

EcoStar™ Gold Star Roofing System

General Design & Planning Criteria

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EcoStar General Design & Planning 2016

EcoStar Gold Star Roof System

General Design & Planning Criteria

The information contained herein is to serve as criteria for specifiers and roofing professionals regarding the design and planning of EcoStar's Gold Star roofing system. Specifiers and roofing professionals are advised to fully familiarize themselves with this section and the applicable "Installation" section(s) prior to completing the project specifications.

Information pertaining to the EcoStar products utilized with this roofing system can be found in the "Products" section included in this manual.

A. DESCRIPTION

The EcoStar Gold Star Roofing System consists of tiles manufactured with a state of the art formulation incorporating recycled polyolefin polymers, combined with the appropriate accessories, including underlayments and fasteners. EcoStar Glacier Guard™ and EcoStar Aqua Guard underlayments are attached to an approved roof decking. The EcoStar tiles are then installed using two EcoStar stainless steel ring shank fasteners according to current published EcoStar installation specifications. EcoStar Universal Hip & Ridge tiles are then attached at all hip and ridge locations.

B. DESIGN CONSIDERATIONS

1. The following projects should be sent to EcoStar for review prior to installation and preferably prior to bid to ensure that EcoStar's minimum warranty requirements are met:
 - a. Projects with a roof decking other than minimum 1/2" plywood, 7/16" OSB or 3/4" tongue and groove decking with end gaps not exceeding 1/4".
 - b. Projects with a roof slope less than three inches to the horizontal foot.
 - c. Projects over 150 feet in height.
2. Projects with a requested wind speed warranty higher than 90 mph will require additional enhancements. Contact the EcoStar Technical Department for applicable requirements.
3. Projects with a requested Class A fire rating will require additional enhancements. Refer to product specifications for underlayment and installation requirements.
4. Petroleum-based products (plastic roofing cement), certain chemicals and waste products (i.e., grease, oil, animal fats, etc.) are not compatible with this roof system. Please contact EcoStar's technical department for verification of compatibility and recommendations concerning an acceptable roofing assembly.

5. It is the responsibility of the specifier or roofing professional to review local, state and regional codes to determine their impact on the EcoStar roofing system.
6. All ventilation or air movement systems must be in accordance with local building codes. The specifier, building owner, or roofing professional must review this prior to installation. Local codes will ultimately supersede any EcoStar ventilation details. Furthermore EcoStar is not responsible for specifying proper air movement within a project.
7. Tear-Off Projects
 - a. All existing roofing material must be removed down to the roof decking before installing the EcoStar Gold Star roofing system. It is the responsibility of the owner or their designate to ensure that the roof decking is suitably flush to accept the EcoStar roof assembly. Installing EcoStar tiles on deflected or warped decking may result in aesthetic issues. Plank decks will require OSB or plywood sheeting.

C. QUALITY ASSURANCE

1. EcoStar requires the use of EcoStar supplied products where available for use with an EcoStar roofing system. The performance or integrity of products by others, when selected by the specifier and accepted as compatible by EcoStar, are not the responsibility of EcoStar and is disclaimed by the EcoStar warranty.
2. An EcoStar authorized roofing contractor must install the specified roofing system.
3. There must be no deviations made from EcoStar's specifications, EcoStar's approved shop drawings and submittals without the prior written approval of EcoStar.
4. After completion of the installation, the authorized roofing contractor must contact EcoStar's warranty coordinator to arrange for an inspection to be conducted by an EcoStar Field Service Representative to ascertain that the roofing system has been installed according to EcoStar's published specifications and details applicable at the time of bid. This inspection is for the benefit of EcoStar to determine whether a warranty shall be issued.

D. WARRANTY

1. A Limited Labor and Material Warranty is available and applies only to products manufactured or marketed by EcoStar. The roofing system is defined as the roof tiles, underlayments, accessories and any other EcoStar brand products utilized in the installation. Products not manufactured by EcoStar are subject to third party manufacturer's warranty.
2. EcoStar Gold Star warranted projects will receive a peak gust wind speed of 90 mph unless prior review is performed and approval has been granted by EcoStar regarding an extended peak gust wind speed coverage.
3. The formation or presence of mold or fungi in a building is dependent upon a broad range of factors including but not limited to, the presence of spores and nutrient sources, moisture, temperatures, climatic conditions, relative humidity, and heating/ventilating systems and their maintenance and operating capabilities. These factors are beyond the control of EcoStar and EcoStar shall not be responsible for any claims, repairs, restoration or damages relating to the presence of any irritants, contaminants, vapors, fumes, molds, fungi, bacteria, spores, mycotoxins, or the like in any building or in the air, land, or water serving the building.

EcoStar disclaims responsibility for the aesthetics or cleanliness of the roofing system caused by environmental conditions including, but not limited to, dirt, pollutants, or biological agents, and discoloration caused by or resulting from initial installation.

E. CODE APPROVALS

1. Building codes are above and beyond the intended purpose of these specifications. The respective owner or specifier should consult local codes for applicable requirements and limitations.
2. For code approvals achieved with the EcoStar roofing system, refer to Underwriters Laboratories (UL) Fire Resistance or Roofing Materials and Systems Directories or contact EcoStar's technical department.

F. ROOF DECK/SUBSTRATE

1. Proper decking shall be provided by the building owner. The building owner or his/her designated representative must ensure that the building structure is investigated by a registered engineer to assure its ability to withstand the total weight of the specified roofing system as well as construction load and live loads in accordance with all applicable codes. It is the responsibility of the owner or his/her designated representative to ensure that the roof decking is suitably flat to accept the EcoStar roofing system. Aesthetic concerns may arise from installing EcoStar tiles on deflected or warped decking. Plank decks will require OSB or plywood sheeting.

G. SNOW RETENTION SYSTEMS

Caution: In regions where snow accumulation is common we strongly recommend that a properly designed snow retention system be incorporated into any EcoStar roof assembly. Accumulated snow may slide off of the roof all at once endangering people and property. An effective snow retention system should be designed by an architect or the manufacturer of the snow retention products to be used. Contact the EcoStar Technical Department with any questions concerning the compatibility of snow retention systems with EcoStar Roofing Tiles.