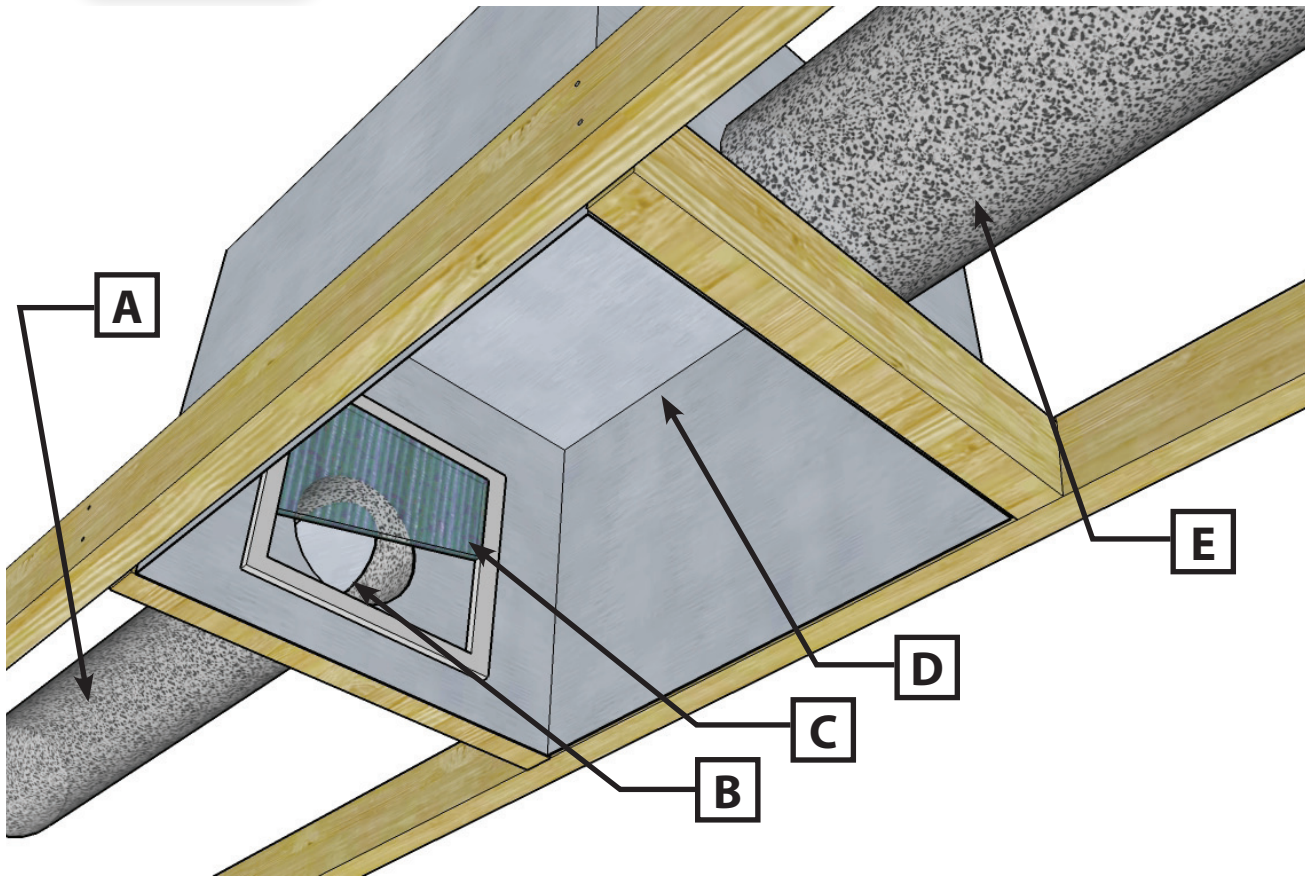




CRITICAL DETAIL: OUTSIDE AIR INTAKE

SUCCESS WITH AFFORDABLE HOUSING

SystemVision



A - Outside Air Intake Duct

This insulated duct should be installed with as short and straight of a run as possible. We recommend installing a 6-8 in. duct. If the duct is located in the attic we recommend the intake termination to be located at the gable end or through the soffit.

B - Manual Damper

This manual damper will be used to adjust the outside air intake to the proper flow and is a program requirement. *SystemVision* complies with ASHRAE 62.2 for the amount of outside air in CFM entering the home:

$$(7.5 \text{ CFM})(\text{Number of Bedrooms}+1) + (.01 \text{ CFM})(\text{Square Footage of the Conditioned Space}) = \text{Amount of Outside Air in CFM}$$

C - Filter

The outside air intake must be filtered. This filter should be located in a place where it is visible to the homeowner.

D - Return Box

All seams and penetrations should be sealed with mastic. Gaps could lead to unconditioned air being pulled from the attic or crawl space.

E - Return Air Duct

The return air duct should be sealed with mastic to the collar on the return box. Although there might be a small gap, with the size of the return duct, this could create a large amount of leakage.

F - Return Grille (Not Shown)

As mentioned previously, sealing the boot to sheetrock or boot to sub-floor connection is important to prevent conditioned air from leaking out of the house. Sealing the return grille is important to prevent unconditioned air from entering the house.