	125,000
PNIO	47L-40X7	5073	5726	5695	92-104	\$5	700	100,000
	. 47L-40K3	5016	5661	5630	91-103	55	700	100,000
[47L-50K7	53\$3	6075	6942	98-110	55	760	100,000
	49L-40K7	5943	6256	6222	102-116	54	350	150,000
	49 1-40K8	5425	6123	6090	100-113	54	350	150,000
	491-50K7	5881	6637	5601	109-123	54	350	150,000

Information above was tested with the Clear Polycarbonate lens, Subject to change without notice. Visit www.kenall.com for iES files and additional information.

Model: FN15-2-7-DB-491-40KB-DV

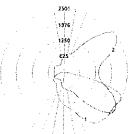
Maximum Cardela = 3526 Lecased As Horizontal Angle = 60, Vertical Angle = 70

Model: FN15-3-7-DB-49L-40K8-DV



Maximum Cardela = 2635 Located At Hor card at Angle = \$5, Vertical Angle = 67.5

Model: FN15-4-7-D8-49L-40K8-DV

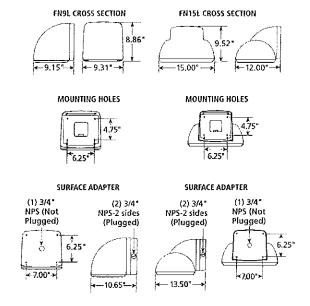


Masinson Candida = 2501 Located At Horizontal Angle = 35, Venical Angle = 65

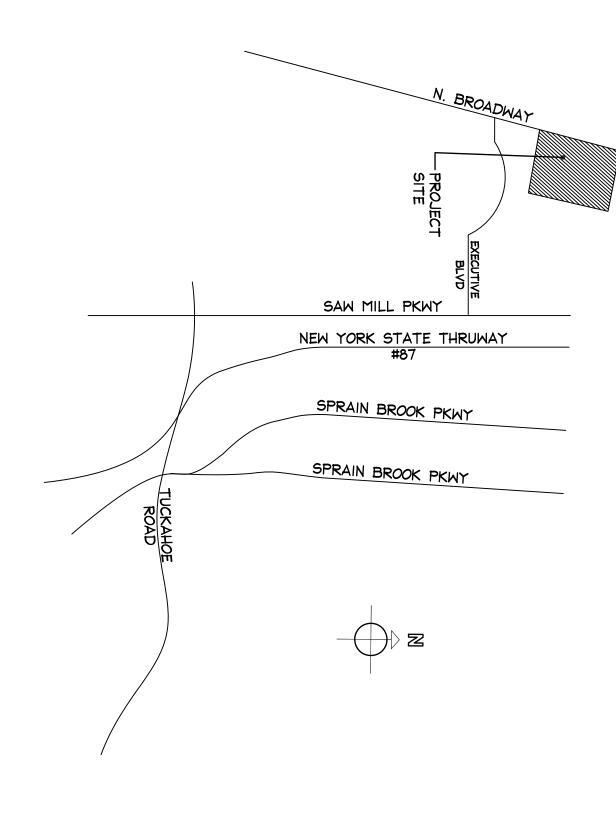
MILLENIUM FINITE™

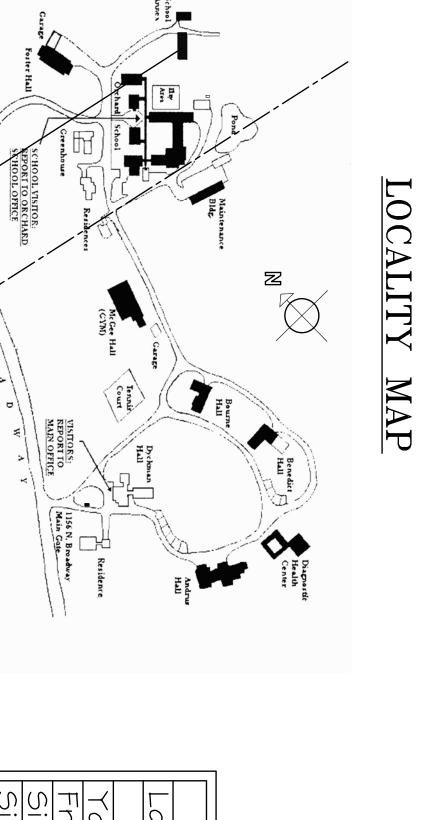
FN SERIES - Technical Data

DIMENSIONAL DATA



JLIA DYCKMAN ANDRUS MEMORIAL PROPOSED NEW (2) CLASSROOMS 1156 NORTH BROADWAY YONKERS, NEW YORK 10701





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+000+	Zoning		ASTING
			9
4 140	R-20		THE HUDSON

	Required/Min./Max.	Existing	Proposed	
Area	4 Acres	$\overline{}$	28.619989 Acres	9
S .				
ont	40'-0"	±822 ¹	±820 ¹	2
<u></u>	20'-0"	+535	+535	9
le Combined	50'-0"	±2,313 ¹	±2,313 ¹	9
2r	40'-0"	±1,100 ¹	±1,102 ¹	9
/erage				
ig. Coverage	15%	±3.93%	±3.95%	9
nd Coverage	40%	±11.598%	±11.61%	9
lg. Ht.	2.5 stories/ 35'	story/ '7"	story/ 15	<u> </u>

AREA OF PROPOSED WORK

DRAMIN	→ WALL MOUNTED LIGHT FIXTURE → CEILING LIGHT FIXTURE	FLOOD LIGHT FIXTURE	EMERGENCY LIGHT FIXTURE	EXIT SIGN	EMERGENCY LIGHT FIXTURE	•	SMOKE DETECTOR	GFI GROUND FAULT INTERRUPTER	# QUADRAPLEX OUTLET	∅ outlet	SMITCH	EXISTING WALL	NEW WALL 3-5% 25 ga @ 16" oc W/ 5" BOTH SIDES	DEMO WALL	STABOLS
DRAWING INDEX TITLE	f il			TELCOM PANEL	■ DATA OUTLET	ELEC PANEL	∇ TEL OUTLET	2'x2' FLUORESCENCE SURFACE MOUNTED LIGHT FIXTURE		2'x4' FLUORESCENCE SURFACE MOUNTED LIGHT FIXTURE			RETURN REGISTER	SUPPLY REGISTER	

GENERAL TI G

GENERAL NOTES, DRAWIN INDEX, MAP LOCATION, ZONING INFORMATION \$ SYMBOLS

SITE SI SITE PLAN S2 SITE PLAN

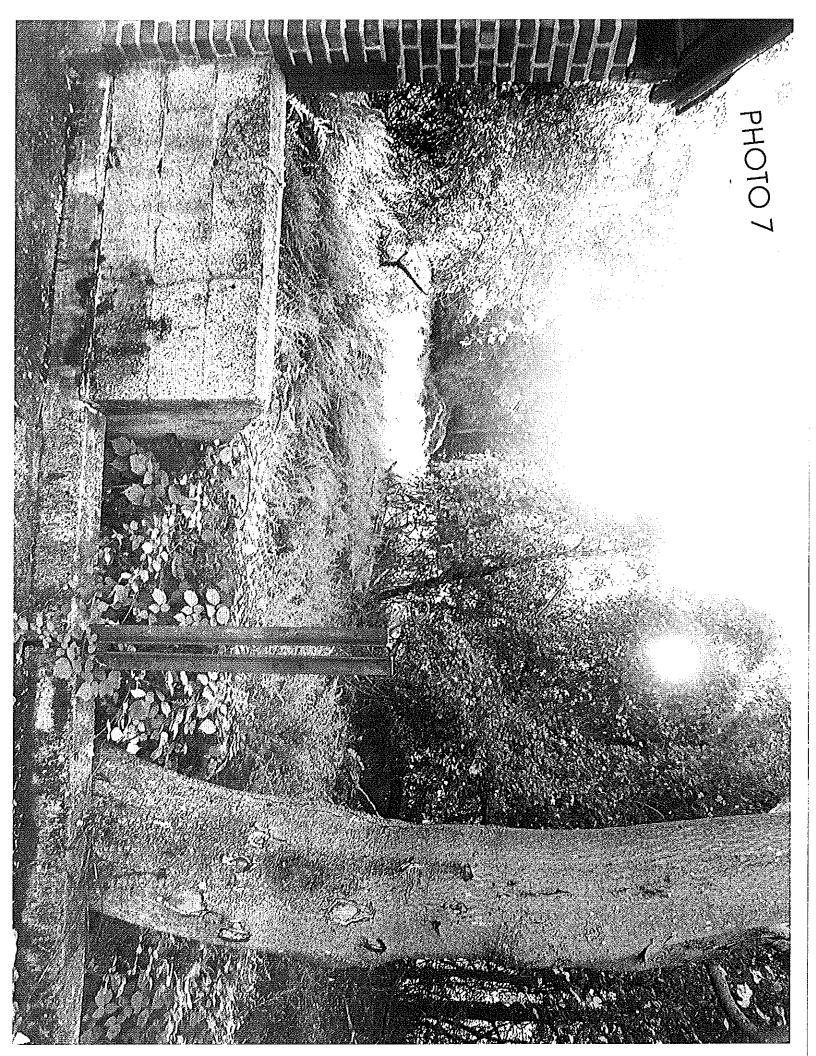
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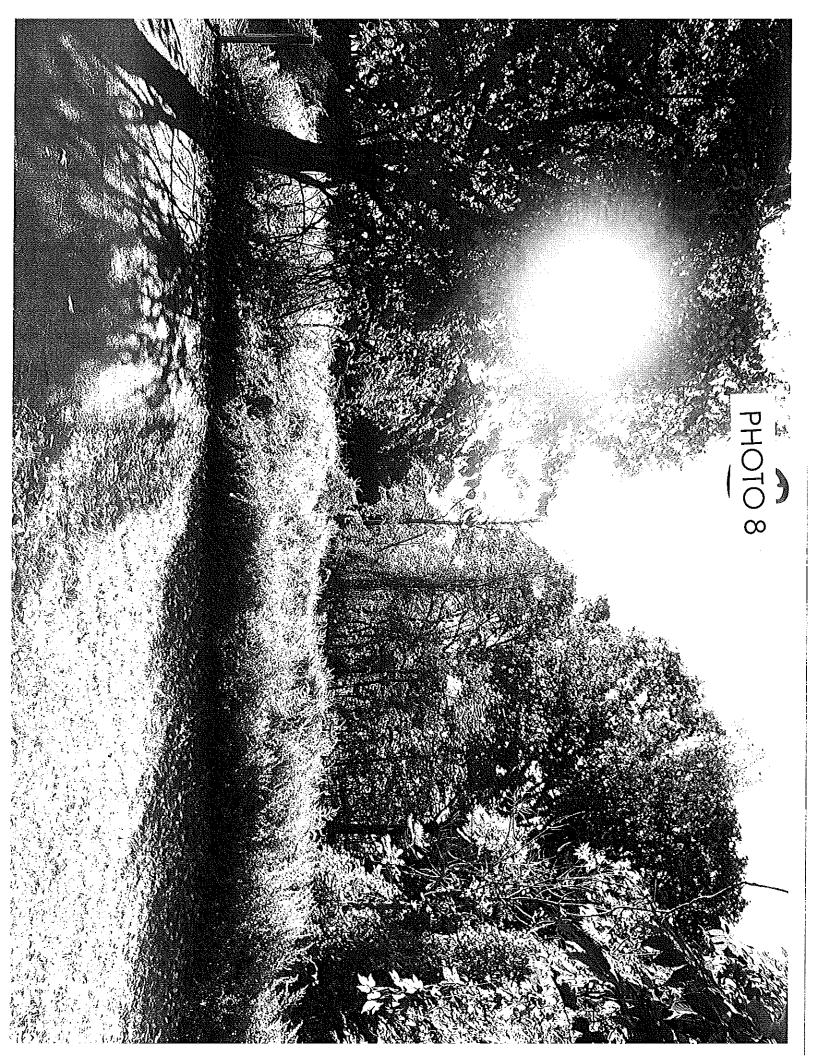
PLANS ELEVATIONS AND SECTIONS DETAILS AND TOPO/TREE SITE PLAN

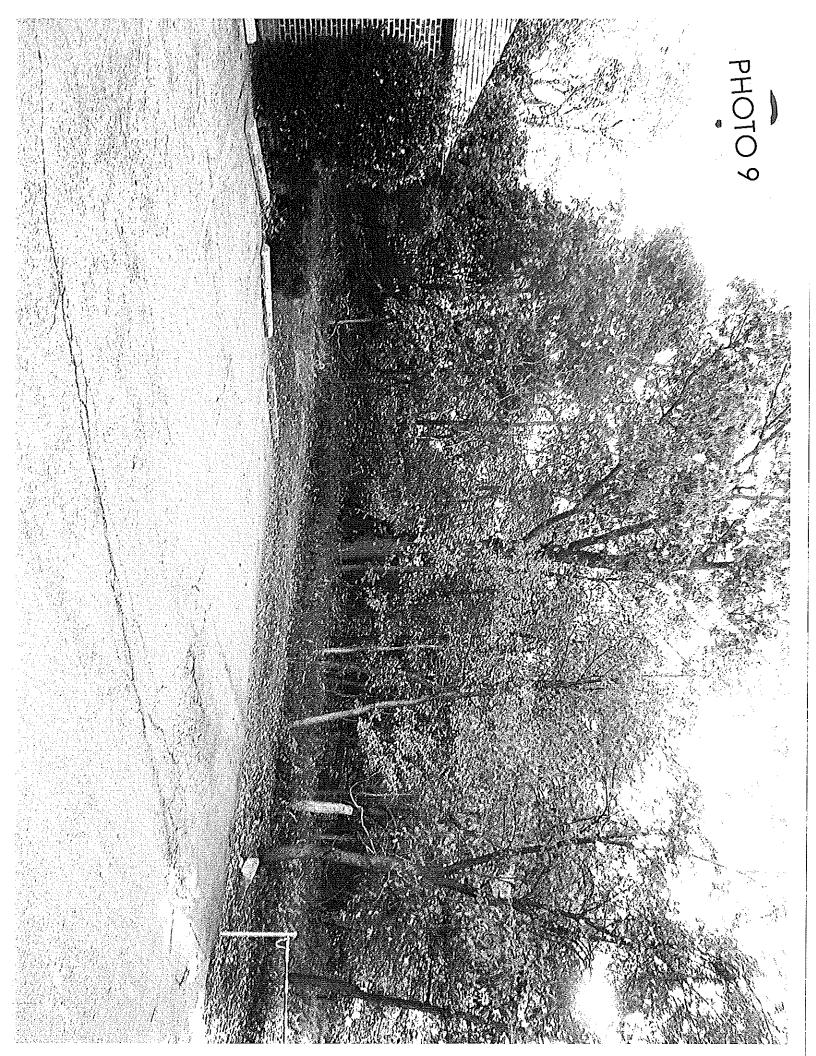
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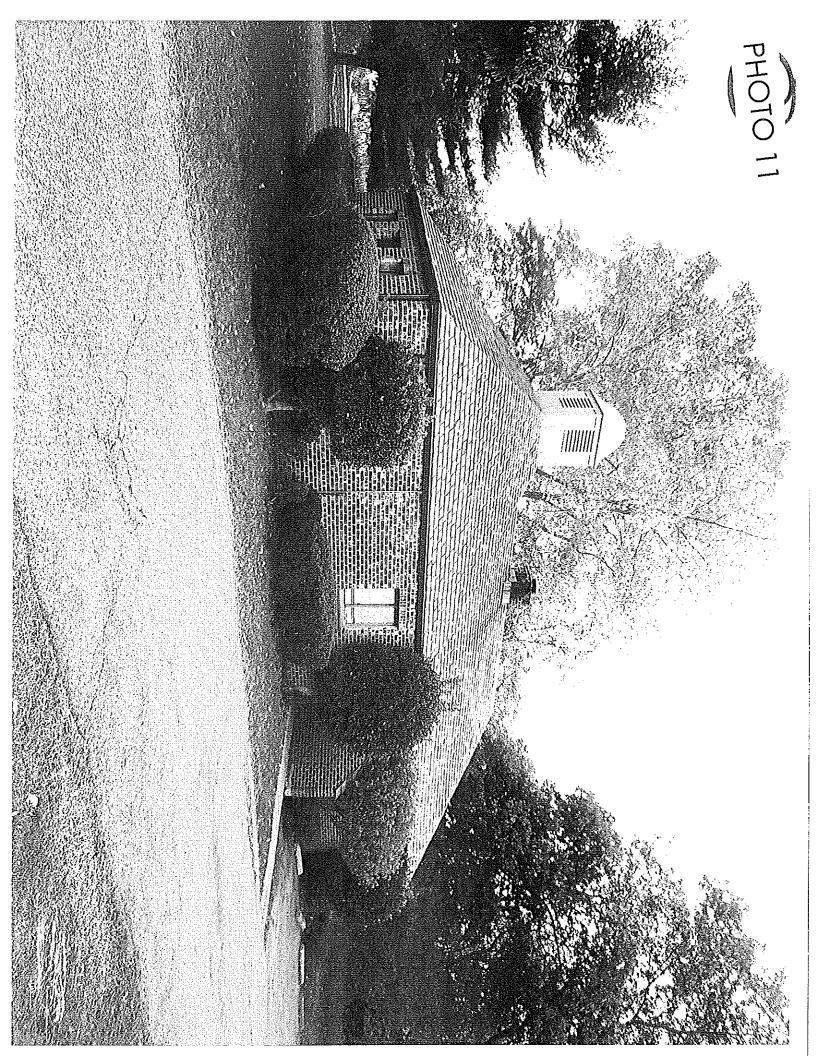
DRAWING NO.	JULIA DYCKMAN ANDRUS MEMORIAL	JULIA DYCKMAN ANDRUS	GARY SPILATRO, ARCHITECT	D A
NO. 1 OF 6	PROPOSED (2) NEW CLASSROOMS 1156 NORTH BROADWAY YONKERS NEW YORK 10701-1108	MEMORIAL 1156 NORTH BROADWAY YONKERS NEW YORK 10701-1108	92 NORTH AVENUE SUITE 204 NEW ROCHELLE, NY 10801 PHONE 914.738.7949 FAX 914.738.7940	TE REVISIO
JOB NO. 16110 DATE: 9-22-16 DRAWN BY: GS	GENERAL NOTES, DRAWING INDEX, MAP LOCATION, ZONING INFORMATION & SYMBOLS			BY BY

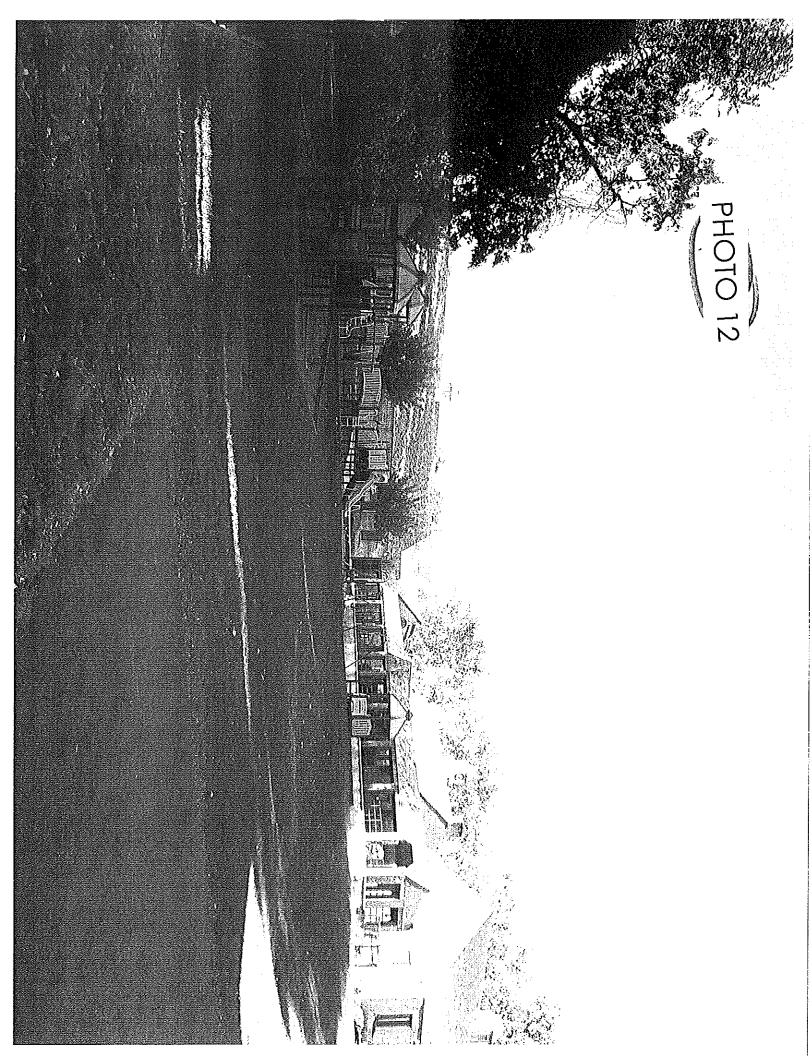


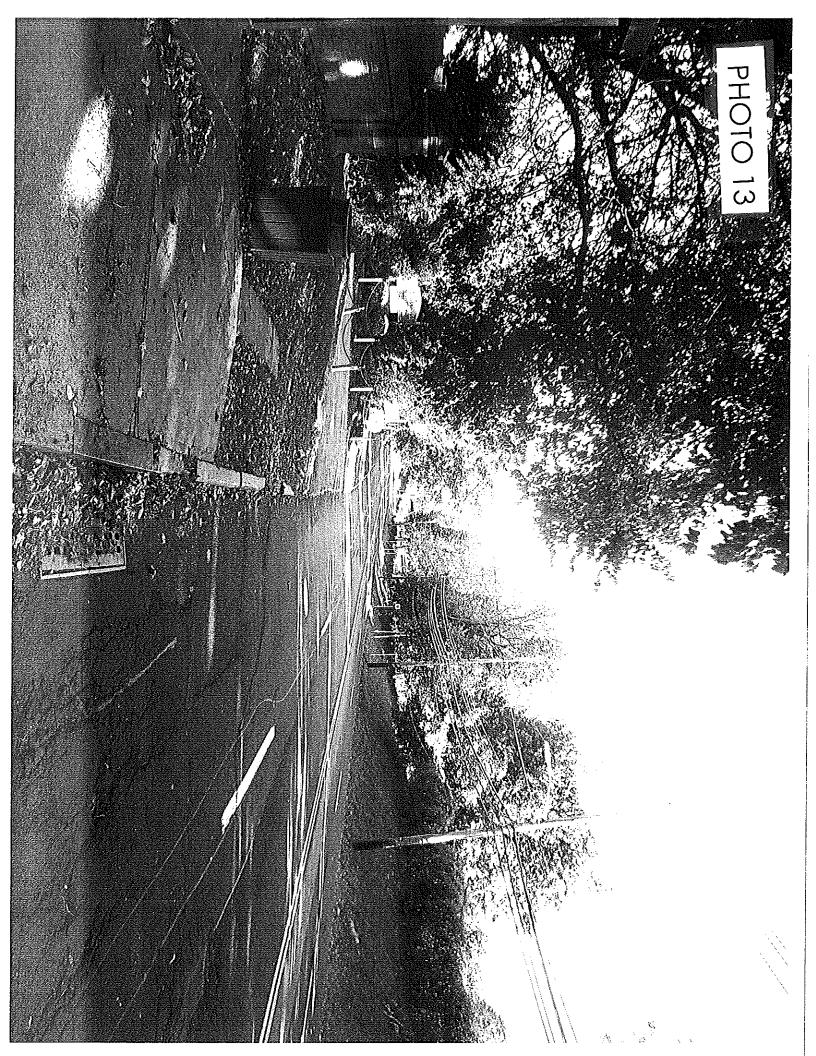


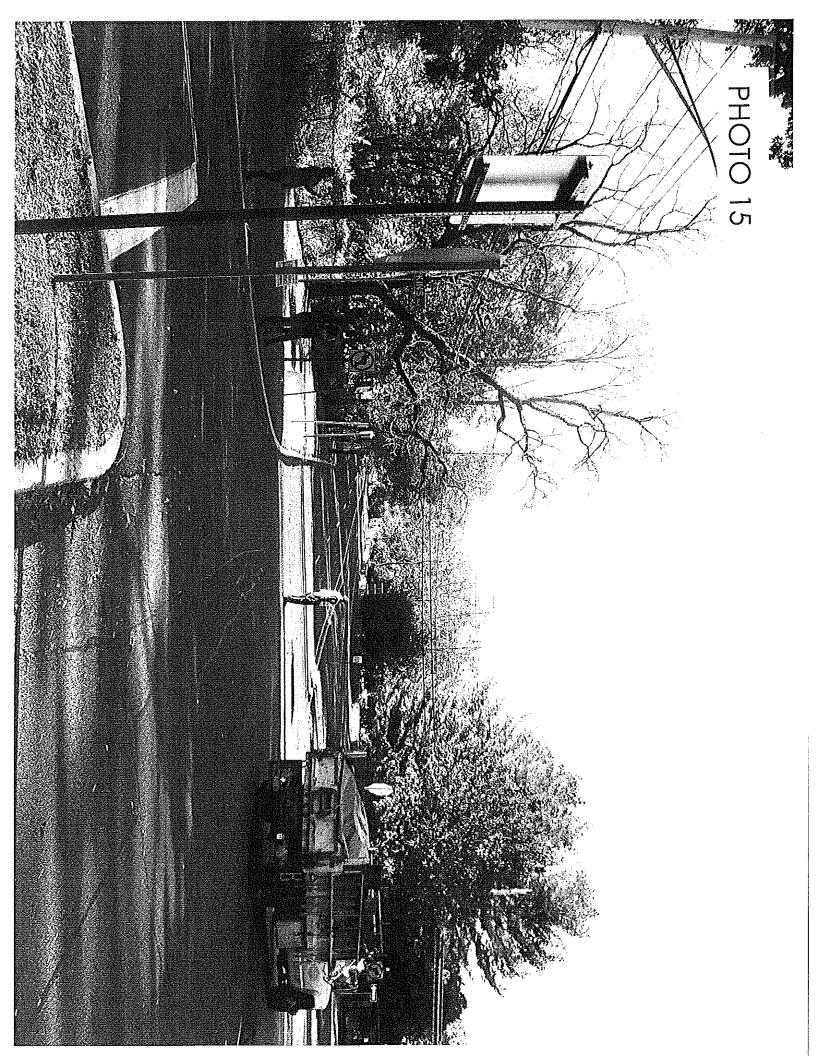






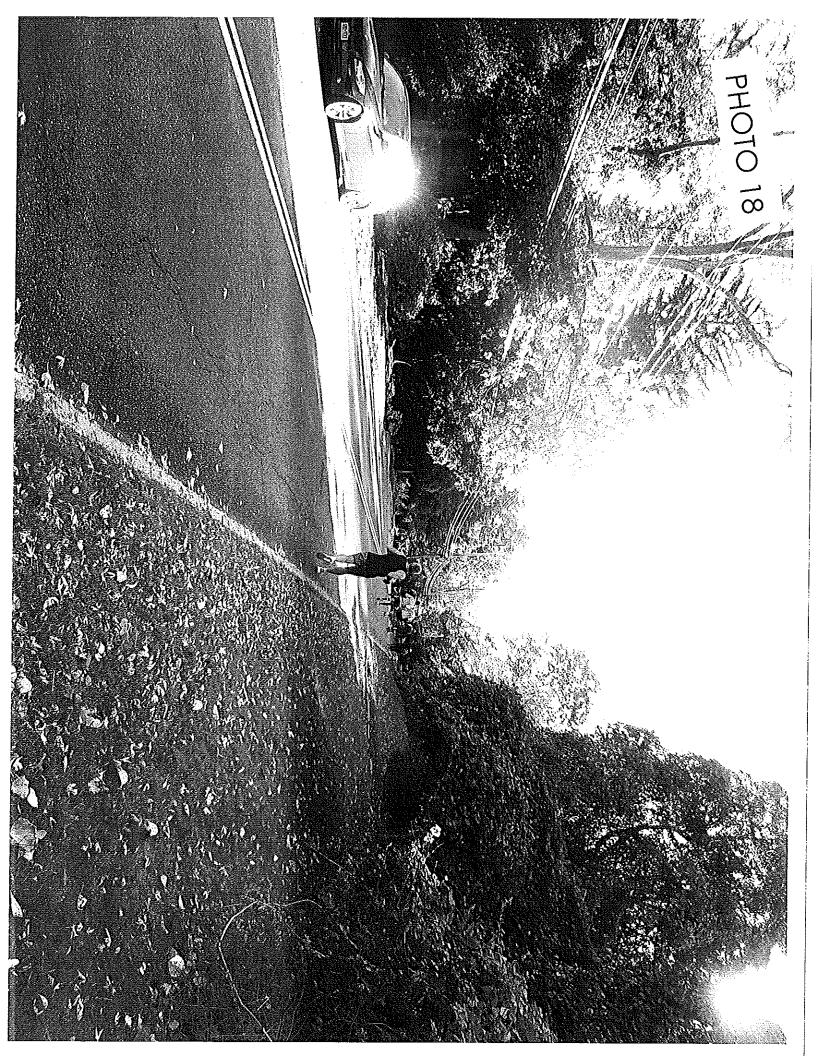






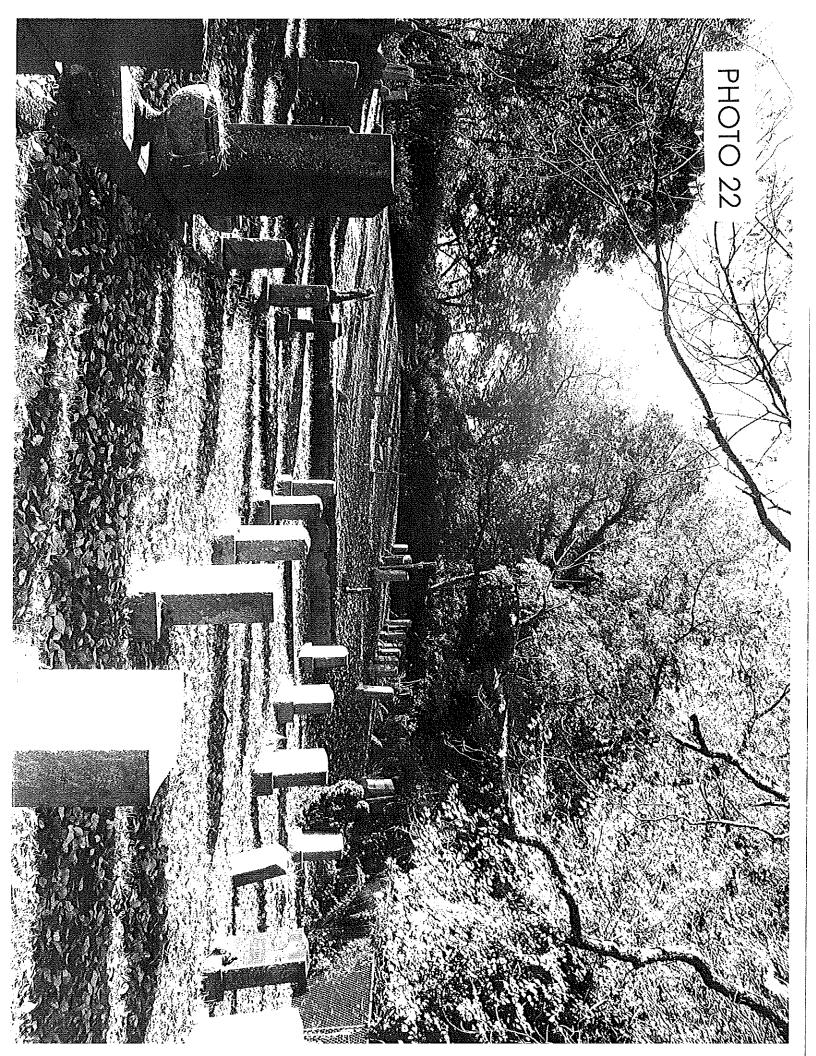






















(B)







2141 BROXTON ROAD DOUGLAS, GEORGIA 31533

Roofing Panel Colors

ors shown are not exact matches to the metal itself, but they have been matched as accurately as possible. vailability of colors are subject to change. Not all colors are available in all panel systems and gauges.



ENERGY STAR COLORS

ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices.

PRODUCT PERFORMANCE

Performance Standards

The Window and Door Manufacturers Association (WDMA), The American Architectural Manufacturers Association (AAMA) and the Canadian Standards Association (CSA) have jointly released AAMA/WDMA/CSA 101/I.S. 2/A440-11; North American Fenestration Standard/ Specification for Windows, Doors and Skylights, which calls for using "Performance Grade" as the new rating to describe products that comply to the standard. This new version dated "-11" has been adopted by the 2015 International Building Code (IBC) and the International Residential Code (IRC).

Performance Grade ratings are being used to replace Design Pressure Ratings as the preferred method of measuring product performance throughout the window, door and skylight industry to define products that comply with all of the requirements of the 101/1.S.2/A440 standard.

A product only achieves a "Performance Grade" or "PG" rating if that product complies with not only the structural loading requirement, but all other performance requirements such as air infiltration resistance, water penetration resistance, ease of operation and resistance to forced entry. A "Design Pressure Rating" or "DP" rating will now describe a product rating that has only been tested to structural loading and not air infiltration, water testing or other requirements for Performance Grade.

Performance Classes

This Standard/Specification defines requirements for four performance classes. The performance classes are designated R, LC, CW, and AW. This classification system provides for several levels of performance. Product selection is always based on the performance requirements of the particular project.

Elements of Performance Grade (PG) Designations

In order to qualify for a given performance grade (PG), test specimens need to pass all required performance tests for the following, in addition to all required auxiliary (durability) tests (not shown here) for the applicable product type and desired performance class:

- (a) Operating force (if applicable): minimum and maximum operating force vary by product type and performance class.
- (b) Air leakage resistance: tested in accordance with ASTM E283 at a test pressure of 1.57 PSF. The allowable air infiltration for R, LC & CW is 0.3 cubic feet per minute per square foot of frame (cfm/ft²)
- (c) Water penetration resistance: tested in accordance with ASTM E547 with the specified test pressure applied per AAMA/WDMA/CSA 101/I.S.2/A440-11. The test consists of four cycles. Each cycle consists of five minutes with pressure applied and one minute with the pressure released, during which the water spray is continuously applied. The water spray shall be uniformly applied at a constant rate of 5.0 U.S. gal/ft² hr.
- (d) Uniform load deflection test; tested in accordance with ASTM E330 for both positive and negative pressure (pressure defined by AAMA/WDMA/CSA 101/LS.2/A440-11) with the load maintained for a period of 60 seconds. After loads are removed there shall be no more permanent deformation in excess of 0.4% of its span and no damage to the unit which would make it inoperable.

Starting with the 2008 specification, design pressure (DP) will only represent the "uniform load deflection test."

- (e) Uniform load structural test: tested in accordance with ASTM E330 for both positive and negative pressure (pressure defined by AAMA/WDMA/CSA 101/I.S.2/A440-11) with the load maintained for a period of 10 seconds. After loads are removed there shall be no damage to the unit which would make it inoperable,
- (f) Forced-entry resistance (if applicable): tested in accordance with ASTM F588 (Windows), F476 (Swinging Doors) and F842 (Sliding Doors) at a performance level 10 rating.

Maximum Size Tested (MST)

Test size is a factor in determining compliance with this Standard/Specification. Each product type and class has a defined minimum set of requirements. The minimum test size increases with each class (i.e. R, LC, CW or AW).

Minimum Requirements

The minimum requirements to obtain a Performance Grade (PG) are listed below:

Product Performance Class	Minimum Performance Grade (PG) (PSF)	Minimum Design Pressure (DP) (PSF)	Minimum Structural Test Pressure (STP) (PSF)	Minimum Water Penetration Test Pressure (WTP) (PSF)
Windows and Doors				
RECEIVED	15	15	22.5	2.93
LC	25	25	37.5	3.75
CW	30	30	45.0	4.50
AW	40	40	69.0	6.03

- *Structural Test Pressure (STP)* is 150% of the Performance Grade (PG) for windows and doors.
- 'Water Penetration Test Pressure (WTP)' is 15% of the Performance Grade (PG).

Optional Higher Performance Grades (PG) & Corresponding Test Pressures (PSF)

MARKE.	PG20	PG25	P030	PG35	PG40	PG45	PG50	PG5S	PG60
WIP	3.00	3.75	4.50	5.25	6.00	6.75	7.50	8.25	9.00
DP	20	25	30	35	40	45	50	55	60
STP	30.0	37.5	45.0	52.5	60.0	67.5	75.0	82.5	90.0
Alr	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

- Forced Entry Resistance (FER) is always a performance level 10 regardless of Performance Grade (PG)
- . Minimum and maximum Operating Force varies by product type

Hallmark Certification

The Window and Door Manufacturers Association (WDMA) sponsored Hallmark Certification Program is designed to provide builders, architects, specifiers and consumers with an easily recognizable means of identifying products that have been manufactured in accordance with the appropriate WDMA and other referenced performance standards. Conformance is determined by periodic in-plant inspections by a third-party administrator. The inspections include auditing licensee quality control procedures and processes, and a review to confirm products are manufactured in accordance with the appropriate performance standards. Periodic testing of representative product constructions and components by a third-party testing laboratory is also required. When all of the program requirements are met, the licensee is authorized to use the WDMA Hallmark registered logo on the Certification Label as a means of identifying products.

Products successfully obtaining Hallmark Certification will be labeled with a 3-part code, which includes performance class, performance grade and maximum size tested.

Below is a sample certification label:

WDMA Hallmark Certified www.dta.com	Andersen Corporation 1.00 SERIES CASEMENT WINDOW Manufacturer Stipulates Conformance as Indicated below					
STANDARD	RATING					
AAMA/WDMA/CSA 101/I.S.2/A440-11	CLASS LC ⁽¹⁾ - PG40 ⁽²⁾ - SIZE TESTED 71 X 71 in. ⁽³⁾ DP+40/-40 ⁽⁴⁾					
AAMA/WOMA/CSA 101/I.S.2/A440-08	CLASS LOT - PG40 ²⁰ - SIZE TESTED 71 X 71 in. ⁴⁰ DP+40 <i>f</i> -40 ⁴⁵					

- (1) Performance Class
- (2) Performance Grade
- (3) Size Tested
- (4) Design Pressure

In the example above, the performance class is LC, the performance grade (PG) is 40 PSF and the size tested is 71" x 71". What this means to the specifier is, based on the optional higher performance grade chart, the laboratory tested air infiltration was less than 0.3 cfm/ft² (test pressure is always 1.57 PSF and the allowable airflow is 0.3 cfm/ft²), the product tested successfully resisted a laboratory water penetration test at a test pressure of 6.0 PSF (test pressure equals 15% of PG), the product tested successfully withstood a laboratory positive and negative structural test at a pressure of 60 PSF (test pressure equals 150% of performance grade) in both the positive and negative directions and the product tested passed the laboratory requirements for operational force and forced entry resistance. Based on this test, all products smaller in both width and height can be labeled with this product performance rating.

Important

Building codes prescribe <u>Performance Grade (PG)</u> based on a variety of criteria (i.e. windspeed zone, building height, etc.), therefore <u>structural test pressures</u> should <u>not</u> be used for code compliance. In the example above, a PG 40 performance grade rating, which passes a 40 PSF design pressure, should be used for determining code compliance, not the structural test pressure of 60 PSF.

If you need further details about how Andersen® products perform to this standard, contact your Andersen sympler.

If you need further information about the AAMA/WDMA/CSA 101/1.S.2/A440-11 standard or the Hallmark Certification Program please contact: WDMA, 330 N. Wabash Avenue Suite 2000 Chicago, IL 60611 Phone: 312-673-4828 Web: wdma.com

Where designated, Andersen products are tested, certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.



Performance Grade, Air Infiltration and Sound Transmission Ratings — 100 Series Windows and Patio Doors

For current performance information please visit andersenwindows.com.

	1	STANDARD GLASS AND STC UPGRADE							
Andersen* Product	AAVA/WDMA/CSA 101/LS.2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OffC)	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OHC)	Air influation CFIA/FI ²		
Casement Windows				ijakin ja ja kai					
Single & Twin (venting/stationary)	Class LC-PG40 Size Tested 71.5" x 71.5"	+40/-40	27	22	30	26	< 0.2		
Picture with Flanking Casements	Class LC-PG40 Size Tested 143.5" x 71.5"	+40/-40	-	. •	•		< 0.2		
Auning Windows									
Single & Twin (vanting/stationary)	Class LC-PG48 Size Tested 47.5° x 95.5°	+40/-40	27	22	30	26	< 0.2		
Picture over Awning	Class LC-PG40 Size Tested 47.5° x 95.5°	+40/-40	-	•		-	< 0.2		
Single-Hung Windows									
Arch Single-Hung	Class LC-PG30 Siza Tested 41.5" x 95.0"	+30/-30	•		•		< 0.2		
Single-Hung	Class LG-PG30 Size Tested 47.5° x 89.5°	+30/-30	25	21	32	26	< 0.2		
Twin & Triple Single-Hung	Class LC-PG30 Size Tested 143.5" x 71.5"	+30/-30	_	-	-	-	< 0.2		
Transom over Single-Hung	Class LC-PG30 Size Tested 47.5" x 95.5"	+30/-30	-		-		< 0.2		
Picture with Flanking Single-Hungs	Class LC-PG30 Size Tested 143.5" x 71.5"	+30/-30	-	•.	-	+	< 0.2		
Gilding Windows									
Gliding - XO/OX (active-stationary or stationary-active)	Class i C-PG30 Size Tested 71.5" x 71.5"	+30/-30	25	21	32	27	< 0.2		
Picture over Gliding - XO/OX	Class LC-PG30 Size Tested 143.5" x 71.5"	+30/-30		-	•	•	< 0.2		
Gilding - XOX (active-stationary-active)	Class LC-PG30 Size Tested 107.5° x 83.5°	+30/-30	-	+	=		< 0.2		
Picture over Gliding - XOX	Class LC-PG30 Size Tested 59.5" x 83.5"	+30/-30	•	•	-	-	< 0.2		
Picture, Transom & Specially Windows	Class LC-PG40 Size Tested 95.5" x 84.3"	+40/-40	26	21	31	26	< 0.2		
Gliding Patio Doors	Class LC-PG30 Size Tested 95.3" x 95.5"	+30/-30	28	23	29	26	< 0.2		
Patio Door Transoms	Class LC-PG30 Size Tested 95.3" x 23.3"	+30/-30	29	24	31	28	< 0.2		
Patio Door Sidelights	Class LC-PG30 Size Rested 47.3" x 95.3"	+30/-30	29	24	31	26	< 0.2		

Center of Glass Performance Data - 100 Series Windows and Patio Doors

For current performance information please visit andersenwindows.com.

		į			Facing		%RH	
Andersen* Product and Glass Type	Visible Light ¹	SC ²	SHGC ³	RHG4	Tuv ⁵	Tđư ⁶	@ center'	IGST ⁸
High-Performance Low-E Glass		gi djes istoj (ili						
Casement, Awning, Single-Hung and Glicing Windows	73%	0.48	0.42	98.7	17%	34%	£03	55.4
Picture, Transom & Specialty Windows	72%	0.47	0.41	97.5	16%	33%	60%	55.3
Gliding Patio Doors	72%	0.47	0.41	97.5	16%	33%	60%	55.3
Patio Door Sidelights & Transoms	72%	0.47	0,41	97.5	16%	33%	60%	55.3
High-Performance Low-E SmartSun* Glass								in Albert
Casement, Awning, Single-Hung and Gircing Windows	66%	0.31	0.27	65.3	5%	21%	61%	55.9
Picture, Transom & Specialty Windows	65%	0.31	0.27	64.9	5%	21%	61%	55.7
Giding Patio Doors	65%	0.31	0.27	64.9	5%	21%	61%	55.7
Patio Door Sidelights & Transoms	65%	0.31	0.27	64.9	5%	21%	61%	55.7
Dual-Pane Glass	33.344.7					productions.	1 (114,114)	
Casement, Awring, Single Hungland Officing Windows	83%	0.91	0.79	189	63%	65%	39%	43.6
Picture, Transom & Specialty Windows	82%	0.89	0.78	186	58%	61%	39%	43.6
Griding Patio Doors	82%	0.89	0.78	186	58%	61%	39%	43.6
Patia Door Sidelights & Transoms	82%	0.89	0.78	186	58%	61%	39%	43.6

^{• &#}x27;Performance Grade (PG)' ratings may vary from tested performance rating for larger or smaller units of a particular type.
• 'Sound Transm's sion Class (STC)' & 'Outdoor/Indoor Transmission Class (OTC)' ratings are for individual units based on Independent tests and represent entire unit

[•] This data is accurate as of August 2015. Due to ongoing product changes, updated test results, or new industry standards, this data may change over time.
• Where designated, Andersen products are certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, emirron mental

conditions and conditions of use.

• Contact your Andersen supplier for more information.

^{• &}quot;Low-E SmartSun" is an Andersen trademark for a type of "Low-E" glass.
• Based on NFRC testing/simulation conditions using Windows v7.3.4.0 and NFRC validated spectral data. 0°F outside temperature, 70°F inside temperature and a 15 mph wind.

¹⁾ Visible Transmittance (VT) measures how much light corres through the glass. The higher the value, from 0 to 1, the more daylight the glass lets in. Visible Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum. 2) Shading Coefficient defines the amount of heat gain through the glass compared to a single lite of clear 1/1 (3 mm) glass. 3) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass both directly transmitted and absorbed and eusequently released inward. The lower the value, the less real is transmitted through the glass of the direct part of the solar spectrum. The energy can cause fabric fading. (i) Transmission Damage Function (TDW). The transmission of UV and visible light energy in the 300-600 nanometer portion of the solar spectrum. The value includes both the UV and visible light energy that can eause fabric fading. This rating has also been referred to as the Krochmann Damage Function. This rating better predicts fading potential than UV transmission alone. The lower tha Damage Function rating, the less transmission of short-wave energy through the glass that can potentially cause fabric fading. Fabric type is also a key component of fading potential. 7) Percent relative humidity before condensation occurs at the center of glass, taken using center of glass temperature. 8) Inside glass surface temperatures are taken at the center of glass.

This data is accurate as of August 2015. Due to ongoing product changes, updated test results, or nex industry standards, this data may change over time. Contact your Ancersen supplier for current performance information or

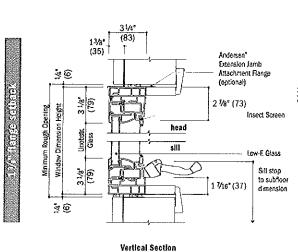
upgrade options.

Contact your Andersen supplier or visit ancersenvindows.com/infro for center of glass performance data on windows with laminated glass, patterned glass, tempered glass and products ordered with capillary breather tubes.

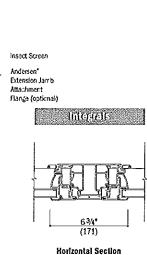
Andersen.

Casement Window Details

Scale $1^{1}/2^{11}(38) = 1^{1}-0^{11}(305) - 1:8$



Minimum Rough Opening Window Dimension Width Unobstructed Glass 27/24 1/4" (73) (6) (6) 35) [amb Clear sash projection Opening Width sss projection
16 14 ²⁹/₂2* (379)
19 17 ²⁹/₃2* (455)
20 20 ²⁹/₂2* (531)
23 23 ²⁹/₂2* (607)
26 26 ²⁹/₃2* (683)
29 29 ²⁹/₃2* (760)
30 32 ²⁹/₃2* (836) Low-E Glass Horizontal Section



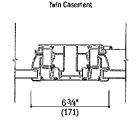
31/4" (83) (25) \$ @ <u>%</u>⊙ 2 1/8° (73) 31% Window Dimension Height Minimum Rough Opening insect Screen head Glass His Low-E Glass \$31 stop 318 to subfloor 1 1/16" (37) dimension *რ . ₩ (0)

2 7/8"
(73)

2 1/8"
(73)

Insect Screen

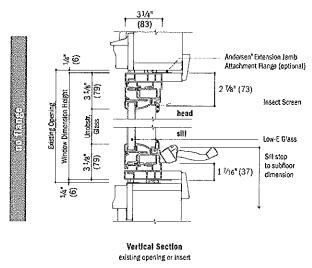
| 1/8" (3) | 1/8" | 1/8" | 1/8" (3) | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" |

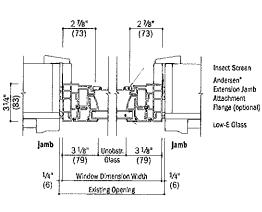


Horizontal Section
Picture with Flanking Casement

Vertical Section

Horizontal Section stucco exterior





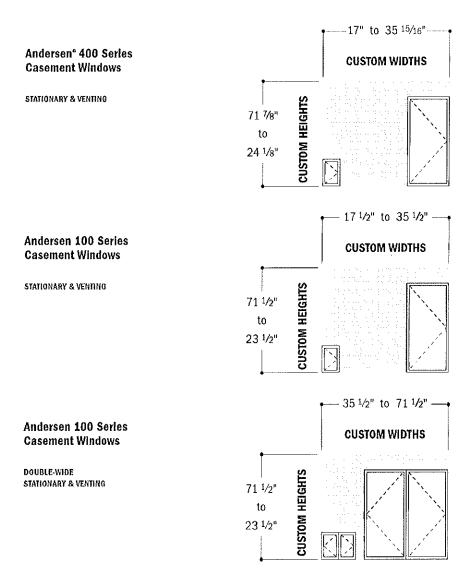
Horizontal Section
existing opening or insert

- Drip cap is required to complete window installation as shown, but may not be included with the window. Use of drip cap is recommended for proper Installation.
- Ught-colored areas are parts included with window. Dark-colored areas are additional Andersen* parts required to complete window ascembly as shown
- assembly as shown.

 Rough openings may need to be increased to allow for use of building wraps, flashing, slill panning, brackets, fasteners or other items.
- Details are for illustration only and are not intended to represent product installation methods or materials.
 Refer to product installation guides at andersenwindows.com.
- Dimensions in parentheses are in millimeters.

CUSTOM-SIZE MINIMUMS & MAXIMUMS AVAILABLE IN 1/8" INCREMENTS

Casement Windows



Aming Windows

