

# KoldLok® Raised Floor Grommets (AR7720, AR7730, AR7740)—Installation

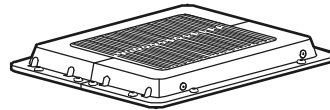
## Overview

### KoldLok Raised floor grommets



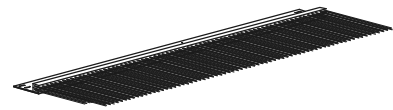
KoldLok Integral Grommet  
AR7720 (10 pieces)

Each includes:  
A(40); C(1); G(1)



KoldLok Surface Mount Grommet  
AR7730 (10 pieces)

Each includes:  
C(1); D(10)



KoldLok Extended Grommet  
AR7740 (10 pieces)

Each includes:  
B(50); E(10); F(10)

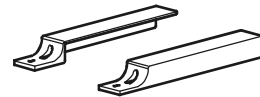
### Inventory



A #8 self tapping screw



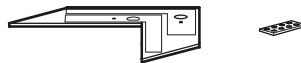
C Edge-mount foam strips,  
10-piece pad



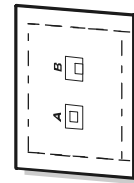
F End cap sets—left and right sides



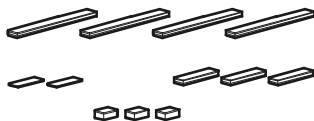
B #10 self tapping screw



D Mounting kit with electrostatic  
discharge (ESD) buttons



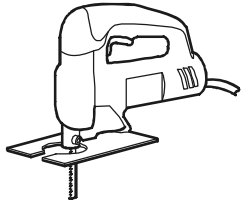
G Cutout template



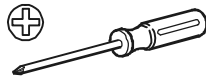
E Floor mount kit

## Tools (not provided)

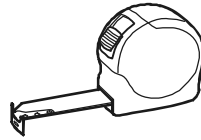
**AR7720, AR7730, AR7740.**



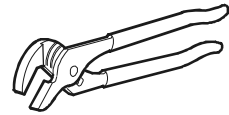
Bandsaw or handsaw



Phillips screwdriver



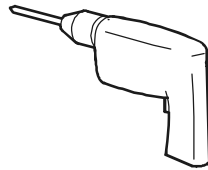
Tape measure



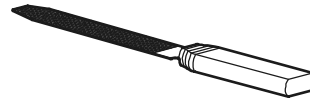
Pliers



Isopropyl alcohol

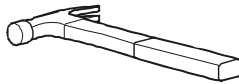


Power drill with Phillips head driver bit and drill bit

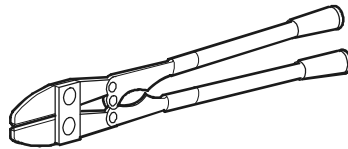


Metal file

**AR7740—additional tools required for modification.**



Hammer or mallet



Wire/bolt cutters

## General Information

### Effective installation of cables

To minimize air loss from under the raised floor plenum, position the cables along the centerline of the brushes in the KoldLok Grommets. Make sure to allow adequate slack in the cables. If the cables are under too much tension, the grommet filaments may be pulled apart, resulting in a V-shaped gap that will cause an increase in the volume of air escaping from under the raised floor.

### Maintaining proper cooling of equipment

Failure to follow equipment manufacturers guidelines for maintaining proper cooling may result in the overheating of equipment. Before sealing cable cutouts, ensure that proper airflow to the intake side of computer equipment or enclosures is feasible through the use of devices such as perforated floor tiles or grates. Achieving proper airflow to the intake side of computer equipment and enclosures is the responsibility of the customer.

## Cutting raised floor tiles

Each raised floor tile manufacturer provides instructions to properly and safely modify their products. Observe the tile manufacturers recommendations for applicable tools, cutting procedures, the design load capacity of the cut tile, and any additional underfloor support requirements for cut raised floor tiles. Be familiar with the tile strength de-rating caused when you cut the tile.

When installing the KoldLok Extended Grommet on a newly cut hole, trim the cutout before installation.

## Safety requirements

Installers must be familiar with standard safety and risk management practices when working in raised-floor environments and when modifying floor tiles. Use of standard personal safety equipment including safety glasses, face shields, respirators, hand protection, and safety footwear is a requirement. Assurance by facilities management of basic safety training for installers on safe use of the appropriate installation tools is a requirement.


## Preparation

Floor tiles must be cleaned with a suitable wax remover (isopropyl alcohol or equivalent). All tiles must be free of dust and contaminants before you mount the KoldLok Grommets.

## Dimensions and tile cutting requirements

	Millimeters (W x D x H)	Inches (W x D x H)
<b>AR7720</b>		
Overall size	279.00 x 210.00 x 41.00	11.00 x 8.25 x 1.63
Product height above the raised floor	3.00	0.13
Usable cable area	203.00 x 102.00	8.00 x 4.00
Cut required to install Grommet in interior of the tile	235.00 x 172.00	9.25 x 6.75
Cut required to install long side of the Grommet on the tile edge	235.00 x 191.00	9.25 x 7.50
Cut required to install short side of the Grommet on the tile edge	275.00 x 172.00	10.25 x 6.75
<b>AR7730</b>		
Overall size	279.00 x 209.00 x 29.00	11.00 x 8.25 x 1.13
Product height above the raised floor	29.00	1.25 with mounting system installed
Maximum cutout size sealed	254.00 x 184.00	10.00 x 7.25
Usable cable area	210.00 x 102.00	8.25 x 4.00
<b>AR7740</b>		
Maximum cutout size sealed	610.00 x 102.00	24.00 x 4.00
Usable cable area	559.00 x 64.00	22.00 x 2.50
Height above the floor	25.00 with mounting system installed	1.00 with mounting system installed



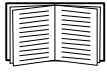
See the provided cutout template  for illustrations that show where to place the grommet on the raised floor tile.

# Installation

## KoldLok Integral Grommet–AR7720



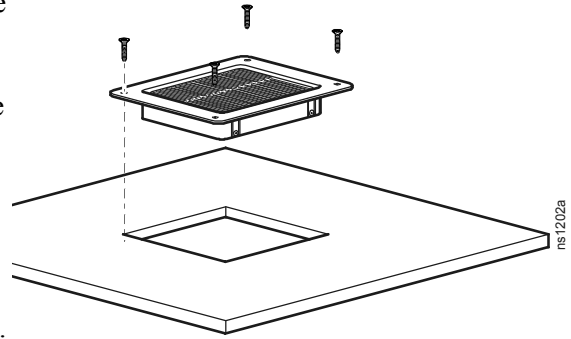
**Caution:** Do not over tighten the screws.



See “Cutting raised floor tiles” on page 3 for floor tile cutting requirements.

### Installation on the tile interior

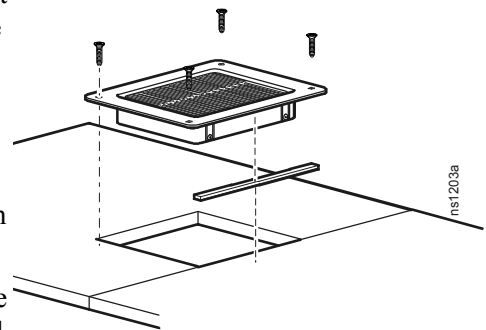
1. Determine the requirements of the floor tile hole cut out dimensions and use the cutout template **G** to make the necessary cut outs. Remove any burrs that resulted from cutting the floor tile with a metal file (not provided). It is not necessary to cover the rough edge of the cutout when installing the KoldLok Integral Grommet.
2. Test-fit the grommet to the floor tile by making the flange flush with the top side of the floor tile. Ensure there is no binding and that the fit is even on all sides of the grommet frame.
3. With the grommet properly placed in the floor tile, fasten it securely to the floor tile using the #8 self-tapping screws **A**.



### Installation on the tile edge—long edge of grommet

In the absence of a supporting floor tile flange, edge-mount installations require a foam insert on the open side of the cut to serve as an air block. If your floor tile has been cut on three sides only, providing one open edge, the grommet must be installed with the supplied foam strip inserted into the molded depression on its underside.

1. Determine the requirements of the floor tile hole cut out dimensions and use the cutout template **G** to make the necessary cut outs. Remove any burrs that resulted from cutting the floor tile. It is not necessary to cover the rough edge of the cutout when installing the KoldLok Integral Grommet.
2. Stretch the edge-mount foam strip **C** to fill the 228-mm (9-in) depression on the underside of the grommet.
3. Test-fit the grommet to the floor tile, with flange on the topside of the floor tile. Ensure there is no binding and that the fit is even on the grommet.
4. With the grommet properly placed in the floor tile, fasten it securely to the floor tile using the #8 self-tapping screws **A**.



### Installation on the tile edge—short edge of grommet

The KoldLok Integral Grommets may also be installed with their short sides mounted along the floor tile edge. Cut out a 257 x 171 mm (10.13 x 6.75 in) hole in the floor tile using the enclosed cutout template **G**. Follow the same cleaning and fastening steps as above.

# KoldLok Surface Mount Grommet–AR7730

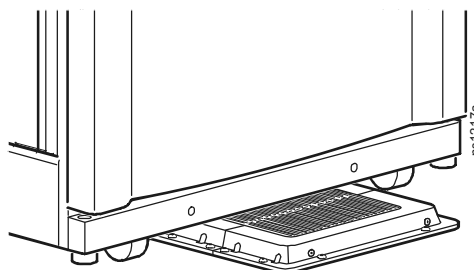
The KoldLok Surface Mount Grommet is designed to separate into two identical halves. One half will be stationary on the floor tile; the other will be removable to facilitate equipment relocation, re-cabling, and removal of the tile.


1. Determine the requirements of the floor tile hole cut out dimensions and make the necessary cut outs.

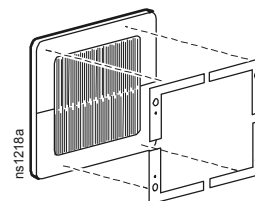



See “Cutting raised floor tiles” on page 3 for floor tile cutting requirements.

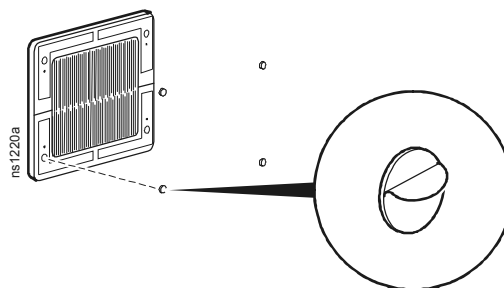
2. Determine which half of the grommet will be stationary and which half will be removable. The removable half should always be accessible.



3. Apply the double-sided adhesive strips provided in the Floor Mounting Kit  (identified by the red stripe) to the stationary half of the grommet and the single-sided adhesive strips (identified by the green stripe) to the other half by removing the backing material and pressing the exposed adhesive firmly to the bottom of the grommet. Ensure the edge of the foam is aligned with the edge of the grommet. Leave the second layer of backing material on the foam until the grommet is ready to be installed on the raised floor.



4. Insert four ESD buttons in the four die-cut holes of the Floor Mounting Kit .



5. Separate the halves of the grommet by pressing the buttons on the sides of the grommet and pulling the halves apart.

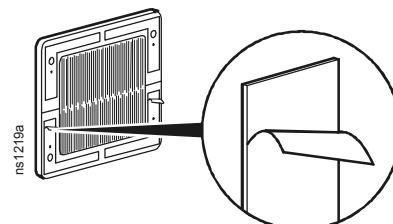


To separate the grommet see “Disassembling the KoldLok Surface Mount Grommet” on page 6.

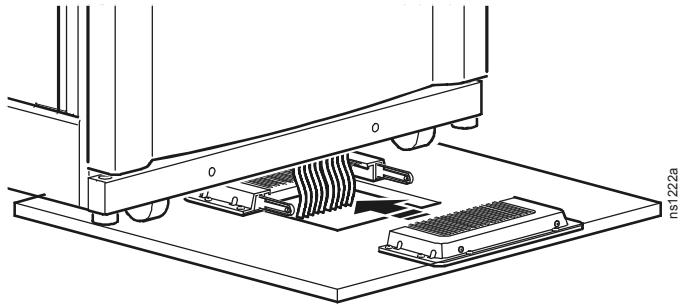
6. Remove the remaining backing material from the stationary half of the grommet.



**Note:** If access underneath a rack or cabinet is limited, it is helpful to perform a practice installation before exposing the protective adhesive strip.



7. Position the stationary half of the grommet behind the cable bundle, aligning the cabling with the edge of the grommet filaments. Position the removable half of the grommet in front of the cable bundle and snap the grommet halves back together.

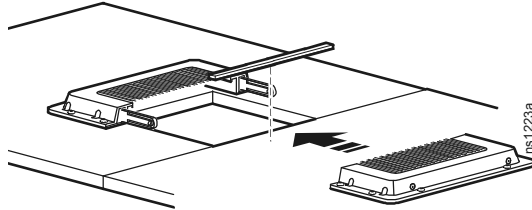


8. Press the grommet onto the floor tile and ensure good adhesion to the tile.
9. If there is slack available in the cables, arrange the cables so that they are against the exposed edge of the filaments.

### Installation on the tile edge

If the cable cutout is an edge cut and the installation of the grommet will be within the perimeter of the tile, use the foam strip included in the Floor Mounting Kit ④.

Apply the foam strip to the exposed metal support on the cut side of the tile to provide an air block between the metal support and the bottom of the grommet.

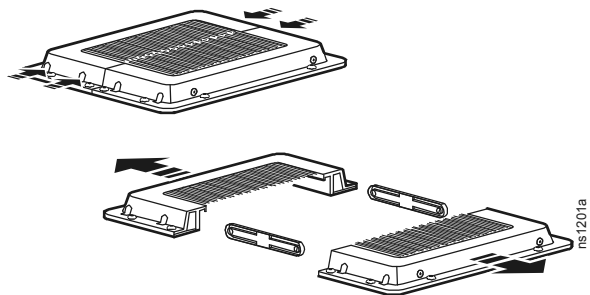


**Note:** If the cable cutout is an edge cut and the grommet will overlap onto the adjacent tile, a foam strip is not necessary.

### Disassembling the KoldLok Surface Mount Grommet

To remove the removable section of the grommet, press and hold the locking buttons on both sides of the joiner bars while gently pulling the removable section of the grommet away from the stationary section.

Foam adhesive can be removed by gently lifting it with a putty knife or other scraping tool.



# KoldLok Extended Grommet–AR7740



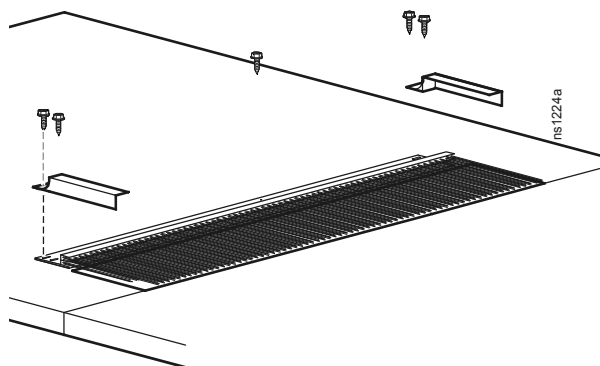
See “Cutting raised floor tiles” on page 3 for floor tile cutting requirements.

## Installation with self-tapping screws



**Caution:** If the KoldLok Extended Grommets are being installed in an active data center, remove the floor tile and install the grommet outside of the data center environment. Following installation, return the floor tile and grommet to the raised floor.

1. Determine the requirements of the floor tile hole cut out dimensions and make the necessary cut outs.
2. Position the grommet over the cable cutout, with the flange resting on the floor tile and grommet filaments covering the cutout.
3. Ensure the flange does not rest on top of any cutout trim.



If the grommet cannot be placed without resting on the cutout trim, install the grommet with the Floor Mount Kit **E**. See “Installation with the floor-mount kit” on page 8.

4. Once the grommet is positioned, drive a #10 self-tapping screw **B** through the center pre-drilled screw hole on the grommet flange to attach the grommet to the raised floor.
5. Align the screw holes of one end cap **F** with the screw holes on the end of the grommet flange. Use #10 self-tapping screws **B** to attach the end cap and flange to the floor tile. The screw-hole design allows you to position the end caps horizontally or vertically when you attach them to the flange.



**Note:** With the inside wall of the end caps **F** mounted against the flange, the installed grommet can seal an opening the length of a 600-mm floor tile. With the end caps extended away from the flange, the installed grommet can seal an opening the length of a 24-in floor tile.

6. Repeat step 4 with the other end cap **F**.
7. Attach the grommet with the remaining #10 self-tapping screws **B**.
8. Clean any residue that may have been created during installation.

## Installation with the floor-mount kit

1. Remove one layer of adhesive backing from the ESD pads of the floor mount kit **E** and install it on the bottom of the flange at the center and outside corners.



**Caution:** To ensure proper electrostatic discharge, ESD pads must adhere to the bottom surface of the flange.

2. Remove one layer of adhesive backing from each of the four 5-in strips of the floor mount kit **E**. Mount strips between each ESD pad, along the rear edge of the flange that is farthest away from the brush holders.

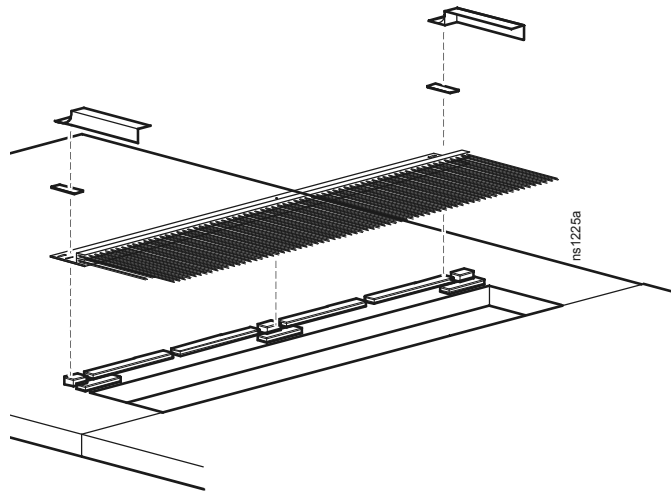
3. Remove one layer of adhesive backing from each of the three 2-in strips of the floor mount kit **E**. Mount strips above each ESD pad.

4. Remove the second layer of adhesive backing from all seven adhesive strips. Position the grommet on the floor tile and over the cable cutout.

5. Adhere the unit to the floor. Press down firmly on all portions of the unit to ensure a secure connection to the raised floor surface.

6. Use the two strips of thin double-sided adhesive from the floor mount kit **E** to adhere the left and right end caps **F** to the top of the flange.

7. If the cutout spans the full length of the raised floor tile mount (the end caps to the edge of the flange) ensure that the outside edges of the end caps are flush with the edges of the floor tile.



## Modification of KoldLok Extended Grommets

The KoldLok Extended Grommets can be modified to seal large and unique openings. The metal filament channel and grommet flange may be cut to any length.



**Caution:** Never cut metal within the raised floor environment.

1. Using a hammer (or mallet) and stake, drive one of the metal filament channels out of the grommet flange to the desired length.
2. Mark the cut line.
3. Use bolt cutters to cut and snap the metal filament channel.
4. Crimp the ends of the metal filament channel with pliers to prevent bristle escape. File any rough or sharp corners and edges.
5. Repeat steps 1 through 4 above for the other metal filament channel.
6. Mark the empty grommet flange for cutting. Cut the flange with a saw.
7. File the cut edge of the flange.
8. Use a hammer (or mallet) and stake to reposition the metal filament channel in the grommet so that the end of the metal filament channel does not protrude from the end of the flange channel.



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