

Custom Switchracks: Built to Comply with NEC/CEC Standards

From Design to Installation, Appleton is The Switchrack Authority

NEC/CEC:
Suitable for use in Class I, Division 1 and 2
Locations

With over 80 years in the industry, Appleton 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 Appleton switchrack offers an innovative, unique solution to the challenges of complex motor control localization.

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

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

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

Customer Design

- The demands of your application are unique. Your switchrack should be too. That's why Appleton 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, Appleton 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

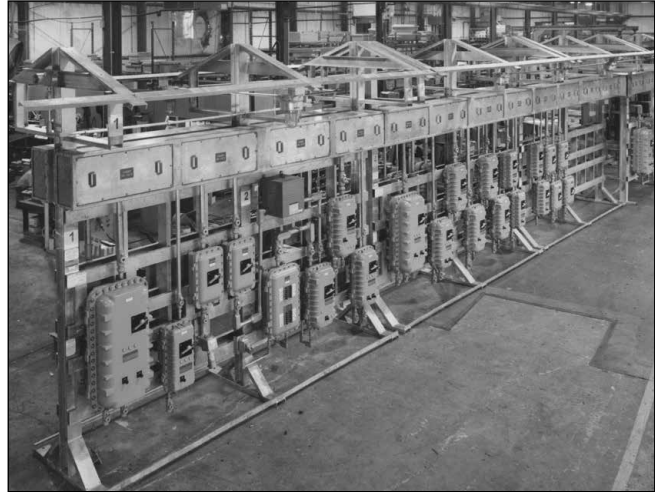
- Appleton stocks one of the most extensive lines of adverse environment enclosures and accessories in the electrical industry to ensure prompt turnaround of every switchrack order.
- Rigid quality standards mean Appleton components stand up to the harshest applications. Only the highest grade steel and aluminum is used in construction. Testing prior to installation guarantees the quality you expect from the Switchrack Authority, Appleton.

Turnkey Fabrication

- Every Appleton switchrack is engineered, fabricated and assembled in-house by qualified technicians. This single-source approach allows Appleton complete control over the manufacturing process.
- Following a series of rugged performance examinations, each Appleton switchrack is shipped via Exclusive Use Carrier for immediate field installation.

Guaranteed Satisfaction

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



Custom Switchracks: Built to Comply with NEC/CEC Standards

From Design to Installation, Appleton is The Switchrack Authority

NEC/CEC:
Suitable for use in Class I, Division 1 and 2
Locations

Application

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

Features

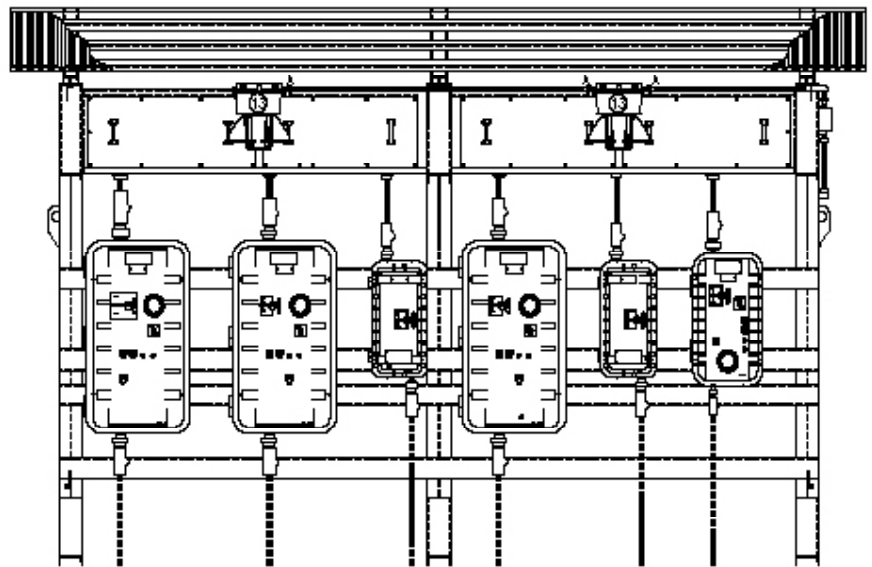
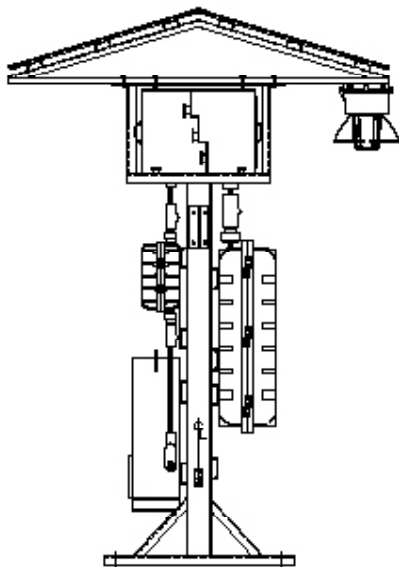
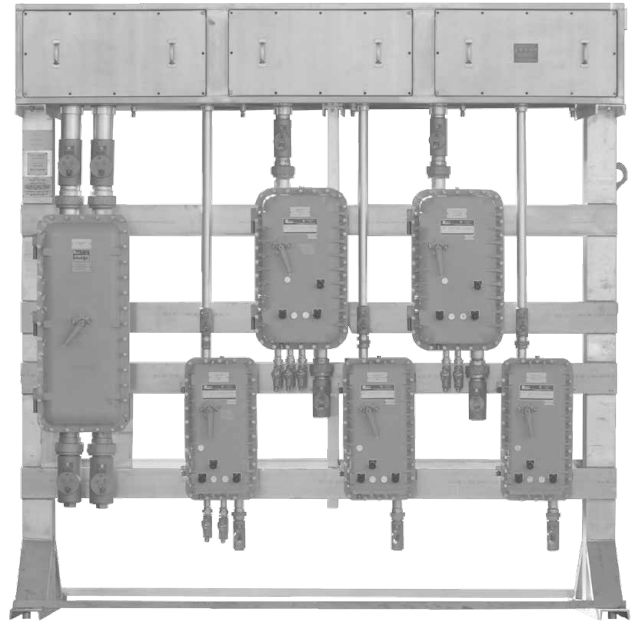
- Single source responsibility, including engineering, designing, wiring and testing of all components.
- Fabricated and wired to custom specifications.
- Only job site requirements are connection of incoming power to the main bus and load side connections.
- UL Listed bus up to 1500 Amp. For larger requirements, please contact your local representative.
- Heavy grade steel or aluminum frame with all welded construction.

Optional Components

- Circuit breakers
- Motor starters
- Contactors
- Junction boxes
- Control stations
- Meter/instrument enclosures
- Ground detection
- Panelboards
- Welding and convenience receptacles
- Photo cells
- Light fixtures
- Transformers

Standard Materials

- Structure: galvanized steel or aluminum
- Bus duct: galvanized steel, aluminum or stainless steel
- Corrugated canopy: galvanized steel or aluminum



Custom Switchracks: Built to Comply with NEC/CEC Standards

Custom Switchrack Data Sheet

NEC/CEC:
Suitable for use in Class I, Division 1 and 2
Locations

Appleton®

Customer Information

Date: _____ Quote Number: _____
 Customer: _____ Revision: _____
 Location: _____ Project Name: _____

Area Classification

Class I	<input type="checkbox"/> Division 1	<input type="checkbox"/> Division 2	Group	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D
Class II	<input type="checkbox"/> Division 1	<input type="checkbox"/> Division 2	Group	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G
Unclassified	<input type="checkbox"/> Outdoor	<input type="checkbox"/> Indoor				

Power Source

Voltage	<input type="checkbox"/> 120 Vac	<input type="checkbox"/> 240 Vac	<input type="checkbox"/> 380 Vac	<input type="checkbox"/> 480 Vac	<input type="checkbox"/> 575 Vac	<input type="checkbox"/> 600 Vac
Phase	<input type="checkbox"/> Single	<input type="checkbox"/> Three				
Wire	<input type="checkbox"/> 3	<input type="checkbox"/> 4				

Structure

Material	<input type="checkbox"/> Steel-Galvanized	<input type="checkbox"/> Aluminum			
Design	<input type="checkbox"/> Single Sided	<input type="checkbox"/> Double Sided	<input type="checkbox"/> Single Row	<input type="checkbox"/> Double Row	

Bus Ducts

					<input type="checkbox"/> Required	<input type="checkbox"/> Not Required
Amp Rating	<input type="checkbox"/> 250 Amp	<input type="checkbox"/> 500 Amp	<input type="checkbox"/> 750 Amp	<input type="checkbox"/> 1000 Amp	<input type="checkbox"/> 1250 Amp	<input type="checkbox"/> 1500 Amp
Material	<input type="checkbox"/> Stainless Steel	<input type="checkbox"/> Steel-Galvanized	<input type="checkbox"/> Aluminum			
Certification	<input type="checkbox"/> UL	<input type="checkbox"/> Non-UL	<input type="checkbox"/> NEMA 3R	<input type="checkbox"/> NEMA 4	<input type="checkbox"/> NEMA 4X	
Type	<input type="checkbox"/> Single Access	<input type="checkbox"/> Dual Access				
Copper Bus Plating	<input type="checkbox"/> Silver	<input type="checkbox"/> Tin				
Bracing	<input type="checkbox"/> 14,000 AIC	<input type="checkbox"/> 22,000 AIC	<input type="checkbox"/> 25,000 AIC	<input type="checkbox"/> 42,000 AIC	<input type="checkbox"/> 65,000 AIC	<input type="checkbox"/> 100,000 AIC
Options	<input type="checkbox"/> Insulated	<input type="checkbox"/> PEM Inserts	<input type="checkbox"/> Weep Holes			
	<input type="checkbox"/> Space Heater	<input type="checkbox"/> Thermostat	<input type="checkbox"/> Drains			

Corrugated Canopy Material

	<input type="checkbox"/> Steel-Galvanized	<input type="checkbox"/> Aluminum		<input type="checkbox"/> Required	<input type="checkbox"/> Not Required
--	---	-----------------------------------	--	-----------------------------------	---------------------------------------

Conduit and Fittings

<input type="checkbox"/> Galvanized	<input type="checkbox"/> Aluminum	<input type="checkbox"/> PVC Coated	<input type="checkbox"/> Drain Seals
-------------------------------------	-----------------------------------	-------------------------------------	--------------------------------------

Wire Type — Copper, +90 °C (+194 °F)

Insulation	<input type="checkbox"/> THW	<input type="checkbox"/> THHN	<input type="checkbox"/> THWN	<input type="checkbox"/> THH	<input type="checkbox"/> RHH	<input type="checkbox"/> RHW
	<input type="checkbox"/> XHHW	<input type="checkbox"/> XLPE	<input type="checkbox"/> SIS			

Custom Switchracks: Built to Comply with NEC/CEC Standards

Custom Switchrack Data Sheet

NEC/CEC:
Suitable for use in Class I, Division 1 and 2 Locations

Component Requirements						
Manufacturer	<input type="checkbox"/> General Electric	<input type="checkbox"/> Square D	<input type="checkbox"/> Cutler-Hammer	<input type="checkbox"/> Allen-Bradley	<input type="checkbox"/> Other	
Component Accessories						
<input type="checkbox"/> Fuses	<input type="checkbox"/> Thermal Board	<input type="checkbox"/> Relays	<input type="checkbox"/> Breather/Drain	<input type="checkbox"/> Stop Push Button	<input type="checkbox"/> Start Push Button	<input type="checkbox"/> HOA Switch
<input type="checkbox"/> Name Plate	<input type="checkbox"/> Red Light	<input type="checkbox"/> Green Light	<input type="checkbox"/> CPT	<input type="checkbox"/> 100 Va Extra	<input type="checkbox"/> Ring Terminal	<input type="checkbox"/> Wire Markers
<input type="checkbox"/> AUX. Contact N.O., N.C.	<input type="checkbox"/> Space Heater	<input type="checkbox"/> Copper Lugs	<input type="checkbox"/> Surge Protector	<input type="checkbox"/> Hi-Break Circuit Breaker		
Optional Components						

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: _____

Custom Switchracks: Built to Comply with NEC/CEC Standards

Estimating Custom Switchrack Weight

NEC/CEC:
Suitable for use in Class I, Division 1 and 2
Locations

Add device weight and structure weight from the following tables:

Combination Starters

Size	Bolted Weight kg (lb)	Threaded Weight kg (lb)
1	56.7 (125)	31.8 (70)
2	59.0 (130)	49.9 (110)
3	88.5 (195)	59.0 (130)
4	90.7 (200)	61.2 (135)
5	254.0 (560)	224.5 (495)
6	362.9 (800)	Not Available

Transformers

1 Phase	2 Phase	Weight kg (lb)
5 kVA	6 kVA	54.4 (120)
10 kVA	9 kVA	106.6 (235)
15 kVA	15 kVA	136.1 (300)
25 kVA	30 kVA	299.4 (660)
	45 kVA	340.2 (750)

Circuit Breakers

Size	Bolted Weight kg (lb)	Threaded Weight kg (lb)
EA 150 AF/50AT	15.0 (33)	18.1 (40)
EB 150 AF/100AT	17.2 (38)	18.1 (40)
EC 150 AF/150AT	43.5 (96)	39.9 (88)
EE 225 A Frame	45.8 (101)	95.3 (210)
EF 400 A Frame	66.7 (147)	Not Available
ED 600 A Frame	99.8 (220)	99.8 (220)
EL 800 A Frame	154.2 (340)	Not Available
EG 1200 A Frame	256.3 (565)	Not Available

Structure

Switchrack Type	Aluminum kg (lb)	Steel kg (lb)	Weight per
Division 2, Single Row	22.7 (50)	45.4 (100)	Foot
Division 2, Double Row	29.5 (65)	59.0 (130)	Foot
Division 1, Single Row	22.7 (50)	45.4 (100)	Foot
Canopy, Corrugated	11.3 (25)	22.7 (50)	Foot
Incoming End Cable Box	22.7 (50)	45.4 (100)	Each

Miscellaneous Items

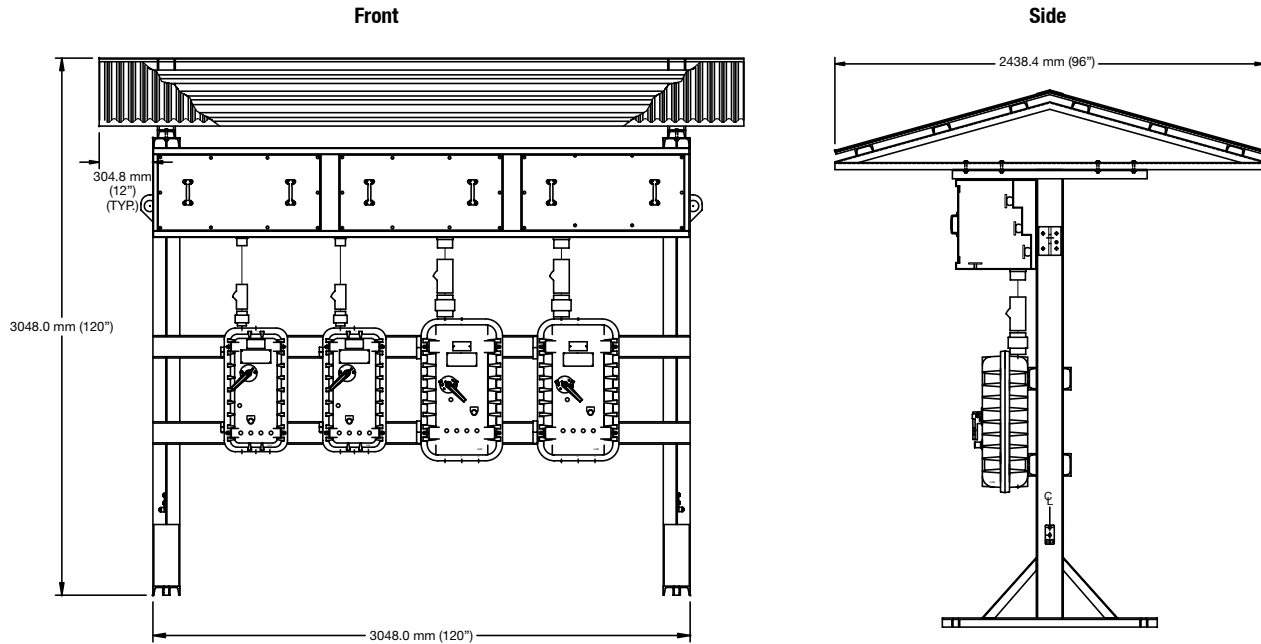
Description	Weight kg (lb)
12 Circuit LTG Panelboard	83.9 (185)
18 Circuit LTG Panelboard	88.5 (195)
24 Circuit LTG Panelboard	127.0 (280)
30 Circuit LTG Panelboard	131.5 (290)
HPS Light Fixture	11.3 (25)
120 Vac Receptacle	4.5 (10)
60 AMP Welding Receptacle	13.6 (30)
Photocell, 120 Vac	2.3 (5)

Custom Switchracks: Built to Comply with NEC/CEC Standards

From Design to Installation, Appleton is The Switchrack Authority

NEC/CEC:
Suitable for use in Class I, Division 1 and 2
Locations

Typical Single Access, Single Sided, Single Row Switchrack with Canopy Dimensions in Millimeters (Inches)



Typical Dual Access, Double Sided, Double Row Switchrack With Canopy

