

# 8'-0" x 10'-0" (ACTUAL SIZE) 810 O/A GUARDHOUSE

## Twin Modular Services Inc.

1001 Lower Landing Road Suit 607, Blackwood , NJ

Example Drawing

DESIGN BASIS	
State/Jurisdiction	North Carolina
Building Code	2012 North Carolina Building Code
Mechanical Code	2012 North Carolina Mechanical Code
Electrical Code	2014 National Electrical Code
Plumbing Code	2012 North Carolina Plumbing Code
Energy Code	2012 North Carolina Energy Code

Project/Location:	Corning, Inc. 14566 US 601 Midland, NC
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STRUCTURAL DESIGN CRITERIA			
GRAVITY LOADS		SEISMIC (IBC)	
	Floor Live 50 psf	Seismic Design Category	D
	Floor Dead 10 psf	Site Class	D
	Roof Live 20 psf	Importance Category	1.0
	Roof Dead 10 psf	Occupancy Category	II
	Exterior Wall Dead 5 psf	Mapped Accelerations	
SNOW	Ground Snow Load 30 psf	$S_s$	0.51
	Flat-Roof Snow, $P_f$ 23.1 psf	$S_i$	0.15
WIND	Wind Speed (3 Second Gust) 90 mph	Spectral Response	
	Exposure Category C	$S_{DS}$	0.47
	Internal Pressure, $G_C$ +/-0.18	$S_{D1}$	0.21
	Base Wind Pressure, $P$ 15 psf	Seismic Force Resisting System	A13
	Mean Roof Height 15 ft	Design Base Shear	0.07W
WIND	Setback Greater than 10 feet to a common or assumed property line.	Response Modification Factor	6.5
	Building shall not be placed on the upper half of a hill or escarpment exceeding 15 feet in height.	Analysis Procedure	ASCE 7-05 Sec. 12.8
		FLOOD	
		Building shall not be located, in whole or in part, in a flood hazard area as established by the authority having jurisdiction unless set on a foundation designed in accordance with ASCE/SEI 25. The flood resistant foundation shall be designed by a registered design professional and constructed to resist all flood loads without transferring loads to the modular structure.	

LIFE SAFETY SUMMARY			
Construction type	VB		
Sprinkler Increase, $I_S$	1.00		
Frontage Increase, $I_F$	1.00		
Allowable Area Per Story, $A_A$	900 ft <sup>2</sup>		
Allowable Height Above Grade	2 stories		
	40 ft		
LEVEL	OCCUPANCY	AREA	OCCUPANT LOAD
1	B	80 ft <sup>2</sup>	1

DRAWING INDEX	
1.	Cover Sheet
1.1	General Notes
1.2	Specifications
2.	Elevations
3.	Floor Plan
3.1	Framing Details
3.2	Framing Details
4.	Electrical Plan
5.	Cross Section
6.	Blocking Plan

THIS PLAN MAY BE REVERSED OR MIRRORED.

#### ACCESSIBILITY EXCEPTIONS

1103.2.7 Raised areas. Raised areas used primarily for purposes of security, life safety, or fire safety including but not limited to, observation galleries, prison guard towers, fire towers or life guard stands are not required to be accessible or to be served by an accessible route.

1103.2.10 Single occupant structures. Single occupant structures accessed only by passageways below grade or elevated above ground including but not limited to, toll booths that are accessed by underground tunnels are not required to be accessible.

Note: Single occupant guard structures will be placed on and elevated entrance island to the park that does not have an accessible route.

#### SPECIAL LIMITATIONS

Adequate handicapped restroom facilities to handle this additional occupant load created by the addition of this building to a site shall be provided in an adjacent building on the same property. The local official having jurisdiction shall verify the existing facilities.

#### THERMAL ZONE

This buildings design complies with or exceeds the minimum requirements for thermal zone 3a.

#### ATTENTION LOCAL BUILDING OFFICIAL

All work to be completed on-site is to be in compliance with all state and local codes and is subject to review, approval, and inspection by the local authority having jurisdiction. This building is designed for installation on a permanent foundation and is not intended to be moved once installed. All on-site work shall be performed by a licensed contractor with experience in the setup of modular buildings. The following list is not all inclusive, nor does it limit the items of work or materials that may be required for complete installation.

- Complete foundation support and anchorage system.
- Ramps, stairs and general access to building.
- Electrical service connection (including feeders) to the building.

COMPONENTS AND CLADDING WIND LOADS		
Component	End Zone (psf)	Interior Zone (psf)
Windows & Siding	+17.7/-23.7	+17.7/-19.2
Doors	+15.0/-18.4	+15.0/-16.5
Roof Cladding	+10.0/-44.6	+10.0/-17.7
Roof Overhangs	-41.9	-25.5

#### NOTICE

These drawings are applicable only to the elements and loading criteria specifically provided herein. These drawings shall not be construed in any way to specify, certify or design any aspects of the building not contained herein. Elements not contained herein are to be constructed in accordance with the prescriptive requirements of the adopted building code or designed by other registered design professionals, as applicable. Specified design criteria are based solely on information provided by the client and must be verified and approved by the local authority having jurisdiction. NTA, Inc. is not responsible for fabrication or erection. If it is suspected that these drawings have been modified, substituted or altered in any way, contact NTA, Inc. directly to obtain a file copy.

NTA, Inc., 305 N Oakland Ave  
Nappanee, Indiana 46550  
Engineering COA No. C-3412

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1014 2008-05-28

REVISIONS:	SCALE: NTS	APPROVED BY:	<b>Twin Modular Services Inc.</b> Blackwood , NJ	TITLE: COVER SHEET	JOB NO: TMS063017-24
	DATE: 07/06/2017	DRAWN BY: EAB		MODEL: 810 GUARDHOUSE	DRAWING NO: 1

**WOOD FRAMING**

- Structural sawn lumber shall be identified by a grade mark in accordance with DOC PS 20.
- Approved end-jointed lumber may be use interchangeably with solid-sawn member of the same species and grade except in fire rated assemblies.
- Structural sheathing shall be rated and labeled for compliance with DOC PS 1 or DOC PS 2.
- LVL members shall have the following minimum properties, E=2.0, F<sub>v</sub>=2800 psi, unless noted otherwise.
- All wood shall have a moisture content of 19% or less at the time of construction.
- Wood framing members, including wood sheathing, that rest on exterior foundation walls and are less than 8" from exposed earth each shall be naturally durable or preservative treated.
- Wood members shall be cut and joined so no gap larger than 1/8" exists between members.
- Wood in contact with concrete or masonry shall be naturally durable or preservative treated in accordance with AWPA use category UC4C and properly identified as preservative treated.
- Nails and staples shall conform to ASTM F1667. Nails with shank diameters of 0.099" but not larger than 0.142" shall have a minimum average bending yield strength, F<sub>by</sub> = 100 ksi.
- Fasteners shall be installed to avoid splitting of the wood members. If splitting occurs, the connection shall be made by alternate means or otherwise reinforced under the direction of the design engineer.
- Fasteners shall be driven so their head or crown is flush with the surface of the wood member or sheathing. Overdriven fasteners shall be replaced.
- Bolts shall conform to ASTM A307 meeting the requirements of ANSI/ASME B18.2.1 for full-body diameter bolts. Screws and lag screws shall conform to ANSI B18.2.1 and ANSI B18.6.1, respectively.
- Bolt holes shall be at least a minimum of 1/32" and no more than a maximum of 1/16" larger than the bolt diameter.
- Bolt nuts shall be finger-tight plus 1/3 to 1/2 turn with a hand wrench.
- Connection hardware shall be the brand and model specified. Alternate connectors shall be submitted to the design engineer for approval.
- Unless otherwise noted, connectors shall be installed with the maximum number and size of fasteners as required in the manufacturer's installation instructions.
- Prefabricated wood I-joist and structural composite lumber shall not be notched or drilled except where permitted by the manufacturer's recommendations.
- Plywood beams shall be detailed and fabricated in accordance with the latest edition of APA Plywood Design Specification Supplement 5 - Design & Fabrication of All-Plywood Beams.
- Douglas Fir, Hem Fir, or Southern Yellow Pine may be substituted for Spruce-Pine-Fir using an equal size and grade.

**CORROSION PROTECTION**

- Metal framing, connectors, fasteners, and flashing in contact with preservative treated or fire retardant treated wood members shall be hot-dipped zinc coated galvanized steel, stainless steel, silicon bronze, copper, or otherwise protected from the corrosive action of the wood member.
- A barrier between the treated members can be used when approved by the design engineer.
- Selection of the appropriate connector and fastener coating shall be based on the intended end use of the connector or fastener and the chemical preservative used in the the treatment of the member for which it is in contact.
- Where connection hardware is used, such as joint hangers, fasteners used shall be made of the same material as the connection hardware.
- Corrosion protection of metal connectors, fasteners, and flashing based on galvanized or stainless steel materials shall be in accordance with the table below.

Product Coatings	Hot Dipped Galvanized (ASTM A153)		Stainless Steel
	G90	G185	
Untreated Wood SBX/DOT CCA-C	Yes	Yes	Yes
ACQ-C & ACQ-B CBA-A & CA-B NON-DOT No Ammonia and Not Rated For Ground Contact	No	Yes	Yes
Unknown Preservative, Contains Ammonia, Rated For Ground Contact or ACZA	No	No	Yes

SBX = DOT Sodium Borate, CCA-C = Chromated Copper Arsenate, ACQ-C & ACQ-D = Alkaline Copper Quat, CBA-A & CA-B = Copper Azote, Non-DOT = Other Borate, ACZA = Ammoniacal Copper Zinc Arsenate

**COASTAL CORROSION PROTECTION**

- The corrosion protection requirements in this sections shall apply to all structures located within 3000' landward of the mean high-tide waterline for all metal components or connectors not contained within the pressure envelope of the structure.
- Fasteners or bolts less than 5/8" in diameter shall be Type 316L stainless steel. Fasteners or bolts 5/8" or larger shall be hot dip galvanized per ASTM A653 or ASTM A153 with a zinc coating thickness of 1.85 oz of zinc per square foot of surface area (G185).
- Connection hardware, such as pre-formed connectors, steel plates, or steel straps, exposed to weather and having a base metal thickness equal to or less than 1/8" shall be Type 303, 304, 305 or 316 stainless steel. Steel exposed to weather having a base metal thickness greater than 1/8" shall be hot dip galvanized per ASTM A653 or ASTM A153 with a zinc coating thickness of 1.85 oz of zinc per square foot of surface area (G185) or painted using one of the following formulations:
  - Epoxy-polyamide
  - Coal-tar epoxy-polyamide
  - Zinc chromate-vinyl butyral primer with asphaltic mastic
- Contact between dissimilar materials (stainless steel and carbon steel) shall be avoided.

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06.04 2007-06-19

REVISIONS:	SCALE: NTS	APPROVED BY:
	DATE: 07/06/2017	DRAWN BY: EAB

**Twin Modular Services Inc.**  
Blackwood , NJ

TITLE: GENERAL NOTES	JOB NO: TMS063017-24
MODEL: 810 GUARDHOUSE	DRAWING NO: 1.1

**CHASSIS** 4" C Channel 5.4 lbs per ft.  
 Type: Perimeter Main Beam: ~~6" C Channel 8.2 lbs per foot~~  
 Cross Members: ~~6" C Channel~~ at 24" o.c.  
 Paint: ~~Asphalt Based~~ Marine Based Epoxy-Black

**FLOOR**  
 Moisture Barrier: Tyvek or Equal  
 Insulation: 2 Layers of 2" Ridged Insulation ~~R-19~~  
 Decking: 3/4" T&G Plywood Fastened Directly to Steel Floor Joist  
 Covering: 1/8" Aluminum Tread Plate Flooring  
 Trim: 4" Vinyl Cove Base

**EXTERIOR WALLS**  
 Studs: 2x4 Stud Grade SPF at 16" o.c.  
 Bottom Plate: Single 2x4 #3 SPF  
 Top Plate: Single 2x4 #3 SPF  
~~Steel Tube: 3"x3"x3/16" Steel Tube Beams and Corner Posts~~ Optional  
 Wall Height: 8'-3"  
 Finished Ceiling Height: 90" AFF  
 Insulation: R-13 Kraft-Backed Batts  
 Interior Wall Covering: 1/8" Vinyl Covered Panel (Class III)

**ROOF**  
 Type: Rafter, 2x8 #3 SPF at 16" o.c. Bow Type  
 Ceiling: 2'x4' T-Grid Drop Ceiling at 7'-9" AFF  
 Insulation: R-30 Kraft Unfaced Fiberglass Batts  
 Overhang: 3" Overhang All Sides- Building Not to Exceed 102"

**ELECTRICAL**  
 Main Distribution Panel: Exterior Surface Mount, 100 Amp. Single Phase, 3 wire, 60 HZ  
 Raceway: Minimum #14/2 with Ground 90 Deg. C Type MC Copper  
 Interior Lights: Lithonia 2'x4' LED Panels Per Print, 54W or Equal  
 Exterior Lights: 150 Watt Quartz Security Light (Weatherproof), Allpro LG LED FLD LT BZ-DNI 27.6W or Equal  
 Switches: 120V 15 Amp Duplex Recepts Per Print  
 Recepts: Duplex Recepts per Print 110V 15 Amp

**HVAC**  
 Heating: 220V, 20 Amp, 3,000 Watt Wall Mount, Dedicated Circuit  
 Air Conditioning: 115V (Dedicated Circuit) 8,000 BTU Wall Mount Approx 75" AFF

**EXTERIOR WINDOWS AND DOORS**  
 Doors: 36x80 Steel Door with 22" x36" window (Safety Glazed) Ball Hardware  
 Windows: 36"x39" Horizontal Slider, Vinyl Clad Thermal Pane Tempered Per Print  
 (3) 36"x39" Horizontal Slider, Vinyl Clad Thermal Pane, Low-E Per Print  
 (3) 46"x39" Fixed Glazing, Vinyl Clad Thermal Pane Tempered, Low-E Per Print

**EXTERIOR FINISHES**  
 Siding: 0.19 Aluminum Light Gray  
 Trim: 0.19 Aluminum Dark Gray  
 Wall Sheathing: 7/16" OSB, 24/16 APA Span Index Rating  
 Roof Sheathing: 1/2" CDX Plywood, 32/16 Span Rating  
 Roof: 0.45 EPDM Rubber Roofing  
 Window Trim: ~~2-1/2" Non-Corrosive Solid Vinyl Painted White~~  
 1-1/2" Aluminum-White

**FURNITURE**  
 Desk Top: 2'x7'-4" Laminated 30" aff

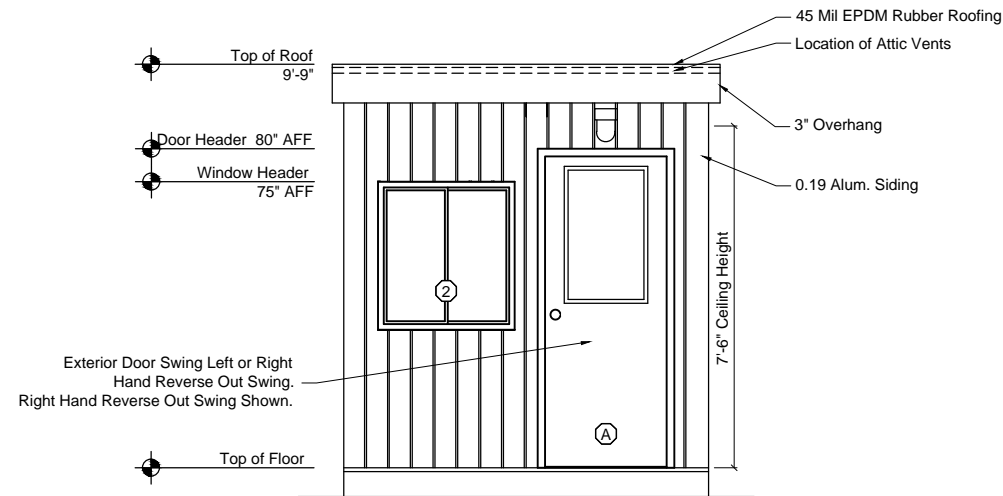
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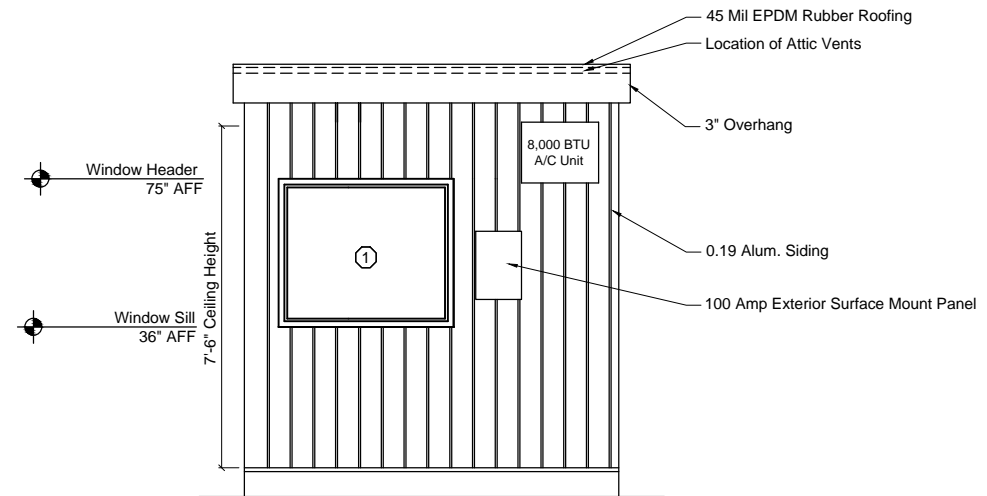
06.04 2007-06-19

REVISIONS:	SCALE: NTS	APPROVED BY:	<b>Twin Modular Services Inc.</b> Blackwood , NJ	TITLE: SPECIFICATIONS	JOB NO: TMS063017-24
	DATE: 07/06/2017	DRAWN BY: EAB		MODEL: 810 GUARDHOUSE	DRAWING NO: 1.2

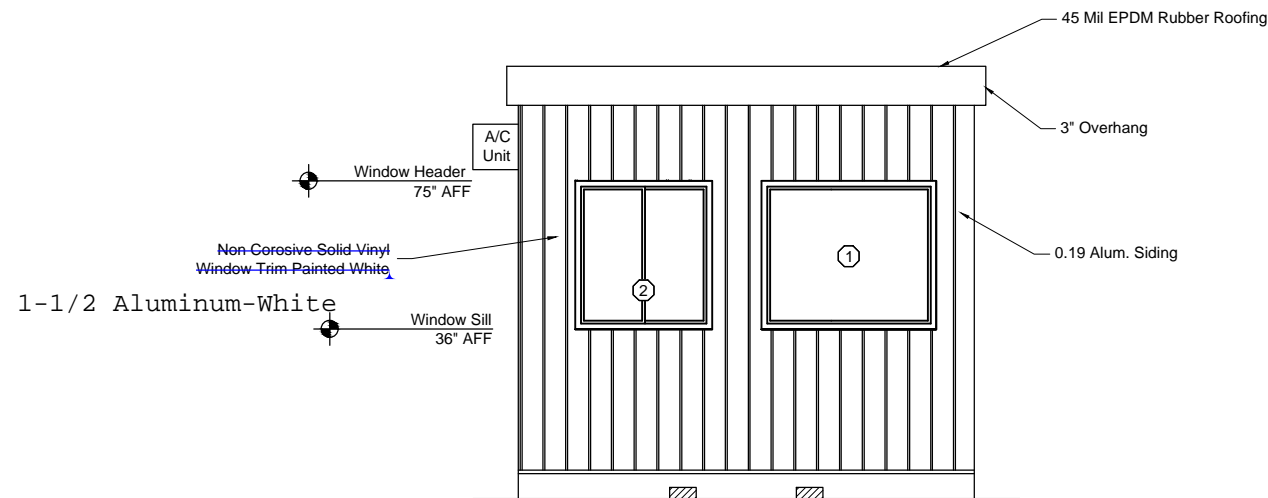
# PLAN A ELEVATIONS



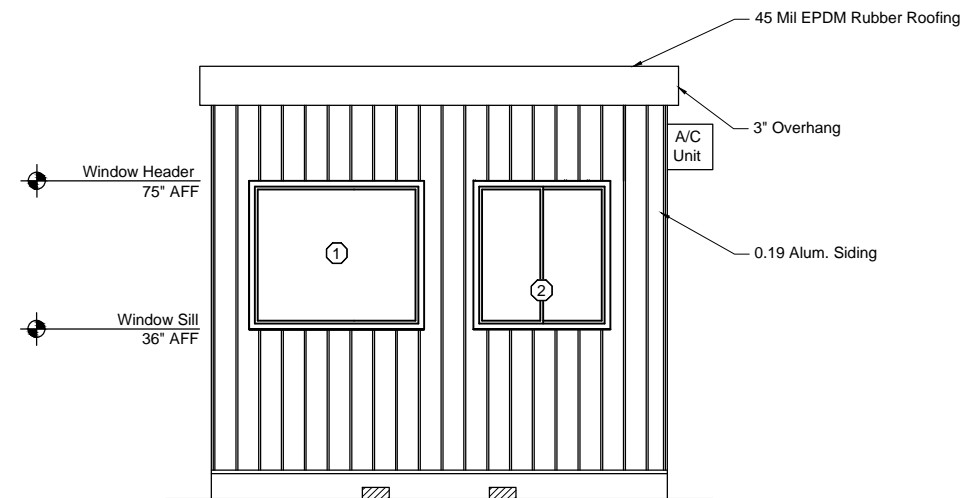
FRONT ELEVATION  
SCALE: 1/4" = 1'-0"



REAR ELEVATION  
SCALE: 1/4" = 1'-0"



LEFT ELEVATION  
SCALE: 1/4" = 1'-0"



RIGHT ELEVATION  
SCALE: 1/4" = 1'-0"

DOOR SCHEDULE	
Mark	Description
(A)	36" x 80" Steel Door with 22 x 36 SG Vision
WINDOW SCHEDULE	
Mark	Description
(1)	46" x 39" Fixed, Vinyl Clad Thermal Pane, Tempered Safety Glazing, Low-E
(2)	36" x 39" Horizontal Slider, Vinyl Clad Thermal Pane, Tempered Safety Glazing, Low-E

**ATTIC VENTILATION**  
Vents shall be installed to provide a total net free ventilating area not less than 1/150 of the area of the space being ventilated. Vents shall be positioned to provide cross ventilation.

96 Area /150= 0.64 sq. ft. Ventilation Required

**SITE INSTALLED ITEMS**  
Steps, rails, and decks are to be designed by others and built on-site in accordance with local codes and subject to approval by the local authority having jurisdiction.

**HEIGHT ABOVE FINISHED GRADE**  
Wood framing members, including wood sheathing, that are less than 8" from exposed earth shall be of naturally durable or preservative-treated wood.

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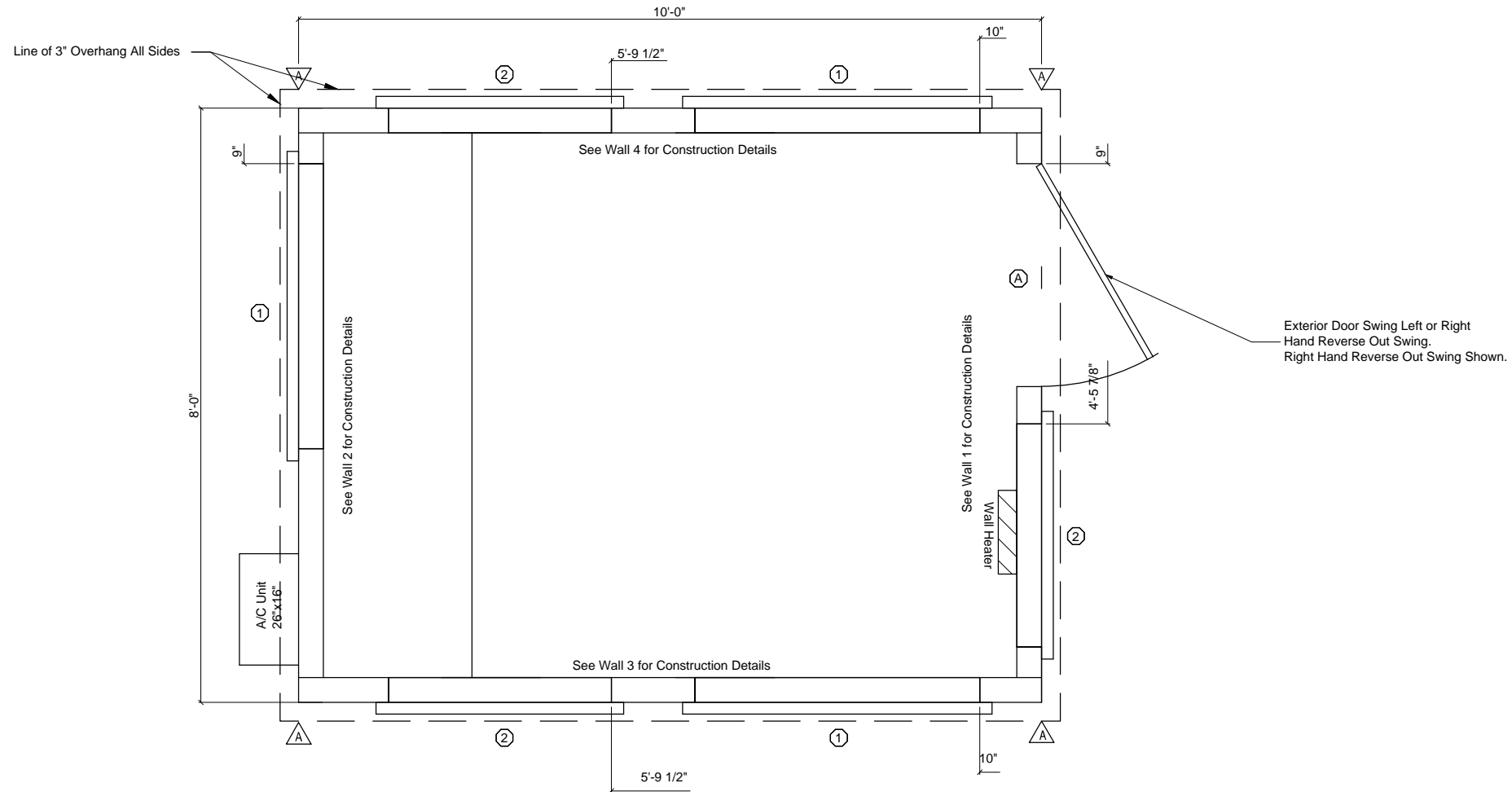
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	DATE: 07/06/2017	DRAWN BY: EAB

**Twin Modular Services Inc.**  
Blackwood , NJ

TITLE: ELEVATIONS PLAN A	JOB NO: TMS063017-24
MODEL: 810 GUARDHOUSE	DRAWING NO: 2

0105.1151 2008-12-02



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BUYER ACCEPTANCE PLAN A SIGN AND DATE

**GENERAL**

1. All glazing within 24" arc of doors, whose bottom edge is less than 60" above the floor, and all glazing in door shall be safety glazed, tempered or acrylic plastic sheet.
2. Minimum corridor width shall not be less than 36".
3. Exterior windows and sliding doors shall be labeled as conforming to AAMA/WDMA/CSA101/1.S.2/A440.
4. Windows in buildings located in windborne debris regions shall be protected in accordance with Section 301.2.1.2 of the residential code.

**SHEARWALL CONSTRUCTION**

1. Alternate holdown of equal or greater capacity may be substituted for holdowns specified.
2. Holdowns to be installed in accordance with manufacturer's installation instructions.

**SHEARWALL SCHEDULE**

Mark	Sheathing	Fastening	Framing
A	7/16" Structural Sheathing, One Side, Blocked	0.113" x 2.5" nails 6/12 (edge/field)	2x4 SPF @ 16" oc

**DOOR SCHEDULE**

Mark	Description	Hardware	Header	Jack Studs	Jamb Studs
A	36" x 80" Steel Door with 22 x 36 SG Vision	Ball Knob	(1) 2x4 #2 SPF	1	1

**WINDOW SCHEDULE**

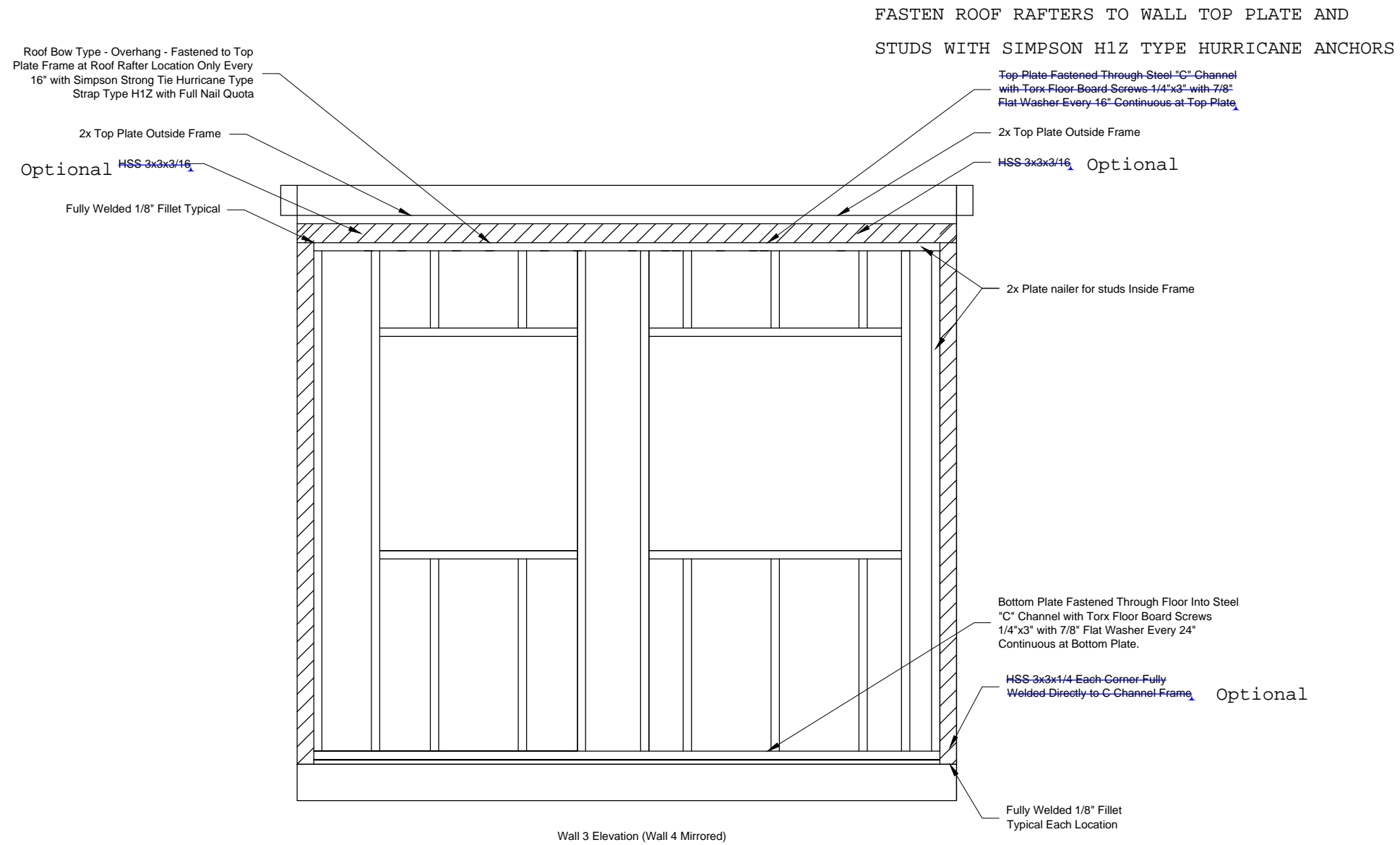
Mark	Description	Glazed Area	Vent Area	Header	Jack Studs	Jamb Studs
1	46" x 39" Fixed, Vinyl Clad Thermal Pane, Tempered Safety Glazing, Low-E	12.45 ft <sup>2</sup>	0 ft <sup>2</sup>	(1) 2x4 #2 SPF	0	1
2	36" x 39" Horizontal Slider, Vinyl Clad Thermal Pane, Tempered Safety Glazing, Low-E	9.75 ft <sup>2</sup>	4.87 ft <sup>2</sup>	(1) 2x4 #2 SPF	0	1

REVISIONS:	SCALE: 1/2" = 1'-0"	APPROVED BY:
	DATE: 07/06/2017	DRAWN BY: EAB

**Twin Modular Services Inc.**  
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TITLE: FLOOR PLAN A	JOB NO: TMS063017-24
MODEL: 810 GUARDHOUSE	DRAWING NO: 3

10106 2008-09-23



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**Twin Modular Services Inc.**  
 Blackwood , NJ

TITLE: FRAMING DETAILS	JOB NO: TMS063017-24
MODEL: 810 GUARDHOUSE	DRAWING NO: 3.1

FASTEN ROOF RAFTERS TO WALL TOP PLATE AND STUDS WITH SIMPSON H1Z TYPE HURRICANE ANCHORS

Roof Bow Type - Overhang - Fastened to Top Plate Frame at Roof Rafter Location Only Every 16" with Simpson Strong Tie Hurricane Type Strap Type H1Z with Full Nail Quota

Top Plate Fastened Through Steel "C" Channel with Torx Floor Board Screws 1/4"x3" with 7/8" Flat Washer Every 16" Continuous at Top Plate

2x Top Plate Outside Frame

HSS 3x3x3/16

Fully Welded 1/8" Fillet Typical

AC Unit Framing (If Applicable)

2x Plate nailer for studs Inside Frame

Roof Bow Type - Overhang - Fastened to Top Plate Frame at Roof Rafter Location Only Every 16" with Simpson Strong Tie Hurricane Type Strap Type H1Z with Full Nail Quota

Top Plate Fastened Through Steel "C" Channel with Torx Floor Board Screws 1/4"x3" with 7/8" Flat Washer Every 16" Continuous at Top Plate

2x Top Plate Outside Frame

HSS 3x3x3/16

Optional

Fully Welded 1/8" Fillet Typical

2x Plate nailer for studs Inside Frame

Bottom Plate Fastened Through Floor Into Steel "C" Channel with Torx Floor Board Screws 1/4"x3" with 7/8" Flat Washer Every 24" Continuous at Bottom Plate.

Bottom Plate Fastened Through Floor Into Steel "C" Channel with Torx Floor Board Screws 1/4"x3" with 7/8" Flat Washer Every 24" Continuous at Bottom Plate.

Optional HSS 3x3x3/16 Each Corner Fully Welded Directly to C Channel Frame

Fully Welded 1/8" Fillet Typical Each Location

Optional HSS 3x3x3/16 Each Corner Fully Welded Directly to C Channel Frame

Fully Welded 1/8" Fillet Typical Each Location

Wall 2 Elevation

Wall 3 Elevation

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PLAN A WALL DETAILS

0106 2008-09-23

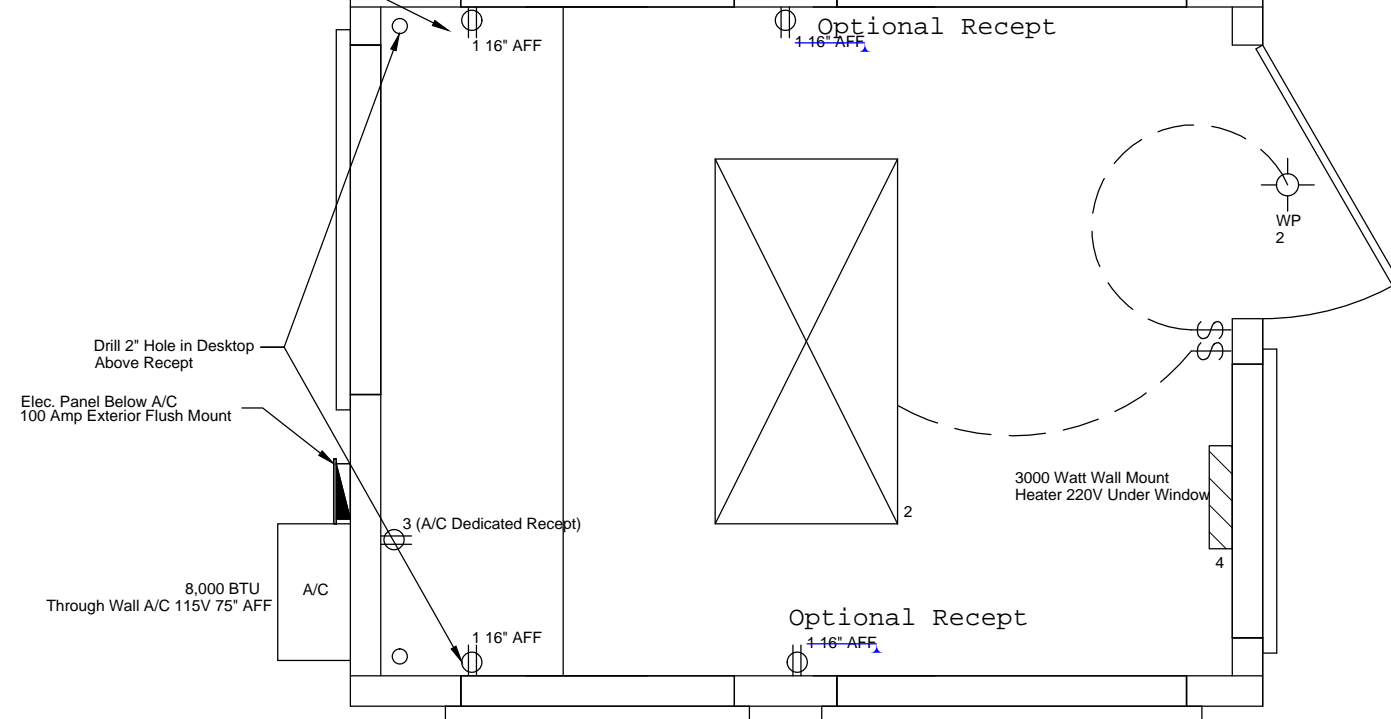
REVISIONS:	SCALE: 1/2" = 1'-0"	APPROVED BY:
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**Twin Modular Services Inc.**  
Blackwood , NJ

TITLE: FRAMING DETAILS	JOB NO: TMS063017-24
MODEL: 810 GUARDHOUSE	DRAWING NO: 3.2

File Cabinet Optional

2'x7'4" Desk Top with File Cabinet 30" aff



Drill 2" Hole in Desktop Above Receipt  
Elec. Panel Below A/C 100 Amp Exterior Flush Mount

8,000 BTU Through Wall A/C 115V 75" AFF

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**Electrical Specifications**

Product	Manufacturer	Model and Specifications
3,000 Watt Wall Mount Heater	Marley Fahrenheit	Model FZL4004 Fahrenheit or Equal 240V
Interior Drop in Light	Lithonia	Lithonia LED 2x4 White Lay-In Troffer, 4000 Lumens with 128W Equivalence
Exterior Lighting	Lithonia	Allpro LG LED FLD LT BZ-DNI, 27.6W Equivalence
A/C Unit	Fridgidaire	115V 8,000 BTU Model EER-9.94 Min., FFTA0833Q1

Note: Products may be substituted for an equal or better model.

BUYER ACCEPTANCE PLAN A SIGN AND DATE

**ELECTRICAL**

1. All Receptacles to be the grounding type.
2. All Wiring to be per the edition of the NEC Listed on the Cover Page, Type MC CU with ground.
3. Main panel to be marked "Suitable For Use As Service Equipment" and be equipped with breaker/ fuse type overcurrent protection.
4. Proper thermal overload protection to be provided for all motors.
5. Disconnecting means within sight required for all motors.
6. Weather proof protection required for all outdoor lights, receptacles and disconnects.
7. Proper working clearances shall be provided and maintained for all electrical equipment.
8. All florescent fixture's required thermal protection and proper clearances from insulation, also applicable for incandescent fixture's.
9. Combination exhaust fan/light and all recessed incandescent fixture's to be with thermal protection.
10. Exit lights, if electric, must be fed from an approved emergency service connected ahead of, but not within main service disconnection means enclosure, and installed as per service requirements, or be battery backup type units.
11. Service conductors located within the perimeter of the building, shall be installed in accordance with article 230-6, per the edition of the NEC on the cover page.
12. Maximum 15 (2) tube florescent lights in 15A circuit, Maximum 10 recepts on 15A circuit, Maximum 7 (4) Tube florescent lights on a 15A circuit.
13. Maximum 20 (2) tube florescent lights in 20A circuit, Maximum 13 recepts on 20A circuit, Maximum 10 (4) Tube florescent lights on a 120A circuit.
14. All circuits and equipment shall be grounded in accordance with the appropriate articles of the National Electrical Code (NEC).
15. HVAC equipment shall be provided with readily accessible disconnects adjacent to the equipment served. A unit switch with a marked "off" position that is a part of the HVAC equipment and disconnects all ungrounded conductors shall be permitted as the disconnecting means where other disconnecting means are also provided by a readily accessible circuit breaker.
16. Prior to energizing the electrical system the interrupt rating of the main breaker must be designed by a local electrical consultant to verify compliance with NEC 110-9.
17. The electrical feeders are designed by others, site installed and subject to review and approval by the authority having jurisdiction.
18. Ceiling Luminary boxes shall be designed for the purpose and required to support a minimum of 50 lbs.

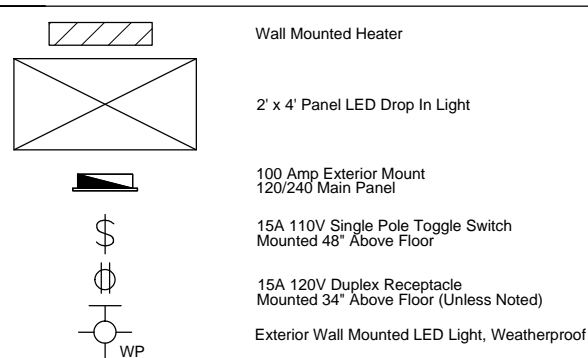
**100 Amp. ELECTRICAL PANEL SCHEDULE**  
120/240-V, 3-Wire, Single Phase  
10 Space, 20 Circuit Minimum

Circuit Number & Type	Wire Size & Quantity	Breaker		Description
		Trip	Pole	
1	12-2	20	1	Recepts
2	14-2	15	1	Lights
3	12-2	15	1	A/C
4 & 6	12-2	20	2	Wall Heater

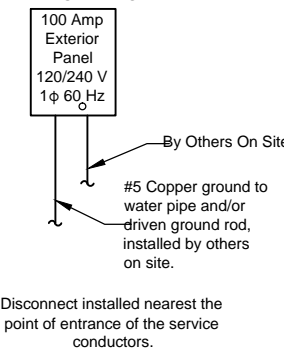
**DISTRIBUTION PANEL SIZING**  
120/240-V, 3-Wire, Single Phase

Receptacles (4x180) 720 W  
Lighting (81 sq. ft x 3w) 240 W  
Wall Heater 4000 W  
A/C 960 W  
  
5920 W / 240 V = 24.6A Service Rating

**ELECTRICAL LEGEND**



**100 AMP ELECTRICAL RISER DIAGRAM**



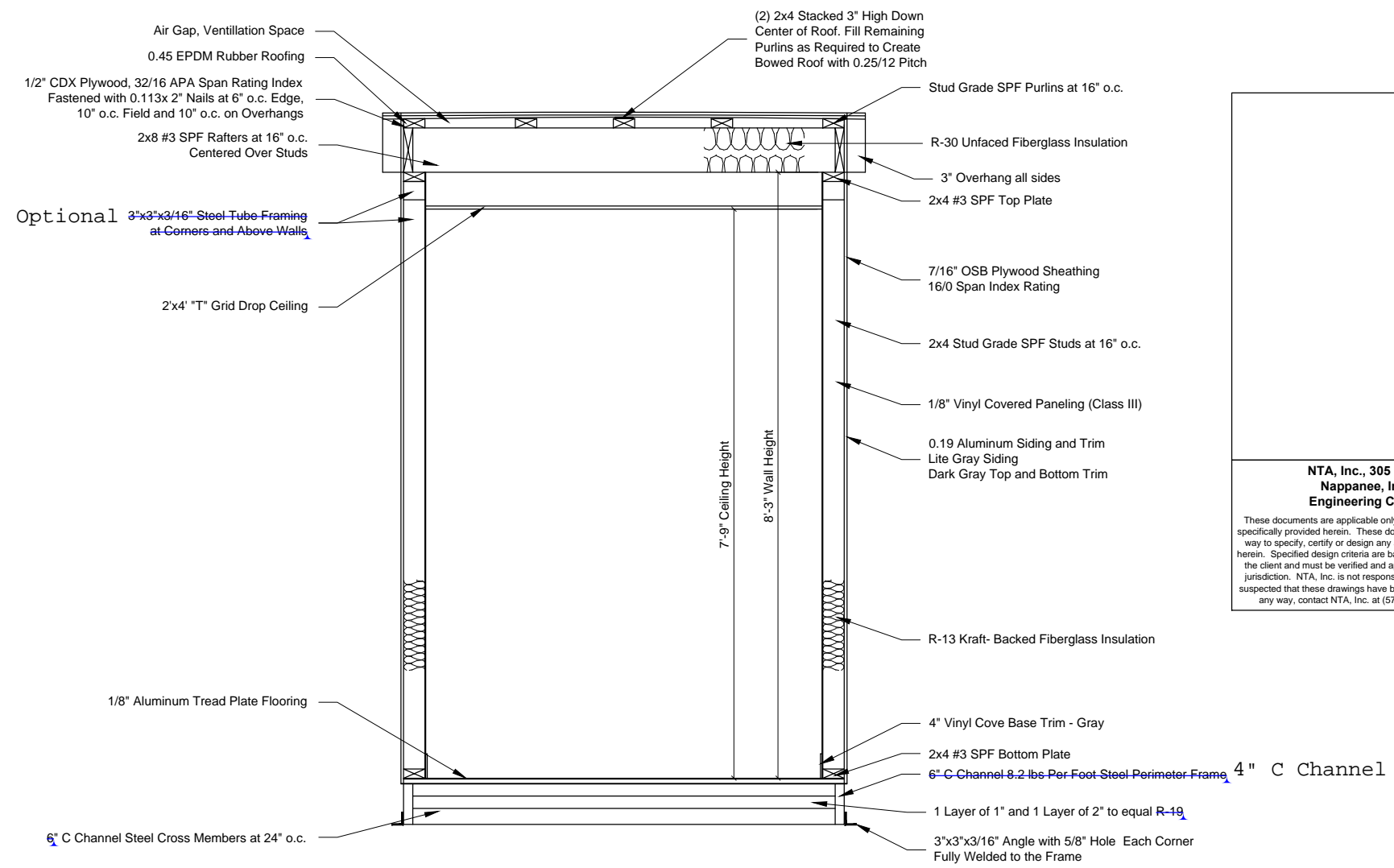
REVISIONS:	SCALE: 1/2" = 1'-0"	APPROVED BY:
	DATE: 07/06/2017	DRAWN BY: EAB

**Twin Modular Services Inc.**  
Blackwood, NJ

TITLE: ELECTRICAL PLAN A	JOB NO: TMS063017-24
MODEL: 810 GUARDHOUSE	DRAWING NO: 4

0107 2008-09-23





**NTA, Inc., 305 N Oakland Ave  
Nappanee, Indiana 46550  
Engineering COA No. C-3412**

These documents are applicable only to the elements and loading criteria specifically provided herein. These documents shall not be construed in any way to specify, certify or design any aspects of the building not contained herein. Specified design criteria are based solely on information provided by the client and must be verified and approved by the local authority having jurisdiction. NTA, Inc. is not responsible for fabrication or erection. If it is suspected that these drawings have been modified, substituted or altered in any way, contact NTA, Inc. at (574) 773-7975 to obtain a file copy.

BUYER ACCEPTANCE SIGN AND DATE

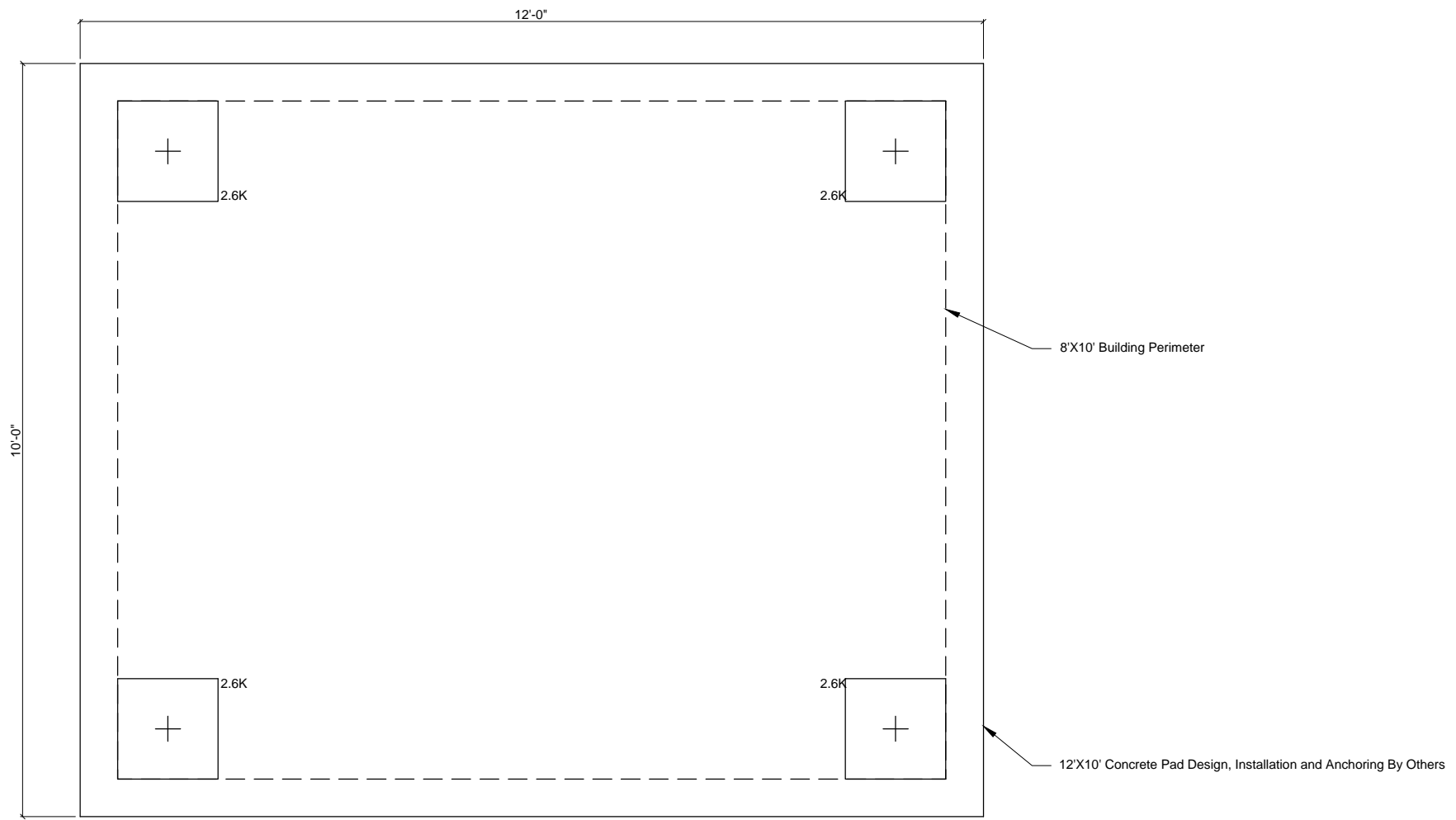
- NOTES**
- Fireblocking shall be installed at the floor and ceiling level. Fireblocking material shall be as permitted in International Building Code Exterior joints in the building envelope that are sources of air leakage, such as floor and ceiling lines, door and windows, or any other penetrations through the building envelope shall be caulked, gasketed, weather-stripped, wrapped or otherwise sealed to limit uncontrolled air movement. Stopping materials installed on-site are subject to local review, approval and inspection.
  - In all framed walls, floors and roof/ceiling comprising elements of the building thermal envelope, a vapor retarder shall be installed on the warm-in-winter side of the insulation with the following exceptions:
    - Where the framed cavity or space is ventilated to allow moisture to escape.
  - Where required, the vapor retarder shall be comprised of any material (kraft backing, polyethylene, spray applied) approved for such use and having a perm rating of 1 or less.
  - Additional connections per standard construction manual or calculations package

REVISIONS:	SCALE: 1/2" = 1'-0"	APPROVED BY:
	DATE: 07/06/2017	DRAWN BY: EAB

**Twin Modular Services Inc.**  
Blackwood , NJ

TITLE: CROSS SECTION	JOB NO: TMS063017-24
MODEL: 810 GUARDHOUSE	DRAWING NO: 5

0110.1150 2008-12-02



Floor Plan Option A and B

Note: Secure to foundation at corners to resist 418 lbs overturning force.  
Fasten perimeter to foundation to resist 841 lbs shear force at each wall.

BUYER ACCEPTANCE SIGN AND DATE

Notes:

1. Pier locations shown on this plan are for the purpose of identifying the location of the required blocking points and the loads applied at each point for this building. Foundation requirements are not known due to varying soil conditions.
2. Foundation Design by others. Foundation review and approval is to be performed by the local official having jurisdiction.

**NTA, Inc., 305 N Oakland Ave  
Nappanee, Indiana 46550  
Engineering COA No. C-3412**

These documents are applicable only to the elements and loading criteria specifically provided herein. These documents shall not be construed in any way to specify, certify or design any aspects of the building not contained herein. Specified design criteria are based solely on information provided by the client and must be verified and approved by the local authority having jurisdiction. NTA, Inc. is not responsible for fabrication or erection. If it is suspected that these drawings have been modified, substituted or altered in any way, contact NTA, Inc. at (574) 773-7975 to obtain a file copy.

**THIS DRAWING IS NOT FOR CONSTRUCTION.** This drawing is intended to show the minimum foundation loads and minimum foundation support locations and is not to be used for construction or certification of any foundation for any building. The foundation for this modular building shall be designed and sealed by a local engineer for the conditions present on-site in accordance with local codes. Additionally, the foundation designed by others shall be reviewed and approved by the local authority having jurisdiction.

FOUNDATION LEGEND	
+	Foundation to support load listed
0110.1150 2008-12-02	

REVISIONS:	SCALE: 1/2" = 1'-0"	APPROVED BY:	<b>Twin Modular Services Inc.</b> Blackwood , NJ	TITLE: BLOCKING PLAN	JOB NO: TMS063017-24
	DATE: 07/06/2017	DRAWN BY: EAB		MODEL: 810 GUARDHOUSE	DRAWING NO: 6