



Sidewall Retrofit

Many older homes have little or no insulation in the wall cavities. There is a growing awareness of the importance of adequate insulation and air infiltration control. AFT cellulose insulation can be pneumatically installed in these walls to improve the thermal and acoustical performance and stop air infiltration.

The installation of blowing products into sidewall cavities requires techniques that differ from an open blow installation. The most common sidewall installation techniques are "Two Hole or Double Blow" and the "Tube" method. Either method will make a dramatic improvement in the wall performance.

Note:

- 1) Air pressure should be reduced substantially compared to the open blow technique to insure damage is not done to the wall membrane. The blowing machine should be equipped with an air relief valve or have other means to adjust the air flow.
- 2) Always check inside the structure for open wall cavity areas into basements, closets, air chases, etc. before starting installation.
- 3) Check the wall cavities for any heat producing items such as fireplaces, chimneys, recessed lights, etc. These items require a minimum of three inches of separation from the insulation.

Two Hole or Double Blow Method

- 1) Two sections of the exterior siding are removed and two 2-inch holes are drilled per cavity. The bottom hole should be about two feet from the bottom plate and the top hole two feet from the top plate but not more than five feet between them.
- 2) Attach a reducer nozzle to the end of the blowing hose. (Hole and reducer sizes may vary.)
- 3) Plumb bob all cavities to reveal obstacles that may alter the flow of the blowing material. Skipping this step can leave undetected obstructions, which may cause uninsulated void spaces. If blockages are found, repeat step (1) above and below the blockage.
- 4) Insert the reducer nozzle into the bottom hole first. Increased back pressure causes the blower to strain, alerting the worker to move the top hole to complete the installation.
- 5) Complete cavity compaction by moving to the top hole.
- 6) Plug the hole and replace the siding.

Tube Method

- 1) Remove a section of exterior siding approximately 12 inches from the bottom plate and cut or drill a single two-inch hole through the sheathing. An oblong hole works best.
- 2) Attach a reducer to the end of the blowing hose, reducing it to one inch.
- 3) Attach a beveled one inch I.D. (or larger) flexible tube to the blowing hose reducer and insert into the hole all the way to the top of the wall cavity. Any firestops or other obstructions are detected and noted (Repeat step 1 above blockage).
- 4) The blower is turned on and insulation is pumped up to the top of the cavity. The insulation will fall and fill the cavity from bottom to top at a low density. During this phase of the operation, which typically takes 1.5 to 4 minutes, the worker need not stand by and can perform other tasks such as drilling the next cavity.
- 5) When the cavity becomes filled, the insulation begins to compact at the top. Increasing back pressure causes the blower to strain, alerting the worker the cavity is filled and ready for the second phase compaction.
- 6) To complete the job, the hose is slowly withdrawn from the cavity, starting the second phase of compaction from top to bottom. When the bottom of the cavity is reached, the hose is turned downward to compact the insulation into the bottom section of the cavity.
- 7) Plug the hole and replace the siding.

Advantages to Tube Method

- 1) No ladder is needed for single story houses. For two story houses, the highest hole is four to five feet lower than the "Two Hole Method".
- 2) Only one hole is drilled and one row of siding removed.