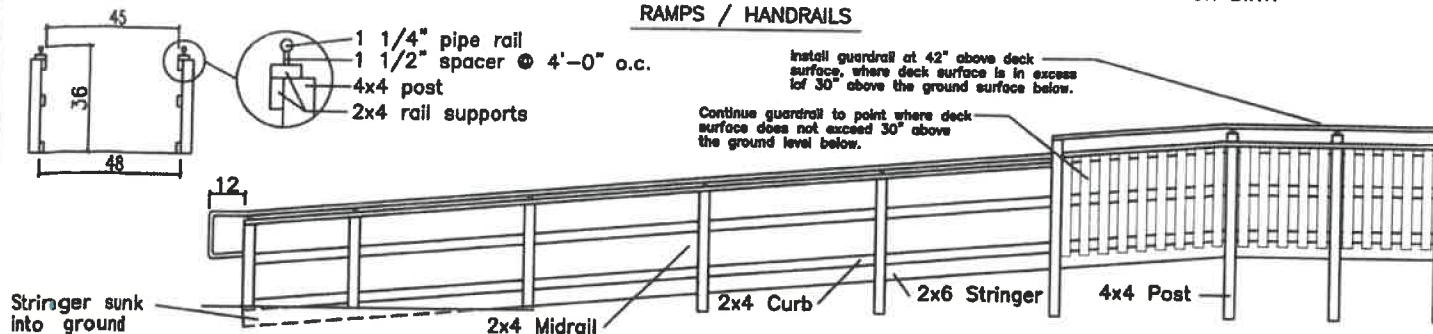


NOTE: THESE DRAWINGS REFLECT A WOOD RAMP/DECK/STEPS ON A NATURAL SURFACE OF GRASS OR DIRT.

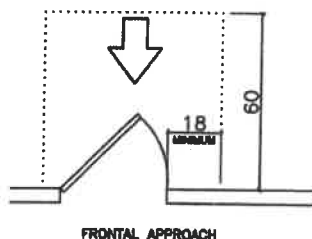
## RAMPS / HANDRAILS



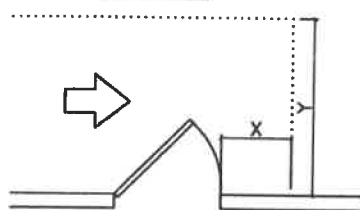
### Ramp / Handrail Notes:

- Changes in level up to 1/4" may be vertical, between 1/4"-1/2" must be beveled, with a slope not to exceed 1:2, and any change in level greater than 1/2" must be accomplished by means of a ramp.
- The maximum slope for a ramp is 1:12. The maximum rise for any unbroken run shall be 30". The maximum cross-slope for any ramp surface shall be 1:50.
- The minimum clear width for a ramp 30'-0" or less in length shall be 36", and any ramp with a run longer than 30'-0" shall have a minimum clear width of 44".
- Any change in level greater than 6" shall have handrails on both sides.
- If a ramp changes direction at a landing, the minimum landing size shall be 60" by 60".
- Ramps shall have level landings at the top and bottom of each run.
- Handrails shall be provided on both sides of ramp segments. The inside handrail on switchback or dogleg ramps shall always be continuous.
- If handrails are not continuous, they shall extend at least 12" beyond the top and bottom of the ramp segment, and shall be parallel with the ground or floor surface.
- The clear space between a handrail and a wall shall be 1 1/2".
- Gripping surfaces shall be continuous. In Louisiana, they must provide for a "power grip" in which the fingers may be wrapped around the handrail, as opposed to a "pinch grip", in which the handrail is squeezed between the thumb and fingers.
- The top of handrails shall be mounted between 34"-38" above the ramp surface. Where a handrail is to be used primarily by children, the top of the handrail may be lowered to 28"-32".
- Ends of handrails shall be either rounded, or returned smoothly to the floor, wall, or post.
- Handrails shall not rotate within their fittings.
- Handrails shall be between 1 1/4"-1 1/2" diameter, or shall provide an equivalent gripping surface.
- A handrail and any wall or other surface adjacent to it shall be free of any sharp or abrasive elements.
- Ramps and landings with drop-offs shall have curbs, walls, railings, or projecting surfaces which prevent people from slipping off the ramp. Curbs shall be a minimum of 2" high.
- Handrail edges shall have a minimum radius of 1/8".

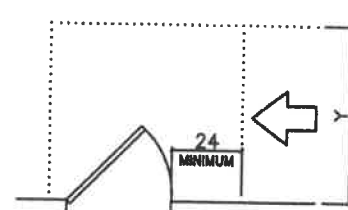
### LANDINGS



FRONTAL APPROACH



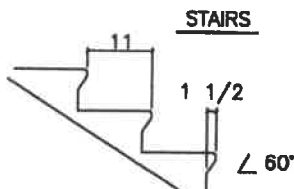
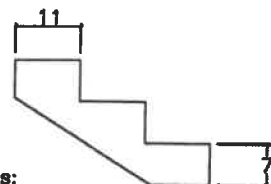
HINGE SIDE APPROACH  
X=36" min. if Y=60"  
X=42" min. if Y=54"



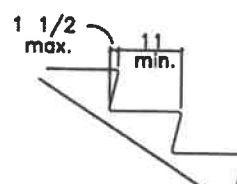
LATCH SIDE APPROACH  
Y=48" Minimum  
Y=54" minimum if door has closer

### Landing Notes:

- Landings shall be at least as wide as the ramp leading to it.
- Landings at the top and bottom of each ramp or ramp run shall have a minimum of 60" clear in the direction of travel.
- If ramps change direction at landings, the minimum landing size shall be 60" x 60".
- Landings at doors must be level. Where a door swings onto the landing, the width of landing between the latch side of the door, and the railing is to be determined as shown in the pictures above.

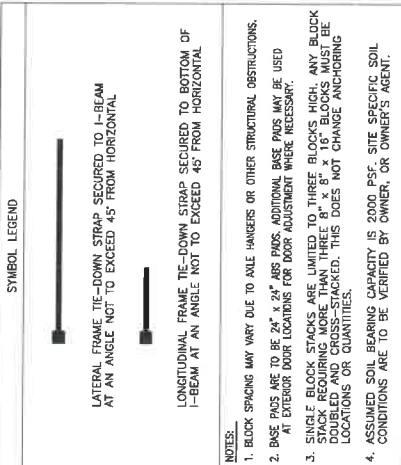


### STAIRS



### Step Notes:

- Treads and risers are to be uniform in depth and height, and are to be a minimum of 11" deep, and a maximum of 7" high.
- Stair nosings shall not be abrupt. The radius of curvature at the leading edge of the tread shall be no greater than 1/2".
- Risers shall be sloped, or the underside of the nosing shall have an angle not less than 60° from horizontal.
- Stair nosings shall not project more than 1 1/2".
- Tread depth is to be measured horizontally from nosing to nosing.
- Stairs must have a minimum clear width of 44". Handrails may project a maximum of 3 1/2", but can't reduce the 44" width.
- Handrails at stairs shall be either continuous, or shall extend at least 12" beyond the top riser, and extend at least 12" plus the width of one tread beyond the bottom riser. At the top the extension shall be parallel with the floor or ground surface. At the bottom, the handrail is to continue to slope for a distance of one tread depth beyond the bottom riser, then become horizontal. Handrail mounting height is measured from edge of stair nosing.
- Gripping surfaces shall not be interrupted by newell posts, other construction elements, or obstructions.
- Handrails at stairs shall meet all of the requirements listed above in the ramp / handrail section.



**MISSOURI  
PUBLIC SERVICE  
COMMISSION**

**APPROVED**

**07/02/2020**

**MANUFACTURED  
HOUSING**

**PFS** **APPROVED**  
DATE 6/23/20  
**PFS CORPORATION**  
Cottage Grove, WI



By Yub at 4:30:05 PM, 6/11/2020  
(Structural Aspects Only)

MODULAR STRUCTURAL CONSULTANTS LLC  
7720 CORP RD, STE. 200-100  
LEE'S SUMMIT, MO 64086-5753  
PHONE: 877-399-5753  
TX REGISTRATION # E-159820

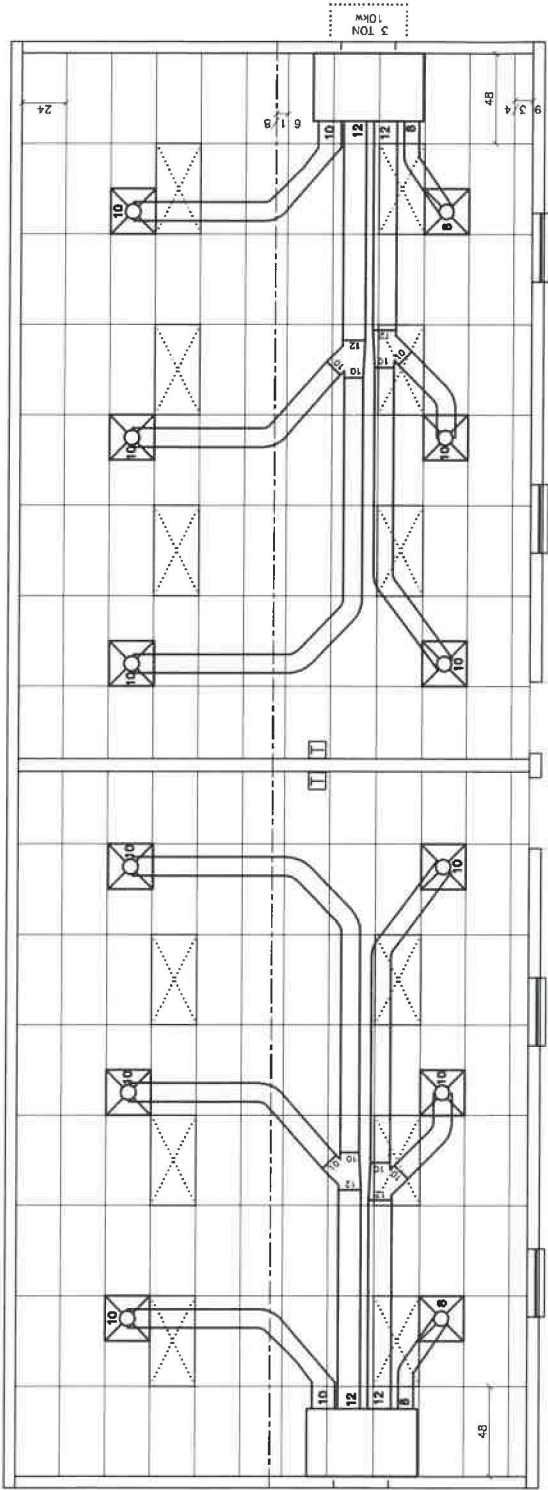
**PAIOMAR**  
MODULAR BUILDINGS LLC  
© 2015, PENDING USPTO PATENT APPLICATION FOR A SYSTEM OF MODULAR BUILDINGS  
REG. U.S. PAT. & TM. OFF.  
P.O. BOX 772-0272

| No. | DESCRIPTION | BY | DATE |
|-----|-------------|----|------|
| 2/7 | RR          |    |      |

|             |              |
|-------------|--------------|
| DATE:       | 6/9/2020     |
| SCALE:      | 1/8" = 1'-0" |
| PLOT SCALE: | 1:1          |
| DRAWN BY:   | NM           |
| CHECKED BY: |              |

DRY CLASSROOM BUILDING  
LEE'S SUMMIT, MO  
CEILING GRID / HVAC LAYOUT  
SERIAL #: 2279-2280  
2464 DRY CLASSROOM

SHEET No.  
**M-1**



MISSOURI  
PUBLIC SERVICE  
COMMISSION  
**APPROVED**  
07/02/2020  
MANUFACTURED  
HOUSING



**SYMBOL LEGEND**

2' x 4' LED LIGHT (44 WATTS)

24"x 24" SUPPLY DIFFUSER

PROGRAMMABLE THERMOSTAT

NOTE: DUCTING IS CLASS 1, U.L. 181 LISTED FLEXIBLE FIBERGLASS DUCTING.  
NOTE: RETURN AIR IS DIRECT TO THE UNIT THROUGH THE WALL.

1  
CEILING GRID / HVAC LAYOUT  
SCALE: 1/8" = 1'-0"



By Yurianto Yudianto  
6/11/2020  
(Structural Aspects Only)

**PALOMAR**  
MODULAR BUILDINGS LLC  
CONSULTANTS LLC  
7720 COFFEE RD. STE. 200  
PLAZA, LEES SUMMIT, MO 64069-0333  
PHONE: 816-486-0333  
TX REGISTRATION # F-15982

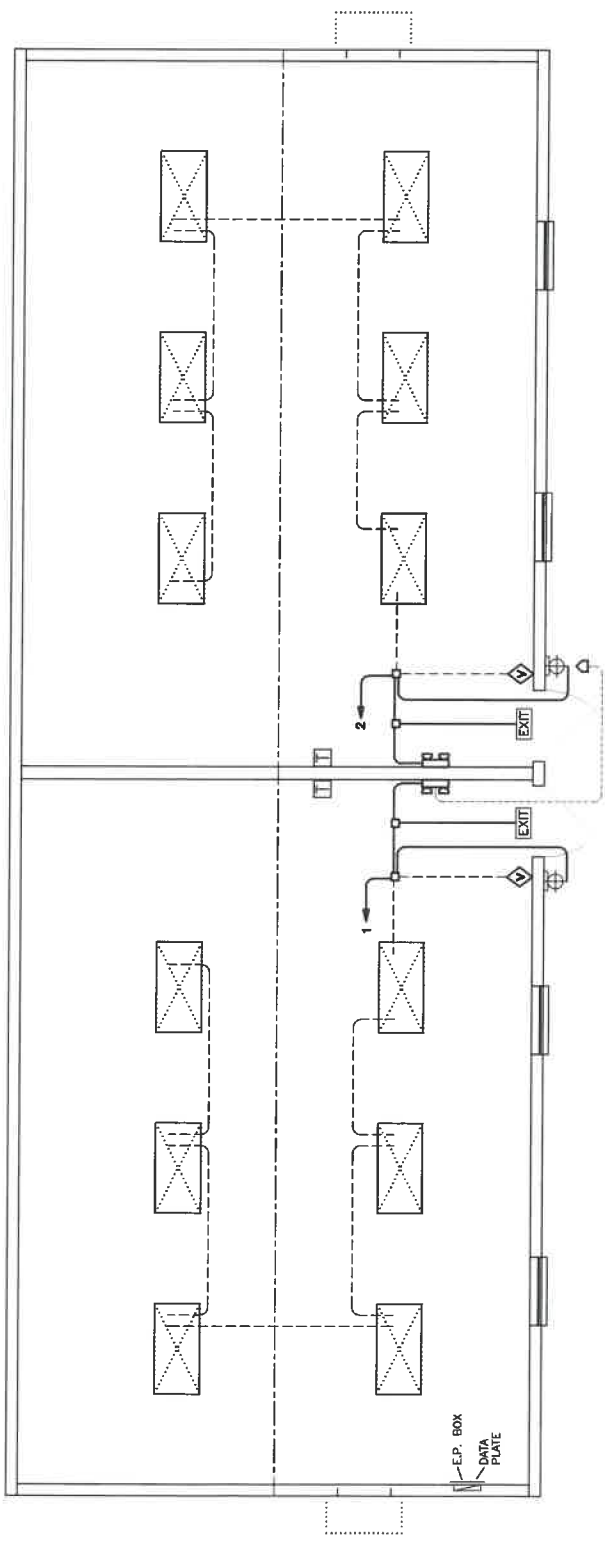
| No. | DESCRIPTION | BY | DATE |
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|     |             |    |      |
|     |             |    |      |

CHECKED BY: NM  
DATE: 6/9/2020  
SCALE: 1/8" = 1'-0"  
PLOT SCALE: 1:1  
DRAWN BY: NM

DRY CLASSROOM BUILDING  
LIGHTING SCHEMATIC  
LEES SUMMIT, MO  
SERIAL #: 2279-2280

SHEET No.  
**E-1**

**1 LIGHTING SCHEMATIC**  
SCALE: 1/8" = 1'-0"



| ELECTRICAL SYMBOL LEGEND                                                                                                                      |                                                                                 |                                                                                           |                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
|                                                                                                                                               | 48" x 24" LED LIGHT (44w)<br>VANDAL-PROOF EXTERIOR LED LIGHT ON PHOTOCELL (22w) | <br>GFI RECEPTACLE<br><br>TAMPER-RESISTANT RECEPTACLE<br><br>WEATHER-PROOF GFI RECEPTACLE | <br>7-DAY PROGRAMMABLE THERMOSTAT w/ OVERRIDE<br><br>OCCUPANCY SENSOR SWITCH IPV15<br><br>PHONE / DATA STUB-IN |
| <br>JUNCTION BOX<br><br>LED EXIT LIGHT w/ BATTERY BACK-UP<br><br>EMERGENCY LIGHT w/ BATTERY BACK-UP & REMOTE HEAD<br><br>EXTERIOR REMOTE HEAD | <br>ELECTRICAL DIST. PANEL                                                      |                                                                                           |                                                                                                                |



MISSOURI  
PUBLIC SERVICE  
COMMISSION  
**APPROVED**  
07/02/2020  
MANUFACTURED  
HOUSING

DATE: 6/9/2020  
SCALE: 1/8" = 1'-0"  
PLOT SCALE: 1:1  
DRAWN BY: NM  
CHECKED BY:

|     |             |    |      |
|-----|-------------|----|------|
|     |             |    |      |
|     |             |    |      |
|     |             |    |      |
| No. | DESCRIPTION | BY | DATE |

**PALOMAR**  
MODULAR BUILDINGS LLC  
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OR 916-252-  
GENERAL INQUIRY: 800-741-1115  
TX REGISTRATION # F-15842

07/02/2020



| ELECTRICAL SYMBOL LEGEND                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>48" x 24" LED LIGHT<br>(44w)                       |  RECEPTACLE<br> GFI RECEPTACLE<br> TAMPER-RESISTANT RECEPTACLE<br> WEATHER-PROOF GFI RECEPTACLE |  7-DAY PROGRAMMABLE THERMOSTAT w/ OCCUPANT OVERRIDE<br> OCCUPANCY SENSOR SWITCH IPV15<br> PHONE / DATA STUB-IN |  JUNCTION BOX<br> ELECTRICAL DIST. PANEL<br> LED EXIT LIGHT w/ BATTERY BACK-UP<br> EMERGENCY LIGHT w/ BATTERY BACK-UP & REMOTE HEAD<br> EXTERIOR REMOTE HEAD |
| <br>VANDAL-PROOF EXTERIOR LED LIGHT ON PHOTOCELL (22w) |                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

**PFS** **APPROVED**  
DATE 6/23/20  
**PFS CORPORATION**  
Cottage Grove, WI

NOTE:  
BUILDING IS: 120/240v 3-WIRE SINGLE PHASE  
ELECTRICAL CONDUIT: ELECTRICAL NON-METALLIC TUBING  
ELECTRICAL WIRING: MIN. #12 THHN COPPER WITH GROUND  
GROUNDING ON SITE: PER 2014 NEC ARTICLE 250-50

|                                 |             |
|---------------------------------|-------------|
| <b><u>TOTAL PANEL LOAD:</u></b> |             |
| Total Watts:                    | 31446 watts |
| Voltage:                        | 240 v       |
| Total Amps:                     | 131.02 amps |

1 1/2 inch



**E-3**

DATE: 6/9/2020  
SSCALE: N.T.S.  
PLOT SCALE: N.T.S.  
DRAWN BY: NM  
CHECK BY:

|     |             |    |      |
|-----|-------------|----|------|
| No. | DESCRIPTION | BY | Date |
|     |             |    |      |
|     |             |    |      |
|     |             |    |      |
|     |             |    |      |

| KW<br>WIRE<br>SIZE |                                  | 150<br>AMP<br>SINGLE PHASE<br>MAIN BREAKER | PANEL 'A'                         | MEN<br>WIRE<br>SIZE |
|--------------------|----------------------------------|--------------------------------------------|-----------------------------------|---------------------|
| 12                 | LIGHTS LEFT CLASSROOM            | 20 1 2 20                                  | LIGHTS RIGHT CLASSROOM            | 12                  |
| 12                 | RECEPITS LEFT CLASSROOM EXTERIOR | 20 3 4 20                                  | RECEPITS RIGHT CLASSROOM EXTERIOR | 12                  |
| 6                  | HVAC UNIT LEFT CLASSROOM         | 60 5 60                                    | HVAC UNIT RIGHT CLASSROOM         | 8                   |
|                    | 3-TON / 10 kw                    | 2P 7 8 2P                                  | 3-TON / 10 kw                     |                     |
|                    |                                  | 9 10 20                                    | PREFABRM CONTROL PANEL            | 12                  |
|                    |                                  | 11 12                                      |                                   |                     |
|                    |                                  | 13 14                                      |                                   |                     |
|                    |                                  | 15 16                                      |                                   |                     |
|                    |                                  | 17 18                                      |                                   |                     |
|                    |                                  | 19 20                                      |                                   |                     |
|                    |                                  | 21 22                                      |                                   |                     |
|                    |                                  | 23 24                                      |                                   |                     |
|                    |                                  | 25 26                                      |                                   |                     |
|                    |                                  | 27 28                                      |                                   |                     |
|                    |                                  | 29 30                                      |                                   |                     |
|                    |                                  | 31 32                                      |                                   |                     |
|                    |                                  | 33 34                                      |                                   |                     |
|                    |                                  | 35 36                                      |                                   |                     |
|                    |                                  | 37 38                                      |                                   |                     |
|                    |                                  | 39 40                                      |                                   |                     |
|                    |                                  | 41 42                                      |                                   |                     |

| QTY | LOAD CALC.                     | ITEM |       | WATTS        | TOTAL  |
|-----|--------------------------------|------|-------|--------------|--------|
| 12  | LED Thruster                   | x    | 44    | 960          | watts  |
| 0   | Contact Thumscut               | x    | 26    | 0            | watts  |
| 0   | Florescent 17w 2 Lamp          | x    | 31    | 0            | watts  |
| 2   | Ext CFL Light                  | x    | 84    | 210          | watts  |
| 0   | Exhaust Fan 86 cfm             | x    | 84    | 0            | watts  |
| 0   | Appliance about                | x    | 1930  | 0            | watts  |
| 14  | Recept Duplex                  | x    | 190   | 2520         | watts  |
| 0   | Recept Dedicated               | x    | 1920  | 0            | watts  |
| 0   | Recept Compacted Oils.         | x    | 1500  | 0            | watts  |
| 0   | Recept Heat Tape               | x    | 1800  | 0            | watts  |
| 0   | Water Heater (240v)            | x    | 3000  | 0            | watts  |
| 0   | Water Cooler                   | x    | 370   | 0            | watts  |
| 0   | Pan. Microwave                 | x    | 1350  | 0            | watts  |
| 0   | Hes. Microwave                 | x    | 1350  | 0            | watts  |
| 0   | Emergency Light                | x    | 14.4  | 0            | watts  |
| 2   | Emergency Light                | x    | 14.4  | 29           | watts  |
| 2   | Exit Sign                      | x    | 2.8   | 7            | watts  |
| 1   | Alarm Panel                    | x    | 144   | 180          | watts  |
| 2   | Bard 370 w 10kw (240v)         | x    | 13520 | 27840        | watts  |
|     | Air Handler 3 Ton / 10w (240v) | x    | 12420 | 0            | watts  |
|     |                                |      |       | Total Watts: | 31446  |
|     |                                |      |       | Total Amper: | 131.02 |

|                     |               |
|---------------------|---------------|
| <b>Total Watts:</b> | <b>31446</b>  |
| <b>Total Amps:</b>  | <b>131.02</b> |

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DESOTO, TX, 75115  
PLANO, TX, 75025-6833