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REFLECTIVE INSULATION MANUFACTURERS ASSOCIATION

DATE: September 2009  
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## RIMA International Announced Winners of 2009 “It’s About Saving Energy” Building Awards

The Reflective Insulation Manufacturers Association International (RIMA-I) began this annual building award contest in 2008 to recognize building projects that utilized reflective products in an exceptional way. The 2009 “**It’s About Saving Energy**” **Building Award** contest entries received fell into two of the four available categories - Residential and Metal Building. Three judges took on the very difficult task of reviewing all the entries and selecting the winners. Plaques for the winning member companies and, if applicable, the installer for the project, will be presented at the upcoming RIMA-I meetings in Atlanta, Georgia. The winners are as follows:

### In the **Residential Building Category**, the winner is **Reflectix, Inc. Markleville, Indiana**

This residence was built outside the city of Anderson, Indiana. The design goal of the home's insulation assemblies was to utilize reflective insulation and radiant barrier to dramatically enhance the structure's energy efficiency resulting in a higher level of interior comfort at reduced costs for heating and air conditioning. Within the home, there were four target areas that reflectives would be employed - cathedral ceiling, attic, exterior walls and on the outside of the structural wall panels (as a house wrap). Five locations within the home's structure would include either a reflective insulation or radiant barriers. They are:

- ✦ Cathedral ceiling - radiant barrier installed above the rafters, below the decking
- ✦ Cathedral ceiling - Reflective insulation installed in the rafter cavity below the fiberglass and above the sheetrock.
- ✦ Attic - Radiant barrier installed above the rafters and below the roof decking.
- ✦ Wall/Exterior - Reflective insulation installed inside the stud cavity between the fiberglass and the sheet rock.
- ✦ Wall/Exterior on the OSB Structural Panels - Radiant barrier installed directly to the OSB structural panels prior to the laying of the trick exterior.

This design is a testament to how the use of reflective products in conjunction with code building design can dramatically enhance the insulating performance of the structure as a whole. ([www.reflectixinc.com](http://www.reflectixinc.com))

### In the **Metal Building Category**, the winner is **Prodex in San Jose, Costa Rica**

This project was done for the Sugar Cane Industry League Costa Rica (LAICA). The customer required its five acre (20500 m<sup>2</sup>) sugar storage to have a minimum humidity and temperature level. Sugar can turn brown when exposed to temperatures higher than 86 F (30° C) and can coagulate with high humidity levels. The ambient temperature at the spot is extreme and can easily get up to 100 F (38 O C) and humidity levels of a 90% can occur. In the mornings, when the outside temperature can be down to 50 F (10 O C) and the inside temperature of the storage is still higher, there will be condensation on the walls and this can damage the sugar. Controlling this size of storage in such environment by air-conditioning is nearly impossible. Imagine the energy costs. Our engineers recommended creating a total building envelope using AD10 (10 mm polyethylene foam with aluminum foil on both sides) in the roof as well as the walls, because AD10 has excellent properties as a vapor retarder (0.05 perms) and it has a very high and constant thermal resistance. Those two characteristics will avoid the inside vapor from coming to its dew point and condensing on the walls. An extra added value of the AD10 is its firmness, which serves well as a surface finish in the roof as well as the walls. It was applied in a standing seam roof in such a way it created air chambers with convection for optimal thermal resistance. The rolls were attached together to create a continuous vapor barrier and thermal protection without thermal bridges. When finished, the project was evaluated and temperature measurements were done. The external temperature taken on various spots on the metal surface was 102 F (39 O C), the inside temperature on the surface of the AD10 was never above 82 F (28 O C). This year the client was visited again and it was found that the insulation was perfectly in place. The client was

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satisfied and there were no cases of coagulated or colored sugar. Prodex sales people and engineers made an excellent analysis of the client's needs, the material characteristics of AD10 were used to its maximum (thermal resistance, vapor barrier and firmness) and the thorough evaluation of the project showed that even in a gigantic storage, the Prodex product AD10 managed to tame the extreme outdoor climate to a satisfying internal climate and it avoided the use of energy to control the environment. ([www.prodexcr.com](http://www.prodexcr.com) )

The following entries received Honorable Mention:

**Innovative Energy** for their metal building entry of Arena Cartier municipal ice rink located in Lval (Quebec) utilizing Astro-Rink by Innvoative Energy.

**Fi-Foil Company, Inc.** for their metal building entry of the Iron Works Fitness Center in Hueytown, Alabama utilizing Fi-Foil's RetroShield(R) System installed by Energy Home Shield of Ocala, Florida.

**Foil Barrier Insulation** for their metal building of an office/warehouse utilizing Tempshield Double Bubble two-sided Foil R-15 radiant barrier insulation.

**TVM Building Products** for their residential entry utilizing TVM Radiant Barrier.

**Foil Barrier Insulation** for their residential entry utilizing Super R Plus Radiant Barrier Foil.

**More photos and details on these entries can be found on [www.rimainternational.org](http://www.rimainternational.org).**

*(The Reflective Insulation Manufacturer's Association International is a group of dedicated people working together to propagate the knowledge and use of reflective insulations and radiant barriers. RIMA-I has been the major force in establishing fair ASTM standards for testing and installation procedures. RIMA-I welcomes all who are interested in promoting and directing the growth of the industry. For more information about membership or the industry, please contact Executive Director Mary Edmondson at 800/279-4123 or visit us on our website at [www.rimainternational.org](http://www.rimainternational.org).)*