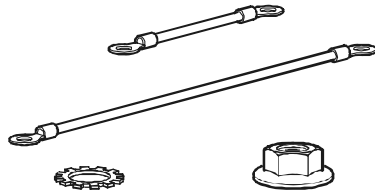


# Shielding Troughs and Shielding Partitions

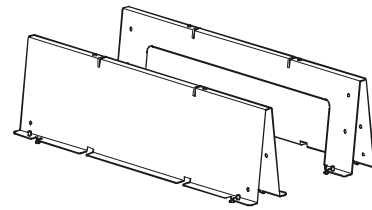
## Overview

Shielding Troughs and Shielding Partitions separate power cables and data cables that are routed on the roofs of enclosures in an InfraStruXure<sup>®</sup> system. The shielding troughs for the 80 kW InfraStruXure PDU, the 20 kW InfraStruXure System, and the Rack Distribution Panel are two pieces. All other Shielding Troughs are one piece. The NetShelter<sup>®</sup> Shielding Troughs and the Pass-Through Shielding Partitions each have an opening for routing data cables in and out of enclosures.

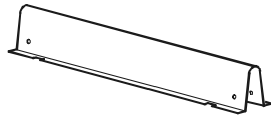
## Parts identification



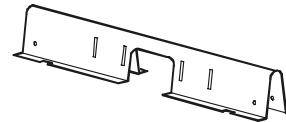
- A** 8-inch ground strap
- B** 24-inch ground strap
- C** M6 serrated lock washer
- D** M6 flanged hex nut



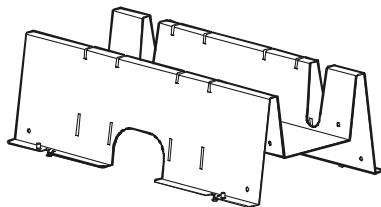
80 kW PDU Shielding Trough (2 pieces)  
AR8178BLK (750-mm wide)  
Includes: (4) **B**; (16) **C**; (8) **D**



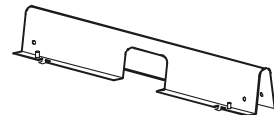
Solid Shielding Partition  
AR8162ABLK (600-mm wide)  
AR8172BLK (750-mm wide)  
Each includes: (1) **A**; (4) **C**; (2) **D**



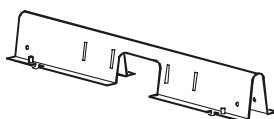
Pass-Through Shielding Partition  
AR8163ABLK (600-mm wide)  
AR8173BLK (750-mm wide)  
Each includes: (1) **A**; (4) **C**; (2) **D**



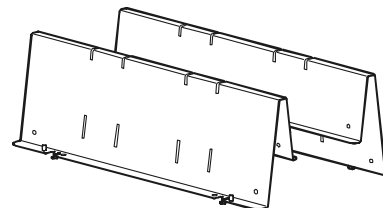
NetShelter Shielding Trough  
AR8161ABLK (600-mm wide)  
AR8171BLK (750-mm wide)  
Each includes: (1) **A**; (4) **C**; (2) **D**



Front Shielding Partition  
AR8182BLK (750-mm wide)  
Each includes: (1) **A**; (4) **C**; (2) **D**



Rear Shielding Partition  
AR8183BLK (750-mm wide)  
Each includes: (1) **A**; (4) **C**; (2) **D**



40 kW PDU Shielding Trough  
AR8160ABLK (600-mm wide)  
Includes: (3) **B**; (12) **C**; (6) **D**  
AR8180 (750-mm wide)  
Includes: (1) **A**; (4) **C**; (2) **D**

## How to install NetShelter Shielding Troughs

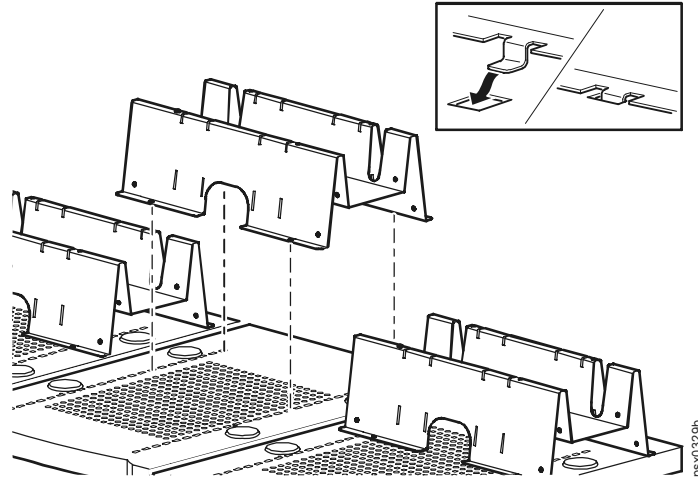


When installing NetShelter Shielding Troughs, be sure that the opening for routing data cables is facing the front of the enclosure.

**Note**

Install Shielding Troughs along the back edge on the roof of each row of enclosures.

1. Insert the rear set of fastening tabs into the square holes along the back of the roof.
2. Squeeze the sides of the Shielding Trough toward each other at the bottom to insert the front fastening tabs.



## How to install one-piece PDU Shielding Troughs

Install the one-piece PDU Shielding Troughs on each 40 kW or 60 kW InfraStruXure PDU in your installation.

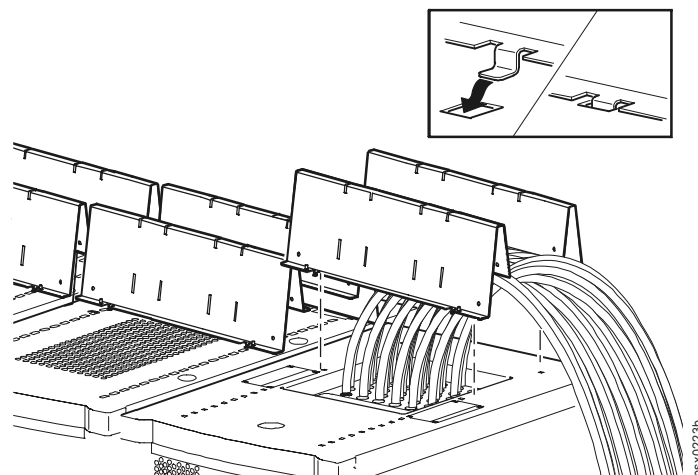


When installing a PDU Shielding Trough, drape the power cables over the side of the enclosure as shown. After you install all the Shielding Troughs in the row, route the power cables in the Shielding Troughs.

**Note**

Install Shielding Troughs along the back edge on the roof of each row of enclosures.

1. Insert the rear set of fastening tabs into the square holes along the back of the roof.
2. Squeeze the sides of the Shielding Trough toward each other at the bottom to insert the front fastening tabs.



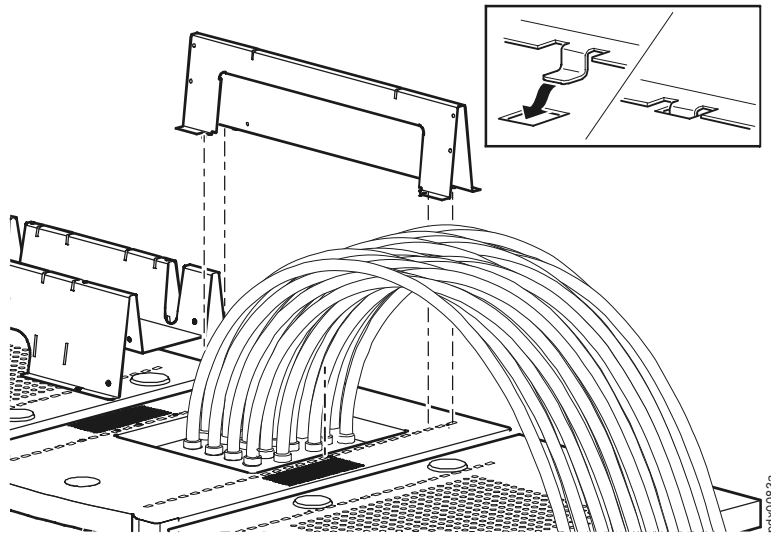
## How to install two-piece Shielding Troughs



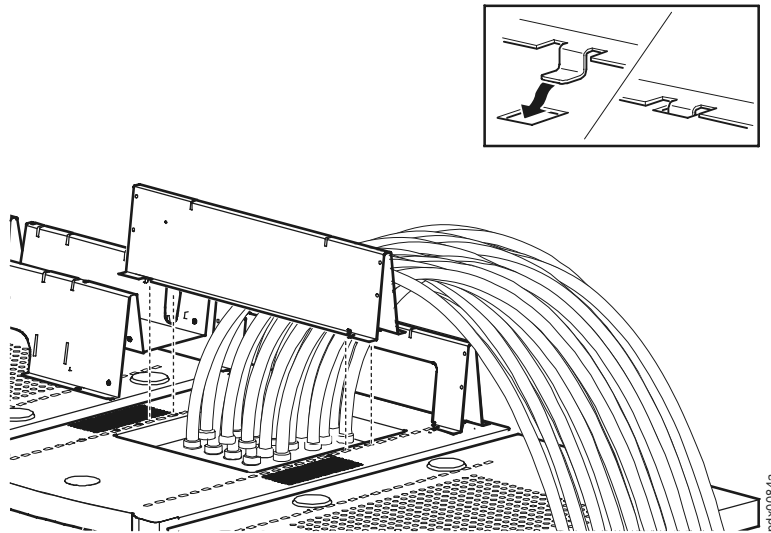
**Note**

When installing a PDU Shielding Trough, drape the power cables over the side of the enclosure as shown. After you install all the Shielding Troughs in the row, route the power cables in the Shielding Troughs.

1. Install one of the trough pieces.
  - a. Insert the rear set of fastening tabs into the square holes along the back of the roof. Be sure that the opening is facing the front of the enclosure.
  - b. Squeeze the sides of the trough piece toward each other at the bottom to insert the front fastening tabs.



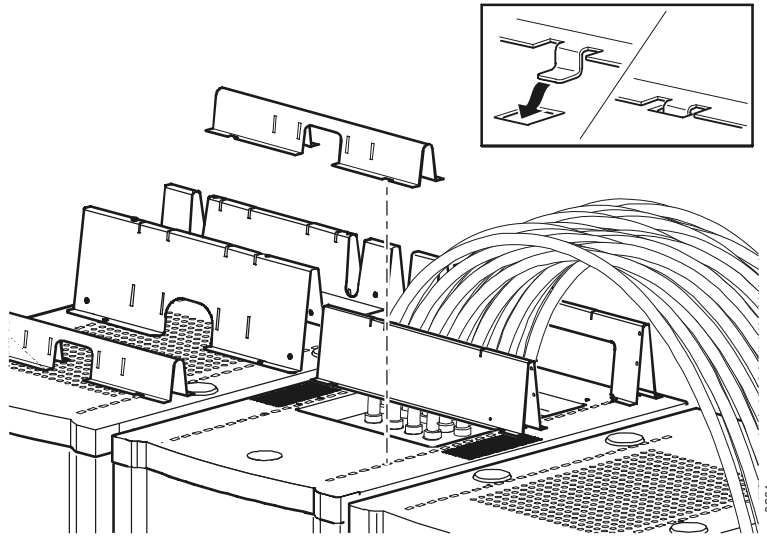
2. Install the other trough piece in the same manner, aligning it with the front of the adjacent NetShelter Trough. Be sure that the opening is facing the rear of the enclosure.



## How to install Shielding Partitions

Use the procedure in this section to install all Shielding Partitions. You can install Shielding Partitions on a NetShelter Enclosure or a PDU.

1. Squeeze the two sides of the Pass-Through Shielding Partition to insert the fastening tabs into the set of square holes toward the back of the roof, next to the Shielding Troughs already installed.

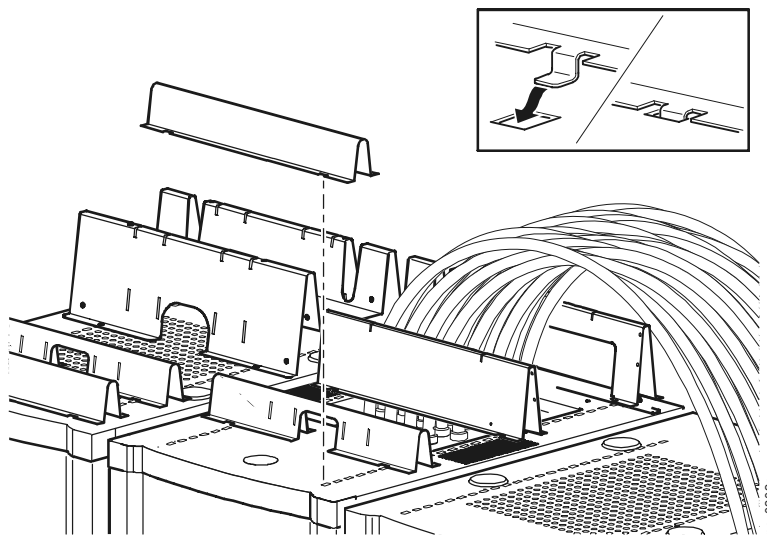


2. At the width you need for data cables, install the Solid Shielding Partition in the same manner at the front of the roof.



**Note**

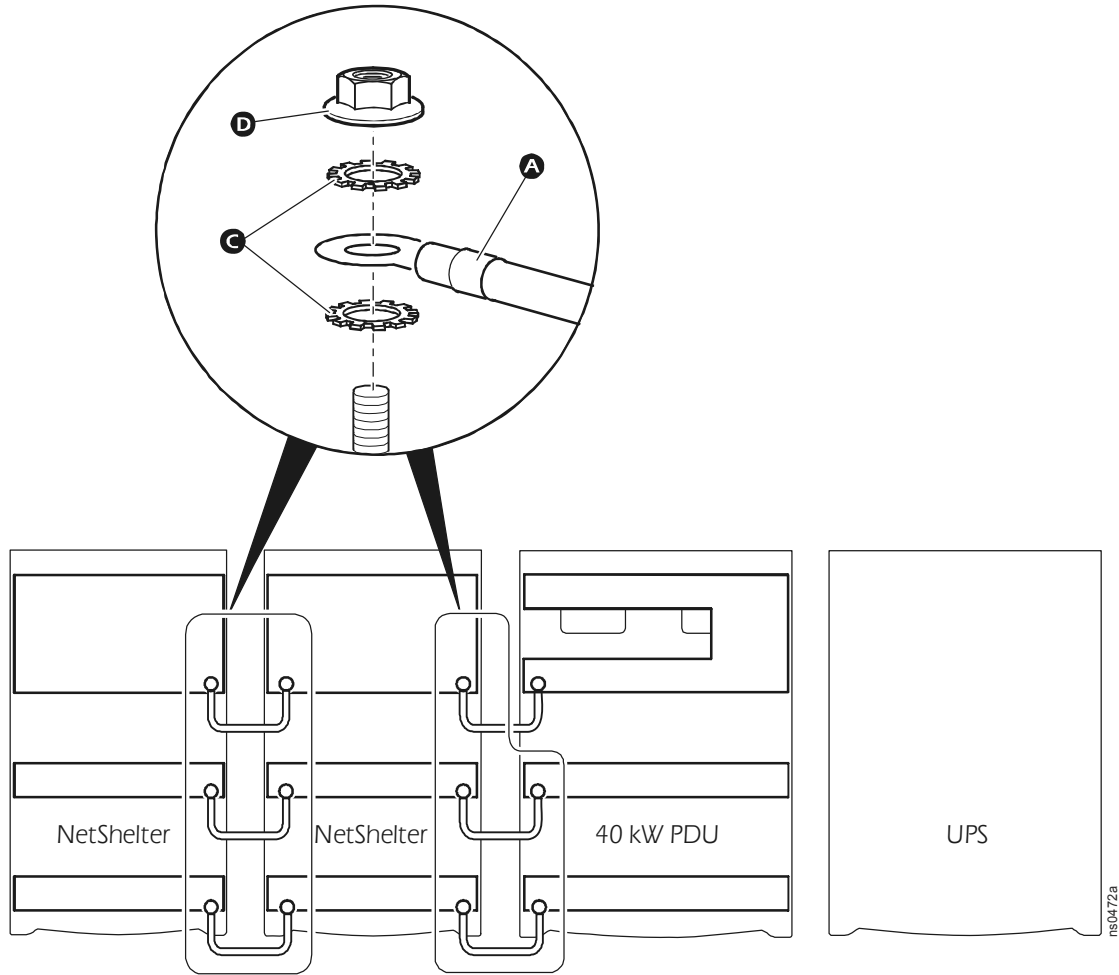
Use a Solid Shielding Partition at the front of the enclosure to ensure a finished appearance.



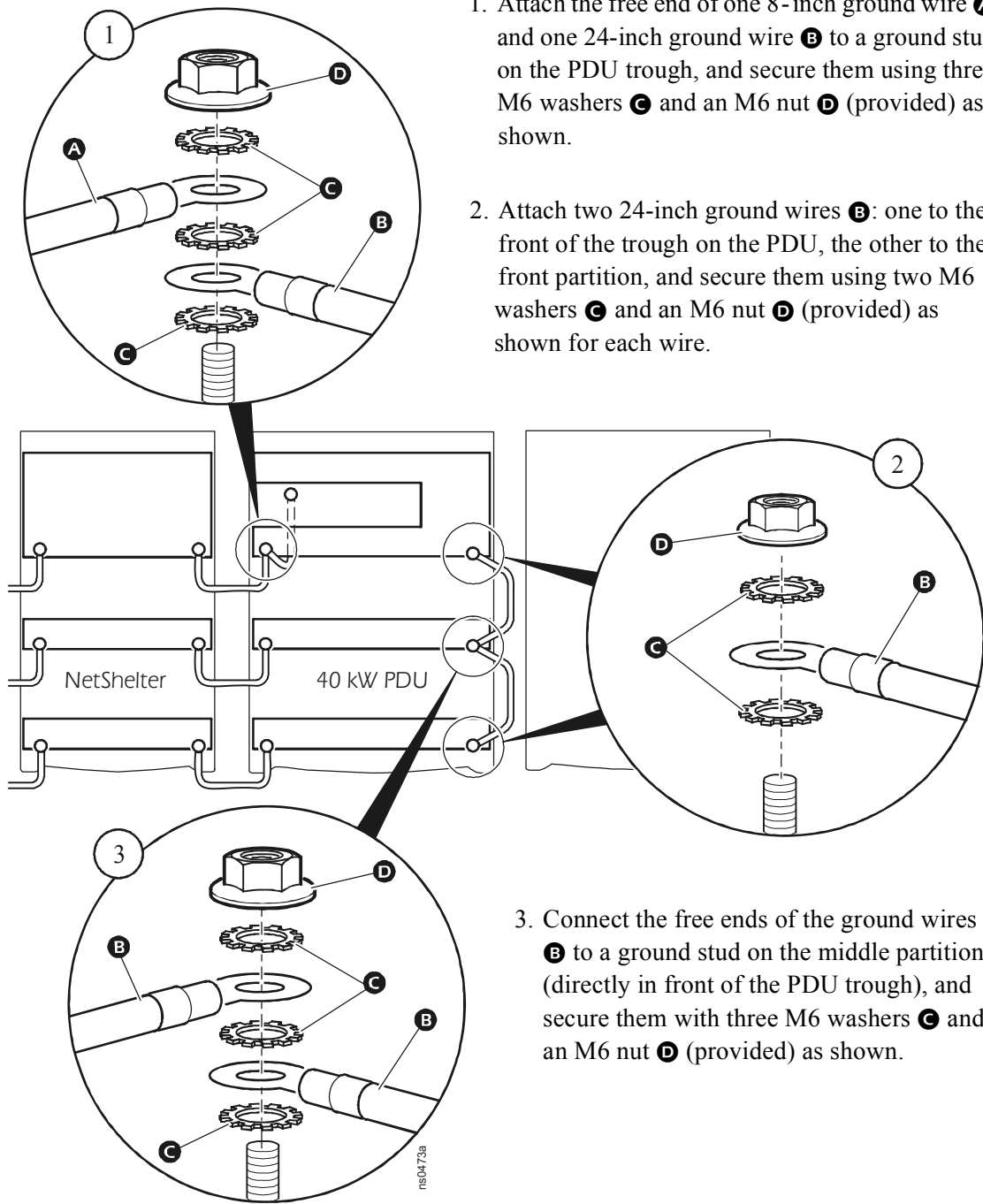
## How to ground troughs, partitions, and ladders

To ground NetShelter Shielding Troughs and Shielding Partitions when the PDU Shielding Trough is one piece:

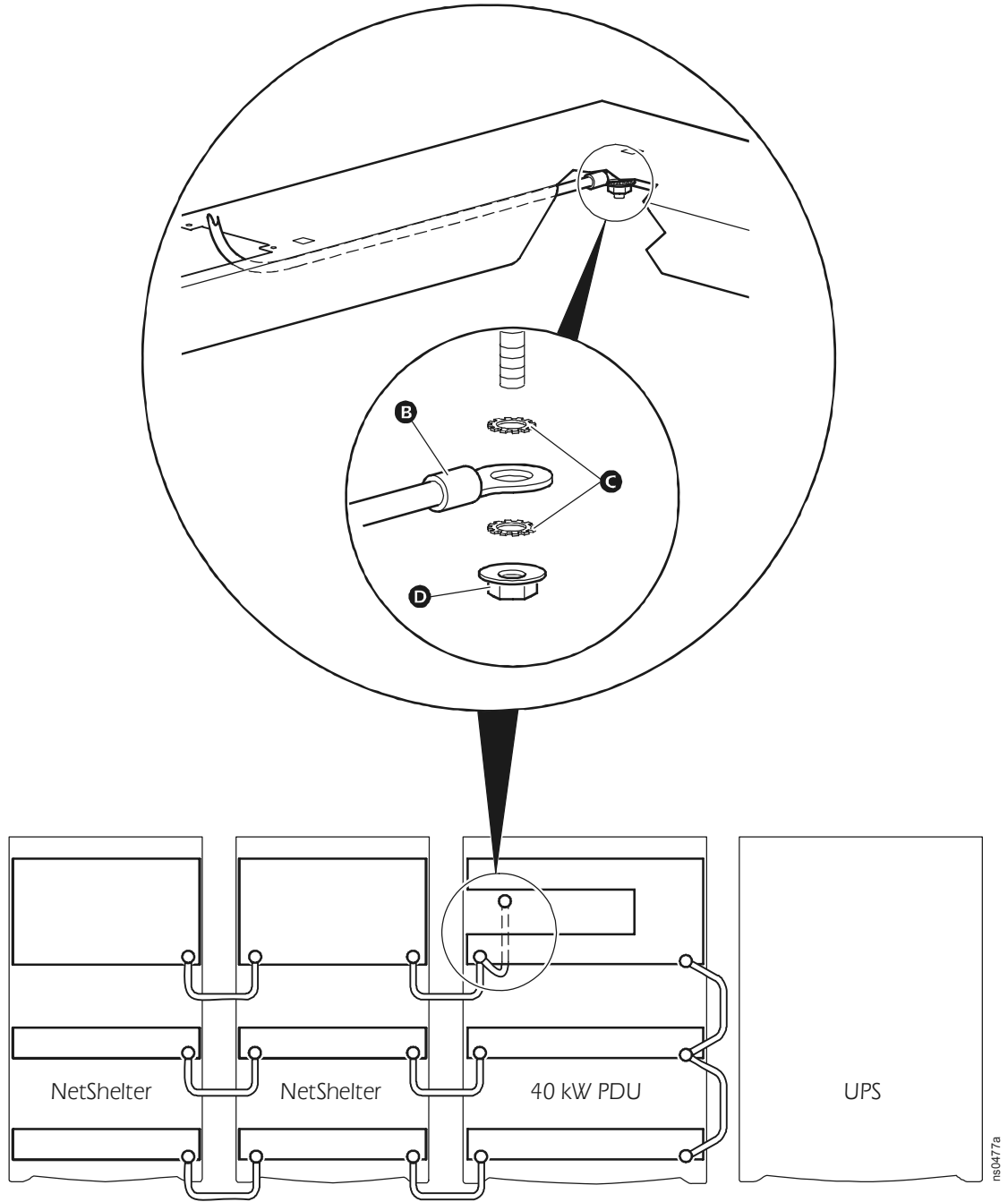
1. Attach one end of a 8-inch ground wire **A** (provided) to a ground stud on each trough and partition, and secure with two M6 washers **C** and an M6 nut **D** (provided) as shown.
2. Connect the free ends of the ground wires to the ground stud on the trough or partition adjacent to the first, and secure them with two M6 washers **C** and an M6 nut **D** (provided).



To ground Shielding Partitions and a one-piece Shielding Trough on an InfraStruXure PDU:

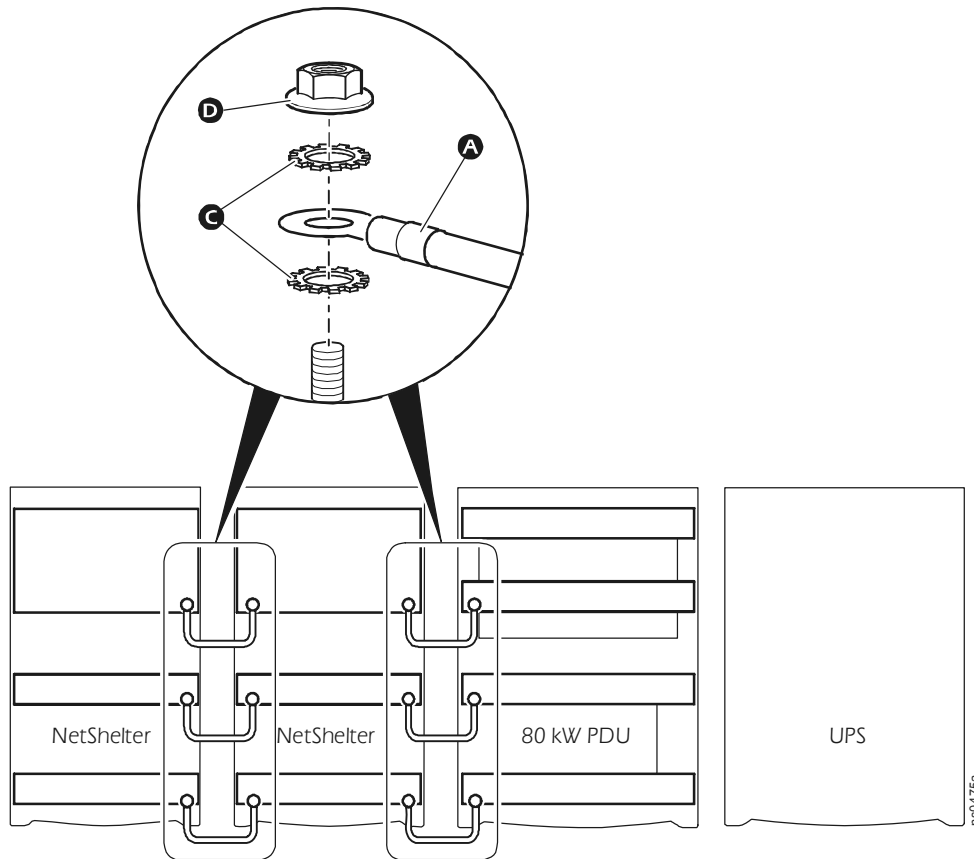


4. Connect the free end of the ground wire **B**, from step 1, to a ground stud on the underside of the PDU roof, and secure it using two M6 washers **C** and an M6 nut **D**.



To ground NetShelter Shielding Troughs and Shielding Partitions when the PDU Shielding Trough is two pieces:

1. Attach one end of an 8-inch ground wire **A** (provided) to a ground stud on each trough and partition, and secure it with two M6 washers **C** and an M6 nut **D** (provided) as shown.

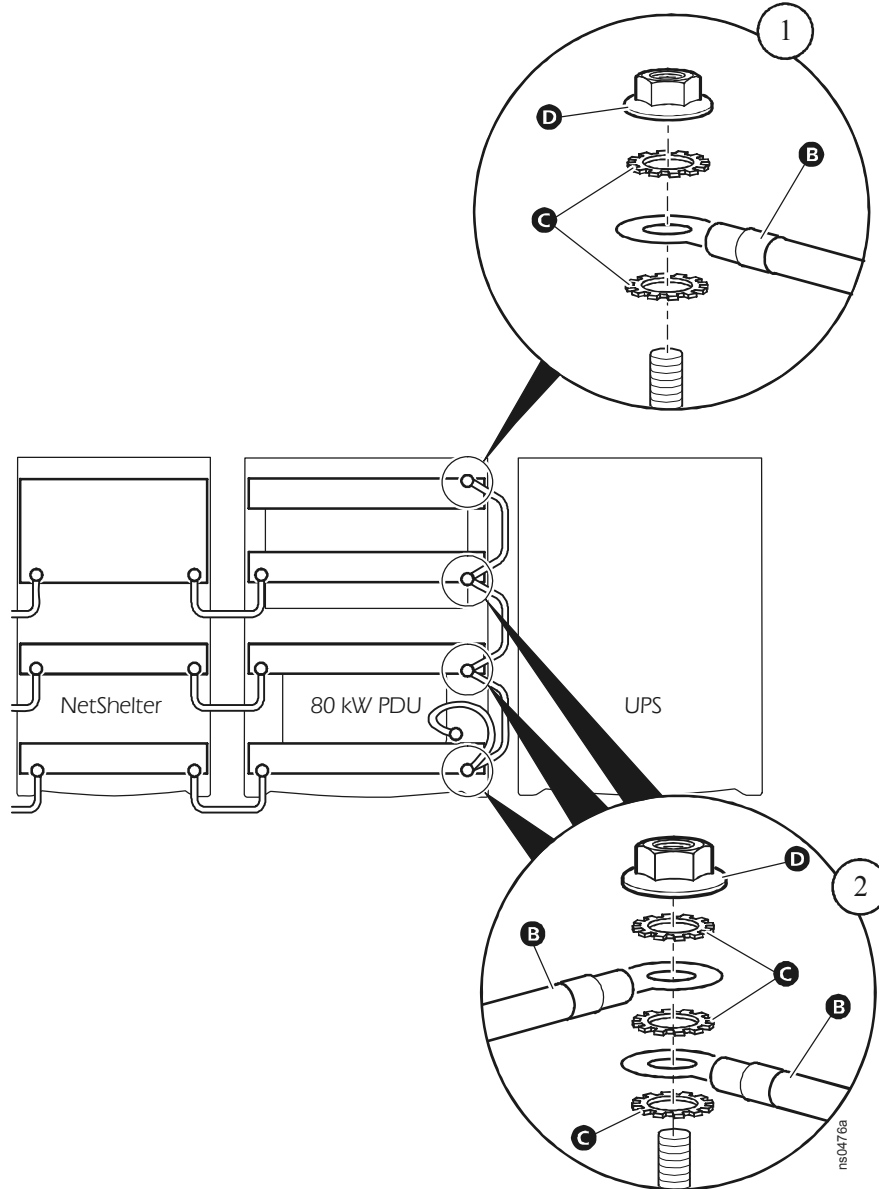


2. Connect the free ends of the ground wires to the ground stud on the trough or partition adjacent to the first, and secure them with two M6 washers **C** and an M6 nut **D** (provided) in the same manner as in step 1.



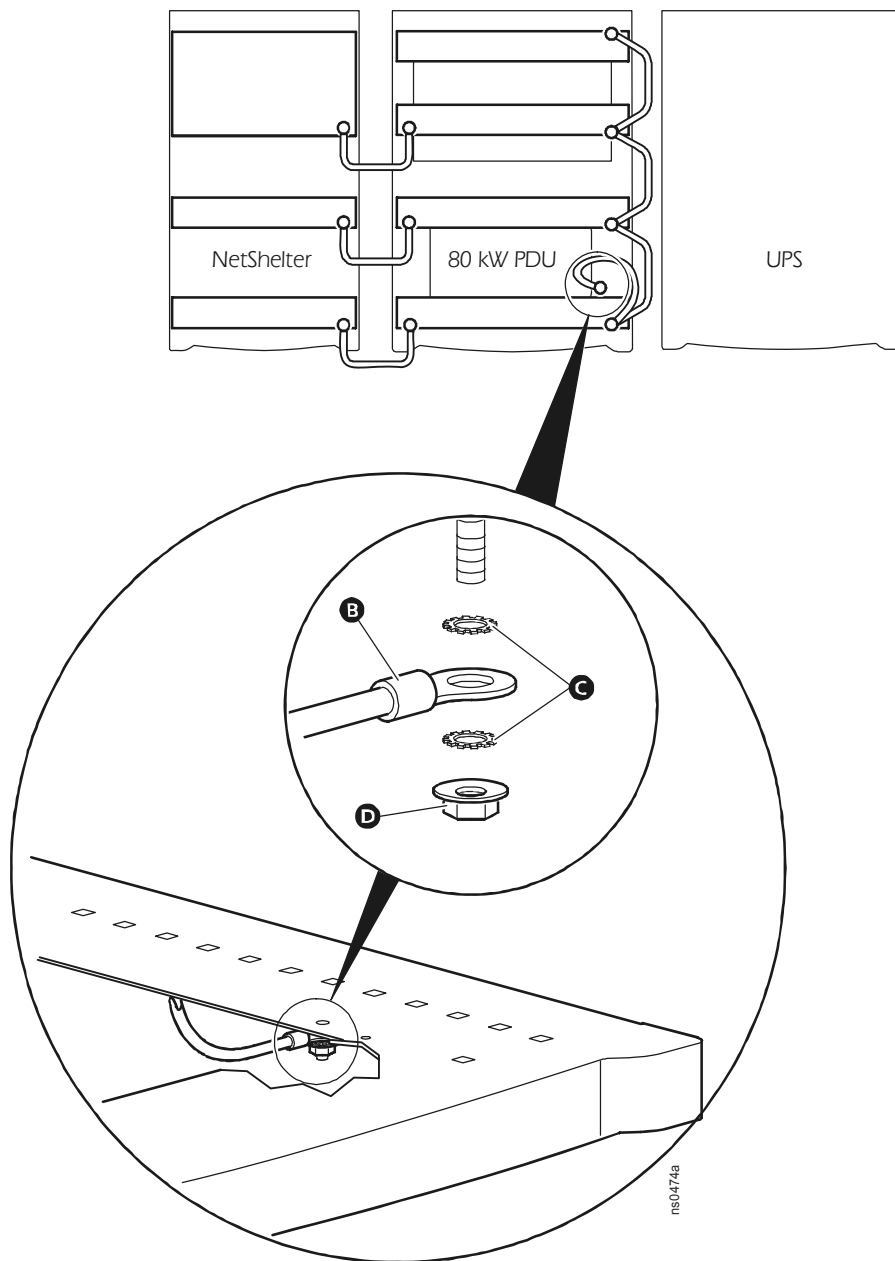
To ground one end of each Shielding Trough and Shielding Partition on an InfraSruXure PDU System:

1. Attach four 24-inch ground wires **B**: two to the front partition on the PDU and two to the PDU trough (second from the back), and secure the ends of the wires using M6 washers **C** and an M6 nut **D** (provided) as shown.



2. Connect two free ground wire ends **B** to a ground stud on the middle partition, and one free ground wire end **B** to the rear PDU trough. Secure using M6 washers **C** and M6 nuts **D** (provided) as shown.

3. Connect the remaining free end of the ground wire **B**, that you attached in step 1, to a ground stud on the underside of the PDU roof, and secure it in place using two M6 washers **C** and an M6 nut **D**.



### How to ground ladders



See also

Refer to “How to Ground the Ladder” in the Cable Ladder Installation with Troughs and Partitions Manual, included with each Cable Ladder, for proper grounding instructions.



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