

# **Product Information**

# Millennium One Step<sup>™</sup> Green Foamable Adhesive

## **Description**

Millennium One Step<sup>TM</sup> Green Foamable Adhesive is an exciting, new, patent pending, VOC-free, all-weather insulation adhesive manufactured with an industry-leading 45%\* rapidly renewable material content. Millennium One Step<sup>TM</sup> Green Foamable Adhesive carries all of the equivalent FM approvals of our highly popular One Step<sup>TM</sup> Foamable Adhesive and is designed for use with our patented application process\*\*.

Our One Step<sup>TM</sup> application process eliminates error due to poor mixing. Application is quick and easy, resulting in significant labor savings for the contractor. No expensive specialty pumps or spray rigs are required.

#### **Basic Use**

Millennium One Step<sup>TM</sup> Green Foamable Adhesive is designed for use as an adhesive for bonding approved roof insulations to a building's structural roof deck, base sheets, other insulation boards, and smooth or properly prepared gravel built-up roof surfaces. Millennium One Step<sup>TM</sup> Green Foamable Adhesive eliminates the need for mechanical fasteners that can often cause damage to the roof deck, which can reduce the roof's service life.

## **Approved Insulations and Substrates**

- HD wood fiber
- Isocyanurate
- Perlite minimum 3/4" (1.9 cm)
- Polystyrene
- Gypsum cover board
- Asphaltic cover boards
- DensDeck

- Concrete
- Gypsum
- Perlite minimum Cementitious wood fiber
  - · Lightweight insulating concrete
  - Wood or steel
  - Modified bitumen membranes and base sheets (sanded or granule surfaced)
  - Approved insulations (multi-layer applications
  - Smooth or gravel surface built-up roof (re-roof applications)

For a complete list of approved substrates and insulation types, or for additional information, contact or Technical Department.



| Features                               | Benefits                                  |
|--|---|
| 45% rapidly renewable material content | Maximum green building credits            |
| No temperature restrictions            | Suitable for all climates                 |
| One Step™ technology                   | Easy to apply                             |
| Solvent free                           | VOC free, no odors                        |
| Elastomeric                            | Remains flexible, absorbs stresses        |
| Low rise foam                          | Accommodates minor surface irregularities |
| Replaces fasteners                     | Minimizes penetrations and deck corrosion |
| Ready to use                           | Requires no mixing, reduces labor costs   |

### **Limitations**

- Do not apply to wet or damp surfaces.
- Not recommended for use with insulation boards larger than  $4' \times 4' (1.2m \times 1.2m)$ .
- Do not use warped or curled insulation boards. All insulation boards must lay flat upon the roof surface.
- When applying Millennium One Step™ Green Foamable Adhesive over a smooth or sanded APP roof surface Millennium Surface Treatment will be required.

\*45% rapidly renewable content independently certified by Iowa State University on 6-23-2008.

\*\*U.S. Patent Nos. 7,056,556; D501,855

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### **Application**

- With a utility knife, remove the molded tips at the groove from the One Step™ mixing head.
- Attach a One Step<sup>™</sup> mixing nozzle to the threaded mixing head.
- Place the cartridge into the appropriate One Step<sup>™</sup> applicator.
- 4. Apply Millennium One Step™ Green Foamable Adhesive directly to the substrate, using a ribbon pattern. Space 1/4" to 1/2" (0.6cm to 1.3cm) wide beads, 12" (30cm) o.c., to achieve proper coverage rates for insulation attachment. As adhesive is applied, immediately place insulation board into wet adhesive. Do not allow the adhesive to skin over. Eliminate uneven surfaces to ensure positive contact between the insulation board and substrate.
- Un-used material can be applied at a later date by simply plugging the cartridges (with provided half moon plugs) and using a new One Step™ mixing nozzle.



All work surfaces should be clean, dry, and free of dirt, dust. debris, oils, loose and/or embedded gravel, un-adhered coatings, deteriorated membrane and other contaminants that may result in a surface that is not sound or is uneven.

For applications over existing weathered asphalt or coal tar pitch BUR, apply Millennium Universal Primer prior to the application of Millennium One Step™ Green Foamable Adhesive. For applications over fresh and/or non-oxidized asphalt, coal tar or plastic film membranes, apply Millennium Surface Treatment prior to the application of Millennium One Step™ Green Foamable Adhesive.

## **Equipment**

The fast and dependable One Step<sup>™</sup> applicators make applying Millennium One Step<sup>™</sup> Green Foamable Adhesive simple :

- Patented Multi-Bead Plus\*\*
- Patented Multi-Bead\*\*
- Battery Powered Single Bead
- Pneumatic Single Bead
- Stand Up Single Bead
- Ultra Drive Manual Applicator
- Heavy Duty Manual Applicator





### **Safety**

Prior to working with this or any product consult product label and Material Safety Date Sheet (MSDS) for necessary health and safety precautions.

### Storage

Keep temperatures of contents between 65°F-85°F (18°C-29°C) 24 hours prior to use. Do not store in direct sunlight or temperatures higher than 90°F (32°C).

#### Color

Off white-light amber

## **Packaging and Coverage**

Millennium One Step $^{TM}$  Green Foamable Adhesive is available in the following package :

Cartridge SizePart#Cartridges/case1.5 LiterOS-GR15-044

Covers 600 sq.ft. (56m²) per case. Coverage estimates indicate total square feet of insulation attachment per case. Rates are based on an application pattern of 4 ribbons, 1/4" to 1/2" (0.6cm to 1.3cm) wide, 12" (30cm) o.c. per 4' x 4' (1.2m x 1.2m) insulation board.



\*\*U.S. Patent Nos. 7,056,556; D501,855

Code #0030-1209

WARRANTY: ADCO warrants its products to conform to ADCO's specifications at the time of sale when tested according to ADCO standards. If a product is proven to be defective when tested according to ADCO standards, ADCO will, at its option, refund the purchase price or replace or repair the defective product. THIS LIMITED WARRANTY IS THE BUYERS SOLE AND EXCLUSIVE REMEDY AGAINST ADCO AND IS IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In no event shall ADCO be liable for any special, incidental, consequential, or punitive damages arising out of any claims whether based on negligence, contract, warranty, strict liability or otherwise.