

Installation Recommendations

ALUMAGUARD®

Ducts must be sealed in accordance with SMACNA HVAC Duct Construction Standards Metal and Flexible - 3rd Edition (2005) Seal Class A prior to insulation of any Alumaguard product.

The instructions below are guidelines for the installation of **Alumaguard®** over insulated ductwork.

Alumaguard is part of the family of **Alumaguard** products including **Alumaguard All-Weather** and **Alumaguard Lite**. Each product provides excellent long-term weather protection but has slightly different usage and application characteristics. Please refer to the separate data sheets and installation instructions for these products.

The **Alumaguard** membrane is used in conjunction with **Alumaguard Lite** in typical applications above 50°F where the **Alumaguard Lite** membrane is used on the underside of the duct. Before the introduction of **Alumaguard Lite**, pinning of the **Alumaguard** membrane under the duct was required. There is no need to pin **Alumaguard Lite**.

Where temperatures are expected to be consistently below 50°F, **Alumaguard All-Weather** or **Alumaguard Lite** should be used. Both products employ acrylic adhesive for excellent cold-weather performance. **Polyguard** no longer recommends the use of solvent activator with **Alumaguard** in cold-weather applications.

Insulation on the top of the ductwork must be installed in such a manner as to allow 'water-shed' from the top of the duct to prevent water from 'ponding' on top of the ductwork. Do not use any **Alumaguard** product to hold insulation onto ductwork or piping.

Basic installation on hot and cold air ducts is recommended in following manner to maintain proper vapor barrier and physical integrity:

Board insulation should be mechanically fastened to a properly sealed duct according to the engineer's specification using insulation fasteners (mini-cup weld pins or perf. based pins and washers, tape sealed joints).

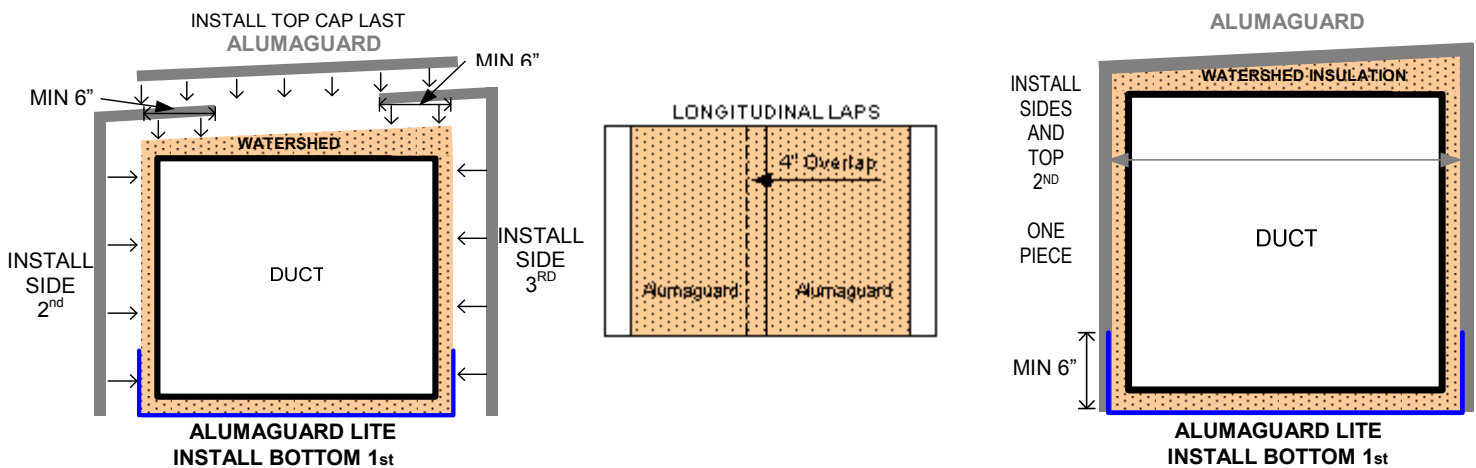
Polyguard recommends the use of faced-foam insulation board like polyiso or extruded polystyrene for the optimal smooth look with less seams and superior R-Value per inch. Faced fiberglass board can also be used. **Polyguard** does not recommend the use of **Alumaguard** over any type of unfaced low-density fiberglass insulation.

Polyguard recommends **Alumaguard** be installed using to one of the these two procedures;

Cut one piece of **Alumaguard Lite** to cover the bottom of the duct and up 6" on each side, install this piece first. **Do not install Alumaguard on the bottom of the duct.**

- Cut each side piece of **Alumaguard** to fit from the bottom corner of the duct up over the top of the duct, lap onto the top 6". Cut the final piece to cover the top, trim it flush with the top corners, do not lap it down the sides. Roll the **Alumaguard** with a laminate roller as you remove the release film to insure adhesion to the substrate. **Or:**
- **Alumaguard** can also be installed in a one piece application when duct size permits. Starting at the bottom of one side of the duct, go up the side, over the top, and down the other side, trimming the **Alumaguard** flush with the bottom corner of the duct; do not terminate this piece on the bottom of the duct! Roll the **Alumaguard** with a laminate roller as you remove the release film to insure adhesion to the substrate.

DO NOT FOLD ANY ALUMAGUARD LAP UNDER THE DUCT



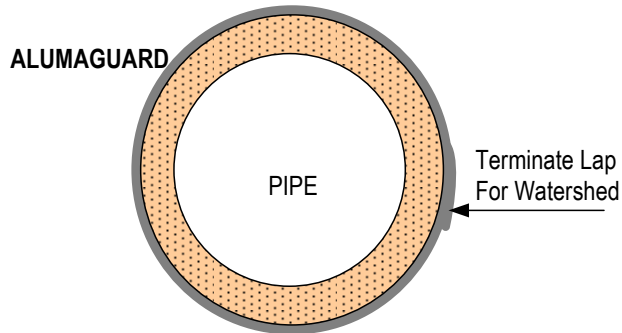
Alumaguard must be protected from damaging chemicals. It can be 'solvated' when exposed to petroleum, or coal tar based compounds. **Alumaguard** should not be adhered directly to commercial roofing membranes. Refer to Technical Bulletin 2011-1 for commercial roofing details.

Polyguard cannot anticipate all aspects of any installation. Do not "assume" it should be done in a particular manner, please feel free to call us at 1-800-541-4994 for recommendations or detail drawings. Store **Alumaguard** in a warm dry place prior to installation. For pipe installation recommendations please see our instructions for piping systems.

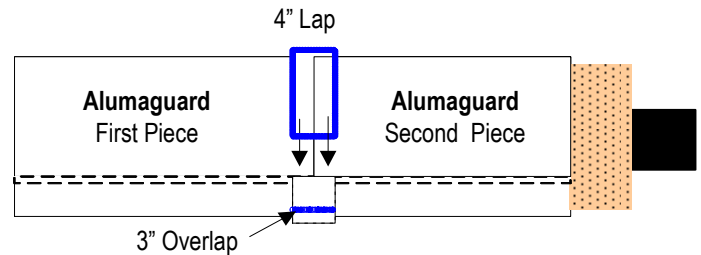
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ALUMAGUARD®, ALUMAGUARD® LITE, ALUMAGUARD® ALL-WEATHER Installation Recommendations for Pipe Applications

Unless noted, the details below apply to all three products in the Alumaguard family:
Alumaguard, Alumaguard Lite and Alumaguard All-Weather.



BUTT LAP INSTALLATION



Alumaguard® products are excellent for use in cold piping jacketing systems; superior to metal or PVC in performance. Although all three **Alumaguard** products can be used in these applications the following recommendations apply:

On ammonia and glycol applications, where expansion and contraction of the pipe may exist, use **Alumaguard** because of its thick layer of rubberized asphalt which can accommodate movement.

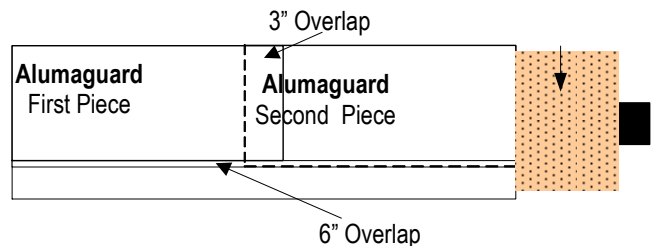
For installation below 50°F, **Alumaguard Lite** and **Alumaguard All-Weather** are recommended.

On systems where heavy abuse is likely, use **Alumaguard** or **Alumaguard All-Weather** where the self-healing characteristics of rubberized asphalt are important.

Cold piping systems jacketed with **Alumaguard** products should be installed in the following manner; the "stretch out" for each piece should be cut to allow a 6" lap over the circumferential lap. Install tightly around the pipe insulation, rolling with a laminate roller or other firm "rolling pin" type roller to insure contact with the substrate. Each piece should be within 1-1/2" of the previous piece and a 4" wide butt lap placed over the joint and rolled with a roller. The butt lap should start where the circumferential lap ends, wrapping around the pipe, and then lapping over 6" past the starting point. Installation can also be a cigarette wrap method using a 3" longitudinal lap and the same 6" circumferential lap.

Alumaguard products are not to be used as mechanical fasteners. Insulation should be installed with strapping or banding according to manufacturers instruction.

NOTE: Care should be taken when using **Alumaguard®** products on hot systems to insure that the surface temperatures after insulation do not exceed our upper use limitations. It is important to note that heat transfer through single layer joint seams could result in the softening or melting of the rubberized asphalt compound.



Install the first **Alumaguard** piece over the insulation with a 6" lap terminated at the 4 o'clock position. Install the second piece of **Alumaguard** with 3" overlapped onto the previous piece of **Alumaguard**. The circumferential laps should all line up at the 4 O'clock position to shed water. Roll the surface with a laminate roller or other firm "rolling pin" type roller to insure contact with the substrate. Insulated piping exceeding 12" outside diameter requires the use of banding on **Alumaguard**. Fittings, 90's, tees, valves, and 45's can be laid out using standard sheet metal methods, modified to allow for overlap. This can be accomplished by adding to the throat and heel of the fittings. The bottom piece is installed first, and then the top piece lapped over the bottom piece to permit water shedding over the lap. Tees, valves and other fittings can be fabricated just like you would use standard layout procedures, either two piece or gored fittings, simple add for the overlap. Fittings can also be 'gored', over sizing each gore piece to allow for a lap onto the preceding piece. Installers can also use standard metal fitting covers with the **Alumaguard®** products. Care must be used to insure that the fittings are vapor sealed!

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NOTE: ALUMAGUARD IS NOT TO BE USED AS A MECHANICAL FASTENER! Insulation must be installed (tape or bands) according to the manufacturers instruction. If **Alumaguard** is pre-applied to pipe cover, it MUST BE BANDED when installed. **DO NOT PAINT ALUMAGUARD BEFORE READING OUR SHEET, it can void your warranty!**

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This information is based on our best knowledge, but
POLYGUARD cannot guarantee the results to be obtained.



Polyguard is ISO 9001 certified since 1995.