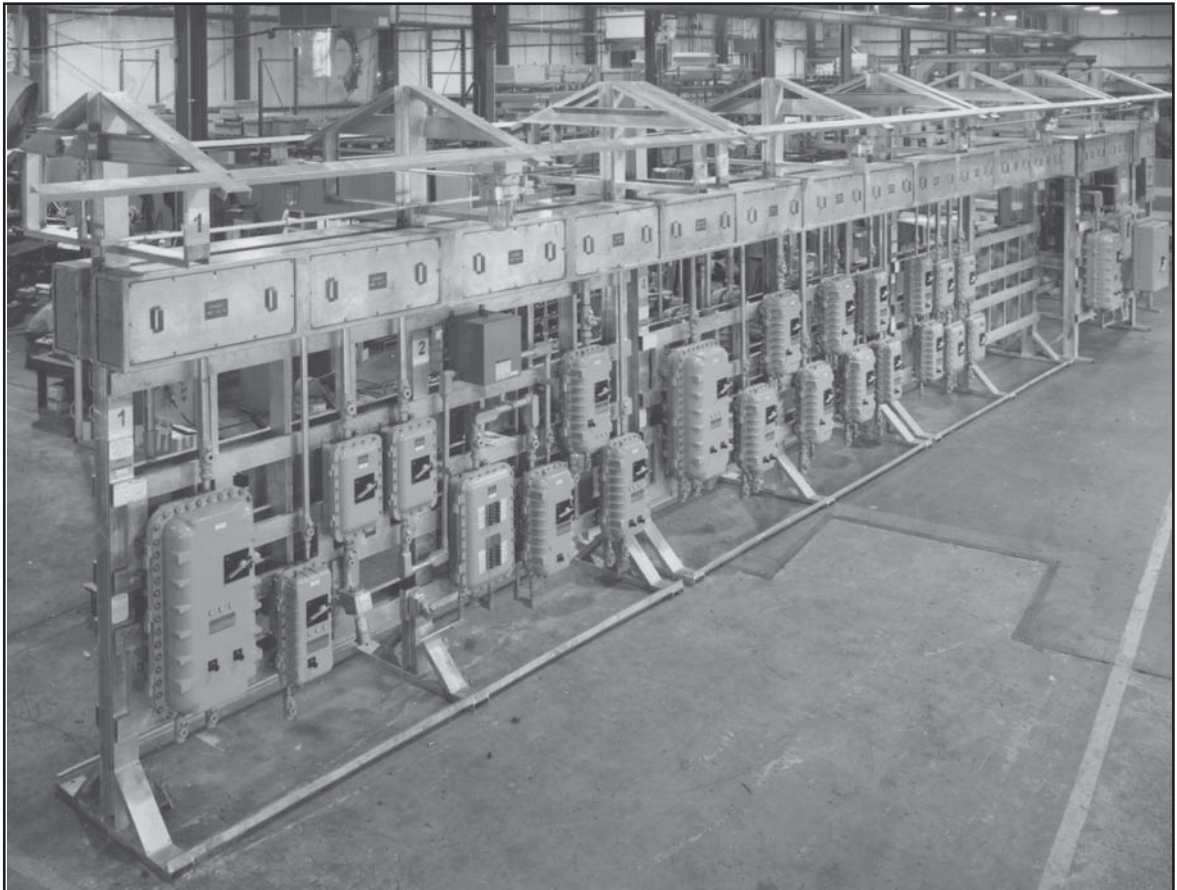


## Switchracks

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## Custom Switchracks

From Design to Installation, Curlee is The Switchrack Authority



With over 70 years in the industry, Curlee is one of the first and the most respected names in custom switchracks for hazardous and adverse locations. Designed for safety and performance, they are built to customer specifications. As a result, every Curlee switchrack offers an innovative, unique solution to the challenges of complex motor control localization.

Beginning in 1935, Curlee has developed its capabilities with attention to the customer's key concerns:

- Custom Design
- Quality Components
- Turnkey Fabrication
- Guaranteed Satisfaction

Together, these qualify Curlee as the Switchrack Authority. It is a hard-earned reputation the company is committed to uphold.

## Custom Switchracks

### Customer Design

The demands of your application are unique. Your switchrack should be too. That's why Curlee engineers use your specifications and engineering drawings as well as all applicable codes and standards to design your custom switchrack solution. It's the only way to guarantee the switchrack will meet your needs today... and tomorrow.

Through experience, Curlee has learned the value of staying on the cutting edge of design technology. The company's AutoCad workstations allow design files to be shared with your in-house engineers for quick revisions. This saves time and money and it means your switchrack will be up and running faster.

### Quality Components

Curlee stocks one of the most extensive lines of adverse environment enclosures and accessories in the electrical industry to ensure prompt turnaround of every switchrack order.

Rigid quality standards mean Curlee components stand up to the harshest applications. Only the highest grade steel and aluminum is used in construction. Testing prior to installation guarantees the quality you expect from the Switchrack Authority, Curlee.

### Turnkey Fabrication

Every Curlee switchrack is engineered, fabricated and assembled in-house by qualified technicians. This single-source approach allows Curlee complete control over the manufacturing process.

Following a series of rugged performance examinations, each Curlee switchrack is shipped via Exclusive Use Carrier for immediate field installation.



*Switchracks may be single or double sided, with components mounted in single or double rows.*

### Guaranteed Satisfaction

Curlee's involvement doesn't end with the purchase order. The company backs its switchracks with an exclusive factory warranty. Should any Curlee component fail due to mechanical or electrical defect, Curlee will replace the part for up to one year following installation, or 18 months after shipment.

## Custom Switchracks

### Application

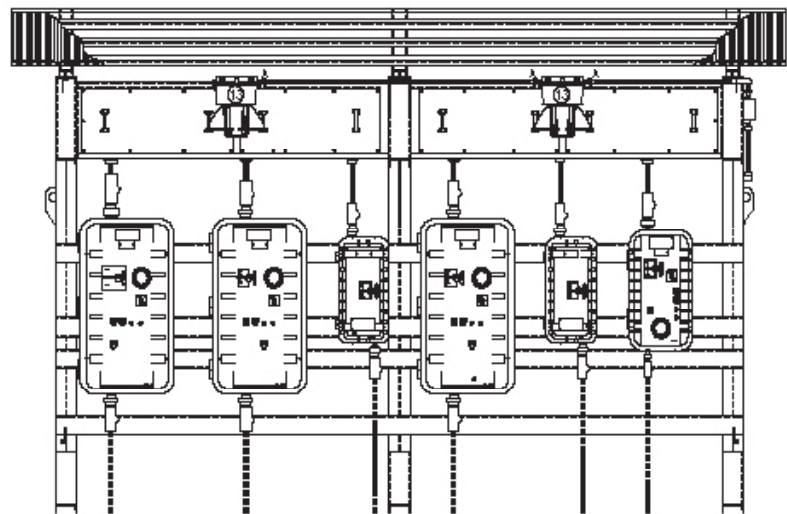
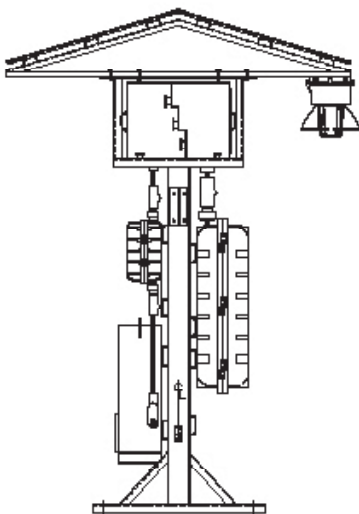
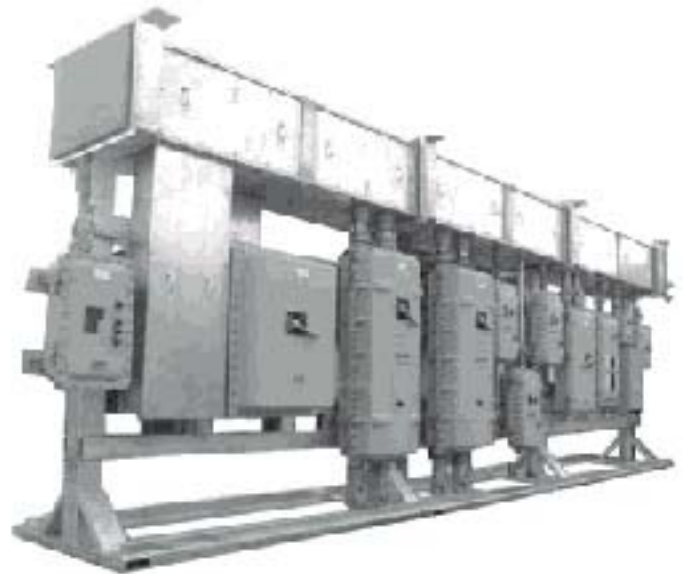
- Curlee switchracks provide complete motor control assemblies in one integrated package. Choose the necessary Curlee components to fit the rating, electrical switching and controlling requirements.

### Features

- Single source responsibility, including engineering, designing, wiring and testing of all components.
- Fabricated and wired to custom specifications.
- Only job site requirements are connection of incoming power to the main bus and load side connections.
- U.L. listed bus up to 1500A. For larger requirements, please consult factory.
- Heavy grade steel or aluminum frame with all welded construction.

### Standard Finishes

- Structure: Steel-Galvanized or Aluminum.
- Bus Duct: Stainless Steel, Steel-Painted, Steel-Galvanized or Aluminum.
- Corrugated Canopy: Steel-Galvanized or Aluminum.



Custom Switchrack Data Sheet

Customer Information

Date: \_\_\_\_\_

Quote Number: \_\_\_\_\_

Customer: \_\_\_\_\_

Revision: \_\_\_\_\_

Location: \_\_\_\_\_

Project Name: \_\_\_\_\_

NEMA Classification for Enclosures:

Class: \_\_\_\_\_, Division: \_\_\_\_\_,

Group: \_\_\_\_\_

Unclassified

Switchrack Structure:

Steel — Hot Dipped Galvanized

Aluminum, not finished

Channel Feet       Square Feet

Double Row       Single Row

Double Sided       Single Sided

Canopy:

Eight foot width with a 1 foot overhang standard

None

Roof Material: Corrugated

Canopy and light fixtures will ship loose, due to height restrictions on motor transport.

Galvanized Steel       Aluminum

White Galvalume

Rigid Conduit and Fittings:

Galvanized Steel     Aluminum       PVC Coated

Non-Drain Type      Form \_\_\_\_\_

Drain Type

Incoming Power Supply:

\_\_\_\_\_ Volts, \_\_\_\_\_ Phase, \_\_\_\_\_ Wire, \_\_\_\_\_ Hz

Copper Main Bus rates \_\_\_\_\_ amps, braced for

\_\_\_\_\_ KAIC, Ground Bus rated \_\_\_\_\_ amps

Neutral \_\_\_\_\_ amps

Bus Duct:

UL       Non-UL

Steel — Galvanized

Steel — Powder Coat Gray

Aluminum, not finished

Stainless Steel (specific alloy )

\_\_\_\_\_ 304

\_\_\_\_\_ 316

Single Bus:     Dual Access     Single Access

Dual Bus:     One Busduct     Two Busducts

Weep Holes     NEMA 4 Drains     NEMA 4X Drains

Maximum allowable space

\_\_\_\_\_ Long x \_\_\_\_\_ High x \_\_\_\_\_ Wide

Bus Bar Modifications:

Insulated       PEM Inserts

Silver Plated       Tin Plated

Wire Insulation Type: Power \_\_\_\_\_, Control \_\_\_\_\_

*Please provide a list of items (including your company's specifications) that the rack will support including quantities and sizes:*

Motor Starters:

Lighting:

Breakers:

Transformers:

Receptacles:

Ground Indicators:

Panelboards:

Control Stations:

Disconnect Switches:

## Estimating Switchrack Weight

Add device weight and structure weight from the following tables:

### Combination Starters

Size	Bolted	Threaded
1	125 lbs	70 lbs
2	130 lbs	110 lbs
3	195 lbs	130 lbs
4	200 lbs	135 lbs
5	560 lbs	495 lbs
6	800 lbs	N/A

### Transformers

1 Phase	2 Phase	Weight
5 KVA	6 KVA	120 lbs
10 KVA	9 KVA	235 lbs
15 KVA	15 KVA	300 lbs
25 KVA	30 KVA	660 lbs
	45 KVA	750 lbs

### Circuit Breakers

Size	Bolted	Threaded
EA 150AF/50AT	33 lbs	40 lbs
EB150AF/100AT	38 lbs	40 lbs
EC150AF/150AT	96 lbs	88 lbs
EE225A Frame	101 lbs	210 lbs
EF 400A Frame	147 lbs	N/A
ED 600A Frame	220 lbs	220 lbs
EL 800A Frame	340 lbs	N/A
EG 1200A Frame	565 lbs	N/A

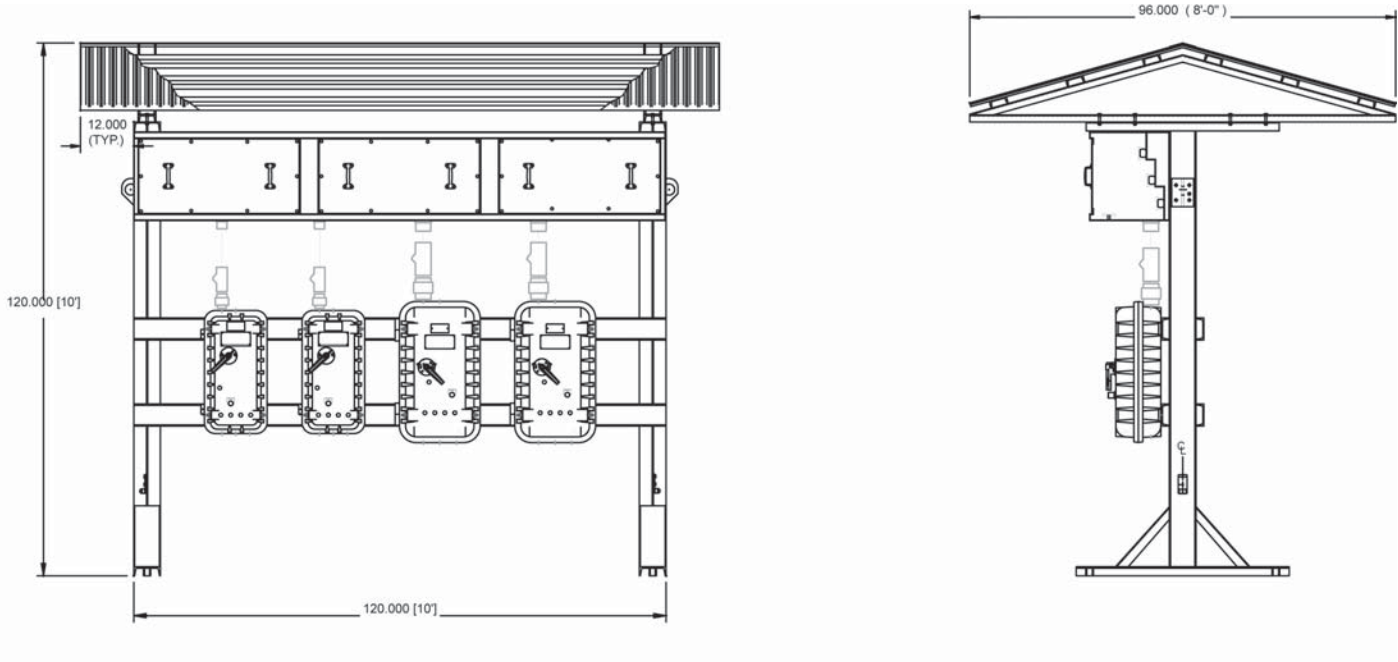
### Structure

Switchrack Type	Aluminum	Steel
Division 2, Single Row	50 lbs/ft	100 lbs/ft
Division 2, Double Row	65 lbs/ft	130 lbs/ft
Division 1, Single Row	50 lbs/ft	100 lbs/ft
Canopy, Corrugated	25 lbs/ft	50 lbs/ft
Incoming End Cable Box	50 lbs/ea	100 lbs/ea

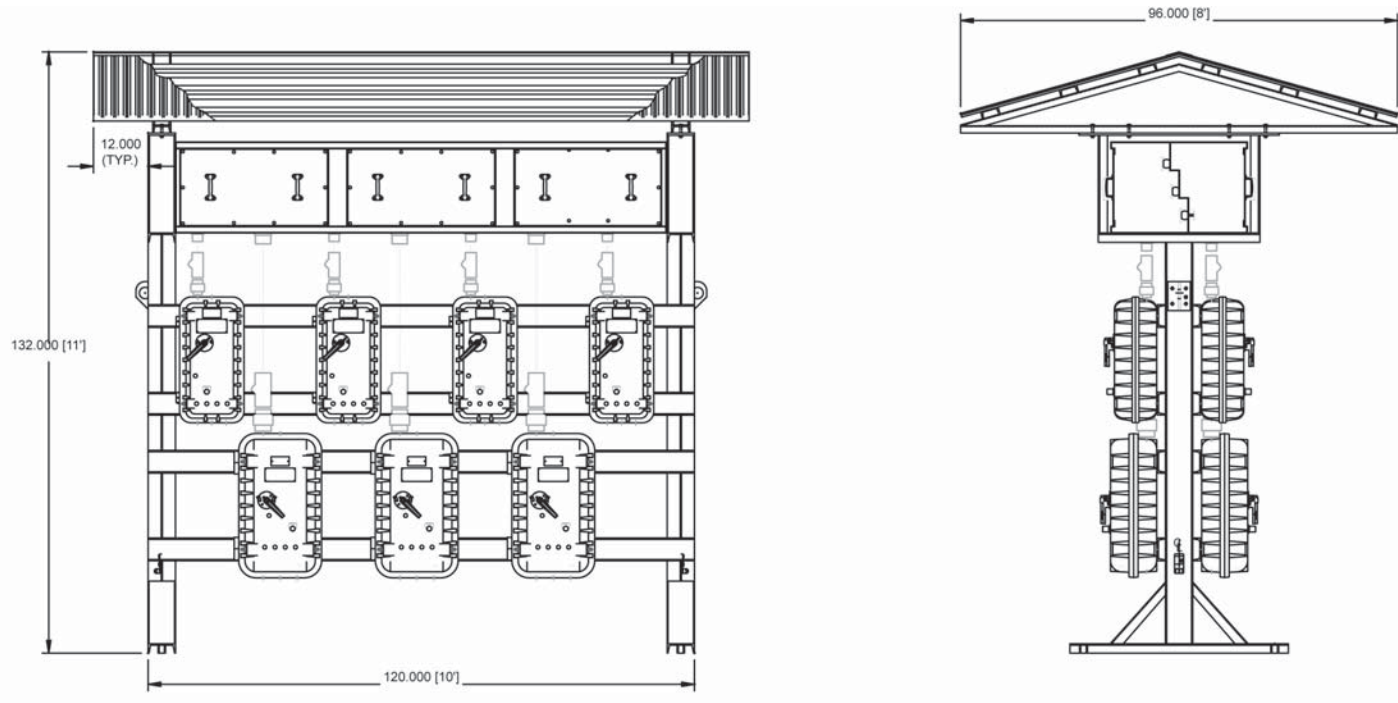
### Miscellaneous Items

12 Circuit LTG Panelboard	185 lbs
18 Circuit LTG Panelboard	195 lbs
24 Circuit LTG Panelboard	280 lbs
30 Circuit LTG Panelboard	290 lbs
HPS Light Fixture	25 lbs
120 VAC Receptacle	10 lbs
60 AMP Welding Receptacle	30 lbs
Photocell, 120 VAC	5 lbs

Typical Rear Seal Double Front Switchrack



Typical Dual Access Double Row Switchrack With Canopy



## Bolted to Bolted Spacing Charts

### 90° Door Opening

	Right Side												Panel-board D2P	Right Leg
	Starter Size 0, 1 & 2	Starter Size 3 & 4	Starter Size 5	Breaker EAB	Breaker EBB	Breaker ECB	Breaker EEB	Breaker EFB	Breaker EDB	Breaker ELB	Breaker EGB			
Left Leg	14.00	17.00	23.00	10.00	10.00	13.00	13.00	14.00	14.00	17.00	19.00	13.00		
Starter Size 0, 1, & 2	20.00	22.00	27.50	16.50	16.50	18.00	17.50	18.50	19.00	22.00	23.50	19.00	13.00	
Starter Size 3 & 4	22.00	24.00	29.50	18.50	18.50	20.00	20.00	20.50	21.00	24.00	25.00	21.00	15.00	
Starter Size 5	27.50	29.00	34.00	23.00	23.00	24.50	24.50	25.00	25.00	28.00	29.50	25.00	18.00	
Breaker EAB	17.50	20.00	20.50	13.50	12.50	15.00	14.00	14.50	15.00	19.00	21.50	17.00	11.00	
Breaker EBB	18.00	20.00	20.50	13.50	12.50	15.50	14.00	14.50	16.00	19.00	21.50	17.00	11.00	
Breaker ECB	21.00	23.00	24.00	18.00	17.50	19.00	18.00	18.50	20.00	22.00	24.50	19.50	14.00	
Breaker EEB	22.50	24.50	29.00	18.00	18.00	19.50	19.00	20.00	20.50	23.00	24.50	19.00	17.50	
Breaker EFB	22.50	25.00	29.00	18.50	18.50	19.50	19.00	20.00	20.50	23.00	25.00	20.00	18.50	
Breaker EDB	23.50	26.00	30.00	19.00	19.00	20.00	20.00	20.50	21.50	24.00	25.50	20.50	19.50	
Breaker ELB	26.50	28.50	33.00	22.00	22.00	23.50	24.00	24.00	24.00	27.00	29.00	24.00	18.00	
Breaker EGB	27.00	29.50	33.55	23.00	23.00	24.00	24.00	25.00	24.50	27.50	29.50	24.50	19.00	
Panel-board D2P	24.50	26.50	31.50	20.00	20.00	21.50	21.50	22.00	22.50	24.50	26.00	21.50	13.50	

### 120° Door Opening

	Right Side												Panel-board D2P	Right Leg
	Starter Size 0, 1 & 2	Starter Size 3 & 4	Starter Size 5	Breaker EAB	Breaker EBB	Breaker ECB	Breaker EEB	Breaker EFB	Breaker EDB	Breaker ELB	Breaker EGB			
Left Leg	17.50	22.00	31.50	12.50	10.00	17.50	17.50	18.00	19.50	25.50	26.50	20.00		
Starter Size 0, 1, & 2	23.50	25.75	31.00	18.75	18.75	18.75	18.25	19.00	19.00	21.00	23.00	18.50	13.00	
Starter Size 3 & 4	26.00	28.00	33.00	20.50	21.00	23.00	22.25	23.00	23.00	23.25	26.00	22.00	15.00	
Starter Size 5	30.25	32.50	38.50	25.25	25.25	28.00	28.00	29.00	29.00	31.50	31.50	28.00	18.00	
Breaker EAB	21.50	23.50	26.50	16.50	16.50	16.50	13.75	14.25	14.75	17.50	20.00	17.00	11.00	
Breaker EBB	21.50	24.00	27.00	17.00	17.00	17.00	14.00	14.75	14.75	18.00	20.50	17.00	11.00	
Breaker ECB	25.25	27.50	31.50	20.50	20.00	20.50	20.00	20.50	20.50	21.75	23.50	19.50	14.00	
Breaker EEB	25.50	27.00	34.00	20.25	20.25	22.75	22.75	23.00	22.00	23.50	25.75	20.50	17.50	
Breaker EFB	25.50	27.50	34.00	20.50	20.50	23.50	23.00	23.75	24.00	24.00	26.50	22.00	18.50	
Breaker EDB	26.50	29.00	34.50	21.50	21.50	24.50	24.00	24.50	24.75	25.00	27.50	22.50	19.50	
Breaker ELB	29.75	32.50	38.00	24.50	24.75	28.00	27.50	28.00	28.00	28.50	30.50	26.00	18.00	
Breaker EGB	30.25	32.50	38.50	25.00	25.25	28.50	28.00	28.50	28.50	28.50	31.00	25.50	19.00	
Panel-board D2P	27.50	29.50	31.50	22.50	22.50	24.50	24.00	24.50	25.00	27.00	28.00	23.00	13.50	