

General

This instruction sheet provides instructions for installing typical 195-type protectors to an inside wall in a single column with side exit customer interface cables for 100 to 900 customer pairs.

Customer Services

- To find out more about **Carrier Apparatus** products, visit us on the web at: <http://cw.commscope.com/>
- For technical assistance regarding Carrier Apparatus products: contact your local CommScope account representative or Commscope technical support at 1-800-344-0223.
- Report any missing or damaged parts to CommScope customer service in Omaha, Nebraska, at 1-866-539-2795.

Tools Required

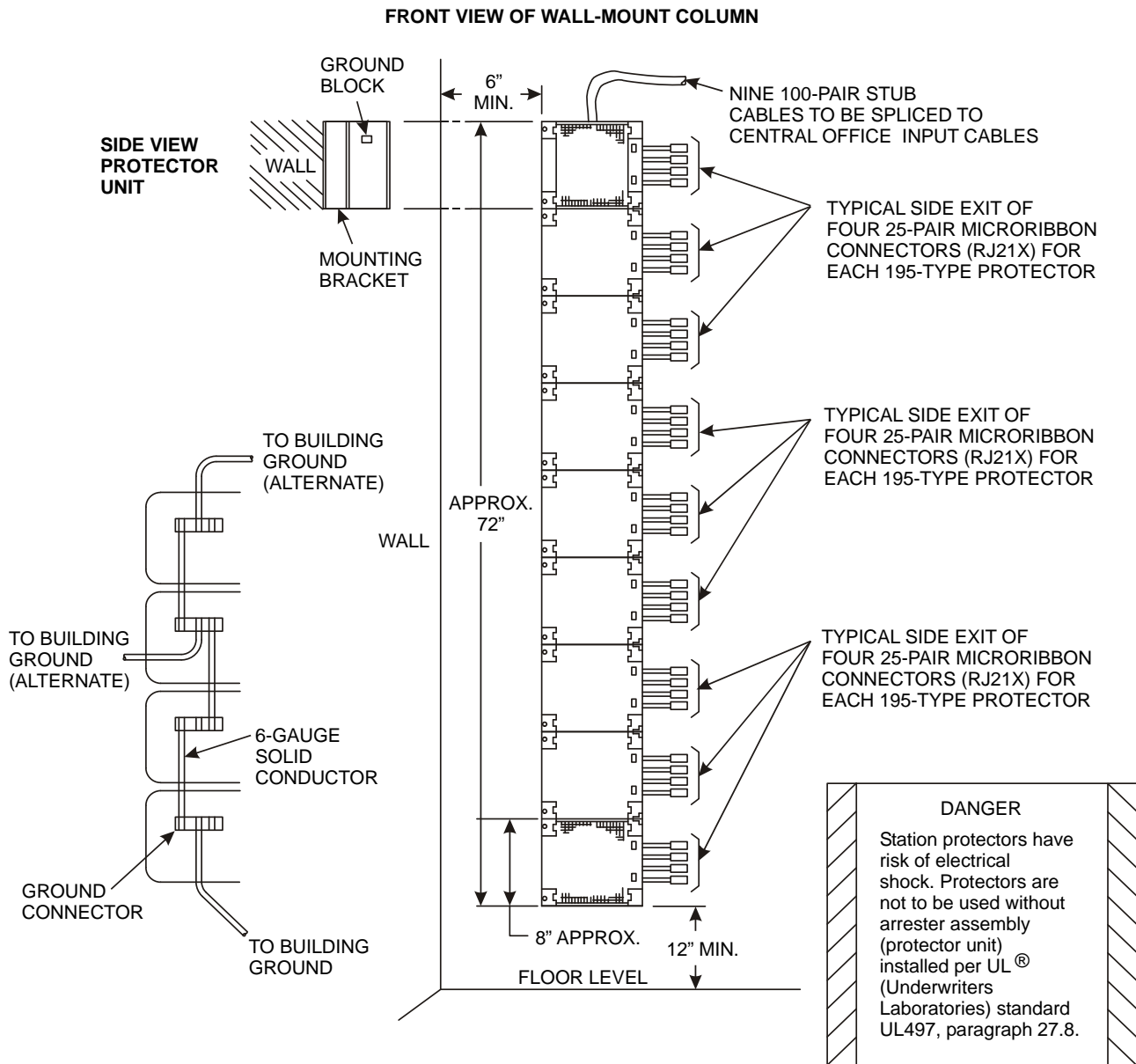
- Level
- Tape measure or other measuring device
- Screwdriver
- Wiring tools
- Drill with a 3/32-inch (2.38 mm) wood bit.

Ordering Information

Wall-Mount Units (100 Pair)		
Apparatus Code	Material ID	Description
195A1-100-25	105 404 776	25-foot input stub, wall-mount bracket, 1-foot female output connector
195A1-100-25M	105 564 025	25-foot input stub, wall-mount bracket, 1-foot male output connector
195A1-100-50	105 564 033	50-foot input stub, wall-mount bracket, 1-foot female output connector
195A1-100-50M	105 564 041	50-foot input stub, wall-mount bracket, 1-foot male output connector

Frame-Mount Units (100 Pair)		
Apparatus Code	Material ID	Description
195B1-100-25	105 501 050	25-foot input stub, 1-foot female output connector
195B1-100-25M	105 564 058	25-foot input stub, 1-foot male output connector
195B1-100-50	105 564 066	50-foot input stub, 1-foot female output connector
195B1-100-50M	105 564 074	50-foot input stub, 1-foot male output connector
195B1-100-100	105 564 082	100-foot input stub, 1-foot female output connector
195B1-100-100M	105 564 090	100-foot input stub, 1-foot male output connector

NOTE:



MOUNTING THE UNITS

The preceding figure shows a side view of the mounting configuration. The following figure shows the top view. Mount from one to nine 195-type protector brackets per local instructions. Ensure that top bracket is both horizontally level and vertically plumb.

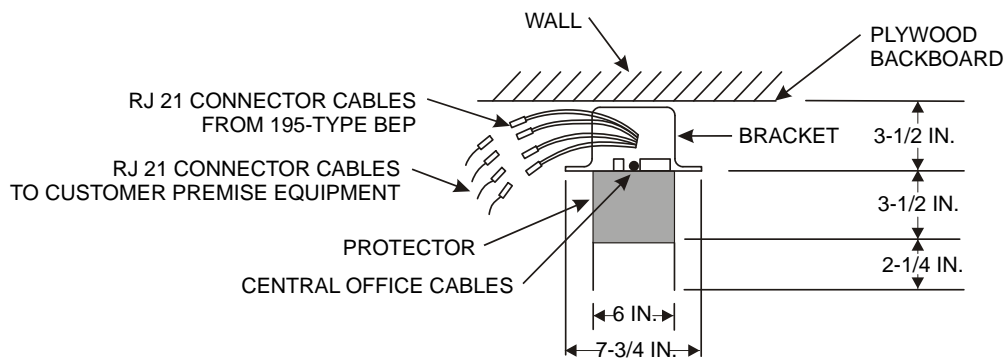
1. Mount top protector to top bracket as shown.
2. Route 100-pair stub cable to top or bottom of protector per local instructions.

3. Route four 25-pair connectorized exit cables (customer interface cables) to right or left side, top or bottom of protector per local instructions. If connectorized cables are fed to top or bottom of mounting brackets, customer cables should be immediately installed after each protector is mounted on its wall bracket.
4. Feed next CO stub cable behind mounted protector(s) for vertical feed or dress downward for bottom feed.
5. Feed next group of four 25-pair connectorized exit cables to right or left side, top or bottom of protector per local instructions.
6. Mount next protector below those already mounted.
7. Repeat Steps 1 through 7 for rest of protectors to be mounted.
8. After all protectors within vertical column have been mounted, use adequate length of number 6 solid conductor from one protector to another using alternate positions on ground connectors for more than two protectors. Use middle position of any protector ground connections for grounding protector array to a building ground.

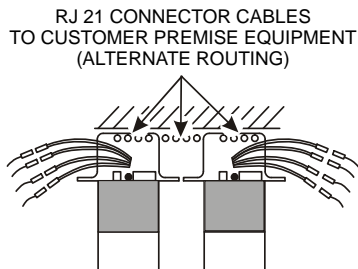
NOTE:

When configuring three columns, you need not use the mounting block for the center column.

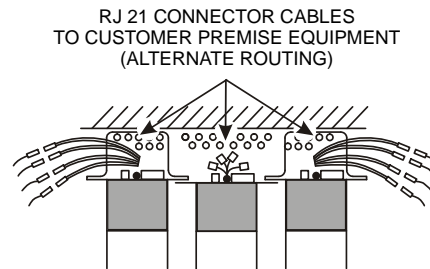
TOP VIEWS OF WALL MOUNTED COLUMNS



SINGLE COLUMN

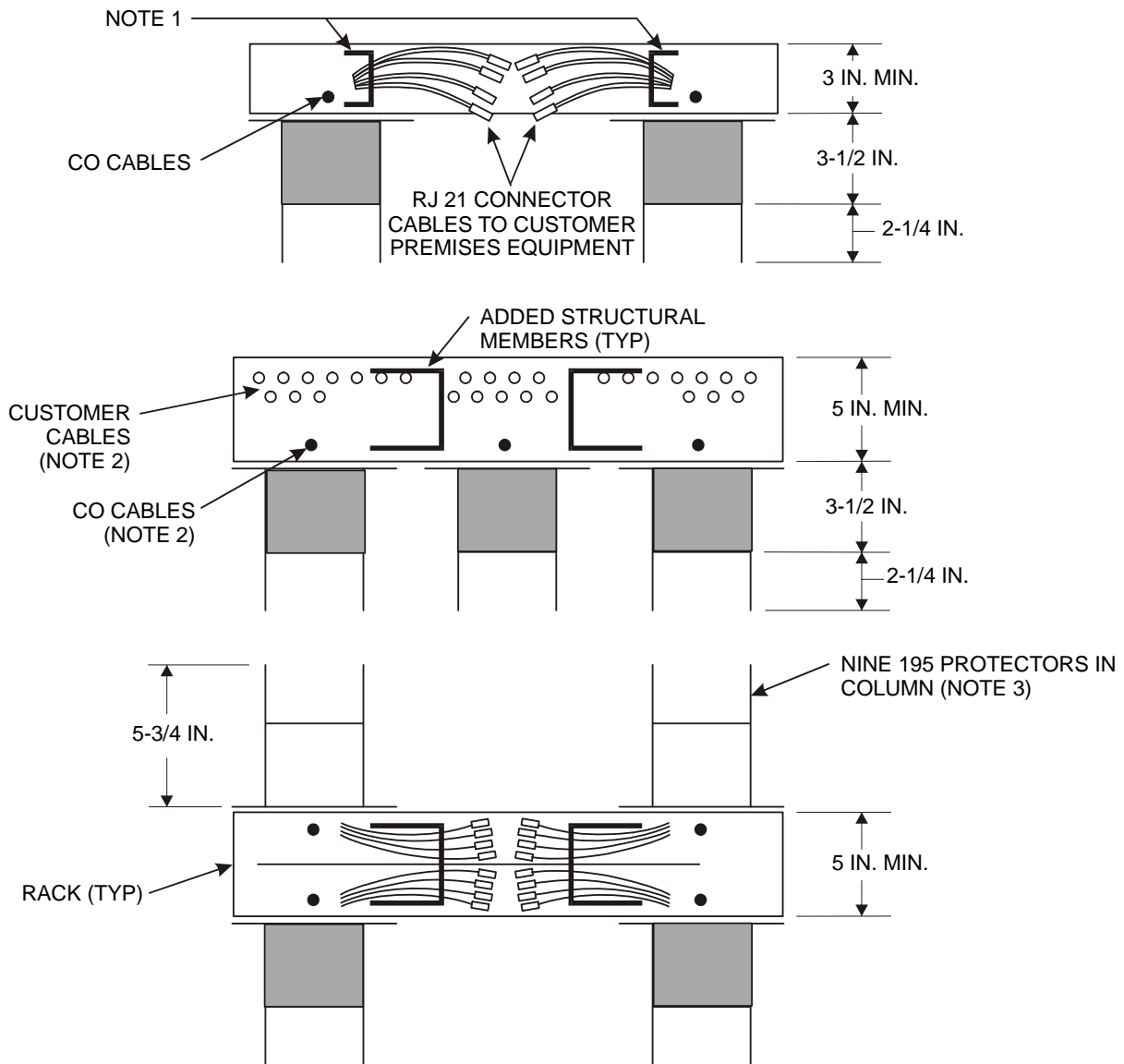


TWO COLUMNS



THREE COLUMNS

**TOP VIEWS OF 23-INCH OR
 24-INCH RACK MOUNTING COLUMNS (MAXIMUM CAPACITY)**



NOTES:

1. Two vertical structural members needed to accommodate column configurations.
2. For rack-mounting configurations, all CO and customer cables access from top. The swivel permits either top or bottom cable entry if rack base permits.
3. Maximum column capacity – nine protectors on each side of rack.

Protector Modules Recommended for Use in all 195-type BEPs					
Protector Code	Material ID	Description	Sneak Current Rating @ 25 Degree C	DC Voltage Breakdown	Impulse Sparkover Voltage
3B1EW	104 410 147	Gas tubes	N/A	265-425 V	200-800 V
4B1EW	104 401 856	Gas tubes + Heat Coils	Carry 350 mA Operate in <210 sec. at 540 mA	265-425 V	200-800 V
3C1S	105 514 756	Solid State, Balanced	N/A	220-300 V	220-300 V
4C1S	104 386 545	Solid State + Heat Coils, Balanced	Carry 350 mA Operate in <210 sec. at 540 mA	220-300 V	220-300 V
7AAOT	108 115 197	Solid State, Bi Mod	N/A	265-400 V	265-400 V
7ABOT	106 945 074	Solid State, Balanced	N/A	265-400 V	265-400 V
7CBOT	106 945 538	Solid State, Balanced + Heat Coils	Carry 350 mA Operate in <210 sec. at 540 mA	265-400 V	265-400 V
7AB6A	107 098 196	Solid State + MTU + Half Ringer	N/A	265-400 V	265-400 V
7AB6B	107 670 028	Solid State + Half Ringer	N/A	265-400 V	265-400 V
7AB6C	107 911 612	Solid State + MTU	N/A	265-400 V	265-400 V
<p>⇒ NOTE:</p> <p>For the full range of protector modules available to you, contact your Lucent Technologies account representative.</p>					
<p>IMPORTANT: UL* PROTECTOR SHOULD BE INSTALLED IN ACCORDANCE WITH NEC†, NCS, ANSI/NFPA 70 (ARTICLE 800 SECTION C).</p>					
<p>* Registered trademark of Underwriter Laboratories, Inc. † Registered trademark of National Fire Protection Association.</p>					