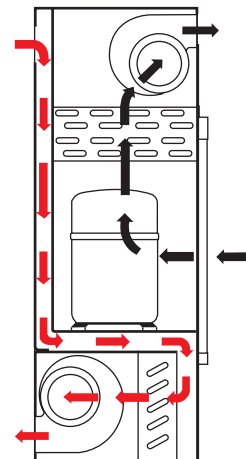




## AIR CONDITIONING SIZING PROCEDURE

How much climate control do you need? Call or fax us the following information and our engineering staff will calculate the BTU/HR requirements.

- Desired enclosure height ..... \_\_\_\_\_
- Desired enclosure width ..... \_\_\_\_\_
- Desired enclosure depth ..... \_\_\_\_\_
- Any surfaces which will be blocked from heat transfer ..... \_\_\_\_\_
- Maximum anticipated outside temperature in degrees Fahrenheit ..... \_\_\_\_\_
- Maximum allowable interior temperature in degrees Fahrenheit ..... \_\_\_\_\_
- Minimum anticipated outside temperature in degrees Fahrenheit ..... \_\_\_\_\_
- Minimum allowable interior temperature in degrees Fahrenheit ..... \_\_\_\_\_
- Desired color or natural finish ..... \_\_\_\_\_
- Internal heat load in watts ..... \_\_\_\_\_



- Ambient airflow
- Clean enclosure airflow

## CLOSED-LOOP COOLING

Within air conditioner, the recirculated clean enclosure air is kept separate from the ambient airflow system. This protects the electronic controls and prevents shutdowns caused by heat, humidity, dust or other contaminants.

## FAN KIT:

Fan kits consist of fan (AC or DC), thermostat, guard, lead assembly and mounting screws. Standard fan kit is 110 VAC and can be factory installed or shipped separately.

P/N \_\_\_\_\_



## HEATER KIT:

Heater kits consist of strip heater, guards and thermostat and are available in 150, 300 or 500 watts (110 VAC). Heater kits can be factory installed or shipped separately.

P/N \_\_\_\_\_



## BATTERY HEATER BLANKETS:

Flexible and lightweight silicone rubber heaters providing 600 watts of heat and is thermostat controlled. Blanket heaters operate on 110 VAC and a factory installed option.

P/N \_\_\_\_\_



## INSULATION:

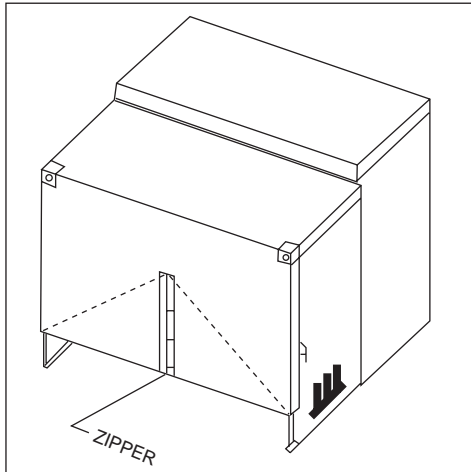
Reflects 95% of incoming radiant radiant heat rays. Resists conductive heat transmission. Lighter and less bulky than fiberglass insulation of same R-value. Factory installed option.

P/N \_\_\_\_\_



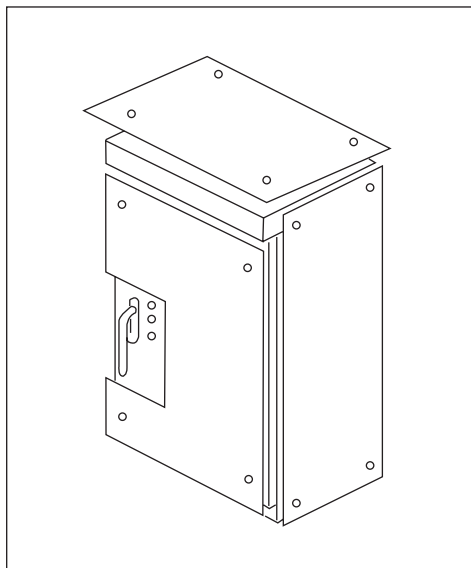
## AWNING KIT

Provides shelter for technicians who are working in enclosures during inclement weather. Available as a custom order option.



## SUNSHIELDS

Aluminum panels custom designed and mounted on standoffs on selected sides of the enclosure, minimizing exposure of the enclosure to direct sunlight. Available as a custom factory installed option only.



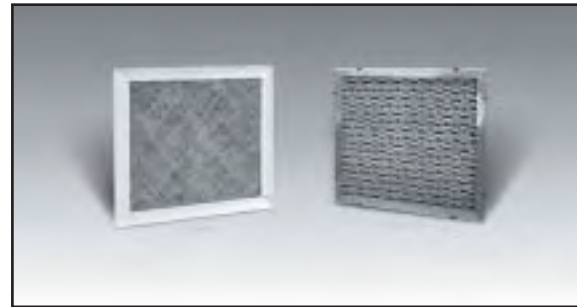
## FILTERS

### DISPOSABLE

28" x 45" x 3/4	14 x 25 x 1
10 x 10 x 1	16 x 20 x 1
6 x 16 x 1	16 x 25 x 1
14 x 4 x 1	16 x 30 x 1
10 x 16 x 1	24 x 12 x 1
12 x 12 x 1	5-3/8 x 10-1/8 x 1
12 x 16 x 1	5 x 8 x 1/2
14 x 20 x 1	12 x 12 x 1

### METAL E-Z CLEAN

6 X 16 X 1
8 X 15 X 1
1/2 X 14 X 25
12 X 12 X 1
12 X 16 X 1
5.375 X 12.3 X 1
10 X 20 X 1
10 X 10 X 1



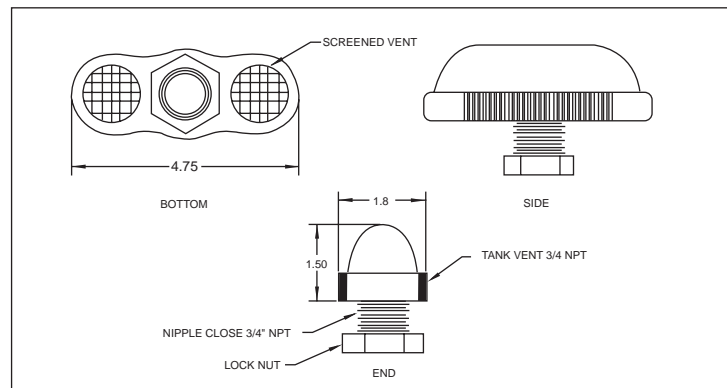
## PROTECTIVE HOOD KITS

Aluminum hood kits designed to protect externally mounted air conditioners and heat exchangers from extreme weather and vandalism.

## GAS VENT KIT

The gas vent kit provides a means to vent small enclosures. It is available as a factory installed option or may be field installed by drilling a 1.125" hole in enclosure top.

P/N \_\_\_\_\_



## STANDBY GENERATOR KIT

Factory installed option offered on our communications style enclosures. Standard kit includes a 60 AMP Hubbell Inlet Connector and DTI transfer switching system, all completely wired.



## OVERHEAD LIGHTING

15 Watt fluorescent light with cover. Can be wired to be door activated. May be shipped separately or factory installed.



## DOOR ALARM/LIGHT SWITCH

Available with either contacts opening or closing when doors open, enabling alarms, lights, etc. Switches are U.L. approved and CSA certified. Shipped separately or factory installed.



## GROUND BARS

Standard ground bar is 1/4" thick copper and will accept up to twelve (12) two hole lugs with 5/8" center to center spacing.

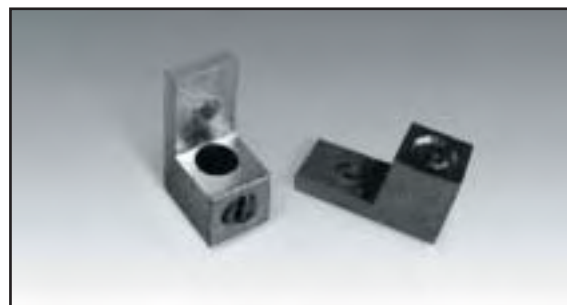


## GROUND LUGS

Solid extruded aluminum ground lugs are available as a factory installed or shipped separately.

4/0 - # 6  
1/0 - # 8

2/0 - # 6  
1/0 - # 14



## SINGLE RECEPTACLE

Provides two (2) 110 VAC outlets for use with installed or test equipment. Shipped separately or factory installed.

**P/N - 15 AMP  
- 20 AMP**



## DUAL RECEPTACLE

Provides four (4) 110 VAC outlets for use with installed or test equipment. Shipped separately or factory installed.

**P/N - 20 AMP**



## GFI RECEPTACLE

Provides two (2) 110 VAC GFI outlets for use with test equipment or as convenience outlets for technicians. Shipped separately or factory installed.

**P/N - 15 AMP**



## 220 VAC TWIST - LOCK RECEPTACLE:

Standard 220 VAC twist-lock receptacle is available in either 20 AMPS or 30 AMP.

**NEMA L6 - 20R  
NEMA L6 - 30R**



## POWER STRIP

110 VAC six (6) outlet power strip with built-in 15 AMP circuit breaker.



## 1/4 TURN LATCHES

APX designs enclosures with and offers various styles of 1/4 turn latches. These latches are designed for vandal resistance, as well as provide for the highest degree of weather resistance.



## T - HANDLE 1/4 TOOL

Available for use with our standard 5/8" deep socket 1/4 turn. Allows the technician to easily open and secure the enclosure.



## DEADBOLT LOCK

APX standard main door lock. Door locks automatically when main door handle is turned completely closed. Master and special keying available on special order. Standard on large Single Door 3R and as option on Front & Rear Door and Double Door Enclosures.

**RIGHT HAND**  
**LEFT HAND**



## "POLICE" TYPE SLAM LATCH

Standard lock on APX switch compartment doors and Small Single Door enclosures. 3R only.



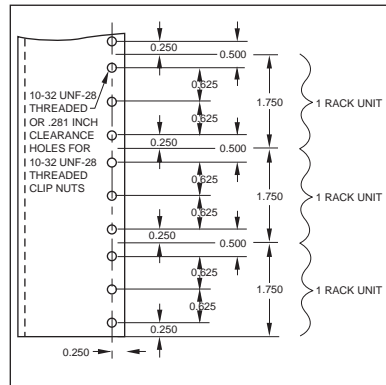
## BEST DEADBOLT LOCKS

ALL parts are made of solid brass with phosphor bronze springs. Uses the Best interchangeable core and may be keyed alike, master keyed or grand-master keyed with any other Best locks of any type.



## E.I.A. STANDARD SPACING

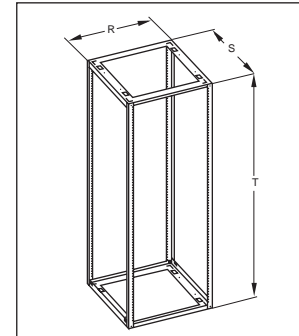
APX standard rack rails are punched to E.I.A. spacing. This chart shows this spacing in detail. Custom spacing can be provided on custom engineered enclosures.



## RACK FRAME ASSEMBLIES

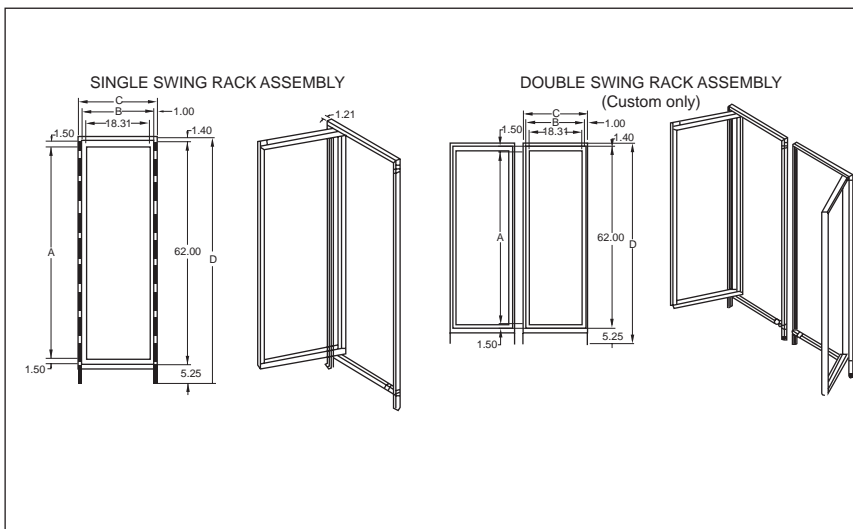
Designed for our standard Rack Mount style enclosures. Standard 19" or 24" equipment.

	R	S	T
RM392420	20.0	15.75	27.75
RM462420	20.0	15.75	34.25
RM672430	20.0	20.75	55.25
RM672438	20.0	29.25	55.25



## SWING RACKS

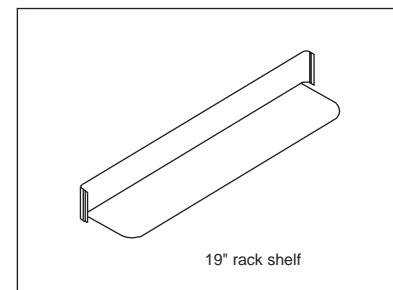
Provides for mounting of standard 19" or 24" rack equipment and allows for easy access and servicing behind the equipment. Available for use in all Communications Enclosure styles.



## STATIONARY RACK SHELF

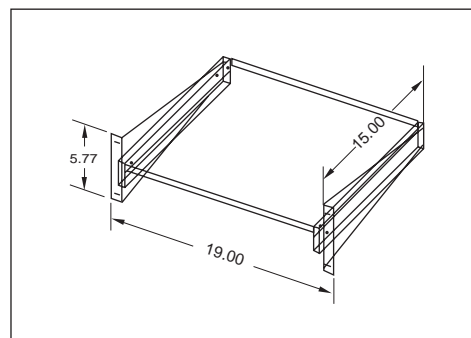
19" or 24" stationary rack shelf designed for use when mounting heavier rack equipment.

P/N -19" shelf



## SLIDE-OUT SHELF

19" or 24" slide-out rack shelf allows access to a particular piece of equipment mounted in the rack. Use is ideal for test equipment and portable





## SLIP-FITTER - 4" PEDESTAL ADAPTER

### APPLICATION:

Aluminum pedestal adapter is designed for post top mounting of enclosures. When adapter is used, enclosure bottom shall be reinforced. Stainless steel hardware is supplied.

### DIMENSIONS (inches)

PART #	SIZE
	4

## ENCLOSURE POLE MOUNTING BRACKET

### APPLICATION:

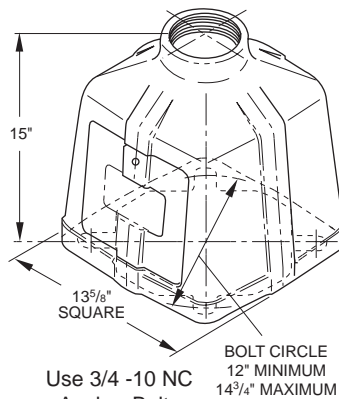
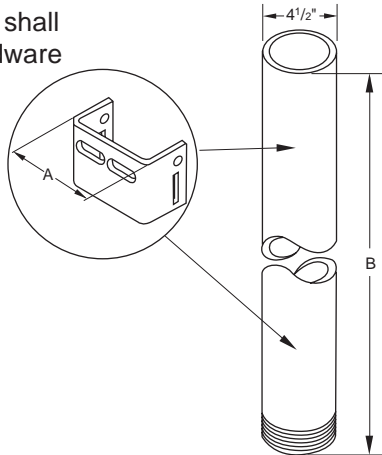
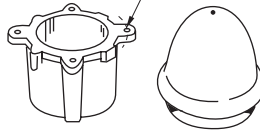
Aluminum bracket is designed for side of pole mounting. Enclosures greater than 26" in height shall have stiffener plates on both top and bottom of rear wall for mounting of brackets. Stainless steel hardware for mounting pole bracket to enclosure is

### DIMENSIONS (inches)

PART #	SIZE	A	POLE DIA.
	Large	6-3/4	8 min.
	Small	3-3/4	4 min.

Pedestal Mount Components
Pole Mount Components

6 1/2" BOLT CIRCLE



## POST CAP

### APPLICATION:

Post cap is used to seal the top of the pole in applications where the enclosure is bracket mounted.

### DIMENSIONS (inches)

PART #	SIZE
	4

## POLE

### CONSTRUCTION:

Pole is 4-1/2" O.D. x .237 wall (Schedule 40) 6063- T6 aluminum,

### DIMENSIONS (inches)

PART #	SIZE
	4
	84

## PEDESTAL BASE

### CONSTRUCTION:

Pedestal base is constructed of 356-T6 (Heat treated) cast aluminum.

### DIMENSIONS (inches)

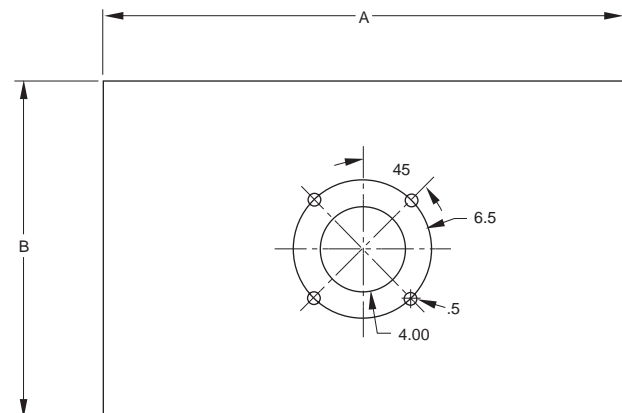
PART #	SIZE
	4

## PEDESTAL PLATES

Constructed of 5052-H32 0.250 inch aluminum. These plates provide a means of mounting the enclosure sizes listed using the pedestal components illustrated above.

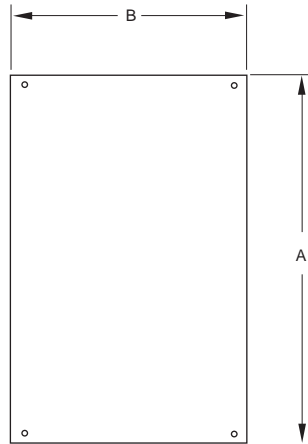
NOTE: All dimensions are in inches.

1/4" PEDESTAL PLATE CHART				
ENCLOSURE SIZE	PART NUMBER	A	B	HOLE PATTERN
301815		17.75	14.75	STANDARD HOLE PATTERN
362015		19.75	14.75	STANDARD HOLE PATTERN
412516		24.75	14.75	STANDARD HOLE PATTERN
512516		24.75	14.75	STANDARD HOLE PATTERN
412516		24.75	14.75	NO HOLES
512516		24.75	14.75	NO HOLES
503017		29.75	16.75	STANDARD HOLE PATTERN



### PANEL KITS:

Panels not shown in the chart below are available on special order.



ENCL. STYLE	ENCL. SIZE H W D	ALUMINUM					COLD ROLLED STEEL					PLYWOOD				
		PANEL KIT NO.	"A" DIM.	"B" DIM.	FLNG. OR THICK.	MTL.	PANEL KIT NO.	"A" DIM.	"B" DIM.	FLNG. OR THICK.	MTL.	PANEL KIT NO.	"A" DIM.	"B" DIM.	FLNG. OR THICK.	MTL.
SM	141007		13.00	7.75	0.125	AL										
SM	141111		13.00	8.75	0.125	AL										
SM	141407		13.00	11.75	0.125	AL										
SM	161412		15.00	11.75	0.125	AL										
SM	201715		19.00	14.75	0.125	AL						19.00	14.75	0.750	PLYD PNL KT	
SM	221507		21.00	12.75	0.125	AL						21.00	12.75	0.750	PLYD PNL KT	
SM	261715		25.00	14.75	0.125	AL						25.00	15.00	0.750	PLYD PNL KT	
LS	301815		22.00	15.00	0.125	AL						21.44	15.00	0.750	PLYD PNL KT	
LS	362015		28.00	17.00	0.125	AL						27.44	17.00	0.750	PLYD PNL KT	
DD	363213		27.00	29.00	0.125	AL										
LS	363624		30.25	33.25	0.125	AL										
FR	363624		30.25	33.25	0.125	AL										
LS	412516		35.00	21.00	0.125	AL						33.88	21.00	0.750	PLYD PNL KT	
LS	443624		38.13	33.25	0.250	AL						38.13	33.25	0.750	PLYD PNL KT	
FR	443624		38.25	33.25	0.125	AL						38.13	33.25	0.750	PLYD PNL KT	
LS	443624		38.25	33.25	0.125	AL										
DD	483615		39.00	33.00	0.125	AL						39.00	33.25	0.750	PLYD PNL KT	
LS	503017		42.00	27.00	0.125	AL						39.00	27.25	0.750	PLYD PNL KT	
LS	503617		42.00	33.00	0.125	AL						42.60	33.25	0.750	PLYD PNL KT	
LS	512516		45.00	21.00	0.125	AL						43.88	21.00	0.750	PLYD PNL KT	
LS	553826		46.00	35.00	0.125	AL						45.19	35.00	0.750	PLYD PNL KT	
LS	554426		46.00	41.00	0.125	AL		45.19	41.00	0.104	12 GASTL PNTD WHT	45.19	41.00	0.750	PLYD PNL KT	
LS	583017		50.00	27.00	0.125	AL						50.47	27.25	0.750	PLYD PNL KT	
DD	604415		51.00	41.00	0.125	AL		50.50	40.00	0.104	12 GASTL PNTD WHT	51.00	41.25	0.750	PLYD PNL KT	
DD	727215		63.00	34.00	0.125	AL		63.00	32.88	0.104	12 GASTL PNTD WHT					
LS	763017		68.63	27.00	0.125	AL						68.47	27.25	0.750	PLYD PNL KT	
LS	773826		69.00	35.00	0.125	AL										
LS	774426		69.00	41.00	0.125	AL						70.38	41.25	0.750	PLYD PNL KT	

HARDWARE

## SHELF KITS

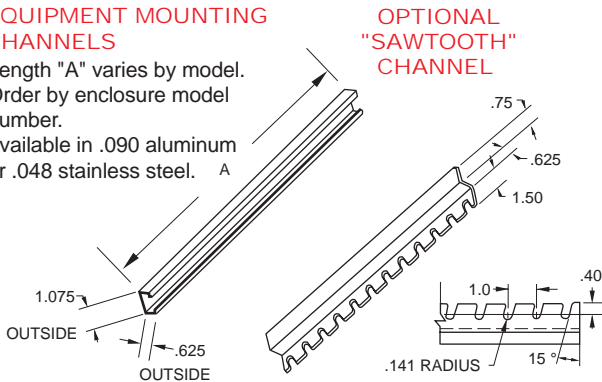
APX Technologies Equipment Shelves are designed to provide versatile mounting options for user equipment. Easily mounted using standard equipment channels, they provide a sturdy surface for mounting of customer equipment.

Constructed of .125" thick 5052-H32 grade aluminum alloy.

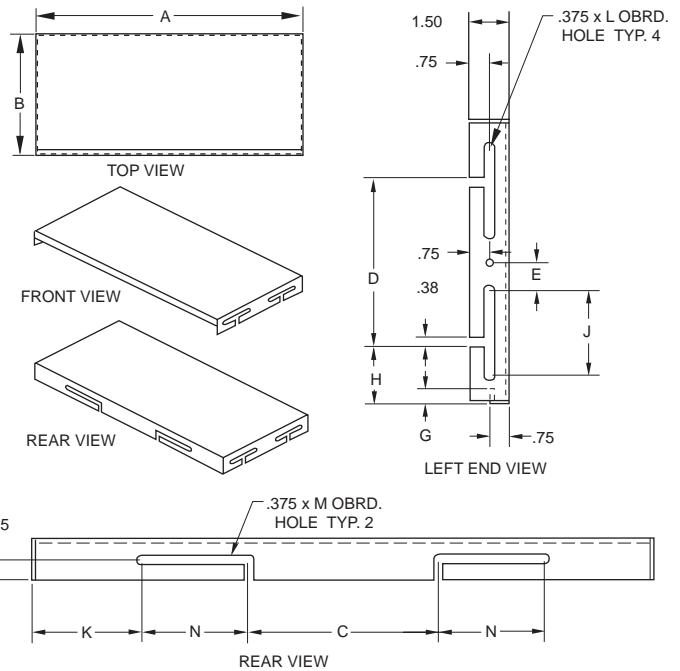
Shelves whose width equals 38" or greater are center reinforced on the underside with 1" formed aluminum angle.

### EQUIPMENT MOUNTING CHANNELS

- Length "A" varies by model. Order by enclosure model number.
- Available in .090 aluminum or .048 stainless steel.



### OPTIONAL "SAWTOOTH" CHANNEL

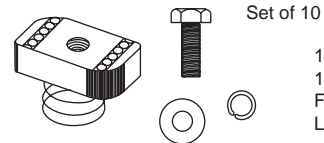


### EQUIPMENT MOUNTING HARDWARE

Fast and easy installation of panels and equipment to mounting channels using these spring nuts and standard 1/4" x 20 bolts. Simply insert the spring nuts to the desired channel position, and one quarter turn positions them to your requirements.

Panels or equipment clamp the spring nut to the channels providing secure mounting where you need it.

### SHELF HARDWARE KIT



Set of 10

1/4 X20 SPRING NUT  
1/4 X20 BOLT  
FLAT WASHERS  
LOCK WASHERS

PART #

## SHELF DIMENSIONS

ENCLOSURE SIZE	KIT NO.	A	B	C	D	E	G	H	J	K	L	M	N
SM201715		15.44	10.63	7.13	6.38	1.06	.55	2.12	3.19	4.13	3.56	3.38	3.00
SM261715		15.44	10.63	7.13	6.38	1.06	.55	2.12	3.19	4.13	3.56	3.38	3.00
LS301815		16.44	10.63	7.13	6.38	1.06	.55	2.12	3.19	4.13	3.56	3.38	4.00
LS362015		18.44	10.63	7.13	6.38	1.06	.55	2.12	3.19	4.13	3.56	3.38	4.00
LS412516		23.44	10.63	7.13	6.38	1.06	.55	2.12	3.19	4.13	3.56	3.38	4.00
LS363624		34.44	10.63	15.00	5.94	1.32	.53	2.34	2.94	4.22	3.31	4.38	4.00
LS443624		34.44	10.63	15.00	5.94	1.32	.53	2.34	2.94	4.22	3.31	4.38	4.00
LS512516		25.38	10.63	7.13	6.38	1.06	.55	2.12	3.19	4.13	3.56	3.38	4.00
LS503017		28.44	10.63	12.00	5.94	1.32	.53	2.34	2.94	4.22	3.31	4.38	4.00
LS503617		34.44	10.63	15.00	5.94	1.32	.53	2.34	2.94	4.22	3.31	4.38	4.00
LS583017		28.44	10.63	12.00	5.94	1.32	.53	2.34	2.94	4.22	3.31	4.38	4.00
LS763017		28.44	10.63	12.00	5.94	1.32	.53	2.34	2.94	4.22	3.31	4.38	4.00
LS553826		36.44	10.63	N/A	5.94	1.32	.53	2.34	2.94	N/A	3.31	N/A	4.00
LS554426		42.44	10.63	N/A	5.94	1.32	.53	2.34	2.94	N/A	3.31	N/A	4.00
LS773826		36.44	10.63	N/A	5.94	1.32	.53	2.34	2.94	N/A	3.31	N/A	4.00
LS774426		42.44	10.63	N/A	5.94	1.32	.53	2.34	2.94	N/A	3.31	N/A	4.00
DD363213		30.44	10.63	N/A	5.94	1.32	.53	2.34	2.94	N/A	3.31	N/A	4.00
DD483615		34.44	10.63	15.00	5.94	1.32	.53	2.34	2.94	4.22	3.31	4.38	4.00
DD604415		42.44	10.63	N/A	5.94	1.32	.53	2.34	2.94	N/A	3.31	N/A	4.00
FR363624		34.44	10.63	15.00	5.94	1.32	.53	2.34	2.94	4.22	3.31	4.38	4.00
FR443624		34.44	10.63	15.00	5.94	1.32	.53	2.34	2.94	4.22	3.31	4.38	4.00

## Aluminum Fabrication Is Our Specialty

### Why Choose Aluminum?

APX Technologies, Inc. specializes in enclosures fabricated from aluminum. As the leading manufacturer and supplier of outdoor enclosures to the traffic signal industry, we have noticed a trend toward the almost exclusive use of aluminum enclosures. Seventy-five percent of all enclosures supplied by APX are aluminum with sixty percent of those being natural or unpainted.

Some Important Reasons Why You Should Choose Aluminum For Your Next Enclosure Needs:

- |                      |                     |
|----------------------|---------------------|
| Low Cost             | Modern Appearance   |
| Lightweight          | Non-Sparking        |
| Non-Magnetic         | Reflectivity        |
| Corrosive Resistance | Strength            |
| Thermal Conductivity | Chemical Resistance |
| Non-Toxic            | Durable             |



### Virtually Maintenance Free

In addition to these immediately recognized advantages of aluminum, long-term maintenance costs are virtually eliminated because of the durability and corrosive resistance of aluminum. The alloy of aluminum we use is 5052-H32. This alloy was originally developed for building ship hulls. Therefore, it is very resistant to corrosion. The resistance to corrosion of aluminum alloys depends on the presence of a very thin film of aluminum oxide that protects the metal surface. This inert film forms immediately upon the metal when it is in contact with air. The extremely thin protective film effectively halts further atmospheric oxidation of aluminum and prevents or slows down chemical reaction between aluminum and the chemicals found in marine and industrial environments.

### Economical and Attractive

Aluminum offers an economical, attractive, natural finish that is forever free of destructive rust. The surface can be changed materially by mechanical finishing and embossing, etching and electroplating. Anodizing increases corrosion resistance and permits iridescent finishes in a wide range of colors.

### Lightweight

Aluminum weighs only one-third as much as most other product metals, making it the logical material for products that must be lifted, mounted or transported. Aluminum has higher conductivity per pound than any other metal. The heat transfer efficiency of aluminum is particularly important in applications for the process industries.

### Converting from Steel to Aluminum

To help determine aluminum requirements for your next project, use the conversion table below. This table shows theoretical aluminum gauge substitutions for given steel gauges. The data is calculated for flat panels and is based on equal strength, equal stiffness, or equal dent resistance. As with any substitution, we strongly urge that tests be conducted to verify a material selection. Since it is difficult to accommodate all of the design details in a calculation, these numbers are approximations.

Steel		Aluminum Equivalent			
Gauge	Thickness(in.)	Strength Thickness(in.)	Stiffness Thickness(in.)	Dent Resist Thickness(in.)	Recommended Equivalent Gauge
18	0.050	0.065	0.071	0.065	12
17	0.056	0.074	0.080	0.074	12
16	0.062	0.082	0.089	0.082	11
15	0.070	0.092	0.100	0.092	10
14	0.078	0.103	0.111	0.103	1/8"
13	0.093	0.123	0.134	0.123	3/16"
12	0.109	0.144	0.156	0.144	3/16"

### Aluminum Gauges and Thicknesses

<b>Gauge</b>	<b>Thickness(in.)</b>	<b>Gauge</b>	<b>Thickness(in.)</b>	<b>Gauge</b>	<b>Thickness(in.)</b>
24	= 0.020	16	= 0.050	10	= 0.100
22	= 0.025	14	= 0.063	1/8"	= 0.100
20	= 0.032	12	= 0.080	3/16"	= 0.100
18	= 0.040	11	= 0.090		



PEDESTAL MOUNT



WALL MOUNT



PAD MOUNT



POLE MOUNT

# Color Selection Chart



## STANDARD FINISH

This chart highlights our standard colors using a polyester powder. Baked enamel is available on most colors, and we can provide special paints and finishes upon request.

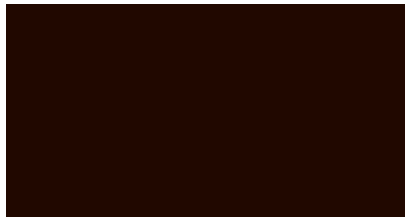
**When ordering, specify description and number.**

In preparation for painting, all parts are submerged in each tank of a three stage iron phosphate conversion technique. After phosphatizing, the parts are passed thru an infrared oven to eliminate any moisture.

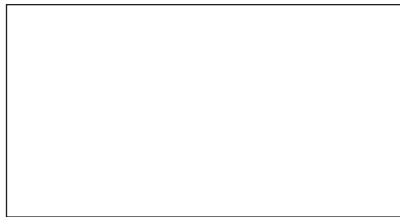
**NOTE:** Air dry paint may be required if enclosure is too large for our oven.

## SPECIAL COLORS

Custom colors can be matched by providing a paint chip or the Fed. Std. 595



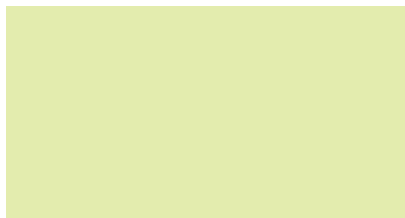
SEMI-GLOSS BLACK  
T - 42



WHITE  
T - 92



FLAT BLACK  
T - 43



SEAFOAM GREEN  
T - 16



HUNTER GREEN  
T - 10



FOREST GREEN  
T - 15



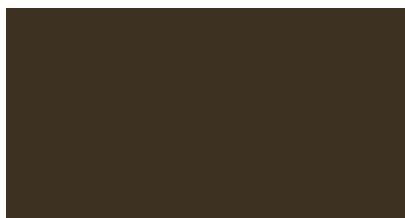
SILVER  
T - 91



ASA61 GRAY  
T - 24



FEDERAL YELLOW  
T - 31



BRONZE  
T - 71



ASA70 GRAY  
T - 23



BELLCORE BEIGE  
T - 09

COLOR CHART

APX Technologies, Inc. standard enclosures are designed to meet or exceed U.L. listed NEMA 3R or 4X.

**NEMA 3R** - APX NEMA 3R enclosures far exceed industry standard 3R requirements. We start with an enclosure designed to meet NEMA 4X and add venting. Outdoor or harsh environments necessitate the use of aluminum and stainless steel to provide corrosion resistance. Corrosion resistant material, combined with the structural requirements of 4X, allow APX 3R enclosures to protect your equipment from severe weather, vandals and other conditions the 3R rating doesn't address. Example: U.L. doesn't require door gasketing on NEMA 3R. For many of the applications we encounter, gasketing is a must.

**NEMA 4X** - APX NEMA 4X enclosures break the old notion that screw clamps are required along three (3) sides of the enclosure to meet 4X. Our heavy duty three (3) point latch easily meets 4X U.L. requirements. For field service personnel and food industry requirements, the ease of access and minimal exposed parts offered by APX, three (3) point latching is desirable. Also, when closing the enclosure, simply rotating the handle assures 4X seal unlike fooling with eight (8) or more screw clamps. All APX three (3) point latching with handles are pad lockable for security. Since our 4X rating exceeds NEMA 4 and 12, we list NEMA 4 and NEMA 12 on some of our enclosure styles.



**U.L. NEMA 4X -  
Hose Down Test**



**U.L. NEMA 3R -  
Rain Test**

### 3-Point Latching

Constructed with extra thick aluminum and nylon rollers on the locking bar, this mechanism:

- eliminates screw clamps on NEMA 4, 4X enclosures
- provides maximum security and environmental protection
- provides smooth, easy operation



### Door Restraint Bar

- prevents door swing while working or during high winds
- automatically engages on larger enclosures



### 3/4" Solid Stainless Steel Padlockable Door Handle

- provides maximum strength and security
- resists corrosion
- provides NEMA 3R or 4X protection



### Switch Compartment With Removable Back Plate

Backplate can be replaced with clear lexan panel to allow viewing of internal equipment.

- allows limited access to and control of internal equipment



### Light/Alarm Switch Bracket (Removable)

- provides mounting for internal light, alarm or other device to be activated when

### Double Flanged Door Openings

- prevents water and dirt entry
- protects against vandalism
- provides strength and rigidity
- maintains structural integrity of enclosure



- ### Heavy Duty Continuous Hinge
- Attached with 1/4" stainless steel captivated pin and stainless steel carriage bolts
- prevents door sagging
  - provides maximum security and corrosion resistance

