



PRODUCT INFORMATION

General description

The self-supporting duct support system is designed to support HVAC ventilation ducts installed on rooftops without penetrating the roofing membrane.

The system ensures uniform load distribution to protect the roof while providing a durable and corrosion-resistant structure that complies with applicable mechanical and construction standards.

This system is suitable for both new construction and renovation projects.

Applications

- Support for rectangular or circular HVAC ducts;
- Rooftop mechanical installations ;
- Flat or low-slope roofs;
- Insulated or non-insulated ducts.
- Single or multi-level duct configurations.

Advantages

- Fully self-supporting system – no roof penetration required;
- Protection of the roofing membrane;
- White, natural aluminum, or painted according to our color range;
- Compact bases on the roof;
- Installation possible in restricted areas;
- No intervention required for roof waterproofing;
- Easy installation on all types of flat and low-slope roofs.

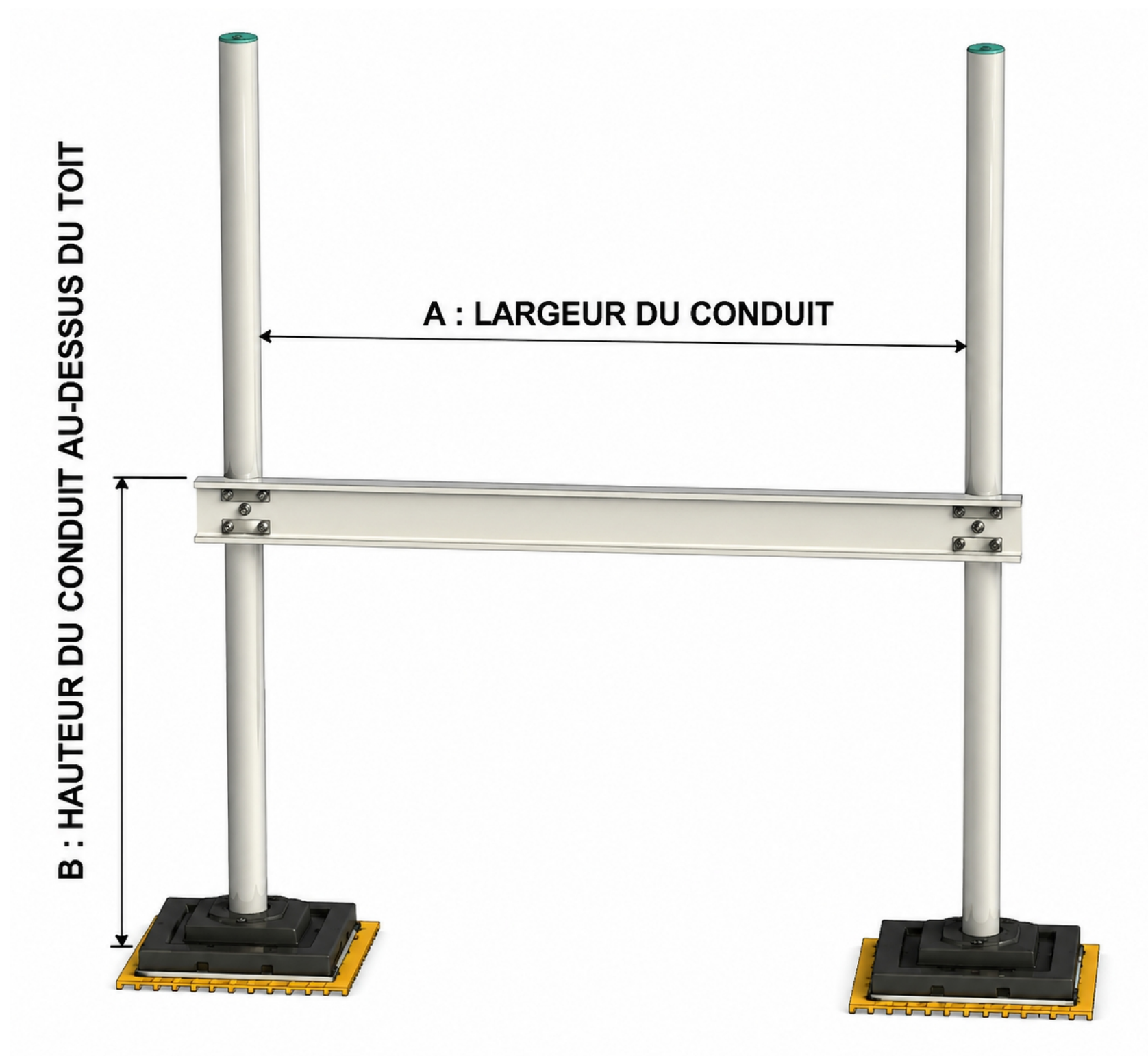


Design criteria

- The allowable load indicated on the drawings corresponds to a maximum pressure applied to the roof covering of **21 kPa (3.0 psi)**, representing a maximum reaction of **2.6 kN (580 lb)** under each support.
- The building owner and their engineer are responsible for verifying roof compatibility with the reactions transmitted to the supports.
- The maximum deflection of the horizontal beam is limited to **L/360 or 3.175 mm (1/8")**, whichever is more restrictive.
- The structure is designed only to carry gravitational loads. Lateral loads (wind, seismic, horizontal forces) must be supported by an independent structural system.
- Aluminum C-channels are alloy 6061-T6 and comply with ASTM B308.
- Aluminum tubes are alloy 6061-T6 and comply with ASTM B241.

Composant de support autoportant pour conduits

- Aluminum plates are alloy 6061-T6 and comply with **ASTM B209**.
- Aluminum bolts comply with **ASTM F468**.
- Aluminum nuts comply with **ASTM F467**.



C-Channel Profile Dimensions	Maximum allowable load	Maximum span (A)	Maximum span (B)
C – 3.5" × 1.75" × 0.1875"	4.5 KN	42"	24"
	4 KN	48"	24"
C – 4" × 2" × 0.15" (âme) / 0.23" (ailes)	4.5 KN	48"	24"



PLATE

12"x16" aluminum plate with
1/2" Ø aluminum tube



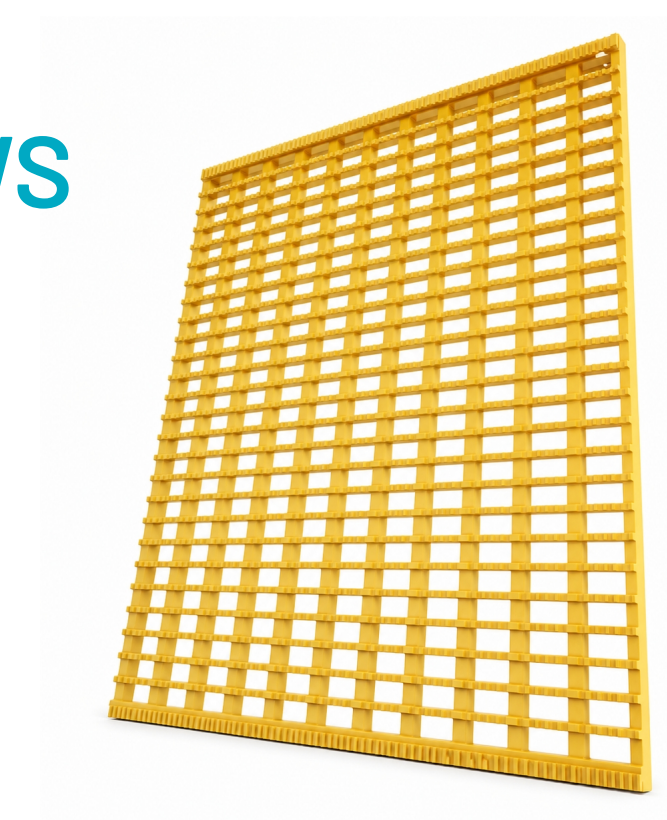
BALLAST PLATE

Painted cast-iron plate with
powder coating, weighing
42.8 lb, compliant with ASTM
A-48 and ISO 9001:2008



SELF-DRILLING SCREWS

Self-drilling steel screws
with drill point, hex head with
integrated neoprene washer,
1/4"-14 x 1 1/4"



PROTECTIVE MATTING

Mat installed beneath the flexible
PVC plate, featuring an anti-slip
surface with an integrated drainage
system, designed to protect the
membrane and provide safe
circulation on flat roofs.



CAP

Tube end caps made of low-
density polyethylene (LDPE)



U-BOLT

2" aluminum U-bolt with
mounting plate, 1/4"-20
thread.



C-CHANNEL

Aluminum C-channel
conforming to ASTM B308.



POSTS

48 mm (1.9") diameter 6061-
T6 aluminum tube with
plastic end cap for tube
termination.

Installation Method

1. Base Preparation

- Position the protective mats at the designated locations.
- Place the aluminum plate on top of the protective mats.

2. Counterweight Installation

- Place the counterweight on the aluminum plate.
- Insert the vertical tube into the counterweight, passing simultaneously through the aluminum plate.

3. Base Assembly Fastening

- Insert the vertical tube into the counterweight while ensuring that the aluminum plate is simultaneously engaged in the vertical tube.
- Fasten the counterweight to the vertical tube using self-drilling screws through the counterweight's pre-drilled holes.

4.C-Channel Installation

- Position the C-channel at the required height and designated location.
- Install two U-bolts on each vertical tube, complete with mounting plates and nuts.
- Tighten the nuts to firmly secure the C-channel.

5. Final Fastening

- Fasten the C-channel to the vertical tubes with a self-drilling screw installed between the two U-bolts.
- Check the alignment and ensure all fasteners are properly tightened.

f) Regulatory Compliance

- 1) Products shall be designed in accordance with applicable building code requirements. The system shall include a one (1) year warranty on the paint finish and a ten (10) year warranty on all materials, effective from the date of purchase.

g) Manufacturing Certification

- 1) Manufactured in an ISO 9001 certified facility.
- 2) Welds shall be certified by the Canadian Welding Bureau (CWB) in accordance with Standard 47.2 (Aluminum) and 47.1 (Steel).