Adhesive Compatibility

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Atlas EPS Expanded Polystyrene (EPS) products are compatible with many non-solvent construction adhesives. Polystyrene foam products are subject to chemical degradation by solvents. Most adhesive manufacturers can provide detailed advice on adhesive bead thickness, spacing, and installation techniques to maximize the effectiveness of their products.

The following is a PARTIAL list of compatible adhesives for use on Atlas EPS products with good adhesion and long term performance:

- Bostik Heavy Duty Construction Adhesive
- Loctite PL375 Heavy Duty Construction Adhesive
- Liquid Nails Heavy Duty Construction Adhesive
- Henkle OSI QB300 Multi Purpose Construction Adhesive
- Loctite PL Premium Polyurethane Adhesive
- Glidden Gripper – White primer

Adhesive manufacturer instructions should be consulted for each substrate and configuration. Generally, concrete must be fully cured and any release agents cleaned off. Wood must be dry. Metal must be above 40F. In some cases, adhesive must be applied to both the foam product and the substrate. Adhesive may need to partially cure before foam is installed, or the product may have a very short "open" time. These details are best provided by the adhesive manufacturer.

Following are some common techniques found in adhesive manufacturer instructions:

- 3/8” bead of adhesive striped 1” from edge around perimeter, then "X" pattern corner to corner of the board. Or, 3/8” bead in stripes spaced every 16” OC for solid substrate
- 3/8” bead on all framing members (works for attachment to stud)
- 3/8” bead, at 3” diameter dabs, spaced 24” OC for 48x96” boards or 8 per 16x96”. Dabs can be reduced by as many fasteners immediately installed through foam for exterior cladding
- Spray web on the back of the foam board and on the substrate, multiple passes

On most commercial projects, it is assumed the cladding is following immediately after the insulation is installed, often via same scaffolding (especially brick). On residential projects, several additional mechanical fasteners may be needed per board to resist wind as the adhesive cures.

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