

**AXS / AX-SX / SAX / SSAX  
EQUIPMENT ACCESS SYSTEM**

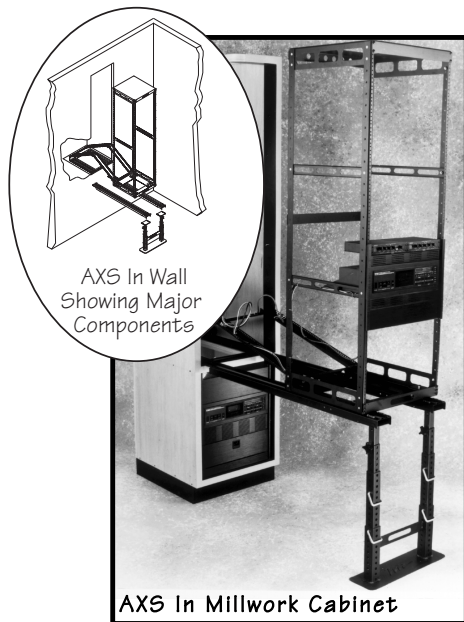
U.S. PATENT # 5,185,818

**ASSEMBLY INSTRUCTIONS**OVERVIEW

For millwork, custom cabinet & flush in-wall installation

Providing a unique method of service, the AXS / AX-SX / SAX / SSAX systems allow an entire bay of **HEAVY** equipment to pull out on removable service tracks.

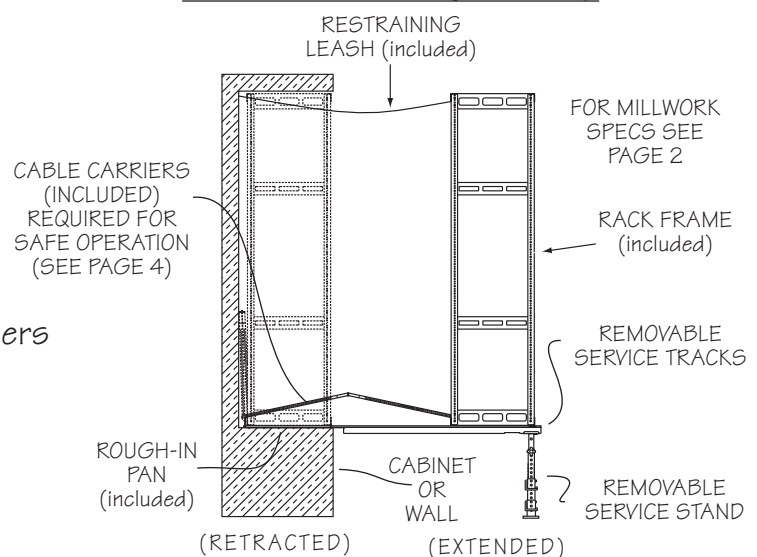
Upon installation or service completion the rolling rack frame retracts, service tracks are disconnected and the system is secured with locking trim panel.

Features

- Shortens installation and service time
- Detachable rack frame allows off-site equipment integration
- Choice of two extensions: AXS & SAX extend 48-1/2", AX-SX & SSAX extend 25"
- Rack frame can be 3" to 40" off floor, providing installation flexibility
- Articulating cable carriers attach to rack frame for effective cable management
- Useable rack frame heights from 10 spaces (17-1/2") to 43 spaces (75-1/4") for AX-SX & SSAX systems and 15 spaces (26-1/4") to 43 spaces (75-1/4") for AXS and SAX systems
- Rack frame 26" deep for AXS-xx-26, 20" deep for AXS and AX-SX systems, 16" deep for SAX & SSAX systems
- 650 lb. capacity with proper weight distribution

OUTLINE OF ASSEMBLY STEPS

- 1) Construct rough opening and base
- 2) Assemble frame
- 3) Install cable carriers
- 4) Install service stand
- 5) Attach frame to tracks and cable carriers
- 6) Assemble leash
- 7) Tie cable to carriers
- 8) Secure rack to millwork

Outline Of Functioning AssemblyInstruction # **I-1000**Rev. **I**

Date:

**1/12/04**Part # **AXS / AX-SX / SAX / SSAX**

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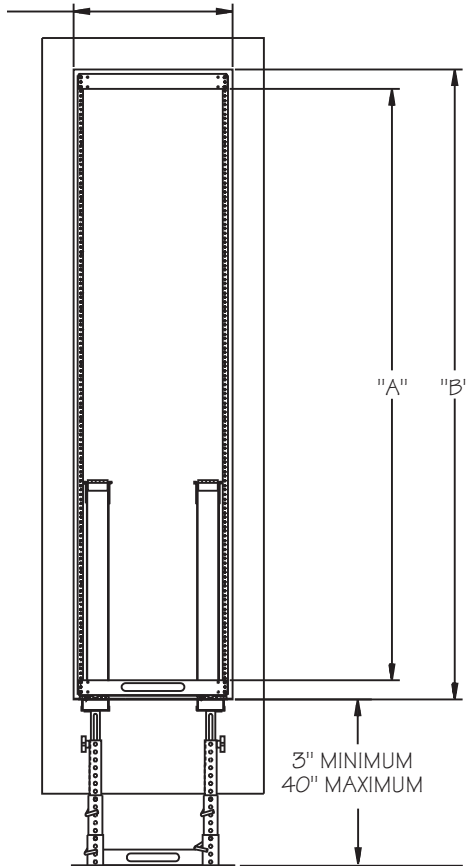
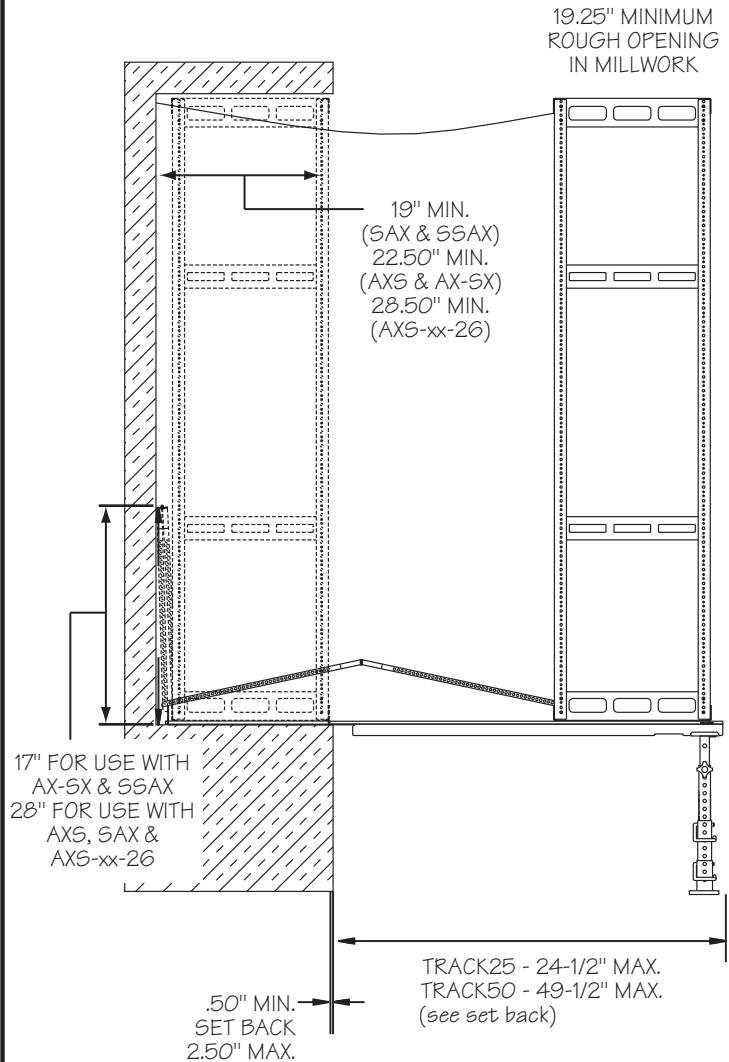
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**Middle Atlantic Products, Inc.**

# 1) Construct rough opening and base

- 1a) Rough-in millwork **must be plumb, square** and completed before beginning assembly. Millwork mounting platform must be minimum 19.25" wide by 18.50" deep for SAX & SSAX models with a 0.50" set back, 19.25" wide by 22.50" deep for AXS & AX-SX models with a 0.50" set back, and 19.25" wide by 28.50" deep for AXS-xx-26 models with a 0.50" set back
- 1b) The millwork must be constructed in such a manner as to provide a weight capacity greater than the total assembled weight



## MILLWORK SPECS

	NUMBER OF USEABLE RACK SPACES	"A" (INCHES) USEABLE RACK HEIGHT	"B" (MIN. INCHES) ROUGH OPENING HEIGHT
AX-SX & SSAX ONLY	10	17-1/2	22-3/16
	11	19-1/4	23-15/16
	12	21	25-11/16
	13	22-3/4	27-7/16
	14	24-1/2	29-3/16
	15	26-1/4	30-15/16
	16	28	32-11/16
	17	29-3/4	34-7/16
	18	31-1/2	36-3/16
	19	33-1/4	37-15/16
	20	35	39-11/16
	21	36-3/4	41-7/16
	22	38-1/2	43-3/16
	23	40-1/4	44-15/16
24	42	46-11/16	
AXS SAX AXS-XX-26 ONLY	25	43-3/4	48-7/16
	26	45-1/2	50-3/16
	27	47-1/4	51-15/16
	28	49	53-11/16
	29	50-3/4	55-7/16
	30	52-1/2	57-3/16
	31	54-1/4	58-15/16
	32	56	60-11/16
	33	57-3/4	62-7/16
	34	59-1/2	64-3/16
	35	61-1/4	65-15/16
	36	63	67-11/16
	37	64-3/4	69-7/16
	38	66-1/2	71-3/16
	39	68-1/4	72-15/16
	40	70	74-11/16
	41	71-3/4	76-7/16
	42	73-1/2	78-3/16
	43	75-1/4	79-15/16

**NOTE:** TOTAL RACK HEIGHT INCLUDING ROUGH-IN PAN IS THE USEABLE RACK HEIGHT ("A") PLUS 4-9/16"

MILLWORKER **MUST** REFER TO THESE INSTRUCTIONS!

## 2) Assemble frame

2a) Attach rackrails to top & bottom using flange nuts on pre-installed studs (do not tighten yet) (see figure B)

**Note:** Front of top has a solid panel in front, base has a horizontal slot in front

2b) Install and tighten flathead hex drive screws into rackrails (Front & Back) (see figure B)

2c) Install temporary squaring panels, centered vertically on front and rear & tighten (see figure A)

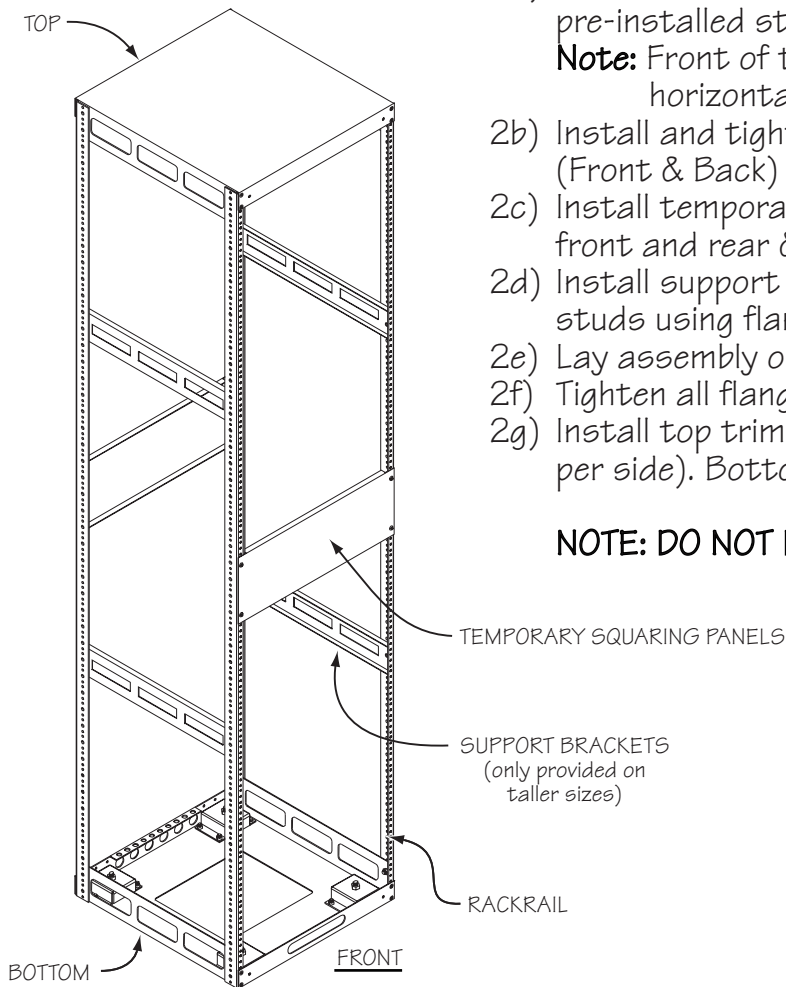
2d) Install support brackets (when included) on preinstalled studs using flange nuts (do not tighten yet)

2e) Lay assembly on a flat surface (see figure C)

2f) Tighten all flange nuts

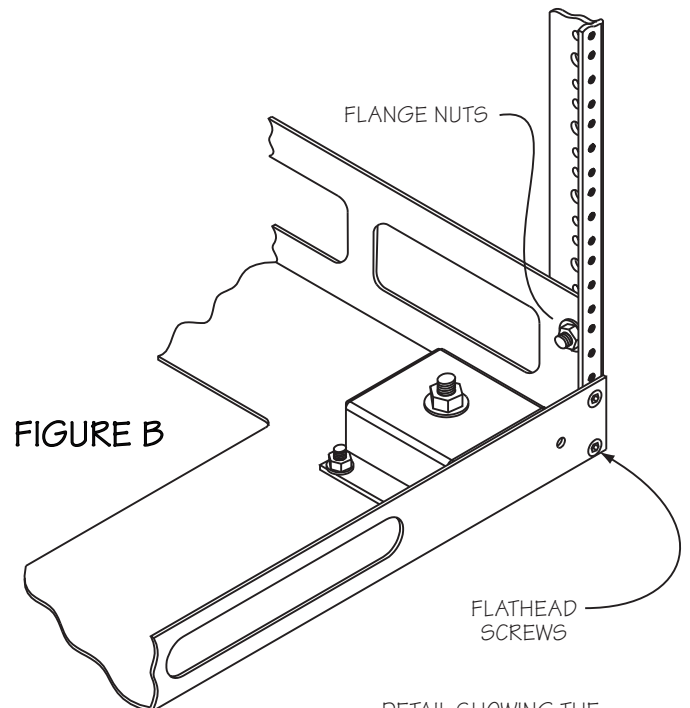
2g) Install top trim panel only (top trim panel has only one hole per side). Bottom panel is for locking frame closed

**NOTE: DO NOT DISCARD BOTTOM TRIM PANEL**



**FIGURE A**

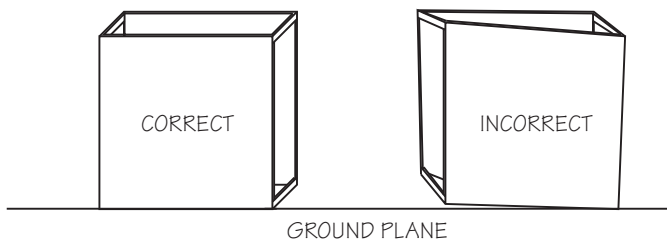
COMPLETED FRAME



**FIGURE B**

DETAIL SHOWING THE MOUNTING CONFIGURATION OF RACKRAIL TO THE FRAME TOP AND BOTTOM

CUBICALLY SQUARE FRAME



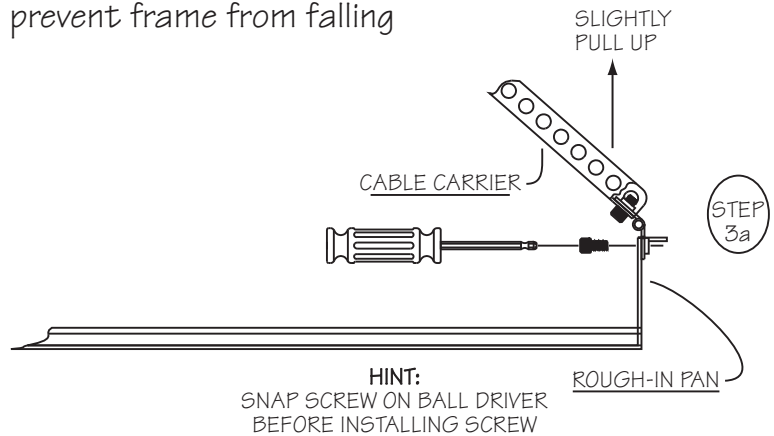
**FIGURE C**

When performing step #2e, lay rack on a flat surface to ensure that the frame does not go out of square

### 3) Install cable carriers (included)

**! Note:** This is required for safe operation to prevent frame from falling

- 3a) Install cable carriers to the rear flange of rough-in pan using the hex drive screws and ball driver provided
1. Loosely install two hex drive screws
  2. Pull up on cable carrier and secure screws
  3. Repeat on other side



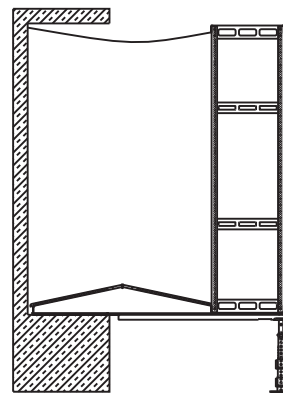
- 3b) Fold up cable carriers and retain in position with rubber bands to facilitate installation

- 3c) Place cable carrier/rough-in pan assembly into millwork mounting platform, carefully center, and mount with appropriate customer supplied hardware (Refer to page 2 "MILLWORK SPECS" for specific front setback dimensions)

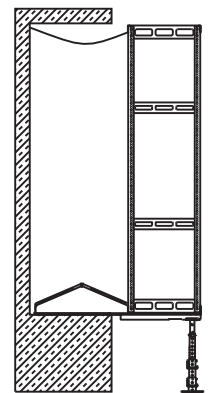
### 4) Install service stand

- 4a) Select the appropriate height service stand and rough adjust for approximate height

- 4b) Place the front of the service track on the cabinet opening and the rear on the service stand saddle (track indent matches service stand & prevents kick-out)



AXS, SAX, AXS-XX-26 SYSTEM  
(long extension)



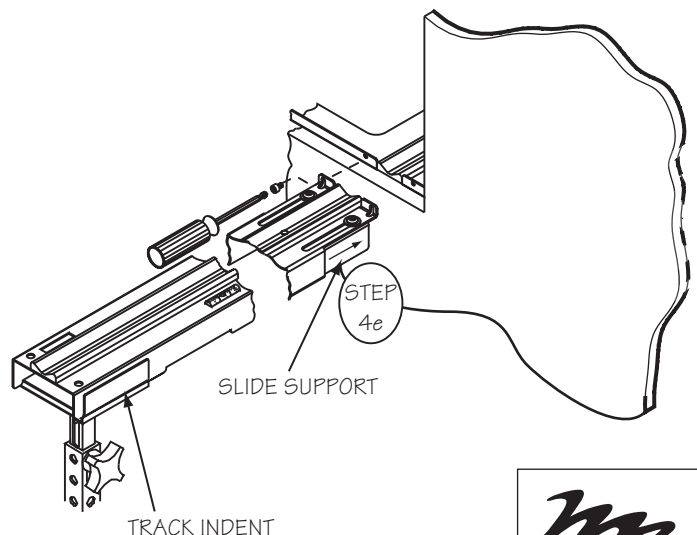
AX-SX, SX-AX SYSTEM  
(short extension)

- 4c) Bolt service track to rough-in pan using the 10-32 hex-drive screws and ball driver provided

- 4d) Fine adjust the service stand with the aid of the level installed in the service track

- 4e) Loosen slide support screws using ball driver provided. Adjust slide support to meet millwork and tighten support screws. This strengthens track when extending heavy equipment for servicing

- 4f) Repeat steps 4b through 4e for second track



## 5) Attach frame to tracks and cable carriers

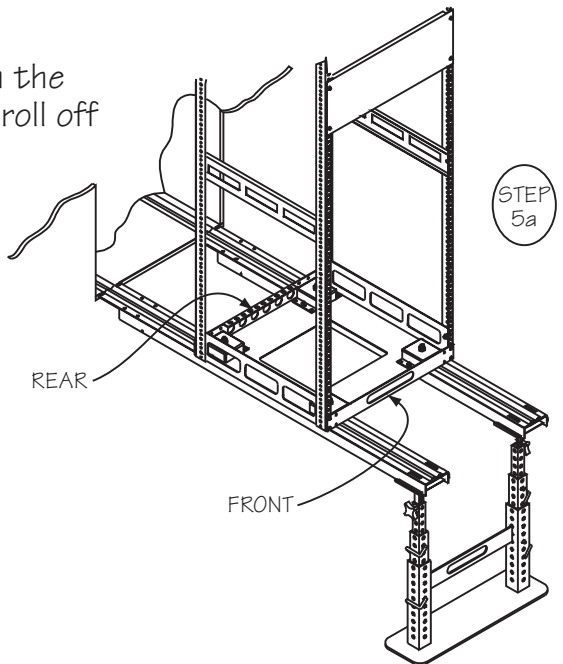
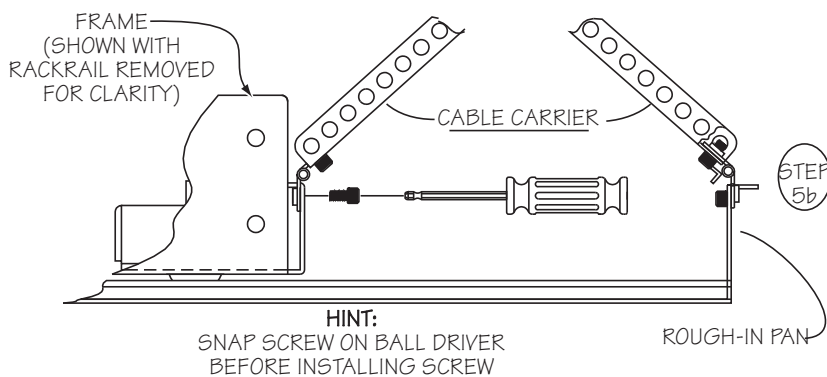
5a) Noting the front and rear, lift the frame and place it on the tracks. Care should be taken not to allow the frame to roll off the end of the tracks

**NEW** 5b) Remove the rubber band from one of the cable carriers, extend and attach it to the frame using the 10-32 hex drive screws and ball driver provided

**NOTE:** The hinge on the cable carrier has now been flipped for your convenience

1. Loosely install two hex drive screws
2. Push down on cable carrier and secure screws

5c) Repeat step 5b for the second cable carrier

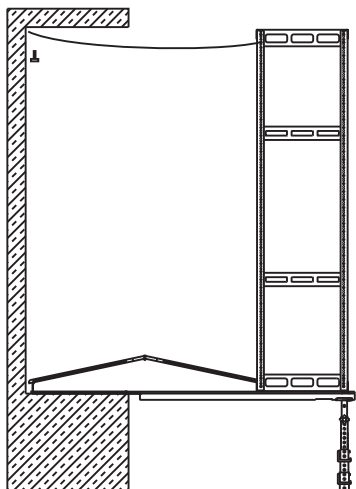


## 6) Assemble leash

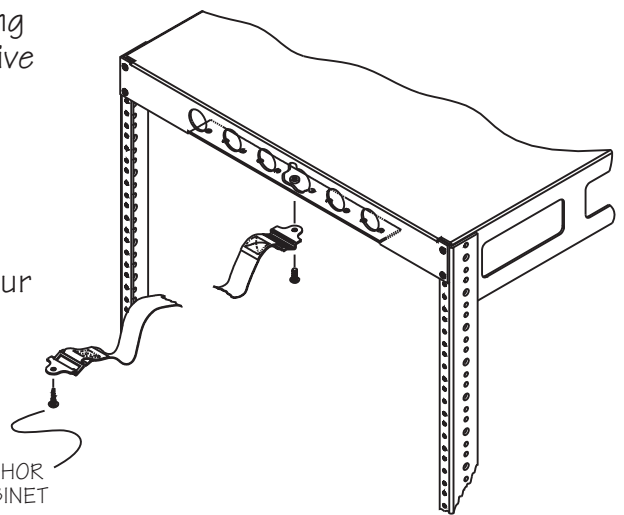
6a) Install one end of the leash to top rear of frame using 10-32 philips screw provided into the installed captive nut on frame flange

6b) Extend frame until cable carriers stop frame at full out position

6c) Attach opposite end of leash to a stable point in your cabinet / millwork with hardware of your choice



INSTALLER PROVIDES ANCHOR HARDWARE TO TOP OF CABINET MILLWORK



**PLEASE NOTE!**  
THE LEASH PREVENTS THE TOP OF THE CABINET FROM TIPPING FORWARD WHEN PULLED OUT TOO FAST

MIDDLE ATLANTIC HAS PROVIDED THE LEASH WITH ENOUGH LENGTH FOR MOST INSTALLATIONS. THE LEASH CAN BE SHORTENED BY TYING KNOTS IN IT



7) Tie cables to carriers  
 (Leave service loop at center to allow full extension of cable carrier)

7a) Extend cable carriers fully

7b) Lay wire down in channel

7c) Tie wires in a bundle and center the bundle in the channel

7d) Tie the bundle to the channel keeping the bundle centered

7e) Leave service loop at hinge point to allow for fold-up

7f) Watch for pinch points!

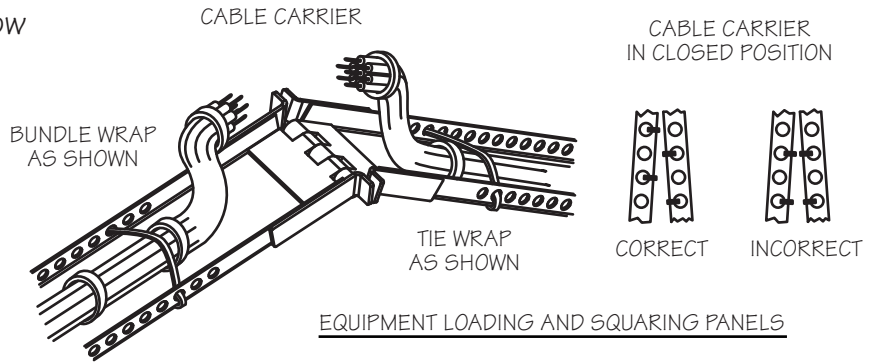
8) Secure rack to millwork position

8a) After AXS is loaded and wired, roll rack into millwork so that all four ball bearing casters are on rough-in base and off of service tracks

8b) Remove tracks & service stand

8c) Close AXS and secure to rough-in base using bottom trim panel and four Phillips head screws (supplied in hardware kit)

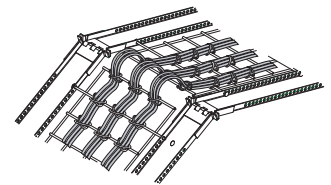
**HINT:** If during installation loaded rack frame has a tendency to spring outward, it can be secured through the rackrail into the millwork wherever a blank panel is located. Remove blank panel and with rack frame in closed position, install screw through side of front rail, into inside of millwork opening. Secure the frame directly to the millwork on both the right and left sides



Due to the nature of the rackrail in the frame assembly, Middle Atlantic suggests that the squaring panels be left in place until some of your components have been mounted to eliminate the possibility of a center bow in the frame

DID YOU KNOW?

Optional part # AXS-WT25/WT50 is available to handle larger cable bundles



PART #	FITS
AXS-WT-25	AX-SX, SSAX
AXS-WT50	AXS, SAX

