



# MAKE-UP AIR SOLUTIONS

## AIRLET™ 100

### Rectangular Self-Regulating Fresh Air Inlet

INSTALLATION  
OPERATION  
MAINTENANCE

## READ AND SAVE THESE INSTRUCTIONS

The AIRLET™ 100 is a fresh air inlet designed to supply make-up air ventilation to bedrooms and living areas. It is not intended to supply combustion air for fireplaces or make-up air for large exhaust fans, such as range hoods.

The AIRLET™ 100 is compatible with zonal electric, radiant, and hydronic heating systems. It must not be used with forced-air heating systems, unless return registers are provided in each room that has an AIRLET™ 100 installed. This is to prevent exfiltration through the inlet when the forced-air system is operating and doors are closed between rooms.

For make-up air products specifically engineered for use with forced-air heating systems, request an ALDES IAQ Fresh Air Kit from your supplier.

### GENERAL

Best results will be obtained in homes with tight air-vapor retarders and continuous central exhaust from bathrooms, kitchens, and laundry rooms.

The goal is to achieve a home with slight negative pressure, so as to avoid exfiltration into the walls and attic. Install one fresh air inlet in each bedroom and in living/dining room area(s). Inlets should not be installed in kitchens, bathrooms, or laundry areas. These areas should be exhaust points to a central exhaust system.

When the inlet is placed high up on exterior walls, drafts should not be noticeable. The interior fixture produces a thin ribbon of fresh air deflected upwards, which quickly mixes with warmer air near the ceiling.

### TOOLS REQUIRED

- Saber saw or router
- Drywall knife
- Phillips No.1 screwdriver
- Silicone or exterior butyl caulk

### WOOD FRAME WALL APPLICATIONS

1. Locate air inlets high up on exterior walls in bedrooms and living/dining/family rooms. Avoid placing inlets closer than 6" to the ceiling; condensation may occur on the ceiling near the inlet in cold weather. The inlet may also be installed near baseboard heating.
2. The metal sleeves may be installed either:
  - a. During the framing stage – after the exterior siding is applied, but before insulation and interior dry wall are completed.
  - b. After all finish materials are applied.

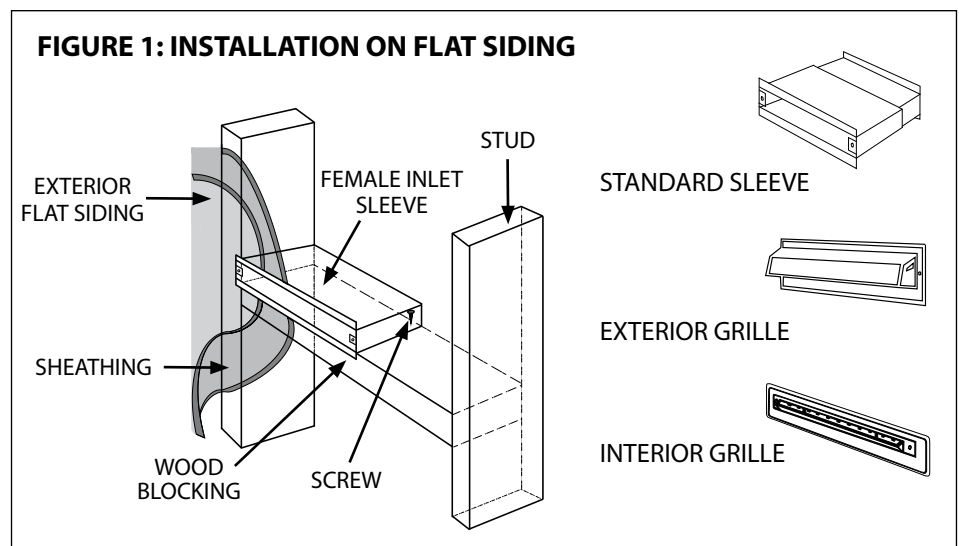
### INSTALLING BEFORE DRYWALL

1. First, locate the studs. Next, mark the opening on the siding. Avoid stud spaces with plumbing or electrical wires. Cut the opening so that one side is flush with a stud. Using a reciprocating saw, cut through the siding and sheathing and remove or dislodge the insulation. Save the insulation for replacement around the sleeve.

2. From the inside, install blocking between the studs, either above or below the opening in the siding. Install the blocking with a slight slope downward to the exterior (1/4" per foot slope is sufficient). Should driving rain enter the sleeve, this slope will permit any water to drain to the exterior.
3. Install the female part of the sleeve from the outside and secure it to the blocking with a flat-head wood screw through the edge of the sleeve (drill a small hole in the sleeve if necessary). **See Figure 1.**

**NOTE:** Take care to note the location of the inlet so that after insulation, vapor barrier, and drywall are installed, the female inlet sleeve may be located to complete the installation.

4. After the drywall has been installed, cut the opening for the male sleeve with a hand drywall knife, following the interior of the female sleeve as a guide. **See Figure 2.**
5. Insert the male sleeve, with the filter installed, into the female sleeve. **See Figure 3.**



6. Seal the exposed joints with silicone caulk:  
Between the sleeves;  
Between the siding and the sleeve; or  
Between the drywall and the sleeve
7. Attach the exterior weather cap and the interior face plate to the sleeve with the screws provided.

**INSTALLATION AFTER DRYWALL IS INSTALLED**

1. First, locate the studs. Next, mark the rough opening on the siding. On bevel siding, locate the inlet so that the exterior cover plate will fall just below the lower edge of the siding.

Avoid stud spaces with plumbing or electrical wires. Cut the opening so that one side is flush with a stud. Using a keyhole or reciprocating saw, cut through the siding and sheathing and remove or dislodge the insulation.

2. Drill a 1/8" hole on the side of the female and male sleeves, within 1/2" of the edge of the sleeves, to permit driving a small nail or screw into the stud from the interior of the sleeve.
3. Install the female sleeve through the siding and secure with a nail or screw to the stud. Using a long-handled screwdriver or awl, drive a hole through the drywall to locate the sleeve from the interior. **Follow Steps 4-7** from the procedure for "Installing Before Drywall".

**MASONRY WALL APPLICATIONS**

The installation is similar to wood frame wall applications, except that the sleeves must be installed during the installation of brick or block. Provide solid blocking inside the sleeves to prevent deforming the

metal sleeves. This blocking must be removed when the wall is finished.

**MAINTENANCE**

The inlet is provided with a bug screen and a filter. These should be checked periodically and cleaned as necessary. The filter can be accessed from the interior of the home by removing the two screws securing the face plate to the metal sleeve. Remove the filter by grasping it at one corner and pulling it out at an angle. The filter may be washed or vacuumed. The bug screen on the exterior weather grille may be brushed or vacuumed at the same time. **See Table 1** for accessories.

**NOTE:** In extremely cold weather, some condensation may occur on the inlet, depending on the outside temperature and the indoor relative humidity. This should be an infrequent occurrence of short duration, occurring when there is a sudden drop in outside temperature. As the cold, dry air enters and mixes with the interior air, the interior humidity should reduce sufficiently so that the condensation on the inlet disappears and is not a cause of concern.

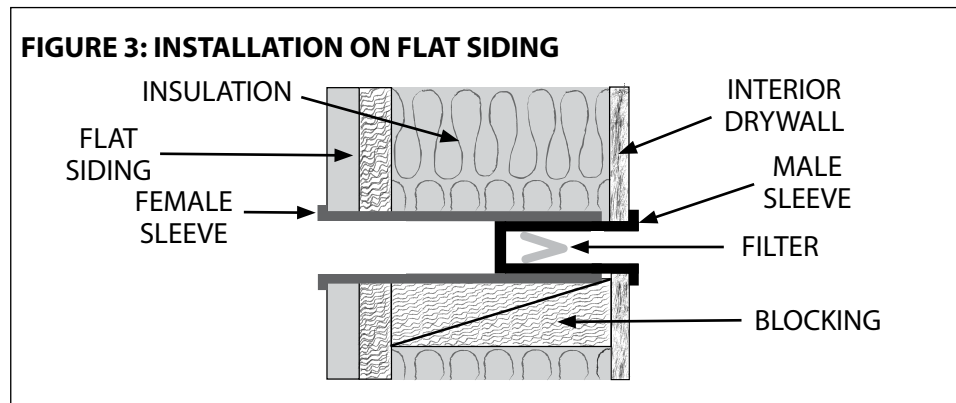
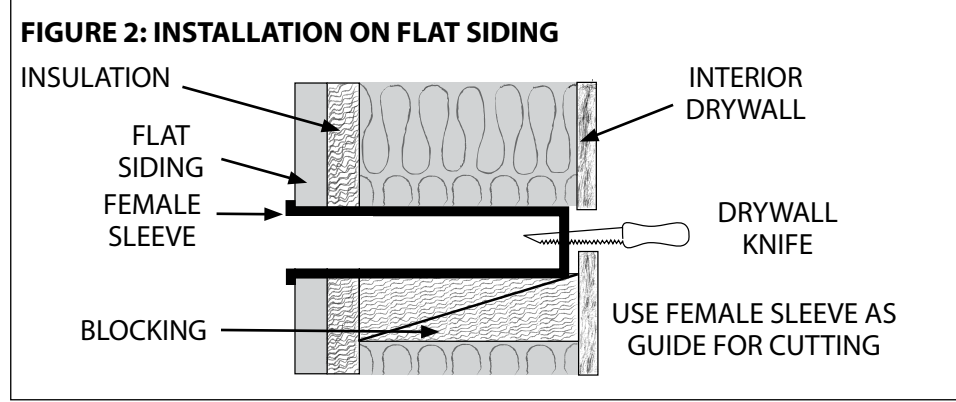


TABLE 1: AIRLET™ 100 ACCESSORIES			
P/N: 11 414	Replacement Filter	P/N: 11 565	Sound-Absorbing Insert (2-1/2" or 5-1/2")

**Some jurisdictions or utilities may have different requirements. Consult your code official/utility representative.**

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